2025 Annual Water Quality Report

Winneshiek County Sanitary Landfill
Decorah, Iowa

March 2026

IDNR Permit No. 96-SDP-01-74P
Project I.D.: 25W024.00

Solving our clients' toughest science and engineering challenges.

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March 31, 2026

Michael W. Smith, PE
Iowa Department of Natural Resources
6200 Park Avenue, Suite 200
Des Moines, IA 50321

Re: 2025 Annual Water Quality Report
Winneshiek County Area Solid Waste Agency
201 West Main Street, Decorah, IA 52101
Permit No. 57-SDP-01-74P

Dear Michael Smith:

On behalf of the Winneshiek County Area Solid Waste Agency (Agency), Foth Infrastructure & Environment, LLC (Foth) is submitting the 2025 Annual Water Quality Report (AWQR) as required by Iowa Department of Natural Resources (IDNR) Permit No. 57-SDP-1-74P. The contents of this report are intended to satisfy the requirements of 567 Iowa Administrative Code (IAC) 113.10(5)c(1) and 113.10(6)d(1), related to recordkeeping and notification, and annual reporting requirements listed in IAC 113.10(10) (effective 12/10/07).

This report was prepared using the IDNR AWQR report format required by Permit Special Provision X.4.e. The Monitoring Well Maintenance and Performance Reevaluation Schedule and Summary, Methane Monitoring Program Report (MMPR), and Leachate Control System Performance Evaluation Report (LCSPER), have been incorporated directly into the AWQR as Tables 4, 5A, 5B, 12, 13A, and 13B.

Thank you for your attention to this matter. Please contact us at our numbers listed below if you have any questions or need additional information.

Sincerely,

Foth Infrastructure & Environment, LLC

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Project Environmental Scientist
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2025 Annual Water Quality Report

Distribution

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2025 Annual Water Quality Report
Winneshiek County Sanitary Landfill

Project ID: 25W024.00

Prepared for

Winneshiek County Area Solid Waste Agency

2000 140th Avenue
Decorah, IA 52101

Prepared by

Foth Infrastructure & Environment, LLC

March 2026

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Certifications

I hereby certify that this document was prepared by me or under my direct supervision and that I am a qualified groundwater scientist as defined in 567 Iowa Administrative Code 113.10(1)d.



3/31/2026

Gina Wilming (date)
Iowa G.W.P. No. 2099.

My certification renewal date is
December 31, 2027.

For the purposes of 567 Iowa Administrative Code 113.10(1)d, a "qualified groundwater scientist" means a scientist or an engineer who has received a baccalaureate or postgraduate degree in the natural sciences or engineering and has sufficient training and experience in groundwater hydrology and related fields demonstrated by state registration, professional certifications, or completion of accredited university programs that enable that individual to make sound professional judgments regarding groundwater monitoring, contaminant fate and transport, and corrective action.

List of Abbreviations, Acronyms, and Symbols

ACM	assessment of corrective measures
Agency	Cedar Rapids Linn County Solid Waste Agency
AWQR	Annual Water Quality Report
C&D	construction and demolition
CFR	Code of Federal Regulations
Foth	Foth Infrastructure & Environment, LLC
GWPS	groundwater protection standard
HMSP	Hydrologic Monitoring System Plan
IAC	Iowa Administrative Code
IDNR	Iowa Department of Natural Resources
LCSPER	Leachate Control System Performance Evaluation Report
LEL	Lower Explosive Limit
mg/L	milligrams per liter
MCL	maximum contaminant level
MMPR	Methane Monitoring Program Report
MNA	monitored natural attenuation
MSW	Municipal solid waste
PQL	practical quantitation limit
SDP	Sanitary Disposal Project
SOP	standard operating procedure
SSI	statistically significant increase (over background)
SSL	statistically significant level (over GWPS)
TSS	total suspended solids
USEPA	United States Environmental Protection Agency

1. Executive Summary

Foth Infrastructure & Environment, LLC (Foth) was retained by the Winneshiek County Area Solid Waste Agency (Agency) to provide an annual report summarizing the groundwater quality and hydrogeologic monitoring activities at the Winneshiek County Sanitary Landfill during 2025. This 2025 Annual Water Quality Report (AWQR) was prepared using the Iowa Department of Natural Resources (IDNR) AWQR report format required by Permit Special Provision X.4.e. The Monitoring Well Maintenance and Performance Reevaluation Schedule and Summary, Methane Monitoring Program Report (MMPR), and Leachate Control System Performance Evaluation Report (LCSPER) have been incorporated directly into the AWQR as Tables 4, 5A, 5B, 12, 13A, and 13B.

1.1 Period of Report Coverage

This AWQR presents an evaluation of the groundwater, methane monitoring, and leachate collection system monitoring, maintenance, and performance activities conducted at the Winneshiek County Sanitary Landfill for the period of January 1 through December 31, 2025.

1.2 Report Priority

No actions or activities are on hold due to the completion of IDNR review or comment. Foth requests IDNR review and approval of the following:

- The background dataset adjustments, as further discussed in the Fall 2025 statistical evaluation provided in Appendix B and Table 14, are recommended for removal. Background dataset adjustments are recommended based on a review of replaced background well data, total suspended solids (TSS), single background detections, and/or reporting limits. A summary of the background data requested for removal is as follows:
    - Removal of MW-1R and MW-19 from the shallow and deep groundwater background data sets, respectively.
    - Removal of the September 2021 barium, cobalt, lead, and nickel concentrations in MW-19R due to correlation with TSS.
    - Removal of the September 2021 arsenic, barium, cadmium, chromium, cobalt, copper, lead, silver, and vanadium concentrations in MW-37A due to correlation with TSS and the single acetone detection.
    - Removal of the March 2022 arsenic, barium, cadmium, chromium, cobalt, copper, lead, nickel, and vanadium concentrations in MW-19R due to correlation with TSS.
    - Removal of the June 2023 barium, cobalt, and copper concentrations in MW-19R due to correlation with TSS.
    - Removal of the November 2023 arsenic, barium, cadmium, cobalt, copper, lead, nickel, and vanadium concentrations in MW-1 due to correlation with TSS.
    - Removal of the October 2025 arsenic, barium, cobalt, and lead concentrations in MW-19R due to correlation with TSS.
    - Removal of the December 2024 arsenic, barium, cobalt, and nickel concentrations in MW-37A due to the single benzene detection.
    - Removal of the November 2014 barium, cobalt, copper, nickel, and vanadium concentrations in MW-1 due to the single chlorobenzene detection.

- Removal of the November 2014 through June 2019 cadmium results in SW-1 due to an elevated reporting limit.

- As further addressed in the Fall 2025 statistical evaluation provided in Appendix B, the October 2025 arsenic concentration at background monitoring well MW-37A was above the groundwater protection standard (GWPS). Therefore, it is recommended that the background GWPS for arsenic in the shallow groundwater system be established at 0.22 milligrams per liter (mg/L).

- As further addressed in the Fall 2025 statistical evaluation provided in Appendix B, the site-specific cobalt GWPS was applied to the deep groundwater system in addition to the shallow groundwater system; however, the cobalt prediction limit in the deep groundwater system is below the 567 Iowa Administrative Code (IAC) Chapter 137 Statewide Standard for a Protected Groundwater Source of 0.0021 mg/L. Therefore, it is recommended that 0.0021 mg/L be used as the GWPS for the deep groundwater system.

- Amend the Permit and Methane Monitoring Program Plan to include the following:

    - Removal of MWII-3, MW-5AR, MW-12, MW-23, and MW-28A, as these wells have been abandoned.

    - Removal of GP-01 through GP-09, as these probes are silted in and do not provide adequate data.

    - Replacement of MW-12A with step-out location MW-39A.

    - Removal of MW-3, MW-18, and MW-19R, as the well screens are continuously submerged.

    - Addition of MW-26A, MW-32A, MW-33A, MW-37A, MW-38A, and MW-46A.

    - Note that an updated Methane Monitoring Plan will be submitted with the Sanitary Disposal Project (SDP) permit renewal application due by September 22, 2026. Additional review of the methane monitoring network will be conducted at that time.

- Amend the Permit and the Leachate Monitoring Plan to remove MH-15, GU5-MH, and GU-2 as leachate monitoring locations. MH-15 is a leachate line manhole outside the waste limits and does not provide information regarding the head on the liner. GU5-MH is an underdrain location for Cell 5, which is adequately monitored by GU-1. GU5E-2 and GU-2 are underdrain locations for Cell 5 EXP that are adequately monitored by GU-5E-1.

Several changes to the statistical methodology were implemented beginning with the Fall 2025 statistical evaluation (Appendix B) and are summarized below.

- The laboratory reporting limit was used as the practical quantitation limit (PQL), and half the reporting limit was used for non-detect data. These changes are consistent with the protocols for handling non-detect data outlined in the *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance* (USEPA, 2009).

- The background data sets previously included data from October/November 2014 through the end of the preceding year. However, utilizing background from October/November 2014 through the most recent monitoring event is recommended.

- When evaluating distributional assumptions for calculating prediction limits and confidence intervals, use of the Kaplan-Meier adjustment is recommended when there are 50% to 85% detects in the background data set.

The Hydrologic Monitoring System Plan (HMSP) will be updated with the SDP permit renewal application due by September 22, 2026 to reflect these changes.

1.3 Site Status and Applicable Rules

The landfill is located in Winneshiek County approximately 5 miles southeast of Decorah in Section 9, Township 97 North, Range 7 West at 2000 140th Ave, Decorah, IA 52101.

Original Areas 1, 2, and 3 are closed either by soil final cover (slopes greater than 5%), composite final cover, or by the abutment liner. Original Cell 4 is also closed by the abutment liner, except for the south and east side slopes, which have 2 feet of temporary cover and dense vegetation. The active Municipal Solid Waste (MSW) incorporates the abutment liner, the original Cell 5 Expansion Area, and original Cell 5 Phases I, II, and III. The active MSW cell is referred to as C5 EXP in all documents and drawings, beginning with the Solid Waste Disposal Permit Renewal in 2017.

Groundwater monitoring and reporting activities were conducted in accordance with Special Provision X.4.b of the permit and 567 IAC 113.10. Details regarding the statistical methods utilized are included with the statistical reports in Appendix B. Monitoring well maintenance and performance reevaluation was conducted in accordance with Special Provision X.4.c. and d. of the permit and 567 IAC 113.10(2)f.

The leachate collection system monitoring, maintenance, and performance activities were conducted in accordance with Special Provision X.2.d and 567 IAC 113.7(5)b.

Methane monitoring and reporting activities were conducted in accordance with Special Provision X.6 and 567 IAC 113.9(2).

2. Site Background

2.1 Site History

Nishna Sanitary Services initially developed the landfill in 1974. The landfill was privately owned and operated until 1991 when the Agency purchased the facility. Since that time, the landfill has served as the primary disposal site for the waste generated in the Winneshiek Service Area. A site map depicting the characteristic of the landfill and surrounding vicinity is provided in Figure1.

Waste disposal at the landfill began in 1974 with the development of original Area 1. Original Area 1 was constructed without a liner or leachate collection system, but a leachate toe drain was installed around the perimeter in 1993.

Original Area 2 was developed from about 1982 and was used until 1994, except for some construction and demolition (C&D) disposal that continued in a small portion of original Area 2 until 2000-02. Original Area 2 has no liner or leachate collection system but has a leachate toe drain along the western perimeter. A landfill gas collection trench extends south of original Area 2 and original Area 3.

Development of original Area 3 began in about 1988 and continued until 1994. Original Area 3 was constructed without a liner or leachate collection system, but it has a leachate toe drain along the eastern side and a landfill gas collection trench along the south side.

Development of original Cell 4 began in 1994. It is constructed with a 4-foot clay liner and leachate collection system.

Development of original Cell 5 began in 1996. It is constructed with a composite liner and leachate collection system.

In 2016, the Agency completed the 2016 Closure and Capital Improvements Project (2016 Project). The 2016 Project included a 20-acre abutment liner over the east side of original Areas 1 and 3, and original Cell 4, and a new 1.5-acre cell in the gap between original Area 1 and original Cell 5, Phase II, called the

original Cell 5 Expansion Area. Also, the 2016 Project included the final closure on the remaining footprint of original Areas 1, 2, and 3. Slopes greater than 5 percent have a 4-foot soil final cover, and the remaining portions are closed with either a composite final cover system or are covered with the abutment liner. Original Cell 4 is effectively closed as it is mostly covered by the abutment liner, except for the south and east side slopes. Those slopes have 2 feet of temporary cover and are densely vegetated. The active cell, including the abutment liner, the original Cell 5 Expansion Area, and the original Cell 5, is now known as C5 EXP. Final closures of the C5 EXP, including the south and east side-slopes of original Cell 4, will be a composite final cover system with passive gas vents.

The final part of the 2016 Project was a 4.5-million-gallon leachate lagoon. From this lagoon, the landfill staff can recirculate, evaporate, and loadout the leachate. The lagoon collects leachate from the west and central toe drains, original Cell 4, original Cell 5, and C5 EXP. The Agency installed diversion manholes with valving to either discharge underdrain groundwater to the creek or discharge to the lagoon for the groundwater underdrains at original Cell 5, the C5 EXP, and the lagoon itself. The C5 EXP groundwater discharge (GU-2) and the combined original Cell 5 and lagoon groundwater discharge (GU-1) are sampled as part of the current detection monitoring program.

Winneshiek County currently recirculates the leachate from the lagoon. The leachate is pumped from the lagoon to a sprinkler system on C5 EXP. The leachate is recirculated in the warm months if there is less than 1 foot of leachate measured at the leachate piezometers. Also, Winneshiek County operates an evaporator in the south bay of the lagoon to evaporate the leachate. The evaporator can be moved around the north half of Lagoon Bay No. 2 to ensure that mist drift is not leaving the lagoon boundary. The evaporator is not operated when the wind speed exceeds 15-MPH.

2.2 Geology and Hydrogeology

The subsurface geologic formations encountered during installation of site wells at the landfill are included on the boring logs and monitoring well/piezometer documentation forms (Iowa DNR Form 542-1277) presented in Appendix A of the *2024 UPDATE Winneshiek Hydrologic Monitoring System Plan* (AECOM, 2024). Boring and well locations are shown on Figure 4 of the HMSP. The site geology and hydrogeology of the landfill have been comprehensively investigated in several studies, including the *Report for the Phase II Hydrogeologic Investigation at the Winneshiek County Sanitary Landfill* (Brown, et al., 1990), *Winneshiek County Sanitary Landfill Hydrologic Monitoring System Plan Update* (Rust E&I, 1997), and *2023 UPDATE Winneshiek Hydrologic Monitoring System Plan* (AECOM, 2023), and will be summarized here.

The landfill is located on a generally eastward sloping upland that is part of an interfluve bordered on the east by an unnamed, northward flowing tributary to the Trout River and on the northwest by a different unnamed, northward flowing drainageway that drains to the Trout River. In this part of Winneshiek County, thin Quaternary-age deposits overlie Ordovician-age bedrock.

In uplands, the thin Quaternary deposits include loess overlying either remnants of Pre-Illinoian-age glacial diamicton (“till”) that locally contains isolated lenses of fluvioglacial material or Quaternary-age colluvium. On side slopes, the loess overlies either Quaternary-age colluvium or, where the colluvium is absent, bedrock. In lowlands, the thin Quaternary-age deposits consist of fine-grained alluvium. In portions of the site area, such as east of original Cell 4, landfill construction activities have removed the Quaternary deposits, and fine-grained, construction-derived soil fill overlies Ordovician-age Maquoketa Formation bedrock. Fine-grained, construction-derived soil fill overlies loess east of original Cell 5.

The Quaternary-age deposits overlie a gently dipping Ordovician-age bedrock sequence that consists of the upper and lower Elgin Member of the Maquoketa Formation and the underlying Galena Formation. In parts of the eastern and northeastern portion of the site, the Maquoketa Formation is eroded away and absent. In that area, the Galena Formation is the uppermost bedrock unit.

Groundwater is monitored in one water-bearing zone: (1) the shallow groundwater measured by the water table, and (2) the deep groundwater measured in the Ordovician-age upper and lower Elgin Member of the Maquoketa Formation and, where the Maquoketa is absent, the Ordovician-age Galena Group Dubuque Formation. Shallow wells are screened in different geologic units because the water table occurs in successively different stratigraphic horizons downslope. The water table and bedrock groundwater are interconnected and act as one water-bearing zone transitioning to only water table on the eastside of the landfill with groundwater discharging to tributary of Trout River.

2.3 History of Groundwater Corrective Action

An Assessment of Corrective Measures (ACM) was initiated in August 2022 following the exceedance of the cobalt GWPS of 0.0021 mg/L at MW-29A, MW-31A, and MW-35. The revised *2024 ACM Report* was provided as Attachment E of the "IDNR Comment Letter Response" (AECOM, 2025b) and was subsequently approved in the letter dated July 15, 2025 (IDNR, 2025). The *2024 ACM Report* (AECOM, 2025b) recommended Monitored Natural Attenuation (MNA) as the selected remedy for cobalt in MW-29A, MW-31A, and MW-35 and noted a site-specific GWPS of 0.0034 mg/L had been established. Details supporting the site-specific cobalt GWPS are provided in the *2024 UPDATE Winneshiek Hydrologic Monitoring System Plan* (AECOM, 2024), which was approved in the letter dated October 29, 2024 (IDNR, 2024).

A public meeting to present and discuss the results of the revised *2024 ACM Report* (AECOM, 2025b) was held on October 13, 2025 and the meeting records were submitted to IDNR on November 20, 2025 (Foth, 2025b). The *Remedial Selection Report* (Foth, 2025c) was submitted on December 11, 2025, selecting MNA as the remedy and outlining the corrective action schedule. The *Remedial Selection Report* (Foth, 2025c) was approved in the letter dated Jan. 6, 2026 (IDNR, 2026).

3. Quality Assurance/Quality Control Summary

In 2025, field blanks, field duplicates, and trip blanks were collected and analyzed at the frequencies listed in the *2024 UPDATE Winneshiek Hydrologic Monitoring System Plan* (AECOM, 2024). Prior to October 2025, data validation was not conducted routinely and was not included in the *2024 UPDATE Winneshiek Hydrologic Monitoring System Plan.* Beginning in October 2025, data validation was conducted in accordance with the Standard Operating Procedure (SOP) included in Appendix A. The HMSP will be updated with the permit renewal application in 2026 to incorporate the data validation protocol and the modifications identified in the Report Priority. Data validation reports detailing any resampling, data qualifiers added per data validation, and an overall assessment of the data are included in Appendix A.

In October 2025, the overall data assessments indicated that method criteria, precision, accuracy, representativeness, comparability, completeness, and suitability for intended use were acceptable. In 2025, resampling was considered based on the data quality for the Fall 2025 sampling event. As further addressed in the data validation report (Appendix A), there were multiple extraction and analysis hold time exceedances identified. Professional judgement was utilized, and neither qualification nor resampling was recommended because the preparation or analysis hold times were only slightly exceeded.

3.1 Sample Turbidity

Low-flow and no purge sampling techniques were continued in 2025. The sampling methodology utilized was consistent with minimizing turbidity and total suspended solids (TSS) in the groundwater samples.

As indicated in the Report Priority, the following background data set adjustments are recommended based on the Fall 2025 evaluation of TSS.

- Removal of the September 2021 barium, cobalt, lead, and nickel concentrations in MW-19R due to elevated TSS (182 mg/L) and the potential for turbidity to contribute to the higher metal concentrations identified.

- Removal of the September 2021 arsenic, barium, cadmium, chromium, cobalt, copper, lead, silver, and vanadium concentration in MW-37A due to the elevated TSS (159 mg/L) and the potential for turbidity to contribute to the higher metal concentrations identified.

- Removal of the March 2022 arsenic, barium, cadmium, chromium, cobalt, copper, lead, nickel, and vanadium concentrations in MW-19R due to the elevated TSS (834 mg/L) and the potential for turbidity to contribute to the higher metal concentrations identified.

- Removal of the June 2023 barium, cobalt, and copper concentrations in MW-19R due to elevated TSS (109 mg/L) and the potential for turbidity to contribute to the higher metal concentrations identified.

- Removal of the November 2023 arsenic, barium, cadmium, cobalt, copper, lead, nickel, and vanadium concentrations in MW-1 due to elevated TSS (276 mg/L) and the potential for turbidity to contribute to the higher metal concentrations identified.

- Removal of the October 2025 arsenic, barium, cobalt, and lead concentrations in MW-19R due to the elevated TSS (151 mg/L) and the potential for turbidity to contribute to the higher metal concentrations identified.

Several downgradient and delineation monitoring wells had TSS concentrations greater than the 5 mg/L level for satisfactory sample quality. However, TSS at most wells only slightly exceeded the 5 mg/L, which indicates that turbidity was not significantly impacting the downgradient data.

4. Conclusions and Recommendations

4.1 2025 Data Evaluation Summary

4.1.1 Groundwater

Resampling was conducted in February 2025 for cadmium in MW-4, barium in MW-7A, and nickel in MW-42A due to prediction limit exceedances identified in Fall 2024. The results of the February 2025 sampling event and field documentation were reported in the *2024 Annual Water Quality Report* (AECOM, 2025a). The February 2025 retest did not confirm the prediction limit exceedances for cadmium in MW-4 and barium in MW-7A; however, nickel in MW-42 was confirmed as a statistically significant increase (SSI) over background.

In June 2025, semiannual groundwater sampling was conducted as indicated in Table 2. During the June 2025 sampling event, deep groundwater location MW-11 was dry or had insufficient volume for sample collection. In the *2024 Annual Water Quality Report* (AECOM, 2025a), MW-24A was requested to be designated as a water-level-only location; therefore, a sample was not collected in June 2025. Although the well is frequently dry, it is recommended that MW-24A remain in the assessment monitoring program and be sampled when there is sufficient volume. As noted in correspondence with the IDNR in the email dated August 12, 2025 (Foth, 2025a), AECOM recommended resampling for barium, cobalt, copper, lead, 2-butanone, and acetone in MW-33A, and for cadmium and zinc in MW-44A prior to the Fall 2025 sampling event. However, since these were in assessment monitoring or corrective action monitoring, these constituents were declared SSIs, and retests were not conducted.

In October 2025, groundwater sampling was conducted as indicated in Table 2. During the October 2025 sampling event, surface water location SW-1; shallow groundwater locations GU-1, GU-2, MW-24A, and MW-101; and deep groundwater locations MW-11, MW-22 were dry or had insufficient volume for sample collection. In October 2025, monitoring locations sampled were also analyzed for the geochemical parameters as outlined in the *2024 ACM Report* (AECOM, 2025b). Analysis of the geochemical parameters was not included in this evaluation. As indicated in the *Remedial Selection Report* (Foth, 2025c), biennial monitoring of geochemical parameters will be conducted at the corrective action, delineation, and background monitoring locations. The IDNR approved the *Remedial Selection Report*

(Foth, 2025c) in their letter dated January 6, 2026 (IDNR, 2026). The next biennial geochemical monitoring event will occur in Fall 2027.

MW-7A and MW-46A moved to assessment monitoring in Summer 2023 and Fall 2024, respectively; however, MW-7A had only undergone one complete Appendix II sampling event, and MW-46A had yet to be sampled for the full Appendix II list. Therefore, MW-7A and MW-46A were sampled for the full Appendix II list in October 2025. During the initial full Appendix II sampling events at MW-7A, no Appendix II constituents not included in Appendix I were detected above the practical quantitation limit (PQL); therefore, no new constituents will be added to the detected Appendix II constituents during semiannual assessment monitoring events. Since two full Appendix II sampling events were completed at MW-7A after the October 2025 sampling event, future resampling of the full Appendix II list will be conducted every five years in accordance with Permit Special Provision X.4.b. MW-46 was sampled for the full Appendix II list for the first time in October 2025, and no Appendix II constituents not in Appendix I were detected above the PQL. Therefore, in accordance with 567 IAC 113.10(6)b, annual monitoring for the full Appendix II list will be conducted at MW-46A again in Fall 2026. For the remaining assessment, corrective action, and background monitoring wells, the five-year resampling schedule for the full Appendix II list is provided in Table 2.

For wells in detection monitoring, no SSIs were identified at the surface water, shallow groundwater, and deep groundwater monitoring locations.

No new shallow and deep groundwater assessment monitoring locations, assessment constituents in corrective action monitoring locations, and assessment constituents in delineation monitoring locations had SSLs identified that would trigger corrective action in 2025.

For the shallow and deep groundwater corrective action constituents in the corrective action and delineation monitoring locations, SSLs remained for cobalt in MW-29A, MW-31A, MW-35, and MW-43A. No trends were identified for the corrective action constituents. However, first order attenuation can be evaluated for cobalt in MW-31A, MW-35, and MW-43A, with cobalt in MW-31A and MW-43A likely to achieve compliance in the near future.

Conversely, compliance with the GWPS was newly achieved for arsenic in MW-33 during the Fall 2025 statistical evaluation. In accordance with 567 IAC 113.10(9)e(2), arsenic in MW-33A will return to assessment constituents in Fall 2028, as long as concentrations remain below the GWPS during interim statistical evaluations. In addition, since arsenic is the only corrective action constituent at MW-33A, MW-33A will return to assessment monitoring when arsenic returns to an assessment constituent. While arsenic was not included in the *2024 ACM Report* (AECOM, 2025b), current conditions indicate compliance; therefore, further evaluation of corrective measures is not recommended.

As indicated in the Fall 2025 statistical evaluation (Appendix B) and the Report priority, the October 2025 arsenic concentration at background monitoring well MW-37A was above the GWPS. Therefore, it is recommended that the background GWPS for arsenic in the shallow groundwater system be established at 0.22 mg/L.

In addition, the site-specific cobalt GWPS was applied to the deep groundwater system as well as the shallow groundwater system; however, the cobalt prediction limit in the deep groundwater system is below the 567 IAC Chapter 137 Statewide Standard for a Protected Groundwater Source of 0.0021 mg/L. Therefore, it is recommended that 0.0021 mg/L be used as the GWPS for the deep groundwater system.

4.1.2 Methane Monitoring Program

The quarterly methane monitoring results did not indicate concentrations in exceedance of 25% of the lower explosive limit (LEL) for facility structures, 100% LEL at subsurface monitoring locations, or 100% LEL for facility boundaries, with the exception of MW-12A. In September 2025, subsurface monitoring location MW-12A exhibited an exceedance of 100% LEL. To the east of MW-12A, the unnamed tributary to the Trout River intersects the water table and serves as a barrier to off-site methane migration. Since the

September 2025 methane concentration detected at MW-12A was physically constrained from migrating eastward beyond the site boundary, a methane remediation plan was not applicable. Based on 567 IAC 113.9(2), no action is required for this facility with regard to methane control at this time.

As indicated in Table 12 and the Report Priority, on behalf of the Agency, Foth requests IDNR review and approval to amend the Permit and the Methane Monitoring Program Plan by removing MWII-3, MW-5AR, MW-12, MW-23, and MW-28A, GP-01 through GP-09, MW-12A, and MW-3, MW-18, MW-19R and adding MW-26A, MW-32A, MW-33A, MW-37A, MW-38, MW-39A, and MW-46A.

An updated Methane Monitoring Plan will be submitted with the SDP permit renewal application due by September 22, 2026. Additional review of the methane monitoring network will be conducted at that time.

4.1.3 Leachate Control System Performance

For Cells 4, Cell 5, and Cell 5 EXP, effective leachate control is defined in accordance with 567 IAC 113.7(5)b(3) as maintaining less than one foot of leachate head over the liner at the system's lowest point(s) within the waste unit. In 2025, there was no correlation between precipitation and leachate head levels and head levels were below one foot of head over the liner, indicating compliance with 567 IAC 113.7(5)b(3).

Approximately 700,000 gallons of leachate was recirculated in 2025. To date, the recirculation does not appear to result in any consistent leachate build-up in the system. No leachate was hauled to the City of Decorah in 2025. Approximately 850,000 gallons of leachate was evaporated in 2025. Overall leachate generation decreased significantly in 2025, which is attributed to waste placement on the abutment liner.

As indicated in Table 13A and the report priority, on behalf of the Agency, Foth requests IDNR review and approval to amend the Permit and Leachate Monitoring Plan to remove MH-15, GU5-MH, GU-5E-2, and GU-2.

4.2 Recommendations for Future Monitoring

On behalf of the Agency, Foth presents the following recommendations for future monitoring at the Winneshiek County Sanitary Landfill:

- Continue collecting water level and well depth measurements on a semiannual basis at the HMSP-approved monitoring points.
- Continue collecting TSS samples and field turbidity measurements during sampling events in 2026.
- Continue detection, assessment, corrective action, background, and delineation monitoring as listed in Table 2.
- Continue MNA remedy implementation in accordance with the conditions set forth under Special Provision X.4.f, the *Remedial Selection Report* (Foth, 2025c), and the IDNR-approved remedy implementation schedule. The remedy implementation schedule is provided in the table below.

Remedy Implementation Schedule

Estimated Completion Date	Activity
On-going – Semiannually	Continue implementation of the existing remedy in accordance with Special Provision X.4.f and the *Remedial Selection Report* (Foth, 2025c).
	Continue semiannual detection, assessment, and corrective action monitoring in accordance with IAC 113.10(5), (6), and (9)a and as listed in Table 2. Continue semiannual surface water and delineation monitoring as listed in Table 2.
On-going – Annually (due March 31)	By March 31 of each year, submit AWQRs including an update on remedy implementation.
On-going – Biennially	Monitor geochemical parameters to track the localized extent of reducing conditions and the transition to oxidizing conditions.
Ongoing – Annual	Inspect leachate collection system components on the east side of Cells 4 and 5 for obstructions and leaks.

5. References

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Tables

Table 1
Monitoring Program Summary
2025 Annual Water Quality Report
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Monitoring Well	Formation	Current Monitoring Program [1]	Change for Next Sampling Event	Constituents w/ SSI [2]	Constituents w/ SSL [2]	Total # of Samples in Each Monitoring Program [3]				
						Detection	Assessment	Corrective Action	Delineation	Background
Surface Water Monitoring Locations										
Downstream Monitoring Locations										
SW-2	Trout River Tributary	Detection	No Change	None	N/A	24	0	0	0	0
SW-5	Trout River Tributary	Detection	No Change	None	N/A	8	0	0	0	0
Upstream Monitoring Location										
SW-1	Trout River	Background	No Change	--[4]	--[4]	0	0	0	0	21
Shallow Groundwater Monitoring Locations										
Groundwater Underdrain Monitoring Locations										
GU-1	N/A	Detection	No Change	--[4]	--[4]	22	0	0	0	0
GU-2	N/A	Detection	No Change	--[4]	--[4]	12	0	0	0	0
Downgradient Monitoring Locations										
MW-2R	Oeu	Detection	No Change	None	None	24	0	0	0	0
MW-3	Qt	Detection	No Change	None	None	26	0	0	0	0
MW-4	Qt/fluv	Assessment	No Change	Cadmium; Nickel	None	21	9	0	0	0
MW-4B	Qt/fluv	Detection	No Change	None	None	26	8	0	0	0
MW-7A	Qt	Assessment	No Change	Chromium; Nickel	None	24	3	0	0	0
MW-24A	Qf,Ql,Oe	Assessment	No Change	--[4]	--[4]	16	2	0	0	0
MW-25A	Qf,Ql,Oe	Detection	No Change	None	None	24	0	0	0	0
MW-29A	Ql/Qc	Corrective Action	No Change	Nickel; Sulfide	Cobalt	13	10	1	0	0
MW-31A	Ql/Qc	Corrective Action	No Change	Nickel	Cobalt	13	11	1	0	0
MW-33A	Ql/Qt	Corrective Action	No Change	None	None [5]	14	2	1	0	0
MW-34A	Ql/Qt	Detection	No Change	None	None	15	0	0	0	0
MW-38A	Qf,Ql,Oe	Detection	No Change	None	None	12	0	0	0	0
MW-40A	Qf,Ql,Oe	Assessment	No Change	Nickel	None	10	4	0	0	0
MW-41A	Qf,Ql,Oe	Detection	No Change	None	None	10	0	0	0	0
MW-45A	Qt	Detection	No Change	None	None	7	0	0	0	0
MW-46A	Qt	Assessment	No Change	Nickel	None	5	2	0	0	0
MW-101	Qt/fluv	Detection	No Change	--[4]	--[4]	14	0	0	0	0
Delineation Monitoring Locations										
MW-39A	Qf,Ql,Oe	Delineation [6]	No Change	None	None	12	0	0	1	0
MW-42A	Qf,Ql,Oe	Delineation [6]	No Change	None	None	7	2	0	1	0
MW-43A	Qf,Ql,Oe	Delineation [6]	No Change	None	Cobalt	8	1	1	1	0
MW-44A	Qf,Ql,Oe	Delineation [6]	No Change	None	None	7	2	0	1	0

Table 1
Monitoring Program Summary
2025 Annual Water Quality Report
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Monitoring Well	Formation	Current Monitoring Program [1]	Change for Next Sampling Event	Constituents w/ SSI [2]	Constituents w/ SSL [2]	Total # of Samples in Each Monitoring Program [3]				
						Detection	Assessment	Corrective Action	Delineation	Background
Shallow Groundwater Monitoring Locations Continued										
Background Monitoring Locations										
MW-1	Qt/fluv	Background	No Change	None	None	0	7	0	0	24
MW-37A	Ql/Qt	Background	No Change	None	None	0	0	0	0	11
Deep Groundwater Monitoring Locations										
Downgradient Monitoring Locations										
MW-11	Oeu/Oel	Assessment	No Change	--[4]	--[4]	7	2	0	0	0
MW-22	Og	Detection	No Change	--[4]	--[4]	16	0	0	0	0
MW-35	Oel	Corrective Action	No Change	Barium; Nickel	Cobalt	14	2	2	0	0
Background Monitoring Locations										
MW-18	Oeu	Background	No Change	None	None	0	0	0	0	5
MW-19R	Oel	Background	No Change	None	None	0	1	0	0	12

Comments:

fluv = Quaternary Fluvioglacial

N/A = not applicable. Either well is in detection monitoring or no statistically significant increases (SSIs) over background were evaluated for statistically significant levels (SSLs) over the groundwater protection standard (GWPS).

Qf = Quaternary Fill Placed During Landfill Construction

Ql = Quaternary Loess

Qc = Quaternary, Pre-Wisconsin Episode Colluvium

Qt = Quaternary Till

Oeu = Ordovician Maquoketa Formation, Upper Elgin Member (Interbedded Limestone and Shale)

Oel = Ordovician Maquoketa Formation, Lower Elgin Member (Shale)

Og = Ordovician Galena Formation (Limestone)

SSI = statistically significant increase above background

SSL = statistically significant level above the groundwater protection standard

[1] Current Monitoring Program is from the last event the location was sampled (i.e., Fall 2025 event).

[2] SSIs and SSLs are from the Fall 2025 statistical evaluation.

[3] The total number of samples under detection, assessment, corrective action, delineation, and background monitoring are estimated based on the numbers reported in the *2024 Annual Water Quality Report* (AECOM, 2024) plus the sampling events conducted in June and October 2025. Previously, corrective action monitoring events were included within the assessment monitoring category. The number of assessment and corrective action monitoring events will be reevaluated and updated in future reports to more accurately reflect sampling activities.

[4] As addressed in Table 2, SW-1, GU-1, GU-2, MW-24A, MW-101, MW-11, and MW-22 were dry or had insufficient volume for sample collection; therefore, these wells were not included in the Fall 2025 statistical evaluation.

[5] As discussed in Table 9, compliance with the GWPS was newly achieved for cobalt in MW-33 starting with this Fall 2025 statistical evaluation; therefore, an SSL was not listed for the corrective action constituent.

[6] MW-39A, MW-42A, MW-43A, and MW-44A moved to delineation monitoring this Fall 2025 sampling event as requested in the *Remedial Selection Report* (Foth, 2025c) and approved by the Iowa Department of Natural Resources (IDNR) in their letter dated Jan. 6, 2026 (IDNR, 2026).

Table 2
Monitoring Program Implementation Schedule
2025 Annual Water Quality Report
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Monitoring Well	Monitoring Program	Sampling Date and Constituents			Upcoming Sampling Dates and Constituents [3,4]		Full Appendix II Sample Dates	
		Feb. 2025 [1]	Jun. 2025 [2]	Oct. 2025 [3,4]	Spring 2026	Fall 2026	Previously Collected	Next Event
Surface Water Monitoring Locations								
Downstream Monitoring Locations								
SW-2	Detection		Appendix I, TSS	Appendix I, TSS	Cobalt, TSS [5]	Cobalt, TSS [5]	N/A	N/A
SW-5	Detection		Appendix I, TSS	Appendix I, TSS	Cobalt, TSS [5]	Cobalt, TSS [5]	N/A	N/A
Upstream Monitoring Location								
SW-1	Background		Appendix I, TSS	Dry	Cobalt, TSS [5]	Cobalt, TSS [5]	N/A	N/A
Shallow Groundwater Monitoring Locations								
Groundwater Underdrain Monitoring Locations								
GU-1	Detection		Appendix I, TSS	Dry	Appendix I, TSS	Appendix I, TSS	N/A	N/A
GU-2	Detection		Appendix I, TSS	Dry	Appendix I, TSS	Appendix I, TSS	N/A	N/A
Downgradient Monitoring Locations								
MW-2R	Detection		Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	N/A	N/A
MW-3	Detection		Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	N/A	N/A
MW-4	Assessment	Cadmium	Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	2015, Sep. 2015, Nov. 2016, Nov. 2017, Jun. 2023	Spring 2028
MW-4B	Detection		Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	2015, Sep. 2015, Dec. 2015, Nov. 2016, Nov. 2017	N/A
MW-7A	Assessment	Barium	Appendix II, TSS	Full Appendix II, TSS [6]	Appendix II, TSS	Appendix II, TSS	Jun. 2024, Oct. 2025	Fall 2030 [6]
MW-24A	Assessment		Water Level	Dry	Appendix II, TSS	Appendix II, TSS	Jun. 2020, Jun. 2024	Spring 2029
MW-25A	Detection		Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	N/A	N/A
MW-29A	Corrective Action		Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	Nov. 2020, May 2021, Mar. 2022	Spring 2027
MW-31A	Corrective Action		Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	Nov. 2020, May 2021, Mar. 2022	Spring 2027
MW-33A	Corrective Action		Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	Sep. 2021, Sep. 2022	Fall 2027
MW-34A	Detection		Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	N/A	N/A
MW-38A	Detection		Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	N/A	N/A
MW-40A	Assessment		Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	Appendix II, TSS	Nov. 2023, Jun. 2024	Spring 2029
MW-41A	Detection		Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	N/A	N/A
MW-45A	Detection		Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	N/A	N/A
MW-46A	Assessment		Appendix II, TSS	Full Appendix II, TSS [6]	Appendix II, TSS	Full Appendix II, TSS [6]	Oct. 2025	Fall 2026 [6]
MW-101	Detection		Appendix I, TSS	Dry	Appendix I, TSS	Appendix I, TSS	N/A	N/A
Delineation Monitoring Locations								
MW-39A	Delineation [3]		Appendix I, TSS	Appendix I, TSS	Cobalt, TSS [4]	Cobalt, TSS [4]	N/A	N/A
MW-42A	Delineation [3]	Nickel	Full Appendix II, TSS	Appendix I, TSS	Cobalt, TSS [4]	Cobalt, TSS [4]	Jun. 2024, Jun. 2025	N/A
MW-43A	Delineation [3]		Full Appendix II, TSS	Appendix I, TSS	Cobalt, TSS [4]	Cobalt, TSS [4]	Jul. 2024, Jun. 2025	N/A

Table 2
Monitoring Program Implementation Schedule
2025 Annual Water Quality Report
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Monitoring Well	Monitoring Program	Sampling Date and Constituents			Upcoming Sampling Dates and Constituents [3,4]		Full Appendix II Sample Dates	
		Feb. 2025 [1]	Jun. 2025 [2]	Oct. 2025 [3,4]	Spring 2026	Fall 2026	Previously Collected	Next Event
Shallow Groundwater Monitoring Locations Continued								
Delineation Monitoring Locations Continued								
MW-44A	Delineation [3]		Full Appendix II, TSS	Appendix I, TSS	Cobalt, TSS [5]	Cobalt, TSS [5]	Jun. 2024, Jun. 2025	N/A
Background Monitoring Locations								
MW-1	Background		Appendix I, TSS	Appendix II, TSS [7]	Appendix II, TSS [7]	Full Appendix II, TSS [7]	2015, Sep. 2015, Dec. 2015, Apr. 2016, Nov. 2016	Fall 2026 [7]
MW-37A	Background		Appendix I, TSS	Appendix II, TSS [7]	Appendix II, TSS [7]	Full Appendix II, TSS [7]	N/A	Fall 2026 [7]
Deep Groundwater Monitoring Locations								
Downgradient Monitoring Locations								
MW-11	Assessment		Dry	Dry	Appendix II, TSS	Appendix II, TSS	Jun. 2023, Jul. 2024	Spring 2029
MW-22	Detection		Appendix I, TSS	Dry	Appendix I, TSS	Appendix I, TSS	N/A	N/A
MW-35	Corrective Action		Appendix II, TSS	Appendix II, TSS	Full Appendix II, TSS [7]	Appendix II, TSS	Nov. 2020, Jun. 2021	Spring 2026
Background Monitoring Locations								
MW-18	Background		Appendix I, TSS	Appendix II, TSS [7]	Full Appendix II, TSS [7]	Appendix II, TSS [7]	N/A	Spring 2026 [7]
MW-19R	Background		Appendix I, TSS	Appendix II, TSS [7]	Full Appendix II, TSS [7]	Appendix II, TSS [7]	N/A	Spring 2026 [7]

Comments:

N/A = Not Applicable

[1] Resampling was conducted in Feb. 2025 for constituents with prediction limit exceedances identified at MW-4, MW-7A, and MW-42A in Fall 2024. The results of the Feb. 2025 sampling event were reported in the *2024 Annual Water Quality Report* (AECOM, 2025a). The Feb. 2025 retest did not confirm the prediction limit exceedances for cadmium in MW-4 and barium in MW-7A; however, nickel in MW-42 was confirmed as a statistically significant increase (SSI).

[2] Appendix II locations were sampled for the Appendix I and detected Appendix II constituents in Jun. 2025, unless otherwise noted. During the Jun. 2025 sampling event, deep groundwater location MW-11 was dry or had insufficient volume for sample collection. In the *2024 Annual Water Quality Report* (AECOM, 2025a), MW-24A was requested to be designated as a water-level-only location; therefore, a sample was not collected in Jun. 2025. Although the well is frequently dry, it is recommended that MW-24A remain in the assessment monitoring program and be sampled when there is sufficient volume. As noted in correspondence with the Iowa Department of Natural Resources (IDNR) in the email dated Aug. 12, 2025 (Foth, 2025a), AECOM recommended resampling for barium, cobalt, copper, lead, 2-butanone, and acetone in MW-33A, and for cadmium and zinc in MW-44A prior to the Fall 2025 sampling event. However, since these were in assessment monitoring or corrective action monitoring, these constituents were declared SSIs, and retests were not conducted.

[3] Appendix II locations were sampled for the Appendix I and detected Appendix II constituents in Oct. 2025, and will be sampled for the Appendix I and detected Appendix II constituents in Spring and Fall 2026, unless otherwise noted. During the Oct. 2025 sampling event, surface water location SW-1; shallow groundwater locations GU-1, GU-2, MW-24A, and MW-101; and deep groundwater locations MW-11, MW-22 were dry or had insufficient volume for sample collection. MW-7A and MW-46A moved to assessment monitoring in Summer 2023 and Fall 2024, respectively; however, MW-7A had only undergone one complete Appendix II sampling event, and MW-46A had yet to be sampled for the full Appendix II list. Therefore, MW-7A and MW-46A were sampled for the full Appendix II list in Oct. 2025. The results and future Appendix II sampling schedule for MW-7A and MW-46 are addressed in footnote (6). In accordance with Permit Special Provision X.4.b, resampling for the full Appendix II list at the assessment and corrective action monitoring wells that have completed at least two rounds of full Appendix II analyses will be conducted every five years.

[4] In Oct. 2025, monitoring locations sampled were also analyzed for the geochemical parameters as outlined in the *2024 ACM Report* (AECOM, 2025b). As indicated in the *Remedial Selection Report* (Foth, 2025c), biennial monitoring of geochemical parameters will be conducted at the corrective action, delineation, and background monitoring locations. Analysis of the geochemical parameters was not included in this evaluation. The Iowa Department of Natural Resources (IDNR) approved the *Remedial Selection Report* (Foth, 2025c) in their letter dated Jan. 6, 2026 (IDNR, 2026). The next biennial geochemical monitoring event will occur in Fall 2027.

Table 2
Monitoring Program Implementation Schedule
2025 Annual Water Quality Report
Winneshiek County Area Solid Waste Agency
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Comments Continued:

(5) MW-39A, MW-42A, MW-43A, and MW-44A moved to delineation monitoring this Fall 2025 sampling event as requested in the *Remedial Selection Report* (Foth, 2025c) and approved by the IDNR in their letter dated Jan. 6, 2026 (IDNR, 2026). Therefore, beginning in Spring 2026, MW-39A, MW-43A, and MW-44A, as well as surface monitoring locations, will only be analyzed for cobalt and total suspended solids.

(6) During the initial full Appendix II sampling events at MW-7A, no Appendix II constituents not included in Appendix I were detected above the practical quantitation limit (PQL); therefore, no new constituents will be added to the detected Appendix II constituents during semiannual assessment monitoring events. Since two full Appendix II sampling events were completed at MW-7A after the Oct. 2025 sampling event, future resampling of the full Appendix II list will be conducted every five years in accordance with Permit Special Provision X.4.b. The next full Appendix II event at MW-7A is scheduled for Fall 2030. MW-46 was sampled for the full Appendix II list for the first time in Oct. 2025, and no Appendix II constituents not in Appendix I were detected above the PQL. Therefore, in accordance with 567 IAC 113.10(6)b, annual monitoring for the full Appendix II list will be conducted at MW-46A again in Fall 2026.

(7) Beginning in Oct. 2025, background monitoring locations were sampled for the Appendix I list and Appendix II constituents detected in the downgradient monitoring wells, and will be conducted again in Spring 2026. While not required for compliance reasons, shallow groundwater background wells MW-1 and MW-37 will be sampled for the full Appendix II list in Fall 2026, and deep groundwater background wells MW-18 and MW-19R will be sampled for the full Appendix II list in Spring 2026.

Table 3
October 2025 Appendix II Detections
2025 Annual Water Quality Report
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Constituent	Unit	MW-1 (Bkgrnd)	MW-4 (DwnGrad)	MW-7A (DwnGrad)	MW-18 (Bkgrnd)	MW-19R (Bkgrnd)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-35 (DwnGrad)	MW-37A (Bkgrnd)	MW-40A (DwnGrad)	MW-46A (DwnGrad)
1,1-Dichloroethane	ug/L							0.916 J+					
1,4-Dichlorobenzene	ug/L	0.278 J+	0.246 J										
Antimony	ug/L				1.27 J								
Arsenic	ug/L	0.651 J	1.05 J			0.561 J	4.3	0.751 J	88.5	0.867 J	220	0.64 J	0.837 J
Barium	ug/L	184	476	319	72.5	92.1	133	206	209	256	630	229	277
Cadmium	ug/L		0.471					0.161 J					0.104 J
Chlorobenzene	ug/L	0.927 J+											
Chromium	ug/L	2.66 J		6.92					2.63 J		4.26 J	2.81 J	
Cobalt	ug/L	0.251 J	2.21	0.192 J	0.296 J	0.848	19.3	2.63	1.6	4.73	2.72	2.57	0.222 J
Lead	ug/L					0.679						0.482 J	
Nickel	ug/L	9.27	10.1	10.8			71	28.7		18.6	3.98 J	26	32.2
Sulfide	ug/L						3070						2270 J
Total Suspended Solids	mg/L	3.38	2.75		2.28	151	7.25	3.25	62	5	11.3	68.5	4.25

Comments:
DwnGrad = downgradient
Bkgrnd = background

Table 4
Monitoring Well Maintenance and Performance Reevaluation Schedule
2025 Annual Water Quality Report
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Compliance with:	Monitoring Calendar Years												
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
567 IAC 113.10(2)"f"(1): High and low water levels (semiannual)	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	
567 IAC 113.10(2)"f"(2): Changes in the hydrologic setting and flow paths	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	
567 IAC 113.10(2)"f"(3): Well depths	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Scheduled
567 IAC 113.10(2)"f"(4)" Well recharge rates and chemistry	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	
567 IAC 113.6(2)"i": Waste separation from ground water	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Scheduled

Comments:

• Groundwater elevations and measured well depths are shown on Table 5A and the field sampling forms in Appendix A.

• Waste separation from groundwater is shown on Table 5B.

Table 5A
Monitoring Well Maintenance and Performance Summary
2025 Annual Water Quality Report
Winneshiek County Area Solid Waste Agency
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Well	Top of Casing (feet amsl)	Top of Screen (feet amsl)	Total Depth (feet bTOC)	Measurement Description	Date of Measurements				Maximum Depth Discrepancy (feet)	Maximum GW Fluctuation (feet)
					Mar. 2024	Aug. 2024	Mar. 2025	Oct. 2025		
Shallow Groundwater Monitoring Locations										
Downgradient Monitoring Locations										
MW-2R	1175.56	1157.20	28.50	Groundwater Level (feet bTOC)	14.98	12.96	13.15	15.27	-0.05	2.31
				Groundwater Elevation (feet amsl)	1160.58	1162.60	1162.41	1160.29		
				Measured Well Depth (feet bTOC)	28.48	28.54	28.49	28.55		
				Submerged Screen	Y	Y	Y	Y		
MW-3	1162.81	1133.72	36.90	Groundwater Level (feet bTOC)	21.06	NM	20.40	20.86	-1.00	0.66
				Groundwater Elevation (feet amsl)	1141.75	NM	1142.41	1141.95		
				Measured Well Depth (feet bTOC)	37.82	NM	37.84	37.90		
				Submerged Screen	Y	NM	Y	Y		
MW-4	1180.35	1143.04	44.80	Groundwater Level (feet bTOC)	34.83	32.49	34.44	34.52	-0.15	2.34
				Groundwater Elevation (feet amsl)	1145.52	1147.86	1145.91	1145.83		
				Measured Well Depth (feet bTOC)	44.88	44.94	44.88	44.95		
				Submerged Screen	Y	Y	Y	Y		
MW-4B	1180.15	1150.59	40.20	Groundwater Level (feet bTOC)	34.25	31.60	33.82	33.89	-0.04	2.65
				Groundwater Elevation (feet amsl)	1145.90	1148.55	1146.33	1146.26		
				Measured Well Depth (feet bTOC)	40.17	40.24	40.20	40.20		
				Submerged Screen	N	N	N	N		
MW-7A	1136.05	1126.19	20.30	Groundwater Level (feet bTOC)	12.07	13.10	11.00	14.73	0.06	3.73
				Groundwater Elevation (feet amsl)	1123.98	1122.95	1125.05	1121.32		
				Measured Well Depth (feet bTOC)	20.24	20.27	20.24	20.25		
				Submerged Screen	N	N	N	N		
MW-24A	1132.98	1120.69	22.29	Groundwater Level (feet bTOC)	19.56	21.66	21.46	22.48	-5.51	2.92
				Groundwater Elevation (feet amsl)	1113.42	1111.32	1111.52	1110.50		
				Measured Well Depth (feet bTOC)	22.78	27.80	22.80	22.55		
				Submerged Screen	N	N	N	N		
MW-25A	1137.98	1126.71	21.27	Groundwater Level (feet bTOC)	16.80	19.20	16.67	19.30	-0.48	2.63
				Groundwater Elevation (feet amsl)	1121.18	1118.78	1121.31	1118.68		
				Measured Well Depth (feet bTOC)	21.74	21.74	21.72	21.75		
				Submerged Screen	N	N	N	N		
MW-29A	1133.85	1116.55	27.27	Groundwater Level (feet bTOC)	23.22	23.69	23.12	24.29	0.08	1.17
				Groundwater Elevation (feet amsl)	1110.63	1110.16	1110.73	1109.56		
				Measured Well Depth (feet bTOC)	27.20	27.24	27.19	27.25		
				Submerged Screen	N	N	N	N		

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Well	Top of Casing (feet amsl)	Top of Screen (feet amsl)	Total Depth (feet bTOC)	Measurement Description	Date of Measurements				Maximum Depth Discrepancy (feet)	Maximum GW Fluctuation (feet)
					Mar. 2024	Aug. 2024	Mar. 2025	Oct. 2025		
Shallow Groundwater Monitoring Locations Continued										
Downgradient Monitoring Locations Continued										
MW-31A	1138.77	1126.17	22.81	Groundwater Level (feet bTOC)	15.78	16.51	16.00	17.04	0.11	1.26
				Groundwater Elevation (feet amsl)	1122.99	1122.26	1122.77	1121.73		
				Measured Well Depth (feet bTOC)	22.70	22.74	22.70	22.75		
				Submerged Screen	N	N	N	N		
MW-33A	1205.88	1193.83	22.45	Groundwater Level (feet bTOC)	19.89	13.06	17.98	19.98	0.27	6.92
				Groundwater Elevation (feet amsl)	1185.99	1192.82	1187.90	1185.90		
				Measured Well Depth (feet bTOC)	22.30	22.40	22.18	22.40		
				Submerged Screen	N	N	N	N		
MW-34A	1166.70	1150.20	26.81	Groundwater Level (feet bTOC)	8.21	6.30	6.53	7.75	0.29	1.91
				Groundwater Elevation (feet amsl)	1158.49	1160.40	1160.17	1158.95		
				Measured Well Depth (feet bTOC)	26.52	26.72	26.65	26.75		
				Submerged Screen	Y	Y	Y	Y		
MW-38A	1148.37	1130.47	32.62	Groundwater Level (feet bTOC)	25.06	24.05	22.58	24.85	0.14	2.48
				Groundwater Elevation (feet amsl)	1123.31	1124.32	1125.79	1123.52		
				Measured Well Depth (feet bTOC)	32.50	32.55	32.48	32.55		
				Submerged Screen	N	N	N	N		
MW-40A	1151.17	1123.82	41.81	Groundwater Level (feet bTOC)	28.14	20.16	26.47	28.23	0.13	8.07
				Groundwater Elevation (feet amsl)	1123.03	1131.01	1124.70	1122.94		
				Measured Well Depth (feet bTOC)	41.69	41.72	41.68	41.75		
				Submerged Screen	N	Y	Y	N		
MW-41A	1149.75	1136.63	23.78	Groundwater Level (feet bTOC)	5.91	2.71	4.87	5.24	-0.04	3.20
				Groundwater Elevation (feet amsl)	1143.84	1147.04	1144.88	1144.51		
				Measured Well Depth (feet bTOC)	23.75	23.82	23.78	23.80		
				Submerged Screen	Y	Y	Y	Y		
MW-45A	1147.69	1139.13	19.13	Groundwater Level (feet bTOC)	8.30	NM	7.57	8.97	-0.05	1.40
				Groundwater Elevation (feet amsl)	1139.39	NM	1140.12	1138.72		
				Measured Well Depth (feet bTOC)	19.13	NM	19.14	19.18		
				Submerged Screen	Y	NM	Y	N		
MW-46A	1130.82	1123.04	18.18	Groundwater Level (feet bTOC)	9.18	9.25	9.95	10.19	0.08	1.01
				Groundwater Elevation (feet amsl)	1121.64	1121.57	1120.87	1120.63		
				Measured Well Depth (feet bTOC)	18.14	18.12	18.10	18.15		
				Submerged Screen	N	N	N	N		

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Well	Top of Casing (feet amsl)	Top of Screen (feet amsl)	Total Depth (feet bTOC)	Measurement Description	Date of Measurements				Maximum Depth Discrepancy (feet)	Maximum GW Fluctuation (feet)
					Mar. 2024	Aug. 2024	Mar. 2025	Oct. 2025		
Shallow Groundwater Monitoring Locations Continued										
Downgradient Monitoring Locations Continued										
MW-101A	1134.55	1104.10	40.40	Groundwater Level (feet bTOC)	39.09	38.82	38.93	38.79	-0.02	0.30
				Groundwater Elevation (feet amsl)	1095.46	1095.73	1095.62	1095.76		
				Measured Well Depth (feet bTOC)	40.38	40.42	40.38	40.40		
				Submerged Screen	N	N	N	N		
Delineation Monitoring Locations										
MW-39A	1146.90	1128.99	32.47	Groundwater Level (feet bTOC)	23.86	23.45	21.57	23.65	0.15	2.29
				Groundwater Elevation (feet amsl)	1123.04	1123.45	1125.33	1123.25		
				Measured Well Depth (feet bTOC)	32.32	32.36	32.37	32.43		
				Submerged Screen	N	N	N	N		
MW-42A	1135.43	1121.86	23.22	Groundwater Level (feet bTOC)	13.50	14.72	13.97	14.83	-0.58	1.33
				Groundwater Elevation (feet amsl)	1121.93	1120.71	1121.46	1120.60		
				Measured Well Depth (feet bTOC)	23.74	23.76	23.73	23.80		
				Submerged Screen	Y	N	N	N		
MW-43A	1119.21	1109.31	20.25	Groundwater Level (feet bTOC)	8.26	8.93	7.84	9.08	-0.05	1.24
				Groundwater Elevation (feet amsl)	1110.95	1110.28	1111.37	1110.13		
				Measured Well Depth (feet bTOC)	20.22	20.25	20.22	20.30		
				Submerged Screen	Y	Y	Y	Y		
MW-44A	1117.88	1107.67	20.27	Groundwater Level (feet bTOC)	9.59	9.40	8.88	9.90	0.06	1.02
				Groundwater Elevation (feet amsl)	1108.29	1108.48	1109.00	1107.98		
				Measured Well Depth (feet bTOC)	20.25	20.21	20.25	20.30		
				Submerged Screen	Y	Y	Y	Y		
Background Monitoring Locations										
MW-1	1200.92	1186.30	22.02	Groundwater Level (feet bTOC)	18.35	11.04	13.50	17.85	-0.08	7.31
				Groundwater Elevation (feet amsl)	1182.57	1189.88	1187.42	1183.07		
				Measured Well Depth (feet bTOC)	22.02	22.04	22.02	22.10		
				Submerged Screen	N	Y	Y	N		
MW-37A	1210.30	1198.50	26.48	Groundwater Level (feet bTOC)	25.61	14.93	21.82	22.44	0.18	10.68
				Groundwater Elevation (feet amsl)	1184.69	1195.37	1188.48	1187.86		
				Measured Well Depth (feet bTOC)	26.30	26.32	26.31	26.35		
				Submerged Screen	N	N	N	N		

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Well	Top of Casing (feet amsl)	Top of Screen (feet amsl)	Total Depth (feet bTOC)	Measurement Description	Date of Measurements				Maximum Depth Discrepancy (feet)	Maximum GW Fluctuation (feet)
					Mar. 2024	Aug. 2024	Mar. 2025	Oct. 2025		
Deep Groundwater Monitoring Locations										
Downgradient Monitoring Locations										
MW-11	1138.92	1106.50	42.42	Groundwater Level (feet bTOC)	40.19	41.46	40.22	39.19	-0.34	2.27
				Groundwater Elevation (feet amsl)	1098.73	1097.46	1098.70	1099.73		
				Measured Well Depth (feet bTOC)	42.34	42.76	42.32	42.40		
				Submerged Screen	N	N	N	N		
MW-22	1135.52	1103.05	42.77	Groundwater Level (feet bTOC)	38.94	39.09	38.61	39.08	0.14	0.48
				Groundwater Elevation (feet amsl)	1096.58	1096.43	1096.91	1096.44		
				Measured Well Depth (feet bTOC)	42.63	42.66	42.65	42.77		
				Submerged Screen	N	N	N	N		
MW-35	1170.60	1125.10	55.64	Groundwater Level (feet bTOC)	47.59	47.15	45.32	47.40	-1.93	2.27
				Groundwater Elevation (feet amsl)	1123.01	1123.45	1125.28	1123.20		
				Measured Well Depth (feet bTOC)	57.57	55.64	55.55	55.60		
				Submerged Screen	N	N	Y	N		
Background Monitoring Locations										
MW-18	1163.02	1122.79	47.38	Groundwater Level (feet bTOC)	20.94	20.18	20.29	20.73	-0.62	0.76
				Groundwater Elevation (feet amsl)	1142.08	1142.84	1142.73	1142.29		
				Measured Well Depth (feet bTOC)	47.93	48.00	47.97	48.00		
				Submerged Screen	Y	Y	Y	Y		
MW-19R	1204.15	1153.45	71.00	Groundwater Level (feet bTOC)	47.83	46.11	47.03	47.36	1.00	1.72
				Groundwater Elevation (feet amsl)	1156.32	1158.04	1157.12	1156.79		
				Measured Well Depth (feet bTOC)	70.80	70.91	70.79	70.00		
				Submerged Screen	Y	Y	Y	Y		

Comments:
amsl = above mean sea level
bTOC = below top of casing
NM = not measured

Table 5A
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Acceptability of Well Locations:

• In accordance with 567 IAC 113.10(2)f(1), a review of the horizontal and vertical acceptability of the approved monitoring points shall be conducted every two years. The *2024 UPDATE Winneshiek Hydrologic Monitoring System Plan* (AECOM, 2024) details the water table shallow groundwater and deep groundwater monitoring networks. The downgradient monitoring wells are spaced roughly 300 feet apart around the downgradient perimeters. In addition, the groundwater underdrains for Cell 5 and Cell 5 EXP are being monitored. Horizontal delineation wells (MW-39A, MW-42A, MW-43A, and MW-44A) and surface water monitoring locations delineate statistically significant levels (SSLs) over the groundwater protection standard (GWPS) at the downgradient corrective action monitoring wells. The current horizontal placement of downgradient wells and monitoring of the groundwater underdrains is acceptable for detecting and monitoring any potential groundwater impacts from the landfill. As described in the theoretical release evaluation of the HMSP, since the landfill was constructed above the water table, the shallow groundwater is considered the primary pathway for any release from the landfill. Therefore, the purpose of the deep groundwater wells is for vertical delineation and not for the identification of new releases. Based on this review, the deeper bedrock monitoring wells are not evaluated for horizontal acceptability.

• In terms of vertical acceptability, the groundwater monitoring network includes wells completed within different intervals of the first water-bearing zone. The water table (shallow) is screened in different geologic units because the water table occurs in successively different stratigraphic horizons downslope. The deep (bedrock) groundwater wells are screened in the lower Elgin Member of the Maquoketa Formation, and where the Maquoketa is absent, the Galena Group Dubuque Formation. The water table and bedrock groundwater are interconnected and act as one water-bearing zone transifitioning to only water table on the east side of the landfill with groundwater discharging to the tributary of Trout River.

• For the water table wells (shallow groundwater), the 2024 and 2025 groundwater elevations were within the screened interval with the exceptions of MW-2R, MW-3, MW-4, MW-34A, MW-40A, MW-41A, MW-42A, MW-43A, MW-44A, and MW-1. Of these wells, MW-4, MW-34A, and MW-41A, MW-43A, and MW-44A consistently had submerged screens. While these wells continually have submerged screens, these locations continue to provide representative information regarding local groundwater elevation and quality given that most elevations were only slightly above the screened interval, elevations were within the normal range of elevations at these locations (indicating no change in conditions), and/or proximity to the tributary attributed to the higher groundwater elevation.

• The biennial evaluation indicates that the horizontal and vertical placement of the existing monitoring wells continues to be acceptable and no maintenance activities are recommended based on horizontal and vertical acceptability at this time.

Water Level Conditions:

• In accordance with IAC 113.10(2)f(2), a review of water level conditions must be conducted every two years to ensure that the effects of waste disposal or well operation have not resulted in changes in the hydrologic setting and resultant flow paths. The Mar. 2024 shallow and deep groundwater contours are depicted in Figures 2 and 3 of the *2024 AWQR* (AECOM, 2025a), and the Mar. and Oct. 2025 shallow and deep groundwater contours are depicted in Figures 2 through 5 of the 2025 AWQR. The water table (shallow) groundwater contour maps were developed using water level measurements from the shallow groundwater monitoring wells, liquid measurements from the leachate monitoring locations in the unlined Areas 1, 2, and 3, and the base of drainageway elevations for the groundwater cutoff trench/drainage way along the western portion of the site. The bedrock (deep) groundwater contour maps were developed using water level measurements from the deep groundwater monitoring wells. The groundwater flow direction is unchanged relative to previous reviews: shallow groundwater continues to flow northward in the western portion and eastward in the eastern portion, and deep groundwater continues to flow toward the northeast. Significant impacts or changes in groundwater hydrology or groundwater flow paths have not occurred.

• Examination of the contours also indicates that the background wells remain suitable for continued use: MW-1, MW-37, MW-18, and MW-19R are located upgradient of the landfill cells.

• The 2024 and 2025 groundwater elevations have remained fairly consistent, typically exhibiting a seasonal fluctuation of less than 4 feet. Greater seasonal fluctuation was exhibited at MW-33A, MW-40A, MW-1, and MW-37A.

• The biennial evaluation did not identify significant impacts or changes in groundwater hydrology or groundwater flow paths. No maintenance activities are recommended based on review of the 2024 and 2025 water level information.

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Well Depths:

• In accordance with IAC 113.10(2)f(3), well depth measurements were collected in 2024 and 2025 to ensure the wells are physically intact and not filling with sediment. The 2024 and 2025 well depths are within one foot of the original well depths, except for MW-35. The well depth measurements at this location was nearly 2 feet deeper than the original well depth, which does not indicate that the well is filling with sediment. The discrepancy between the measured well depth and the original depth at MW-35 is attributed to an error in the original boring log record for the well.

• The 2024 and 2025 measured well depths indicated that the wells are not filling with sediment and remain physically intact. No maintenance activities are recommended based on review of the 2024 and 2025 well depth information.

Well Deterioration:

• In accordance with IAC 113.10(2)f(4), a review of well recharge rates and chemistry must be conducted every two years to determine if well deterioration is occurring. Review of the water level measurements prior to and subsequent to sampling indicated that recharge rates are consistent with historically observed data. The 2024 and 2025 field parameter results measured during purging are consistent with previously observed measurements.

• The well recharges rates and field chemistry data indicate the integrity of the monitoring wells remains intact and that no deterioration is occurring. Based on review of the well recharge rates and field chemistry, no maintenance activities are recommended.

Exterior Well Maintenance:

• Details regarding the well inspection conducted in Mar. 2025 is provided in Appendix A. The following exterior well maintenance is recommended in 2026: repair the outer casing at monitoring wells MW-2 and MW-3.

Proposed Changes to the Monitoring Network

• Based on the biennial review of water levels, well depths, horizontal and vertical acceptability of well locations, well recharge rates, and field chemistry, no well maintenance activities or additional monitoring wells are recommended. As noted above, exterior well maintenance is recommended at MW-2 and MW-3.

Table 5B
Groundwater Separation Distance Evaluation
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Well	Unit	Date	Bottom of Waste Elevation (feet amsl)	Groundwater Elevation (feet amsl)	Groundwater Separation Distance (feet)	Acceptable (Yes/No)
Groundwater Separation Distance Piezometers						
GU-1	Cell 5	Mar. 2025	1123.70	1107.20	>5	Yes
		Oct. 2025	1123.70	1107.20	>5	Yes
GU5E-1	Cell 5 EXP	Mar. 2025	1141.50	1136.40	>5	Yes
		Oct. 2025	1141.50	1136.40	>5	Yes

Comments:

amsl = above mean sea level

• The contents of this table are intended to satisfy the requirements set forth in 567 IAC 113.6(2)i and Permit Special Provision X.4.d.

• Areas 1, 2, and 3 are unlined and were constructed in accordance with the rules in effect at the time, which did not include a requirement for groundwater separation. Cell 4 is clay-lined and constructed without an underdrain based on documented groundwater separation exceeding 5 feet below waste. As a result, these areas are not evaluated in this table.

• Groundwater elevations are measured at the GU-1 and GU-5E-1 underdrain sumps by measuring depth to water.

• The minimum five-foot separation distance was maintained at lined Cell 5 and Cell 5 EXP in 2025.

Table 6
Background and GWPS Summary
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Constituent [1]	CAS #	Units	Samples	Detections [2]	Min [3]	Max [3]	Mean [3]	Note	Background Level	Statistical Test	GWPS	Source [4]
Interwell Background/GWPS (Oct./Nov. 2014 - Jun. 2025) - Surface Water Monitoring Locations [5]												
Acetone	67-64-1	ug/L	20	5	2.88 J	5.00 (1/2 RL)	4.62	J-flagged Only	**10.0 (RL)**	DQR	**6300**	SS
Arsenic	7440-38-2	mg/L	20	4	0.000685 J	0.00254	0.00105		**0.00254**	Non-Parametric (1-of-2)	**0.01**	MCL
Barium	7440-39-3	mg/L	20	20	0.103	0.201	0.127		**0.201**	Non-Parametric (1-of-2)	**2**	MCL
Beryllium	7440-41-7	mg/L	20	1	0.000497 J	0.0005 (1/2 RL)	0.00050	J-flagged Only	**0.001**	DQR	**0.004**	MCL
Bromomethane	74-83-9	ug/L	20	1	0.367 J	2.00 (1/2 RL)	1.92	J-flagged Only	**4.00 (RL)**	DQR	**10**	SS
Cadmium	7440-43-9	mg/L	12	3	0.00005 (1/2 RL)	0.000228	0.000959		**0.000228**	Non-Parametric (1-of-2)	**0.005**	MCL
Chloromethane	74-87-3	ug/L	20	1	0.322 J	1.5 (1/2 RL)	1.44	J-flagged Only	**3.00 (RL)**	DQR	**N/A**	N/A
Chromium	7440-47-3	mg/L	20	3	0.00128 J	0.0025 (1/2 RL)	0.0024	J-flagged Only	**0.005 (RL)**	DQR	**0.1**	MCL
Cobalt	7440-48-4	mg/L	20	15	0.000085 J	0.00436	0.00047		**0.00436**	Non-Parametric (1-of-2)	**0.00436**	Background
Copper	7440-50-8	mg/L	20	6	0.000508 J	0.0115	0.0030		**0.0115**	Non-Parametric (1-of-2)	**1.3**	MCL
Lead	7439-92-1	mg/L	20	8	0.000142 J	0.00708	0.00067		**0.00708**	Non-Parametric (1-of-2)	**0.01**	MCL
Methylene Chloride	75-09-2	ug/L	20	3	0.753 J	2.5 (1/2 RL)	2.24	J-flagged Only	**5.00 (RL)**	DQR	**5**	MCL
Nickel	7440-02-0	mg/L	20	3	0.00106 J	0.00785	0.00262		**0.00785**	Non-Parametric (1-of-2)	**0.1**	SS
Selenium	7782-49-2	mg/L	20	4	0.000916 J	0.0025 (1/2 RL)	0.00222	J-flagged Only	**0.005 (RL)**	DQR	**0.05**	MCL
Silver	7440-22-4	mg/L	21	2	0.000063 J	0.00136	0.00051		**0.00136**	Non-Parametric (1-of-2)	**0.1**	SS
Thallium	7440-28-0	mg/L	21	3	0.000281 J	0.00467	0.00079		**0.00467**	Non-Parametric (1-of-2)	**0.00467**	Background
Toluene	108-88-3	ug/L	20	1	0.475 J	0.50 (1/2 RL)	0.50	J-flagged Only	**1.00 (RL)**	DQR	**1000**	SS
Total Suspended Solids	TSS	mg/L	21	21	1.75 J	824	64.57		**N/A**	N/A	**N/A**	N/A
Vanadium	7440-62-2	mg/L	20	12	0.000495 J	0.00759	0.00218		**0.007742**	Parametric (Lognormal, 1-of-2)	**0.035**	SS
Vinyl Chloride	75-01-4	ug/L	20	1	0.224 J	0.50 (1/2 RL)	0.49	J-flagged Only	**1.00 (RL)**	DQR	**2**	MCL
Zinc	7440-66-6	mg/L	20	2	0.005 (1/2 RL)	0.0207	0.0097		**0.0207**	Non-Parametric (1-of-2)	**2**	SS
Interwell Background/GWPS (Oct./Nov. 2014 - Oct. 2025) - Shallow Groundwater Monitoring Locations												
1,4-Dichlorobenzene	106-46-7	ug/L	34	4	0.256 J	0.516 J	0.482	J-Flagged Only	**1.00 (RL)**	DQR	**75**	SS
4,4'-DDE	72-55-9	ug/L	3	2	0.00427 J	0.0176 (1/2 RL)	0.0095	J-Flagged Only	**0.0352 (RL)**	DQR	**0.51**	SS
4,4'-DDT	50-29-3	ug/L	3	2	0.00632 J	0.0176 (1/2 RL)	0.0111	J-Flagged Only	**0.0352 (RL)**	DQR	**0.51**	SS
Acetone	67-64-1	ug/L	34	3	1.98 J	18.1	5.26		**10.0 (RL)**	DQR	**6300**	SS
Acetonitrile	75-05-8	ug/L	2	1	0.166 J	5 (1/2 RL)	2.58	J-Flagged Only	**10.0 (RL)**	DQR	**N/A**	N/A
alpha-BHC	319-84-6	ug/L	3	1	0.00287 J	0.0178 (1/2 RL)	0.01276	J-Flagged Only	**0.0352 (RL)**	DQR	**0.028**	SS
Arsenic	7440-38-2	mg/L	31	8	0.000604 J	0.22	0.00816		**0.22**	Non-Parametric (1-of-2)	**0.22**	Background
Barium	7440-39-3	mg/L	30	30	0.0938	0.63	0.1527		**0.63**	Non-Parametric (1-of-2)	**2**	MCL
Benzene	71-43-2	ug/L	34	1	0.25 (1/2 RL)	6.01	0.42		**0.500 (RL)**	DQR	**5**	MCL
Bis(2-ethylhexyl)phthalate	117-81-7	ug/L	2	2	0.679 J	7.65 J	4.17	J-Flagged Only	**11.0 (RL)**	DQR	**6**	MCL
Chlorobenzene	108-90-7	ug/L	35	6	0.5 (1/2 RL)	4.64	0.74		**1.00 (RL)**	DQR	**100**	MCL
Chloromethane	74-87-3	ug/L	34	1	0.815	1.5	1.48	J-Flagged Only	**3.00 (RL)**	DQR	**N/A**	N/A
Chromium	7440-47-3	mg/L	33	11	0.000423 J	0.00426	0.00220	J-Flagged Only	**0.005 (RL)**	DQR	**0.1**	MCL
Cobalt	7440-48-4	mg/L	30	15	0.000047 J	0.00272	0.00032		**0.00272**	Non-Parametric (1-of-2)	**0.0034**	Site-Specific
Copper	7440-50-8	mg/L	31	2	0.000526	0.0225 (1/2 RL)	0.0023	J-Flagged Only	**0.0225**	DQR	**1.3**	MCL
delta-BHC	319-86-8	ug/L	3	1	0.00458 J	0.0178 (1/2 RL)	0.0133	J-Flagged Only	**0.0352 (RL)**	DQR	**2.1**	SS
Dieldrin	60-57-1	ug/L	3	1	0.00683 J	0.0178 (1/2 RL)	0.0141	J-Flagged Only	**0.0352 (RL)**	DQR	**0.011**	SS

Table 6
Background and GWPS Summary
2025 Annual Water Quality Report
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Constituent [1]	CAS #	Units	Samples	Detections [2]	Min [3]	Max [3]	Mean [3]	Note	Background Level	Statistical Test	GWPS	Source [4]
Interwell Background/GWPS (Oct./Nov. 2014 - Oct. 2025) - Shallow Groundwater Monitoring Locations Continued												
Diethylphthalate	84-66-2	ug/L	5	3	0.348 J	5.5 (1/2 RL)	2.49	J-Flagged Only	**11.0 (RL)**	DQR	**5600**	SS
Di-n-octylphthalate	117-84-0	ug/L	5	2	1.08 J	11.1 (1/2 RL)	6.92	J-Flagged Only	**22.0 (RL)**	DQR	**140**	SS
Endosulfan II	33213-65-9	ug/L	5	1	0.00589 J	0.0182 (1/2 RL)	0.0151	J-Flagged Only	**0.0352 (RL)**	DQR	**42**	SS
Endosulfan Sulfate	1031-07-8	ug/L	3	2	0.00544 J	0.0176 (1/2 RL)	0.0103	J-Flagged Only	**0.0352 (RL)**	DQR	**42**	SS
Endrin	72-20-8	ug/L	3	1	0.00247 J	0.0178 (1/2 RL)	0.0126	J-Flagged Only	**0.0352 (RL)**	DQR	**N/A**	N/A
Heptachlor	76-44-8	ug/L	3	2	0.00335 J	0.0176 (1/2 RL)	0.0086	J-Flagged Only	**0.0352 (RL)**	DQR	**0.4**	MCL
Lead	7439-92-1	mg/L	32	4	0.000224 J	0.000459 J	0.000259	J-Flagged Only	**0.0005 (RL)**	DQR	**0.01**	MCL
Lindane (BHC, Gamma-)	58-89-9	ug/L	3	1	0.00267 J	0.0178 (1/2RL)	0.0127	J-Flagged Only	**0.0352 (RL)**	DQR	**0.2**	MCL
Methoxychlor	72-43-5	ug/L	6	2	0.00889 J	0.0184 (1/2 RL)	0.0154	J-Flagged Only	**0.0352 (RL)**	DQR	**40**	MCL
Methylene Chloride	75-09-2	ug/L	34	3	0.286	2.5 (1/2 RL)	2.33	J-Flagged Only	**5.0 (RL)**	DQR	**5**	MCL
Nickel	7440-02-0	mg/L	31	11	0.000971 J	0.00927	0.0029		**0.00927**	Non-Parametric (1-of-2)	**0.1**	SS
Selenium	7782-49-2	mg/L	34	2	0.00125 (1/2 RL)	0.0025 (1/2 RL)	0.0024	J-Flagged Only	**0.005 (RL)**	DQR	**0.05**	MCL
Silver	7440-22-4	mg/L	33	3	0.000117 J	0.0005 (1/2 RL)	0.00047	J-Flagged Only	**0.001 (RL)**	DQR	**0.1**	SS
Tetrachloroethene	127-18-4	ug/L	34	1	0.5 (1/2 RL)	0.94 J	0.51	J-Flagged Only	**1.00 (RL)**	DQR	**5**	MCL
Thallium	7440-28-0	mg/L	34	1	0.000038 J	0.001 (1/2 RL)	0.0005	J-Flagged Only	**0.001 (RL)**	DQR	**0.002**	MCL
Total Suspended Solids	TSS	mg/L	35	21	0.75 J	276	18.46		**N/A**	N/A	**N/A**	N/A
Vanadium	7440-62-2	mg/L	31	6	0.000394 J	0.0025 (1/2 RL)	0.0022	J-Flagged Only	**0.005 (RL)**	DQR	**0.035**	SS
Vinyl Chloride	75-01-4	ug/L	34	1	0.437 J	0.5 (1/2 RL)	0.498		**1.00 (RL)**	DQR	**2**	MCL
Interwell Background/GWPS (Oct./Nov. 2014 - Oct. 2025) - Deep Groundwater Monitoring Locations												
Acetone	67-64-1	ug/L	17	1	5 (1/2 RL)	10.3	5.31		**10.0 (RL)**	DQR	**6300**	SS
Antimony	7440-36-0	mg/L	17	1	0.001 (1/2 RL)	0.00127 J	0.00102		**0.002 (RL)**	DQR	**0.006**	MCL
Barium	7440-39-3	mg/L	13	13	0.0584	0.168	0.0893		**0.1906**	Parametric (Lognormal, 1-of-2)	**2**	MCL
Benzene	71-43-2	ug/L	17	5	0.235 J	0.467 J	0.287		**0.500 (RL)**	DQR	**5**	MCL
Chromium	7440-47-3	mg/L	16	1	0.0025 (1/2 RL)	0.00299 J	0.00253	J-Flagged Only	**0.005 (RL)**	DQR	**0.1**	MCL
Cobalt	7440-48-4	mg/L	13	7	0.000231 J	0.000624	0.00030		**0.000624**	Non-Parametric (1-of-2)	**0.0021**	Background
Copper	7440-50-8	mg/L	16	1	0.0001	0.00272	0.0024	J-Flagged Only	**0.005 (RL)**	DQR	**1.3**	MCL
Lead	7439-92-1	mg/L	14	1	0.00025 (1/2 RL)	0.000268 J	0.00025	J-Flagged Only	**0.0005 (RL)**	DQR	**0.01**	MCL
Nickel	7440-02-0	mg/L	15	1	0.00206 J	0.0025 (1/2 RL)	0.0025	J-Flagged Only	**0.005 (RL)**	DQR	**0.1**	SS
Silver	7440-22-4	mg/L	17	1	0.0005 (1/2 RL)	0.00124	0.0005	J-Flagged Only	**0.00124**	Non-Parametric (1-of-2)	**0.1**	SS
Toluene	108-88-3	ug/L	17	1	0.431 J	0.50 (1/2 RL)	0.496	J-Flagged Only	**1.00 (RL)**	DQR	**1,000**	MCL
Total Suspended Solids	TSS	mg/L	18	16	0.94 (1/2 RL)	834	80.27		**N/A**	N/A	**N/A**	N/A

Comments:
DQR = double quantification rule
GWPS = groundwater protection standard
MCL = Maximum Contaminant Level
mg/L = milligrams per liter
N/A = not applicable
RL = reporting limit taken as the laboratory practical quantitation limit (PQL)

Table 6
Background and GWPS Summary
2025 Annual Water Quality Report
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Comments Continued:

SS = Statewide Standard

ug/L = micrograms per liter

(1) List contains constituents detected above the laboratory method detection limit (MDL) in the background data sets after data set adjustments detailed in the Appendix B statistical reports were conducted (i.e., removal of background data based on turbidity and elevated PQLs). Background data set adjustments are listed as crossed-out concentrations in Table 13 and were removed from the background data set prior to conducting statistical analyses.

(2) The number of detections includes J-flagged data (concentrations above the MDL but below the RL).

(3) Non-detect concentrations are included in the calculation of minimum, maximum, and mean; 1/2 the RL was utilized for non-detect concentrations.

(4) Sources are either the Maximum Contaminant Level (MCL) promulgated under Section 1412 of the Safe Drinking Water Act in 40 CFR Part 141 or the 567 Iowa Administrative Code (IAC) Chapter 137 Statewide Standards for a Protected Groundwater Source (SS). If background is higher than the MCL or SS, the GWPS is background. Background as the GWPS is the one-sample test confidence limit method where the fixed GWPS is the background upper tolerance limit with 95% confidence and 95% coverage. As requested in the report priority, the Oct. 2025 arsenic concentration at background monitoring well MW-37 was above the GWPS. Therefore, it is recommended that the background GWPS for arsenic in the shallow groundwater system be established at 0.22 mg/L. In the case of cobalt, a site-specific GWPS of 0.0034 mg/L has been established and is detailed in the *2024 UPDATE Winneshiek Hydrologic Monitoring System Plan* (HMSP) (AECOM, 2024), which was approved by the IDNR in their letter dated Oct. 29, 2024 (IDNR, 2024). Previously, the site-specific GWPS was applied to the deep groundwater system in addition to the shallow groundwater system; however, the cobalt prediction limit in the deep groundwater system is below the SS of 0.0021 mg/L. Therefore, it is recommended that the health-based GWPS (i.e., 0.0021 mg/L) be used as the GWPS for the deep groundwater system. N/A = not applicable; constituent does not have a MCL or SS and using background as the GWPS is not applicable due to limited detections in background and the downgradient data set.

(5) As noted in Table 2, background surface water monitoring location SW-1 was dry during the Oct. 2025 sampling event; therefore, only data through the Jun. 2025 event are included.

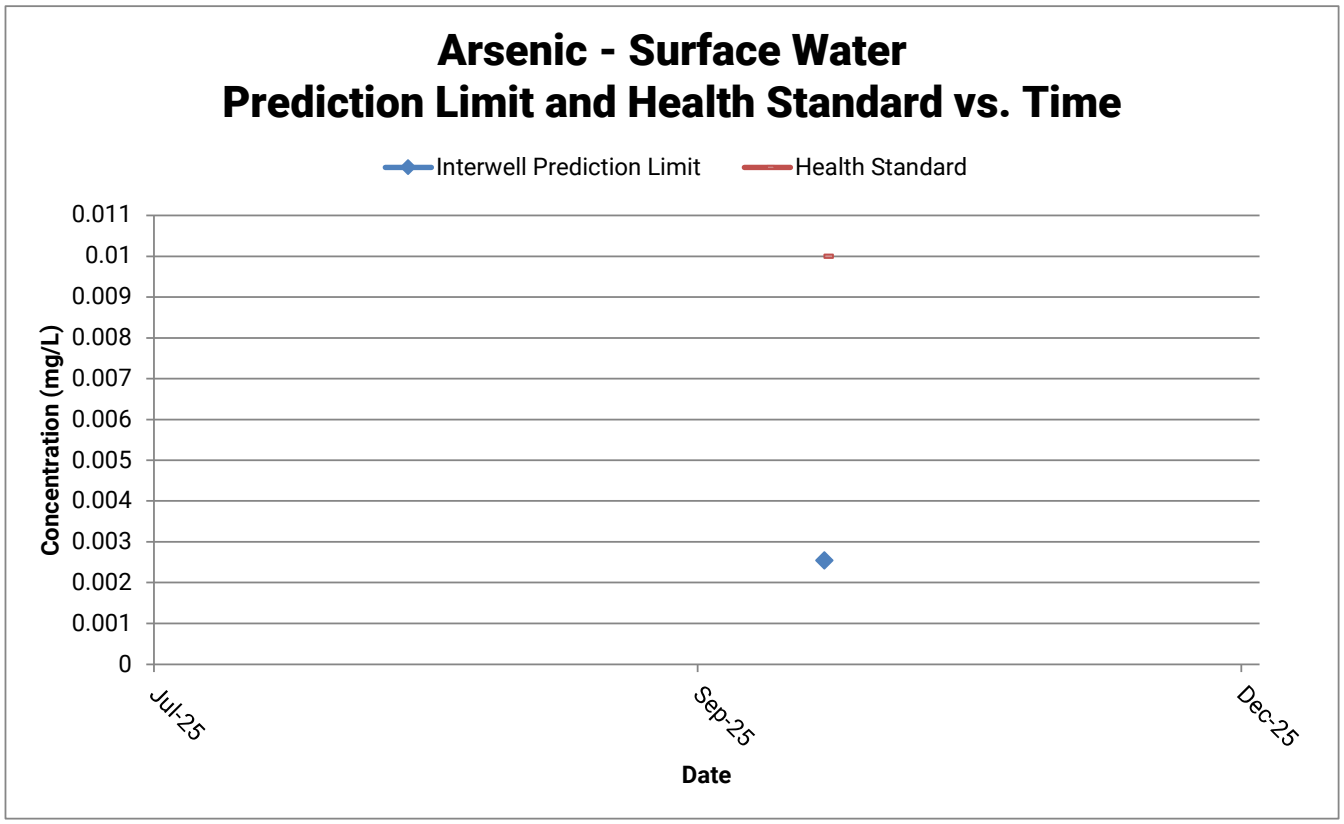
• The background data sets consist of SW-1 for surface water, MW-1 and MW-37A for shallow groundwater, and MW-18 and MW-19R for deep groundwater. Background data set adjustments were made in 2025 as addressed in the Fall 2025 statistical evaluation and requested in the Report Priority. Of note, historical MW-1R and MW-19 data were recommended for removal from the shallow and deep groundwater background data sets, respectively; and data from these wells are not included in the background analysis included in this table. The background data set adjustments detailed in the statistical reports provided in Appendix B are listed as crossed-out concentrations in Table 14 .

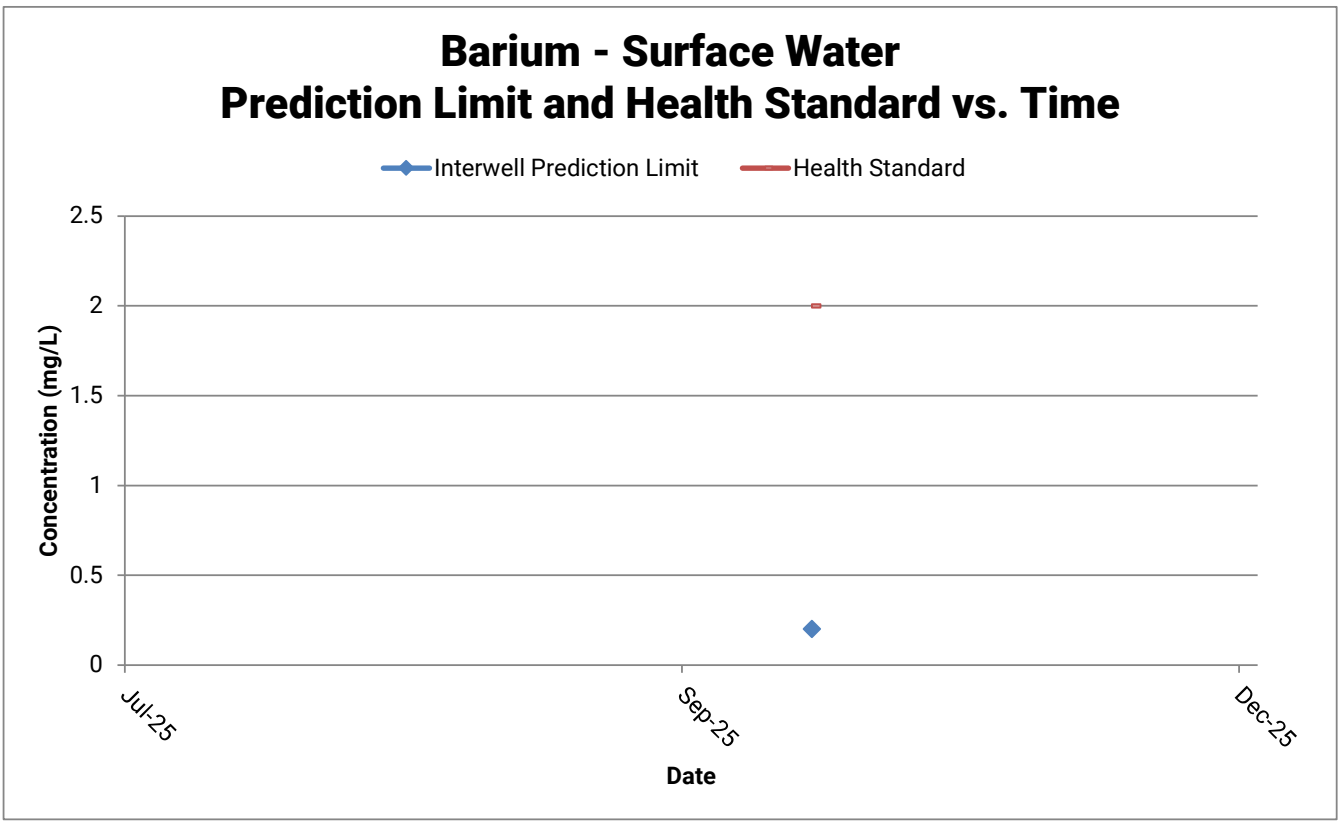
Summary of Prediction Limits and Health Standards
2025 Annual Water Quality Report
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

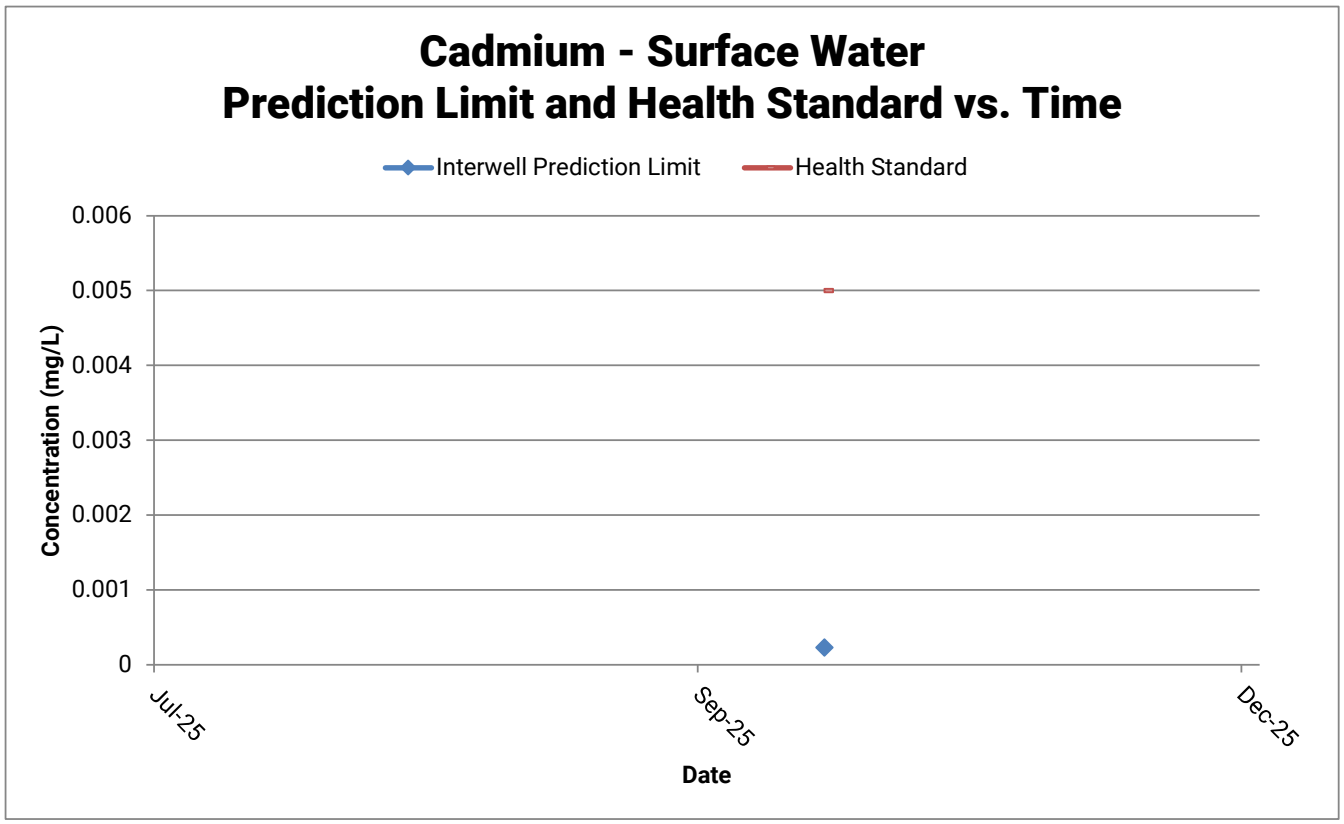
Comments:

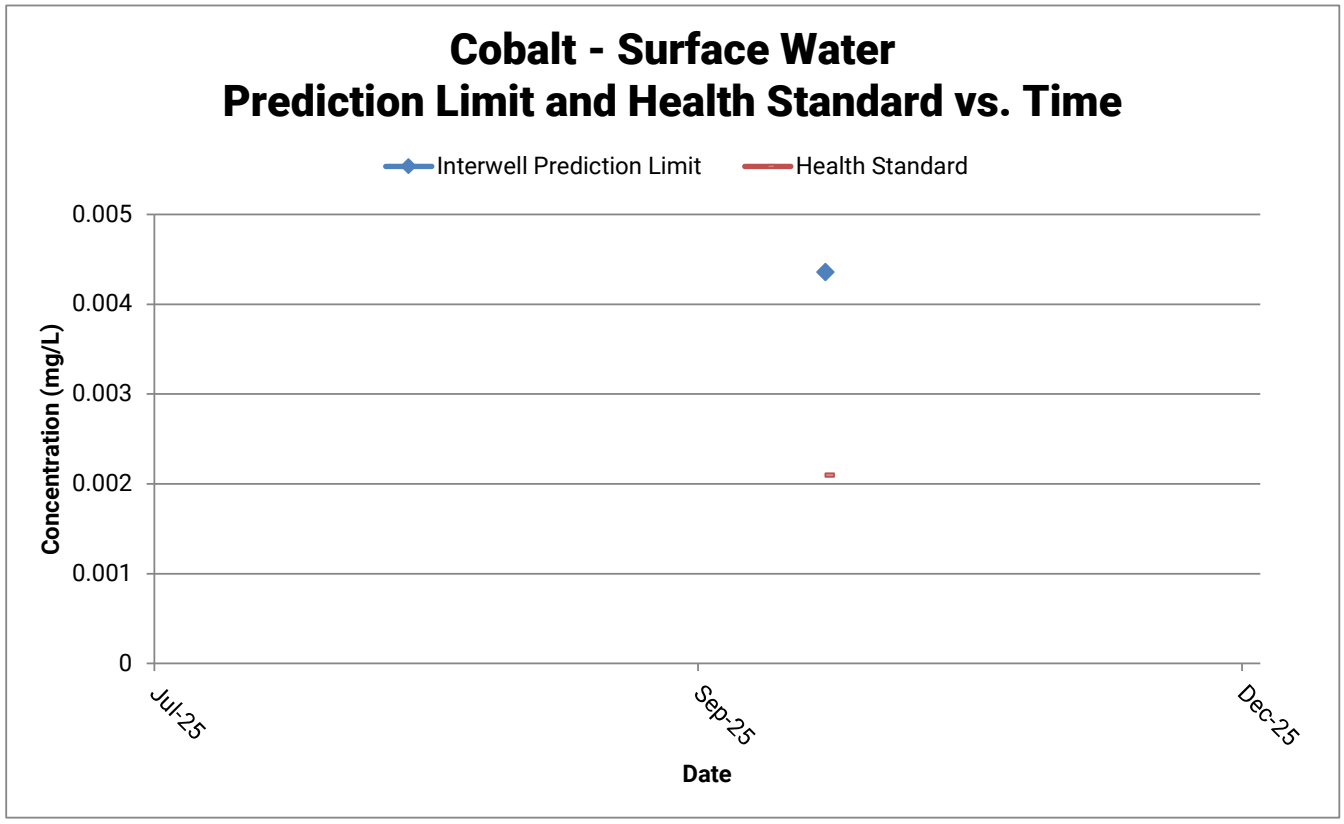
• The following graphs depict the surface water, shallow groundwater, and deep groundwater interwell prediction limits for the Fall 2025 statistical evaluation. As discussed in the Fall 2025 statistical evaluation (Appendix B), numerous background data set adjustments and changes to the statistical methodologies affected the calculated prediction limits; therefore, comparisons to previous limits provides little value. Interwell prediction limits are calculated using pooled data from the background monitoring wells: SW-1 for the surface water, MW-1 and MW-37A for the shallow groundwater, and MW-18 and MW-19 for the deep groundwater.

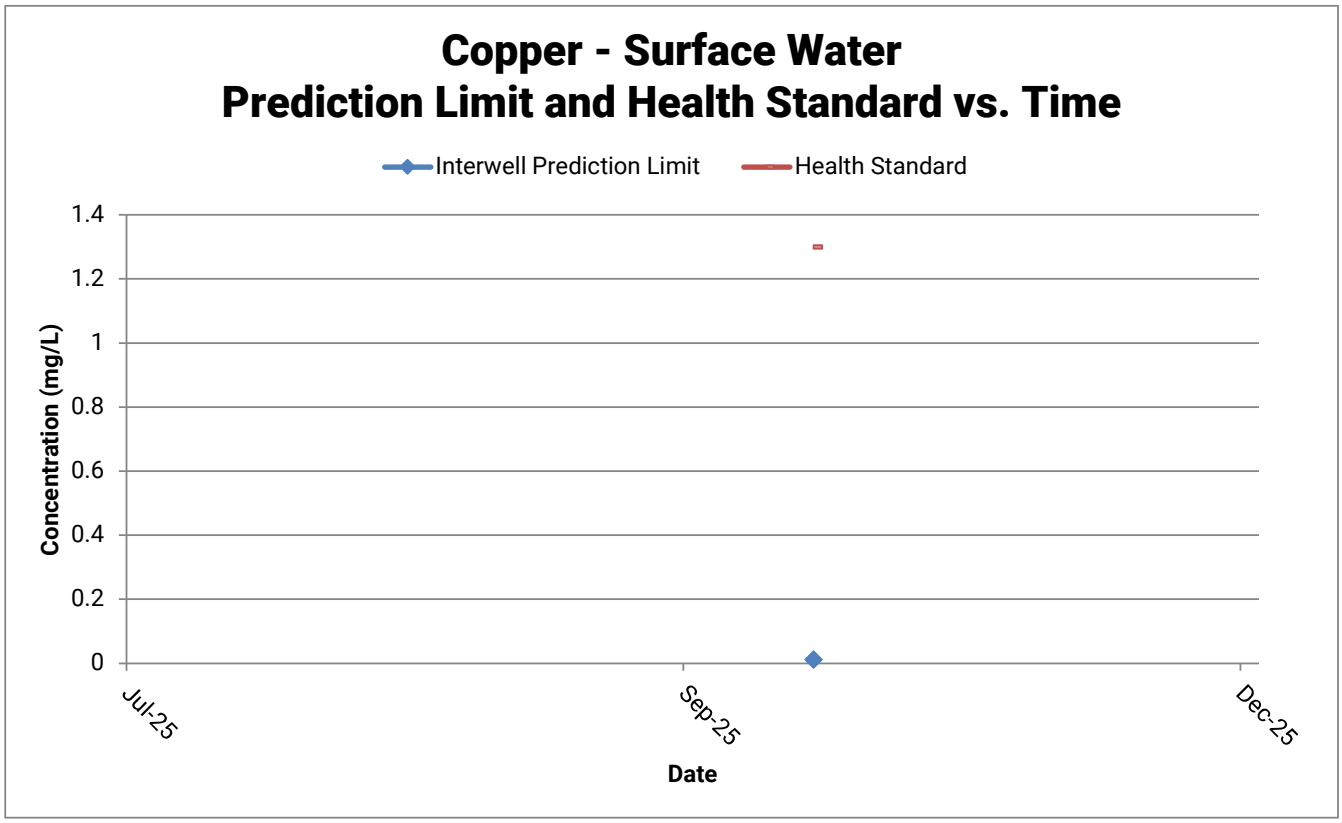
• The sources of the background and health standards are presented in Table 6.

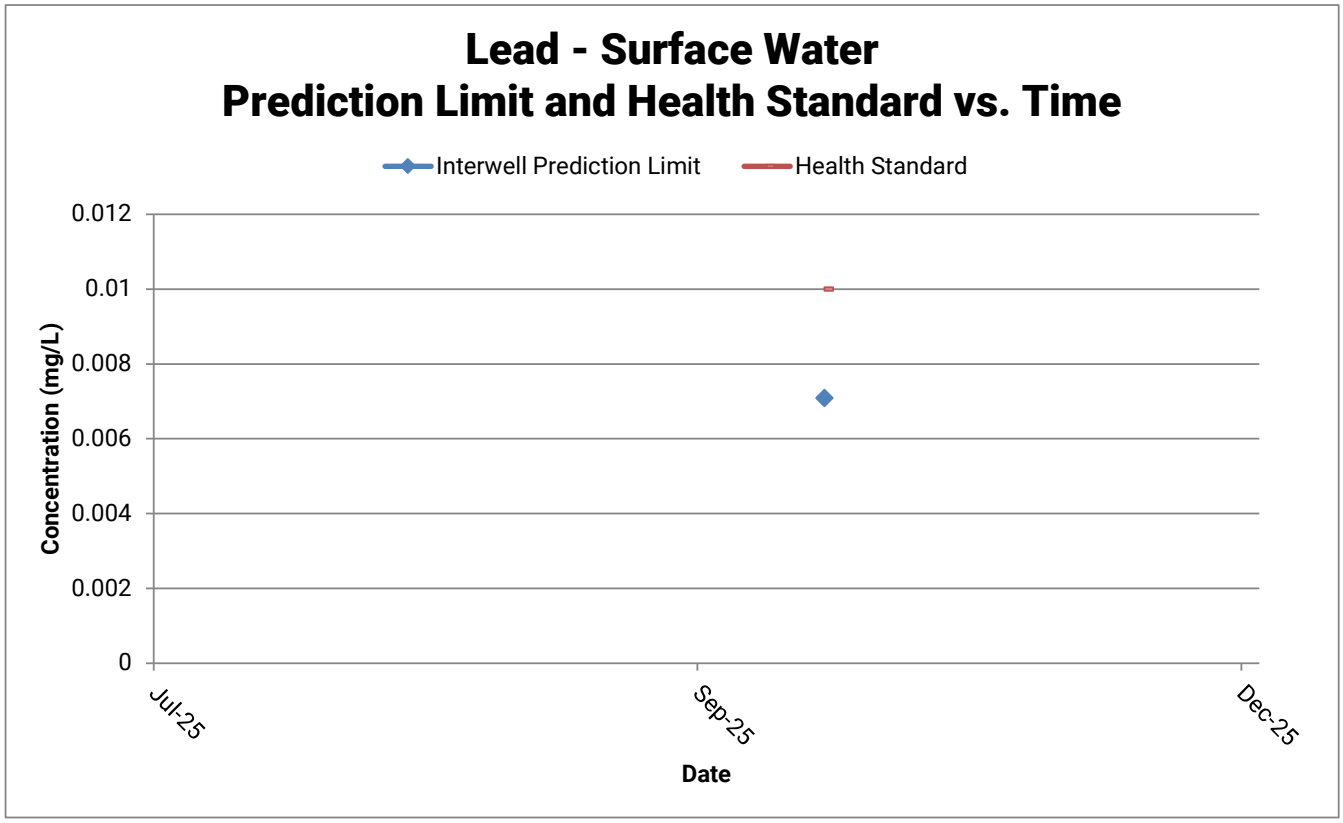

Arsenic - Surface Water
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001
0
Concentration (mg/L)
Jul-25
Sep-25
Dec-25
Date

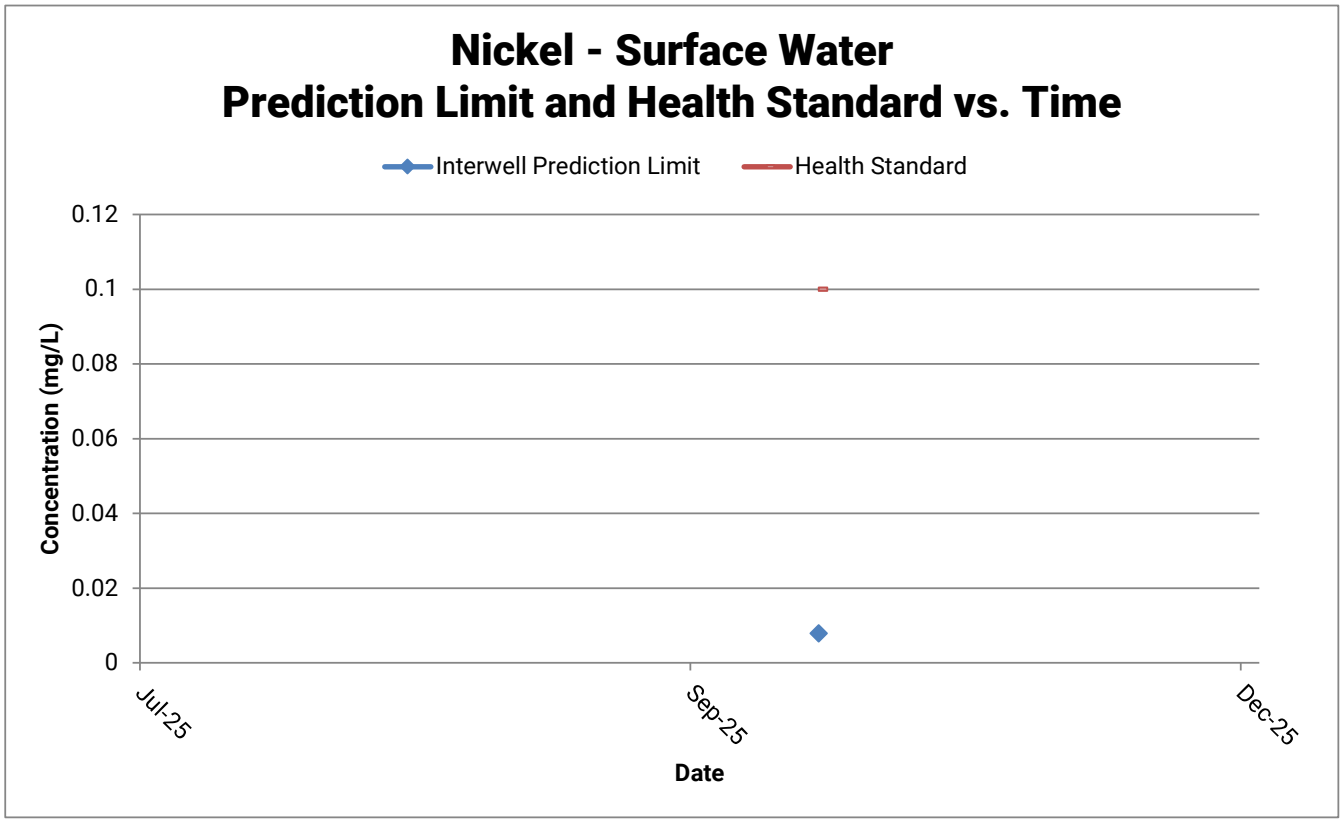

Barium - Surface Water
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
2.5
2
1.5
1
0.5
0
Concentration (mg/L)
Jul-25
Sep-25
Dec-25
Date

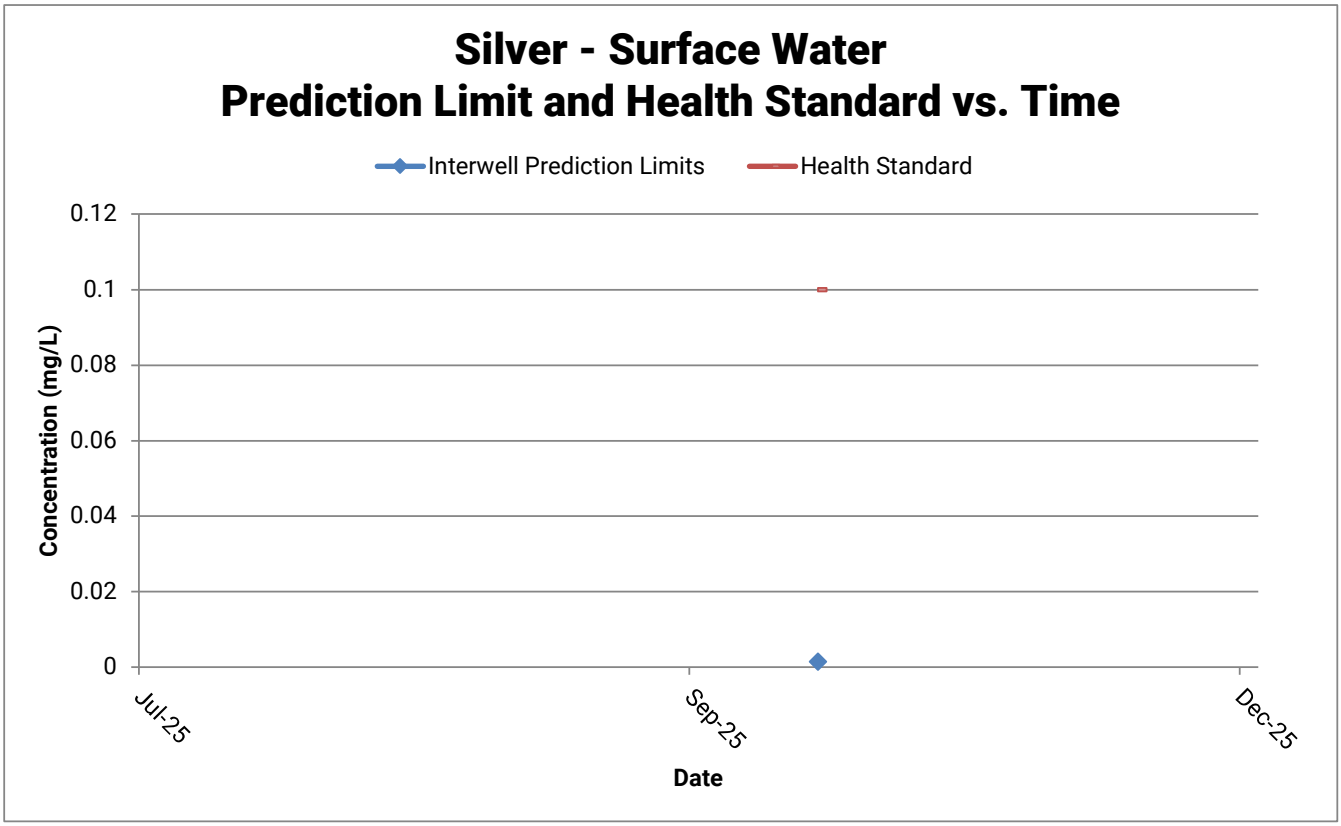

Cadmium - Surface Water
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
0.006
0.005
0.004
0.003
0.002
0.001
0
Concentration (mg/L)
Jul-25
Sep-25
Dec-25
Date

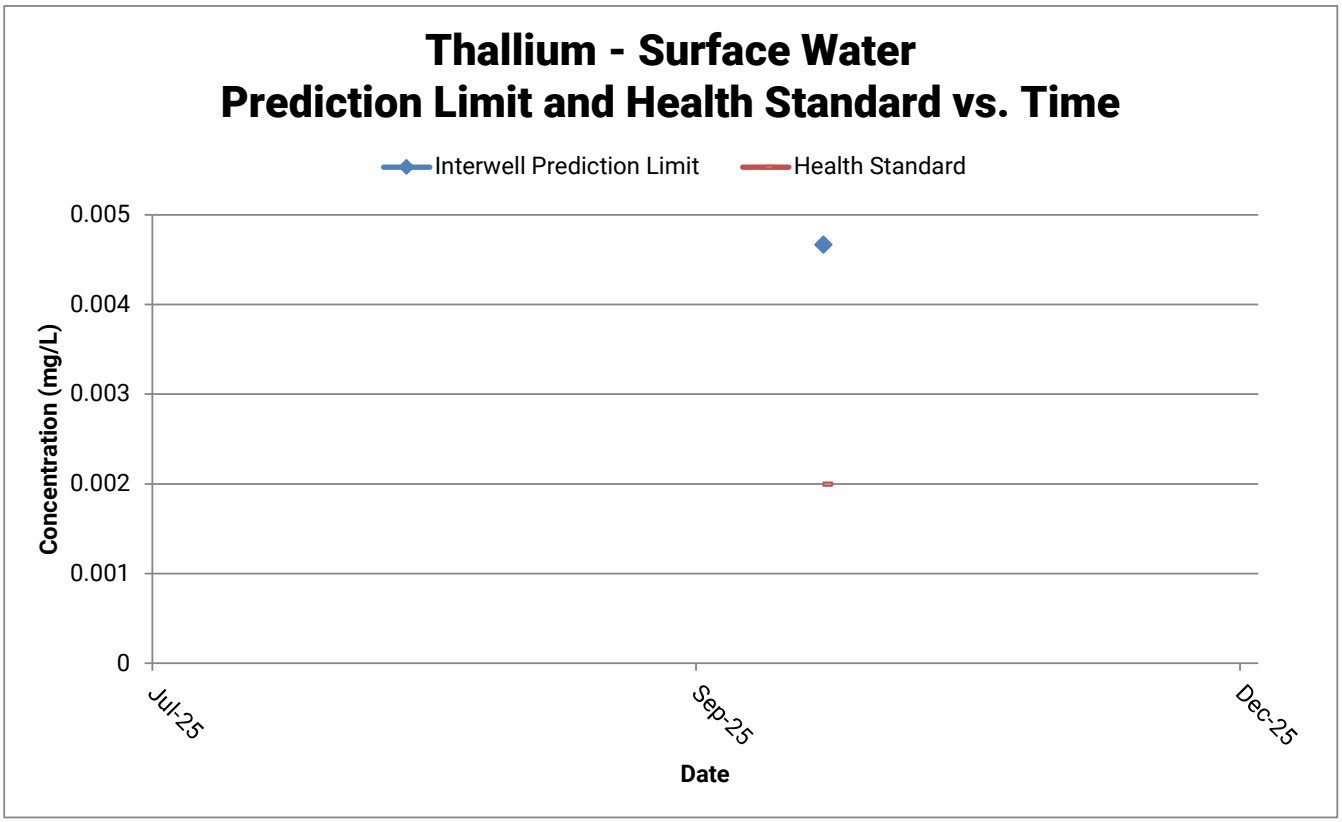

Cobalt - Surface Water
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
0.005
0.004
0.003
0.002
0.001
0
Concentration (mg/L)
Jul-25
Sep-25
Dec-25
Date

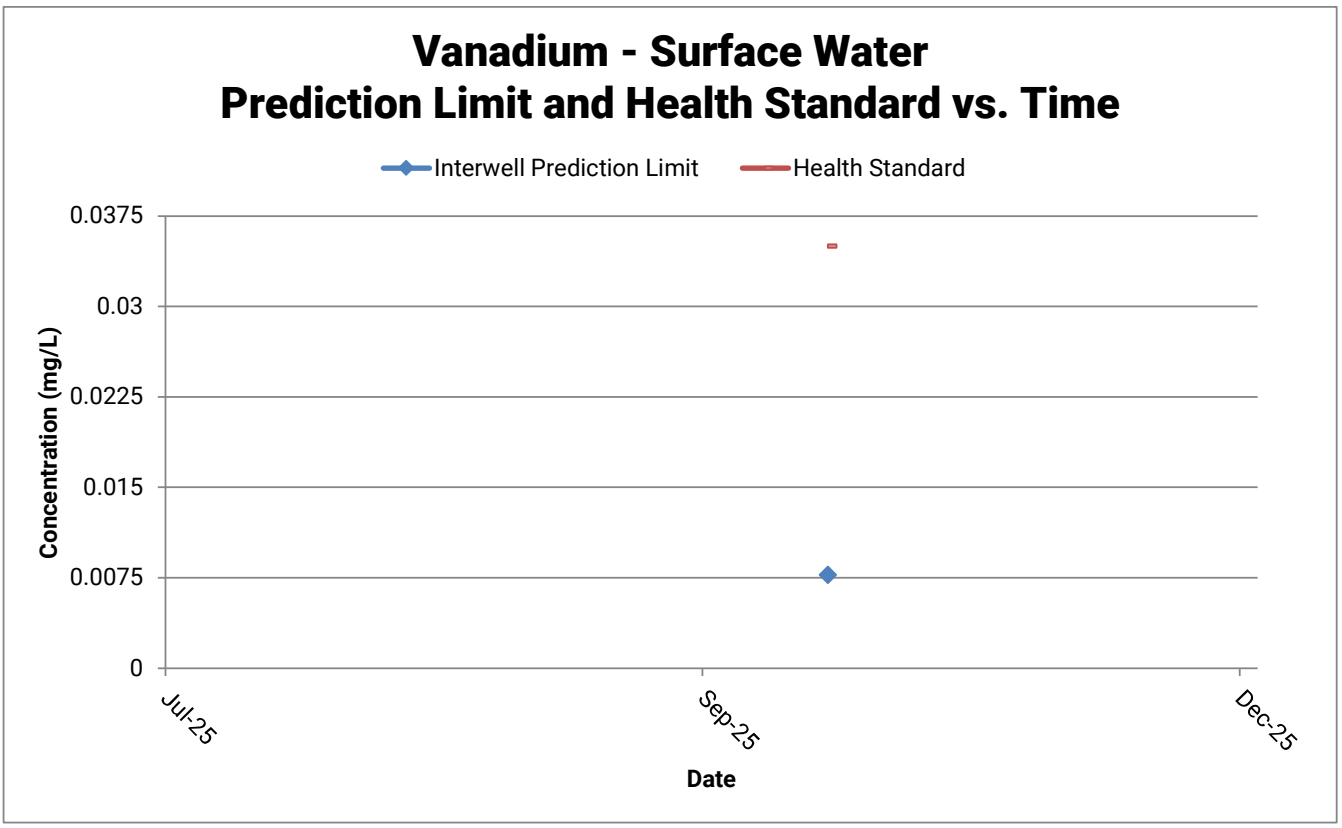

Copper - Surface Water
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
1.4
1.2
1
0.8
0.6
0.4
0.2
0
Concentration (mg/L)
Jul-25
Sep-25
Dec-25
Date

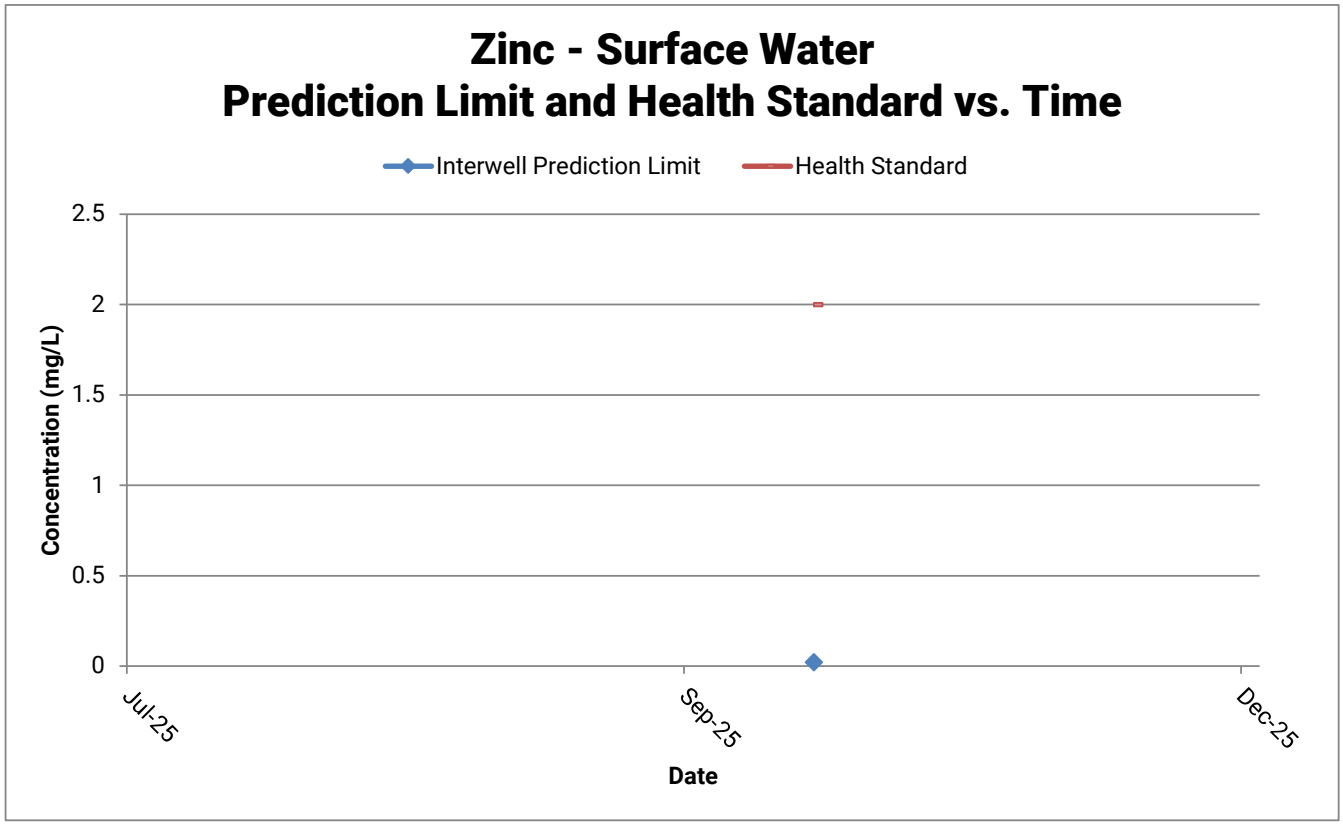

Lead - Surface Water
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
0.012
0.01
0.008
0.006
0.004
0.002
0
Concentration (mg/L)
Jul-25
Sep-25
Dec-25
Date

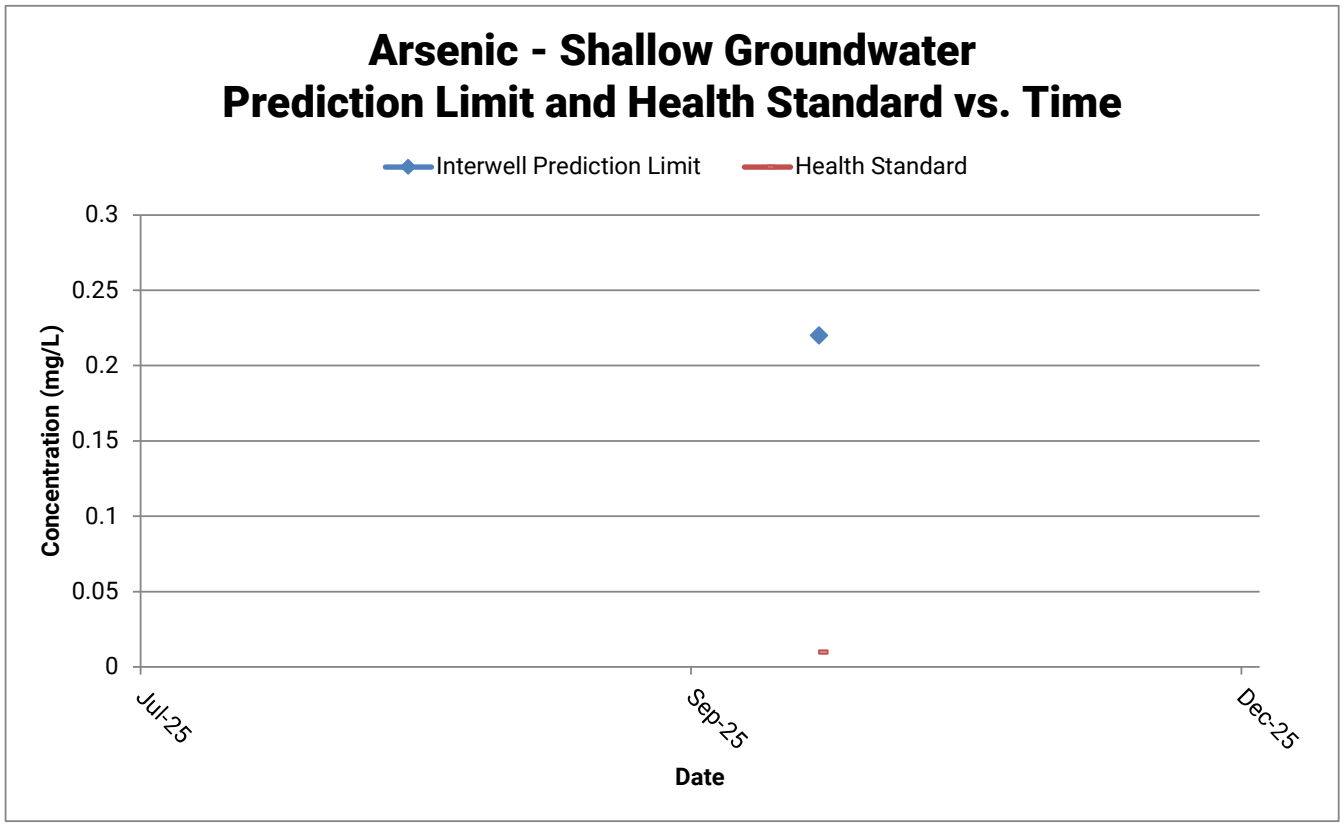

Nickel - Surface Water
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
0.12
0.1
0.08
0.06
0.04
0.02
0
Concentration (mg/L)
Jul-25
Sep-25
Dec-25
Date

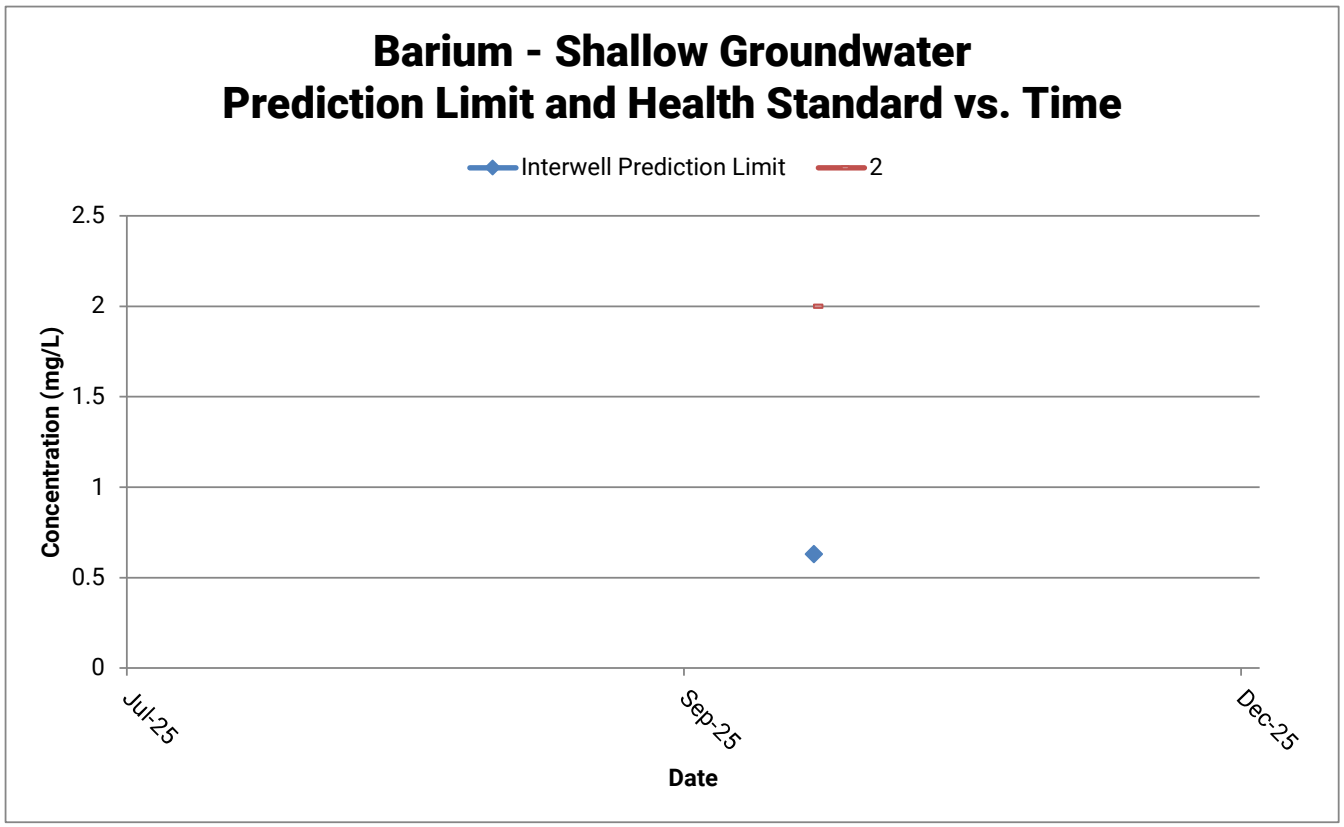

Silver - Surface Water
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limits
Health Standard
0.12
0.1
0.08
0.06
0.04
0.02
0
Concentration (mg/L)
Jul-25
Sep-25
Dec-25
Date

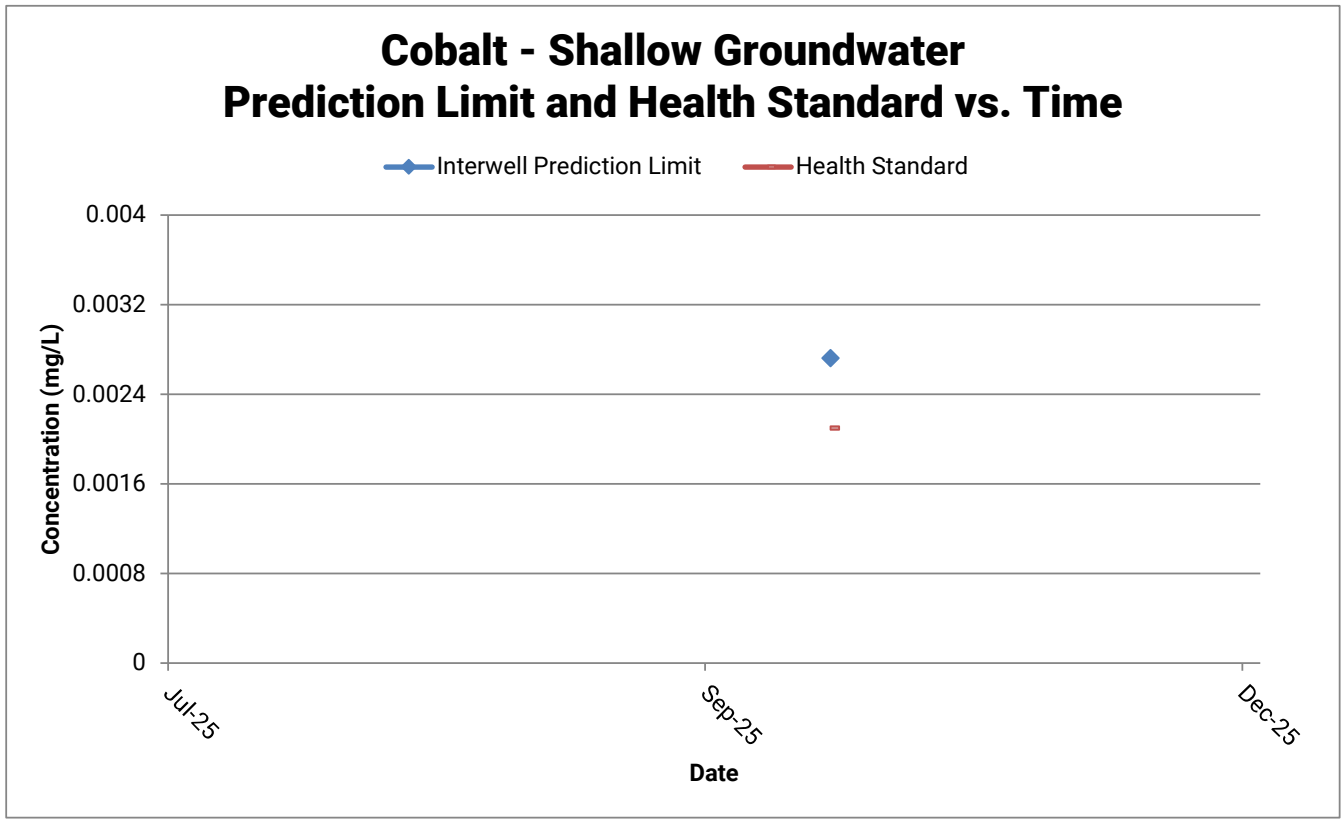

Thallium - Surface Water
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
0.005
0.004
0.003
0.002
0.001
0
Concentration (mg/L)
Jul-25
Sep-25
Dec-25
Date

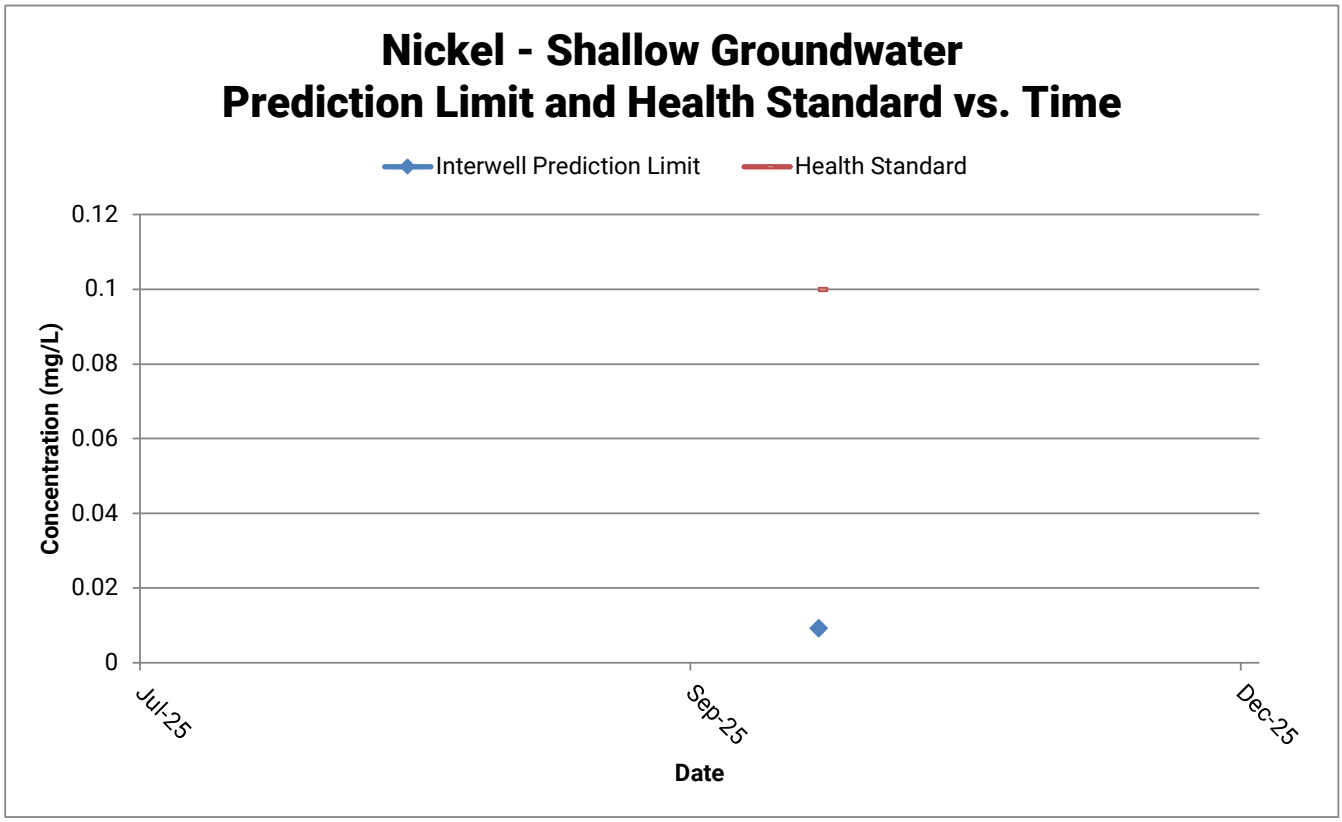

Vanadium - Surface Water
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
0.0375
0.03
0.0225
0.015
0.0075
0
Concentration (mg/L)
Jul-25
Sep-25
Dec-25
Date

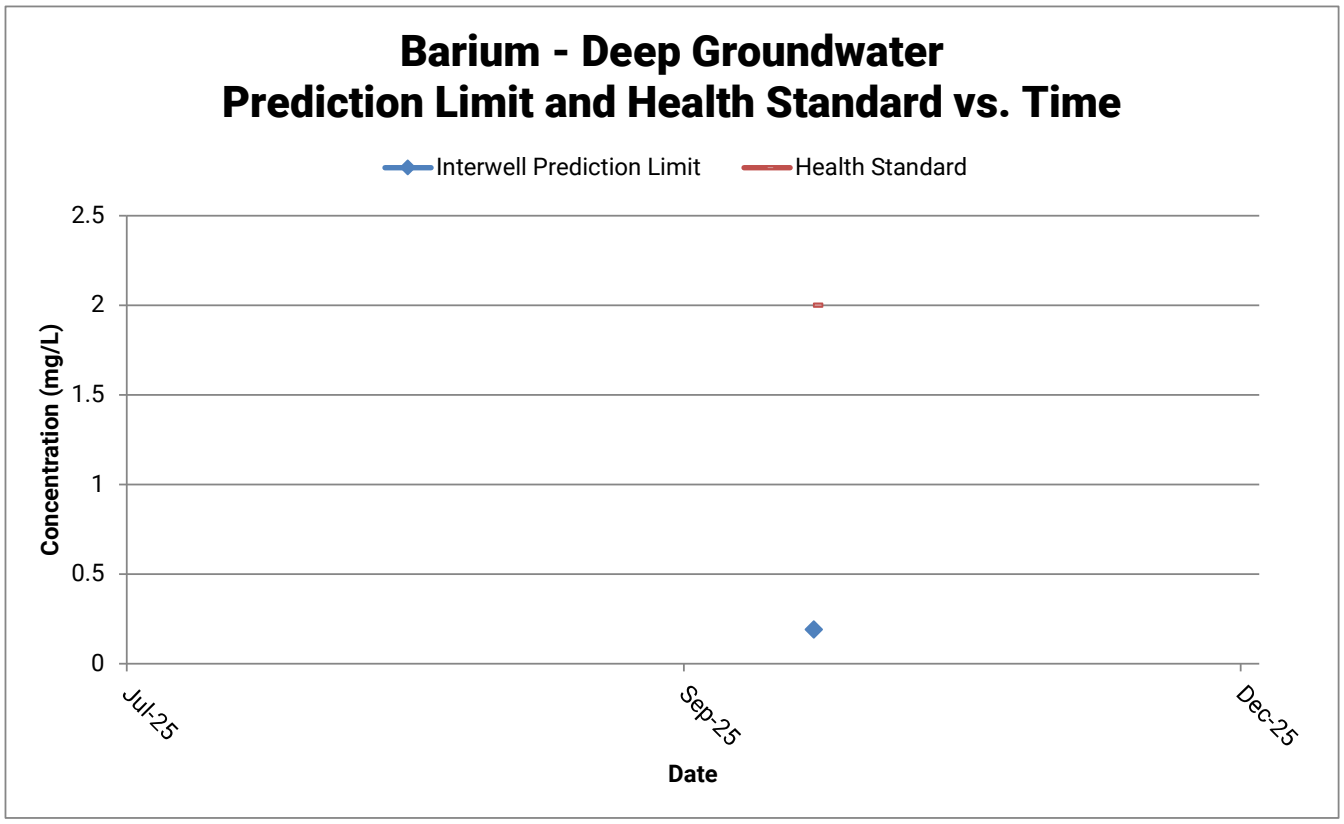

Zinc - Surface Water
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
2.5
2
1.5
1
0.5
0
Concentration (mg/L)
Jul-25
Sep-25
Dec-25
Date

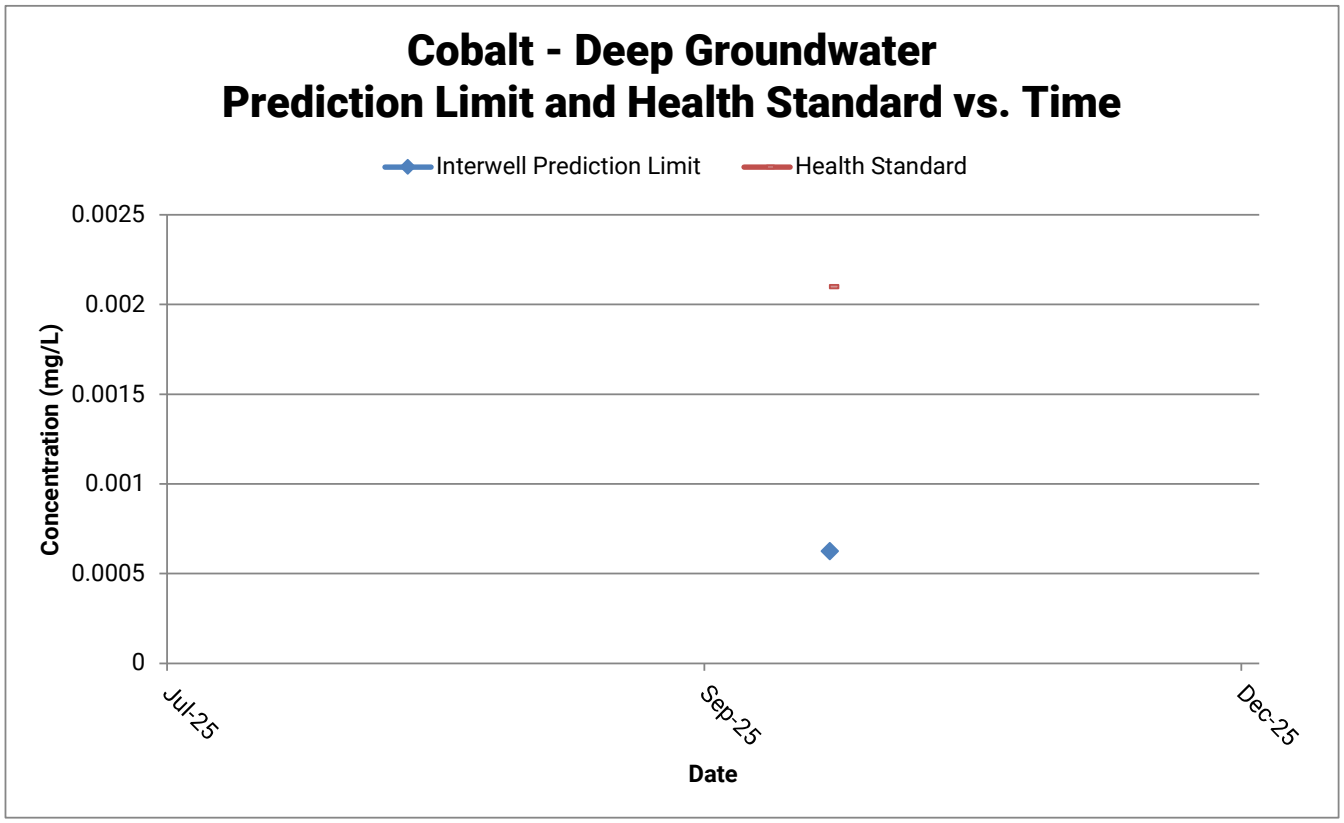

Arsenic - Shallow Groundwater
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
0.3
0.25
0.2
0.15
0.1
0.05
0
Concentration (mg/L)
Jul-25
Sep-25
Dec-25
Date


Barium - Shallow Groundwater
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
2
2.5
2
1.5
1
0.5
0
Concentration (mg/L)
Jul-25
Sep-25
Dec-25
Date


Cobalt - Shallow Groundwater
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
0.004
0.0032
0.0024
0.0016
0.0008
0
Concentration (mg/L)
Jul-25
Sep-25
Dec-25
Date


Nickel - Shallow Groundwater
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
0.12
0.1
0.08
0.06
0.04
0.02
0
Concentration (mg/L)
Jul-25
Sep-25
Dec-25
Date


Barium - Deep Groundwater
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
2.5
2
1.5
1
0.5
0
Concentration (mg/L)
Jul-25
Sep-25
Dec-25
Date


Cobalt - Deep Groundwater
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
0.0025
0.002
0.0015
0.001
0.0005
0
Concentration (mg/L)
Jul-25
Sep-25
Dec-25
Date

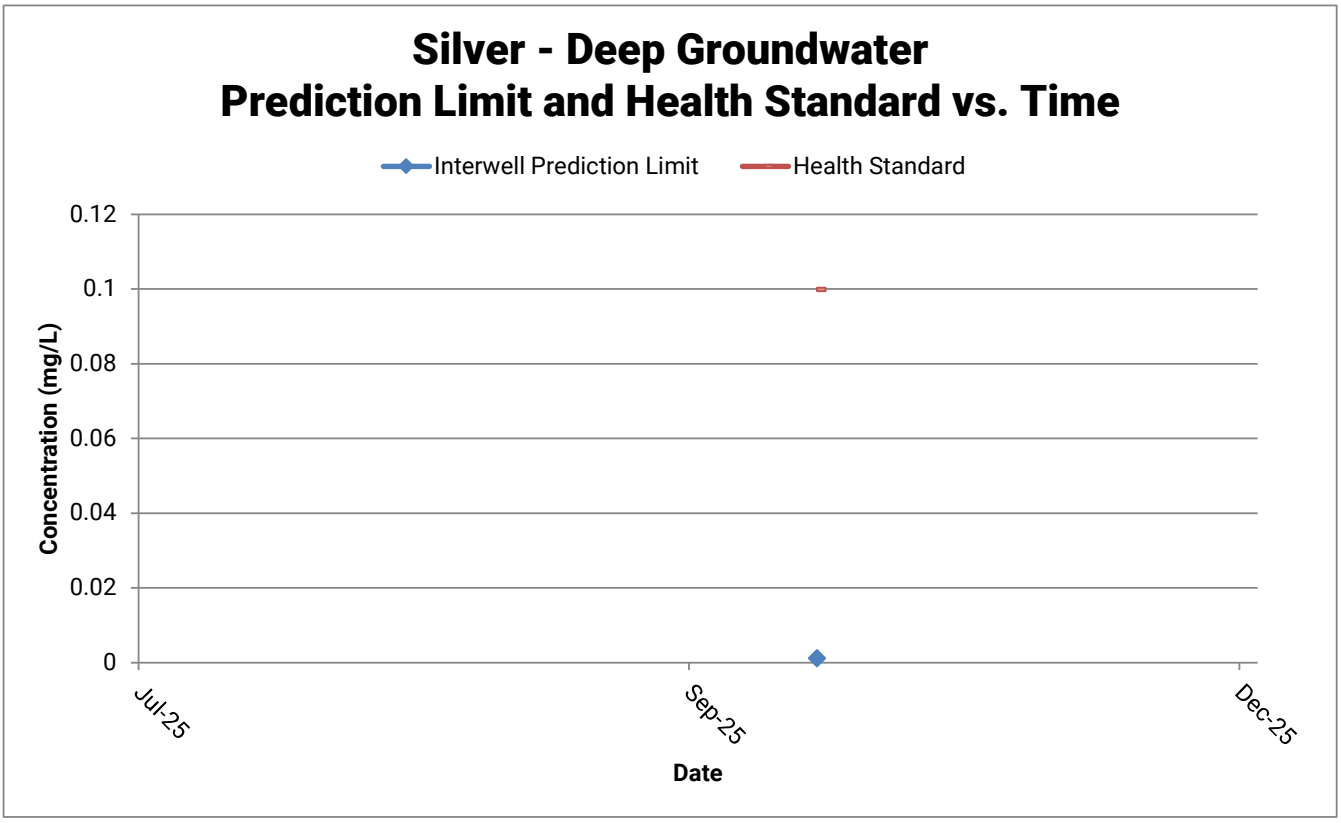

Silver - Deep Groundwater
Prediction Limit and Health Standard vs. Time
Interwell Prediction Limit
Health Standard
0.12
0.1
0.08
0.06
0.04
0.02
0
Concentration (mg/L)
Jul-25
Sep-25
Dec-25
Date

Table 7
Summary of Well/Detected Constituent Pairs With No Previous SSIs
2025 Annual Water Quality Report
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Well	Constituent [1]	Units	Most Recent Result (Oct. 2025)	Background Standard [2]
Surface Water Monitoring Locations				
Detection Monitoring Locations				
SW-2	Arsenic	mg/L	0.000693 J	0.00254
	Barium	mg/L	0.0917	0.201
	Total Suspended Solids	mg/L	2.15	N/A
SW-5	Arsenic	mg/L	0.00086 J	0.00254
	Barium	mg/L	0.103	0.201
	Cobalt	mg/L	0.000663	0.00436
	Lead	mg/L	0.000594	0.00708
	Nickel	mg/L	0.00343 J	0.00785
	Total Suspended Solids	mg/L	15.2	N/A
	Vanadium	mg/L	0.00178 J	0.007742
Shallow Groundwater Monitoring Locations				
Detection Monitoring Locations				
MW-2R	Barium	mg/L	0.13	0.63
MW-25A	Barium	mg/L	0.203	0.63
	Nickel	mg/L	0.00247 J	0.00927
	Total Suspended Solids	mg/L	1.88	N/A
MW-34A	Barium	mg/L	0.0667	0.63
	Chromium	mg/L	0.00334 J	0.005
	Selenium	mg/L	0.00176 J	0.005
	Total Suspended Solids	mg/L	3.13	N/A
MW-38A	Barium	mg/L	0.142	0.63
	Chromium	mg/L	0.00313 J	0.005
	Nickel	mg/L	0.00299 J	0.00927
MW-41A	Arsenic	mg/L	0.000665 J	0.22
	Barium	mg/L	0.157	0.63
MW-45A	Barium	mg/L	0.133	0.63
	Chromium	mg/L	0.0022 J	0.005
	Cobalt	mg/L	0.000299 J	0.00272

* Current result is above background, if confirmed by retest sample(s) an SSI will be identified (1-of-2 retesting plan for groundwater prediction limits and DQR constituents).

** Current result is a confirmed SSI. Appendix II sampling will be completed within 90 days.

Comments:

DQR = double quantification rule

mg/L = milligrams per liter

N/A = Not Applicable

SSI = statistically significant increase above background

[1] List contains constituents detected above the laboratory method detection limit (MDL) and includes J-flagged concentrations.

[2] Source of background standards are presented in Table 6. If a constituent isn't listed in Table 5, indicating the constituent hasn't been detected in background, then the background standard is the laboratory reporting limit.

• No SSIs were identified at surface water, shallow groundwater, and deep groundwater detection monitoring wells. The future sampling schedule is provided in Table 2.

Table 8
Summary of Ongoing and Newly Identified SSIs
2025 Annual Water Quality Report
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Well	Constituent [1]	Units	Most Recent Result [2]	Background Standard [3]	Lower Confidence Limit	GWPS [3]	Sample Dates		
							Initial Exceedance (above background)	Resample(s)	5th Background Sample [4]
Shallow Groundwater Monitoring Locations									
Assessment Monitoring Locations									
MW-4	Cadmium	mg/L	0.000471	0.0002	0.0001	0.005	Jun. 2020	N/S	Nov. 2016
	Nickel	mg/L	0.0101	0.00927	0.005	0.1	Nov. 2020	N/S	Nov. 2016
MW-7A	Chromium	mg/L	0.00692	0.005	0.003	0.1	Fall 2025	N/S	Nov. 2016
	Nickel	mg/L	0.0108	0.00927	0.002	0.1	Nov. 2023	N/S	Nov. 2016
MW-40A	Nickel	mg/L	0.026	0.00927	0.010	0.1	Sep. 2021	Dec. 2021	Aug. 2022
MW-46A	Nickel	mg/L	0.0322	0.00927	0.025	0.1	Nov. 2023	Jan. 2024	Dec. 2024
Corrective Action Monitoring Locations - Assessment Constituents									
MW-29A	Nickel	mg/L	0.071	0.00927	0.053	0.1	Feb. 2020	N/S	Nov. 2020
	Sulfide	mg/L	3.07	3	0.50	3	Spring 2021	N/S	Sep. 2022
MW-31A	Nickel	mg/L	0.0287	0.00927	0.028	0.1	Nov. 2019	Feb. 2020	Nov. 2020
Deep Groundwater Monitoring Locations									
Corrective Action Monitoring Locations - Assessment Constituents									
MW-35	Barium	mg/L	0.256	0.1906	0.26	2	Nov. 2019	Feb. 2020	Nov. 2020
	Nickel	mg/L	0.0186	0.005	0.018	0.1	Nov. 2019	Feb. 2020	Nov. 2020

* For assessment monitoring locations, all current results are below background. If confirmed by a second event, location may return to detection monitoring in accordance with IAC 113.10(6)e. However, three consecutive events will be utilized to make the determination to return to detection monitoring to limit frequent fluctuation of wells moving between the detection and assessment monitoring program.

** LCL has exceeded the GWPS, this well/constituent pair is now identified as an SSL.

*** Non-MSWLF Unit source of the SSI identified.

Comments:

GWPS = Groundwater Protection Standard

LCL = lower confidence limit

mg/L = milligrams per liter

MSWLF = municipal solid waste landfill

N/S = Not resampled; SSI was declared in lieu of conducting resample(s).

SSI = statistically significant increase above background

Table 8
Summary of Ongoing and Newly Identified SSIs
2025 Annual Water Quality Report
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

SSL = statistically significant level above GWPS

(1) List contains constituents which have been identified as SSIs during the Fall 2025 statistical evaluation. Unless otherwise noted, all current results listed in this table are above background. SSIs were declared in lieu of conducting resample(s).
(2) Most recent results are from Oct. 2025.

Comments Continued:

(3) Source of background standards and GWPS values are presented in Table 6. If the constituent isn't listed in Table 5 (indicating the constituent hasn't been detected in background), then the background standard is the laboratory reporting limit (RL), and the GWPS is the maximum contaminant level (MCL) or the statewide standard (SS) if there is no MCL. If background is higher than the MCL or SS, the GWPS is background.
(4) The 5th background sample for the Appendix I and II metals is the fifth sampling event conducted using low-flow sampling methods. Low-flow sampling was initiated in Oct/.Nov. 2014.
• Resampling was conducted in Feb. 2025 for cadmium in MW-4, barium in MW-7A, and nikel in MW-42A. The results of the Feb. 2025 sampling event were reported in the *2024 Annual Water Quality Report* (AECOM, 2025a). The Feb. 2025 retest did not confirm the prediction limit exceedances for cadmium in MW-4 and barium in MW-7A; however, nickel in MW-42 was confirmed as a statistically significant increase (SSI). Statistical results are provided in the Winter 2025 statistical evaluation (AECOM, 2025a).
• As noted in correspondence with the Iowa Department of Natural Resources (IDNR) in the email dated Aug. 12, 2025 (Foth, 2025a), AECOM recommended resampling for barium, cobalt, copper, lead, 2-butanone, and acetone in MW-33A, and for cadmium and zinc in MW-44A prior to the Fall 2025 sampling event. However, since these were in assessment monitoring or corrective action monitoring, these constituents were declared SSIs, and retests were not conducted.
• No SSLs were identified for the assessment monitoring locations. Details regarding the future sampling schedules are provided in Table 2.
• No SSLs were identified for the assessment constituents in the corrective action monitoring locations. These locations will continue corrective action monitoring in 2026 as listed in Table 2. A summary of the statistical comparisons for the corrective action constituents is provided in Table 9.
• No SSIs were identified for cobalt in the delineation monitoring locations. These locations will continue delineation monitoring in 2026 as listed in Table 2.

Table 9
Summary of Ongoing and Newly Identified SSLs
2025 Annual Water Quality Report
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Well [1]	Constituent [1]	Units	Most Recent Result [1]	Upper Confidence Limit [2]	GWPS [3]	Initial Exceedance	Consecutive Compliance Dates		
							1st Occurrence	Most Recent	Duration
Shallow Groundwater Monitoring Locations									
Corrective Action Monitoring Locations									
MW-29A	Cobalt	mg/L	0.0193	0.0127	0.0034	Nov. 2019	N/A	N/A	N/A
MW-31A	Cobalt	mg/L	0.00263	0.0120	0.0034	Nov. 2019	N/A	N/A	N/A
MW-33A	Arsenic	mg/L	0.0885	0.0506	0.22	Nov. 2019	Fall 2025	Fall 2025	0.5 years
Delineation Monitoring Locations									
MW-43A	Cobalt	mg/L	0.003	0.0042	0.0034	Sep. 2022	N/A	N/A	N/A
Deep Groundwater Monitoring Locations									
Corrective Action Monitoring Locations									
MW-35	Cobalt	mg/L	0.00473	0.0066	0.0021	Nov. 2019	N/A	N/A	N/A

* This well/contaminant pair has been compliant for 3 consecutive years and no longer has an SSL.

** Non-MSWLF Unit source of the SSL identified.

Comments:

GWPS = Groundwater Protection Standard

mg/L = milligrams per liter

MSWLF = municipal solid waste landfill

N/A = Not applicable; indicates the analyte/well pair has not achieved compliance with the GWPS (i.e., upper confident limit or the upper 95% confidence limit on the trend line is lower than the GWPS for a period of three consecutive years).

SSL = statistically significant level above GWPS

[1] The most recent results are from the Oct. 2025 event.

[2] If a decreasing trend was identified, the value is the upper 95% confidence limit on the trend line.

[3] Source of the Groundwater Protection Standard (GWPS) values are presented in Table 6. If the constituent isn't listed in Table 5, the GWPS is the Maximum Contaminant Level (MCL) or the Statewide Standard (SS) if there is no MCL. If background is higher than the MCL or SS, the GWPS is background.

• For the corrective action constituents in the shallow groundwater corrective action and delineation monitoring locations, statistically significant levels SSLs over the GWPS remained for cobalt in MW-29A, MW-31A, and MW-43A.

• Compliance with the GWPS was newly achieved for arsenic in MW-33 during the Fall 2025 statistical evaluation. In accordance with 567 IAC 113.10(9)e(2), arsenic in MW-33A will return to assessment constituents in Fall 2028, as long as concentrations remain below the GWPS during interim statistical evaluations. In addition, since arsenic is the only corrective action constituent at MW-33A, MW-33A will return to assessment monitoring when arsenic returns to an assessment constituent. While arsenic was not included in the *2024 ACM Report* (AECOM, 2025b), current conditions indicate compliance; therefore, further evaluation of corrective measures is not recommended.

• An SSL remained for cobalt in deep groundwater corrective action monitoring location MW-35.

• No changes are recommended for the shallow and deep groundwater corrective action and delineation monitoring locations based on the corrective action statistical results conducted during the Fall 2025 statistical evaluation.

Table 10
Historic SSIs and SSLs
2025 Annual Water Quality Report
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Key:		Fall
	SSI	
	SSL	
	SSL achieved compliance with the GWPS (1 event)	
Well	**Constituent**	**2025**
Shallow GroundwaterMonitoring Locations		
Downgradient Monitoring Locations		
MW-4	Cadmium	
	Nickel	
MW-7A	Chromium	
	Nickel	
MW-29A	Cobalt	
	Nickel	
	Sulfide	
MW-31A	Cobalt	
	Nickel	
MW-33A	Arsenic [(1)]	
MW-40A	Nickel	
MW-46A	Nickel	
Delineation Monitoring Locations		
MW-43A	Cobalt	
Deep Groundwater Monitoring Locations		
Downgradient Monitoring Locations		
MW-35	Barium	
	Cobalt	
	Nickel	

Comments:

• Table 10 currently presents only the Fall 2025 statistically significant increases (SSIs) and statistically significant levels (SSLs) for assessment, corrective action, and delineation monitoring locations sampled in Oct. 2025. Due to changes in statistical methodology noted in the Fall 2025 statistical evaluation (Appendix B) and Report Priority, inclusion of past evaluation results was deemed of limited value.

• As noted in Table 9, compliance with the groundwater protection standard (GWPS) was newly achieved for arsenic in MW-33 during the Fall 2025 statistical evaluation.

Table 11
Corrective Action Trend Analysis
2025 Annual Water Quality Report
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Well	Corrective Action Constituent	Trend	N	Analyte/Well Pair Achieved Compliance with GWPS?	Projected Year to Completion* [1,2]
Shallow Groundwater Monitoring Locations					
Corrective Action Monitoring Locations					
MW-29	Cobalt	No Trend	15	No	No Attenuation
MW-31A	Cobalt	No Trend	15	No	2027 [4]
MW-33A	Arsenic	No Trend	16	**Yes**	Fall 2028
Delineation Monitoring Locations					
MW-43A	Cobalt	No Trend	9	No	2029
Deep Groundwater Monitoring Locations					
Corrective Action Monitoring Locations					
MW-35	Cobalt	No Trend	14	No	2048

* To satisfy IAC 113.10(9)e(2)
Permit holder addresses adequacy of corrective measure when trend is not favorable
Permit shall adjust corrective action for financial assurance as completion date warrants

Comments:
N = Number of Samples
* For remedy completion [IAC 113.10(9)e(2)], compliance with the Groundwater Protection Standard (GWPS) is considered achieved by demonstrating that concentrations of Appendix II constituents have not exceeded the GWPS for a period of three consecutive years or an alternate length of time established by the Iowa Department of Natural Resources (IDNR).
[1] For corrective action constituents that have achieved compliance with the GWPS, the projected year to completion listed is 3 years after compliance was first achieved (i.e., 3 years after the First Occurrence listed in Table 9) and will remain as long as concentrations remain statistically below the GWPS during the interim statistical evaluations. Individual analyte/well pairs will return to assessment constituents once compliance with the GWPS has been achieved for a period of 3 years. In accordance with IAC 113.10(9)3(2), a well may not return to assessment monitoring until all detected constituents are below the GWPS.
[2] For the remaining corrective constituents (i.e., those that have not achieved compliance with the GWPS), the projected year to completion is based on the estimated first order attenuation rates for individual analyte/well pairs evaluated as part of the Fall 2025 statistical evaluation (Appendix B). The projected years to completion are 3 years after the first order attenuation rates projected initial compliance with the GWPS.
[4] For cobalt in MW-31, first order attenuation rates projected that compliance with the GWPS has already been achieved (i.e., Jun. 2024). However, the confidence bands placed around the linear trend line have not yet indicated compliance with the GWPS. Recent results have individually been below the GWPS, and a decreasing trend is beginning to appear. Although a trend is not statistically significant, the data suggest that attenuation may soon be evaluated using regression statistics.
• Compliance with the GWPS was newly achieved for arsenic in MW-33 during the Fall 2025 statistical evaluation. In accordance with 567 IAC 113.10(9)e(2), arsenic in MW-33A will return to assessment constituents in Fall 2028, as long as concentrations remain below the GWPS during interim statistical evaluations. In addition, since arsenic is the only corrective action constituent at MW-33A, MW-33A will return to assessment monitoring when arsenic returns to an assessment constituent. While arsenic was not included in the *2024 ACM Report* (AECOM, 2025b), current conditions indicate compliance; therefore, further evaluation of corrective measures is not recommended.
• No trends were identified for the corrective action constituents. However, compliance with the GWPS was achieved for arsenic in MW-33A, and first order attenuation can be evaluated for cobalt in MW-31A, MW-43A, and MW-35, with cobalt in MW-31A and MW-43A likely to achieve compliance in the near future.

Table 12
Methane Monitoring Summary
2025 Methane Monitoring Report
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Monitoring Points			Methane Results (% LEL)							
Name	Type	Description	N/A - S (Y/N)		N/A - S (Y/N)		9/12/2025 - S (Y/N)		10/23/2025 - S (Y/N)	
Scale House	Indoor	NW of Landfill					0		0	
Maintenance Building	Indoor	NW of Landfill					0		0	
GP-01	Subsurface	East of Landfill					N/A		0	
GP-02	Subsurface	SE of Landfill					0		0	
GP-03	Subsurface	SE of Landfill					0		0	
GP-04	Subsurface	South of Landfill					0		0	
GP-05	Subsurface	South of Landfill					N/A		0	
GP-06	Subsurface	SW of Landfill					0		0	
GP-07	Subsurface	West of Landfill					0		0	
GP-08	Subsurface	West of Landfill					0		0	
GP-09	Subsurface	West of Landfill					0		0	
GU-1	Subsurface - Underdrain	NE of Landfill					N/A		0	
GU-2	Subsurface - Underdrain	North of Landfill					N/A		0	
MW-1	Subsurface - Perimeter	SW of Landfill					0	N	0	N
MW-2	Subsurface - Perimeter	West of Landfill					0	N	0	N
MW-3	Subsurface - Perimeter	NW of Landfill					N/A		0	Y
MW-4B	Subsurface - Perimeter	North of Landfill					0	N	0	N
MW-11	Subsurface - Perimeter	East of Landfill					0	N	0	N
MW-12A	Subsurface - Perimeter	East of Landfill					100	N	6	N
MW-18	Subsurface - Perimeter	West of Landfill					0	Y	0	Y
MW-19R	Subsurface - Perimeter	South of Landfill					0	Y	0	Y
MW-22	Subsurface - Perimeter	NE of Landfill					0	N	0	N
MW-24A	Subsurface - Perimeter	NE of Landfill					0		0	N
MW-26A	Proposed Subsurface	East of Landfill					0	N	0	N
MW-32A	Proposed Subsurface	South of Landfill					18		38	N
MW-33A	Proposed Subsurface	West of Landfill					N/A		0	N
MW-37A	Proposed Subsurface	SW of Landfill					N/A		0	N
MW-39A	Proposed Subsurface	East of Landfill					N/A		0	N
MW-46A	Proposed Subsurface	East of Landfill					0	N	N/A	

S (Y/N) - Was screen submerged, yes or no or blank is non-applicable

Comments:

% = percent

N/A = not applicable

• The contents of this report are intended to satisfy the requirements set forth in 567 IAC 113.9(2) and Permit Special Provision X.6.

• Multiple attempts were made to obtain the field documentation from the previous consultant for the first and second quarter monitoring events; however, these efforts were unsuccessful. Going forward, methane monitoring will be conducted on a quarterly basis in accordance with 567 IAC 113.9(2).

Table 12
Methane Monitoring Summary
2025 Methane Monitoring Report
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Comments Continued:

• As shown in Table 12, the quarterly methane monitoring results did not indicate concentrations in exceedance of 25% of the lower explosive limit (LEL) for facility structures, 100% LEL at subsurface monitoring locations, or 100% LEL for facility boundaries, with the exception of MW-12A. In Sep. 2025, subsurface monitoring location MW-12A exhibited an exceedance of 100% LEL. To the east of MW-12A, the unnamed tributary to the Trout River intersects the water table and serves as a barrier to off-site methane migration. Since the Sep. 2025 methane concentration detected at MW-12A was physically constrained from migrating eastward beyond the site boundary, a methane remediation plan was not applicable. Methane monitoring was conducted the following month, and methane concentration at MW-12A was below 100% the LEL, and methane was not detected at step-out location MW-39A. As discussed below, MW-39A is recommended as a replacement for MW-12A. With the exception of MW-38A, the proposed subsurface monitoring locations were monitored in third or fourth quarter, and the results are presented in Table 12. Based on 567 IAC 113.9(2), no action is required for this facility with regard to methane control at this time.

Requests:

• On behalf of the Winneshiek County Area Solid Waste Agency (Agency), Foth requests Iowa Department of Natural Resource (IDNR) review and approval to amend the Permit and the Methane Monitoring Program Plan to include the following:

- Removal of MWII-3, MW-5AR, MW-12, MW-23, and MW-28A, as these wells have been abandoned.
- Removal of GP-01 through GP-09, as these probes are silted in and do not provide adequate data.
- Replacement of MW-12A with step-out location MW-39A.
- Removal of MW-3, MW-18, and MW-19R, as the well screens are continuously submerged.
- Addition of MW-26A, MW-32A, MW-33A, MW-37A, MW-38A, and MW-46A.

• Upon approval of these changes, the methane monitoring network would consist of the Scale House, Maintenance Building, GU-1, GU-2, MW-1, MW-2, MW-4B, MW-11, MW-22, MW-24A, MW-26A, MW-32A, MW-33A, MW-37A, MW-38A, MW-39A, and MW-46A. These locations will provide adequate spatial coverage and representative methane monitoring data.

• An updated Methane Monitoring Plan will be submitted with the Sanitary Disposal Project (SDP) permit renewal application due by September 22, 2026. Additional review of the methane monitoring network will be conducted at that time.

Table 13A
Leachate Management Summary
2025 Leachate Collection System Performance Evaluation Report
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

		Leachate Head-Lined					GW-Lined			Leachate Head-Unlined					Leachate Hauling			Leachate Recirculation			Evaporator			Weather Conditions	
Piezometer		4-1	5-1	5-2	5E-1	5E-2	GU5E-1	GULG-1	GU-1	LHPZ-1	LHPZ-2	LHPZ-3	LHPZ-4	LHPZ-6	1, 2, 3 & 5	Cell 4		Pump (GPH)	Runoff Ck	4,000	Operation	Evap (GPH)	2,000	Precipitation - Inches	
Liner Elevation (amsl)		1161.70	1122.70	1140.00	1140.50	1141.50	1135.50	1121.00	1107.00	1184.50	1173.00	1170.00	1159.00	1183.00											
Month		Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Gal	Gal	Total	Hours	Day	Gal Recirc	Days	Hours	Gal Evap	Rain	Snow
January	Depth (feet)	0.00	0.50	0.00	0.50	0.80	0.90	0.00	0.20	13.50	2.90	2.75	3.25	4.90	January	0	0	0	0	0	0	0	0	0	0.00	0.50
	Elevation (amsl)	1161.70	1123.20	1140.00	1141.00	1142.30	1136.40	1121.00	1107.20	1198.00	1175.90	1172.75	1162.25	1187.90											
February	Depth (feet)	0.00	0.50	0.00	0.80	0.70	0.90	0.10	0.20	13.30	3.50	1.80	3.20	4.90	February	0	0	0	0	0	0	0	0	0	0.00	1.00
	Elevation (amsl)	1161.70	1123.20	1140.00	1141.30	1142.20	1136.40	1121.10	1107.20	1197.80	1176.50	1171.80	1162.20	1187.90											
March	Depth (feet)	0.00	0.40	0.00	1.00	0.70	0.90	0.00	0.20	13.00	3.30	0.20	3.25	4.80	March	0	0	0	0	0	0	0	0	0	3.50	2.00
	Elevation (amsl)	1161.70	1123.10	1140.00	1141.50	1142.20	1136.40	1121.00	1107.20	1197.50	1176.30	1170.20	1162.25	1187.80											
April	Depth (feet)	0.00	0.40	0.00	1.25	0.90	1.00	0.10	0.28	13.66	4.91	3.00	3.28	4.85	April	0	0	0	0	0	0	0	0	0	7.00	0.00
	Elevation (amsl)	1161.70	1123.10	1140.00	1141.75	1142.40	1136.50	1121.10	1107.28	1198.16	1177.91	1173.00	1162.28	1187.85											
May	Depth (feet)	0.10	0.40	0.00	1.25	1.00	1.00	0.50	0.20	0.25	4.30	3.30	3.20	4.80	May	0	0	0	6	0	24,000	7	56	224,000	2.20	0.00
	Elevation (amsl)	1161.80	1123.10	1140.00	1141.75	1142.50	1136.50	1121.50	1107.20	1184.75	1177.30	1173.30	1162.20	1187.80											
June	Depth (feet)	0.10	0.30	0.00	1.10	0.80	1.00	0.10	0.20	19.90	4.00	2.80	3.00	4.80	June	0	0	0	60	0	240,000	12	95	380,000	4.40	0.00
	Elevation (amsl)	1161.80	1123.00	1140.00	1141.60	1142.30	1136.50	1121.10	1107.20	1204.40	1177.00	1172.80	1162.00	1187.80											
July	Depth (feet)	0.10	0.30	0.00	1.10	0.80	0.90	0.40	0.20	17.80	3.75	1.50	3.00	4.75	July	0	0	0	46	0	184,000	11	87	348,000	5.15	0.00
	Elevation (amsl)	1161.80	1123.00	1140.00	1141.60	1142.30	1136.40	1121.40	1107.20	1202.30	1176.75	1171.50	1162.00	1187.75											
August	Depth (feet)	0.10	0.30	0.00	1.10	0.80	0.90	0.00	0.30	16.50	3.80	0.50	2.90	4.75	August	0	0	0	24	0	96,000	16	121	484,000	5.75	0.00
	Elevation (amsl)	1161.80	1123.00	1140.00	1141.60	1142.30	1136.40	1121.00	1107.30	1201.00	1176.80	1170.50	1161.90	1187.75											
September	Depth (feet)	0.00	0.30	0.00	1.10	0.80	1.00	0.00	0.20	15.75	3.00	0.60	2.90	4.75	September	0	0	0	42	0	168,000	10	66	264,000	4.20	0.00
	Elevation (amsl)	1161.70	1123.00	1140.00	1141.60	1142.30	1136.50	1121.00	1107.20	1200.25	1176.00	1170.60	1161.90	1187.75											
October	Depth (feet)	0.00	0.20	0.00	0.80	0.80	0.90	0.00	0.20	15.50	3.00	0.50	2.90	4.75	October	0	0	0	0	0	0	0	0	0	1.95	0.00
	Elevation (amsl)	1161.70	1122.90	1140.00	1141.30	1142.30	1136.40	1121.00	1107.20	1200.00	1176.00	1170.50	1161.90	1187.75											
November	Depth (feet)	0.00	0.30	0.00	0.30	0.80	0.90	0.00	0.20	13.75	3.40	0.50	2.80	4.60	November	0	0	0	0	0	0	0	0	0	0.30	0.00
	Elevation (amsl)	1161.70	1123.00	1140.00	1140.80	1142.30	1136.40	1121.00	1107.20	1198.25	1176.40	1170.50	1161.80	1187.60											
December	Depth (feet)	0.00	0.00	0.00	0.30	0.70	0.80	0.00	0.10	13.50	3.40	0.50	2.70	4.50	December	0	0	0	0	0	0	0	0	0	0.30	15.00
	Elevation (amsl)	1161.70	1122.70	1140.00	1140.80	1142.20	1136.30	1121.00	1107.10	1198.00	1176.40	1170.50	1161.70	1187.50											
Maximum Depth (feet)		0.10	0.50	0.00	1.25	1.00	1.00	0.50	0.30	19.90	4.91	3.30	3.28	4.90											
Maximum Elevation (amsl)		1161.80	1123.20	1140.00	1141.75	1142.50	1136.50	1121.50	1107.30	1204.40	1177.91	1173.30	1162.28	1187.90											
2025 Avg Elevation (amsl)		1161.73	1123.03	1140.00	1141.38	1142.30	1136.43	1121.10	1107.21	1198.37	1176.61	1171.50	1162.03	1187.76	2025	0	0	0	178		712,000	56	425	850,000	34.75	18.50
2024 Avg Elevation (amsl)		1162.07	1123.41	1140.00	1140.90	1142.25	1038.71	1121.16	1106.95	1200.47	1177.22	1172.78	1162.58	1187.75	2024	0	0	0	757		3,028,000	88	703	1,406,000	44.40	25.20
2023 Avg Elevation (amsl)		1161.70	1123.41	1140.03	1140.65	1142.01	1038.23	1121.26	1106.98	1199.34	1176.29	1171.48	1163.35	1187.55	2023	0	0	0	515		2,060,000	101	782	1,564,000	30.10	33.50
2022 Avg Elevation (amsl)		1161.79	1123.17	1140.00	1140.60	1141.78	1038.08	1121.18	1106.44	1197.28	1175.52	1171.70	1162.32	1186.42	2022	0	0	0	457		1,828,000	68	579	1,158,000	35.00	0.50
2021 Avg Elevation (amsl)		1161.70	1123.13	1140.02	1140.68	1141.79	1038.18	1121.27	1107.28	1200.46	1175.77	1171.22	1162.48	1187.56	2021	0	0	0	626	85	2,504,000	104	851	1,702,000	36.70	29.00
2020 Avg Elevation (amsl)		1161.72	1122.94	1140.63	1140.95	1141.57	1038.06	1121.06	1107.08	1200.13	1174.40	1171.20	1163.37	1189.29	2020	0	0	0	800		3,200,000	83	703	1,406,000	43.00	11.75
2019 Avg Elevation (amsl)		1161.95	1122.87	1140.37	1140.82	1141.50	1038.00	1121.00	1107.00	1203.03	1173.28	1171.78	1163.08	1190.70	2019	0	0	0	437		1,748,000	118	962	1,924,000	44.85	63.50
2018 Avg Elevation (amsl)		1162.21	1122.87	1140.38	1141.21	1141.55	1038.41	1121.02	1107.02	1198.83	1174.27	1171.07	1162.98	1190.22	2018	0	0	0	355		1,420,000				53.10	33.50
2017 Avg Elevation (amsl)		1161.83	1122.84	1140.13	1141.18	1141.50	1138.49	1121.00	1107.00	1201.98	1176.27	1170.94	1162.58	1190.97	2017	0	0	0	458		1,832,000				31.90	16.00
2016 Avg Elevation (amsl)		1161.90	1122.92	1140.70						1201.76	1178.21	1171.19	1162.60	1191.04	2016	1,021,800	70,200	1,092,000	202		808,000				56.60	29.00
2015 Avg Elevation (amsl)		1162.05	1122.95	1140.47						1200.61	1178.83	1172.33	1162.13	1191.08	2015	639,600	153,400	793,000	835		3,340,000				28.47	43.90
2014 Avg Elevation (amsl)		1162.16	1123.14	1140.48						1199.12	1178.94	1170.08	1161.78	1191.28	2014	3,238,300	196,300	3,434,600	680		2,720,000				39.40	

amsl = above mean sea level
gal = gallon

Table 13A
Leachate Management Summary
2025 Leachate Collection System Performance Evaluation Report
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

• The contents of this report are intended to satisfy the requirements set forth in 567 Iowa Administrative Code (IAC) 113.7(5)b and Special Provision X.2.d.

• Leachate was not sent to the City of Decorah publicly owned treatment works (POTW) during the reporting period; therefore, the laboratory analytical results were not submitted to the City of Decorah.

Leachate Collection System Description:

• Toe Drain Leachate Collection Pipe Around Original Areas 1, 2, and 3 - Installed in approximately 1992. This toe drain system includes a gravity collection system that flows to Leachate Lagoon Bay No. 1.

• Leachate Collection System - Constructed as Part of Original Cell 4. This is a gravity collection system that flows to a leachate sump at the northeast corner of original Cell 4. The leachate flows by gravity to Leachate Lagoon Bay No. 2.

• Leachate Collection System - Constructed as Part of Original Cell 5. This is similar to the original Cell 4 system and flows to the northeast corner of original Cell 5. Leachate is pumped from the sump to Leachate Lagoon Bay No. 2.

• Leachate Collection System – Constructed as Part of the 2016 Project. There is a gravity collection system in the original Cell 5 Expansion Area that travels to Lagoon Bay No. 2. Also, there is a gravity toe drain that runs along the bottom of the abutment liner. The section across the north edge of original Cell 4 travels by gravity to the east to Lagoon Bay No. 2. The section across the west edge of original Cell 5 travels north and is deposited in the original Cell 5 Expansion Area Leachate Collection System.

Maintenance:

• Leachate lines are cleaned every 3 years in accordance with 567 IAC 113.7(5)"b." Leachate line cleaning and inspection is conducted according to the following schedule:

- Areas 1, 2, and 3 were last cleaned in 2023 and are scheduled to be cleaned in 2026.
- Original Cell 4 was cleaned in 2025 and is scheduled to be cleaned again in 2028.
- Cell 5 and Cell 5 EXP was last cleaned in 2024 and is scheduled to be cleaned in 2027.

Performance

• Effective leachate control is defined in accordance with 567 IAC 113.7(5)b(3) as maintaining less than one foot of leachate head over the liner at the system's lowest point(s) within the waste unit.

• Leachate head levels are monitored by dedicated transducers. LHPZ-1 and LHPZ-2 monitor head levels for unlined Area 2, LHPZ-3 and LHPZ-4 monitor head levels for unlined Area 1, and LHPZ-6 monitors head levels for unlined Area 3. LHPZ-4-1 monitor head levels for Cell 4; LHPZ-5-1 and LHPZ-5-2 monitor head levels for Cell 5; and LHPZ-5E-1 and LHPZ-5E-2 monitor head levels for Cell 5 EXP. In 2025, less than one foot of head on the liner was achieved for lined cells.

• Groundwater elevations are measured at the GU-1, GU-2, GU-5E-1, and GULG-1 underdrain sumps by measuring depth to water. GU-2 is monitored for the Cell 5 EXP, but has remained dry; therefore, it has not been evaluated further and included in Table 13. Groundwater seperation distance is addressed in Table 5B.

• Monthly leachate elevations measured between Jan. and Dec. 2025 and annual leachate elevations computed using measurements collected between 2014 and Dec. 2025 for each location are presented in this table (Table 13). Leachate contours are depicted with the shallow groundwater contours in Figures 2 and 4.

• Leachate contours generally reflect the ground surface contours, with the highest leachate elevations in the southwest portion of the landfill, and the lowest leachate elevations located along the perimeters of the landfill. This leachate pattern is consistent with previous years and represents no significant change.

• In 2025, there was no correlation between precipitation and leachate elevations or volumes.

Leachate Recirculation and Evaporation:

• No leachate was hauled to the City of Decorah in 2025.

• When conditions allow, leachate is pumped through a sprinkler system and recirculated over the composite-lined areas of the Landfill, Cell 5 EXP. This has proven to be successful in the past and reduces leachate hauling and disposal costs for the landfill. Leachate is dispersed from the sprinklers and is partially evaporated and/or used by the vegetation on the site (evapotranspiration) with a reduction in volume. Leachate piezometers LHPZ-4-1, LHPZ-5-1, LHPZ-5-2, LHPZ-5E-1, and LHPZ-5E-2 were installed to monitor leachate levels above the top of the liner; and to date, the recirculation does not appear to result in any consistent leachate build-up in the system. Approximately 700,000 gallons of leachate was recirculated in 2025. No leachate was hauled to the City of Decorah in

Leachate Recirculation and Evaporation Continued:

• In August 2017, the SMI 420F Evaporator in Lagoon Bay No. 2 was installed. The anchoring points are adjusted by the landfill staff depending on the wind conditions, and the evaporator is not operated when the wind is greater than 15 miles per hour to control the mist from drifting outside the lagoon boundary. The evaporator is designed to evaporate 2,000 gallons per hour at 500 degrees Fahrenheit. The use of the evaporator has had a significant effect on the leachate levels in the lagoon. In 2025, the evaporators were operated from May through September, for a total of 56 days and 425 total hours. Assuming the equipment evaporation rate is 2,000 gallons per hour, approximately 850,000 gallons of leachate was evaporated in 2025.

• Leachate generation has significantly decreased in 2025 due to waste placement on the abutment liner.

Requests:

• On behalf of the Winneshiek County Area Solid Waste Agency, Foth requests the Iowa Department of Natural Resources (IDNR) review and approval to amend the Permit and the Leachate Monitoring Plan to remove MH-15, GU5-MH, GU5E-2, and GU-2 as leachate monitoring locations. MH-15 is a leachate line manhole outside the waste limits and does not provide information regarding the head on the liner. GU5-MH is an underdrain location for Cell 5, which is adequately monitored by GU-1. GU5E-2 and GU-2 are underdrain locations for Cell 5 EXP that are adequately monitored by GU-5E-1.

Table 13B
Leachate Recirculation Operations Plan Data
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Foth

* Based on 5 year avg of recirc totals

2025		Leachate Head-Lined					GW Head-Lined			Leachate Head-Unlined						Leachate Hauling		Hauling Vol - Gal		2,600	Leachate Recirculation			Evaporator		Weather Conditions			
		4-1	5-1	5-2	5E-1	5E-2	GU5E-1	GULG-1	GU5-MH	LHPZ-1	LHPZ-2	LHPZ-3	LHPZ-4	LHPZ-6		123 & 5	Cell 4	123 & 5	Cell 4	Total	Pump (GPH)	Runoff CK	4,000	Evap (GPH)	2,000	Precipitation - Inches		Temp	
Month	Day	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	Time	Loads	Loads	Gal	Gal	Gal	Hours	Day	Gal. Recirc		Gal. Evap	Rain	Snow	°F	Conditions
January	1																	0	0	0			0		0	0.00	0.00	20	Overcast
	2																	0	0	0			0		0	0.00	0.00	10	Overcast
	3																	0	0	0			0		0	0.00	0.00	15	Sunny
	4																	0	0	0			0		0	0.00	0.00	0	
	5																	0	0	0			0		0	0.00	0.00	0	
	6	0	0.50	0.00	0.50	0.80	0.90	0.00	2.50	13.50	2.90	2.75	3.25	4.90	5.00			0	0	0			0		0	0.00	0.00	10	Sunny
	7																	0	0	0			0		0	0.00	0.00	20	Overcast
	8																	0	0	0			0		0	0.00	0.00	15	Sunny
	9																	0	0	0			0		0	0.00	0.00	25	Sunny
	10																	0	0	0			0		0	0.00	0.00	25	Overcast
	11																	0	0	0			0		0	0.00	0.00	0	
	12																	0	0	0			0		0	0.00	0.00	0	
	13																	0	0	0			0		0	0.00	0.00	5	Sunny
	14																	0	0	0			0		0	0.00	0.00	0	Sunny
	15																	0	0	0			0		0	0.00	0.00	15	Sunny
	16																	0	0	0			0		0	0.00	0.00	30	Sunny
	17																	0	0	0			0		0	0.00	0.00	35	Overcast/windy
	18																	0	0	0			0		0	0.00	0.00	0	
	19																	0	0	0			0		0	0.00	0.00	0	
	20																	0	0	0			0		0	0.00	0.00	-5	Overcast
	21																	0	0	0			0		0	0.00	0.00	-15	Overcast
	22																	0	0	0			0		0	0.00	0.00	20	Overcast
	23																	0	0	0			0		0	0.00	0.50	25	Sunny
	24																	0	0	0			0		0	0.00	0.00	25	Overcast
	25																	0	0	0			0		0	0.00	0.00	0	
	26																	0	0	0			0		0	0.00	0.00	0	
	27																	0	0	0			0		0	0.00	0.00	40	Sunny/Windy
	28																	0	0	0			0		0	0.00	0.00	45	Sunny/Windy40+
	29																	0	0	0			0		0	0.00	0.00	40	Sunny
	30																	0	0	0			0		0	0.00	0.00	50	Sunny
	31																	0	0	0			0		0	0.00	0.00	45	Sunny

Table 13B
Leachate Recirculation Operations Plan Data
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Foth

* Based on 5 year avg of recirc totals

2025		Leachate Head-Lined					GW Head-Lined			Leachate Head-Unlined						Leachate Hauling					Leachate Recirculation			Evaporator		Weather Conditions			
																		Hauling Vol - Gal		2,600									
		4-1	5-1	5-2	5E-1	5E-2	GU5E-1	GULG-1	GU5-MH	LHPZ-1	LHPZ-2	LHPZ-3	LHPZ-4	LHPZ-6		123 & 5	Cell 4	123 & 5	Cell 4	Total	Pump (GPH)	Runoff CK	4,000	Evap (GPH)	2,000	Precipitation - Inches		Temp	
Month	Day	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	Time	Loads	Loads	Gal	Gal	Gal	Hours	Day	Gal. Recirc		Gal. Evap	Rain	Snow	°F	Conditions
February	1																	0	0	0			0		0	0.00	0.00	0	
	2																	0	0	0			0		0	0.00	0.00	0	
	3	0	0.50	0.00	0.80	0.70	0.90	0.10	2.50	13.30	3.50	1.80	3.20	4.90	5.00			0	0	0			0		0	0.00	0.00	40	Overcast
	4																	0	0	0			0		0	0.00	0.00	25	Sunny
	5																	0	0	0			0		0	0.00	0.00	25	Overcast
	6																	0	0	0			0		0	0.00	0.00	30	Sunny
	7																	0	0	0			0		0	0.00	0.00	25	Sunny
	8																	0	0	0			0		0	0.00	0.00	0	
	9																	0	0	0			0		0	0.00	0.00	0	
	10																	0	0	0			0		0	0.00	0.00	25	Sunny
	11																	0	0	0			0		0	0.00	0.00	20	Sunny
	12																	0	0	0			0		0	0.00	1.00	10	Overcvast
	13																	0	0	0			0		0	0.00	0.00	0	Sunny
	14																	0	0	0			0		0	0.00	0.00	15	Sunny
	15																	0	0	0			0		0	0.00	0.00	0	
	16																	0	0	0			0		0	0.00	0.00	0	
	17																	0	0	0			0		0	0.00	0.00	-10	Sunny
	18																	0	0	0			0		0	0.00	0.00	-15	Sunny
	19																	0	0	0			0		0	0.00	0.00	-10	Sunny
	20																	0	0	0			0		0	0.00	0.00	-10	Sunny
	21																	0	0	0			0		0	0.00	0.00	-5	Sunny
	22																	0	0	0			0		0	0.00	0.00	0	
	23																	0	0	0			0		0	0.00	0.00	0	
	24																	0	0	0			0		0	0.00	0.00	40	Sunny
	25																	0	0	0			0		0	0.00	0.00	45	Sunny
	26																	0	0	0			0		0	0.00	0.00	50	Sunny
	27																	0	0	0			0		0	0.00	0.00	50	Sunny
	28																	0	0	0			0		0	0.00	0.00	55	Windy/Closed early
Leap Year	29																	0	0	0			0		0	0.00	0.00	0	

Table 13B
Leachate Recirculation Operations Plan Data
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Foth

* Based on 5 year avg of recirc totals

2025		Leachate Head-Lined					GW Head-Lined			Leachate Head-Unlined						Leachate Hauling					Leachate Recirculation			Evaporator		Weather Conditions			
																		Hauling Vol - Gal		2,600									
		4-1	5-1	5-2	5E-1	5E-2	GU5E-1	GULG-1	GU5-MH	LHPZ-1	LHPZ-2	LHPZ-3	LHPZ-4	LHPZ-6		123 & 5	Cell 4	123 & 5	Cell 4	Total	Pump (GPH)	Runoff CK	4,000	Evap (GPH)	2,000	Precipitation - Inches		Temp	
Month	Day	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	Time	Loads	Loads	Gal	Gal	Gal	Hours	Day	Gal. Recirc		Gal. Evap	Rain	Snow	°F	Conditions
March	1																	0	0	0			0		0	0.00	0.00	0	
	2																	0	0	0			0		0	0.00	0.00	0	
	3	0	0.40	0.00	1.00	0.70	0.90	0.00	2.50	13.00	3.30	0.20	3.25	4.80	5.00			0	0	0			0		0	0.00	0.00	60	Overcast
	4																	0	0	0			0		0	0.00	0.00	50	Overcast
	5																	0	0	0			0		0	2.00	1.00	25	Windy 45-50mph open only8 - 9:30
	6																	0	0	0			0		0	0.00	0.00	45	Sunny
	7																	0	0	0			0		0	0.00	0.00	35	Overcast
	8																	0	0	0			0		0	0.00	0.00	0	
	9																	0	0	0			0		0	0.00	0.00	0	
	10																	0	0	0			0		0	0.00	0.00	65	Sunny
	11																	0	0	0			0		0	0.00	0.00	55	Sunny
	12																	0	0	0			0		0	0.00	0.00	55	Sunny
	13																	0	0	0			0		0	0.00	0.00	65	Sunny
	14																	0	0	0			0		0	0.00	0.00	70	Sunny/windy
	15																	0	0	0			0		0	0.00	0.00	0	
	16																	0	0	0			0		0	0.00	0.00	0	
	17																	0	0	0			0		0	0.00	0.00	60	Sunny/Windy
	18																	0	0	0			0		0	0.00	0.00	55	Overcast/wind
	19																	0	0	0			0		0	1.00	1.00	30	Windy/rain/snow
	20																	0	0	0			0		0	0.00	0.00	35	Sunny
	21																	0	0	0			0		0	0.00	0.00	40	Sunny
	22																	0	0	0			0		0	0.00	0.00	0	
	23																	0	0	0			0		0	0.00	0.00	0	
	24																	0	0	0			0		0	0.00	0.00	35	Windy
	25																	0	0	0			0		0	0.00	0.00	40	Sunny
	26																	0	0	0			0		0	0.00	0.00	45	Sunny
	27																	0	0	0			0		0	0.00	0.00	65	Sunny
	28																	0	0	0			0		0	0.00	0.00	75	Sunny/Windy
	29																	0	0	0			0		0	0.00	0.00	0	
	30																	0	0	0			0		0	0.50	0.00	0	
	31																	0	0	0			0		0	0.00	0.00	40	Sunny

Table 13B
Leachate Recirculation Operations Plan Data
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Foth

* Based on 5 year avg of recirc totals

2025		Leachate Head-Lined					GW Head-Lined			Leachate Head-Unlined						Leachate Hauling					Leachate Recirculation			Evaporator		Weather Conditions			
																		Hauling Vol - Gal		2,600								
		4-1	5-1	5-2	5E-1	5E-2	GU5E-1	GULG-1	GU5-MH	LHPZ-1	LHPZ-2	LHPZ-3	LHPZ-4	LHPZ-6		123 & 5	Cell 4	123 & 5	Cell 4	Total	Pump (GPH)	Runoff CK	4,000	Evap (GPH)	2,000	Precipitation - Inches		Temp	
Month	Day	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	Time	Loads	Loads	Gal	Gal	Gal	Hours	Day	Gal. Recirc		Gal. Evap	Rain	Snow	°F	Conditions
April	1																	0	0	0			0		0	0.00	0.00	35	Overcast
	2																	0	0	0			0		0	0.00	0.00	35	Overcast
	3																	0	0	0			0		0	0.00	0.00	35	Overcast
	4																	0	0	0			0		0	0.00	0.00	40	Overcast
	5																	0	0	0			0		0	0.00	0.00	0	
	6																	0	0	0			0		0	0.00	0.00	0	
	7	0	0.40	0.00	1.25	0.90	1.00	0.10	2.58	13.66	4.91	3.00	3.28	4.85	5.00			0	0	0			0		0	0.00	0.00	40	Sunny
	8																	0	0	0			0		0	0.00	0.00	45	Sunny
	9																	0	0	0			0		0	0.00	0.00	55	Sunny
	10																	0	0	0			0		0	0.00	0.00	55	Overcast
	11																	0	0	0			0		0	0.00	0.00	50	Sunny
	12																	0	0	0			0		0	0.00	0.00	0	
	13																	0	0	0			0		0	0.00	0.00	0	
	14																	0	0	0			0		0	0.00	0.00	60	Sunny/Windy
	15																	0	0	0			0		0	0.00	0.00	60	Sunny/Windy
	16																	0	0	0			0		0	0.00	0.00	65	Sunny/Windy
	17																	0	0	0			0		0	0.00	0.00	60	Windy
	18																	0	0	0			0		0	1.50	0.00	0	
	19																	0	0	0			0		0	0.00	0.00	0	
	20																	0	0	0			0		0	1.00	0.00	0	
	21																	0	0	0			0		0	1.50	0.00	50	Overcast
	22																	0	0	0			0		0	1.00	0.00	65	Sunny
	23																	0	0	0			0		0	0.50	0.00	65	Sunny
	24																	0	0	0			0		0	0.50	0.00	60	Overcast
	25																	0	0	0			0		0	1.00	0.00	50	Overcast
	26																	0	0	0			0		0	0.00	0.00	0	
	27																	0	0	0			0		0	0.00	0.00	0	
	28																	0	0	0			0		0	0.00	0.00	65	Sunny
	29																	0	0	0			0		0	0.00	0.00	70	Sunny
	30																	0	0	0			0		0	0.00	0.00	75	Sunny

Table 13B
Leachate Recirculation Operations Plan Data
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

* Based on 5 year avg of recirc totals

2025		Leachate Head-Lined					GW Head-Lined			Leachate Head-Unlined						Leachate Hauling					Leachate Recirculation			Evaporator		Weather Conditions			
																		Hauling Vol - Gal		2,600									
		4-1	5-1	5-2	5E-1	5E-2	GU5E-1	GULG-1	GU5-MH	LHPZ-1	LHPZ-2	LHPZ-3	LHPZ-4	LHPZ-6		123 & 5	Cell 4	123 & 5	Cell 4	Total	Pump (GPH)	Runoff CK	4,000	Evap (GPH)	2,000	Precipitation - Inches		Temp	
Month	Day	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	Time	Loads	Loads	Gal	Gal	Gal	Hours	Day	Gal. Recirc		Gal. Evap	Rain	Snow	°F	Conditions
May	1																	0	0	0			0		0	0.50	0.00	60	Overcast
	2																	0	0	0			0		0	0.00	0.00	65	Overcast
	3																	0	0	0			0		0	0.00	0.00	0	
	4																	0	0	0			0		0	0.00	0.00	0	
	5	0	0.40	0.00	1.25	1.00	1.00	0.50	2.50	0.25	4.30	3.30	3.20	4.80	5.00			0	0	0			0	8.00	16,000	0.00	0.00	70	Sunny
	6																	0	0	0			0		0	0.00	0.00	65	Sunny
	7																	0	0	0			0	8.00	16,000	0.00	0.00	65	Sunny
	8																	0	0	0			0	8.00	16,000	0.00	0.00	75	Sunny
	9																	0	0	0			0	8.00	16,000	0.00	0.00	70	Sunny
	10																	0	0	0			0		0	0.00	0.00	0	
	11																	0	0	0			0		0	0.00	0.00	0	
	12	0.1	0.40	0.00	1.20	0.90									5.00			0	0	0			0	8.00	16,000	0.00	0.00	80	Sunny
	13	0.1	0.40	0.00	1.20	0.90									5.00			0	0	0			0		0	0.00	0.00	80	Sunny
	14	0.1	0.40	0.00	1.20	0.90									5.00			0	0	0			0		0	0.00	0.00	85	Sunny
	15	0.1	0.40	0.00	1.00	0.80									5.00			0	0	0			0		0	0.00	0.00	80	Sunyy 35+mphwinds
	16	0.1	0.40	0.00	1.00	0.80									5.00			0	0	0			0		0	0.00	0.00	80	Sunny
	17																	0	0	0			0		0	0.00	0.00	0	
	18																	0	0	0			0		0	0.00	0.00	0	
	19	0.1	0.30	0.00	1.00	0.80												0	0	0			0		0	0.00	0.00	55	Overcast windy E
	20																	0	0	0			0		0	1.00	0.00	50	Rain E-wind35mph
	21																	0	0	0			0		0	0.50	0.00	50	Rain overcast
	22																	0	0	0			0	8.00	16,000	0.00	0.00	60	Sunny
	23																	0	0	0	6.00	x	24,000	8.00	16,000	0.00	0.00	65	Sunny
	24																	0	0	0			0		0	0.00	0.00	0	
	25																	0	0	0			0		0	0.00	0.00	0	
	26																	0	0	0			0		0	0.00	0.00	0	
	27	0.1	0.30	0.00	1.00	0.70												0	0	0			0		0	0.00	0.00	65	Overcast
	28																	0	0	0			0		0	0.00	0.00	60	Overcast
	29																	0	0	0			0		0	0.20	0.00	65	Overcast
	30																	0	0	0			0		0	0.00	0.00	65	Overcast
	31																	0	0	0			0		0	0.00	0.00	0	

Table 13B
Leachate Recirculation Operations Plan Data
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

* Based on 5 year avg of recirc totals

2025		Leachate Head-Lined					GW Head-Lined			Leachate Head-Unlined						Leachate Hauling					Leachate Recirculation			Evaporator		Weather Conditions			
																		Hauling Vol - Gal		2,600									
		4-1	5-1	5-2	5E-1	5E-2	GU5E-1	GULG-1	GU5-MH	LHPZ-1	LHPZ-2	LHPZ-3	LHPZ-4	LHPZ-6		123 & 5	Cell 4	123 & 5	Cell 4	Total	Pump (GPH)	Runoff CK	4,000	Evap (GPH)	2,000	Precipitation - Inches		Temp	
Month	Day	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	Time	Loads	Loads	Gal	Gal	Gal	Hours	Day	Gal. Recirc		Gal. Evap	Rain	Snow	°F	Conditions
June	1																	0	0	0			0		0	0.00	0.00	0	
	2	0.1	0.30	0.00	1.00	0.80	1.00	0.10	2.50	19.90	4.00	2.80	3.00	4.80	5.00			0	0	0	6.00	x	24,000	8.00	16,000	0.00	0.00	80	Sunny
	3																	0	0	0			0		0	0.90	0.00	85	Overcast/Rain
	4																	0	0	0			0		0	0.00	0.00	75	Sunny/Hazy
	5																	0	0	0	6.00	x	24,000	8.00	16,000	0.00	0.00	80	Sunny
	6																	0	0	0	6.00	x	24,000	8.00	16,000	0.00	0.00	80	Overcast
	7																	0	0	0			0		0	0.00	0.00	0	
	8																	0	0	0			0		0	0.00	0.00	0	
	9	0.1	0.30	0.00	1.00	0.80									5.00			0	0	0	5.00	x	20,000	8.00	16,000	0.00	0.00	80	Sunny
	10	0.1	0.30	0.00	1.00	0.80									5.00			0	0	0	6.00	x	24,000	8.00	16,000	0.00	0.00	80	Sunny
	11	0.1	0.30	0.00	1.00	0.80									5.00			0	0	0	7.00	x	28,000	8.00	16,000	0.00	0.00	85	Sunny
	12																	0	0	0			0		0	1.00	0.00	75	Rain
	13	0.1	0.30	0.00	1.00	0.80									5.00			0	0	0	5.00	x	20,000	7.00	14,000	0.00	0.00	80	Sunny
	14																	0	0	0			0		0	0.00	0.00	0	
	15																	0	0	0			0		0	1.00	0.00	0	
	16	0.1	0.30	0.00	1.10	0.80									5.00			0	0	0			0		0	0.30	0.00	85	Overcast
	17																	0	0	0			0		0	0.20	0.00	85	Sunny
	18																	0	0	0			0		0	0.20	0.00	80	Overcast/rain
	19																	0	0	0			0		0	0.00	0.00	90	sunny
	20																	0	0	0			0		0	0.30	0.00	80	overcast/rain
	21																	0	0	0			0		0	0.00	0.00	0	
	22																	0	0	0			0		0	0.00	0.00	0	
	23	0.1	0.30	0.00	1.00	0.80									5.00			0	0	0	5.00	x	20,000	8.00	16,000	0.00	0.00	85	Overcast
	24	0.1	0.30	0.00	0.80	0.70									5.00			0	0	0	4.00	x	16,000	8.00	16,000	0.00	0.00	85	Overcast
	25	0.1	0.30	0.00	0.80	0.80									5.00			0	0	0	6.00	x	24,000	8.00	16,000	0.30	0.00	90	Sunny
	26																	0	0	0			0	8.00	16,000	0.00	0.00	90	Sunny
	27	0	0.30	0.00	0.80	0.80									5.00			0	0	0	4.00	x	16,000	8.00	16,000	0.00	0.00	90	Sunny
	28																	0	0	0			0		0	0.00	0.00	0	
	29																	0	0	0			0		0	0.20	0.00	0	
	30	0.1	0.30	0.00	1.10	0.80									5.00			0	0	0			0		0	0.00	0.00	90	Sunny

Table 13B
Leachate Recirculation Operations Plan Data
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Foth

* Based on 5 year avg of recirc totals

2025		Leachate Head-Lined					GW Head-Lined			Leachate Head-Unlined						Leachate Hauling		Hauling Vol - Gal		2,600	Leachate Recirculation			Evaporator		Weather Conditions			
		4-1	5-1	5-2	5E-1	5E-2	GU5E-1	GULG-1	GU5-MH	LHPZ-1	LHPZ-2	LHPZ-3	LHPZ-4	LHPZ-6		123 & 5	Cell 4	123 & 5	Cell 4	Total	Pump (GPH)	Runoff CK	4,000	Evap (GPH)	2,000	Precipitation - Inches		Temp	
Month	Day	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	Time	Loads	Loads	Gal	Gal	Gal	Hours	Day	Gal. Recirc		Gal. Evap	Rain	Snow	°F	Conditions
July	1	0.1	0.30	0.00	1.10	0.80									5.00			0	0	0	4.00	x	16,000	9.00	18,000	0.00	0.00	90	Sunny
	2	0.1	0.30	0.00	1.00	0.80									5.00			0	0	0	5.00	x	20,000	9.00	18,000	0.00	0.00	90	Sunny
	3																	0	0	0	6.00	x	24,000	9.00	18,000	0.00	0.00	90	Sunny
	4																	0	0	0			0		0	0.00	0.00	0	
	5																	0	0	0			0		0	0.50	0.00	0	
	6																	0	0	0			0		0	0.00	0.00	0	
	7	0.1	0.30	0.00	1.00	0.80	0.90	0.40	2.50	17.80	3.75	1.50	3.00	4.75	5.00			0	0	0	4.00	x	16,000	9.00	18,000	0.00	0.00	90	Sunny
	8	0.1	0.30	0.00	1.00	0.80												0	0	0	4.00	x	16,000	9.00	18,000	0.00	0.00	90	Sunny
	9	0.1	0.30	0.00	1.00	0.80												0	0	0	4.00	x	16,000	9.00	18,000	0.00	0.00	95	Sunny
	10																	0	0	0			0		0	0.00	0.00	85	overcast
	11																	0	0	0			0		0	0.70	0.00	85	overcast/rain
	12																	0	0	0			0		0	0.00	0.00	0	
	13																	0	0	0			0		0	0.00	0.00	0	
	14	0.1	0.30	0.00	0.90	0.80												0	0	0	6.00	x	24,000	8.00	16,000	0.00	0.00	80	Sunny
	15	0.1	0.30	0.00	0.90	0.80												0	0	0	5.00	x	20,000	8.00	16,000	0.00	0.00	85	Sunny
	16	0.1	0.30	0.00	0.90	0.80												0	0	0			0		0	0.60	0.00	80	Overcast
	17	0.1	0.30	0.00	0.90	0.80												0	0	0			0	8.00	16,000	0.00	0.00	75	Overcast
	18	0.1	0.30	0.00	0.80	0.80												0	0	0	4.00	x	16,000	4.00	8,000	0.00	0.00	75	Overcast
	19																	0	0	0			0		0	1.00	0.00	0	
	20																	0	0	0			0		0	0.00	0.00	0	
	21	0.1	0.30	0.00	0.80	0.80												0	0	0	4.00	x	16,000	5.00	10,000	0.00	0.00	80	Sunny
	22	0.1	0.30	0.00	0.80	0.80												0	0	0			0		0	0.00	0.00	90	Sunny
	23	0.1	0.30	0.00	0.80	0.80												0	0	0			0		0	1.00	0.00	85	Overcast/Sun
	24	0.1	0.30	0.00	0.80	0.80												0	0	0			0		0	0.20	0.00	90	Sunny
	25	0.1	0.30	0.00	0.70	0.80												0	0	0			0		0	0.00	0.00	90	Sunny
	26																	0	0	0			0		0	0.00	0.00	0	
	27																	0	0	0			0		0	0.00	0.00	0	
	28	0.1	0.30	0.00	0.70	0.80												0	0	0			0		0	0.25	0.00	90	Sunny
	29	0.1	0.30	0.00	0.80	0.80												0	0	0			0		0	0.30	0.00	70	Sunny
	30	0.1	0.30	0.00	0.80	0.80												0	0	0			0		0	0.60	0.00	75	Overcast
	31	0.1	0.30	0.00	0.80	0.80												0	0	0			0		0	0.00	0.00	75	Overcast

Table 13B
Leachate Recirculation Operations Plan Data
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Foth

* Based on 5 year avg of recirc totals

2025		Leachate Head-Lined					GW Head-Lined			Leachate Head-Unlined						Leachate Hauling					Leachate Recirculation			Evaporator		Weather Conditions			
																		Hauling Vol - Gal		2,600									
		4-1	5-1	5-2	5E-1	5E-2	GU5E-1	GULG-1	GU5-MH	LHPZ-1	LHPZ-2	LHPZ-3	LHPZ-4	LHPZ-6		123 & 5	Cell 4	123 & 5	Cell 4	Total	Pump (GPH)	Runoff CK	4,000	Evap (GPH)	2,000	Precipitation - Inches		Temp	
Month	Day	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	Time	Loads	Loads	Gal	Gal	Gal	Hours	Day	Gal. Recirc		Gal. Evap	Rain	Snow	°F	Conditions
August	1	0.1	0.30	0.00	0.70	0.80												0	0	0			0		0	0.00	0.00	80	Sunny
	2																	0	0	0			0		0	0.00	0.00	0	
	3																	0	0	0			0		0	0.00	0.00	0	
	4	0	0.30	0.00	1.1	0.75	0.90	0.00	2.60	16.50	3.80	0.50	2.90	4.75	5.00			0	0	0	4.00	x	16,000	8.00	16,000	0.00	0.00	80	Sunny
	5	0	0.30	0.00	1.00	0.75												0	0	0	4.00	x	16,000	5.00	10,000	0.00	0.00	85	Sunny
	6	0	0.30	0.00	1.00	0.80												0	0	0	5.00	x	20,000	4.00	8,000	0.00	0.00	85	Sunny
	7	0	0.30	0.00	0.90	0.80												0	0	0	6.00	x	24,000	8.00	16,000	0.00	0.00	85	Sunny
	8	0	0.30	0.00	0.90	0.80												0	0	0	5.00	x	20,000		0	0.00	0.00	95	Sunny
	9																	0	0	0			0		0	0.00	0.00	0	
	10																	0	0	0			0	8.00	16,000	0.75	0.00	0	
	11	0	0.30	0.00	0.90	0.80												0	0	0			0	8.00	16,000	0.00	0.00	80	Sunny
	12	0	0.30	0.00	0.90	0.80												0	0	0			0	8.00	16,000	0.00	0.00	85	Sunny
	13	0	0.30	0.00	0.90	0.80												0	0	0			0	8.00	16,000	0.00	0.00	80	Sunny
	14	0	0.30	0.00	0.90	0.80												0	0	0			0	8.00	16,000	0.00	0.00	85	Sunny
	15	0	0.30	0.00	0.90	0.80												0	0	0			0	8.00	16,000	0.00	0.00	95	Sunny
	16																	0	0	0			0		0	0.50	0.00	0	
	17																	0	0	0			0	9	0	0.00	0.00	0	
	18	0	0.30	0.00	0.80	0.80												0	0	0			0		0	4.50	0.00	80	Rain
	19																	0	0	0			0		0	0.00	0.00	85	Sunny
	20																	0	0	0			0		0	0.00	0.00	80	Sunny
	21																	0	0	0			0	8.00	16,000	0.00	0.00	85	Sunny
	22																	0	0	0			0	8.00	16,000	0.00	0.00	85	Sunny
	23																	0	0	0			0		0	0.00	0.00	0	
	24																	0	0	0			0		0	0.00	0.00	0	
	25	0	0.30	0.00	0.80	0.80												0	0	0			0	8.00	16,000	0.00	0.00	75	Sunny
	26	0	0.30	0.00	0.80	0.80												0	0	0			0	8.00	16,000	0.00	0.00	80	Sunny
	27																	0	0	0			0	8.00	16,000	0.00	0.00	75	Sunny
	28																	0	0	0			0	8.00	16,000	0.00	0.00	85	Sunny
	29																	0	0	0			0		0	0.00	0.00	0	
	30																	0	0	0			0		0	0.00	0.00	0	
	31																	0	0	0			0		0	0.00	0.00	0	

Table 13B
Leachate Recirculation Operations Plan Data
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Foth

* Based on 5 year avg of recirc totals

2025		Leachate Head-Lined					GW Head-Lined			Leachate Head-Unlined						Leachate Hauling					Leachate Recirculation			Evaporator		Weather Conditions			
																		Hauling Vol - Gal		2,600									
		4-1	5-1	5-2	5E-1	5E-2	GU5E-1	GULG-1	GU5-MH	LHPZ-1	LHPZ-2	LHPZ-3	LHPZ-4	LHPZ-6		123 & 5	Cell 4	123 & 5	Cell 4	Total	Pump (GPH)	Runoff CK	4,000	Evap (GPH)	2,000	Precipitation - Inches		Temp	
Month	Day	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	Time	Loads	Loads	Gal	Gal	Gal	Hours	Day	Gal. Recirc		Gal. Evap	Rain	Snow	°F	Conditions
September	1	0	0.30	0.00	0.80	0.80	1.00	0.00	2.50	15.75	3.00	0.60	2.90	4.75	5.00			0	0	0	5.00		20,000	8.00	16,000	0.00	0.00	75	Sunny
	2	0	0.30	0.00	1.10	0.80												0	0	0	4.00	x	16,000	8.00	16,000	0.00	0.00	75	Sunny
	3	0	0.30	0.00	1.00	0.80												0	0	0	5.00	x	20,000	8.00	16,000	0.00	0.00	70	Sunny
	4	0	0.30	0.00	0.90	0.80												0	0	0	5.00	x	20,000	8.00	16,000	0.00	0.00	65	Sunny
	5	0	0.30	0.00	0.80	0.80												0	0	0	5.00	x	20,000		0	0.00	0.00	70	Sunny
	6																	0	0	0			0		0	0.00	0.00	0	
	7																	0	0	0			0		0	0.00	0.00	0	
	8	0	0.30	0.00	0.80	0.80												0	0	0	6.00	x	24,000		0	0.00	0.00	70	Sunny
	9	0	0.30	0.00	0.80	0.80												0	0	0	4.00	x	16,000		0	0.00	0.00	70	Sunny
	10	0	0.30	0.00	0.80	0.80												0	0	0			0		0	1.00	0.00	75	Sunny
	11	0	0.30	0.00	0.80	0.80												0	0	0			0		0	0.00	0.00	80	Sunny
	12																	0	0	0			0		0	0.00	0.00	85	Sunny/windy
	13																	0	0	0			0		0	0.00	0.00	0	
	14																	0	0	0			0		0	0.00	0.00	0	
	15	0	0.30	0.00	0.80	0.80												0	0	0	4.00	x	16,000	6.00	12,000	1.00	0.00	90	Sunny/rain
	16	0	0.20	0.00	1.00	0.80												0	0	0	4.00	x	16,000	6.00	12,000	0.00	0.00	80	Sunny
	17	0	0.20	0.00	1.00	0.80												0	0	0			0		0	1.50	0.00	85	Sunny
	18																	0	0	0			0		0	0.00	0.00	80	Sunny
	19																	0	0	0			0		0	0.00	0.00	85	Sunny
	20																	0	0	0			0		0	0.20	0.00	0	
	21																	0	0	0			0		0	0.00	0.00	0	
	22	0	0.20	0.00	0.80	0.80												0	0	0			0		0	0.00	0.00	85	Overcast
	23	0	0.20	0.00	0.80	0.80												0	0	0			0	6.00	12,000	0.50	0.00	80	Sunny
	24	0	0.20	0.00	0.80	0.80												0	0	0			0	4.00	8,000	0.00	0.00	85	Sunny
	25	0	0.20	0.00	0.80	0.80												0	0	0			0	6.00	12,000	0.00	0.00	85	Sunny
	26	0	0.20	0.00	0.80	0.80												0	0	0			0	6.00	12,000	0.00	0.00	80	Sunny
	27																	0	0	0			0		0	0.00	0.00	0	
	28																	0	0	0			0		0	0.00	0.00	0	
	29	0	0.20	0.00	0.80	0.80												0	0	0			0		0	0.00	0.00	80	Sunny
	30																	0	0	0			0		0	0.00	0.00	85	Sunny

Table 13B
Leachate Recirculation Operations Plan Data
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Foth

* Based on 5 year avg of recirc totals

2025		Leachate Head-Lined					GW Head-Lined			Leachate Head-Unlined						Leachate Hauling					Leachate Recirculation			Evaporator		Weather Conditions			
																		Hauling Vol - Gal		2,600								
		4-1	5-1	5-2	5E-1	5E-2	GU5E-1	GULG-1	GU5-MH	LHPZ-1	LHPZ-2	LHPZ-3	LHPZ-4	LHPZ-6		123 & 5	Cell 4	123 & 5	Cell 4	Total	Pump (GPH)	Runoff CK	4,000	Evap (GPH)	2,000	Precipitation - Inches		Temp	
Month	Day	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	Time	Loads	Loads	Gal	Gal	Gal	Hours	Day	Gal. Recirc		Gal. Evap	Rain	Snow	°F	Conditions
October	1																	0	0	0			0		0	0.00	0.00	85	Sunny
	2																	0	0	0			0		0	0.00	0.00	90	Sunny
	3																	0	0	0			0		0	0.00	0.00	85	Sunny
	4																	0	0	0			0		0	0.00	0.00	0	
	5																	0	0	0			0		0	0.00	0.00	0	
	6	0	0.20	0.00	0.80	0.80	0.90	0.00	2.50	15.50	3.00	0.50	2.90	4.75	5.00			0	0	0			0		0	0.60	0.00	55	Overcast
	7																	0	0	0			0		0	0.00	0.00	60	Overcast
	8																	0	0	0			0		0	0.00	0.00	65	Sunny
	9																	0	0	0			0		0	0.00	0.00	65	Sunny
	10																	0	0	0			0		0	0.00	0.00	70	Sunny
	11																	0	0	0			0		0	0.00	0.00	0	
	12																	0	0	0			0		0	0.00	0.00	0	
	13																	0	0	0			0		0	0.00	0.00	70	Sunny
	14																	0	0	0			0		0	0.00	0.00	55	Overcast
	15																	0	0	0			0		0	0.50	0.00	60	Rain
	16																	0	0	0			0		0	0.50	0.00	70	Overcast
	17																	0	0	0			0		0	0.00	0.00	75	Sunny
	18																	0	0	0			0		0	0.00	0.00	0	
	19																	0	0	0			0		0	0.00	0.00	0	
	20																	0	0	0			0		0	0.00	0.00	60	Overcast 20-30mphwinds
	21																	0	0	0			0		0	0.10	0.00	55	Overcast 40mphwinds
	22																	0	0	0			0		0	0.00	0.00	55	Overcast 20-30mphwinds
	23																	0	0	0			0		0	0.00	0.00	50	Sunny
	24																	0	0	0			0		0	0.00	0.00	50	Sunny
	25																	0	0	0			0		0	0.00	0.00	0	
	26																	0	0	0			0		0	0.00	0.00	0	
	27																	0	0	0			0		0	0.00	0.00	55	Sunny
	28																	0	0	0			0		0	0.00	0.00	60	Sunny
	29																	0	0	0			0		0	0.25	0.00	55	Overcast
	30																	0	0	0			0		0	0.00	0.00	55	Sunny
	31																	0	0	0			0		0	0.00	0.00	60	

Table 13B
Leachate Recirculation Operations Plan Data
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Foth

* Based on 5 year avg of recirc totals

2025		Leachate Head-Lined					GW Head-Lined			Leachate Head-Unlined						Leachate Hauling					Leachate Recirculation			Evaporator		Weather Conditions			
																		Hauling Vol - Gal		2,600								
		4-1	5-1	5-2	5E-1	5E-2	GU5E-1	GULG-1	GU5-MH	LHPZ-1	LHPZ-2	LHPZ-3	LHPZ-4	LHPZ-6		123 & 5	Cell 4	123 & 5	Cell 4	Total	Pump (GPH)	Runoff CK	4,000	Evap (GPH)	2,000	Precipitation - Inches		Temp	
Month	Day	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	Time	Loads	Loads	Gal	Gal	Gal	Hours	Day	Gal. Recirc		Gal. Evap	Rain	Snow	°F	Conditions
November	1																	0	0	0			0		0	0.00	0.00	0	
	2																	0	0	0			0		0	0.00	0.00	0	
	3	0	0.30	0.00	0.30	0.80	0.90	0.00	2.50	13.75	3.40	0.50	2.80	4.60	5.00			0	0	0			0		0	0.00	0.00	65	Sunny
	4																	0	0	0			0		0	0.00	0.00	60	Sunny
	5																	0	0	0			0		0	0.00	0.00	60	overcast wind 35-40nw
	6																	0	0	0			0		0	0.00	0.00	60	Overcast
	7																	0	0	0			0		0	0.00	0.00	55	Sunny
	8																	0	0	0			0		0	0.00	0.00	0	
	9																	0	0	0			0		0	0.00	0.00	0	
	10																	0	0	0			0		0	0.00	0.00	35	Sunny
	11																	0	0	0			0		0	0.00	0.00	0	
	12																	0	0	0			0		0	0.00	0.00	50	Windy25-35nw
	13																	0	0	0			0		0	0.00	0.00	60	Sunny
	14																	0	0	0			0		0	0.00	0.00	65	Sunny
	15																	0	0	0			0		0	0.00	0.00	0	
	16																	0	0	0			0		0	0.00	0.00	0	
	17																	0	0	0			0		0	0.00	0.00	45	Overcast
	18																	0	0	0			0		0	0.30	0.00	55	Overcast
	19																	0	0	0			0		0	0.00	0.00	50	Overcast
	20																	0	0	0			0		0	0.00	0.00	45	Overcast
	21																	0	0	0			0		0	0.00	0.00	55	Sunny
	22																	0	0	0			0		0	0.00	0.00	0	
	23																	0	0	0			0		0	0.00	0.00	0	
	24																	0	0	0			0		0	0.00	0.00	50	Overcast
	25																	0	0	0			0		0	0.00	0.00	45	Overcast
	26																	0	0	0			0		0	0.00	0.00	25	Windy 45-50mph
	27																	0	0	0			0		0	0.00	0.00	0	
	28																	0	0	0			0		0	0.00	0.00	0	
	29																	0	0	0			0		0	0.00	0.00	0	
	30																	0	0	0			0		0	0.00	0.00	0	

Table 13B
Leachate Recirculation Operations Plan Data
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Foth

* Based on 5 year avg of recirc totals

2025		Leachate Head-Lined					GW Head-Lined			Leachate Head-Unlined						Leachate Hauling		Hauling Vol - Gal		2,600	Leachate Recirculation			Evaporator		Weather Conditions			
		4-1	5-1	5-2	5E-1	5E-2	GU5E-1	GULG-1	GU5-MH	LHPZ-1	LHPZ-2	LHPZ-3	LHPZ-4	LHPZ-6		123 & 5	Cell 4	123 & 5	Cell 4	Total	Pump (GPH)	Runoff CK	4,000	Evap (GPH)	2,000	Precipitation - Inches		Temp	
Month	Day	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	Time	Loads	Loads	Gal	Gal	Gal	Hours	Day	Gal. Recirc		Gal. Evap	Rain	Snow	°F	Conditions
December	1			0.00	0.30	0.70	0.80	0.00	2.40	13.50	3.40	0.50	2.70	4.50	5.00			0	0	0			0		0	0.00	7.00	20	Overcast
	2																	0	0	0			0		0	0.00	0.00	30	Overcast
	3																	0	0	0			0		0	0.00	0.00	20	Overcast
	4																	0	0	0			0		0	0.00	0.00	0	Overcast
	5																	0	0	0			0		0	0.00	0.00	25	Overcast
	6																	0	0	0			0		0	0.00	4.00	0	
	7																	0	0	0			0		0	0.00	0.00	0	
	8																	0	0	0			0		0	0.00	0.00	15	Sunny
	9																	0	0	0			0		0	0.00	2.00	25	Overcast
	10																	0	0	0			0		0	0.00	0.00	15	Overcast
	11																	0	0	0			0		0	0.00	0.00	10	Sunny
	12																	0	0	0			0		0	0.00	0.00	10	Overcast
	13																	0	0	0			0		0	0.00	0.00	0	
	14																	0	0	0			0		0	0.00	0.00	0	
	15																	0	0	0			0		0	0.00	0.00	20	Overcast
	16																	0	0	0			0		0	0.00	0.00	25	Overcast
	17																	0	0	0			0		0	0.00	0.00	30	sunny
	18																	0	0	0			0		0	0.10	0.00	40	Sunny
	19																	0	0	0			0		0	0.00	0.00	15	Sunny
	20																	0	0	0			0		0	0.00	0.00	0	
	21																	0	0	0			0		0	0.00	0.00	0	
	22																	0	0	0			0		0	0.00	0.00	35	Sunny
	23																	0	0	0			0		0	0.00	0.00	35	Sunny
	24																	0	0	0			0		0	0.00	0.00	0	
	25																	0	0	0			0		0	0.00	0.00	0	
	26																	0	0	0			0		0	0.20	0.00	40	Sunny
	27																	0	0	0			0		0	0.00	0.00	0	
	28																	0	0	0			0		0	0.00	0.00	0	
	29																	0	0	0			0		0	0.00	2.00	15	Overcast
	30																	0	0	0			0		0	0.00	0.00	15	overcast
	31																	0	0	0			0		0	0.00	0.00	20	Overcast

Table 14
Analytical Data Summary
2025 Annual Water Quality Report
Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Comments:

The following table presents the surface water, shallow groundwater, and deep groundwater Appendix II analytical data collected since Oct./Nov. 2014.

Detections above the laboratory MDL are shown in **bold**.

DwnGrad = downgradient (compliance) monitoring location.

Bkgrnd = background monitoring location.

Delin = delineation monitoring location.

• The Jun. 2025 p-Phenylenediamine result at MW-11 was rejected due to laboratory control sample/laboratory control sample duplicate recoveries that were below the acceptance limit. As a result, the Jun. 2025 p-Phenylenediamine result at MW-11 is listed as a crossed-out concentration in Table 14.

• As further addressed in the Fall 2025 statistical evaluation (Appendix B) and Report Priority, the following background data set adjustments are recommended for removal based on a review of replaced background well data, total suspended solids (TSS), single background detections, and/or reporting limits. As discussed below, MW-1R and MW-19 were recommended for removal from background and are no longer included in Table 14. The remaining background data set adjustments are listed as crossed-out concentrations.

- Removal of MW-1R from the shallow groundwater background data set. MW-1R was installed in April 2010 after MW-1 moved to assessment monitoring. However, MW-1R was installed in a crop field on the adjoining property to the west and was mostly inaccessible from November 2017 through Sep. 2021, when MW-1R was abandoned. MW-37A was installed in Sep. 2021 to replace MW-1R. Since MW-1R's contribution to shallow groundwater background is minimal due to inaccessibility, and further data set removals would likely be required due to volatile organic compound (VOC) detections, removal of the historical MW-1R data from the combined shallow groundwater background data set is
- Removal of MW-19 from the deep groundwater background data set. From Jun. to Oct. 2019, groundwater levels at MW-19 increased approximately 15 feet, which was attributed to annular seal failure. MW-19 was abandoned in Aug. 2021, and MW-19R was installed in Sep. 2021 as its replacement. The data sets for MW-19 and MW-19R were initially combined; however, due to the seal failure, removal of the Jun. 2019 through May 2021 metals data at MW-19 was recommended and approved by the IDNR in their letter dated May 2, 2023 (IDNR, 2023). With four years of monitoring data now available from MW-19R, retaining the limited historical MW-19 data no longer provides meaningful ongoing value. Therefore, removal of the historical MW-19 data from the combined deep groundwater background data set is recommended.
- Removal of the Sep. 2021 barium, cobalt, lead, and nickel concentrations in MW-19R due to elevated TSS (182 mg/L) and the potential for turbidity to contribute to the higher metal concentrations identified.
- Removal of the Sep. 2021 arsenic, barium, cadmium, chromium, cobalt, copper, lead, silver, and vanadium concentrations in MW-37A due to the elevated TSS (159 mg/L) and the potential for turbidity to contribute to the higher metal concentrations identified.
- Removal of the Mar. 2022 arsenic, barium, cadmium, chromium, cobalt, copper, lead, nickel, and vanadium concentrations in MW-19R due to the elevated TSS (834 mg/L) and the potential for turbidity to contribute to the higher metal concentrations identified.
- Removal of the Jun. 2023 barium, cobalt, and copper concentrations in MW-19R due to elevated TSS (109 mg/L) and the potential for turbidity to contribute to the higher metal concentrations identified.
- Removal of the Nov. 2023 arsenic, barium, cadmium, cobalt, copper, lead, nickel, and vanadium concentrations in MW-1 due to elevated TSS (276 mg/L) and the potential for turbidity to contribute to the higher metal concentrations identified.
- Removal of the Oct. 2025 arsenic, barium, cobalt, and lead concentrations in MW-19R due to the elevated TSS (151 mg/L) and the potential for turbidity to contribute to the higher metal concentrations identified.
- Removal of the Nov. 2014 barium, cobalt, copper, nickel, and vanadium concentrations in MW-1 due to the potential impact indicated by the chlorobenzene detection.
- Removal of the Dec. 2024 arsenic, barium, cobalt, and nickel concentrations in MW-37A due to the potential impact indicated by the benzene detection.
- Removal of the Nov. 2014 through Jun. 2019 cadmium results in SW-1 since the practical quantitation limit (PQL) was at least two times the maximum detected background concentration.

Table 14

Winneshiek County Area Solid Waste Agency — **Analytical Data Summary - Surface Water Appendix I**

Permit No. 57-SDP-01-74P — **2025 Annual Water Quality Report**

Constituent	Date	Units	SW-2 (DwnGrad)	SW-5 (DwnGrad)	SW-1 (Bkgrnd)
1,1,1,2-Tetrachloroethane	2014-11	ug/L	< 1.00		< 1.00
1,1,1,2-Tetrachloroethane	2015-05	ug/L	< 1.00		< 1.00
1,1,1,2-Tetrachloroethane	2016-04	ug/L	< 1.00		< 1.00
1,1,1,2-Tetrachloroethane	2016-11	ug/L	< 1.00		< 1.00
1,1,1,2-Tetrachloroethane	2017-05	ug/L	< 1.00		< 1.00
1,1,1,2-Tetrachloroethane	2017-11	ug/L	< 1.00		< 1.00
1,1,1,2-Tetrachloroethane	2018-06	ug/L	< 1.00		< 1.00
1,1,1,2-Tetrachloroethane	2018-10	ug/L	< 1.00		< 1.00
1,1,1,2-Tetrachloroethane	2019-06	ug/L	< 1.00		< 1.00
1,1,1,2-Tetrachloroethane	2019-11	ug/L	< 1.00		< 1.00
1,1,1,2-Tetrachloroethane	2020-07	ug/L	< 1.00		< 1.00
1,1,1,2-Tetrachloroethane	2020-11	ug/L	< 1.00		< 1.00
1,1,1,2-Tetrachloroethane	2021-06	ug/L	< 1.00		< 1.00
1,1,1,2-Tetrachloroethane	2021-09	ug/L	< 1.00		< 1.00
1,1,1,2-Tetrachloroethane	2022-03	ug/L	< 1.00		< 1.00
1,1,1,2-Tetrachloroethane	2022-06	ug/L	< 1.00		< 1.00
1,1,1,2-Tetrachloroethane	2022-08	ug/L	< 1.00		< 1.00
1,1,1,2-Tetrachloroethane	2023-06	ug/L	< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2023-11	ug/L	< 1.00	< 1.00	
1,1,1,2-Tetrachloroethane	2024-01	ug/L		< 1.00	
1,1,1,2-Tetrachloroethane	2024-06	ug/L	< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2024-12	ug/L	< 1.00	< 1.00	
1,1,1,2-Tetrachloroethane	2025-06	ug/L	< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2025-10	ug/L	< 1	< 1	
1,1,1-Trichloroethane	2014-11	ug/L	< 1.00		< 1.00
1,1,1-Trichloroethane	2015-05	ug/L	< 1.00		< 1.00
1,1,1-Trichloroethane	2016-04	ug/L	< 1.00		< 1.00
1,1,1-Trichloroethane	2016-11	ug/L	< 1.00		< 1.00
1,1,1-Trichloroethane	2017-05	ug/L	< 1.00		< 1.00
1,1,1-Trichloroethane	2017-11	ug/L	< 1.00		< 1.00
1,1,1-Trichloroethane	2018-06	ug/L	< 1.00		< 1.00
1,1,1-Trichloroethane	2018-10	ug/L	< 1.00		< 1.00
1,1,1-Trichloroethane	2019-06	ug/L	< 1.00		< 1.00
1,1,1-Trichloroethane	2019-11	ug/L	< 1.00		< 1.00
1,1,1-Trichloroethane	2020-07	ug/L	< 1.00		< 1.00
1,1,1-Trichloroethane	2020-11	ug/L	< 1.00		< 1.00
1,1,1-Trichloroethane	2021-06	ug/L	< 1.00		< 1.00
1,1,1-Trichloroethane	2021-09	ug/L	< 1.00		< 1.00
1,1,1-Trichloroethane	2022-03	ug/L	< 1.00		< 1.00
1,1,1-Trichloroethane	2022-06	ug/L	< 1.00		< 1.00
1,1,1-Trichloroethane	2022-08	ug/L	< 1.00		< 1.00
1,1,1-Trichloroethane	2023-06	ug/L	< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2023-11	ug/L	< 1.00	< 1.00	
1,1,1-Trichloroethane	2024-01	ug/L		< 1.00	
1,1,1-Trichloroethane	2024-06	ug/L	< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2024-12	ug/L	< 1.00	< 1.00	
1,1,1-Trichloroethane	2025-06	ug/L	< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2025-10	ug/L	< 1	< 1	
1,1,2,2-Tetrachloroethane	2014-11	ug/L	< 1.00		< 1.00
1,1,2,2-Tetrachloroethane	2015-05	ug/L	< 1.00		< 1.00
1,1,2,2-Tetrachloroethane	2016-04	ug/L	< 1.00		< 1.00
1,1,2,2-Tetrachloroethane	2016-11	ug/L	< 1.00		< 1.00
1,1,2,2-Tetrachloroethane	2017-05	ug/L	< 1.00		< 1.00
1,1,2,2-Tetrachloroethane	2017-11	ug/L	< 1.00		< 1.00
1,1,2,2-Tetrachloroethane	2018-06	ug/L	< 1.00		< 1.00
1,1,2,2-Tetrachloroethane	2018-10	ug/L	< 1.00		< 1.00
1,1,2,2-Tetrachloroethane	2019-06	ug/L	< 1.00		< 1.00
1,1,2,2-Tetrachloroethane	2019-11	ug/L	< 1.00		< 1.00
1,1,2,2-Tetrachloroethane	2020-07	ug/L	< 1.00		< 1.00
1,1,2,2-Tetrachloroethane	2020-11	ug/L	< 1.00		< 1.00
1,1,2,2-Tetrachloroethane	2021-06	ug/L	< 1.00		< 1.00
1,1,2,2-Tetrachloroethane	2021-09	ug/L	< 1.00		< 1.00
1,1,2,2-Tetrachloroethane	2022-03	ug/L	< 1.00		< 1.00
1,1,2,2-Tetrachloroethane	2022-06	ug/L	< 1.00		< 1.00
1,1,2,2-Tetrachloroethane	2022-08	ug/L	< 1.00		< 1.00
1,1,2,2-Tetrachloroethane	2023-06	ug/L	< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2023-11	ug/L	< 1.00	< 1.00	
1,1,2,2-Tetrachloroethane	2024-01	ug/L		< 1.00	
1,1,2,2-Tetrachloroethane	2024-06	ug/L	< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2024-12	ug/L	< 1.00	< 1.00	
1,1,2,2-Tetrachloroethane	2025-06	ug/L	< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2025-10	ug/L	< 1	< 1	
1,1,2-Trichloroethane	2014-11	ug/L	< 1.00		< 1.00
1,1,2-Trichloroethane	2015-05	ug/L	< 1.00		< 1.00
1,1,2-Trichloroethane	2016-04	ug/L	< 1.00		< 1.00
1,1,2-Trichloroethane	2016-11	ug/L	< 1.00		< 1.00
1,1,2-Trichloroethane	2017-05	ug/L	< 1.00		< 1.00
1,1,2-Trichloroethane	2017-11	ug/L	< 1.00		< 1.00
1,1,2-Trichloroethane	2018-06	ug/L	< 1.00		< 1.00
1,1,2-Trichloroethane	2018-10	ug/L	< 1.00		< 1.00
1,1,2-Trichloroethane	2019-06	ug/L	< 1.00		< 1.00
1,1,2-Trichloroethane	2019-11	ug/L	< 2.00		< 1.00
1,1,2-Trichloroethane	2020-07	ug/L	< 1.00		< 1.00
1,1,2-Trichloroethane	2020-11	ug/L	< 1.00		< 1.00
1,1,2-Trichloroethane	2021-06	ug/L	< 1.00		< 1.00
1,1,2-Trichloroethane	2021-09	ug/L	< 1.00		< 1.00
1,1,2-Trichloroethane	2022-03	ug/L	< 1.00		< 1.00
1,1,2-Trichloroethane	2022-06	ug/L	< 1.00		< 1.00

Table 14

Winneshiek County Area Solid Waste Agency **Analytical Data Summary - Surface Water Appendix I**

Permit No. 57-SDP-01-74P **2025 Annual Water Quality Report**

Constituent	Date	Units	SW-2 (DwnGrad)	SW-5 (DwnGrad)	SW-1 (Bkgrnd)
1,1,2-Trichloroethane	2022-08	ug/L	< 1.00		< 1.00
1,1,2-Trichloroethane	2023-06	ug/L	< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2023-11	ug/L	< 1.00	< 1.00	
1,1,2-Trichloroethane	2024-01	ug/L		< 1.00	
1,1,2-Trichloroethane	2024-06	ug/L	< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2024-12	ug/L	< 1.00	< 1.00	
1,1,2-Trichloroethane	2025-06	ug/L	< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2025-10	ug/L	< 1	< 1	
1,1-Dichloroethane	2014-11	ug/L	< 1.00		< 1.00
1,1-Dichloroethane	2015-05	ug/L	< 1.00		< 1.00
1,1-Dichloroethane	2016-04	ug/L	< 1.00		< 1.00
1,1-Dichloroethane	2016-11	ug/L	< 1.00		< 1.00
1,1-Dichloroethane	2017-05	ug/L	< 1.00		< 1.00
1,1-Dichloroethane	2017-11	ug/L	< 1.00		< 1.00
1,1-Dichloroethane	2018-06	ug/L	< 1.00		< 1.00
1,1-Dichloroethane	2018-10	ug/L	< 1.00		< 1.00
1,1-Dichloroethane	2019-06	ug/L	< 1.00		< 1.00
1,1-Dichloroethane	2019-11	ug/L	< 1.00		< 1.00
1,1-Dichloroethane	2020-07	ug/L	< 1.00		< 1.00
1,1-Dichloroethane	2020-11	ug/L	< 1.00		< 1.00
1,1-Dichloroethane	2021-06	ug/L	< 1.00		< 1.00
1,1-Dichloroethane	2021-09	ug/L	< 1.00		< 1.00
1,1-Dichloroethane	2022-03	ug/L	< 1.00		< 1.00
1,1-Dichloroethane	2022-06	ug/L	< 1.00		< 1.00
1,1-Dichloroethane	2022-08	ug/L	< 1.00		< 1.00
1,1-Dichloroethane	2023-06	ug/L	< 1.00	< 1.00	< 1.00
1,1-Dichloroethane	2023-11	ug/L	< 1.00	< 1.00	
1,1-Dichloroethane	2024-01	ug/L		< 1.00	
1,1-Dichloroethane	2024-06	ug/L	< 1.00	< 1.00	< 1.00
1,1-Dichloroethane	2024-12	ug/L	< 1.00	< 1.00	
1,1-Dichloroethane	2025-06	ug/L	< 1.00	< 1.00	< 1.00
1,1-Dichloroethane	2025-10	ug/L	< 1	< 1	
1,1-Dichloroethene	2014-11	ug/L	< 2.00		< 2.00
1,1-Dichloroethene	2015-05	ug/L	< 2.00		< 2.00
1,1-Dichloroethene	2016-04	ug/L	< 2.00		< 2.00
1,1-Dichloroethene	2016-11	ug/L	< 2.00		< 2.00
1,1-Dichloroethene	2017-05	ug/L	< 2.00		< 2.00
1,1-Dichloroethene	2017-11	ug/L	< 2.00		< 2.00
1,1-Dichloroethene	2018-06	ug/L	< 2.00		< 2.00
1,1-Dichloroethene	2018-10	ug/L	< 2.00		< 2.00
1,1-Dichloroethene	2019-06	ug/L	< 2.00		< 2.00
1,1-Dichloroethene	2019-11	ug/L	< 2.00		< 2.00
1,1-Dichloroethene	2020-07	ug/L	< 2.00		< 2.00
1,1-Dichloroethene	2020-11	ug/L	< 2.00		< 2.00
1,1-Dichloroethene	2021-06	ug/L	< 2.00		< 2.00
1,1-Dichloroethene	2021-09	ug/L	< 2.00		< 2.00
1,1-Dichloroethene	2022-03	ug/L	< 2.00		< 2.00
1,1-Dichloroethene	2022-06	ug/L	< 2.00		< 2.00
1,1-Dichloroethene	2022-08	ug/L	< 2.00		< 2.00
1,1-Dichloroethene	2023-06	ug/L	< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2023-11	ug/L	< 2.00	< 2.00	
1,1-Dichloroethene	2024-01	ug/L		< 2.00	
1,1-Dichloroethene	2024-06	ug/L	< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2024-12	ug/L	< 2.00	< 2.00	
1,1-Dichloroethene	2025-06	ug/L	< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2025-10	ug/L	< 2	< 2	
1,2,3-Trichloropropane	2014-11	ug/L	< 1.00		< 1.00
1,2,3-Trichloropropane	2015-05	ug/L	< 1.00		< 1.00
1,2,3-Trichloropropane	2016-04	ug/L	< 1.00		< 1.00
1,2,3-Trichloropropane	2016-11	ug/L	< 1.00		< 1.00
1,2,3-Trichloropropane	2017-05	ug/L	< 1.00		< 1.00
1,2,3-Trichloropropane	2017-11	ug/L	< 1.00		< 1.00
1,2,3-Trichloropropane	2018-06	ug/L	< 1.00		< 1.00
1,2,3-Trichloropropane	2018-10	ug/L	< 1.00		< 1.00
1,2,3-Trichloropropane	2019-06	ug/L	< 1.00		< 1.00
1,2,3-Trichloropropane	2019-11	ug/L	< 5.00		< 1.00
1,2,3-Trichloropropane	2020-07	ug/L	< 1.00		< 1.00
1,2,3-Trichloropropane	2020-11	ug/L	< 1.00		< 1.00
1,2,3-Trichloropropane	2021-06	ug/L	< 1.00		< 1.00
1,2,3-Trichloropropane	2021-09	ug/L	< 1.00		< 1.00
1,2,3-Trichloropropane	2022-03	ug/L	< 1.00		< 1.00
1,2,3-Trichloropropane	2022-06	ug/L	< 1.00		< 1.00
1,2,3-Trichloropropane	2022-08	ug/L	< 1.00		< 1.00
1,2,3-Trichloropropane	2023-06	ug/L	< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2023-11	ug/L	< 1.00	< 1.00	
1,2,3-Trichloropropane	2024-01	ug/L		< 1.00	
1,2,3-Trichloropropane	2024-06	ug/L	< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2024-12	ug/L	< 1.00	< 1.00	
1,2,3-Trichloropropane	2025-06	ug/L	< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2025-10	ug/L	< 1	< 1	
1,2-Dibromo-3-chloropropane	2014-11	ug/L	< 10.0		< 10.0
1,2-Dibromo-3-chloropropane	2015-05	ug/L	< 10.0		< 10.0
1,2-Dibromo-3-chloropropane	2016-04	ug/L	< 10.0		< 10.0
1,2-Dibromo-3-chloropropane	2016-11	ug/L	< 5.00		< 5.00
1,2-Dibromo-3-chloropropane	2017-05	ug/L	< 5.00		< 5.00
1,2-Dibromo-3-chloropropane	2017-11	ug/L	< 5.00		< 5.00
1,2-Dibromo-3-chloropropane	2018-06	ug/L	< 5.00		< 5.00
1,2-Dibromo-3-chloropropane	2018-10	ug/L	< 5.00		< 5.00

Constituent	Date	Units	SW-2 (DwnGrad)	SW-5 (DwnGrad)	SW-1 (Bkgrnd)
1,2-Dibromo-3-chloropropane	2019-06	ug/L	< 5.00		< 5.00
1,2-Dibromo-3-chloropropane	2019-11	ug/L	< 5.00		< 5.00
1,2-Dibromo-3-chloropropane	2020-07	ug/L	< 5.00		< 5.00
1,2-Dibromo-3-chloropropane	2020-11	ug/L	< 5.00		< 5.00
1,2-Dibromo-3-chloropropane	2021-06	ug/L	< 5.00		< 5.00
1,2-Dibromo-3-chloropropane	2021-09	ug/L	< 5.00		< 5.00
1,2-Dibromo-3-chloropropane	2022-03	ug/L	< 5.00		< 5.00
1,2-Dibromo-3-chloropropane	2022-06	ug/L	< 5.00		< 5.00
1,2-Dibromo-3-chloropropane	2022-08	ug/L	< 5.00		< 5.00
1,2-Dibromo-3-chloropropane	2023-06	ug/L	< 5.00	< 5.00	< 5.00
1,2-Dibromo-3-chloropropane	2023-11	ug/L	< 5.00	< 5.00	
1,2-Dibromo-3-chloropropane	2024-01	ug/L		< 5.00	
1,2-Dibromo-3-chloropropane	2024-06	ug/L	< 5.00	< 5.00	< 5.00
1,2-Dibromo-3-chloropropane	2024-12	ug/L	< 5.00	< 5.00	
1,2-Dibromo-3-chloropropane	2025-06	ug/L	< 5.00	< 5.00	< 5.00
1,2-Dibromo-3-chloropropane	2025-10	ug/L	< 5	< 5	
1,2-Dibromoethane	2014-11	ug/L	< 10.0		< 10.0
1,2-Dibromoethane	2015-05	ug/L	< 10.0		< 10.0
1,2-Dibromoethane	2016-04	ug/L	< 10.0		< 10.0
1,2-Dibromoethane	2016-11	ug/L	< 1.00		< 1.00
1,2-Dibromoethane	2017-05	ug/L	< 1.00		< 1.00
1,2-Dibromoethane	2017-11	ug/L	< 1.00		< 1.00
1,2-Dibromoethane	2018-06	ug/L	< 1.00		< 1.00
1,2-Dibromoethane	2018-10	ug/L	< 1.00		< 1.00
1,2-Dibromoethane	2019-06	ug/L	< 1.00		< 1.00
1,2-Dibromoethane	2019-11	ug/L	< 2.00		< 1.00
1,2-Dibromoethane	2020-07	ug/L	< 1.00		< 1.00
1,2-Dibromoethane	2020-11	ug/L	< 1.00		< 1.00
1,2-Dibromoethane	2021-06	ug/L	< 1.00		< 1.00
1,2-Dibromoethane	2021-09	ug/L	< 1.00		< 1.00
1,2-Dibromoethane	2022-03	ug/L	< 1.00		< 1.00
1,2-Dibromoethane	2022-06	ug/L	< 1.00		< 1.00
1,2-Dibromoethane	2022-08	ug/L	< 1.00		< 1.00
1,2-Dibromoethane	2023-06	ug/L	< 1.00	< 1.00	< 1.00
1,2-Dibromoethane	2023-11	ug/L	< 1.00	< 1.00	
1,2-Dibromoethane	2024-01	ug/L		< 1.00	
1,2-Dibromoethane	2024-06	ug/L	< 1.00	< 1.00	< 1.00
1,2-Dibromoethane	2024-12	ug/L	< 1.00	< 1.00	
1,2-Dibromoethane	2025-06	ug/L	< 1.00	< 1.00	< 1.00
1,2-Dibromoethane	2025-10	ug/L	< 1	< 1	
1,2-Dichlorobenzene	2014-11	ug/L	< 1.00		< 1.00
1,2-Dichlorobenzene	2015-05	ug/L	< 1.00		< 1.00
1,2-Dichlorobenzene	2016-04	ug/L	< 1.00		< 1.00
1,2-Dichlorobenzene	2016-11	ug/L	< 1.00		< 1.00
1,2-Dichlorobenzene	2017-05	ug/L	< 1.00		< 1.00
1,2-Dichlorobenzene	2017-11	ug/L	< 1.00		< 1.00
1,2-Dichlorobenzene	2018-06	ug/L	< 1.00		< 1.00
1,2-Dichlorobenzene	2018-10	ug/L	< 1.00		< 1.00
1,2-Dichlorobenzene	2019-06	ug/L	< 1.00		< 1.00
1,2-Dichlorobenzene	2019-11	ug/L	< 1.00		< 1.00
1,2-Dichlorobenzene	2020-07	ug/L	< 1.00		< 1.00
1,2-Dichlorobenzene	2020-11	ug/L	< 1.00		< 1.00
1,2-Dichlorobenzene	2021-06	ug/L	< 1.00		< 1.00
1,2-Dichlorobenzene	2021-09	ug/L	< 1.00		< 1.00
1,2-Dichlorobenzene	2022-03	ug/L	< 1.00		< 1.00
1,2-Dichlorobenzene	2022-06	ug/L	< 1.00		< 1.00
1,2-Dichlorobenzene	2022-08	ug/L	< 1.00		< 1.00
1,2-Dichlorobenzene	2023-06	ug/L	< 1.00	< 1.00	< 1.00
1,2-Dichlorobenzene	2023-11	ug/L	< 1.00	< 1.00	
1,2-Dichlorobenzene	2024-01	ug/L		< 1.00	
1,2-Dichlorobenzene	2024-06	ug/L	< 1.00	< 1.00	< 1.00
1,2-Dichlorobenzene	2024-12	ug/L	< 1.00	< 1.00	
1,2-Dichlorobenzene	2025-06	ug/L	< 1.00	< 1.00	< 1.00
1,2-Dichlorobenzene	2025-10	ug/L	< 1	< 1	
1,2-Dichloroethane	2014-11	ug/L	< 1.00		< 1.00
1,2-Dichloroethane	2015-05	ug/L	< 1.00		< 1.00
1,2-Dichloroethane	2016-04	ug/L	< 1.00		< 1.00
1,2-Dichloroethane	2016-11	ug/L	< 1.00		< 1.00
1,2-Dichloroethane	2017-05	ug/L	< 1.00		< 1.00
1,2-Dichloroethane	2017-11	ug/L	< 1.00		< 1.00
1,2-Dichloroethane	2018-06	ug/L	< 1.00		< 1.00
1,2-Dichloroethane	2018-10	ug/L	< 1.00		< 1.00
1,2-Dichloroethane	2019-06	ug/L	< 1.00		< 1.00
1,2-Dichloroethane	2019-11	ug/L	< 1.00		< 1.00
1,2-Dichloroethane	2020-07	ug/L	< 1.00		< 1.00
1,2-Dichloroethane	2020-11	ug/L	< 1.00		< 1.00
1,2-Dichloroethane	2021-06	ug/L	< 1.00		< 1.00
1,2-Dichloroethane	2021-09	ug/L	< 1.00		< 1.00
1,2-Dichloroethane	2022-03	ug/L	< 1.00		< 1.00
1,2-Dichloroethane	2022-06	ug/L	< 1.00		< 1.00
1,2-Dichloroethane	2022-08	ug/L	< 1.00		< 1.00
1,2-Dichloroethane	2023-06	ug/L	< 1.00	< 1.00	< 1.00
1,2-Dichloroethane	2023-11	ug/L	< 1.00	< 1.00	
1,2-Dichloroethane	2024-01	ug/L		< 1.00	
1,2-Dichloroethane	2024-06	ug/L	< 1.00	< 1.00	< 1.00
1,2-Dichloroethane	2024-12	ug/L	< 1.00	< 1.00	
1,2-Dichloroethane	2025-06	ug/L	< 1.00	< 1.00	< 1.00
1,2-Dichloroethane	2025-10	ug/L	< 1	< 1	

Table 14
Analytical Data Summary - Surface Water Appendix I
2025 Annual Water Quality Report

Constituent	Date	Units	SW-2 (DwnGrad)	SW-5 (DwnGrad)	SW-1 (Bkgrnd)
1,2-Dichloropropane	2014-11	ug/L	< 1.00		< 1.00
1,2-Dichloropropane	2015-05	ug/L	< 1.00		< 1.00
1,2-Dichloropropane	2016-04	ug/L	< 1.00		< 1.00
1,2-Dichloropropane	2016-11	ug/L	< 1.00		< 1.00
1,2-Dichloropropane	2017-05	ug/L	< 1.00		< 1.00
1,2-Dichloropropane	2017-11	ug/L	< 1.00		< 1.00
1,2-Dichloropropane	2018-06	ug/L	< 1.00		< 1.00
1,2-Dichloropropane	2018-10	ug/L	< 1.00		< 1.00
1,2-Dichloropropane	2019-06	ug/L	< 1.00		< 1.00
1,2-Dichloropropane	2019-11	ug/L	< 1.00		< 1.00
1,2-Dichloropropane	2020-07	ug/L	< 1.00		< 1.00
1,2-Dichloropropane	2020-11	ug/L	< 1.00		< 1.00
1,2-Dichloropropane	2021-06	ug/L	< 1.00		< 1.00
1,2-Dichloropropane	2021-09	ug/L	< 1.00		< 1.00
1,2-Dichloropropane	2022-03	ug/L	< 1.00		< 1.00
1,2-Dichloropropane	2022-06	ug/L	< 1.00		< 1.00
1,2-Dichloropropane	2022-08	ug/L	< 1.00		< 1.00
1,2-Dichloropropane	2023-06	ug/L	< 1.00	< 1.00	< 1.00
1,2-Dichloropropane	2023-11	ug/L	< 1.00	< 1.00	
1,2-Dichloropropane	2024-01	ug/L		< 1.00	
1,2-Dichloropropane	2024-06	ug/L	< 1.00	< 1.00	< 1.00
1,2-Dichloropropane	2024-12	ug/L	< 1.00	< 1.00	
1,2-Dichloropropane	2025-06	ug/L	< 1.00	< 1.00	< 1.00
1,2-Dichloropropane	2025-10	ug/L	< 1	< 1	
1,4-Dichlorobenzene	2014-11	ug/L	< 1.00		< 1.00
1,4-Dichlorobenzene	2015-05	ug/L	< 1.00		< 1.00
1,4-Dichlorobenzene	2016-04	ug/L	< 1.00		< 1.00
1,4-Dichlorobenzene	2016-11	ug/L	< 1.00		< 1.00
1,4-Dichlorobenzene	2017-05	ug/L	< 1.00		< 1.00
1,4-Dichlorobenzene	2017-11	ug/L	< 1.00		< 1.00
1,4-Dichlorobenzene	2018-06	ug/L	< 1.00		< 1.00
1,4-Dichlorobenzene	2018-10	ug/L	< 1.00		< 1.00
1,4-Dichlorobenzene	2019-06	ug/L	< 1.00		< 1.00
1,4-Dichlorobenzene	2019-11	ug/L	< 1.00		< 1.00
1,4-Dichlorobenzene	2020-07	ug/L	< 1.00		< 1.00
1,4-Dichlorobenzene	2020-11	ug/L	< 1.00		< 1.00
1,4-Dichlorobenzene	2021-06	ug/L	< 1.00		< 1.00
1,4-Dichlorobenzene	2021-09	ug/L	< 1.00		< 1.00
1,4-Dichlorobenzene	2022-03	ug/L	< 1.00		< 1.00
1,4-Dichlorobenzene	2022-06	ug/L	< 1.00		< 1.00
1,4-Dichlorobenzene	2022-08	ug/L	< 1.00		< 1.00
1,4-Dichlorobenzene	2023-06	ug/L	< 1.00	< 1.00	< 1.00
1,4-Dichlorobenzene	2023-11	ug/L	< 1.00	< 1.00	
1,4-Dichlorobenzene	2024-01	ug/L		< 1.00	
1,4-Dichlorobenzene	2024-06	ug/L	< 1.00	< 1.00	< 1.00
1,4-Dichlorobenzene	2024-12	ug/L	< 1.00	< 1.00	
1,4-Dichlorobenzene	2025-06	ug/L	< 1.00	< 1.00	< 1.00
1,4-Dichlorobenzene	2025-10	ug/L	< 1	< 1	
2-Butanone	2014-11	ug/L	< 10.0		< 10.0
2-Butanone	2015-05	ug/L	< 10.0		< 10.0
2-Butanone	2016-04	ug/L	< 10.0		< 10.0
2-Butanone	2016-11	ug/L	< 10.0		< 10.0
2-Butanone	2017-05	ug/L	< 10.0		< 10.0
2-Butanone	2017-11	ug/L	< 10.0		< 10.0
2-Butanone	2018-06	ug/L	< 10.0		< 10.0
2-Butanone	2018-10	ug/L	< 10.0		< 10.0
2-Butanone	2019-06	ug/L	< 10.0		< 10.0
2-Butanone	2019-11	ug/L	< 10.0		< 10.0
2-Butanone	2020-07	ug/L	< 10.0		< 10.0
2-Butanone	2020-11	ug/L	< 10.0		< 10.0
2-Butanone	2021-06	ug/L	< 10.0		< 10.0
2-Butanone	2021-09	ug/L	< 10.0		< 10.0
2-Butanone	2022-03	ug/L	< 10.0		< 10.0
2-Butanone	2022-06	ug/L	< 10.0		< 10.0
2-Butanone	2022-08	ug/L	< 10.0		< 10.0
2-Butanone	2023-06	ug/L	< 10.0	< 10.0	< 10.0
2-Butanone	2023-11	ug/L	< 10.0	< 10.0	
2-Butanone	2024-01	ug/L		< 10.0	
2-Butanone	2024-06	ug/L	< 10.0	< 10.0	< 10.0
2-Butanone	2024-12	ug/L	< 10.0	< 10.0	
2-Butanone	2025-06	ug/L	< 10.0	< 10.0	< 10.0
2-Butanone	2025-10	ug/L	< 10	< 10	
2-Hexanone	2014-11	ug/L	< 10.0		< 10.0
2-Hexanone	2015-05	ug/L	< 10.0		< 10.0
2-Hexanone	2016-04	ug/L	< 10.0		< 10.0
2-Hexanone	2016-11	ug/L	< 10.0		< 10.0
2-Hexanone	2017-05	ug/L	< 10.0		< 10.0
2-Hexanone	2017-11	ug/L	< 10.0		< 10.0
2-Hexanone	2018-06	ug/L	< 10.0		< 10.0
2-Hexanone	2018-10	ug/L	< 10.0		< 10.0
2-Hexanone	2019-06	ug/L	< 10.0		< 10.0
2-Hexanone	2019-11	ug/L	< 10.0		< 10.0
2-Hexanone	2020-07	ug/L	< 10.0		< 10.0
2-Hexanone	2020-11	ug/L	< 10.0		< 10.0
2-Hexanone	2021-06	ug/L	< 10.0		< 10.0
2-Hexanone	2021-09	ug/L	< 10.0		< 10.0
2-Hexanone	2022-03	ug/L	< 10.0		< 10.0
2-Hexanone	2022-06	ug/L	< 10.0		< 10.0

Table 14

Winneshiek County Area Solid Waste Agency **Analytical Data Summary - Surface Water Appendix I**

Permit No. 57-SDP-01-74P **2025 Annual Water Quality Report**

Constituent	Date	Units	SW-2 (DwnGrad)	SW-5 (DwnGrad)	SW-1 (Bkgrnd)
2-Hexanone	2022-08	ug/L	< 10.0		< 10.0
2-Hexanone	2023-06	ug/L	< 10.0	< 10.0	< 10.0
2-Hexanone	2023-11	ug/L	< 10.0	< 10.0	
2-Hexanone	2024-01	ug/L		< 10.0	
2-Hexanone	2024-06	ug/L	< 10.0	< 10.0	< 10.0
2-Hexanone	2024-12	ug/L	< 10.0	< 10.0	
2-Hexanone	2025-06	ug/L	< 10.0	< 10.0	< 10.0
2-Hexanone	2025-10	ug/L	< 10	< 10	
4-Methyl-2-pentanone	2014-11	ug/L	< 10.0		< 10.0
4-Methyl-2-pentanone	2015-05	ug/L	< 10.0		< 10.0
4-Methyl-2-pentanone	2016-04	ug/L	< 10.0		< 10.0
4-Methyl-2-pentanone	2016-11	ug/L	< 10.0		< 10.0
4-Methyl-2-pentanone	2017-05	ug/L	< 10.0		< 10.0
4-Methyl-2-pentanone	2017-11	ug/L	< 10.0		< 10.0
4-Methyl-2-pentanone	2018-06	ug/L	< 10.0		< 10.0
4-Methyl-2-pentanone	2018-10	ug/L	< 10.0		< 10.0
4-Methyl-2-pentanone	2019-06	ug/L	< 10.0		< 10.0
4-Methyl-2-pentanone	2019-11	ug/L	< 10.0		< 10.0
4-Methyl-2-pentanone	2020-07	ug/L	< 10.0		< 10.0
4-Methyl-2-pentanone	2020-11	ug/L	< 10.0		< 10.0
4-Methyl-2-pentanone	2021-06	ug/L	< 10.0		< 10.0
4-Methyl-2-pentanone	2021-09	ug/L	< 10.0		< 10.0
4-Methyl-2-pentanone	2022-03	ug/L	< 10.0		< 10.0
4-Methyl-2-pentanone	2022-06	ug/L	< 10.0		< 10.0
4-Methyl-2-pentanone	2022-08	ug/L	< 10.0		< 10.0
4-Methyl-2-pentanone	2023-06	ug/L	< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2023-11	ug/L	< 10.0	< 10.0	
4-Methyl-2-pentanone	2024-01	ug/L		< 10.0	
4-Methyl-2-pentanone	2024-06	ug/L	< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2024-12	ug/L	< 10.0	< 10.0	
4-Methyl-2-pentanone	2025-06	ug/L	< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2025-10	ug/L	< 10	< 10	
Acetone	2014-11	ug/L	< 10.0		< 10.0
Acetone	2015-05	ug/L	< 10.0		< 10.0
Acetone	2016-04	ug/L	**2.59 J**		< 10.0
Acetone	2016-11	ug/L	< 10.0		< 10.0
Acetone	2017-05	ug/L	< 10.0		< 10.0
Acetone	2017-11	ug/L	**2.82 J**		**2.88 J**
Acetone	2018-06	ug/L	**4.04 J**		**3.12 J**
Acetone	2018-10	ug/L	< 10.0		< 10.0
Acetone	2019-06	ug/L	**4.43 J**		**4.55 J**
Acetone	2019-11	ug/L	< 10.0		< 10.0
Acetone	2020-07	ug/L	< 10.0		< 10.0
Acetone	2020-11	ug/L	< 10.0		< 10.0
Acetone	2021-06	ug/L	**7.5 J**		**3.45 J**
Acetone	2021-09	ug/L	**4.22 J**		< 10.0
Acetone	2022-03	ug/L	**3.73 J**		< 10.0
Acetone	2022-06	ug/L	< 10.0		< 10.0
Acetone	2022-08	ug/L	< 10.0		< 10.0
Acetone	2023-06	ug/L	**5 J**	< 10.0	**3.3 J**
Acetone	2023-11	ug/L	< 10.0	< 10.0	
Acetone	2024-01	ug/L		< 10.0	
Acetone	2024-06	ug/L	**3.68 J**	**5.15 J**	< 10.0
Acetone	2024-12	ug/L	< 10.0	< 10.0	
Acetone	2025-06	ug/L	< 10.0	**3.42 J**	< 10.0
Acetone	2025-10	ug/L	< 10	< 10	
Acrylonitrile	2014-11	ug/L	< 10.0		< 10.0
Acrylonitrile	2015-05	ug/L	< 10.0		< 10.0
Acrylonitrile	2016-04	ug/L	< 10.0		< 10.0
Acrylonitrile	2016-11	ug/L	< 10.0		< 10.0
Acrylonitrile	2017-05	ug/L	< 5.00		< 5.00
Acrylonitrile	2017-11	ug/L	< 5.00		< 5.00
Acrylonitrile	2018-06	ug/L	< 5.00		< 5.00
Acrylonitrile	2018-10	ug/L	< 5.00		< 5.00
Acrylonitrile	2019-06	ug/L	< 5.00		< 5.00
Acrylonitrile	2019-11	ug/L	< 5.00		< 5.00
Acrylonitrile	2020-07	ug/L	< 5.00		< 5.00
Acrylonitrile	2020-11	ug/L	< 5.00		< 5.00
Acrylonitrile	2021-06	ug/L	< 5.00		< 5.00
Acrylonitrile	2021-09	ug/L	< 5.00		< 5.00
Acrylonitrile	2022-03	ug/L	< 5.00		< 5.00
Acrylonitrile	2022-06	ug/L	< 5.00		< 5.00
Acrylonitrile	2022-08	ug/L	< 5.00		< 5.00
Acrylonitrile	2023-06	ug/L	< 5.00	< 5.00	< 5.00
Acrylonitrile	2023-11	ug/L	< 5.00	< 5.00	
Acrylonitrile	2024-01	ug/L		< 5.00	
Acrylonitrile	2024-06	ug/L	< 5.00	< 5.00	< 5.00
Acrylonitrile	2024-12	ug/L	< 5.00	< 5.00	
Acrylonitrile	2025-06	ug/L	< 5.00	< 5.00	< 5.00
Acrylonitrile	2025-10	ug/L	< 5	< 5	
Antimony	2014-11	ug/L	< 1.00		< 1.00
Antimony	2015-05	ug/L	< 1.00		< 1.00
Antimony	2016-04	ug/L	< 1.00		< 1.00
Antimony	2016-11	ug/L	< 1.00		< 1.00
Antimony	2017-05	ug/L	< 1.00		< 1.00
Antimony	2017-11	ug/L	< 1.00		< 1.00
Antimony	2018-06	ug/L	< 1.00		< 1.00
Antimony	2018-10	ug/L	< 1.00		< 1.00

Winneshiek County Area Solid Waste Agency
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Table 14
Analytical Data Summary - Surface Water Appendix I
2025 Annual Water Quality Report

Constituent	Date	Units	SW-2 (DwnGrad)	SW-5 (DwnGrad)	SW-1 (Bkgrnd)
Antimony	2019-06	ug/L	< 3.00		< 3.00
Antimony	2019-11	ug/L	< 1.00		< 1.00
Antimony	2020-07	ug/L	< 1.00		< 1.00
Antimony	2020-11	ug/L	< 1.00		< 1.00
Antimony	2021-06	ug/L	< 2.00		< 2.00
Antimony	2021-09	ug/L	< 2.00		< 2.00
Antimony	2022-03	ug/L	< 2.00		< 2.00
Antimony	2022-06	ug/L	< 2.00		< 2.00
Antimony	2022-08	ug/L	< 2.00		< 2.00
Antimony	2023-06	ug/L	< 2.00	< 2.00	< 2.00
Antimony	2023-11	ug/L	< 2.00	< 2.00	
Antimony	2024-01	ug/L		< 2.00	
Antimony	2024-06	ug/L	< 2.00	< 2.00	< 2.00
Antimony	2024-12	ug/L	< 2.00	< 2.00	
Antimony	2025-06	ug/L	< 2.00	< 2.00	< 2.00
Antimony	2025-10	ug/L	< 2	< 2	
Arsenic	2014-11	ug/L	< 2.00		< 2.00
Arsenic	2015-05	ug/L	< 2.00		< 2.00
Arsenic	2016-04	ug/L	< 2.00		< 2.00
Arsenic	2016-11	ug/L	< 2.00		< 2.00
Arsenic	2017-05	ug/L	< 2.00		< 2.00
Arsenic	2017-11	ug/L	**0.743 J**		< 2.00
Arsenic	2018-06	ug/L	< 2.00		< 2.00
Arsenic	2018-10	ug/L	< 2.00		< 2.00
Arsenic	2019-06	ug/L	**0.877 J**		**0.769 J**
Arsenic	2019-11	ug/L	< 2.00		< 2.00
Arsenic	2020-07	ug/L	**1.02 J**		< 2.00
Arsenic	2020-11	ug/L	< 2.00		< 2.00
Arsenic	2021-06	ug/L	< 2.00		**0.951 J**
Arsenic	2021-09	ug/L	< 2.00		< 2.00
Arsenic	2022-03	ug/L	**1.52 J**		**2.54**
Arsenic	2022-06	ug/L	**0.806 J**		< 2.00
Arsenic	2022-08	ug/L	< 2.00		< 2.00
Arsenic	2023-06	ug/L	**0.84 J**	**0.745 J**	**0.685 J**
Arsenic	2023-11	ug/L	**0.591 J**	**0.582 J**	
Arsenic	2024-01	ug/L		**0.569 J**	
Arsenic	2024-06	ug/L	**0.627 J**	**0.764 J**	< 2.00
Arsenic	2024-12	ug/L	< 2.00	< 2.00	
Arsenic	2025-06	ug/L	**0.772 J**	**1.31 J**	< 2.00
Arsenic	2025-10	ug/L	**0.693 J**	**0.86 J**	
Barium	2014-11	ug/L	**117**		**136**
Barium	2015-05	ug/L	**105**		**116**
Barium	2016-04	ug/L	**128**		**124**
Barium	2016-11	ug/L	**100**		**134**
Barium	2017-05	ug/L	**60.5**		**115**
Barium	2017-11	ug/L	**104**		**143**
Barium	2018-06	ug/L	**98.5**		**139**
Barium	2018-10	ug/L	**99.8**		**120**
Barium	2019-06	ug/L	**91.8**		**121**
Barium	2019-11	ug/L	**104**		**136**
Barium	2020-07	ug/L	**195**		**113**
Barium	2020-11	ug/L	**96.2**		**127**
Barium	2021-06	ug/L	**90**		**121**
Barium	2021-09	ug/L	**107**		**129**
Barium	2022-03	ug/L	**156**		**201**
Barium	2022-06	ug/L	**110**		**123**
Barium	2022-08	ug/L	**89.7**		**112**
Barium	2023-06	ug/L	**101**	**91.4**	**110**
Barium	2023-11	ug/L	**94.1**	**90**	
Barium	2024-01	ug/L		**87.1**	
Barium	2024-06	ug/L	**104**	**70.1**	**103**
Barium	2024-12	ug/L	**110**	**87.2**	
Barium	2025-06	ug/L	**99.6**	**86.9**	**111**
Barium	2025-10	ug/L	**91.7**	**103**	
Benzene	2014-11	ug/L	< 0.500		< 0.500
Benzene	2015-05	ug/L	< 0.500		< 0.500
Benzene	2016-04	ug/L	< 0.500		< 0.500
Benzene	2016-11	ug/L	< 0.500		< 0.500
Benzene	2017-05	ug/L	< 0.500		< 0.500
Benzene	2017-11	ug/L	< 0.500		< 0.500
Benzene	2018-06	ug/L	< 0.500		< 0.500
Benzene	2018-10	ug/L	< 0.500		< 0.500
Benzene	2019-06	ug/L	< 0.500		< 0.500
Benzene	2019-11	ug/L	< 0.500		< 0.500
Benzene	2020-07	ug/L	< 0.500		< 0.500
Benzene	2020-11	ug/L	< 0.500		< 0.500
Benzene	2021-06	ug/L	< 0.500		< 0.500
Benzene	2021-09	ug/L	< 0.500		< 0.500
Benzene	2022-03	ug/L	< 0.500		< 0.500
Benzene	2022-06	ug/L	< 0.500		< 0.500
Benzene	2022-08	ug/L	< 0.500		< 0.500
Benzene	2023-06	ug/L	< 0.500	< 0.500	< 0.500
Benzene	2023-11	ug/L	< 0.500	< 0.500	
Benzene	2024-01	ug/L		< 0.500	
Benzene	2024-06	ug/L	< 0.500	< 0.500	< 0.500
Benzene	2024-12	ug/L	< 0.500	< 0.500	
Benzene	2025-06	ug/L	< 0.500	< 0.500	< 0.500
Benzene	2025-10	ug/L	< 0.5	< 0.5	

Table 14
Analytical Data Summary - Surface Water Appendix I
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Constituent	Date	Units	SW-2 (DwnGrad)	SW-5 (DwnGrad)	SW-1 (Bkgrnd)
Beryllium	2014-11	ug/L	< 1.00		< 1.00
Beryllium	2015-05	ug/L	**0.15 J**		< 1.00
Beryllium	2016-04	ug/L	< 1.00		< 1.00
Beryllium	2016-11	ug/L	< 1.00		< 1.00
Beryllium	2017-05	ug/L	< 1.00		< 1.00
Beryllium	2017-11	ug/L	< 1.00		< 1.00
Beryllium	2018-06	ug/L	< 1.00		< 1.00
Beryllium	2018-10	ug/L	< 1.00		< 1.00
Beryllium	2019-06	ug/L	< 1.00		< 1.00
Beryllium	2019-11	ug/L	< 1.00		< 1.00
Beryllium	2020-07	ug/L	< 1.00		< 1.00
Beryllium	2020-11	ug/L	< 1.00		< 1.00
Beryllium	2021-06	ug/L	< 1.00		< 1.00
Beryllium	2021-09	ug/L	< 1.00		< 1.00
Beryllium	2022-03	ug/L	**0.321 J**		**0.497 J**
Beryllium	2022-06	ug/L	< 1.00		< 1.00
Beryllium	2022-08	ug/L	< 1.00		< 1.00
Beryllium	2023-06	ug/L	< 1.00	< 1.00	< 1.00
Beryllium	2023-11	ug/L	< 1.00	< 1.00	
Beryllium	2024-01	ug/L		< 1.00	
Beryllium	2024-06	ug/L	< 1.00	< 1.00	< 1.00
Beryllium	2024-12	ug/L	< 1.00	< 1.00	
Beryllium	2025-06	ug/L	< 1.00	< 1.00	< 1.00
Beryllium	2025-10	ug/L	< 1	< 1	
Bromochloromethane	2014-11	ug/L	< 5.00		< 5.00
Bromochloromethane	2015-05	ug/L	< 5.00		< 5.00
Bromochloromethane	2016-04	ug/L	< 5.00		< 5.00
Bromochloromethane	2016-11	ug/L	< 5.00		< 5.00
Bromochloromethane	2017-05	ug/L	< 5.00		< 5.00
Bromochloromethane	2017-11	ug/L	< 5.00		< 5.00
Bromochloromethane	2018-06	ug/L	< 5.00		< 5.00
Bromochloromethane	2018-10	ug/L	< 5.00		< 5.00
Bromochloromethane	2019-06	ug/L	< 5.00		< 5.00
Bromochloromethane	2019-11	ug/L	< 5.00		< 5.00
Bromochloromethane	2020-07	ug/L	< 5.00		< 5.00
Bromochloromethane	2020-11	ug/L	< 5.00		< 5.00
Bromochloromethane	2021-06	ug/L	< 5.00		< 5.00
Bromochloromethane	2021-09	ug/L	< 5.00		< 5.00
Bromochloromethane	2022-03	ug/L	< 5.00		< 5.00
Bromochloromethane	2022-06	ug/L	< 5.00		< 5.00
Bromochloromethane	2022-08	ug/L	< 5.00		< 5.00
Bromochloromethane	2023-06	ug/L	< 5.00	< 5.00	< 5.00
Bromochloromethane	2023-11	ug/L	< 5.00	< 5.00	
Bromochloromethane	2024-01	ug/L		< 5.00	
Bromochloromethane	2024-06	ug/L	< 5.00	< 5.00	< 5.00
Bromochloromethane	2024-12	ug/L	< 5.00	< 5.00	
Bromochloromethane	2025-06	ug/L	< 5.00	< 5.00	< 5.00
Bromochloromethane	2025-10	ug/L	< 5	< 5	
Bromodichloromethane	2014-11	ug/L	< 1.00		< 1.00
Bromodichloromethane	2015-05	ug/L	< 1.00		< 1.00
Bromodichloromethane	2016-04	ug/L	< 1.00		< 1.00
Bromodichloromethane	2016-11	ug/L	< 1.00		< 1.00
Bromodichloromethane	2017-05	ug/L	< 1.00		< 1.00
Bromodichloromethane	2017-11	ug/L	< 1.00		< 1.00
Bromodichloromethane	2018-06	ug/L	< 1.00		< 1.00
Bromodichloromethane	2018-10	ug/L	< 1.00		< 1.00
Bromodichloromethane	2019-06	ug/L	< 1.00		< 1.00
Bromodichloromethane	2019-11	ug/L	< 1.00		< 1.00
Bromodichloromethane	2020-07	ug/L	< 1.00		< 1.00
Bromodichloromethane	2020-11	ug/L	< 1.00		< 1.00
Bromodichloromethane	2021-06	ug/L	< 1.00		< 1.00
Bromodichloromethane	2021-09	ug/L	< 1.00		< 1.00
Bromodichloromethane	2022-03	ug/L	< 1.00		< 1.00
Bromodichloromethane	2022-06	ug/L	< 1.00		< 1.00
Bromodichloromethane	2022-08	ug/L	< 1.00		< 1.00
Bromodichloromethane	2023-06	ug/L	< 1.00	< 1.00	< 1.00
Bromodichloromethane	2023-11	ug/L	< 1.00	< 1.00	
Bromodichloromethane	2024-01	ug/L		< 1.00	
Bromodichloromethane	2024-06	ug/L	< 1.00	< 1.00	< 1.00
Bromodichloromethane	2024-12	ug/L	< 1.00	< 1.00	
Bromodichloromethane	2025-06	ug/L	< 1.00	< 1.00	< 1.00
Bromodichloromethane	2025-10	ug/L	< 1	< 1	
Bromoform	2014-11	ug/L	< 5.00		< 5.00
Bromoform	2015-05	ug/L	< 5.00		< 5.00
Bromoform	2016-04	ug/L	< 5.00		< 5.00
Bromoform	2016-11	ug/L	< 5.00		< 5.00
Bromoform	2017-05	ug/L	< 5.00		< 5.00
Bromoform	2017-11	ug/L	< 5.00		< 5.00
Bromoform	2018-06	ug/L	< 5.00		< 5.00
Bromoform	2018-10	ug/L	< 5.00		< 5.00
Bromoform	2019-06	ug/L	< 5.00		< 5.00
Bromoform	2019-11	ug/L	< 5.00		< 5.00
Bromoform	2020-07	ug/L	< 5.00		< 5.00
Bromoform	2020-11	ug/L	< 5.00		< 5.00
Bromoform	2021-06	ug/L	< 5.00		< 5.00
Bromoform	2021-09	ug/L	< 5.00		< 5.00
Bromoform	2022-03	ug/L	< 5.00		< 5.00
Bromoform	2022-06	ug/L	< 5.00		< 5.00

Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Table 14
Analytical Data Summary - Surface Water Appendix I
2025 Annual Water Quality Report

Constituent	Date	Units	SW-2 (DwnGrad)	SW-5 (DwnGrad)	SW-1 (Bkgrnd)
Bromoform	2022-08	ug/L	< 5.00		< 5.00
Bromoform	2023-06	ug/L	< 5.00	< 5.00	< 5.00
Bromoform	2023-11	ug/L	< 5.00	< 5.00	
Bromoform	2024-01	ug/L		< 5.00	
Bromoform	2024-06	ug/L	< 5.00	< 5.00	< 5.00
Bromoform	2024-12	ug/L	< 5.00	< 5.00	
Bromoform	2025-06	ug/L	< 5.00	< 5.00	< 5.00
Bromoform	2025-10	ug/L	< 5	< 5	
Bromomethane	2014-11	ug/L	< 4.00		< 4.00
Bromomethane	2015-05	ug/L	**0.249 J**		< 4.00
Bromomethane	2016-04	ug/L	< 4.00		< 4.00
Bromomethane	2016-11	ug/L	< 4.00		< 4.00
Bromomethane	2017-05	ug/L	**0.487 J**		**0.367 J**
Bromomethane	2017-11	ug/L	< 4.00		< 4.00
Bromomethane	2018-06	ug/L	< 4.00		< 4.00
Bromomethane	2018-10	ug/L	< 4.00		< 4.00
Bromomethane	2019-06	ug/L	< 4.00		< 4.00
Bromomethane	2019-11	ug/L	< 4.00		< 4.00
Bromomethane	2020-07	ug/L	< 4.00		< 4.00
Bromomethane	2020-11	ug/L	< 4.00		< 4.00
Bromomethane	2021-06	ug/L	< 4.00		< 4.00
Bromomethane	2021-09	ug/L	< 4.00		< 4.00
Bromomethane	2022-03	ug/L	< 4.00		< 4.00
Bromomethane	2022-06	ug/L	< 4.00		< 4.00
Bromomethane	2022-08	ug/L	< 4.00		< 4.00
Bromomethane	2023-06	ug/L	< 4.00	< 4.00	< 4.00
Bromomethane	2023-11	ug/L	< 4.00	< 4.00	
Bromomethane	2024-01	ug/L		< 4.00	
Bromomethane	2024-06	ug/L	< 4.00	< 4.00	< 4.00
Bromomethane	2024-12	ug/L	< 4.00	< 4.00	
Bromomethane	2025-06	ug/L	< 4.00	< 4.00	< 4.00
Bromomethane	2025-10	ug/L	< 4	< 4	
Cadmium	2014-11	ug/L	< 0.500		~~< 0.500~~
Cadmium	2015-05	ug/L	< 0.500		~~< 0.500~~
Cadmium	2016-04	ug/L	< 0.500		~~< 0.500~~
Cadmium	2016-11	ug/L	< 0.500		~~< 0.500~~
Cadmium	2017-05	ug/L	< 0.500		~~< 0.500~~
Cadmium	2017-11	ug/L	< 0.500		~~< 0.500~~
Cadmium	2018-06	ug/L	< 0.500		~~< 0.500~~
Cadmium	2018-10	ug/L	< 0.500		~~< 0.500~~
Cadmium	2019-06	ug/L	< 0.500		~~< 0.500~~
Cadmium	2019-11	ug/L	< 0.100		< 0.100
Cadmium	2020-07	ug/L	**0.05 J**		< 0.100
Cadmium	2020-11	ug/L	< 0.100		< 0.100
Cadmium	2021-06	ug/L	< 0.100		**0.103**
Cadmium	2021-09	ug/L	< 0.100		< 0.100
Cadmium	2022-03	ug/L	**0.181**		**0.22**
Cadmium	2022-06	ug/L	< 0.100		< 0.100
Cadmium	2022-08	ug/L	< 0.100		< 0.100
Cadmium	2023-06	ug/L	**0.157 J**	< 0.200	**0.228**
Cadmium	2023-08	ug/L			< 0.200
Cadmium	2023-11	ug/L	< 0.200	< 0.200	
Cadmium	2024-01	ug/L		< 0.200	
Cadmium	2024-06	ug/L	< 0.200	< 0.200	< 0.200
Cadmium	2024-12	ug/L	< 0.200	< 0.200	
Cadmium	2025-06	ug/L	< 0.200	< 0.200	< 0.200
Cadmium	2025-10	ug/L	< 0.2	< 0.2	
Carbon Disulfide	2014-11	ug/L	< 1.00		< 1.00
Carbon Disulfide	2015-05	ug/L	< 1.00		< 1.00
Carbon Disulfide	2016-04	ug/L	< 1.00		< 1.00
Carbon Disulfide	2016-11	ug/L	< 1.00		< 1.00
Carbon Disulfide	2017-05	ug/L	< 1.00		< 1.00
Carbon Disulfide	2017-11	ug/L	< 1.00		< 1.00
Carbon Disulfide	2018-06	ug/L	< 1.00		< 1.00
Carbon Disulfide	2018-10	ug/L	< 1.00		< 1.00
Carbon Disulfide	2019-06	ug/L	< 1.00		< 1.00
Carbon Disulfide	2019-11	ug/L	< 1.00		< 1.00
Carbon Disulfide	2020-07	ug/L	< 1.00		< 1.00
Carbon Disulfide	2020-11	ug/L	< 1.00		< 1.00
Carbon Disulfide	2021-06	ug/L	< 1.00		< 1.00
Carbon Disulfide	2021-09	ug/L	< 1.00		< 1.00
Carbon Disulfide	2022-03	ug/L	< 1.00		< 1.00
Carbon Disulfide	2022-06	ug/L	< 1.00		< 1.00
Carbon Disulfide	2022-08	ug/L	< 1.00		< 1.00
Carbon Disulfide	2023-06	ug/L	< 1.00	< 1.00	< 1.00
Carbon Disulfide	2023-11	ug/L	< 1.00	< 1.00	
Carbon Disulfide	2024-01	ug/L		< 1.00	
Carbon Disulfide	2024-06	ug/L	< 1.00	< 1.00	< 1.00
Carbon Disulfide	2024-12	ug/L	< 1.00	< 1.00	
Carbon Disulfide	2025-06	ug/L	< 1.00	< 1.00	< 1.00
Carbon Disulfide	2025-10	ug/L	< 1	< 1	
Carbon Tetrachloride	2014-11	ug/L	< 2.00		< 2.00
Carbon Tetrachloride	2015-05	ug/L	< 2.00		< 2.00
Carbon Tetrachloride	2016-04	ug/L	< 2.00		< 2.00
Carbon Tetrachloride	2016-11	ug/L	< 2.00		< 2.00
Carbon Tetrachloride	2017-05	ug/L	< 2.00		< 2.00
Carbon Tetrachloride	2017-11	ug/L	< 2.00		< 2.00
Carbon Tetrachloride	2018-06	ug/L	< 2.00		< 2.00

Table 14

Winneshiek County Area Solid Waste Agency **Analytical Data Summary - Surface Water Appendix I**

Permit No. 57-SDP-01-74P **2025 Annual Water Quality Report**

Constituent	Date	Units	SW-2 (DwnGrad)	SW-5 (DwnGrad)	SW-1 (Bkgrnd)
Carbon Tetrachloride	2018-10	ug/L	< 2.00		< 2.00
Carbon Tetrachloride	2019-06	ug/L	< 2.00		< 2.00
Carbon Tetrachloride	2019-11	ug/L	< 2.00		< 2.00
Carbon Tetrachloride	2020-07	ug/L	< 2.00		< 2.00
Carbon Tetrachloride	2020-11	ug/L	< 2.00		< 2.00
Carbon Tetrachloride	2021-06	ug/L	< 2.00		< 2.00
Carbon Tetrachloride	2021-09	ug/L	< 2.00		< 2.00
Carbon Tetrachloride	2022-03	ug/L	< 2.00		< 2.00
Carbon Tetrachloride	2022-06	ug/L	< 2.00		< 2.00
Carbon Tetrachloride	2022-08	ug/L	< 2.00		< 2.00
Carbon Tetrachloride	2023-06	ug/L	< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2023-11	ug/L	< 2.00	< 2.00	
Carbon Tetrachloride	2024-01	ug/L		< 2.00	
Carbon Tetrachloride	2024-06	ug/L	< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2024-12	ug/L	< 2.00	< 2.00	
Carbon Tetrachloride	2025-06	ug/L	< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2025-10	ug/L	< 2	< 2	
Chlorobenzene	2014-11	ug/L	< 1.00		< 1.00
Chlorobenzene	2015-05	ug/L	< 1.00		< 1.00
Chlorobenzene	2016-04	ug/L	< 1.00		< 1.00
Chlorobenzene	2016-11	ug/L	< 1.00		< 1.00
Chlorobenzene	2017-05	ug/L	< 1.00		< 1.00
Chlorobenzene	2017-11	ug/L	< 1.00		< 1.00
Chlorobenzene	2018-06	ug/L	< 1.00		< 1.00
Chlorobenzene	2018-10	ug/L	< 1.00		< 1.00
Chlorobenzene	2019-06	ug/L	< 1.00		< 1.00
Chlorobenzene	2019-11	ug/L	< 1.00		< 1.00
Chlorobenzene	2020-07	ug/L	< 1.00		< 1.00
Chlorobenzene	2020-11	ug/L	< 1.00		< 1.00
Chlorobenzene	2021-06	ug/L	< 1.00		< 1.00
Chlorobenzene	2021-09	ug/L	< 1.00		< 1.00
Chlorobenzene	2022-03	ug/L	< 1.00		< 1.00
Chlorobenzene	2022-06	ug/L	< 1.00		< 1.00
Chlorobenzene	2022-08	ug/L	< 1.00		< 1.00
Chlorobenzene	2023-06	ug/L	< 1.00	< 1.00	< 1.00
Chlorobenzene	2023-11	ug/L	< 1.00	< 1.00	
Chlorobenzene	2024-01	ug/L		< 1.00	
Chlorobenzene	2024-06	ug/L	< 1.00	< 1.00	< 1.00
Chlorobenzene	2024-12	ug/L	< 1.00	< 1.00	
Chlorobenzene	2025-06	ug/L	< 1.00	< 1.00	< 1.00
Chlorobenzene	2025-10	ug/L	< 1	< 1	
Chlorodibromomethane	2014-11	ug/L	< 5.00		< 5.00
Chlorodibromomethane	2015-05	ug/L	< 5.00		< 5.00
Chlorodibromomethane	2016-04	ug/L	< 5.00		< 5.00
Chlorodibromomethane	2016-11	ug/L	< 5.00		< 5.00
Chlorodibromomethane	2017-05	ug/L	< 5.00		< 5.00
Chlorodibromomethane	2017-11	ug/L	< 5.00		< 5.00
Chlorodibromomethane	2018-06	ug/L	< 5.00		< 5.00
Chlorodibromomethane	2018-10	ug/L	< 5.00		< 5.00
Chlorodibromomethane	2019-06	ug/L	< 5.00		< 5.00
Chlorodibromomethane	2019-11	ug/L	< 5.00		< 5.00
Chlorodibromomethane	2020-07	ug/L	< 5.00		< 5.00
Chlorodibromomethane	2020-11	ug/L	< 5.00		< 5.00
Chlorodibromomethane	2021-06	ug/L	< 5.00		< 5.00
Chlorodibromomethane	2021-09	ug/L	< 5.00		< 5.00
Chlorodibromomethane	2022-03	ug/L	< 5.00		< 5.00
Chlorodibromomethane	2022-06	ug/L	< 5.00		< 5.00
Chlorodibromomethane	2022-08	ug/L	< 5.00		< 5.00
Chlorodibromomethane	2023-06	ug/L	< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2023-11	ug/L	< 5.00	< 5.00	
Chlorodibromomethane	2024-01	ug/L		< 5.00	
Chlorodibromomethane	2024-06	ug/L	< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2024-12	ug/L	< 5.00	< 5.00	
Chlorodibromomethane	2025-06	ug/L	< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2025-10	ug/L	< 5	< 5	
Chloroethane	2014-11	ug/L	< 4.00		< 4.00
Chloroethane	2015-05	ug/L	< 4.00		< 4.00
Chloroethane	2016-04	ug/L	< 4.00		< 4.00
Chloroethane	2016-11	ug/L	< 4.00		< 4.00
Chloroethane	2017-05	ug/L	< 4.00		< 4.00
Chloroethane	2017-11	ug/L	< 4.00		< 4.00
Chloroethane	2018-06	ug/L	< 4.00		< 4.00
Chloroethane	2018-10	ug/L	< 4.00		< 4.00
Chloroethane	2019-06	ug/L	< 4.00		< 4.00
Chloroethane	2019-11	ug/L	< 4.00		< 4.00
Chloroethane	2020-07	ug/L	< 4.00		< 4.00
Chloroethane	2020-11	ug/L	< 4.00		< 4.00
Chloroethane	2021-06	ug/L	< 4.00		< 4.00
Chloroethane	2021-09	ug/L	< 4.00		< 4.00
Chloroethane	2022-03	ug/L	< 4.00		< 4.00
Chloroethane	2022-06	ug/L	< 4.00		< 4.00
Chloroethane	2022-08	ug/L	< 4.00		< 4.00
Chloroethane	2023-06	ug/L	< 4.00	< 4.00	< 4.00
Chloroethane	2023-11	ug/L	< 4.00	< 4.00	
Chloroethane	2024-01	ug/L		< 4.00	
Chloroethane	2024-06	ug/L	< 4.00	< 4.00	< 4.00
Chloroethane	2024-12	ug/L	< 4.00	< 4.00	
Chloroethane	2025-06	ug/L	< 4.00	< 4.00	< 4.00

Table 14
Analytical Data Summary - Surface Water Appendix I
2025 Annual Water Quality Report

Constituent	Date	Units	SW-2 (DwnGrad)	SW-5 (DwnGrad)	SW-1 (Bkgrnd)
Chloroethane	2025-10	ug/L	< 4	< 4	
Chloroform	2014-11	ug/L	< 1.00		< 1.00
Chloroform	2015-05	ug/L	< 1.00		< 1.00
Chloroform	2016-04	ug/L	< 1.00		< 1.00
Chloroform	2016-11	ug/L	< 1.00		< 1.00
Chloroform	2017-05	ug/L	< 1.00		< 1.00
Chloroform	2017-11	ug/L	< 1.00		< 1.00
Chloroform	2018-06	ug/L	< 3.00		< 3.00
Chloroform	2018-10	ug/L	< 3.00		< 3.00
Chloroform	2019-06	ug/L	< 3.00		< 3.00
Chloroform	2019-11	ug/L	< 3.00		< 3.00
Chloroform	2020-07	ug/L	< 3.00		< 3.00
Chloroform	2020-11	ug/L	< 3.00		< 3.00
Chloroform	2021-06	ug/L	< 3.00		< 3.00
Chloroform	2021-09	ug/L	< 3.00		< 3.00
Chloroform	2022-03	ug/L	< 3.00		< 3.00
Chloroform	2022-06	ug/L	< 3.00		< 3.00
Chloroform	2022-08	ug/L	< 3.00		< 3.00
Chloroform	2023-06	ug/L	< 3.00	< 3.00	< 3.00
Chloroform	2023-11	ug/L	< 3.00	< 3.00	
Chloroform	2024-01	ug/L		< 3.00	
Chloroform	2024-06	ug/L	< 3.00	< 3.00	< 3.00
Chloroform	2024-12	ug/L	< 3.00	< 3.00	
Chloroform	2025-06	ug/L	< 3.00	< 3.00	< 3.00
Chloroform	2025-10	ug/L	< 3	< 3	
Chloromethane	2014-11	ug/L	< 3.00		< 3.00
Chloromethane	2015-05	ug/L	< 3.00		< 3.00
Chloromethane	2016-04	ug/L	< 3.00		< 3.00
Chloromethane	2016-11	ug/L	**0.507 J**		< 3.00
Chloromethane	2017-05	ug/L	< 3.00		**0.322 J**
Chloromethane	2017-11	ug/L	< 3.00		< 3.00
Chloromethane	2018-06	ug/L	< 3.00		< 3.00
Chloromethane	2018-10	ug/L	< 3.00		< 3.00
Chloromethane	2019-06	ug/L	< 3.00		< 3.00
Chloromethane	2019-11	ug/L	< 3.00		< 3.00
Chloromethane	2020-07	ug/L	< 3.00		< 3.00
Chloromethane	2020-11	ug/L	< 3.00		< 3.00
Chloromethane	2021-06	ug/L	< 3.00		< 3.00
Chloromethane	2021-09	ug/L	< 3.00		< 3.00
Chloromethane	2022-03	ug/L	< 3.00		< 3.00
Chloromethane	2022-06	ug/L	< 3.00		< 3.00
Chloromethane	2022-08	ug/L	< 3.00		< 3.00
Chloromethane	2023-06	ug/L	< 3.00	< 3.00	< 3.00
Chloromethane	2023-11	ug/L	< 3.00	< 3.00	
Chloromethane	2024-01	ug/L		< 3.00	
Chloromethane	2024-06	ug/L	< 3.00	< 3.00	< 3.00
Chloromethane	2024-12	ug/L	< 3.00	< 3.00	
Chloromethane	2025-06	ug/L	< 3.00	< 3.00	< 3.00
Chloromethane	2025-10	ug/L	< 3	< 3	
Chromium	2014-11	ug/L	< 5.00		< 5.00
Chromium	2015-05	ug/L	**1.74 J**		< 5.00
Chromium	2016-04	ug/L	< 5.00		< 5.00
Chromium	2016-11	ug/L	**0.417 J**		< 5.00
Chromium	2017-05	ug/L	< 5.00		< 5.00
Chromium	2017-11	ug/L	**2.56 J**		< 5.00
Chromium	2018-06	ug/L	< 5.00		< 5.00
Chromium	2018-10	ug/L	**0.781 J**		< 5.00
Chromium	2019-06	ug/L	**1.61 J**		**1.28 J**
Chromium	2019-11	ug/L	< 5.00		< 5.00
Chromium	2020-07	ug/L	< 5.00		< 5.00
Chromium	2020-11	ug/L	< 5.00		< 5.00
Chromium	2021-06	ug/L	< 5.00		**1.87 J**
Chromium	2021-09	ug/L	< 5.00		< 5.00
Chromium	2022-03	ug/L	**1.26 J**		**1.63 J**
Chromium	2022-06	ug/L	**1.73 J**		< 5.00
Chromium	2022-08	ug/L	< 5.00		< 5.00
Chromium	2023-06	ug/L	< 5.00	< 5.00	< 5.00
Chromium	2023-11	ug/L	< 5.00	< 5.00	
Chromium	2024-01	ug/L		< 5.00	
Chromium	2024-06	ug/L	< 5.00	**1.27 J**	< 5.00
Chromium	2024-12	ug/L	< 5.00	< 5.00	
Chromium	2025-06	ug/L	< 5.00	< 5.00	< 5.00
Chromium	2025-10	ug/L	< 5	< 5	
cis-1,2-Dichloroethene	2014-11	ug/L	< 1.00		< 1.00
cis-1,2-Dichloroethene	2015-05	ug/L	< 1.00		< 1.00
cis-1,2-Dichloroethene	2016-04	ug/L	< 1.00		< 1.00
cis-1,2-Dichloroethene	2016-11	ug/L	< 1.00		< 1.00
cis-1,2-Dichloroethene	2017-05	ug/L	< 1.00		< 1.00
cis-1,2-Dichloroethene	2017-11	ug/L	< 1.00		< 1.00
cis-1,2-Dichloroethene	2018-06	ug/L	< 1.00		< 1.00
cis-1,2-Dichloroethene	2018-10	ug/L	< 1.00		< 1.00
cis-1,2-Dichloroethene	2019-06	ug/L	< 1.00		< 1.00
cis-1,2-Dichloroethene	2019-11	ug/L	< 1.00		< 1.00
cis-1,2-Dichloroethene	2020-07	ug/L	< 1.00		< 1.00
cis-1,2-Dichloroethene	2020-11	ug/L	< 1.00		< 1.00
cis-1,2-Dichloroethene	2021-06	ug/L	< 1.00		< 1.00
cis-1,2-Dichloroethene	2021-09	ug/L	< 1.00		< 1.00
cis-1,2-Dichloroethene	2022-03	ug/L	< 1.00		< 1.00

Table 14
Analytical Data Summary - Surface Water Appendix I
2025 Annual Water Quality Report

Constituent	Date	Units	SW-2 (DwnGrad)	SW-5 (DwnGrad)	SW-1 (Bkgrnd)
cis-1,2-Dichloroethene	2022-06	ug/L	< 1.00		< 1.00
cis-1,2-Dichloroethene	2022-08	ug/L	< 1.00		< 1.00
cis-1,2-Dichloroethene	2023-06	ug/L	< 1.00	< 1.00	< 1.00
cis-1,2-Dichloroethene	2023-11	ug/L	< 1.00	< 1.00	
cis-1,2-Dichloroethene	2024-01	ug/L		< 1.00	
cis-1,2-Dichloroethene	2024-06	ug/L	< 1.00	< 1.00	< 1.00
cis-1,2-Dichloroethene	2024-12	ug/L	< 1.00	< 1.00	
cis-1,2-Dichloroethene	2025-06	ug/L	< 1.00	< 1.00	< 1.00
cis-1,2-Dichloroethene	2025-10	ug/L	< 1	< 1	
cis-1,3-Dichloropropene	2014-11	ug/L	< 5.00		< 5.00
cis-1,3-Dichloropropene	2015-05	ug/L	< 5.00		< 5.00
cis-1,3-Dichloropropene	2016-04	ug/L	< 5.00		< 5.00
cis-1,3-Dichloropropene	2016-11	ug/L	< 5.00		< 5.00
cis-1,3-Dichloropropene	2017-05	ug/L	< 5.00		< 5.00
cis-1,3-Dichloropropene	2017-11	ug/L	< 5.00		< 5.00
cis-1,3-Dichloropropene	2018-06	ug/L	< 5.00		< 5.00
cis-1,3-Dichloropropene	2018-10	ug/L	< 5.00		< 5.00
cis-1,3-Dichloropropene	2019-06	ug/L	< 5.00		< 5.00
cis-1,3-Dichloropropene	2019-11	ug/L	< 5.00		< 5.00
cis-1,3-Dichloropropene	2020-07	ug/L	< 5.00		< 5.00
cis-1,3-Dichloropropene	2020-11	ug/L	< 5.00		< 5.00
cis-1,3-Dichloropropene	2021-06	ug/L	< 5.00		< 5.00
cis-1,3-Dichloropropene	2021-09	ug/L	< 5.00		< 5.00
cis-1,3-Dichloropropene	2022-03	ug/L	< 5.00		< 5.00
cis-1,3-Dichloropropene	2022-06	ug/L	< 5.00		< 5.00
cis-1,3-Dichloropropene	2022-08	ug/L	< 5.00		< 5.00
cis-1,3-Dichloropropene	2023-06	ug/L	< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2023-11	ug/L	< 5.00	< 5.00	
cis-1,3-Dichloropropene	2024-01	ug/L		< 5.00	
cis-1,3-Dichloropropene	2024-06	ug/L	< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2024-12	ug/L	< 5.00	< 5.00	
cis-1,3-Dichloropropene	2025-06	ug/L	< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2025-10	ug/L	< 5	< 5	
Cobalt	2014-11	ug/L	**0.414 J**		**0.085 J**
Cobalt	2015-05	ug/L	**0.753**		**0.177 J**
Cobalt	2016-04	ug/L	**0.24 J**		**0.156 J**
Cobalt	2016-11	ug/L	**0.193 J**		**0.328 J**
Cobalt	2017-05	ug/L	**0.138 J**		**0.121 J**
Cobalt	2017-11	ug/L	**0.247 J**		**0.204 J**
Cobalt	2018-06	ug/L	**0.22 J**		**0.218 J**
Cobalt	2018-10	ug/L	**0.235 J**		**0.107 J**
Cobalt	2019-06	ug/L	< 1.00		< 1.00
Cobalt	2019-11	ug/L	**0.171 J**		**0.264 J**
Cobalt	2020-07	ug/L	**0.495 J**		**0.327 J**
Cobalt	2020-11	ug/L	**0.174 J**		**0.153 J**
Cobalt	2021-06	ug/L	**0.302 J**		**0.787**
Cobalt	2021-09	ug/L	**0.361 J**		< 0.500
Cobalt	2022-03	ug/L	**3.17**		**4.36**
Cobalt	2022-06	ug/L	**0.693**		**0.244 J**
Cobalt	2022-08	ug/L	**0.212 J**		< 0.500
Cobalt	2023-06	ug/L	**0.622**	**0.287 J**	**0.411 J**
Cobalt	2023-11	ug/L	< 0.500	**0.181 J**	
Cobalt	2024-01	ug/L		< 0.500	
Cobalt	2024-06	ug/L	**0.388 J**	**0.679**	< 0.500
Cobalt	2024-12	ug/L	**0.237 J**	< 0.500	
Cobalt	2025-06	ug/L	**0.389 J**	**0.938**	< 0.500
Cobalt	2025-10	ug/L	< 0.5	**0.663**	
Copper	2014-11	ug/L	**0.591 J**		**0.508 J**
Copper	2015-05	ug/L	**1.67 J**		**0.677 J**
Copper	2016-04	ug/L	< 5.00		< 5.00
Copper	2016-11	ug/L	< 5.00		**1.43 J**
Copper	2017-05	ug/L	< 5.00		< 5.00
Copper	2017-11	ug/L	< 5.00		< 5.00
Copper	2018-06	mg/L	< 0.0200		< 0.0200
Copper	2018-06	ug/L	< 5.00		< 5.00
Copper	2018-10	ug/L	< 5.00		< 5.00
Copper	2019-06	ug/L	**1.73 J**		**1.86 J**
Copper	2019-11	ug/L	< 5.00		< 5.00
Copper	2020-07	ug/L	< 5.00		< 5.00
Copper	2020-11	ug/L	< 5.00		< 5.00
Copper	2021-06	ug/L	< 5.00		**1.84 J**
Copper	2021-09	ug/L	< 5.00		< 5.00
Copper	2022-03	ug/L	**6.76**		**11.5**
Copper	2022-06	ug/L	< 5.00		< 5.00
Copper	2022-08	ug/L	< 5.00		< 5.00
Copper	2023-06	ug/L	< 5.00	< 5.00	< 5.00
Copper	2023-11	ug/L	< 5.00	< 5.00	
Copper	2024-01	ug/L		< 5.00	
Copper	2024-06	ug/L	< 5.00	< 5.00	< 5.00
Copper	2024-12	ug/L	< 5.00	< 5.00	
Copper	2025-06	ug/L	< 5.00	< 5.00	< 5.00
Copper	2025-10	ug/L	< 5	< 5	
Dibromomethane	2014-11	ug/L	< 1.00		< 1.00
Dibromomethane	2015-05	ug/L	< 1.00		< 1.00
Dibromomethane	2016-04	ug/L	< 1.00		< 1.00
Dibromomethane	2016-11	ug/L	< 1.00		< 1.00
Dibromomethane	2017-05	ug/L	< 1.00		< 1.00
Dibromomethane	2017-11	ug/L	< 1.00		< 1.00

Table 14
Analytical Data Summary - Surface Water Appendix I
2025 Annual Water Quality Report

Constituent	Date	Units	SW-2 (DwnGrad)	SW-5 (DwnGrad)	SW-1 (Bkgrnd)
Dibromomethane	2018-06	ug/L	< 1.00		< 1.00
Dibromomethane	2018-10	ug/L	< 1.00		< 1.00
Dibromomethane	2019-06	ug/L	< 1.00		< 1.00
Dibromomethane	2019-11	ug/L	< 1.00		< 1.00
Dibromomethane	2020-07	ug/L	< 1.00		< 1.00
Dibromomethane	2020-11	ug/L	< 1.00		< 1.00
Dibromomethane	2021-06	ug/L	< 1.00		< 1.00
Dibromomethane	2021-09	ug/L	< 1.00		< 1.00
Dibromomethane	2022-03	ug/L	< 1.00		< 1.00
Dibromomethane	2022-06	ug/L	< 1.00		< 1.00
Dibromomethane	2022-08	ug/L	< 1.00		< 1.00
Dibromomethane	2023-06	ug/L	< 1.00	< 1.00	< 1.00
Dibromomethane	2023-11	ug/L	< 1.00	< 1.00	
Dibromomethane	2024-01	ug/L		< 1.00	
Dibromomethane	2024-06	ug/L	< 1.00	< 1.00	< 1.00
Dibromomethane	2024-12	ug/L	< 1.00	< 1.00	
Dibromomethane	2025-06	ug/L	< 1.00	< 1.00	< 1.00
Dibromomethane	2025-10	ug/L	< 1	< 1	
Ethylbenzene	2014-11	ug/L	< 1.00		< 1.00
Ethylbenzene	2015-05	ug/L	< 1.00		< 1.00
Ethylbenzene	2016-04	ug/L	< 1.00		< 1.00
Ethylbenzene	2016-11	ug/L	< 1.00		< 1.00
Ethylbenzene	2017-05	ug/L	< 1.00		< 1.00
Ethylbenzene	2017-11	ug/L	< 1.00		< 1.00
Ethylbenzene	2018-06	ug/L	< 1.00		< 1.00
Ethylbenzene	2018-10	ug/L	< 1.00		< 1.00
Ethylbenzene	2019-06	ug/L	< 1.00		< 1.00
Ethylbenzene	2019-11	ug/L	< 1.00		< 1.00
Ethylbenzene	2020-07	ug/L	< 1.00		< 1.00
Ethylbenzene	2020-11	ug/L	< 1.00		< 1.00
Ethylbenzene	2021-06	ug/L	< 1.00		< 1.00
Ethylbenzene	2021-09	ug/L	< 1.00		< 1.00
Ethylbenzene	2022-03	ug/L	< 1.00		< 1.00
Ethylbenzene	2022-06	ug/L	< 1.00		< 1.00
Ethylbenzene	2022-08	ug/L	< 1.00		< 1.00
Ethylbenzene	2023-06	ug/L	< 1.00	< 1.00	< 1.00
Ethylbenzene	2023-11	ug/L	< 1.00	< 1.00	
Ethylbenzene	2024-01	ug/L		< 1.00	
Ethylbenzene	2024-06	ug/L	< 1.00	< 1.00	< 1.00
Ethylbenzene	2024-12	ug/L	< 1.00	< 1.00	
Ethylbenzene	2025-06	ug/L	< 1.00	< 1.00	< 1.00
Ethylbenzene	2025-10	ug/L	< 1	< 1	
Fluorotrichloromethane	2014-11	ug/L	< 4.00		< 4.00
Fluorotrichloromethane	2015-05	ug/L	< 4.00		< 4.00
Fluorotrichloromethane	2016-04	ug/L	< 4.00		< 4.00
Fluorotrichloromethane	2016-11	ug/L	< 4.00		< 4.00
Fluorotrichloromethane	2017-05	ug/L	< 4.00		< 4.00
Fluorotrichloromethane	2017-11	ug/L	< 4.00		< 4.00
Fluorotrichloromethane	2018-06	ug/L	< 4.00		< 4.00
Fluorotrichloromethane	2018-10	ug/L	< 4.00		< 4.00
Fluorotrichloromethane	2019-06	ug/L	< 4.00		< 4.00
Fluorotrichloromethane	2019-11	ug/L	< 4.00		< 4.00
Fluorotrichloromethane	2020-07	ug/L	< 4.00		< 4.00
Fluorotrichloromethane	2020-11	ug/L	< 4.00		< 4.00
Fluorotrichloromethane	2021-06	ug/L	< 4.00		< 4.00
Fluorotrichloromethane	2021-09	ug/L	< 4.00		< 4.00
Fluorotrichloromethane	2022-03	ug/L	< 4.00		< 4.00
Fluorotrichloromethane	2022-06	ug/L	< 4.00		< 4.00
Fluorotrichloromethane	2022-08	ug/L	< 4.00		< 4.00
Fluorotrichloromethane	2023-06	ug/L	< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2023-11	ug/L	< 4.00	< 4.00	
Fluorotrichloromethane	2024-01	ug/L		< 4.00	
Fluorotrichloromethane	2024-06	ug/L	< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2024-12	ug/L	< 4.00	< 4.00	
Fluorotrichloromethane	2025-06	ug/L	< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2025-10	ug/L	< 4	< 4	
Iodomethane	2014-11	ug/L	< 10.0		< 10.0
Iodomethane	2015-05	ug/L	< 10.0		< 10.0
Iodomethane	2016-04	ug/L	< 10.0		< 10.0
Iodomethane	2016-11	ug/L	< 10.0		< 10.0
Iodomethane	2017-05	ug/L	< 10.0		< 10.0
Iodomethane	2017-11	ug/L	< 10.0		< 10.0
Iodomethane	2018-06	ug/L	< 10.0		< 10.0
Iodomethane	2018-10	ug/L	< 10.0		< 10.0
Iodomethane	2019-06	ug/L	< 10.0		< 10.0
Iodomethane	2019-11	ug/L	< 10.0		< 10.0
Iodomethane	2020-07	ug/L	< 10.0		< 10.0
Iodomethane	2020-11	ug/L	< 10.0		< 10.0
Iodomethane	2021-06	ug/L	< 10.0		< 10.0
Iodomethane	2021-09	ug/L	< 10.0		< 10.0
Iodomethane	2022-03	ug/L	< 10.0		< 10.0
Iodomethane	2022-06	ug/L	< 10.0		< 10.0
Iodomethane	2022-08	ug/L	< 10.0		< 10.0
Iodomethane	2023-06	ug/L	< 10.0	< 10.0	< 10.0
Iodomethane	2023-11	ug/L	< 10.0	< 10.0	
Iodomethane	2024-01	ug/L		< 10.0	
Iodomethane	2024-06	ug/L	< 10.0	< 10.0	< 10.0
Iodomethane	2024-12	ug/L	< 10.0	< 10.0	

Table 14

Winneshiek County Area Solid Waste Agency **Analytical Data Summary - Surface Water Appendix I**

Permit No. 57-SDP-01-74P **2025 Annual Water Quality Report**

Constituent	Date	Units	SW-2 (DwnGrad)	SW-5 (DwnGrad)	SW-1 (Bkgrnd)
Iodomethane	2025-06	ug/L	< 10.0	< 10.0	< 10.0
Iodomethane	2025-10	ug/L	< 10	< 10	
Lead	2014-11	ug/L	**0.32 J**		< 0.500
Lead	2015-05	ug/L	**1.08**		**0.232 J**
Lead	2016-04	ug/L	**0.251 J**		< 0.500
Lead	2016-11	ug/L	**0.237 J**		**0.32 J**
Lead	2017-05	ug/L	< 0.500		< 0.500
Lead	2017-11	ug/L	< 0.500		< 0.500
Lead	2018-06	ug/L	< 0.500		< 0.500
Lead	2018-10	ug/L	**0.354 J**		< 0.500
Lead	2019-06	ug/L	**0.721**		**0.644**
Lead	2019-11	ug/L	**0.765**		< 0.500
Lead	2020-07	ug/L	< 0.500		**0.531**
Lead	2020-11	ug/L	**0.158 J**		**0.142 J**
Lead	2021-06	ug/L	**0.238 J**		**0.886**
Lead	2021-09	ug/L	**0.308 J**		< 0.500
Lead	2022-03	ug/L	**5.3**		**7.08**
Lead	2022-06	ug/L	**0.939**		< 0.500
Lead	2022-08	ug/L	< 0.500		< 0.500
Lead	2023-06	ug/L	**0.867**	**0.388 J**	**0.617**
Lead	2023-11	ug/L	< 0.500	< 0.500	
Lead	2024-01	ug/L		< 0.500	
Lead	2024-06	ug/L	**0.583**	**0.689**	< 0.500
Lead	2024-12	ug/L	< 0.500	< 0.500	
Lead	2025-06	ug/L	**0.362 J**	**0.862**	< 0.500
Lead	2025-10	ug/L	< 0.5	**0.594**	
Methylene Chloride	2014-11	ug/L	< 5.00		< 5.00
Methylene Chloride	2015-05	ug/L	< 5.00		< 5.00
Methylene Chloride	2016-04	ug/L	< 5.00		< 5.00
Methylene Chloride	2016-11	ug/L	**0.707 J**		**0.786 J**
Methylene Chloride	2017-05	ug/L	**0.683 J**		**0.753 J**
Methylene Chloride	2017-11	ug/L	< 5.00		**0.83 J**
Methylene Chloride	2018-06	ug/L	< 5.00		< 5.00
Methylene Chloride	2018-10	ug/L	< 5.00		< 5.00
Methylene Chloride	2019-06	ug/L	< 5.00		< 5.00
Methylene Chloride	2019-11	ug/L	< 5.00		< 5.00
Methylene Chloride	2020-07	ug/L	< 5.00		< 5.00
Methylene Chloride	2020-11	ug/L	< 5.00		< 5.00
Methylene Chloride	2021-06	ug/L	< 5.00		< 5.00
Methylene Chloride	2021-09	ug/L	< 5.00		< 5.00
Methylene Chloride	2022-03	ug/L	< 5.00		< 5.00
Methylene Chloride	2022-06	ug/L	< 5.00		< 5.00
Methylene Chloride	2022-08	ug/L	< 5.00		< 5.00
Methylene Chloride	2023-06	ug/L	< 5.00	< 5.00	< 5.00
Methylene Chloride	2023-11	ug/L	< 5.00	< 5.00	
Methylene Chloride	2024-01	ug/L		< 5.00	
Methylene Chloride	2024-06	ug/L	< 5.00	< 5.00	< 5.00
Methylene Chloride	2024-12	ug/L	< 5.00	< 5.00	
Methylene Chloride	2025-06	ug/L	< 5.00	< 5.00	< 5.00
Methylene Chloride	2025-10	ug/L	< 5	< 5	
Nickel	2014-11	ug/L	**0.969 J**		< 5.00
Nickel	2015-05	ug/L	**2.54 J**		< 5.00
Nickel	2016-04	ug/L	< 5.00		< 5.00
Nickel	2016-11	ug/L	< 5.00		< 5.00
Nickel	2017-05	ug/L	< 5.00		< 5.00
Nickel	2017-11	ug/L	**0.982 J**		< 5.00
Nickel	2018-06	ug/L	< 5.00		**1.07 J**
Nickel	2018-10	ug/L	< 5.00		< 5.00
Nickel	2019-06	ug/L	**1.35 J**		**1.06 J**
Nickel	2019-11	ug/L	< 5.00		< 5.00
Nickel	2020-07	ug/L	**3.03 J**		< 5.00
Nickel	2020-11	ug/L	< 5.00		< 5.00
Nickel	2021-06	ug/L	< 5.00		< 5.00
Nickel	2021-09	ug/L	< 5.00		< 5.00
Nickel	2022-03	ug/L	**6.59**		**7.85**
Nickel	2022-06	ug/L	< 5.00		< 5.00
Nickel	2022-08	ug/L	< 5.00		< 5.00
Nickel	2023-06	ug/L	< 5.00	< 5.00	< 5.00
Nickel	2023-11	ug/L	< 5.00	< 5.00	
Nickel	2024-01	ug/L		< 5.00	
Nickel	2024-06	ug/L	< 5.00	**2.33 J**	< 5.00
Nickel	2024-12	ug/L	**3.27 J**	< 5.00	
Nickel	2025-06	ug/L	< 5.00	**3.2 J**	< 5.00
Nickel	2025-10	ug/L	< 5	**3.43 J**	
Selenium	2014-11	ug/L	< 5.00		< 5.00
Selenium	2015-05	ug/L	< 5.00		< 5.00
Selenium	2016-04	ug/L	**0.771 J**		**0.916 J**
Selenium	2016-11	ug/L	< 5.00		< 5.00
Selenium	2017-05	ug/L	< 5.00		< 5.00
Selenium	2017-11	ug/L	< 5.00		< 5.00
Selenium	2018-06	ug/L	< 5.00		< 5.00
Selenium	2018-10	ug/L	< 5.00		< 5.00
Selenium	2019-06	ug/L	< 2.50		< 2.50
Selenium	2019-11	ug/L	< 5.00		< 5.00
Selenium	2020-07	ug/L	< 5.00		< 5.00
Selenium	2020-11	ug/L	< 5.00		< 5.00
Selenium	2021-06	ug/L	**1.28 J**		**1.9 J**
Selenium	2021-09	ug/L	< 5.00		< 5.00

Table 14
Analytical Data Summary - Surface Water Appendix I
2025 Annual Water Quality Report

Constituent	Date	Units	SW-2 (DwnGrad)	SW-5 (DwnGrad)	SW-1 (Bkgrnd)
Selenium	2022-03	ug/L	< 5.00		**0.966 J**
Selenium	2022-06	ug/L	< 5.00		< 5.00
Selenium	2022-08	ug/L	< 5.00		< 5.00
Selenium	2023-06	ug/L	**1.58 J**	**1.51 J**	**1.77 J**
Selenium	2023-11	ug/L	< 5.00	< 5.00	
Selenium	2024-01	ug/L		< 5.00	
Selenium	2024-06	ug/L	< 5.00	< 5.00	< 5.00
Selenium	2024-12	ug/L	< 5.00	< 5.00	
Selenium	2025-06	ug/L	< 5.00	< 5.00	< 5.00
Selenium	2025-10	ug/L	< 5	< 5	
Silver	2014-11	ug/L	< 1.00		< 1.00
Silver	2015-05	ug/L	**0.062 J**		**0.063 J**
Silver	2016-04	ug/L	< 1.00		< 1.00
Silver	2016-11	ug/L	< 1.00		< 1.00
Silver	2017-05	ug/L	< 1.00		< 1.00
Silver	2017-11	ug/L	< 1.00		< 1.00
Silver	2018-06	ug/L	< 1.00		< 1.00
Silver	2018-10	ug/L	< 1.00		< 1.00
Silver	2019-06	ug/L	< 0.500		< 0.500
Silver	2019-11	ug/L	< 1.00		< 1.00
Silver	2020-07	ug/L	< 1.00		< 1.00
Silver	2020-11	ug/L	< 1.00		< 1.00
Silver	2021-06	ug/L	< 1.00		< 1.00
Silver	2021-09	ug/L	< 1.00		< 1.00
Silver	2022-03	ug/L	< 1.00		< 1.00
Silver	2022-06	ug/L	< 1.00		< 1.00
Silver	2022-08	ug/L	< 1.00		< 1.00
Silver	2023-06	ug/L	**1.43**	**1.54**	**1.36**
Silver	2023-08	ug/L	< 1.00	< 1.00	< 1.00
Silver	2023-11	ug/L	< 1.00	< 1.00	
Silver	2024-01	ug/L		< 1.00	
Silver	2024-06	ug/L	< 1.00	< 1.00	< 1.00
Silver	2024-12	ug/L	< 1.00	< 1.00	
Silver	2025-06	ug/L	< 1.00	< 1.00	< 1.00
Silver	2025-10	ug/L	< 1	< 1	
Styrene	2014-11	ug/L	< 1.00		< 1.00
Styrene	2015-05	ug/L	< 1.00		< 1.00
Styrene	2016-04	ug/L	< 1.00		< 1.00
Styrene	2016-11	ug/L	< 1.00		< 1.00
Styrene	2017-05	ug/L	< 1.00		< 1.00
Styrene	2017-11	ug/L	< 1.00		< 1.00
Styrene	2018-06	ug/L	< 1.00		< 1.00
Styrene	2018-10	ug/L	< 1.00		< 1.00
Styrene	2019-06	ug/L	< 1.00		< 1.00
Styrene	2019-11	ug/L	< 1.00		< 1.00
Styrene	2020-07	ug/L	< 1.00		< 1.00
Styrene	2020-11	ug/L	< 1.00		< 1.00
Styrene	2021-06	ug/L	< 1.00		< 1.00
Styrene	2021-09	ug/L	< 1.00		< 1.00
Styrene	2022-03	ug/L	< 1.00		< 1.00
Styrene	2022-06	ug/L	< 1.00		< 1.00
Styrene	2022-08	ug/L	< 1.00		< 1.00
Styrene	2023-06	ug/L	< 1.00	< 1.00	< 1.00
Styrene	2023-11	ug/L	< 1.00	< 1.00	
Styrene	2024-01	ug/L		< 1.00	
Styrene	2024-06	ug/L	< 1.00	< 1.00	< 1.00
Styrene	2024-12	ug/L	< 1.00	< 1.00	
Styrene	2025-06	ug/L	< 1.00	< 1.00	< 1.00
Styrene	2025-10	ug/L	< 1	< 1	
Tetrachloroethene	2014-11	ug/L	< 1.00		< 1.00
Tetrachloroethene	2015-05	ug/L	< 1.00		< 1.00
Tetrachloroethene	2016-04	ug/L	< 1.00		< 1.00
Tetrachloroethene	2016-11	ug/L	< 1.00		< 1.00
Tetrachloroethene	2017-05	ug/L	< 1.00		< 1.00
Tetrachloroethene	2017-11	ug/L	< 1.00		< 1.00
Tetrachloroethene	2018-06	ug/L	< 1.00		< 1.00
Tetrachloroethene	2018-10	ug/L	< 1.00		< 1.00
Tetrachloroethene	2019-06	ug/L	< 1.00		< 1.00
Tetrachloroethene	2019-11	ug/L	< 1.00		< 1.00
Tetrachloroethene	2020-07	ug/L	< 1.00		< 1.00
Tetrachloroethene	2020-11	ug/L	< 1.00		< 1.00
Tetrachloroethene	2021-06	ug/L	< 1.00		< 1.00
Tetrachloroethene	2021-09	ug/L	< 1.00		< 1.00
Tetrachloroethene	2022-03	ug/L	< 1.00		< 1.00
Tetrachloroethene	2022-06	ug/L	< 1.00		< 1.00
Tetrachloroethene	2022-08	ug/L	< 1.00		< 1.00
Tetrachloroethene	2023-06	ug/L	< 1.00	< 1.00	< 1.00
Tetrachloroethene	2023-11	ug/L	< 1.00	< 1.00	
Tetrachloroethene	2024-01	ug/L		< 1.00	
Tetrachloroethene	2024-06	ug/L	< 1.00	< 1.00	< 1.00
Tetrachloroethene	2024-12	ug/L	< 1.00	< 1.00	
Tetrachloroethene	2025-06	ug/L	< 1.00	< 1.00	< 1.00
Tetrachloroethene	2025-10	ug/L	< 1	< 1	
Thallium	2014-11	ug/L	< 1.00		< 1.00
Thallium	2015-05	ug/L	**0.037 J**		< 1.00
Thallium	2016-04	ug/L	< 1.00		< 1.00
Thallium	2016-11	ug/L	< 1.00		< 1.00
Thallium	2017-05	ug/L	< 1.00		< 1.00

Table 14

Winneshiek County Area Solid Waste Agency **Analytical Data Summary - Surface Water Appendix I**

Permit No. 57-SDP-01-74P **2025 Annual Water Quality Report**

Constituent	Date	Units	SW-2 (DwnGrad)	SW-5 (DwnGrad)	SW-1 (Bkgrnd)
Thallium	2017-11	ug/L	< 1.00		< 1.00
Thallium	2018-06	ug/L	< 1.00		< 1.00
Thallium	2018-10	ug/L	< 1.00		< 1.00
Thallium	2019-06	ug/L	< 2.00		< 2.00
Thallium	2019-11	ug/L	< 1.00		< 1.00
Thallium	2020-07	ug/L	< 1.00		< 1.00
Thallium	2020-11	ug/L	< 1.00		< 1.00
Thallium	2021-06	ug/L	< 1.00		**2.13**
Thallium	2021-09	ug/L	< 1.00		< 1.00
Thallium	2022-03	ug/L	< 1.00		**0.281 J**
Thallium	2022-06	ug/L	< 1.00		< 1.00
Thallium	2022-08	ug/L	< 1.00		< 1.00
Thallium	2023-06	ug/L	**3.93**	< 1.00	**4.67**
Thallium	2023-08	ug/L	**0.279 J**		< 1.00
Thallium	2023-11	ug/L	< 1.00	< 1.00	
Thallium	2024-01	ug/L		< 1.00	
Thallium	2024-06	ug/L	< 1.00	< 1.00	< 1.00
Thallium	2024-12	ug/L	< 1.00	< 1.00	
Thallium	2025-06	ug/L	< 1.00	< 1.00	< 1.00
Thallium	2025-10	ug/L	< 1	< 1	
Toluene	2014-11	ug/L	< 1.00		< 1.00
Toluene	2015-05	ug/L	< 1.00		< 1.00
Toluene	2016-04	ug/L	< 1.00		< 1.00
Toluene	2016-11	ug/L	< 1.00		< 1.00
Toluene	2017-05	ug/L	< 1.00		< 1.00
Toluene	2017-11	ug/L	< 1.00		< 1.00
Toluene	2018-06	ug/L	< 1.00		< 1.00
Toluene	2018-10	ug/L	< 1.00		< 1.00
Toluene	2019-06	ug/L	< 1.00		< 1.00
Toluene	2019-11	ug/L	< 1.00		< 1.00
Toluene	2020-07	ug/L	< 1.00		< 1.00
Toluene	2020-11	ug/L	< 1.00		< 1.00
Toluene	2021-06	ug/L	**0.597 J**		**0.475 J**
Toluene	2021-09	ug/L	< 1.00		< 1.00
Toluene	2022-03	ug/L	< 1.00		< 1.00
Toluene	2022-06	ug/L	< 1.00		< 1.00
Toluene	2022-08	ug/L	< 1.00		< 1.00
Toluene	2023-06	ug/L	< 1.00	< 1.00	< 1.00
Toluene	2023-11	ug/L	< 1.00	< 1.00	
Toluene	2024-01	ug/L		< 1.00	
Toluene	2024-06	ug/L	< 1.00	< 1.00	< 1.00
Toluene	2024-12	ug/L	< 1.00	< 1.00	
Toluene	2025-06	ug/L	< 1.00	< 1.00	< 1.00
Toluene	2025-10	ug/L	< 1	< 1	
Total Suspended Solids	2014-11	mg/L	**15.7**		**3.17**
Total Suspended Solids	2015-05	mg/L	**79.7**		**23**
Total Suspended Solids	2016-04	mg/L	**17.1**		**17.6**
Total Suspended Solids	2016-11	mg/L	**16.3**		**28.7**
Total Suspended Solids	2017-05	mg/L	**20.5**		**15**
Total Suspended Solids	2017-11	mg/L	**10.2**		**8.25**
Total Suspended Solids	2018-06	mg/L	**13.4**		**7.5**
Total Suspended Solids	2018-10	mg/L	**11**		**5.63**
Total Suspended Solids	2019-06	mg/L	**31.5**		**22.6**
Total Suspended Solids	2019-11	mg/L	**6.25**		**11.1**
Total Suspended Solids	2020-07	mg/L	**1.75 J**		**20**
Total Suspended Solids	2020-11	mg/L	**6.75**		**6.25**
Total Suspended Solids	2021-06	mg/L	**10.3**		**35**
Total Suspended Solids	2021-09	mg/L	**17.4**		**12.7**
Total Suspended Solids	2022-03	mg/L	**564**		**824**
Total Suspended Solids	2022-06	mg/L	**63.8**		**11.5**
Total Suspended Solids	2022-08	mg/L	**6.38**		**2.25**
Total Suspended Solids	2023-06	mg/L	**37.9**	**10.4**	**19.3**
Total Suspended Solids	2023-08	mg/L	**17**	**19**	**276**
Total Suspended Solids	2023-11	mg/L	**4.88**	**5.63**	
Total Suspended Solids	2024-01	mg/L		**1.75 J**	
Total Suspended Solids	2024-06	mg/L	**24.1**	**37**	**4.75**
Total Suspended Solids	2024-12	mg/L	**4.67 J**	< 5.00	
Total Suspended Solids	2025-06	mg/L	**26.1**	**59**	**1.75 J**
Total Suspended Solids	2025-10	mg/L	**2.15**	**15.2**	
trans-1,2-Dichloroethene	2014-11	ug/L	< 1.00		< 1.00
trans-1,2-Dichloroethene	2015-05	ug/L	< 1.00		< 1.00
trans-1,2-Dichloroethene	2016-04	ug/L	< 1.00		< 1.00
trans-1,2-Dichloroethene	2016-11	ug/L	< 1.00		< 1.00
trans-1,2-Dichloroethene	2017-05	ug/L	< 1.00		< 1.00
trans-1,2-Dichloroethene	2017-11	ug/L	< 1.00		< 1.00
trans-1,2-Dichloroethene	2018-06	ug/L	< 1.00		< 1.00
trans-1,2-Dichloroethene	2018-10	ug/L	< 1.00		< 1.00
trans-1,2-Dichloroethene	2019-06	ug/L	< 1.00		< 1.00
trans-1,2-Dichloroethene	2019-11	ug/L	< 1.00		< 1.00
trans-1,2-Dichloroethene	2020-07	ug/L	< 1.00		< 1.00
trans-1,2-Dichloroethene	2020-11	ug/L	< 1.00		< 1.00
trans-1,2-Dichloroethene	2021-06	ug/L	< 1.00		< 1.00
trans-1,2-Dichloroethene	2021-09	ug/L	< 1.00		< 1.00
trans-1,2-Dichloroethene	2022-03	ug/L	< 1.00		< 1.00
trans-1,2-Dichloroethene	2022-06	ug/L	< 1.00		< 1.00
trans-1,2-Dichloroethene	2022-08	ug/L	< 1.00		< 1.00
trans-1,2-Dichloroethene	2023-06	ug/L	< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2023-11	ug/L	< 1.00	< 1.00	

Table 14
Analytical Data Summary - Surface Water Appendix I
2025 Annual Water Quality Report

Constituent	Date	Units	SW-2 (DwnGrad)	SW-5 (DwnGrad)	SW-1 (Bkgrnd)
trans-1,2-Dichloroethene	2024-01	ug/L		< 1.00	
trans-1,2-Dichloroethene	2024-06	ug/L	< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2024-12	ug/L	< 1.00	< 1.00	
trans-1,2-Dichloroethene	2025-06	ug/L	< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2025-10	ug/L	< 1	< 1	
trans-1,3-Dichloropropene	2014-11	ug/L	< 5.00		< 5.00
trans-1,3-Dichloropropene	2015-05	ug/L	< 5.00		< 5.00
trans-1,3-Dichloropropene	2016-04	ug/L	< 5.00		< 5.00
trans-1,3-Dichloropropene	2016-11	ug/L	< 5.00		< 5.00
trans-1,3-Dichloropropene	2017-05	ug/L	< 5.00		< 5.00
trans-1,3-Dichloropropene	2017-11	ug/L	< 5.00		< 5.00
trans-1,3-Dichloropropene	2018-06	ug/L	< 5.00		< 5.00
trans-1,3-Dichloropropene	2018-10	ug/L	< 5.00		< 5.00
trans-1,3-Dichloropropene	2019-06	ug/L	< 5.00		< 5.00
trans-1,3-Dichloropropene	2019-11	ug/L	< 5.00		< 5.00
trans-1,3-Dichloropropene	2020-07	ug/L	< 5.00		< 5.00
trans-1,3-Dichloropropene	2020-11	ug/L	< 5.00		< 5.00
trans-1,3-Dichloropropene	2021-06	ug/L	< 5.00		< 5.00
trans-1,3-Dichloropropene	2021-09	ug/L	< 5.00		< 5.00
trans-1,3-Dichloropropene	2022-03	ug/L	< 5.00		< 5.00
trans-1,3-Dichloropropene	2022-06	ug/L	< 5.00		< 5.00
trans-1,3-Dichloropropene	2022-08	ug/L	< 5.00		< 5.00
trans-1,3-Dichloropropene	2023-06	ug/L	< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2023-11	ug/L	< 5.00	< 5.00	
trans-1,3-Dichloropropene	2024-01	ug/L		< 5.00	
trans-1,3-Dichloropropene	2024-06	ug/L	< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2024-12	ug/L	< 5.00	< 5.00	
trans-1,3-Dichloropropene	2025-06	ug/L	< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2025-10	ug/L	< 5	< 5	
trans-1,4-Dichloro-2-butene	2014-11	ug/L	< 10.0		< 10.0
trans-1,4-Dichloro-2-butene	2015-05	ug/L	< 10.0		< 10.0
trans-1,4-Dichloro-2-butene	2016-04	ug/L	< 10.0		< 10.0
trans-1,4-Dichloro-2-butene	2016-11	ug/L	< 10.0		< 10.0
trans-1,4-Dichloro-2-butene	2017-05	ug/L	< 10.0		< 10.0
trans-1,4-Dichloro-2-butene	2017-11	ug/L	< 10.0		< 10.0
trans-1,4-Dichloro-2-butene	2018-06	ug/L	< 10.0		< 10.0
trans-1,4-Dichloro-2-butene	2018-10	ug/L	< 10.0		< 10.0
trans-1,4-Dichloro-2-butene	2019-06	ug/L	< 10.0		< 10.0
trans-1,4-Dichloro-2-butene	2019-11	ug/L	< 10.0		< 10.0
trans-1,4-Dichloro-2-butene	2020-07	ug/L	< 10.0		< 10.0
trans-1,4-Dichloro-2-butene	2020-11	ug/L	< 10.0		< 10.0
trans-1,4-Dichloro-2-butene	2021-06	ug/L	< 10.0		< 10.0
trans-1,4-Dichloro-2-butene	2021-09	ug/L	< 10.0		< 10.0
trans-1,4-Dichloro-2-butene	2022-03	ug/L	< 10.0		< 10.0
trans-1,4-Dichloro-2-butene	2022-06	ug/L	< 10.0		< 10.0
trans-1,4-Dichloro-2-butene	2022-08	ug/L	< 10.0		< 10.0
trans-1,4-Dichloro-2-butene	2023-06	ug/L	< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2023-11	ug/L	< 10.0	< 10.0	
trans-1,4-Dichloro-2-butene	2024-01	ug/L		< 10.0	
trans-1,4-Dichloro-2-butene	2024-06	ug/L	< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2024-12	ug/L	< 10.0	< 10.0	
trans-1,4-Dichloro-2-butene	2025-06	ug/L	< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2025-10	ug/L	< 10	< 10	
Trichloroethene	2014-11	ug/L	< 1.00		< 1.00
Trichloroethene	2015-05	ug/L	< 1.00		< 1.00
Trichloroethene	2016-04	ug/L	< 1.00		< 1.00
Trichloroethene	2016-11	ug/L	< 1.00		< 1.00
Trichloroethene	2017-05	ug/L	< 1.00		< 1.00
Trichloroethene	2017-11	ug/L	< 1.00		< 1.00
Trichloroethene	2018-06	ug/L	< 1.00		< 1.00
Trichloroethene	2018-10	ug/L	< 1.00		< 1.00
Trichloroethene	2019-06	ug/L	< 1.00		< 1.00
Trichloroethene	2019-11	ug/L	< 1.00		< 1.00
Trichloroethene	2020-07	ug/L	< 1.00		< 1.00
Trichloroethene	2020-11	ug/L	< 1.00		< 1.00
Trichloroethene	2021-06	ug/L	< 1.00		< 1.00
Trichloroethene	2021-09	ug/L	< 1.00		< 1.00
Trichloroethene	2022-03	ug/L	< 1.00		< 1.00
Trichloroethene	2022-06	ug/L	< 1.00		< 1.00
Trichloroethene	2022-08	ug/L	< 1.00		< 1.00
Trichloroethene	2023-06	ug/L	< 1.00	< 1.00	< 1.00
Trichloroethene	2023-11	ug/L	< 1.00	< 1.00	
Trichloroethene	2024-01	ug/L		< 1.00	
Trichloroethene	2024-06	ug/L	< 1.00	< 1.00	< 1.00
Trichloroethene	2024-12	ug/L	< 1.00	< 1.00	
Trichloroethene	2025-06	ug/L	< 1.00	< 1.00	< 1.00
Trichloroethene	2025-10	ug/L	< 1	< 1	
Vanadium	2014-11	ug/L	**1.28 J**		**0.512 J**
Vanadium	2015-05	ug/L	**3.53 J**		**0.716 J**
Vanadium	2016-04	ug/L	**0.571 J**		**0.495 J**
Vanadium	2016-11	ug/L	**0.769 J**		**0.645 J**
Vanadium	2017-05	ug/L	< 5.00		< 5.00
Vanadium	2017-11	ug/L	**1.49 J**		**1.39 J**
Vanadium	2018-06	ug/L	**1.27 J**		**0.778 J**
Vanadium	2018-10	ug/L	**1.34 J**		**0.646 J**
Vanadium	2019-06	ug/L	**4.5 J**		**3.82 J**
Vanadium	2019-11	ug/L	**0.951 J**		**1.24 J**
Vanadium	2020-07	ug/L	< 5.00		**1.41 J**

Table 14
Analytical Data Summary - Surface Water Appendix I
2025 Annual Water Quality Report

Constituent	Date	Units	SW-2 (DwnGrad)	SW-5 (DwnGrad)	SW-1 (Bkgrnd)
Vanadium	2020-11	ug/L	**1.3 J**		< 5.00
Vanadium	2021-06	ug/L	**2.31 J**		**4.3 J**
Vanadium	2021-09	ug/L	**1.44 J**		< 5.00
Vanadium	2022-03	ug/L	**5.45**		**7.59**
Vanadium	2022-06	ug/L	**3.84 J**		< 5.00
Vanadium	2022-08	ug/L	**1.19 J**		< 5.00
Vanadium	2023-06	ug/L	**1.52 J**	< 5.00	< 5.00
Vanadium	2023-11	ug/L	**1.11 J**	**1.61 J**	
Vanadium	2024-01	ug/L		< 5.00	
Vanadium	2024-06	ug/L	**2.14 J**	**2.4 J**	< 5.00
Vanadium	2024-12	ug/L	< 5.00	< 5.00	
Vanadium	2025-06	ug/L	< 5.00	< 5.00	< 5.00
Vanadium	2025-10	ug/L	< 5	**1.78 J**	
Vinyl Acetate	2014-11	ug/L	< 10.0		< 10.0
Vinyl Acetate	2015-05	ug/L	< 10.0		< 10.0
Vinyl Acetate	2016-04	ug/L	< 10.0		< 10.0
Vinyl Acetate	2016-11	ug/L	< 10.0		< 10.0
Vinyl Acetate	2017-05	ug/L	< 10.0		< 10.0
Vinyl Acetate	2017-11	ug/L	< 10.0		< 10.0
Vinyl Acetate	2018-06	ug/L	< 10.0		< 10.0
Vinyl Acetate	2018-10	ug/L	< 10.0		< 10.0
Vinyl Acetate	2019-06	ug/L	< 10.0		< 10.0
Vinyl Acetate	2019-11	ug/L	< 10.0		< 10.0
Vinyl Acetate	2020-07	ug/L	< 10.0		< 10.0
Vinyl Acetate	2020-11	ug/L	< 10.0		< 10.0
Vinyl Acetate	2021-06	ug/L	< 10.0		< 10.0
Vinyl Acetate	2021-09	ug/L	< 10.0		< 10.0
Vinyl Acetate	2022-03	ug/L	< 10.0		< 10.0
Vinyl Acetate	2022-06	ug/L	< 10.0		< 10.0
Vinyl Acetate	2022-08	ug/L	< 10.0		< 10.0
Vinyl Acetate	2023-06	ug/L	< 10.0	< 10.0	< 10.0
Vinyl Acetate	2023-11	ug/L	< 10.0	< 10.0	
Vinyl Acetate	2024-01	ug/L		< 10.0	
Vinyl Acetate	2024-06	ug/L	< 10.0	< 10.0	< 10.0
Vinyl Acetate	2024-12	ug/L	< 10.0	< 10.0	
Vinyl Acetate	2025-06	ug/L	< 10.0	< 10.0	< 10.0
Vinyl Acetate	2025-10	ug/L	< 10	< 10	
Vinyl Chloride	2014-11	ug/L	< 1.00		< 1.00
Vinyl Chloride	2015-05	ug/L	< 1.00		< 1.00
Vinyl Chloride	2016-04	ug/L	< 1.00		< 1.00
Vinyl Chloride	2016-11	ug/L	< 1.00		< 1.00
Vinyl Chloride	2017-05	ug/L	< 1.00		< 1.00
Vinyl Chloride	2017-11	ug/L	< 1.00		< 1.00
Vinyl Chloride	2018-06	ug/L	< 1.00		< 1.00
Vinyl Chloride	2018-10	ug/L	< 1.00		< 1.00
Vinyl Chloride	2019-06	ug/L	< 1.00		< 1.00
Vinyl Chloride	2019-11	ug/L	< 1.00		**0.224 J**
Vinyl Chloride	2020-07	ug/L	< 1.00		< 1.00
Vinyl Chloride	2020-11	ug/L	< 1.00		< 1.00
Vinyl Chloride	2021-06	ug/L	< 1.00		< 1.00
Vinyl Chloride	2021-09	ug/L	< 1.00		< 1.00
Vinyl Chloride	2022-03	ug/L	< 1.00		< 1.00
Vinyl Chloride	2022-06	ug/L	< 1.00		< 1.00
Vinyl Chloride	2022-08	ug/L	< 1.00		< 1.00
Vinyl Chloride	2023-06	ug/L	< 1.00	< 1.00	< 1.00
Vinyl Chloride	2023-11	ug/L	< 1.00	< 1.00	
Vinyl Chloride	2024-01	ug/L		< 1.00	
Vinyl Chloride	2024-06	ug/L	< 1.00	< 1.00	< 1.00
Vinyl Chloride	2024-12	ug/L	< 1.00	< 1.00	
Vinyl Chloride	2025-06	ug/L	< 1.00	< 1.00	< 1.00
Vinyl Chloride	2025-10	ug/L	< 1	< 1	
Xylenes, Total	2014-11	ug/L	< 3.00		< 3.00
Xylenes, Total	2015-05	ug/L	< 3.00		< 3.00
Xylenes, Total	2016-04	ug/L	< 3.00		< 3.00
Xylenes, Total	2016-11	ug/L	< 3.00		< 3.00
Xylenes, Total	2017-05	ug/L	< 3.00		< 3.00
Xylenes, Total	2017-11	ug/L	< 3.00		< 3.00
Xylenes, Total	2018-06	ug/L	< 3.00		< 3.00
Xylenes, Total	2018-10	ug/L	< 3.00		< 3.00
Xylenes, Total	2019-06	ug/L	< 3.00		< 3.00
Xylenes, Total	2019-11	ug/L	< 3.00		< 3.00
Xylenes, Total	2020-07	ug/L	< 3.00		< 3.00
Xylenes, Total	2020-11	ug/L	< 3.00		< 3.00
Xylenes, Total	2021-06	ug/L	< 3.00		< 3.00
Xylenes, Total	2021-09	ug/L	< 3.00		< 3.00
Xylenes, Total	2022-03	ug/L	< 3.00		< 3.00
Xylenes, Total	2022-06	ug/L	< 3.00		< 3.00
Xylenes, Total	2022-08	ug/L	< 3.00		< 3.00
Xylenes, Total	2023-06	ug/L	< 3.00	< 3.00	< 3.00
Xylenes, Total	2023-11	ug/L	< 3.00	< 3.00	
Xylenes, Total	2024-01	ug/L		< 3.00	
Xylenes, Total	2024-06	ug/L	< 3.00	< 3.00	< 3.00
Xylenes, Total	2024-12	ug/L	< 3.00	< 3.00	
Xylenes, Total	2025-06	ug/L	< 3.00	< 3.00	< 3.00
Xylenes, Total	2025-10	ug/L	< 3	< 3	
Zinc	2014-11	ug/L	< 10.0		< 10.0
Zinc	2015-05	ug/L	**6.97 J**		< 10.0
Zinc	2016-04	ug/L	< 10.0		< 10.0

Table 14

Winneshiek County Area Solid Waste Agency **Analytical Data Summary - Surface Water Appendix I**

Permit No. 57-SDP-01-74P **2025 Annual Water Quality Report**

Constituent	Date	Units	SW-2 (DwnGrad)	SW-5 (DwnGrad)	SW-1 (Bkgrnd)
Zinc	2016-11	ug/L	< 10.0		< 10.0
Zinc	2017-05	ug/L	< 20.0		< 20.0
Zinc	2017-11	ug/L	< 20.0		< 20.0
Zinc	2018-06	ug/L	< 20.0		< 20.0
Zinc	2018-10	ug/L	< 20.0		< 20.0
Zinc	2019-06	ug/L	**12 J**		**12.9 J**
Zinc	2019-11	ug/L	< 20.0		< 20.0
Zinc	2020-07	ug/L	< 20.0		< 20.0
Zinc	2020-11	ug/L	< 20.0		< 20.0
Zinc	2021-06	ug/L	< 20.0		< 20.0
Zinc	2021-09	ug/L	< 20.0		< 20.0
Zinc	2022-03	ug/L	**16.7 J**		**20.7**
Zinc	2022-06	ug/L	< 20.0		< 20.0
Zinc	2022-08	ug/L	< 20.0		< 20.0
Zinc	2023-06	ug/L	< 20.0	< 20.0	< 20.0
Zinc	2023-11	ug/L	< 20.0	< 20.0	
Zinc	2024-01	ug/L		< 20.0	
Zinc	2024-06	ug/L	< 20.0	< 20.0	< 20.0
Zinc	2024-12	ug/L	< 20.0	< 20.0	
Zinc	2025-06	ug/L	< 20.0	< 20.0	< 20.0
Zinc	2025-10	ug/L	< 20	< 20	

Table 14

Winneshiek County Area Solid Waste Agency — **Analytical Data Summary - Shallow Groundwater Appendix II**

Permit No. 57-SDP-01-74P — **2025 Annual Water Quality Report**

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
1,1,1,2-Tetrachloroethane	2014-11	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00						
1,1,1,2-Tetrachloroethane	2015-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1,1,2-Tetrachloroethane	2015-09	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,1,1,2-Tetrachloroethane	2016-03	ug/L						< 1.00	< 1.00									
1,1,1,2-Tetrachloroethane	2016-04	ug/L	< 1.00		< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00						
1,1,1,2-Tetrachloroethane	2016-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
1,1,1,2-Tetrachloroethane	2017-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1,1,2-Tetrachloroethane	2017-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
1,1,1,2-Tetrachloroethane	2018-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1,1,2-Tetrachloroethane	2018-08	ug/L		< 1.00														
1,1,1,2-Tetrachloroethane	2018-10	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1,1,2-Tetrachloroethane	2019-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1,1,2-Tetrachloroethane	2019-08	ug/L		< 1.00														
1,1,1,2-Tetrachloroethane	2019-10	ug/L						< 1.00	< 1.00									
1,1,1,2-Tetrachloroethane	2019-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 2.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.00	< 2.00		
1,1,1,2-Tetrachloroethane	2020-02	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
1,1,1,2-Tetrachloroethane	2020-06	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
1,1,1,2-Tetrachloroethane	2020-07	ug/L	< 1.00	< 1.00												< 1.00		
1,1,1,2-Tetrachloroethane	2020-08	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
1,1,1,2-Tetrachloroethane	2020-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,1,2-Tetrachloroethane	2021-05	ug/L			< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00				
1,1,1,2-Tetrachloroethane	2021-06	ug/L	< 1.00				< 1.00								< 1.00	< 1.00		
1,1,1,2-Tetrachloroethane	2021-08	ug/L													< 1.00			
1,1,1,2-Tetrachloroethane	2021-09	ug/L	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2021-12	ug/L															< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2022-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2022-06	ug/L															< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2022-08	ug/L			< 1.00					< 1.00	< 1.00	< 1.00					< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2022-09	ug/L	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00				< 1.00	< 1.00	< 1.00	< 1.00		
1,1,1,2-Tetrachloroethane	2022-12	ug/L															< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2023-08	ug/L																
1,1,1,2-Tetrachloroethane	2023-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00		< 1.00		< 1.00
1,1,1,2-Tetrachloroethane	2024-01	ug/L																
1,1,1,2-Tetrachloroethane	2024-06	ug/L			< 1.00			< 1.00	< 1.00			< 1.00	< 1.00		< 1.00		< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2024-07	ug/L	< 1.00			< 1.00 J	< 1.00 J							< 1.00 J		< 1.00		
1,1,1,2-Tetrachloroethane	2024-09	ug/L																
1,1,1,2-Tetrachloroethane	2024-11	ug/L				< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1,1,2-Tetrachloroethane	2024-12	ug/L	< 1.00		< 1.00		< 1.00						< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2025-10	ug/L			< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1 J	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	2014-10	ug/L							< 1.00	< 1.00								
1,1,1-Trichloroethane	2014-11	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00						
1,1,1-Trichloroethane	2015-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1,1-Trichloroethane	2015-09	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,1,1-Trichloroethane	2016-03	ug/L						< 1.00	< 1.00									
1,1,1-Trichloroethane	2016-04	ug/L	< 1.00		< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00						
1,1,1-Trichloroethane	2016-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
1,1,1-Trichloroethane	2017-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1,1-Trichloroethane	2017-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
1,1,1-Trichloroethane	2018-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1,1-Trichloroethane	2018-08	ug/L		< 1.00														
1,1,1-Trichloroethane	2018-10	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1,1-Trichloroethane	2019-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1,1-Trichloroethane	2019-08	ug/L		< 1.00														
1,1,1-Trichloroethane	2019-10	ug/L						< 1.00	< 1.00									

Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
1,1,1,2-Tetrachloroethane	2014-11	ug/L									
1,1,1,2-Tetrachloroethane	2015-05	ug/L									
1,1,1,2-Tetrachloroethane	2015-09	ug/L									
1,1,1,2-Tetrachloroethane	2016-03	ug/L									
1,1,1,2-Tetrachloroethane	2016-04	ug/L									
1,1,1,2-Tetrachloroethane	2016-11	ug/L									
1,1,1,2-Tetrachloroethane	2017-05	ug/L									
1,1,1,2-Tetrachloroethane	2017-11	ug/L									
1,1,1,2-Tetrachloroethane	2018-06	ug/L									
1,1,1,2-Tetrachloroethane	2018-08	ug/L									
1,1,1,2-Tetrachloroethane	2018-10	ug/L									
1,1,1,2-Tetrachloroethane	2019-06	ug/L									< 1.00
1,1,1,2-Tetrachloroethane	2019-08	ug/L									< 1.00
1,1,1,2-Tetrachloroethane	2019-10	ug/L									
1,1,1,2-Tetrachloroethane	2019-11	ug/L									< 1.00
1,1,1,2-Tetrachloroethane	2020-02	ug/L									< 1.00
1,1,1,2-Tetrachloroethane	2020-06	ug/L									< 1.00
1,1,1,2-Tetrachloroethane	2020-07	ug/L									
1,1,1,2-Tetrachloroethane	2020-08	ug/L									
1,1,1,2-Tetrachloroethane	2020-11	ug/L									< 1.00
1,1,1,2-Tetrachloroethane	2021-05	ug/L									< 1.00
1,1,1,2-Tetrachloroethane	2021-06	ug/L									
1,1,1,2-Tetrachloroethane	2021-08	ug/L									
1,1,1,2-Tetrachloroethane	2021-09	ug/L	< 1.00	< 1.00							< 1.00
1,1,1,2-Tetrachloroethane	2021-12	ug/L	< 1.00	< 1.00							
1,1,1,2-Tetrachloroethane	2022-03	ug/L	< 1.00	< 1.00							
1,1,1,2-Tetrachloroethane	2022-06	ug/L	< 1.00	< 1.00							
1,1,1,2-Tetrachloroethane	2022-08	ug/L	< 1.00	< 1.00		< 1.00					
1,1,1,2-Tetrachloroethane	2022-09	ug/L			< 1.00		< 1.00	< 1.00			< 1.00
1,1,1,2-Tetrachloroethane	2022-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
1,1,1,2-Tetrachloroethane	2023-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00
1,1,1,2-Tetrachloroethane	2023-08	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			
1,1,1,2-Tetrachloroethane	2023-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
1,1,1,2-Tetrachloroethane	2024-01	ug/L							< 1.00	< 1.00	
1,1,1,2-Tetrachloroethane	2024-06	ug/L	< 1.00	< 1.00			< 1.00	< 1.00		< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2024-07	ug/L			< 1.00 J				< 1.00 J		
1,1,1,2-Tetrachloroethane	2024-09	ug/L							< 1.00	< 1.00	
1,1,1,2-Tetrachloroethane	2024-11	ug/L							< 1.00		
1,1,1,2-Tetrachloroethane	2024-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2025-10	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
1,1,1-Trichloroethane	2014-10	ug/L									
1,1,1-Trichloroethane	2014-11	ug/L									
1,1,1-Trichloroethane	2015-05	ug/L									
1,1,1-Trichloroethane	2015-09	ug/L									
1,1,1-Trichloroethane	2016-03	ug/L									
1,1,1-Trichloroethane	2016-04	ug/L									
1,1,1-Trichloroethane	2016-11	ug/L									
1,1,1-Trichloroethane	2017-05	ug/L									
1,1,1-Trichloroethane	2017-11	ug/L									
1,1,1-Trichloroethane	2018-06	ug/L									
1,1,1-Trichloroethane	2018-08	ug/L									
1,1,1-Trichloroethane	2018-10	ug/L									
1,1,1-Trichloroethane	2019-06	ug/L									< 1.00
1,1,1-Trichloroethane	2019-08	ug/L									< 1.00
1,1,1-Trichloroethane	2019-10	ug/L									

Table 14

Winneshiek County Area Solid Waste Agency — **Analytical Data Summary - Shallow Groundwater Appendix II**

Permit No. 57-SDP-01-74P — **2025 Annual Water Quality Report**

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
1,1,1-Trichloroethane	2019-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,1-Trichloroethane	2020-02	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
1,1,1-Trichloroethane	2020-06	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
1,1,1-Trichloroethane	2020-07	ug/L	< 1.00	< 1.00												< 1.00		
1,1,1-Trichloroethane	2020-08	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
1,1,1-Trichloroethane	2020-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,1-Trichloroethane	2021-05	ug/L			< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00				
1,1,1-Trichloroethane	2021-06	ug/L	< 1.00				< 1.00								< 1.00	< 1.00		
1,1,1-Trichloroethane	2021-08	ug/L													< 1.00			
1,1,1-Trichloroethane	2021-09	ug/L	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2021-12	ug/L															< 1.00	< 1.00
1,1,1-Trichloroethane	2022-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2022-06	ug/L															< 1.00	< 1.00
1,1,1-Trichloroethane	2022-08	ug/L			< 1.00					< 1.00	< 1.00	< 1.00					< 1.00	< 1.00
1,1,1-Trichloroethane	2022-09	ug/L	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00				< 1.00	< 1.00	< 1.00	< 1.00		
1,1,1-Trichloroethane	2022-12	ug/L															< 1.00	< 1.00
1,1,1-Trichloroethane	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2023-08	ug/L																
1,1,1-Trichloroethane	2023-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00		< 1.00		< 1.00
1,1,1-Trichloroethane	2024-01	ug/L																
1,1,1-Trichloroethane	2024-06	ug/L			< 1.00			< 1.00	< 1.00			< 1.00	< 1.00		< 1.00		< 1.00	< 1.00
1,1,1-Trichloroethane	2024-07	ug/L	< 1.00			< 1.00 J	< 1.00 J							< 1.00 J		< 1.00		
1,1,1-Trichloroethane	2024-09	ug/L																
1,1,1-Trichloroethane	2024-11	ug/L				< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1,1-Trichloroethane	2024-12	ug/L	< 1.00		< 1.00		< 1.00						< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2025-10	ug/L			< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1 J	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
1,1,2,2-Tetrachloroethane	2014-11	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00						
1,1,2,2-Tetrachloroethane	2015-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1,2,2-Tetrachloroethane	2015-09	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,1,2,2-Tetrachloroethane	2016-03	ug/L						< 1.00	< 1.00									
1,1,2,2-Tetrachloroethane	2016-04	ug/L	< 1.00		< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00						
1,1,2,2-Tetrachloroethane	2016-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
1,1,2,2-Tetrachloroethane	2017-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1,2,2-Tetrachloroethane	2017-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
1,1,2,2-Tetrachloroethane	2018-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1,2,2-Tetrachloroethane	2018-08	ug/L		< 1.00														
1,1,2,2-Tetrachloroethane	2018-10	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1,2,2-Tetrachloroethane	2019-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1,2,2-Tetrachloroethane	2019-08	ug/L		< 1.00														
1,1,2,2-Tetrachloroethane	2019-10	ug/L						< 1.00	< 1.00									
1,1,2,2-Tetrachloroethane	2019-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2,2-Tetrachloroethane	2020-02	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2,2-Tetrachloroethane	2020-06	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
1,1,2,2-Tetrachloroethane	2020-07	ug/L	< 1.00	< 1.00												< 1.00		
1,1,2,2-Tetrachloroethane	2020-08	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2,2-Tetrachloroethane	2020-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2,2-Tetrachloroethane	2021-05	ug/L			< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00				
1,1,2,2-Tetrachloroethane	2021-06	ug/L	< 1.00				< 1.00								< 1.00	< 1.00		
1,1,2,2-Tetrachloroethane	2021-08	ug/L													< 1.00			
1,1,2,2-Tetrachloroethane	2021-09	ug/L	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2021-12	ug/L															< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2022-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2022-06	ug/L															< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2022-08	ug/L			< 1.00					< 1.00	< 1.00	< 1.00					< 1.00	< 1.00

Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
1,1,1-Trichloroethane	2019-11	ug/L									< 1.00
1,1,1-Trichloroethane	2020-02	ug/L									< 1.00
1,1,1-Trichloroethane	2020-06	ug/L									< 1.00
1,1,1-Trichloroethane	2020-07	ug/L									
1,1,1-Trichloroethane	2020-08	ug/L									
1,1,1-Trichloroethane	2020-11	ug/L									< 1.00
1,1,1-Trichloroethane	2021-05	ug/L									< 1.00
1,1,1-Trichloroethane	2021-06	ug/L									
1,1,1-Trichloroethane	2021-08	ug/L									
1,1,1-Trichloroethane	2021-09	ug/L	< 1.00	< 1.00							< 1.00
1,1,1-Trichloroethane	2021-12	ug/L	< 1.00	< 1.00							
1,1,1-Trichloroethane	2022-03	ug/L	< 1.00	< 1.00							
1,1,1-Trichloroethane	2022-06	ug/L	< 1.00	< 1.00							
1,1,1-Trichloroethane	2022-08	ug/L	< 1.00	< 1.00		< 1.00					
1,1,1-Trichloroethane	2022-09	ug/L			< 1.00		< 1.00	< 1.00			< 1.00
1,1,1-Trichloroethane	2022-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
1,1,1-Trichloroethane	2023-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00
1,1,1-Trichloroethane	2023-08	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			
1,1,1-Trichloroethane	2023-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
1,1,1-Trichloroethane	2024-01	ug/L							< 1.00	< 1.00	
1,1,1-Trichloroethane	2024-06	ug/L	< 1.00	< 1.00			< 1.00	< 1.00		< 1.00	< 1.00
1,1,1-Trichloroethane	2024-07	ug/L			< 1.00 J				< 1.00 J		
1,1,1-Trichloroethane	2024-09	ug/L							< 1.00	< 1.00	
1,1,1-Trichloroethane	2024-11	ug/L							< 1.00		
1,1,1-Trichloroethane	2024-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00
1,1,1-Trichloroethane	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2025-10	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
1,1,2,2-Tetrachloroethane	2014-10	ug/L									
1,1,2,2-Tetrachloroethane	2014-11	ug/L									
1,1,2,2-Tetrachloroethane	2015-05	ug/L									
1,1,2,2-Tetrachloroethane	2015-09	ug/L									
1,1,2,2-Tetrachloroethane	2016-03	ug/L									
1,1,2,2-Tetrachloroethane	2016-04	ug/L									
1,1,2,2-Tetrachloroethane	2016-11	ug/L									
1,1,2,2-Tetrachloroethane	2017-05	ug/L									
1,1,2,2-Tetrachloroethane	2017-11	ug/L									
1,1,2,2-Tetrachloroethane	2018-06	ug/L									
1,1,2,2-Tetrachloroethane	2018-08	ug/L									
1,1,2,2-Tetrachloroethane	2018-10	ug/L									
1,1,2,2-Tetrachloroethane	2019-06	ug/L									< 1.00
1,1,2,2-Tetrachloroethane	2019-08	ug/L									< 1.00
1,1,2,2-Tetrachloroethane	2019-10	ug/L									
1,1,2,2-Tetrachloroethane	2019-11	ug/L									< 1.00
1,1,2,2-Tetrachloroethane	2020-02	ug/L									< 1.00
1,1,2,2-Tetrachloroethane	2020-06	ug/L									< 1.00
1,1,2,2-Tetrachloroethane	2020-07	ug/L									
1,1,2,2-Tetrachloroethane	2020-08	ug/L									
1,1,2,2-Tetrachloroethane	2020-11	ug/L									< 1.00
1,1,2,2-Tetrachloroethane	2021-05	ug/L									< 1.00
1,1,2,2-Tetrachloroethane	2021-06	ug/L									
1,1,2,2-Tetrachloroethane	2021-08	ug/L									
1,1,2,2-Tetrachloroethane	2021-09	ug/L	< 1.00	< 1.00							< 1.00
1,1,2,2-Tetrachloroethane	2021-12	ug/L	< 1.00	< 1.00							
1,1,2,2-Tetrachloroethane	2022-03	ug/L	< 1.00	< 1.00							
1,1,2,2-Tetrachloroethane	2022-06	ug/L	< 1.00	< 1.00							
1,1,2,2-Tetrachloroethane	2022-08	ug/L	< 1.00	< 1.00		< 1.00					

Table 14

Winneshiek County Area Solid Waste Agency — **Analytical Data Summary - Shallow Groundwater Appendix II**

Permit No. 57-SDP-01-74P — **2025 Annual Water Quality Report**

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
1,1,2,2-Tetrachloroethane	2022-09	ug/L	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00				< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2,2-Tetrachloroethane	2022-12	ug/L															< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2023-08	ug/L																
1,1,2,2-Tetrachloroethane	2023-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00		< 1.00		< 1.00
1,1,2,2-Tetrachloroethane	2024-01	ug/L																
1,1,2,2-Tetrachloroethane	2024-06	ug/L			< 1.00			< 1.00	< 1.00			< 1.00	< 1.00		< 1.00		< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2024-07	ug/L	< 1.00			< 1.00 J	< 1.00 J							< 1.00 J		< 1.00		
1,1,2,2-Tetrachloroethane	2024-09	ug/L																
1,1,2,2-Tetrachloroethane	2024-11	ug/L				< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1,2,2-Tetrachloroethane	2024-12	ug/L	< 1.00		< 1.00		< 1.00						< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2025-10	ug/L			< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1 J	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	2014-10	ug/L							< 1.00	< 1.00								
1,1,2-Trichloroethane	2014-11	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00						
1,1,2-Trichloroethane	2015-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1,2-Trichloroethane	2015-09	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,1,2-Trichloroethane	2016-03	ug/L						< 1.00	< 1.00									
1,1,2-Trichloroethane	2016-04	ug/L	< 1.00		< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00						
1,1,2-Trichloroethane	2016-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
1,1,2-Trichloroethane	2017-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1,2-Trichloroethane	2017-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
1,1,2-Trichloroethane	2018-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1,2-Trichloroethane	2018-08	ug/L		< 1.00														
1,1,2-Trichloroethane	2018-10	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1,2-Trichloroethane	2019-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1,2-Trichloroethane	2019-08	ug/L		< 1.00														
1,1,2-Trichloroethane	2019-10	ug/L						< 1.00	< 1.00									
1,1,2-Trichloroethane	2019-11	ug/L	< 2.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2-Trichloroethane	2020-02	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2-Trichloroethane	2020-06	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
1,1,2-Trichloroethane	2020-07	ug/L	< 1.00	< 1.00												< 1.00		
1,1,2-Trichloroethane	2020-08	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2-Trichloroethane	2020-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2-Trichloroethane	2021-05	ug/L			< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00				
1,1,2-Trichloroethane	2021-06	ug/L	< 1.00				< 1.00								< 1.00	< 1.00		
1,1,2-Trichloroethane	2021-08	ug/L													< 1.00			
1,1,2-Trichloroethane	2021-09	ug/L	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2021-12	ug/L															< 1.00	< 1.00
1,1,2-Trichloroethane	2022-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2022-06	ug/L															< 1.00	< 1.00
1,1,2-Trichloroethane	2022-08	ug/L			< 1.00					< 1.00	< 1.00	< 1.00					< 1.00	< 1.00
1,1,2-Trichloroethane	2022-09	ug/L	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00				< 1.00	< 1.00	< 1.00	< 1.00		
1,1,2-Trichloroethane	2022-12	ug/L															< 1.00	< 1.00
1,1,2-Trichloroethane	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2023-08	ug/L																
1,1,2-Trichloroethane	2023-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00		< 1.00		< 1.00
1,1,2-Trichloroethane	2024-01	ug/L																
1,1,2-Trichloroethane	2024-06	ug/L			< 1.00			< 1.00	< 1.00			< 1.00	< 1.00		< 1.00		< 1.00	< 1.00
1,1,2-Trichloroethane	2024-07	ug/L	< 1.00			< 1.00 J	< 1.00 J							< 1.00 J		< 1.00		
1,1,2-Trichloroethane	2024-09	ug/L																
1,1,2-Trichloroethane	2024-11	ug/L				< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1,2-Trichloroethane	2024-12	ug/L	< 1.00		< 1.00		< 1.00						< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2025-10	ug/L			< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1 J	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	2014-10	ug/L							< 1.00	< 1.00								

Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
1,1,2,2-Tetrachloroethane	2022-09	ug/L			< 1.00		< 1.00	< 1.00			< 1.00
1,1,2,2-Tetrachloroethane	2022-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
1,1,2,2-Tetrachloroethane	2023-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00
1,1,2,2-Tetrachloroethane	2023-08	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			
1,1,2,2-Tetrachloroethane	2023-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
1,1,2,2-Tetrachloroethane	2024-01	ug/L							< 1.00	< 1.00	
1,1,2,2-Tetrachloroethane	2024-06	ug/L	< 1.00	< 1.00			< 1.00	< 1.00		< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2024-07	ug/L			< 1.00 J				< 1.00 J		
1,1,2,2-Tetrachloroethane	2024-09	ug/L							< 1.00	< 1.00	
1,1,2,2-Tetrachloroethane	2024-11	ug/L							< 1.00		
1,1,2,2-Tetrachloroethane	2024-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2025-10	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
1,1,2-Trichloroethane	2014-10	ug/L									
1,1,2-Trichloroethane	2014-11	ug/L									
1,1,2-Trichloroethane	2015-05	ug/L									
1,1,2-Trichloroethane	2015-09	ug/L									
1,1,2-Trichloroethane	2016-03	ug/L									
1,1,2-Trichloroethane	2016-04	ug/L									
1,1,2-Trichloroethane	2016-11	ug/L									
1,1,2-Trichloroethane	2017-05	ug/L									
1,1,2-Trichloroethane	2017-11	ug/L									
1,1,2-Trichloroethane	2018-06	ug/L									
1,1,2-Trichloroethane	2018-08	ug/L									
1,1,2-Trichloroethane	2018-10	ug/L									
1,1,2-Trichloroethane	2019-06	ug/L									< 1.00
1,1,2-Trichloroethane	2019-08	ug/L									< 1.00
1,1,2-Trichloroethane	2019-10	ug/L									
1,1,2-Trichloroethane	2019-11	ug/L									< 1.00
1,1,2-Trichloroethane	2020-02	ug/L									< 1.00
1,1,2-Trichloroethane	2020-06	ug/L									< 1.00
1,1,2-Trichloroethane	2020-07	ug/L									
1,1,2-Trichloroethane	2020-08	ug/L									
1,1,2-Trichloroethane	2020-11	ug/L									< 1.00
1,1,2-Trichloroethane	2021-05	ug/L									< 1.00
1,1,2-Trichloroethane	2021-06	ug/L									
1,1,2-Trichloroethane	2021-08	ug/L									
1,1,2-Trichloroethane	2021-09	ug/L	< 1.00	< 1.00							< 1.00
1,1,2-Trichloroethane	2021-12	ug/L	< 1.00	< 1.00							
1,1,2-Trichloroethane	2022-03	ug/L	< 1.00	< 1.00							
1,1,2-Trichloroethane	2022-06	ug/L	< 1.00	< 1.00							
1,1,2-Trichloroethane	2022-08	ug/L	< 1.00	< 1.00		< 1.00					
1,1,2-Trichloroethane	2022-09	ug/L			< 1.00		< 1.00	< 1.00			< 1.00
1,1,2-Trichloroethane	2022-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
1,1,2-Trichloroethane	2023-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00
1,1,2-Trichloroethane	2023-08	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			
1,1,2-Trichloroethane	2023-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
1,1,2-Trichloroethane	2024-01	ug/L							< 1.00	< 1.00	
1,1,2-Trichloroethane	2024-06	ug/L	< 1.00	< 1.00			< 1.00	< 1.00		< 1.00	< 1.00
1,1,2-Trichloroethane	2024-07	ug/L			< 1.00 J				< 1.00 J		
1,1,2-Trichloroethane	2024-09	ug/L							< 1.00	< 1.00	
1,1,2-Trichloroethane	2024-11	ug/L							< 1.00		
1,1,2-Trichloroethane	2024-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00
1,1,2-Trichloroethane	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2025-10	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
1,1-Dichloroethane	2014-10	ug/L									

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
1,1-Dichloroethane	2014-11	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00						
1,1-Dichloroethane	2015-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1-Dichloroethane	2015-09	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,1-Dichloroethane	2016-03	ug/L						**0.32 J**	**0.578 J**									
1,1-Dichloroethane	2016-04	ug/L	< 1.00		< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00						
1,1-Dichloroethane	2016-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
1,1-Dichloroethane	2017-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1-Dichloroethane	2017-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
1,1-Dichloroethane	2018-06	ug/L	< 1.00	**0.517 J**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1-Dichloroethane	2018-08	ug/L		< 1.00														
1,1-Dichloroethane	2018-10	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1-Dichloroethane	2019-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1-Dichloroethane	2019-08	ug/L		**0.314 J**														
1,1-Dichloroethane	2019-10	ug/L						< 1.00	< 1.00									
1,1-Dichloroethane	2019-11	ug/L	< 1.00	**0.28 J**	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	**1.26**	< 1.00	< 1.00		
1,1-Dichloroethane	2020-02	ug/L											< 1.00	**0.724 J**	< 1.00	< 1.00		
1,1-Dichloroethane	2020-06	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**0.774 J**	< 1.00			
1,1-Dichloroethane	2020-07	ug/L	< 1.00	< 1.00												< 1.00		
1,1-Dichloroethane	2020-08	ug/L											< 1.00	**1.4**	< 1.00	< 1.00		
1,1-Dichloroethane	2020-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,1-Dichloroethane	2021-05	ug/L			< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**0.306 J**				
1,1-Dichloroethane	2021-06	ug/L	< 1.00				< 1.00								< 1.00	< 1.00		
1,1-Dichloroethane	2021-08	ug/L													< 1.00			
1,1-Dichloroethane	2021-09	ug/L	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1-Dichloroethane	2021-12	ug/L															< 1.00	< 1.00
1,1-Dichloroethane	2022-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	**0.475 J**	< 1.00	< 1.00	< 1.00	< 1.00
1,1-Dichloroethane	2022-06	ug/L															< 1.00	< 1.00
1,1-Dichloroethane	2022-08	ug/L			< 1.00					< 1.00	< 1.00	< 1.00					< 1.00	< 1.00
1,1-Dichloroethane	2022-09	ug/L	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00				< 1.00	< 1.00	< 1.00	< 1.00		
1,1-Dichloroethane	2022-12	ug/L															< 1.00	< 1.00
1,1-Dichloroethane	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**1.23**	< 1.00	< 1.00	< 1.00	< 1.00
1,1-Dichloroethane	2023-08	ug/L																
1,1-Dichloroethane	2023-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	**0.859 J**		< 1.00		< 1.00
1,1-Dichloroethane	2024-01	ug/L																
1,1-Dichloroethane	2024-06	ug/L			< 1.00			< 1.00	< 1.00			< 1.00	< 1.00		< 1.00		< 1.00	< 1.00
1,1-Dichloroethane	2024-07	ug/L	< 1.00			< 1.00 J	< 1.00 J							**0.358 J**		< 1.00		
1,1-Dichloroethane	2024-09	ug/L																
1,1-Dichloroethane	2024-11	ug/L				< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,1-Dichloroethane	2024-12	ug/L	< 1.00		< 1.00		< 1.00						< 1.00	**0.484 J**	< 1.00	< 1.00	< 1.00	< 1.00
1,1-Dichloroethane	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1-Dichloroethane	2025-10	ug/L			< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1 J	**0.916 J+**	< 1	< 1	< 1	< 1
1,1-Dichloroethene	2014-10	ug/L							< 2.00	< 2.00								
1,1-Dichloroethene	2014-11	ug/L			< 2.00	< 2.00	< 2.00	< 2.00			< 2.00	< 2.00						
1,1-Dichloroethene	2015-05	ug/L	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00						
1,1-Dichloroethene	2015-09	ug/L			< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00								
1,1-Dichloroethene	2016-03	ug/L						< 2.00	< 2.00									
1,1-Dichloroethene	2016-04	ug/L	< 2.00		< 2.00	< 2.00	< 2.00			< 2.00	< 2.00	< 2.00						
1,1-Dichloroethene	2016-11	ug/L	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00						
1,1-Dichloroethene	2017-05	ug/L	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00						
1,1-Dichloroethene	2017-11	ug/L	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00						
1,1-Dichloroethene	2018-06	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00						
1,1-Dichloroethene	2018-08	ug/L		< 2.00														
1,1-Dichloroethene	2018-10	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00						
1,1-Dichloroethene	2019-06	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00						
1,1-Dichloroethene	2019-08	ug/L		< 2.00														
1,1-Dichloroethene	2019-10	ug/L						< 2.00	< 2.00									

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Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
1,1-Dichloroethane	2014-11	ug/L									
1,1-Dichloroethane	2015-05	ug/L									
1,1-Dichloroethane	2015-09	ug/L									
1,1-Dichloroethane	2016-03	ug/L									
1,1-Dichloroethane	2016-04	ug/L									
1,1-Dichloroethane	2016-11	ug/L									
1,1-Dichloroethane	2017-05	ug/L									
1,1-Dichloroethane	2017-11	ug/L									
1,1-Dichloroethane	2018-06	ug/L									
1,1-Dichloroethane	2018-08	ug/L									
1,1-Dichloroethane	2018-10	ug/L									
1,1-Dichloroethane	2019-06	ug/L									< 1.00
1,1-Dichloroethane	2019-08	ug/L									< 1.00
1,1-Dichloroethane	2019-10	ug/L									
1,1-Dichloroethane	2019-11	ug/L									< 1.00
1,1-Dichloroethane	2020-02	ug/L									< 1.00
1,1-Dichloroethane	2020-06	ug/L									< 1.00
1,1-Dichloroethane	2020-07	ug/L									
1,1-Dichloroethane	2020-08	ug/L									
1,1-Dichloroethane	2020-11	ug/L									< 1.00
1,1-Dichloroethane	2021-05	ug/L									< 1.00
1,1-Dichloroethane	2021-06	ug/L									
1,1-Dichloroethane	2021-08	ug/L									
1,1-Dichloroethane	2021-09	ug/L	< 1.00	< 1.00							< 1.00
1,1-Dichloroethane	2021-12	ug/L	< 1.00	< 1.00							
1,1-Dichloroethane	2022-03	ug/L	< 1.00	< 1.00							
1,1-Dichloroethane	2022-06	ug/L	< 1.00	< 1.00							
1,1-Dichloroethane	2022-08	ug/L	< 1.00	< 1.00		< 1.00					
1,1-Dichloroethane	2022-09	ug/L			< 1.00		< 1.00	< 1.00			< 1.00
1,1-Dichloroethane	2022-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
1,1-Dichloroethane	2023-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00
1,1-Dichloroethane	2023-08	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			
1,1-Dichloroethane	2023-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
1,1-Dichloroethane	2024-01	ug/L							< 1.00	< 1.00	
1,1-Dichloroethane	2024-06	ug/L	< 1.00	< 1.00			< 1.00	< 1.00		< 1.00	< 1.00
1,1-Dichloroethane	2024-07	ug/L			< 1.00 J				< 1.00 J		
1,1-Dichloroethane	2024-09	ug/L							< 1.00	< 1.00	
1,1-Dichloroethane	2024-11	ug/L							< 1.00		
1,1-Dichloroethane	2024-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00
1,1-Dichloroethane	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1-Dichloroethane	2025-10	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
1,1-Dichloroethene	2014-10	ug/L									
1,1-Dichloroethene	2014-11	ug/L									
1,1-Dichloroethene	2015-05	ug/L									
1,1-Dichloroethene	2015-09	ug/L									
1,1-Dichloroethene	2016-03	ug/L									
1,1-Dichloroethene	2016-04	ug/L									
1,1-Dichloroethene	2016-11	ug/L									
1,1-Dichloroethene	2017-05	ug/L									
1,1-Dichloroethene	2017-11	ug/L									
1,1-Dichloroethene	2018-06	ug/L									
1,1-Dichloroethene	2018-08	ug/L									
1,1-Dichloroethene	2018-10	ug/L									
1,1-Dichloroethene	2019-06	ug/L									< 2.00
1,1-Dichloroethene	2019-08	ug/L									< 2.00
1,1-Dichloroethene	2019-10	ug/L									

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Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
1,1-Dichloroethene	2019-11	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00			< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
1,1-Dichloroethene	2020-02	ug/L											< 2.00	< 2.00	< 2.00	< 2.00		
1,1-Dichloroethene	2020-06	ug/L			< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00			
1,1-Dichloroethene	2020-07	ug/L	< 2.00	< 2.00												< 2.00		
1,1-Dichloroethene	2020-08	ug/L											< 2.00	< 2.00	< 2.00	< 2.00		
1,1-Dichloroethene	2020-11	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
1,1-Dichloroethene	2021-05	ug/L			< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00				
1,1-Dichloroethene	2021-06	ug/L	< 2.00				< 2.00								< 2.00	< 2.00		
1,1-Dichloroethene	2021-08	ug/L													< 2.00			
1,1-Dichloroethene	2021-09	ug/L	< 2.00	< 20.0	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2021-12	ug/L															< 2.00	< 2.00
1,1-Dichloroethene	2022-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2022-06	ug/L															< 2.00	< 2.00
1,1-Dichloroethene	2022-08	ug/L			< 2.00					< 2.00	< 2.00	< 2.00					< 2.00	< 2.00
1,1-Dichloroethene	2022-09	ug/L	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00				< 2.00	< 2.00	< 2.00	< 2.00		
1,1-Dichloroethene	2022-12	ug/L															< 2.00	< 2.00
1,1-Dichloroethene	2023-06	ug/L	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2023-08	ug/L																
1,1-Dichloroethene	2023-11	ug/L	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00		< 2.00		< 2.00
1,1-Dichloroethene	2024-01	ug/L																
1,1-Dichloroethene	2024-06	ug/L			< 2.00			< 2.00	< 2.00			< 2.00	< 2.00		< 2.00		< 2.00	< 2.00
1,1-Dichloroethene	2024-07	ug/L	< 2.00			< 2.00 J	< 2.00 J							< 2.00 J		< 2.00		
1,1-Dichloroethene	2024-09	ug/L																
1,1-Dichloroethene	2024-11	ug/L				< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00						
1,1-Dichloroethene	2024-12	ug/L	< 2.00		< 2.00		< 2.00						< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2025-06	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2025-10	ug/L			< 2	< 2	< 2	< 2	< 2	< 2		< 2	< 2 J	< 2	< 2	< 2	< 2	< 2
1,1-Dichloropropene	2014-10	ug/L							< 1.00									
1,1-Dichloropropene	2015-09	ug/L			< 1.00			< 1.00	< 1.00									
1,1-Dichloropropene	2016-11	ug/L			< 1.00			< 1.00	< 1.00									
1,1-Dichloropropene	2017-11	ug/L						< 1.00	< 1.00									
1,1-Dichloropropene	2020-06	ug/L									< 1.00							
1,1-Dichloropropene	2020-11	ug/L											< 1.00	< 1.00				
1,1-Dichloropropene	2021-05	ug/L											< 1.00	< 1.00				
1,1-Dichloropropene	2021-09	ug/L													< 1.00			
1,1-Dichloropropene	2022-03	ug/L											< 1.00	< 1.00				
1,1-Dichloropropene	2022-09	ug/L													< 1.00			
1,1-Dichloropropene	2023-06	ug/L						< 1.00										
1,1-Dichloropropene	2023-11	ug/L																
1,1-Dichloropropene	2024-06	ug/L																
1,1-Dichloropropene	2025-06	ug/L																
1,1-Dichloropropene	2025-10	ug/L								< 1								
1,2,3-Trichloropropane	2014-10	ug/L							< 1.00	< 1.00								
1,2,3-Trichloropropane	2014-11	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00						
1,2,3-Trichloropropane	2015-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,2,3-Trichloropropane	2015-09	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,2,3-Trichloropropane	2016-03	ug/L						< 1.00	< 1.00									
1,2,3-Trichloropropane	2016-04	ug/L	< 1.00		< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00						
1,2,3-Trichloropropane	2016-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
1,2,3-Trichloropropane	2017-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,2,3-Trichloropropane	2017-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
1,2,3-Trichloropropane	2018-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,2,3-Trichloropropane	2018-08	ug/L		< 1.00														
1,2,3-Trichloropropane	2018-10	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,2,3-Trichloropropane	2019-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,2,3-Trichloropropane	2019-08	ug/L		< 1.00														

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Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
1,1-Dichloroethene	2019-11	ug/L									< 2.00
1,1-Dichloroethene	2020-02	ug/L									< 2.00
1,1-Dichloroethene	2020-06	ug/L									< 2.00
1,1-Dichloroethene	2020-07	ug/L									
1,1-Dichloroethene	2020-08	ug/L									
1,1-Dichloroethene	2020-11	ug/L									< 2.00
1,1-Dichloroethene	2021-05	ug/L									< 2.00
1,1-Dichloroethene	2021-06	ug/L									
1,1-Dichloroethene	2021-08	ug/L									
1,1-Dichloroethene	2021-09	ug/L	< 2.00	< 2.00							< 2.00
1,1-Dichloroethene	2021-12	ug/L	< 2.00	< 2.00							
1,1-Dichloroethene	2022-03	ug/L	< 2.00	< 2.00							
1,1-Dichloroethene	2022-06	ug/L	< 2.00	< 2.00							
1,1-Dichloroethene	2022-08	ug/L	< 2.00	< 2.00		< 2.00					
1,1-Dichloroethene	2022-09	ug/L			< 2.00		< 2.00	< 2.00			< 2.00
1,1-Dichloroethene	2022-12	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00			
1,1-Dichloroethene	2023-06	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00			< 2.00
1,1-Dichloroethene	2023-08	ug/L			< 2.00	< 2.00	< 2.00	< 2.00			
1,1-Dichloroethene	2023-11	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	
1,1-Dichloroethene	2024-01	ug/L							< 2.00	< 2.00	
1,1-Dichloroethene	2024-06	ug/L	< 2.00	< 2.00			< 2.00	< 2.00		< 2.00	< 2.00
1,1-Dichloroethene	2024-07	ug/L			< 2.00 J				< 2.00 J		
1,1-Dichloroethene	2024-09	ug/L							< 2.00	< 2.00	
1,1-Dichloroethene	2024-11	ug/L							< 2.00		
1,1-Dichloroethene	2024-12	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00
1,1-Dichloroethene	2025-06	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2025-10	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	
1,1-Dichloropropene	2014-10	ug/L									
1,1-Dichloropropene	2015-09	ug/L									
1,1-Dichloropropene	2016-11	ug/L									
1,1-Dichloropropene	2017-11	ug/L									
1,1-Dichloropropene	2020-06	ug/L									
1,1-Dichloropropene	2020-11	ug/L									
1,1-Dichloropropene	2021-05	ug/L									
1,1-Dichloropropene	2021-09	ug/L									
1,1-Dichloropropene	2022-03	ug/L									
1,1-Dichloropropene	2022-09	ug/L									
1,1-Dichloropropene	2023-06	ug/L									
1,1-Dichloropropene	2023-11	ug/L		< 1.00							
1,1-Dichloropropene	2024-06	ug/L		< 1.00			< 1.00	< 1.00			
1,1-Dichloropropene	2025-06	ug/L				< 1.00	< 1.00	< 1.00			
1,1-Dichloropropene	2025-10	ug/L								< 1	
1,2,3-Trichloropropane	2014-10	ug/L									
1,2,3-Trichloropropane	2014-11	ug/L									
1,2,3-Trichloropropane	2015-05	ug/L									
1,2,3-Trichloropropane	2015-09	ug/L									
1,2,3-Trichloropropane	2016-03	ug/L									
1,2,3-Trichloropropane	2016-04	ug/L									
1,2,3-Trichloropropane	2016-11	ug/L									
1,2,3-Trichloropropane	2017-05	ug/L									
1,2,3-Trichloropropane	2017-11	ug/L									
1,2,3-Trichloropropane	2018-06	ug/L									
1,2,3-Trichloropropane	2018-08	ug/L									
1,2,3-Trichloropropane	2018-10	ug/L									
1,2,3-Trichloropropane	2019-06	ug/L									< 1.00
1,2,3-Trichloropropane	2019-08	ug/L									< 1.00

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
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Winneshiek County Area Solid Waste Agency
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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
1,2,3-Trichloropropane	2019-10	ug/L						< 1.00	< 1.00									
1,2,3-Trichloropropane	2019-11	ug/L	< 5.00	< 1.00	< 1.00	< 2.00	< 1.00			< 2.00	< 2.00	< 2.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2,3-Trichloropropane	2020-02	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
1,2,3-Trichloropropane	2020-06	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
1,2,3-Trichloropropane	2020-07	ug/L	< 1.00	< 1.00												< 1.00		
1,2,3-Trichloropropane	2020-08	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
1,2,3-Trichloropropane	2020-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2,3-Trichloropropane	2021-05	ug/L			< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00				
1,2,3-Trichloropropane	2021-06	ug/L	< 1.00				< 1.00								< 1.00	< 1.00		
1,2,3-Trichloropropane	2021-08	ug/L													< 1.00			
1,2,3-Trichloropropane	2021-09	ug/L	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2021-12	ug/L															< 1.00	< 1.00
1,2,3-Trichloropropane	2022-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2022-06	ug/L															< 1.00	< 1.00
1,2,3-Trichloropropane	2022-08	ug/L			< 1.00					< 1.00	< 1.00	< 1.00					< 1.00	< 1.00
1,2,3-Trichloropropane	2022-09	ug/L	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00				< 1.00	< 1.00	< 1.00	< 1.00		
1,2,3-Trichloropropane	2022-12	ug/L															< 1.00	< 1.00
1,2,3-Trichloropropane	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2023-08	ug/L																
1,2,3-Trichloropropane	2023-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00		< 1.00		< 1.00
1,2,3-Trichloropropane	2024-01	ug/L																
1,2,3-Trichloropropane	2024-06	ug/L			< 1.00			< 1.00	< 1.00			< 1.00	< 1.00		< 1.00		< 1.00	< 1.00
1,2,3-Trichloropropane	2024-07	ug/L	< 1.00			< 1.00 J	< 1.00 J							< 1.00 J		< 1.00		
1,2,3-Trichloropropane	2024-09	ug/L																
1,2,3-Trichloropropane	2024-11	ug/L				< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,2,3-Trichloropropane	2024-12	ug/L	< 1.00		< 1.00		< 1.00						< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2025-10	ug/L			< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1 J	< 1	< 1	< 1	< 1	< 1
1,2,4,5-Tetrachlorobenzene	2014-10	ug/L							< 11.1									
1,2,4,5-Tetrachlorobenzene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
1,2,4,5-Tetrachlorobenzene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
1,2,4,5-Tetrachlorobenzene	2017-11	ug/L						< 11.8	< 10.9									
1,2,4,5-Tetrachlorobenzene	2020-06	ug/L									< 11.5							
1,2,4,5-Tetrachlorobenzene	2020-11	ug/L											< 11.8	< 10.5				
1,2,4,5-Tetrachlorobenzene	2021-05	ug/L											< 11.2	< 11.9				
1,2,4,5-Tetrachlorobenzene	2021-09	ug/L													< 10.5			
1,2,4,5-Tetrachlorobenzene	2022-03	ug/L											< 11.9	< 10.4				
1,2,4,5-Tetrachlorobenzene	2022-09	ug/L													< 10.4			
1,2,4,5-Tetrachlorobenzene	2023-06	ug/L						< 11.6										
1,2,4,5-Tetrachlorobenzene	2023-11	ug/L																
1,2,4,5-Tetrachlorobenzene	2024-06	ug/L																
1,2,4,5-Tetrachlorobenzene	2024-07	ug/L																
1,2,4,5-Tetrachlorobenzene	2025-06	ug/L																
1,2,4,5-Tetrachlorobenzene	2025-10	ug/L								< 10.9								
1,2,4-Trichlorobenzene	2014-10	ug/L							< 5.00									
1,2,4-Trichlorobenzene	2015-09	ug/L			< 5.00			< 5.00	< 5.00									
1,2,4-Trichlorobenzene	2016-11	ug/L			< 5.00			< 5.00	< 5.00									
1,2,4-Trichlorobenzene	2017-11	ug/L						< 5.00	< 5.00									
1,2,4-Trichlorobenzene	2020-06	ug/L									< 5.00							
1,2,4-Trichlorobenzene	2020-11	ug/L											< 5.00	< 5.00				
1,2,4-Trichlorobenzene	2021-05	ug/L											< 5.00	< 5.00				
1,2,4-Trichlorobenzene	2021-09	ug/L													< 5.00			
1,2,4-Trichlorobenzene	2022-03	ug/L											< 5.00	< 5.00				
1,2,4-Trichlorobenzene	2022-09	ug/L													< 5.00			
1,2,4-Trichlorobenzene	2023-06	ug/L						< 5.00										
1,2,4-Trichlorobenzene	2023-11	ug/L																

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
1,2,3-Trichloropropane	2019-10	ug/L									
1,2,3-Trichloropropane	2019-11	ug/L									< 1.00
1,2,3-Trichloropropane	2020-02	ug/L									< 1.00
1,2,3-Trichloropropane	2020-06	ug/L									< 1.00
1,2,3-Trichloropropane	2020-07	ug/L									
1,2,3-Trichloropropane	2020-08	ug/L									
1,2,3-Trichloropropane	2020-11	ug/L									< 1.00
1,2,3-Trichloropropane	2021-05	ug/L									< 1.00
1,2,3-Trichloropropane	2021-06	ug/L									
1,2,3-Trichloropropane	2021-08	ug/L									
1,2,3-Trichloropropane	2021-09	ug/L	< 1.00	< 1.00							< 1.00
1,2,3-Trichloropropane	2021-12	ug/L	< 1.00	< 1.00							
1,2,3-Trichloropropane	2022-03	ug/L	< 1.00	< 1.00							
1,2,3-Trichloropropane	2022-06	ug/L	< 1.00	< 1.00							
1,2,3-Trichloropropane	2022-08	ug/L	< 1.00	< 1.00		< 1.00					
1,2,3-Trichloropropane	2022-09	ug/L			< 1.00		< 1.00	< 1.00			< 1.00
1,2,3-Trichloropropane	2022-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
1,2,3-Trichloropropane	2023-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00
1,2,3-Trichloropropane	2023-08	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			
1,2,3-Trichloropropane	2023-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
1,2,3-Trichloropropane	2024-01	ug/L							< 1.00	< 1.00	
1,2,3-Trichloropropane	2024-06	ug/L	< 1.00	< 1.00			< 1.00	< 1.00		< 1.00	< 1.00
1,2,3-Trichloropropane	2024-07	ug/L			< 1.00 J				< 1.00 J		
1,2,3-Trichloropropane	2024-09	ug/L							< 1.00	< 1.00	
1,2,3-Trichloropropane	2024-11	ug/L							< 1.00		
1,2,3-Trichloropropane	2024-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00
1,2,3-Trichloropropane	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2025-10	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
1,2,4,5-Tetrachlorobenzene	2014-10	ug/L									
1,2,4,5-Tetrachlorobenzene	2015-09	ug/L									
1,2,4,5-Tetrachlorobenzene	2016-11	ug/L									
1,2,4,5-Tetrachlorobenzene	2017-11	ug/L									
1,2,4,5-Tetrachlorobenzene	2020-06	ug/L									
1,2,4,5-Tetrachlorobenzene	2020-11	ug/L									
1,2,4,5-Tetrachlorobenzene	2021-05	ug/L									
1,2,4,5-Tetrachlorobenzene	2021-09	ug/L									
1,2,4,5-Tetrachlorobenzene	2022-03	ug/L									
1,2,4,5-Tetrachlorobenzene	2022-09	ug/L									
1,2,4,5-Tetrachlorobenzene	2023-06	ug/L									
1,2,4,5-Tetrachlorobenzene	2023-11	ug/L		< 10.0							
1,2,4,5-Tetrachlorobenzene	2024-06	ug/L		< 10.4				< 10.0			
1,2,4,5-Tetrachlorobenzene	2024-07	ug/L					< 12.5				
1,2,4,5-Tetrachlorobenzene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
1,2,4,5-Tetrachlorobenzene	2025-10	ug/L								< 10.2	
1,2,4-Trichlorobenzene	2014-10	ug/L									
1,2,4-Trichlorobenzene	2015-09	ug/L									
1,2,4-Trichlorobenzene	2016-11	ug/L									
1,2,4-Trichlorobenzene	2017-11	ug/L									
1,2,4-Trichlorobenzene	2020-06	ug/L									
1,2,4-Trichlorobenzene	2020-11	ug/L									
1,2,4-Trichlorobenzene	2021-05	ug/L									
1,2,4-Trichlorobenzene	2021-09	ug/L									
1,2,4-Trichlorobenzene	2022-03	ug/L									
1,2,4-Trichlorobenzene	2022-09	ug/L									
1,2,4-Trichlorobenzene	2023-06	ug/L									
1,2,4-Trichlorobenzene	2023-11	ug/L		< 5.00							

Table 14

Winneshiek County Area Solid Waste Agency — **Analytical Data Summary - Shallow Groundwater Appendix II**

Permit No. 57-SDP-01-74P — **2025 Annual Water Quality Report**

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
1,2,4-Trichlorobenzene	2024-06	ug/L																
1,2,4-Trichlorobenzene	2025-06	ug/L																
1,2,4-Trichlorobenzene	2025-10	ug/L								< 5								
1,2-Dibromo-3-chloropropane	2014-10	ug/L							< 10.0	< 10.0								
1,2-Dibromo-3-chloropropane	2014-11	ug/L			< 10.0	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0						
1,2-Dibromo-3-chloropropane	2015-05	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
1,2-Dibromo-3-chloropropane	2015-09	ug/L			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
1,2-Dibromo-3-chloropropane	2016-03	ug/L						< 10.0	< 10.0									
1,2-Dibromo-3-chloropropane	2016-04	ug/L	< 10.0		< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0						
1,2-Dibromo-3-chloropropane	2016-11	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00						
1,2-Dibromo-3-chloropropane	2017-05	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
1,2-Dibromo-3-chloropropane	2017-11	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00						
1,2-Dibromo-3-chloropropane	2018-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
1,2-Dibromo-3-chloropropane	2018-08	ug/L		< 5.00														
1,2-Dibromo-3-chloropropane	2018-10	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
1,2-Dibromo-3-chloropropane	2019-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
1,2-Dibromo-3-chloropropane	2019-08	ug/L		< 5.00														
1,2-Dibromo-3-chloropropane	2019-10	ug/L						< 5.00	< 5.00									
1,2-Dibromo-3-chloropropane	2019-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
1,2-Dibromo-3-chloropropane	2020-02	ug/L											< 5.00	< 5.00	< 5.00	< 5.00		
1,2-Dibromo-3-chloropropane	2020-06	ug/L			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			
1,2-Dibromo-3-chloropropane	2020-07	ug/L	< 5.00	< 5.00												< 5.00		
1,2-Dibromo-3-chloropropane	2020-08	ug/L											< 5.00	< 5.00	< 5.00	< 5.00		
1,2-Dibromo-3-chloropropane	2020-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
1,2-Dibromo-3-chloropropane	2021-05	ug/L			< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00				
1,2-Dibromo-3-chloropropane	2021-06	ug/L	< 5.00				< 5.00								< 5.00	< 5.00		
1,2-Dibromo-3-chloropropane	2021-08	ug/L													< 5.00			
1,2-Dibromo-3-chloropropane	2021-09	ug/L	< 5.00	< 50.0	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
1,2-Dibromo-3-chloropropane	2021-12	ug/L															< 5.00	< 5.00
1,2-Dibromo-3-chloropropane	2022-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
1,2-Dibromo-3-chloropropane	2022-06	ug/L															< 5.00	< 5.00
1,2-Dibromo-3-chloropropane	2022-08	ug/L			< 5.00					< 5.00	< 5.00	< 5.00					< 5.00	< 5.00
1,2-Dibromo-3-chloropropane	2022-09	ug/L	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00				< 5.00	< 5.00	< 5.00	< 5.00		
1,2-Dibromo-3-chloropropane	2022-12	ug/L															< 5.00	< 5.00
1,2-Dibromo-3-chloropropane	2023-06	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
1,2-Dibromo-3-chloropropane	2023-08	ug/L																
1,2-Dibromo-3-chloropropane	2023-11	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00		< 5.00		< 5.00
1,2-Dibromo-3-chloropropane	2024-01	ug/L																
1,2-Dibromo-3-chloropropane	2024-06	ug/L			< 5.00			< 5.00	< 5.00			< 5.00	< 5.00		< 5.00		< 5.00	< 5.00
1,2-Dibromo-3-chloropropane	2024-07	ug/L	< 5.00			< 5.00 J	< 5.00 J							< 5.00 J		< 5.00		
1,2-Dibromo-3-chloropropane	2024-09	ug/L																
1,2-Dibromo-3-chloropropane	2024-11	ug/L				< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
1,2-Dibromo-3-chloropropane	2024-12	ug/L	< 5.00		< 5.00		< 5.00						< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
1,2-Dibromo-3-chloropropane	2025-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
1,2-Dibromo-3-chloropropane	2025-10	ug/L			< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5 J	< 5	< 5	< 5	< 5	< 5
1,2-Dibromoethane	2014-10	ug/L							< 10.0	< 10.0								
1,2-Dibromoethane	2014-11	ug/L			< 10.0	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0						
1,2-Dibromoethane	2015-05	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
1,2-Dibromoethane	2015-09	ug/L			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
1,2-Dibromoethane	2016-03	ug/L						< 10.0	< 10.0									
1,2-Dibromoethane	2016-04	ug/L	< 10.0		< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0						
1,2-Dibromoethane	2016-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
1,2-Dibromoethane	2017-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,2-Dibromoethane	2017-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
1,2-Dibromoethane	2018-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,2-Dibromoethane	2018-08	ug/L		< 1.00														

Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
1,2,4-Trichlorobenzene	2024-06	ug/L		< 5.00			< 5.00	< 5.00			
1,2,4-Trichlorobenzene	2025-06	ug/L				< 5.00	< 5.00	< 5.00			
1,2,4-Trichlorobenzene	2025-10	ug/L								< 5	
1,2-Dibromo-3-chloropropane	2014-10	ug/L									
1,2-Dibromo-3-chloropropane	2014-11	ug/L									
1,2-Dibromo-3-chloropropane	2015-05	ug/L									
1,2-Dibromo-3-chloropropane	2015-09	ug/L									
1,2-Dibromo-3-chloropropane	2016-03	ug/L									
1,2-Dibromo-3-chloropropane	2016-04	ug/L									
1,2-Dibromo-3-chloropropane	2016-11	ug/L									
1,2-Dibromo-3-chloropropane	2017-05	ug/L									
1,2-Dibromo-3-chloropropane	2017-11	ug/L									
1,2-Dibromo-3-chloropropane	2018-06	ug/L									
1,2-Dibromo-3-chloropropane	2018-08	ug/L									
1,2-Dibromo-3-chloropropane	2018-10	ug/L									
1,2-Dibromo-3-chloropropane	2019-06	ug/L									< 5.00
1,2-Dibromo-3-chloropropane	2019-08	ug/L									< 5.00
1,2-Dibromo-3-chloropropane	2019-10	ug/L									
1,2-Dibromo-3-chloropropane	2019-11	ug/L									< 5.00
1,2-Dibromo-3-chloropropane	2020-02	ug/L									< 5.00
1,2-Dibromo-3-chloropropane	2020-06	ug/L									< 5.00
1,2-Dibromo-3-chloropropane	2020-07	ug/L									
1,2-Dibromo-3-chloropropane	2020-08	ug/L									
1,2-Dibromo-3-chloropropane	2020-11	ug/L									< 5.00
1,2-Dibromo-3-chloropropane	2021-05	ug/L									< 5.00
1,2-Dibromo-3-chloropropane	2021-06	ug/L									
1,2-Dibromo-3-chloropropane	2021-08	ug/L									
1,2-Dibromo-3-chloropropane	2021-09	ug/L	< 5.00	< 5.00							< 5.00
1,2-Dibromo-3-chloropropane	2021-12	ug/L	< 5.00	< 5.00							
1,2-Dibromo-3-chloropropane	2022-03	ug/L	< 5.00	< 5.00							
1,2-Dibromo-3-chloropropane	2022-06	ug/L	< 5.00	< 5.00							
1,2-Dibromo-3-chloropropane	2022-08	ug/L	< 5.00	< 5.00		< 5.00					
1,2-Dibromo-3-chloropropane	2022-09	ug/L			< 5.00		< 5.00	< 5.00			< 5.00
1,2-Dibromo-3-chloropropane	2022-12	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			
1,2-Dibromo-3-chloropropane	2023-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			< 5.00
1,2-Dibromo-3-chloropropane	2023-08	ug/L			< 5.00	< 5.00	< 5.00	< 5.00			
1,2-Dibromo-3-chloropropane	2023-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	
1,2-Dibromo-3-chloropropane	2024-01	ug/L							< 5.00	< 5.00	
1,2-Dibromo-3-chloropropane	2024-06	ug/L	< 5.00	< 5.00			< 5.00	< 5.00		< 5.00	< 5.00
1,2-Dibromo-3-chloropropane	2024-07	ug/L			< 5.00 J				< 5.00 J		
1,2-Dibromo-3-chloropropane	2024-09	ug/L							< 5.00	< 5.00	
1,2-Dibromo-3-chloropropane	2024-11	ug/L							< 5.00		
1,2-Dibromo-3-chloropropane	2024-12	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00
1,2-Dibromo-3-chloropropane	2025-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
1,2-Dibromo-3-chloropropane	2025-10	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	
1,2-Dibromoethane	2014-10	ug/L									
1,2-Dibromoethane	2014-11	ug/L									
1,2-Dibromoethane	2015-05	ug/L									
1,2-Dibromoethane	2015-09	ug/L									
1,2-Dibromoethane	2016-03	ug/L									
1,2-Dibromoethane	2016-04	ug/L									
1,2-Dibromoethane	2016-11	ug/L									
1,2-Dibromoethane	2017-05	ug/L									
1,2-Dibromoethane	2017-11	ug/L									
1,2-Dibromoethane	2018-06	ug/L									
1,2-Dibromoethane	2018-08	ug/L									

Table 14

Winneshiek County Area Solid Waste Agency — **Analytical Data Summary - Shallow Groundwater Appendix II**

Permit No. 57-SDP-01-74P — **2025 Annual Water Quality Report**

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
1,2-Dibromoethane	2018-10	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,2-Dibromoethane	2019-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,2-Dibromoethane	2019-08	ug/L		< 1.00														
1,2-Dibromoethane	2019-10	ug/L						< 1.00	< 1.00									
1,2-Dibromoethane	2019-11	ug/L	< 2.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dibromoethane	2020-02	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dibromoethane	2020-06	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
1,2-Dibromoethane	2020-07	ug/L	< 1.00	< 1.00												< 1.00		
1,2-Dibromoethane	2020-08	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dibromoethane	2020-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dibromoethane	2021-05	ug/L			< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00				
1,2-Dibromoethane	2021-06	ug/L	< 1.00				< 1.00								< 1.00	< 1.00		
1,2-Dibromoethane	2021-08	ug/L													< 1.00			
1,2-Dibromoethane	2021-09	ug/L	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dibromoethane	2021-12	ug/L															< 1.00	< 1.00
1,2-Dibromoethane	2022-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dibromoethane	2022-06	ug/L															< 1.00	< 1.00
1,2-Dibromoethane	2022-08	ug/L			< 1.00					< 1.00	< 1.00	< 1.00					< 1.00	< 1.00
1,2-Dibromoethane	2022-09	ug/L	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00				< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dibromoethane	2022-12	ug/L															< 1.00	< 1.00
1,2-Dibromoethane	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dibromoethane	2023-08	ug/L																
1,2-Dibromoethane	2023-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00		< 1.00		< 1.00
1,2-Dibromoethane	2024-01	ug/L																
1,2-Dibromoethane	2024-06	ug/L			< 1.00			< 1.00	< 1.00			< 1.00	< 1.00		< 1.00		< 1.00	< 1.00
1,2-Dibromoethane	2024-07	ug/L	< 1.00			< 1.00 J	< 1.00 J							< 1.00 J		< 1.00		
1,2-Dibromoethane	2024-09	ug/L																
1,2-Dibromoethane	2024-11	ug/L				< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,2-Dibromoethane	2024-12	ug/L	< 1.00		< 1.00		< 1.00						< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dibromoethane	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dibromoethane	2025-10	ug/L			< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1 J	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	2014-10	ug/L							< 1.00	< 1.00								
1,2-Dichlorobenzene	2014-11	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00						
1,2-Dichlorobenzene	2015-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,2-Dichlorobenzene	2015-09	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,2-Dichlorobenzene	2016-03	ug/L						< 1.00	< 1.00									
1,2-Dichlorobenzene	2016-04	ug/L	< 1.00		< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00						
1,2-Dichlorobenzene	2016-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
1,2-Dichlorobenzene	2017-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,2-Dichlorobenzene	2017-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
1,2-Dichlorobenzene	2018-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,2-Dichlorobenzene	2018-08	ug/L		< 1.00														
1,2-Dichlorobenzene	2018-10	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,2-Dichlorobenzene	2019-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,2-Dichlorobenzene	2019-08	ug/L		< 1.00														
1,2-Dichlorobenzene	2019-10	ug/L						< 1.00	< 1.00									
1,2-Dichlorobenzene	2019-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichlorobenzene	2020-02	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichlorobenzene	2020-06	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
1,2-Dichlorobenzene	2020-07	ug/L	< 1.00	< 1.00												< 1.00		
1,2-Dichlorobenzene	2020-08	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichlorobenzene	2020-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichlorobenzene	2021-05	ug/L			< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00				
1,2-Dichlorobenzene	2021-06	ug/L	< 1.00				< 1.00								< 1.00	< 1.00		
1,2-Dichlorobenzene	2021-08	ug/L													< 1.00			
1,2-Dichlorobenzene	2021-09	ug/L	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
1,2-Dibromoethane	2018-10	ug/L									
1,2-Dibromoethane	2019-06	ug/L									< 1.00
1,2-Dibromoethane	2019-08	ug/L									< 1.00
1,2-Dibromoethane	2019-10	ug/L									
1,2-Dibromoethane	2019-11	ug/L									< 1.00
1,2-Dibromoethane	2020-02	ug/L									< 1.00
1,2-Dibromoethane	2020-06	ug/L									< 1.00
1,2-Dibromoethane	2020-07	ug/L									
1,2-Dibromoethane	2020-08	ug/L									
1,2-Dibromoethane	2020-11	ug/L									< 1.00
1,2-Dibromoethane	2021-05	ug/L									< 1.00
1,2-Dibromoethane	2021-06	ug/L									
1,2-Dibromoethane	2021-08	ug/L									
1,2-Dibromoethane	2021-09	ug/L	< 1.00	< 1.00							< 1.00
1,2-Dibromoethane	2021-12	ug/L	< 1.00	< 1.00							
1,2-Dibromoethane	2022-03	ug/L	< 1.00	< 1.00							
1,2-Dibromoethane	2022-06	ug/L	< 1.00	< 1.00							
1,2-Dibromoethane	2022-08	ug/L	< 1.00	< 1.00		< 1.00					
1,2-Dibromoethane	2022-09	ug/L			< 1.00		< 1.00	< 1.00			< 1.00
1,2-Dibromoethane	2022-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
1,2-Dibromoethane	2023-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00
1,2-Dibromoethane	2023-08	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			
1,2-Dibromoethane	2023-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
1,2-Dibromoethane	2024-01	ug/L							< 1.00	< 1.00	
1,2-Dibromoethane	2024-06	ug/L	< 1.00	< 1.00			< 1.00	< 1.00		< 1.00	< 1.00
1,2-Dibromoethane	2024-07	ug/L			< 1.00 J				< 1.00 J		
1,2-Dibromoethane	2024-09	ug/L							< 1.00	< 1.00	
1,2-Dibromoethane	2024-11	ug/L							< 1.00		
1,2-Dibromoethane	2024-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00
1,2-Dibromoethane	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dibromoethane	2025-10	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
1,2-Dichlorobenzene	2014-10	ug/L									
1,2-Dichlorobenzene	2014-11	ug/L									
1,2-Dichlorobenzene	2015-05	ug/L									
1,2-Dichlorobenzene	2015-09	ug/L									
1,2-Dichlorobenzene	2016-03	ug/L									
1,2-Dichlorobenzene	2016-04	ug/L									
1,2-Dichlorobenzene	2016-11	ug/L									
1,2-Dichlorobenzene	2017-05	ug/L									
1,2-Dichlorobenzene	2017-11	ug/L									
1,2-Dichlorobenzene	2018-06	ug/L									
1,2-Dichlorobenzene	2018-08	ug/L									
1,2-Dichlorobenzene	2018-10	ug/L									
1,2-Dichlorobenzene	2019-06	ug/L									< 1.00
1,2-Dichlorobenzene	2019-08	ug/L									< 1.00
1,2-Dichlorobenzene	2019-10	ug/L									
1,2-Dichlorobenzene	2019-11	ug/L									< 1.00
1,2-Dichlorobenzene	2020-02	ug/L									< 1.00
1,2-Dichlorobenzene	2020-06	ug/L									< 1.00
1,2-Dichlorobenzene	2020-07	ug/L									
1,2-Dichlorobenzene	2020-08	ug/L									
1,2-Dichlorobenzene	2020-11	ug/L									< 1.00
1,2-Dichlorobenzene	2021-05	ug/L									< 1.00
1,2-Dichlorobenzene	2021-06	ug/L									
1,2-Dichlorobenzene	2021-08	ug/L									
1,2-Dichlorobenzene	2021-09	ug/L	< 1.00	< 1.00							< 1.00

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
1,2-Dichlorobenzene	2021-12	ug/L															< 1.00	< 1.00
1,2-Dichlorobenzene	2022-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichlorobenzene	2022-06	ug/L															< 1.00	< 1.00
1,2-Dichlorobenzene	2022-08	ug/L			< 1.00					< 1.00	< 1.00	< 1.00					< 1.00	< 1.00
1,2-Dichlorobenzene	2022-09	ug/L	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00				< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichlorobenzene	2022-12	ug/L															< 1.00	< 1.00
1,2-Dichlorobenzene	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichlorobenzene	2023-08	ug/L																
1,2-Dichlorobenzene	2023-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00		< 1.00		< 1.00
1,2-Dichlorobenzene	2024-01	ug/L																
1,2-Dichlorobenzene	2024-06	ug/L			< 1.00			< 1.00	< 1.00			< 1.00	< 1.00		< 1.00		< 1.00	< 1.00
1,2-Dichlorobenzene	2024-07	ug/L	< 1.00			< 1.00 J	< 1.00 J							< 1.00 J		< 1.00		
1,2-Dichlorobenzene	2024-09	ug/L																
1,2-Dichlorobenzene	2024-11	ug/L				< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,2-Dichlorobenzene	2024-12	ug/L	< 1.00		< 1.00		< 1.00						< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichlorobenzene	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichlorobenzene	2025-10	ug/L			< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1 J	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2014-10	ug/L							< 1.00	< 1.00								
1,2-Dichloroethane	2014-11	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00						
1,2-Dichloroethane	2015-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,2-Dichloroethane	2015-09	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,2-Dichloroethane	2016-03	ug/L						< 1.00	< 1.00									
1,2-Dichloroethane	2016-04	ug/L	< 1.00		< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00						
1,2-Dichloroethane	2016-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
1,2-Dichloroethane	2017-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,2-Dichloroethane	2017-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
1,2-Dichloroethane	2018-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,2-Dichloroethane	2018-08	ug/L		< 1.00														
1,2-Dichloroethane	2018-10	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,2-Dichloroethane	2019-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,2-Dichloroethane	2019-08	ug/L		< 1.00														
1,2-Dichloroethane	2019-10	ug/L						< 1.00	< 1.00									
1,2-Dichloroethane	2019-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloroethane	2020-02	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloroethane	2020-06	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
1,2-Dichloroethane	2020-07	ug/L	< 1.00	< 1.00												< 1.00		
1,2-Dichloroethane	2020-08	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloroethane	2020-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloroethane	2021-05	ug/L			< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00				
1,2-Dichloroethane	2021-06	ug/L	< 1.00				< 1.00								< 1.00	< 1.00		
1,2-Dichloroethane	2021-08	ug/L													< 1.00			
1,2-Dichloroethane	2021-09	ug/L	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichloroethane	2021-12	ug/L															< 1.00	< 1.00
1,2-Dichloroethane	2022-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichloroethane	2022-06	ug/L															< 1.00	< 1.00
1,2-Dichloroethane	2022-08	ug/L			< 1.00					< 1.00	< 1.00	< 1.00					< 1.00	< 1.00
1,2-Dichloroethane	2022-09	ug/L	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00				< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloroethane	2022-12	ug/L															< 1.00	< 1.00
1,2-Dichloroethane	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichloroethane	2023-08	ug/L																
1,2-Dichloroethane	2023-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00		< 1.00		< 1.00
1,2-Dichloroethane	2024-01	ug/L																
1,2-Dichloroethane	2024-06	ug/L			< 1.00			< 1.00	< 1.00			< 1.00	< 1.00		< 1.00		< 1.00	< 1.00
1,2-Dichloroethane	2024-07	ug/L	< 1.00			< 1.00 J	< 1.00 J							< 1.00 J		< 1.00		
1,2-Dichloroethane	2024-09	ug/L																
1,2-Dichloroethane	2024-11	ug/L				< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						

Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
1,2-Dichlorobenzene	2021-12	ug/L	< 1.00	< 1.00							
1,2-Dichlorobenzene	2022-03	ug/L	< 1.00	< 1.00							
1,2-Dichlorobenzene	2022-06	ug/L	< 1.00	< 1.00							
1,2-Dichlorobenzene	2022-08	ug/L	< 1.00	< 1.00		< 1.00					
1,2-Dichlorobenzene	2022-09	ug/L			< 1.00		< 1.00	< 1.00			< 1.00
1,2-Dichlorobenzene	2022-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
1,2-Dichlorobenzene	2023-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00
1,2-Dichlorobenzene	2023-08	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			
1,2-Dichlorobenzene	2023-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
1,2-Dichlorobenzene	2024-01	ug/L							< 1.00	< 1.00	
1,2-Dichlorobenzene	2024-06	ug/L	< 1.00	< 1.00			< 1.00	< 1.00		< 1.00	< 1.00
1,2-Dichlorobenzene	2024-07	ug/L			< 1.00 J				< 1.00 J		
1,2-Dichlorobenzene	2024-09	ug/L							< 1.00	< 1.00	
1,2-Dichlorobenzene	2024-11	ug/L							< 1.00		
1,2-Dichlorobenzene	2024-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00
1,2-Dichlorobenzene	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichlorobenzene	2025-10	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
1,2-Dichloroethane	2014-10	ug/L									
1,2-Dichloroethane	2014-11	ug/L									
1,2-Dichloroethane	2015-05	ug/L									
1,2-Dichloroethane	2015-09	ug/L									
1,2-Dichloroethane	2016-03	ug/L									
1,2-Dichloroethane	2016-04	ug/L									
1,2-Dichloroethane	2016-11	ug/L									
1,2-Dichloroethane	2017-05	ug/L									
1,2-Dichloroethane	2017-11	ug/L									
1,2-Dichloroethane	2018-06	ug/L									
1,2-Dichloroethane	2018-08	ug/L									
1,2-Dichloroethane	2018-10	ug/L									
1,2-Dichloroethane	2019-06	ug/L									< 1.00
1,2-Dichloroethane	2019-08	ug/L									< 1.00
1,2-Dichloroethane	2019-10	ug/L									
1,2-Dichloroethane	2019-11	ug/L									< 1.00
1,2-Dichloroethane	2020-02	ug/L									< 1.00
1,2-Dichloroethane	2020-06	ug/L									< 1.00
1,2-Dichloroethane	2020-07	ug/L									
1,2-Dichloroethane	2020-08	ug/L									
1,2-Dichloroethane	2020-11	ug/L									< 1.00
1,2-Dichloroethane	2021-05	ug/L									< 1.00
1,2-Dichloroethane	2021-06	ug/L									
1,2-Dichloroethane	2021-08	ug/L									
1,2-Dichloroethane	2021-09	ug/L	< 1.00	< 1.00							< 1.00
1,2-Dichloroethane	2021-12	ug/L	< 1.00	< 1.00							
1,2-Dichloroethane	2022-03	ug/L	< 1.00	< 1.00							
1,2-Dichloroethane	2022-06	ug/L	< 1.00	< 1.00							
1,2-Dichloroethane	2022-08	ug/L	< 1.00	< 1.00		< 1.00					
1,2-Dichloroethane	2022-09	ug/L			< 1.00		< 1.00	< 1.00			< 1.00
1,2-Dichloroethane	2022-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
1,2-Dichloroethane	2023-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00
1,2-Dichloroethane	2023-08	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			
1,2-Dichloroethane	2023-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
1,2-Dichloroethane	2024-01	ug/L							< 1.00	< 1.00	
1,2-Dichloroethane	2024-06	ug/L	< 1.00	< 1.00			< 1.00	< 1.00		< 1.00	< 1.00
1,2-Dichloroethane	2024-07	ug/L			< 1.00 J				< 1.00 J		
1,2-Dichloroethane	2024-09	ug/L							< 1.00	< 1.00	
1,2-Dichloroethane	2024-11	ug/L							< 1.00		

Table 14

Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
1,2-Dichloroethane	2024-12	ug/L	< 1.00		< 1.00		< 1.00						< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichloroethane	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichloroethane	2025-10	ug/L			< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1 J	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	2014-10	ug/L							< 1.00	< 1.00								
1,2-Dichloropropane	2014-11	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00						
1,2-Dichloropropane	2015-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,2-Dichloropropane	2015-09	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,2-Dichloropropane	2016-03	ug/L						< 1.00	< 1.00									
1,2-Dichloropropane	2016-04	ug/L	< 1.00		< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00						
1,2-Dichloropropane	2016-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
1,2-Dichloropropane	2017-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,2-Dichloropropane	2017-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
1,2-Dichloropropane	2018-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,2-Dichloropropane	2018-08	ug/L		< 1.00														
1,2-Dichloropropane	2018-10	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,2-Dichloropropane	2019-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,2-Dichloropropane	2019-08	ug/L		< 1.00														
1,2-Dichloropropane	2019-10	ug/L						< 1.00	< 1.00									
1,2-Dichloropropane	2019-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloropropane	2020-02	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloropropane	2020-06	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
1,2-Dichloropropane	2020-07	ug/L	< 1.00	< 1.00												< 1.00		
1,2-Dichloropropane	2020-08	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloropropane	2020-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloropropane	2021-05	ug/L			< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00				
1,2-Dichloropropane	2021-06	ug/L	< 1.00				< 1.00								< 1.00	< 1.00		
1,2-Dichloropropane	2021-08	ug/L													< 1.00			
1,2-Dichloropropane	2021-09	ug/L	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichloropropane	2021-12	ug/L															< 1.00	< 1.00
1,2-Dichloropropane	2022-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichloropropane	2022-06	ug/L															< 1.00	< 1.00
1,2-Dichloropropane	2022-08	ug/L			< 1.00					< 1.00	< 1.00	< 1.00					< 1.00	< 1.00
1,2-Dichloropropane	2022-09	ug/L	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00				< 1.00	< 1.00	< 1.00	< 1.00		
1,2-Dichloropropane	2022-12	ug/L															< 1.00	< 1.00
1,2-Dichloropropane	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichloropropane	2023-08	ug/L																
1,2-Dichloropropane	2023-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00		< 1.00		< 1.00
1,2-Dichloropropane	2024-01	ug/L																
1,2-Dichloropropane	2024-06	ug/L			< 1.00			< 1.00	< 1.00			< 1.00	< 1.00		< 1.00		< 1.00	< 1.00
1,2-Dichloropropane	2024-07	ug/L	< 1.00			< 1.00 J	< 1.00 J							< 1.00 J		< 1.00		
1,2-Dichloropropane	2024-09	ug/L																
1,2-Dichloropropane	2024-11	ug/L				< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,2-Dichloropropane	2024-12	ug/L	< 1.00		< 1.00		< 1.00						< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichloropropane	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichloropropane	2025-10	ug/L			< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1 J	< 1	< 1	< 1	< 1	< 1
1,3,5-Trinitrobenzene	2014-10	ug/L							< 11.1									
1,3,5-Trinitrobenzene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
1,3,5-Trinitrobenzene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
1,3,5-Trinitrobenzene	2017-11	ug/L						< 11.8	< 10.9									
1,3,5-Trinitrobenzene	2020-06	ug/L									< 11.5							
1,3,5-Trinitrobenzene	2020-11	ug/L											< 11.8	< 10.5				
1,3,5-Trinitrobenzene	2021-05	ug/L											< 11.2	< 11.9				
1,3,5-Trinitrobenzene	2021-09	ug/L													< 10.5			
1,3,5-Trinitrobenzene	2022-03	ug/L											< 11.9	< 10.4				
1,3,5-Trinitrobenzene	2022-09	ug/L													< 10.4			
1,3,5-Trinitrobenzene	2023-06	ug/L						< 11.6										

Winneshiek County Area Solid Waste Agency
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Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
1,2-Dichloroethane	2024-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00
1,2-Dichloroethane	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichloroethane	2025-10	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
1,2-Dichloropropane	2014-10	ug/L									
1,2-Dichloropropane	2014-11	ug/L									
1,2-Dichloropropane	2015-05	ug/L									
1,2-Dichloropropane	2015-09	ug/L									
1,2-Dichloropropane	2016-03	ug/L									
1,2-Dichloropropane	2016-04	ug/L									
1,2-Dichloropropane	2016-11	ug/L									
1,2-Dichloropropane	2017-05	ug/L									
1,2-Dichloropropane	2017-11	ug/L									
1,2-Dichloropropane	2018-06	ug/L									
1,2-Dichloropropane	2018-08	ug/L									
1,2-Dichloropropane	2018-10	ug/L									
1,2-Dichloropropane	2019-06	ug/L									< 1.00
1,2-Dichloropropane	2019-08	ug/L									< 1.00
1,2-Dichloropropane	2019-10	ug/L									
1,2-Dichloropropane	2019-11	ug/L									< 1.00
1,2-Dichloropropane	2020-02	ug/L									< 1.00
1,2-Dichloropropane	2020-06	ug/L									< 1.00
1,2-Dichloropropane	2020-07	ug/L									
1,2-Dichloropropane	2020-08	ug/L									
1,2-Dichloropropane	2020-11	ug/L									< 1.00
1,2-Dichloropropane	2021-05	ug/L									< 1.00
1,2-Dichloropropane	2021-06	ug/L									
1,2-Dichloropropane	2021-08	ug/L									
1,2-Dichloropropane	2021-09	ug/L	< 1.00	< 1.00							< 1.00
1,2-Dichloropropane	2021-12	ug/L	< 1.00	< 1.00							
1,2-Dichloropropane	2022-03	ug/L	< 1.00	< 1.00							
1,2-Dichloropropane	2022-06	ug/L	< 1.00	< 1.00							
1,2-Dichloropropane	2022-08	ug/L	< 1.00	< 1.00		< 1.00					
1,2-Dichloropropane	2022-09	ug/L			< 1.00		< 1.00	< 1.00			< 1.00
1,2-Dichloropropane	2022-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
1,2-Dichloropropane	2023-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00
1,2-Dichloropropane	2023-08	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			
1,2-Dichloropropane	2023-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
1,2-Dichloropropane	2024-01	ug/L							< 1.00	< 1.00	
1,2-Dichloropropane	2024-06	ug/L	< 1.00	< 1.00			< 1.00	< 1.00		< 1.00	< 1.00
1,2-Dichloropropane	2024-07	ug/L			< 1.00 J				< 1.00 J		
1,2-Dichloropropane	2024-09	ug/L							< 1.00	< 1.00	
1,2-Dichloropropane	2024-11	ug/L							< 1.00		
1,2-Dichloropropane	2024-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00
1,2-Dichloropropane	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichloropropane	2025-10	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
1,3,5-Trinitrobenzene	2014-10	ug/L									
1,3,5-Trinitrobenzene	2015-09	ug/L									
1,3,5-Trinitrobenzene	2016-11	ug/L									
1,3,5-Trinitrobenzene	2017-11	ug/L									
1,3,5-Trinitrobenzene	2020-06	ug/L									
1,3,5-Trinitrobenzene	2020-11	ug/L									
1,3,5-Trinitrobenzene	2021-05	ug/L									
1,3,5-Trinitrobenzene	2021-09	ug/L									
1,3,5-Trinitrobenzene	2022-03	ug/L									
1,3,5-Trinitrobenzene	2022-09	ug/L									
1,3,5-Trinitrobenzene	2023-06	ug/L									

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
1,3,5-Trinitrobenzene	2023-11	ug/L																
1,3,5-Trinitrobenzene	2024-06	ug/L																
1,3,5-Trinitrobenzene	2024-07	ug/L																
1,3,5-Trinitrobenzene	2025-06	ug/L																
1,3,5-Trinitrobenzene	2025-10	ug/L								< 10.9								
1,3-Dichlorobenzene	2014-10	ug/L							< 1.00									
1,3-Dichlorobenzene	2015-09	ug/L			< 1.00			< 1.00	< 1.00									
1,3-Dichlorobenzene	2016-11	ug/L			< 1.00			< 1.00	< 1.00									
1,3-Dichlorobenzene	2017-11	ug/L						< 1.00	< 1.00									
1,3-Dichlorobenzene	2020-06	ug/L									< 1.00							
1,3-Dichlorobenzene	2020-11	ug/L											< 1.00	< 1.00				
1,3-Dichlorobenzene	2021-05	ug/L											< 1.00	< 1.00				
1,3-Dichlorobenzene	2021-09	ug/L													< 1.00			
1,3-Dichlorobenzene	2022-03	ug/L											< 1.00	< 1.00				
1,3-Dichlorobenzene	2022-09	ug/L													< 1.00			
1,3-Dichlorobenzene	2023-06	ug/L						< 1.00										
1,3-Dichlorobenzene	2023-11	ug/L																
1,3-Dichlorobenzene	2024-06	ug/L																
1,3-Dichlorobenzene	2025-06	ug/L																
1,3-Dichlorobenzene	2025-10	ug/L								< 1								
1,3-Dichloropropane	2014-10	ug/L							< 1.00									
1,3-Dichloropropane	2015-09	ug/L			< 1.00			< 1.00	< 1.00									
1,3-Dichloropropane	2016-11	ug/L			< 1.00			< 1.00	< 1.00									
1,3-Dichloropropane	2017-11	ug/L						< 1.00	< 1.00									
1,3-Dichloropropane	2020-06	ug/L									< 1.00							
1,3-Dichloropropane	2020-11	ug/L											< 1.00	< 1.00				
1,3-Dichloropropane	2021-05	ug/L											< 1.00	< 1.00				
1,3-Dichloropropane	2021-09	ug/L													< 1.00			
1,3-Dichloropropane	2022-03	ug/L											< 1.00	< 1.00				
1,3-Dichloropropane	2022-09	ug/L													< 1.00			
1,3-Dichloropropane	2023-06	ug/L						< 1.00										
1,3-Dichloropropane	2023-11	ug/L																
1,3-Dichloropropane	2024-06	ug/L																
1,3-Dichloropropane	2025-06	ug/L																
1,3-Dichloropropane	2025-10	ug/L								< 1								
1,3-Dinitrobenzene	2014-10	ug/L							< 11.1									
1,3-Dinitrobenzene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
1,3-Dinitrobenzene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
1,3-Dinitrobenzene	2017-11	ug/L						< 11.8	< 10.9									
1,3-Dinitrobenzene	2020-06	ug/L									< 11.5							
1,3-Dinitrobenzene	2020-11	ug/L											< 11.8	< 10.5				
1,3-Dinitrobenzene	2021-05	ug/L											< 11.2	< 11.9				
1,3-Dinitrobenzene	2021-09	ug/L													< 10.5			
1,3-Dinitrobenzene	2022-03	ug/L											< 11.9	< 10.4				
1,3-Dinitrobenzene	2022-09	ug/L													< 10.4			
1,3-Dinitrobenzene	2023-06	ug/L						< 11.6										
1,3-Dinitrobenzene	2023-11	ug/L																
1,3-Dinitrobenzene	2024-06	ug/L																
1,3-Dinitrobenzene	2024-07	ug/L																
1,3-Dinitrobenzene	2025-06	ug/L																
1,3-Dinitrobenzene	2025-10	ug/L								< 10.9								
1,4-Dichlorobenzene	2014-10	ug/L							< 1.00	< 1.00								
1,4-Dichlorobenzene	2014-11	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00						
1,4-Dichlorobenzene	2015-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,4-Dichlorobenzene	2015-09	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
1,4-Dichlorobenzene	2016-03	ug/L						< 1.00	< 1.00									

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Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
1,3,5-Trinitrobenzene	2023-11	ug/L		< 10.0							
1,3,5-Trinitrobenzene	2024-06	ug/L		< 10.4				< 10.0			
1,3,5-Trinitrobenzene	2024-07	ug/L					< 12.5				
1,3,5-Trinitrobenzene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
1,3,5-Trinitrobenzene	2025-10	ug/L								< 10.2	
1,3-Dichlorobenzene	2014-10	ug/L									
1,3-Dichlorobenzene	2015-09	ug/L									
1,3-Dichlorobenzene	2016-11	ug/L									
1,3-Dichlorobenzene	2017-11	ug/L									
1,3-Dichlorobenzene	2020-06	ug/L									
1,3-Dichlorobenzene	2020-11	ug/L									
1,3-Dichlorobenzene	2021-05	ug/L									
1,3-Dichlorobenzene	2021-09	ug/L									
1,3-Dichlorobenzene	2022-03	ug/L									
1,3-Dichlorobenzene	2022-09	ug/L									
1,3-Dichlorobenzene	2023-06	ug/L									
1,3-Dichlorobenzene	2023-11	ug/L		< 1.00							
1,3-Dichlorobenzene	2024-06	ug/L		< 1.00			< 1.00	< 1.00			
1,3-Dichlorobenzene	2025-06	ug/L				< 1.00	< 1.00	< 1.00			
1,3-Dichlorobenzene	2025-10	ug/L								< 1	
1,3-Dichloropropane	2014-10	ug/L									
1,3-Dichloropropane	2015-09	ug/L									
1,3-Dichloropropane	2016-11	ug/L									
1,3-Dichloropropane	2017-11	ug/L									
1,3-Dichloropropane	2020-06	ug/L									
1,3-Dichloropropane	2020-11	ug/L									
1,3-Dichloropropane	2021-05	ug/L									
1,3-Dichloropropane	2021-09	ug/L									
1,3-Dichloropropane	2022-03	ug/L									
1,3-Dichloropropane	2022-09	ug/L									
1,3-Dichloropropane	2023-06	ug/L									
1,3-Dichloropropane	2023-11	ug/L		< 1.00							
1,3-Dichloropropane	2024-06	ug/L		< 1.00			< 1.00	< 1.00			
1,3-Dichloropropane	2025-06	ug/L				< 1.00	< 1.00	< 1.00			
1,3-Dichloropropane	2025-10	ug/L								< 1	
1,3-Dinitrobenzene	2014-10	ug/L									
1,3-Dinitrobenzene	2015-09	ug/L									
1,3-Dinitrobenzene	2016-11	ug/L									
1,3-Dinitrobenzene	2017-11	ug/L									
1,3-Dinitrobenzene	2020-06	ug/L									
1,3-Dinitrobenzene	2020-11	ug/L									
1,3-Dinitrobenzene	2021-05	ug/L									
1,3-Dinitrobenzene	2021-09	ug/L									
1,3-Dinitrobenzene	2022-03	ug/L									
1,3-Dinitrobenzene	2022-09	ug/L									
1,3-Dinitrobenzene	2023-06	ug/L									
1,3-Dinitrobenzene	2023-11	ug/L		< 10.0							
1,3-Dinitrobenzene	2024-06	ug/L		< 10.4				< 10.0			
1,3-Dinitrobenzene	2024-07	ug/L					< 12.5				
1,3-Dinitrobenzene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
1,3-Dinitrobenzene	2025-10	ug/L								< 10.2	
1,4-Dichlorobenzene	2014-10	ug/L									
1,4-Dichlorobenzene	2014-11	ug/L									
1,4-Dichlorobenzene	2015-05	ug/L									
1,4-Dichlorobenzene	2015-09	ug/L									
1,4-Dichlorobenzene	2016-03	ug/L									

Table 14

Winneshiek County Area Solid Waste Agency — **Analytical Data Summary - Shallow Groundwater Appendix II**

Permit No. 57-SDP-01-74P — **2025 Annual Water Quality Report**

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
1,4-Dichlorobenzene	2016-04	ug/L	< 1.00		< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00						
1,4-Dichlorobenzene	2016-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
1,4-Dichlorobenzene	2017-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,4-Dichlorobenzene	2017-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	**0.55 J**	< 1.00	< 1.00		< 1.00						
1,4-Dichlorobenzene	2018-06	ug/L	< 1.00	**2.22**	< 1.00	< 1.00	< 1.00	**0.405 J**	**0.326 J**	< 1.00	< 1.00	< 1.00						
1,4-Dichlorobenzene	2018-08	ug/L		< 1.00														
1,4-Dichlorobenzene	2018-10	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,4-Dichlorobenzene	2019-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,4-Dichlorobenzene	2019-08	ug/L		< 1.00														
1,4-Dichlorobenzene	2019-10	ug/L						< 1.00	< 1.00									
1,4-Dichlorobenzene	2019-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,4-Dichlorobenzene	2020-02	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
1,4-Dichlorobenzene	2020-06	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
1,4-Dichlorobenzene	2020-07	ug/L	< 1.00	< 1.00												< 1.00		
1,4-Dichlorobenzene	2020-08	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
1,4-Dichlorobenzene	2020-11	ug/L	< 1.00	**0.263 J**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
1,4-Dichlorobenzene	2021-05	ug/L			< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00				
1,4-Dichlorobenzene	2021-06	ug/L	< 1.00				< 1.00								< 1.00	< 1.00		
1,4-Dichlorobenzene	2021-08	ug/L													< 1.00			
1,4-Dichlorobenzene	2021-09	ug/L	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,4-Dichlorobenzene	2021-12	ug/L															< 1.00	< 1.00
1,4-Dichlorobenzene	2022-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,4-Dichlorobenzene	2022-06	ug/L															< 1.00	< 1.00
1,4-Dichlorobenzene	2022-08	ug/L			< 1.00					< 1.00	< 1.00	< 1.00					< 1.00	< 1.00
1,4-Dichlorobenzene	2022-09	ug/L	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00				< 1.00	< 1.00	< 1.00	< 1.00		
1,4-Dichlorobenzene	2022-12	ug/L															< 1.00	< 1.00
1,4-Dichlorobenzene	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,4-Dichlorobenzene	2023-08	ug/L																
1,4-Dichlorobenzene	2023-11	ug/L	< 1.00		**0.516 J**	< 1.00	< 1.00	**0.293 J**	**0.554 J**	< 1.00		< 1.00	< 1.00	< 1.00		< 1.00		< 1.00
1,4-Dichlorobenzene	2024-01	ug/L																
1,4-Dichlorobenzene	2024-06	ug/L			< 1.00			**0.425 J**	< 1.00			< 1.00	< 1.00		< 1.00		< 1.00	< 1.00
1,4-Dichlorobenzene	2024-07	ug/L	< 1.00			< 1.00 J	< 1.00 J							< 1.00 J		< 1.00		
1,4-Dichlorobenzene	2024-09	ug/L																
1,4-Dichlorobenzene	2024-11	ug/L				< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
1,4-Dichlorobenzene	2024-12	ug/L	< 1.00		**0.256 J**		< 1.00						< 1.00	< 1.00	**0.231 J**	< 1.00	**0.321 J**	< 1.00
1,4-Dichlorobenzene	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**0.366 J**	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,4-Dichlorobenzene	2025-10	ug/L			**0.278 J+**	< 1	< 1	**0.246 J**	< 1	< 1		< 1	< 1 J	< 1	< 1	< 1	< 1	< 1
1,4-Naphthoquinone	2014-10	ug/L							< 11.1									
1,4-Naphthoquinone	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
1,4-Naphthoquinone	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
1,4-Naphthoquinone	2017-11	ug/L						< 11.8	< 10.9									
1,4-Naphthoquinone	2020-06	ug/L									< 11.5							
1,4-Naphthoquinone	2020-11	ug/L											< 11.8	< 10.5				
1,4-Naphthoquinone	2021-05	ug/L											< 11.2	< 11.9				
1,4-Naphthoquinone	2021-09	ug/L													< 10.5			
1,4-Naphthoquinone	2022-03	ug/L											< 11.9	< 10.4				
1,4-Naphthoquinone	2022-09	ug/L													< 10.4			
1,4-Naphthoquinone	2023-06	ug/L						< 11.6										
1,4-Naphthoquinone	2023-11	ug/L																
1,4-Naphthoquinone	2024-06	ug/L																
1,4-Naphthoquinone	2024-07	ug/L																
1,4-Naphthoquinone	2025-06	ug/L																
1,4-Naphthoquinone	2025-10	ug/L								< 10.9								
1-Naphthylamine	2014-10	ug/L							< 11.1									
1-Naphthylamine	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
1-Naphthylamine	2016-11	ug/L			< 11.0			< 11.0	< 11.0									

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
1,4-Dichlorobenzene	2016-04	ug/L									
1,4-Dichlorobenzene	2016-11	ug/L									
1,4-Dichlorobenzene	2017-05	ug/L									
1,4-Dichlorobenzene	2017-11	ug/L									
1,4-Dichlorobenzene	2018-06	ug/L									
1,4-Dichlorobenzene	2018-08	ug/L									
1,4-Dichlorobenzene	2018-10	ug/L									
1,4-Dichlorobenzene	2019-06	ug/L									< 1.00
1,4-Dichlorobenzene	2019-08	ug/L									< 1.00
1,4-Dichlorobenzene	2019-10	ug/L									
1,4-Dichlorobenzene	2019-11	ug/L									< 1.00
1,4-Dichlorobenzene	2020-02	ug/L									< 1.00
1,4-Dichlorobenzene	2020-06	ug/L									< 1.00
1,4-Dichlorobenzene	2020-07	ug/L									
1,4-Dichlorobenzene	2020-08	ug/L									
1,4-Dichlorobenzene	2020-11	ug/L									< 1.00
1,4-Dichlorobenzene	2021-05	ug/L									< 1.00
1,4-Dichlorobenzene	2021-06	ug/L									
1,4-Dichlorobenzene	2021-08	ug/L									
1,4-Dichlorobenzene	2021-09	ug/L	< 1.00	< 1.00							< 1.00
1,4-Dichlorobenzene	2021-12	ug/L	< 1.00	< 1.00							
1,4-Dichlorobenzene	2022-03	ug/L	< 1.00	< 1.00							
1,4-Dichlorobenzene	2022-06	ug/L	< 1.00	< 1.00							
1,4-Dichlorobenzene	2022-08	ug/L	< 1.00	< 1.00		< 1.00					
1,4-Dichlorobenzene	2022-09	ug/L			< 1.00		< 1.00	< 1.00			< 1.00
1,4-Dichlorobenzene	2022-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
1,4-Dichlorobenzene	2023-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00
1,4-Dichlorobenzene	2023-08	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			
1,4-Dichlorobenzene	2023-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
1,4-Dichlorobenzene	2024-01	ug/L							< 1.00	< 1.00	
1,4-Dichlorobenzene	2024-06	ug/L	< 1.00	< 1.00			< 1.00	< 1.00		< 1.00	< 1.00
1,4-Dichlorobenzene	2024-07	ug/L			< 1.00 J				< 1.00 J		
1,4-Dichlorobenzene	2024-09	ug/L							< 1.00	< 1.00	
1,4-Dichlorobenzene	2024-11	ug/L							< 1.00		
1,4-Dichlorobenzene	2024-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00
1,4-Dichlorobenzene	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,4-Dichlorobenzene	2025-10	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
1,4-Naphthoquinone	2014-10	ug/L									
1,4-Naphthoquinone	2015-09	ug/L									
1,4-Naphthoquinone	2016-11	ug/L									
1,4-Naphthoquinone	2017-11	ug/L									
1,4-Naphthoquinone	2020-06	ug/L									
1,4-Naphthoquinone	2020-11	ug/L									
1,4-Naphthoquinone	2021-05	ug/L									
1,4-Naphthoquinone	2021-09	ug/L									
1,4-Naphthoquinone	2022-03	ug/L									
1,4-Naphthoquinone	2022-09	ug/L									
1,4-Naphthoquinone	2023-06	ug/L									
1,4-Naphthoquinone	2023-11	ug/L		< 10.0							
1,4-Naphthoquinone	2024-06	ug/L		< 10.4				< 10.0			
1,4-Naphthoquinone	2024-07	ug/L					< 12.5				
1,4-Naphthoquinone	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
1,4-Naphthoquinone	2025-10	ug/L								< 10.2	
1-Naphthylamine	2014-10	ug/L									
1-Naphthylamine	2015-09	ug/L									
1-Naphthylamine	2016-11	ug/L									

Table 14

Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
1-Naphthylamine	2017-11	ug/L						< 11.8	< 10.9									
1-Naphthylamine	2020-06	ug/L									< 11.5							
1-Naphthylamine	2020-11	ug/L											< 11.8	< 10.5				
1-Naphthylamine	2021-05	ug/L											< 11.2	< 11.9				
1-Naphthylamine	2021-09	ug/L													< 10.5			
1-Naphthylamine	2022-03	ug/L											< 11.9	< 10.4				
1-Naphthylamine	2022-09	ug/L													< 10.4			
1-Naphthylamine	2023-06	ug/L						< 11.6										
1-Naphthylamine	2023-11	ug/L																
1-Naphthylamine	2024-06	ug/L																
1-Naphthylamine	2024-07	ug/L																
1-Naphthylamine	2025-06	ug/L																
1-Naphthylamine	2025-10	ug/L								< 10.9								
2,2-Dichloropropane	2014-10	ug/L							< 4.00									
2,2-Dichloropropane	2015-09	ug/L			< 4.00			< 4.00	< 4.00									
2,2-Dichloropropane	2016-11	ug/L			< 4.00			< 4.00	< 4.00									
2,2-Dichloropropane	2017-11	ug/L						< 4.00	< 4.00									
2,2-Dichloropropane	2020-06	ug/L									< 4.00							
2,2-Dichloropropane	2020-11	ug/L											< 4.00	< 4.00				
2,2-Dichloropropane	2021-05	ug/L											< 4.00	< 4.00				
2,2-Dichloropropane	2021-09	ug/L													< 4.00			
2,2-Dichloropropane	2022-03	ug/L											< 4.00	< 4.00				
2,2-Dichloropropane	2022-09	ug/L													< 4.00			
2,2-Dichloropropane	2023-06	ug/L						< 4.00										
2,2-Dichloropropane	2023-11	ug/L																
2,2-Dichloropropane	2024-06	ug/L																
2,2-Dichloropropane	2025-06	ug/L																
2,2-Dichloropropane	2025-10	ug/L								< 4								
2,2'-oxybis(1-Chloropropane)	2014-10	ug/L							< 11.1									
2,2'-oxybis(1-Chloropropane)	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
2,2'-oxybis(1-Chloropropane)	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
2,2'-oxybis(1-Chloropropane)	2017-11	ug/L						< 11.8	< 10.9									
2,2'-oxybis(1-Chloropropane)	2020-06	ug/L									< 11.5							
2,2'-oxybis(1-Chloropropane)	2020-11	ug/L											< 11.8	< 10.5				
2,2'-oxybis(1-Chloropropane)	2021-05	ug/L											< 11.2	< 11.9				
2,2'-oxybis(1-Chloropropane)	2021-09	ug/L													< 10.5			
2,2'-oxybis(1-Chloropropane)	2022-03	ug/L											< 11.9	< 10.4				
2,2'-oxybis(1-Chloropropane)	2022-09	ug/L													< 10.4			
2,2'-oxybis(1-Chloropropane)	2023-06	ug/L						< 11.6										
2,2'-oxybis(1-Chloropropane)	2023-11	ug/L																
2,2'-oxybis(1-Chloropropane)	2024-06	ug/L																
2,2'-oxybis(1-Chloropropane)	2024-07	ug/L																
2,2'-oxybis(1-Chloropropane)	2025-06	ug/L																
2,2'-oxybis(1-Chloropropane)	2025-10	ug/L								< 10.9								
2,3,4,6-Tetrachlorophenol	2014-10	ug/L							< 11.1									
2,3,4,6-Tetrachlorophenol	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
2,3,4,6-Tetrachlorophenol	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
2,3,4,6-Tetrachlorophenol	2017-11	ug/L						< 11.8	< 10.9									
2,3,4,6-Tetrachlorophenol	2020-06	ug/L									< 11.5							
2,3,4,6-Tetrachlorophenol	2020-11	ug/L											< 11.8	< 10.5				
2,3,4,6-Tetrachlorophenol	2021-05	ug/L											< 11.2	< 11.9				
2,3,4,6-Tetrachlorophenol	2021-09	ug/L													< 10.5			
2,3,4,6-Tetrachlorophenol	2022-03	ug/L											< 11.9	< 10.4				
2,3,4,6-Tetrachlorophenol	2022-09	ug/L													< 10.4			
2,3,4,6-Tetrachlorophenol	2023-06	ug/L						< 11.6										
2,3,4,6-Tetrachlorophenol	2023-11	ug/L																

Winneshiek County Area Solid Waste Agency
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Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
1-Naphthylamine	2017-11	ug/L									
1-Naphthylamine	2020-06	ug/L									
1-Naphthylamine	2020-11	ug/L									
1-Naphthylamine	2021-05	ug/L									
1-Naphthylamine	2021-09	ug/L									
1-Naphthylamine	2022-03	ug/L									
1-Naphthylamine	2022-09	ug/L									
1-Naphthylamine	2023-06	ug/L									
1-Naphthylamine	2023-11	ug/L		< 10.0							
1-Naphthylamine	2024-06	ug/L		< 10.4				< 10.0			
1-Naphthylamine	2024-07	ug/L					< 12.5				
1-Naphthylamine	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
1-Naphthylamine	2025-10	ug/L								< 10.2	
2,2-Dichloropropane	2014-10	ug/L									
2,2-Dichloropropane	2015-09	ug/L									
2,2-Dichloropropane	2016-11	ug/L									
2,2-Dichloropropane	2017-11	ug/L									
2,2-Dichloropropane	2020-06	ug/L									
2,2-Dichloropropane	2020-11	ug/L									
2,2-Dichloropropane	2021-05	ug/L									
2,2-Dichloropropane	2021-09	ug/L									
2,2-Dichloropropane	2022-03	ug/L									
2,2-Dichloropropane	2022-09	ug/L									
2,2-Dichloropropane	2023-06	ug/L									
2,2-Dichloropropane	2023-11	ug/L		< 4.00							
2,2-Dichloropropane	2024-06	ug/L		< 4.00			< 4.00	< 4.00			
2,2-Dichloropropane	2025-06	ug/L				< 4.00	< 4.00	< 4.00			
2,2-Dichloropropane	2025-10	ug/L								< 4	
2,2'-oxybis(1-Chloropropane)	2014-10	ug/L									
2,2'-oxybis(1-Chloropropane)	2015-09	ug/L									
2,2'-oxybis(1-Chloropropane)	2016-11	ug/L									
2,2'-oxybis(1-Chloropropane)	2017-11	ug/L									
2,2'-oxybis(1-Chloropropane)	2020-06	ug/L									
2,2'-oxybis(1-Chloropropane)	2020-11	ug/L									
2,2'-oxybis(1-Chloropropane)	2021-05	ug/L									
2,2'-oxybis(1-Chloropropane)	2021-09	ug/L									
2,2'-oxybis(1-Chloropropane)	2022-03	ug/L									
2,2'-oxybis(1-Chloropropane)	2022-09	ug/L									
2,2'-oxybis(1-Chloropropane)	2023-06	ug/L									
2,2'-oxybis(1-Chloropropane)	2023-11	ug/L		< 10.0							
2,2'-oxybis(1-Chloropropane)	2024-06	ug/L		< 10.4				< 10.0			
2,2'-oxybis(1-Chloropropane)	2024-07	ug/L					< 12.5				
2,2'-oxybis(1-Chloropropane)	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
2,2'-oxybis(1-Chloropropane)	2025-10	ug/L								< 10.2	
2,3,4,6-Tetrachlorophenol	2014-10	ug/L									
2,3,4,6-Tetrachlorophenol	2015-09	ug/L									
2,3,4,6-Tetrachlorophenol	2016-11	ug/L									
2,3,4,6-Tetrachlorophenol	2017-11	ug/L									
2,3,4,6-Tetrachlorophenol	2020-06	ug/L									
2,3,4,6-Tetrachlorophenol	2020-11	ug/L									
2,3,4,6-Tetrachlorophenol	2021-05	ug/L									
2,3,4,6-Tetrachlorophenol	2021-09	ug/L									
2,3,4,6-Tetrachlorophenol	2022-03	ug/L									
2,3,4,6-Tetrachlorophenol	2022-09	ug/L									
2,3,4,6-Tetrachlorophenol	2023-06	ug/L									
2,3,4,6-Tetrachlorophenol	2023-11	ug/L		< 10.0							

Table 14
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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
2,3,4,6-Tetrachlorophenol	2024-06	ug/L																
2,3,4,6-Tetrachlorophenol	2024-07	ug/L																
2,3,4,6-Tetrachlorophenol	2025-06	ug/L																
2,3,4,6-Tetrachlorophenol	2025-10	ug/L								< 10.9								
2,4,5-T	2014-10	ug/L							< 1.27									
2,4,5-T	2015-09	ug/L			< 1.13			< 1.21	< 1.19									
2,4,5-T	2016-11	ug/L			< 1.17			< 1.19	< 1.25									
2,4,5-T	2017-11	ug/L						< 1.22	< 1.15									
2,4,5-T	2020-06	ug/L									< 1.21							
2,4,5-T	2020-11	ug/L											< 1.11	< 1.16				
2,4,5-T	2021-05	ug/L											< 1.17	< 1.20				
2,4,5-T	2021-09	ug/L													< 1.16			
2,4,5-T	2022-03	ug/L											< 1.16	< 1.13				
2,4,5-T	2023-11	ug/L																
2,4,5-T	2024-06	ug/L																
2,4,5-T	2024-07	ug/L																
2,4,5-T	2025-06	ug/L																
2,4,5-T	2025-10	ug/L								< 0.181								
2,4,5-TP (Silvex)	2014-10	ug/L							< 1.27									
2,4,5-TP (Silvex)	2015-09	ug/L			< 1.13			< 1.21	< 1.19									
2,4,5-TP (Silvex)	2016-11	ug/L			< 1.17			< 1.19	< 1.25									
2,4,5-TP (Silvex)	2017-11	ug/L						< 1.22	< 1.15									
2,4,5-TP (Silvex)	2020-06	ug/L									< 1.21							
2,4,5-TP (Silvex)	2020-11	ug/L											< 1.11	< 1.16				
2,4,5-TP (Silvex)	2021-05	ug/L											< 1.17	< 1.20				
2,4,5-TP (Silvex)	2021-09	ug/L													< 1.16			
2,4,5-TP (Silvex)	2022-03	ug/L											< 1.16	< 1.13				
2,4,5-TP (Silvex)	2022-09	ug/L													**0.5**			
2,4,5-TP (Silvex)	2023-11	ug/L																
2,4,5-TP (Silvex)	2024-06	ug/L																
2,4,5-TP (Silvex)	2024-07	ug/L																
2,4,5-TP (Silvex)	2025-06	ug/L																
2,4,5-TP (Silvex)	2025-10	ug/L								< 0.0605								
2,4,5-Trichlorophenol	2014-10	ug/L							< 11.1									
2,4,5-Trichlorophenol	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
2,4,5-Trichlorophenol	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
2,4,5-Trichlorophenol	2017-11	ug/L						< 11.8	< 10.9									
2,4,5-Trichlorophenol	2020-06	ug/L									< 11.5							
2,4,5-Trichlorophenol	2020-11	ug/L											< 11.8	< 10.5				
2,4,5-Trichlorophenol	2021-05	ug/L											< 11.2	< 11.9				
2,4,5-Trichlorophenol	2021-09	ug/L													< 10.5			
2,4,5-Trichlorophenol	2022-03	ug/L											< 11.9	< 10.4				
2,4,5-Trichlorophenol	2022-09	ug/L													< 10.4			
2,4,5-Trichlorophenol	2023-06	ug/L						< 11.6										
2,4,5-Trichlorophenol	2023-11	ug/L																
2,4,5-Trichlorophenol	2024-06	ug/L																
2,4,5-Trichlorophenol	2024-07	ug/L																
2,4,5-Trichlorophenol	2025-06	ug/L																
2,4,5-Trichlorophenol	2025-10	ug/L								< 10.9								
2,4,6-Trichlorophenol	2014-10	ug/L							< 11.1									
2,4,6-Trichlorophenol	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
2,4,6-Trichlorophenol	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
2,4,6-Trichlorophenol	2017-11	ug/L						< 11.8	< 10.9									
2,4,6-Trichlorophenol	2020-06	ug/L									< 11.5							
2,4,6-Trichlorophenol	2020-11	ug/L											< 11.8	< 10.5				
2,4,6-Trichlorophenol	2021-05	ug/L											< 11.2	< 11.9				

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Table 14
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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
2,3,4,6-Tetrachlorophenol	2024-06	ug/L		< 10.4				< 10.0			
2,3,4,6-Tetrachlorophenol	2024-07	ug/L					< 12.5				
2,3,4,6-Tetrachlorophenol	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
2,3,4,6-Tetrachlorophenol	2025-10	ug/L								< 10.2	
2,4,5-T	2014-10	ug/L									
2,4,5-T	2015-09	ug/L									
2,4,5-T	2016-11	ug/L									
2,4,5-T	2017-11	ug/L									
2,4,5-T	2020-06	ug/L									
2,4,5-T	2020-11	ug/L									
2,4,5-T	2021-05	ug/L									
2,4,5-T	2021-09	ug/L									
2,4,5-T	2022-03	ug/L									
2,4,5-T	2023-11	ug/L		< 0.154							
2,4,5-T	2024-06	ug/L		< 0.144				< 0.172			
2,4,5-T	2024-07	ug/L					< 0.169				
2,4,5-T	2025-06	ug/L				< 0.161	< 0.157	< 0.179			
2,4,5-T	2025-10	ug/L								< 0.158	
2,4,5-TP (Silvex)	2014-10	ug/L									
2,4,5-TP (Silvex)	2015-09	ug/L									
2,4,5-TP (Silvex)	2016-11	ug/L									
2,4,5-TP (Silvex)	2017-11	ug/L									
2,4,5-TP (Silvex)	2020-06	ug/L									
2,4,5-TP (Silvex)	2020-11	ug/L									
2,4,5-TP (Silvex)	2021-05	ug/L									
2,4,5-TP (Silvex)	2021-09	ug/L									
2,4,5-TP (Silvex)	2022-03	ug/L									
2,4,5-TP (Silvex)	2022-09	ug/L									
2,4,5-TP (Silvex)	2023-11	ug/L		< 0.0514							
2,4,5-TP (Silvex)	2024-06	ug/L		< 0.0481				< 0.0573			
2,4,5-TP (Silvex)	2024-07	ug/L					< 0.0564				
2,4,5-TP (Silvex)	2025-06	ug/L				< 0.0537	< 0.0524	< 0.0597			
2,4,5-TP (Silvex)	2025-10	ug/L								< 0.0526	
2,4,5-Trichlorophenol	2014-10	ug/L									
2,4,5-Trichlorophenol	2015-09	ug/L									
2,4,5-Trichlorophenol	2016-11	ug/L									
2,4,5-Trichlorophenol	2017-11	ug/L									
2,4,5-Trichlorophenol	2020-06	ug/L									
2,4,5-Trichlorophenol	2020-11	ug/L									
2,4,5-Trichlorophenol	2021-05	ug/L									
2,4,5-Trichlorophenol	2021-09	ug/L									
2,4,5-Trichlorophenol	2022-03	ug/L									
2,4,5-Trichlorophenol	2022-09	ug/L									
2,4,5-Trichlorophenol	2023-06	ug/L									
2,4,5-Trichlorophenol	2023-11	ug/L		< 10.0							
2,4,5-Trichlorophenol	2024-06	ug/L		< 10.4				< 10.0			
2,4,5-Trichlorophenol	2024-07	ug/L					< 12.5				
2,4,5-Trichlorophenol	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
2,4,5-Trichlorophenol	2025-10	ug/L								< 10.2	
2,4,6-Trichlorophenol	2014-10	ug/L									
2,4,6-Trichlorophenol	2015-09	ug/L									
2,4,6-Trichlorophenol	2016-11	ug/L									
2,4,6-Trichlorophenol	2017-11	ug/L									
2,4,6-Trichlorophenol	2020-06	ug/L									
2,4,6-Trichlorophenol	2020-11	ug/L									
2,4,6-Trichlorophenol	2021-05	ug/L									

Table 14

Winneshiek County Area Solid Waste Agency | **Analytical Data Summary - Shallow Groundwater Appendix II**

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
2,4,6-Trichlorophenol	2021-09	ug/L													< 10.5			
2,4,6-Trichlorophenol	2022-03	ug/L											< 11.9	< 10.4				
2,4,6-Trichlorophenol	2022-09	ug/L													< 10.4			
2,4,6-Trichlorophenol	2023-06	ug/L						< 11.6										
2,4,6-Trichlorophenol	2023-11	ug/L																
2,4,6-Trichlorophenol	2024-06	ug/L																
2,4,6-Trichlorophenol	2024-07	ug/L																
2,4,6-Trichlorophenol	2025-06	ug/L																
2,4,6-Trichlorophenol	2025-10	ug/L								< 10.9								
2,4-D	2014-10	ug/L							< 1.27									
2,4-D	2015-09	ug/L			< 1.13			< 1.21	< 1.19									
2,4-D	2016-11	ug/L			< 1.17			< 1.19	< 1.25									
2,4-D	2017-11	ug/L						< 1.22	< 1.15									
2,4-D	2020-06	ug/L									< 1.21							
2,4-D	2020-11	ug/L											< 1.11	< 1.16				
2,4-D	2021-05	ug/L											< 1.17	< 1.20				
2,4-D	2021-09	ug/L													< 1.16			
2,4-D	2022-03	ug/L											< 1.16	< 1.13				
2,4-D	2022-09	ug/L													**2**			
2,4-D	2023-11	ug/L																
2,4-D	2024-06	ug/L																
2,4-D	2024-07	ug/L																
2,4-D	2025-06	ug/L																
2,4-D	2025-10	ug/L								< 0.726								
2,4-Dichlorophenol	2014-10	ug/L							< 11.1									
2,4-Dichlorophenol	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
2,4-Dichlorophenol	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
2,4-Dichlorophenol	2017-11	ug/L						< 11.8	< 10.9									
2,4-Dichlorophenol	2020-06	ug/L									< 11.5							
2,4-Dichlorophenol	2020-11	ug/L											< 11.8	< 10.5				
2,4-Dichlorophenol	2021-05	ug/L											< 11.2	< 11.9				
2,4-Dichlorophenol	2021-09	ug/L													< 10.5			
2,4-Dichlorophenol	2022-03	ug/L											< 11.9	< 10.4				
2,4-Dichlorophenol	2022-09	ug/L													< 10.4			
2,4-Dichlorophenol	2023-06	ug/L						< 11.6										
2,4-Dichlorophenol	2023-11	ug/L																
2,4-Dichlorophenol	2024-06	ug/L																
2,4-Dichlorophenol	2024-07	ug/L																
2,4-Dichlorophenol	2025-06	ug/L																
2,4-Dichlorophenol	2025-10	ug/L								< 10.9								
2,4-Dimethylphenol	2014-10	ug/L							< 11.1									
2,4-Dimethylphenol	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
2,4-Dimethylphenol	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
2,4-Dimethylphenol	2017-11	ug/L						< 11.8	< 10.9									
2,4-Dimethylphenol	2020-06	ug/L									< 11.5							
2,4-Dimethylphenol	2020-11	ug/L											< 11.8	< 10.5				
2,4-Dimethylphenol	2021-05	ug/L											< 11.2	< 11.9				
2,4-Dimethylphenol	2021-09	ug/L													< 10.5			
2,4-Dimethylphenol	2022-03	ug/L											< 11.9	< 10.4				
2,4-Dimethylphenol	2022-09	ug/L													< 10.4			
2,4-Dimethylphenol	2023-06	ug/L						< 11.6										
2,4-Dimethylphenol	2023-11	ug/L																
2,4-Dimethylphenol	2024-06	ug/L																
2,4-Dimethylphenol	2024-07	ug/L																
2,4-Dimethylphenol	2025-06	ug/L																
2,4-Dimethylphenol	2025-10	ug/L								< 10.9								

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
2,4,6-Trichlorophenol	2021-09	ug/L									
2,4,6-Trichlorophenol	2022-03	ug/L									
2,4,6-Trichlorophenol	2022-09	ug/L									
2,4,6-Trichlorophenol	2023-06	ug/L									
2,4,6-Trichlorophenol	2023-11	ug/L		< 10.0							
2,4,6-Trichlorophenol	2024-06	ug/L		< 10.4				< 10.0			
2,4,6-Trichlorophenol	2024-07	ug/L					< 12.5				
2,4,6-Trichlorophenol	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
2,4,6-Trichlorophenol	2025-10	ug/L								< 10.2	
2,4-D	2014-10	ug/L									
2,4-D	2015-09	ug/L									
2,4-D	2016-11	ug/L									
2,4-D	2017-11	ug/L									
2,4-D	2020-06	ug/L									
2,4-D	2020-11	ug/L									
2,4-D	2021-05	ug/L									
2,4-D	2021-09	ug/L									
2,4-D	2022-03	ug/L									
2,4-D	2022-09	ug/L									
2,4-D	2023-11	ug/L		< 0.617							
2,4-D	2024-06	ug/L		< 0.577				< 0.688			
2,4-D	2024-07	ug/L					< 0.677				
2,4-D	2025-06	ug/L				< 0.644	< 0.629	< 0.716			
2,4-D	2025-10	ug/L								< 0.631	
2,4-Dichlorophenol	2014-10	ug/L									
2,4-Dichlorophenol	2015-09	ug/L									
2,4-Dichlorophenol	2016-11	ug/L									
2,4-Dichlorophenol	2017-11	ug/L									
2,4-Dichlorophenol	2020-06	ug/L									
2,4-Dichlorophenol	2020-11	ug/L									
2,4-Dichlorophenol	2021-05	ug/L									
2,4-Dichlorophenol	2021-09	ug/L									
2,4-Dichlorophenol	2022-03	ug/L									
2,4-Dichlorophenol	2022-09	ug/L									
2,4-Dichlorophenol	2023-06	ug/L									
2,4-Dichlorophenol	2023-11	ug/L		< 10.0							
2,4-Dichlorophenol	2024-06	ug/L		< 10.4				< 10.0			
2,4-Dichlorophenol	2024-07	ug/L					< 12.5				
2,4-Dichlorophenol	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
2,4-Dichlorophenol	2025-10	ug/L								< 10.2	
2,4-Dimethylphenol	2014-10	ug/L									
2,4-Dimethylphenol	2015-09	ug/L									
2,4-Dimethylphenol	2016-11	ug/L									
2,4-Dimethylphenol	2017-11	ug/L									
2,4-Dimethylphenol	2020-06	ug/L									
2,4-Dimethylphenol	2020-11	ug/L									
2,4-Dimethylphenol	2021-05	ug/L									
2,4-Dimethylphenol	2021-09	ug/L									
2,4-Dimethylphenol	2022-03	ug/L									
2,4-Dimethylphenol	2022-09	ug/L									
2,4-Dimethylphenol	2023-06	ug/L									
2,4-Dimethylphenol	2023-11	ug/L		< 10.0							
2,4-Dimethylphenol	2024-06	ug/L		< 10.4				< 10.0			
2,4-Dimethylphenol	2024-07	ug/L					< 12.5				
2,4-Dimethylphenol	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
2,4-Dimethylphenol	2025-10	ug/L								< 10.2	

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
2,4-Dinitrophenol	2014-10	ug/L							< 22.2									
2,4-Dinitrophenol	2015-09	ug/L			< 21.1			< 22.5	< 21.5									
2,4-Dinitrophenol	2016-11	ug/L			< 22.0			< 22.0	< 22.0									
2,4-Dinitrophenol	2017-11	ug/L						< 23.5	**2.34 J**									
2,4-Dinitrophenol	2020-06	ug/L									< 23.0							
2,4-Dinitrophenol	2020-11	ug/L											< 23.5	< 21.1				
2,4-Dinitrophenol	2021-05	ug/L											< 22.5	< 23.8				
2,4-Dinitrophenol	2021-09	ug/L													< 21.1			
2,4-Dinitrophenol	2022-03	ug/L											< 23.8	< 20.8				
2,4-Dinitrophenol	2022-09	ug/L													< 20.8			
2,4-Dinitrophenol	2023-06	ug/L						< 23.3										
2,4-Dinitrophenol	2023-11	ug/L																
2,4-Dinitrophenol	2024-06	ug/L																
2,4-Dinitrophenol	2024-07	ug/L																
2,4-Dinitrophenol	2025-06	ug/L																
2,4-Dinitrophenol	2025-10	ug/L								< 21.7								
2,4-Dinitrotoluene	2014-10	ug/L							< 11.1									
2,4-Dinitrotoluene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
2,4-Dinitrotoluene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
2,4-Dinitrotoluene	2017-11	ug/L						< 11.8	< 10.9									
2,4-Dinitrotoluene	2020-06	ug/L									< 11.5							
2,4-Dinitrotoluene	2020-11	ug/L											< 11.8	< 10.5				
2,4-Dinitrotoluene	2021-05	ug/L											< 11.2	< 11.9				
2,4-Dinitrotoluene	2021-09	ug/L													< 10.5			
2,4-Dinitrotoluene	2022-03	ug/L											< 11.9	< 10.4				
2,4-Dinitrotoluene	2022-09	ug/L													< 10.4			
2,4-Dinitrotoluene	2023-06	ug/L						< 11.6										
2,4-Dinitrotoluene	2023-11	ug/L																
2,4-Dinitrotoluene	2024-06	ug/L																
2,4-Dinitrotoluene	2024-07	ug/L																
2,4-Dinitrotoluene	2025-06	ug/L																
2,4-Dinitrotoluene	2025-10	ug/L								< 10.9								
2,6-Dichlorophenol	2014-10	ug/L							< 11.1									
2,6-Dichlorophenol	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
2,6-Dichlorophenol	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
2,6-Dichlorophenol	2017-11	ug/L						< 11.8	< 10.9									
2,6-Dichlorophenol	2020-06	ug/L									< 11.5							
2,6-Dichlorophenol	2020-11	ug/L											< 11.8	< 10.5				
2,6-Dichlorophenol	2021-05	ug/L											< 11.2	< 11.9				
2,6-Dichlorophenol	2021-09	ug/L													< 10.5			
2,6-Dichlorophenol	2022-03	ug/L											< 11.9	< 10.4				
2,6-Dichlorophenol	2022-09	ug/L													< 10.4			
2,6-Dichlorophenol	2023-06	ug/L						< 11.6										
2,6-Dichlorophenol	2023-11	ug/L																
2,6-Dichlorophenol	2024-06	ug/L																
2,6-Dichlorophenol	2024-07	ug/L																
2,6-Dichlorophenol	2025-06	ug/L																
2,6-Dichlorophenol	2025-10	ug/L								< 10.9								
2,6-Dinitrotoluene	2014-10	ug/L							< 11.1									
2,6-Dinitrotoluene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
2,6-Dinitrotoluene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
2,6-Dinitrotoluene	2017-11	ug/L						< 11.8	< 10.9									
2,6-Dinitrotoluene	2020-06	ug/L									< 11.5							
2,6-Dinitrotoluene	2020-11	ug/L											< 11.8	< 10.5				
2,6-Dinitrotoluene	2021-05	ug/L											< 11.2	< 11.9				
2,6-Dinitrotoluene	2021-09	ug/L													< 10.5			

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
2,4-Dinitrophenol	2014-10	ug/L									
2,4-Dinitrophenol	2015-09	ug/L									
2,4-Dinitrophenol	2016-11	ug/L									
2,4-Dinitrophenol	2017-11	ug/L									
2,4-Dinitrophenol	2020-06	ug/L									
2,4-Dinitrophenol	2020-11	ug/L									
2,4-Dinitrophenol	2021-05	ug/L									
2,4-Dinitrophenol	2021-09	ug/L									
2,4-Dinitrophenol	2022-03	ug/L									
2,4-Dinitrophenol	2022-09	ug/L									
2,4-Dinitrophenol	2023-06	ug/L									
2,4-Dinitrophenol	2023-11	ug/L		< 20.0							
2,4-Dinitrophenol	2024-06	ug/L		< 20.8				< 20.0			
2,4-Dinitrophenol	2024-07	ug/L					< 25.0				
2,4-Dinitrophenol	2025-06	ug/L				< 21.7	< 21.3	< 20.8			
2,4-Dinitrophenol	2025-10	ug/L								< 20.4	
2,4-Dinitrotoluene	2014-10	ug/L									
2,4-Dinitrotoluene	2015-09	ug/L									
2,4-Dinitrotoluene	2016-11	ug/L									
2,4-Dinitrotoluene	2017-11	ug/L									
2,4-Dinitrotoluene	2020-06	ug/L									
2,4-Dinitrotoluene	2020-11	ug/L									
2,4-Dinitrotoluene	2021-05	ug/L									
2,4-Dinitrotoluene	2021-09	ug/L									
2,4-Dinitrotoluene	2022-03	ug/L									
2,4-Dinitrotoluene	2022-09	ug/L									
2,4-Dinitrotoluene	2023-06	ug/L									
2,4-Dinitrotoluene	2023-11	ug/L		< 10.0							
2,4-Dinitrotoluene	2024-06	ug/L		< 10.4				< 10.0			
2,4-Dinitrotoluene	2024-07	ug/L					< 12.5				
2,4-Dinitrotoluene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
2,4-Dinitrotoluene	2025-10	ug/L								< 10.2	
2,6-Dichlorophenol	2014-10	ug/L									
2,6-Dichlorophenol	2015-09	ug/L									
2,6-Dichlorophenol	2016-11	ug/L									
2,6-Dichlorophenol	2017-11	ug/L									
2,6-Dichlorophenol	2020-06	ug/L									
2,6-Dichlorophenol	2020-11	ug/L									
2,6-Dichlorophenol	2021-05	ug/L									
2,6-Dichlorophenol	2021-09	ug/L									
2,6-Dichlorophenol	2022-03	ug/L									
2,6-Dichlorophenol	2022-09	ug/L									
2,6-Dichlorophenol	2023-06	ug/L									
2,6-Dichlorophenol	2023-11	ug/L		< 10.0							
2,6-Dichlorophenol	2024-06	ug/L		< 10.4				< 10.0			
2,6-Dichlorophenol	2024-07	ug/L					< 12.5				
2,6-Dichlorophenol	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
2,6-Dichlorophenol	2025-10	ug/L								< 10.2	
2,6-Dinitrotoluene	2014-10	ug/L									
2,6-Dinitrotoluene	2015-09	ug/L									
2,6-Dinitrotoluene	2016-11	ug/L									
2,6-Dinitrotoluene	2017-11	ug/L									
2,6-Dinitrotoluene	2020-06	ug/L									
2,6-Dinitrotoluene	2020-11	ug/L									
2,6-Dinitrotoluene	2021-05	ug/L									
2,6-Dinitrotoluene	2021-09	ug/L									

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1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
2,6-Dinitrotoluene	2022-03	ug/L											< 11.9	< 10.4				
2,6-Dinitrotoluene	2022-09	ug/L													< 10.4			
2,6-Dinitrotoluene	2023-06	ug/L						< 11.6										
2,6-Dinitrotoluene	2023-11	ug/L																
2,6-Dinitrotoluene	2024-06	ug/L																
2,6-Dinitrotoluene	2024-07	ug/L																
2,6-Dinitrotoluene	2025-06	ug/L																
2,6-Dinitrotoluene	2025-10	ug/L								< 10.9								
2-Acetylaminofluorene	2014-10	ug/L							< 11.1									
2-Acetylaminofluorene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
2-Acetylaminofluorene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
2-Acetylaminofluorene	2017-11	ug/L						< 11.8	< 10.9									
2-Acetylaminofluorene	2020-06	ug/L									< 11.5							
2-Acetylaminofluorene	2020-11	ug/L											< 11.8	< 10.5				
2-Acetylaminofluorene	2021-05	ug/L											< 11.2	< 11.9				
2-Acetylaminofluorene	2021-09	ug/L													< 10.5			
2-Acetylaminofluorene	2022-03	ug/L											< 11.9	< 10.4				
2-Acetylaminofluorene	2022-09	ug/L													< 10.4			
2-Acetylaminofluorene	2023-06	ug/L						< 11.6										
2-Acetylaminofluorene	2023-11	ug/L																
2-Acetylaminofluorene	2024-06	ug/L																
2-Acetylaminofluorene	2024-07	ug/L																
2-Acetylaminofluorene	2025-06	ug/L																
2-Acetylaminofluorene	2025-10	ug/L								< 10.9								
2-Butanone	2014-10	ug/L							< 10.0	< 10.0								
2-Butanone	2014-11	ug/L			< 10.0	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0						
2-Butanone	2015-05	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
2-Butanone	2015-09	ug/L			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Butanone	2016-03	ug/L						< 10.0	< 10.0									
2-Butanone	2016-04	ug/L	< 10.0		< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0						
2-Butanone	2016-11	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0						
2-Butanone	2017-05	ug/L	< 10.0		< 10.0	**1.11 J**	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
2-Butanone	2017-11	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0						
2-Butanone	2018-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
2-Butanone	2018-08	ug/L		< 10.0														
2-Butanone	2018-10	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
2-Butanone	2019-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
2-Butanone	2019-08	ug/L		< 10.0														
2-Butanone	2019-10	ug/L						< 10.0	< 10.0									
2-Butanone	2019-11	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
2-Butanone	2020-02	ug/L											< 10.0	< 10.0	< 10.0	< 10.0		
2-Butanone	2020-06	ug/L			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	**5.19 J**	< 10.0			
2-Butanone	2020-07	ug/L	< 10.0	< 10.0												< 10.0		
2-Butanone	2020-08	ug/L											< 10.0	< 10.0	< 10.0	< 10.0		
2-Butanone	2020-11	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
2-Butanone	2021-05	ug/L			< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0				
2-Butanone	2021-06	ug/L	< 10.0				< 10.0								< 10.0	< 10.0		
2-Butanone	2021-08	ug/L													< 10.0			
2-Butanone	2021-09	ug/L	< 10.0	**27.9 J**	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Butanone	2021-12	ug/L															< 10.0	< 10.0
2-Butanone	2022-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Butanone	2022-06	ug/L															< 10.0	< 10.0
2-Butanone	2022-08	ug/L			< 10.0					< 10.0	< 10.0	< 10.0					< 10.0	< 10.0
2-Butanone	2022-09	ug/L	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0				< 10.0	< 10.0	< 10.0	< 10.0		
2-Butanone	2022-12	ug/L															< 10.0	< 10.0
2-Butanone	2023-06	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0

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1,1,1,2-Tetrachloroethane	2014-10	ug/L									
2,6-Dinitrotoluene	2022-03	ug/L									
2,6-Dinitrotoluene	2022-09	ug/L									
2,6-Dinitrotoluene	2023-06	ug/L									
2,6-Dinitrotoluene	2023-11	ug/L		< 10.0							
2,6-Dinitrotoluene	2024-06	ug/L		< 10.4				< 10.0			
2,6-Dinitrotoluene	2024-07	ug/L					< 12.5				
2,6-Dinitrotoluene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
2,6-Dinitrotoluene	2025-10	ug/L								< 10.2	
2-Acetylaminofluorene	2014-10	ug/L									
2-Acetylaminofluorene	2015-09	ug/L									
2-Acetylaminofluorene	2016-11	ug/L									
2-Acetylaminofluorene	2017-11	ug/L									
2-Acetylaminofluorene	2020-06	ug/L									
2-Acetylaminofluorene	2020-11	ug/L									
2-Acetylaminofluorene	2021-05	ug/L									
2-Acetylaminofluorene	2021-09	ug/L									
2-Acetylaminofluorene	2022-03	ug/L									
2-Acetylaminofluorene	2022-09	ug/L									
2-Acetylaminofluorene	2023-06	ug/L									
2-Acetylaminofluorene	2023-11	ug/L		< 10.0							
2-Acetylaminofluorene	2024-06	ug/L		< 10.4				< 10.0			
2-Acetylaminofluorene	2024-07	ug/L					< 12.5				
2-Acetylaminofluorene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
2-Acetylaminofluorene	2025-10	ug/L								< 10.2	
2-Butanone	2014-10	ug/L									
2-Butanone	2014-11	ug/L									
2-Butanone	2015-05	ug/L									
2-Butanone	2015-09	ug/L									
2-Butanone	2016-03	ug/L									
2-Butanone	2016-04	ug/L									
2-Butanone	2016-11	ug/L									
2-Butanone	2017-05	ug/L									
2-Butanone	2017-11	ug/L									
2-Butanone	2018-06	ug/L									
2-Butanone	2018-08	ug/L									
2-Butanone	2018-10	ug/L									
2-Butanone	2019-06	ug/L									< 10.0
2-Butanone	2019-08	ug/L									< 10.0
2-Butanone	2019-10	ug/L									
2-Butanone	2019-11	ug/L									< 10.0
2-Butanone	2020-02	ug/L									< 10.0
2-Butanone	2020-06	ug/L									< 10.0
2-Butanone	2020-07	ug/L									
2-Butanone	2020-08	ug/L									
2-Butanone	2020-11	ug/L									< 10.0
2-Butanone	2021-05	ug/L									< 10.0
2-Butanone	2021-06	ug/L									
2-Butanone	2021-08	ug/L									
2-Butanone	2021-09	ug/L	< 10.0	< 10.0							< 10.0
2-Butanone	2021-12	ug/L	< 10.0	< 10.0							
2-Butanone	2022-03	ug/L	< 10.0	< 10.0							
2-Butanone	2022-06	ug/L	< 10.0	< 10.0							
2-Butanone	2022-08	ug/L	< 10.0	< 10.0		< 10.0					
2-Butanone	2022-09	ug/L			< 10.0		< 10.0	< 10.0			< 10.0
2-Butanone	2022-12	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0			
2-Butanone	2023-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0			< 10.0

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
2-Butanone	2023-08	ug/L																
2-Butanone	2023-11	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0		< 10.0		< 10.0
2-Butanone	2024-01	ug/L																
2-Butanone	2024-06	ug/L			< 10.0			< 10.0	< 10.0			< 10.0	< 10.0		< 10.0		< 10.0	< 10.0
2-Butanone	2024-07	ug/L	< 10.0			< 10.0 J	< 10.0 J							< 10.0 J		< 10.0		
2-Butanone	2024-09	ug/L																
2-Butanone	2024-11	ug/L				< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
2-Butanone	2024-12	ug/L	< 10.0		< 10.0		< 10.0						< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Butanone	2025-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	**10.6**	< 10.0	< 10.0	< 10.0
2-Butanone	2025-10	ug/L			< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10 J	< 10	< 10	< 10	< 10	< 10
2-Chloronaphthalene	2014-10	ug/L							< 11.1									
2-Chloronaphthalene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
2-Chloronaphthalene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
2-Chloronaphthalene	2017-11	ug/L						< 11.8	< 10.9									
2-Chloronaphthalene	2020-06	ug/L									< 11.5							
2-Chloronaphthalene	2020-11	ug/L											< 11.8	< 10.5				
2-Chloronaphthalene	2021-05	ug/L											< 11.2	< 11.9				
2-Chloronaphthalene	2021-09	ug/L													< 10.5			
2-Chloronaphthalene	2022-03	ug/L											< 11.9	< 10.4				
2-Chloronaphthalene	2022-09	ug/L													< 10.4			
2-Chloronaphthalene	2023-06	ug/L						< 11.6										
2-Chloronaphthalene	2023-11	ug/L																
2-Chloronaphthalene	2024-06	ug/L																
2-Chloronaphthalene	2024-07	ug/L																
2-Chloronaphthalene	2025-06	ug/L																
2-Chloronaphthalene	2025-10	ug/L								< 10.9								
2-Chlorophenol	2014-10	ug/L							< 11.1									
2-Chlorophenol	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
2-Chlorophenol	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
2-Chlorophenol	2017-11	ug/L						< 11.8	< 10.9									
2-Chlorophenol	2020-06	ug/L									< 11.5							
2-Chlorophenol	2020-11	ug/L											< 11.8	< 10.5				
2-Chlorophenol	2021-05	ug/L											< 11.2	< 11.9				
2-Chlorophenol	2021-09	ug/L													< 10.5			
2-Chlorophenol	2022-03	ug/L											< 11.9	< 10.4				
2-Chlorophenol	2022-09	ug/L													< 10.4			
2-Chlorophenol	2023-06	ug/L						< 11.6										
2-Chlorophenol	2023-11	ug/L																
2-Chlorophenol	2024-06	ug/L																
2-Chlorophenol	2024-07	ug/L																
2-Chlorophenol	2025-06	ug/L																
2-Chlorophenol	2025-10	ug/L								< 10.9								
2-Hexanone	2014-10	ug/L							< 10.0	< 10.0								
2-Hexanone	2014-11	ug/L			< 10.0	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0						
2-Hexanone	2015-05	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
2-Hexanone	2015-09	ug/L			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
2-Hexanone	2016-03	ug/L						< 10.0	< 10.0									
2-Hexanone	2016-04	ug/L	< 10.0		< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0						
2-Hexanone	2016-11	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0						
2-Hexanone	2017-05	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
2-Hexanone	2017-11	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0						
2-Hexanone	2018-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
2-Hexanone	2018-08	ug/L		< 10.0														
2-Hexanone	2018-10	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
2-Hexanone	2019-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
2-Hexanone	2019-08	ug/L		< 10.0														

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
2-Butanone	2023-08	ug/L			< 10.0	< 10.0	< 10.0	< 10.0			
2-Butanone	2023-11	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	
2-Butanone	2024-01	ug/L							< 10.0	< 10.0	
2-Butanone	2024-06	ug/L	< 10.0	< 10.0			< 10.0	< 10.0		< 10.0	< 10.0
2-Butanone	2024-07	ug/L			< 10.0 J				< 10.0 J		
2-Butanone	2024-09	ug/L							< 10.0	< 10.0	
2-Butanone	2024-11	ug/L							< 10.0		
2-Butanone	2024-12	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0
2-Butanone	2025-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Butanone	2025-10	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
2-Chloronaphthalene	2014-10	ug/L									
2-Chloronaphthalene	2015-09	ug/L									
2-Chloronaphthalene	2016-11	ug/L									
2-Chloronaphthalene	2017-11	ug/L									
2-Chloronaphthalene	2020-06	ug/L									
2-Chloronaphthalene	2020-11	ug/L									
2-Chloronaphthalene	2021-05	ug/L									
2-Chloronaphthalene	2021-09	ug/L									
2-Chloronaphthalene	2022-03	ug/L									
2-Chloronaphthalene	2022-09	ug/L									
2-Chloronaphthalene	2023-06	ug/L									
2-Chloronaphthalene	2023-11	ug/L		< 10.0							
2-Chloronaphthalene	2024-06	ug/L		< 10.4				< 10.0			
2-Chloronaphthalene	2024-07	ug/L					< 12.5				
2-Chloronaphthalene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
2-Chloronaphthalene	2025-10	ug/L								< 10.2	
2-Chlorophenol	2014-10	ug/L									
2-Chlorophenol	2015-09	ug/L									
2-Chlorophenol	2016-11	ug/L									
2-Chlorophenol	2017-11	ug/L									
2-Chlorophenol	2020-06	ug/L									
2-Chlorophenol	2020-11	ug/L									
2-Chlorophenol	2021-05	ug/L									
2-Chlorophenol	2021-09	ug/L									
2-Chlorophenol	2022-03	ug/L									
2-Chlorophenol	2022-09	ug/L									
2-Chlorophenol	2023-06	ug/L									
2-Chlorophenol	2023-11	ug/L		< 10.0							
2-Chlorophenol	2024-06	ug/L		< 10.4				< 10.0			
2-Chlorophenol	2024-07	ug/L					< 12.5				
2-Chlorophenol	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
2-Chlorophenol	2025-10	ug/L								< 10.2	
2-Hexanone	2014-10	ug/L									
2-Hexanone	2014-11	ug/L									
2-Hexanone	2015-05	ug/L									
2-Hexanone	2015-09	ug/L									
2-Hexanone	2016-03	ug/L									
2-Hexanone	2016-04	ug/L									
2-Hexanone	2016-11	ug/L									
2-Hexanone	2017-05	ug/L									
2-Hexanone	2017-11	ug/L									
2-Hexanone	2018-06	ug/L									
2-Hexanone	2018-08	ug/L									
2-Hexanone	2018-10	ug/L									
2-Hexanone	2019-06	ug/L									< 10.0
2-Hexanone	2019-08	ug/L									< 10.0

Table 14

Winneshiek County Area Solid Waste Agency — **Analytical Data Summary - Shallow Groundwater Appendix II**

Permit No. 57-SDP-01-74P — **2025 Annual Water Quality Report**

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
2-Hexanone	2019-10	ug/L						< 10.0	< 10.0									
2-Hexanone	2019-11	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
2-Hexanone	2020-02	ug/L											< 10.0	< 10.0	< 10.0	< 10.0		
2-Hexanone	2020-06	ug/L			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0			
2-Hexanone	2020-07	ug/L	< 10.0	< 10.0												< 10.0		
2-Hexanone	2020-08	ug/L											< 10.0	< 10.0	< 10.0	< 10.0		
2-Hexanone	2020-11	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
2-Hexanone	2021-05	ug/L			< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0				
2-Hexanone	2021-06	ug/L	< 10.0				< 10.0								< 10.0	< 10.0		
2-Hexanone	2021-08	ug/L													< 10.0			
2-Hexanone	2021-09	ug/L	< 10.0	< 100	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Hexanone	2021-12	ug/L															< 10.0	< 10.0
2-Hexanone	2022-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Hexanone	2022-06	ug/L															< 10.0	< 10.0
2-Hexanone	2022-08	ug/L			< 10.0					< 10.0	< 10.0	< 10.0					< 10.0	< 10.0
2-Hexanone	2022-09	ug/L	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0				< 10.0	< 10.0	< 10.0	< 10.0		
2-Hexanone	2022-12	ug/L															< 10.0	< 10.0
2-Hexanone	2023-06	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Hexanone	2023-08	ug/L																
2-Hexanone	2023-11	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0		< 10.0		< 10.0
2-Hexanone	2024-01	ug/L																
2-Hexanone	2024-06	ug/L			< 10.0			< 10.0	< 10.0			< 10.0	< 10.0		< 10.0		< 10.0	< 10.0
2-Hexanone	2024-07	ug/L	< 10.0			< 10.0 J	< 10.0 J							< 10.0 J		< 10.0		
2-Hexanone	2024-09	ug/L																
2-Hexanone	2024-11	ug/L				< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
2-Hexanone	2024-12	ug/L	< 10.0		< 10.0		< 10.0						< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Hexanone	2025-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Hexanone	2025-10	ug/L			< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10 J	< 10	< 10	< 10	< 10	< 10
2-Methylnaphthalene	2014-10	ug/L							< 11.1									
2-Methylnaphthalene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
2-Methylnaphthalene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
2-Methylnaphthalene	2017-11	ug/L						< 11.8	< 10.9									
2-Methylnaphthalene	2020-06	ug/L									< 11.5							
2-Methylnaphthalene	2020-11	ug/L											< 11.8	< 10.5				
2-Methylnaphthalene	2021-05	ug/L											< 11.2	< 11.9				
2-Methylnaphthalene	2021-09	ug/L													< 10.5			
2-Methylnaphthalene	2022-03	ug/L											< 11.9	< 10.4				
2-Methylnaphthalene	2022-09	ug/L													< 10.4			
2-Methylnaphthalene	2023-06	ug/L						< 11.6										
2-Methylnaphthalene	2023-11	ug/L																
2-Methylnaphthalene	2024-06	ug/L																
2-Methylnaphthalene	2024-07	ug/L																
2-Methylnaphthalene	2025-06	ug/L																
2-Methylnaphthalene	2025-10	ug/L								< 10.9								
2-Methylphenol	2014-10	ug/L							< 11.1									
2-Methylphenol	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
2-Methylphenol	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
2-Methylphenol	2017-11	ug/L						< 11.8	< 10.9									
2-Methylphenol	2020-06	ug/L									< 11.5							
2-Methylphenol	2020-11	ug/L											< 11.8	< 10.5				
2-Methylphenol	2021-05	ug/L											< 11.2	< 11.9				
2-Methylphenol	2021-09	ug/L													< 10.5			
2-Methylphenol	2022-03	ug/L											< 11.9	< 10.4				
2-Methylphenol	2022-09	ug/L													< 10.4			
2-Methylphenol	2023-06	ug/L						< 11.6										
2-Methylphenol	2023-11	ug/L																

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
2-Hexanone	2019-10	ug/L									
2-Hexanone	2019-11	ug/L									< 10.0
2-Hexanone	2020-02	ug/L									< 10.0
2-Hexanone	2020-06	ug/L									< 10.0
2-Hexanone	2020-07	ug/L									
2-Hexanone	2020-08	ug/L									
2-Hexanone	2020-11	ug/L									< 10.0
2-Hexanone	2021-05	ug/L									< 10.0
2-Hexanone	2021-06	ug/L									
2-Hexanone	2021-08	ug/L									
2-Hexanone	2021-09	ug/L	< 10.0	< 10.0							< 10.0
2-Hexanone	2021-12	ug/L	< 10.0	< 10.0							
2-Hexanone	2022-03	ug/L	< 10.0	< 10.0							
2-Hexanone	2022-06	ug/L	< 10.0	< 10.0							
2-Hexanone	2022-08	ug/L	< 10.0	< 10.0		< 10.0					
2-Hexanone	2022-09	ug/L			< 10.0		< 10.0	< 10.0			< 10.0
2-Hexanone	2022-12	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0			
2-Hexanone	2023-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0			< 10.0
2-Hexanone	2023-08	ug/L			< 10.0	< 10.0	< 10.0	< 10.0			
2-Hexanone	2023-11	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	
2-Hexanone	2024-01	ug/L							< 10.0	< 10.0	
2-Hexanone	2024-06	ug/L	< 10.0	< 10.0			< 10.0	< 10.0		< 10.0	< 10.0
2-Hexanone	2024-07	ug/L			< 10.0 J				< 10.0 J		
2-Hexanone	2024-09	ug/L							< 10.0	< 10.0	
2-Hexanone	2024-11	ug/L							< 10.0		
2-Hexanone	2024-12	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0
2-Hexanone	2025-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
2-Hexanone	2025-10	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
2-Methylnaphthalene	2014-10	ug/L									
2-Methylnaphthalene	2015-09	ug/L									
2-Methylnaphthalene	2016-11	ug/L									
2-Methylnaphthalene	2017-11	ug/L									
2-Methylnaphthalene	2020-06	ug/L									
2-Methylnaphthalene	2020-11	ug/L									
2-Methylnaphthalene	2021-05	ug/L									
2-Methylnaphthalene	2021-09	ug/L									
2-Methylnaphthalene	2022-03	ug/L									
2-Methylnaphthalene	2022-09	ug/L									
2-Methylnaphthalene	2023-06	ug/L									
2-Methylnaphthalene	2023-11	ug/L		< 10.0							
2-Methylnaphthalene	2024-06	ug/L		< 10.4				< 10.0			
2-Methylnaphthalene	2024-07	ug/L					< 12.5				
2-Methylnaphthalene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
2-Methylnaphthalene	2025-10	ug/L								< 10.2	
2-Methylphenol	2014-10	ug/L									
2-Methylphenol	2015-09	ug/L									
2-Methylphenol	2016-11	ug/L									
2-Methylphenol	2017-11	ug/L									
2-Methylphenol	2020-06	ug/L									
2-Methylphenol	2020-11	ug/L									
2-Methylphenol	2021-05	ug/L									
2-Methylphenol	2021-09	ug/L									
2-Methylphenol	2022-03	ug/L									
2-Methylphenol	2022-09	ug/L									
2-Methylphenol	2023-06	ug/L									
2-Methylphenol	2023-11	ug/L		< 10.0							

Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
2-Methylphenol	2024-06	ug/L																
2-Methylphenol	2024-07	ug/L																
2-Methylphenol	2025-06	ug/L																
2-Methylphenol	2025-10	ug/L								< 10.9								
2-Naphthylamine	2014-10	ug/L							< 11.1									
2-Naphthylamine	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
2-Naphthylamine	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
2-Naphthylamine	2017-11	ug/L						< 11.8	< 10.9									
2-Naphthylamine	2020-06	ug/L									< 11.5							
2-Naphthylamine	2020-11	ug/L											< 11.8	< 10.5				
2-Naphthylamine	2021-05	ug/L											< 11.2	< 11.9				
2-Naphthylamine	2021-09	ug/L													< 10.5			
2-Naphthylamine	2022-03	ug/L											< 11.9	< 10.4				
2-Naphthylamine	2022-09	ug/L													< 10.4			
2-Naphthylamine	2023-06	ug/L						< 11.6										
2-Naphthylamine	2023-11	ug/L																
2-Naphthylamine	2024-06	ug/L																
2-Naphthylamine	2024-07	ug/L																
2-Naphthylamine	2025-06	ug/L																
2-Naphthylamine	2025-10	ug/L								< 10.9								
2-Nitroaniline	2014-10	ug/L							< 11.1									
2-Nitroaniline	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
2-Nitroaniline	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
2-Nitroaniline	2017-11	ug/L						< 11.8	< 10.9									
2-Nitroaniline	2020-06	ug/L									< 11.5							
2-Nitroaniline	2020-11	ug/L											< 11.8	< 10.5				
2-Nitroaniline	2021-05	ug/L											< 11.2	< 11.9				
2-Nitroaniline	2021-09	ug/L													< 10.5			
2-Nitroaniline	2022-03	ug/L											< 11.9	< 10.4				
2-Nitroaniline	2022-09	ug/L													< 10.4			
2-Nitroaniline	2023-06	ug/L						< 11.6										
2-Nitroaniline	2023-11	ug/L																
2-Nitroaniline	2024-06	ug/L																
2-Nitroaniline	2024-07	ug/L																
2-Nitroaniline	2025-06	ug/L																
2-Nitroaniline	2025-10	ug/L								< 10.9								
2-Nitrophenol	2014-10	ug/L							< 11.1									
2-Nitrophenol	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
2-Nitrophenol	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
2-Nitrophenol	2017-11	ug/L						< 11.8	< 10.9									
2-Nitrophenol	2020-06	ug/L									< 11.5							
2-Nitrophenol	2020-11	ug/L											< 11.8	< 10.5				
2-Nitrophenol	2021-05	ug/L											< 11.2	< 11.9				
2-Nitrophenol	2021-09	ug/L													< 10.5			
2-Nitrophenol	2022-03	ug/L											< 11.9	< 10.4				
2-Nitrophenol	2022-09	ug/L													< 10.4			
2-Nitrophenol	2023-06	ug/L						< 11.6										
2-Nitrophenol	2023-11	ug/L																
2-Nitrophenol	2024-06	ug/L																
2-Nitrophenol	2024-07	ug/L																
2-Nitrophenol	2025-06	ug/L																
2-Nitrophenol	2025-10	ug/L								< 10.9								
3,3-Dichlorobenzidine	2014-10	ug/L							< 55.6									
3,3-Dichlorobenzidine	2015-09	ug/L			< 52.6			< 56.2	< 53.8									
3,3-Dichlorobenzidine	2016-11	ug/L			< 54.9			< 54.9	< 54.9									
3,3-Dichlorobenzidine	2017-11	ug/L						< 58.8	< 54.3									

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
2-Methylphenol	2024-06	ug/L		< 10.4				< 10.0			
2-Methylphenol	2024-07	ug/L					< 12.5				
2-Methylphenol	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
2-Methylphenol	2025-10	ug/L								< 10.2	
2-Naphthylamine	2014-10	ug/L									
2-Naphthylamine	2015-09	ug/L									
2-Naphthylamine	2016-11	ug/L									
2-Naphthylamine	2017-11	ug/L									
2-Naphthylamine	2020-06	ug/L									
2-Naphthylamine	2020-11	ug/L									
2-Naphthylamine	2021-05	ug/L									
2-Naphthylamine	2021-09	ug/L									
2-Naphthylamine	2022-03	ug/L									
2-Naphthylamine	2022-09	ug/L									
2-Naphthylamine	2023-06	ug/L									
2-Naphthylamine	2023-11	ug/L		< 10.0							
2-Naphthylamine	2024-06	ug/L		< 10.4				< 10.0			
2-Naphthylamine	2024-07	ug/L					< 12.5				
2-Naphthylamine	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
2-Naphthylamine	2025-10	ug/L								< 10.2	
2-Nitroaniline	2014-10	ug/L									
2-Nitroaniline	2015-09	ug/L									
2-Nitroaniline	2016-11	ug/L									
2-Nitroaniline	2017-11	ug/L									
2-Nitroaniline	2020-06	ug/L									
2-Nitroaniline	2020-11	ug/L									
2-Nitroaniline	2021-05	ug/L									
2-Nitroaniline	2021-09	ug/L									
2-Nitroaniline	2022-03	ug/L									
2-Nitroaniline	2022-09	ug/L									
2-Nitroaniline	2023-06	ug/L									
2-Nitroaniline	2023-11	ug/L		< 10.0							
2-Nitroaniline	2024-06	ug/L		< 10.4				< 10.0			
2-Nitroaniline	2024-07	ug/L					< 12.5				
2-Nitroaniline	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
2-Nitroaniline	2025-10	ug/L								< 10.2	
2-Nitrophenol	2014-10	ug/L									
2-Nitrophenol	2015-09	ug/L									
2-Nitrophenol	2016-11	ug/L									
2-Nitrophenol	2017-11	ug/L									
2-Nitrophenol	2020-06	ug/L									
2-Nitrophenol	2020-11	ug/L									
2-Nitrophenol	2021-05	ug/L									
2-Nitrophenol	2021-09	ug/L									
2-Nitrophenol	2022-03	ug/L									
2-Nitrophenol	2022-09	ug/L									
2-Nitrophenol	2023-06	ug/L									
2-Nitrophenol	2023-11	ug/L		< 10.0							
2-Nitrophenol	2024-06	ug/L		< 10.4				< 10.0			
2-Nitrophenol	2024-07	ug/L					< 12.5				
2-Nitrophenol	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
2-Nitrophenol	2025-10	ug/L								< 10.2	
3,3-Dichlorobenzidine	2014-10	ug/L									
3,3-Dichlorobenzidine	2015-09	ug/L									
3,3-Dichlorobenzidine	2016-11	ug/L									
3,3-Dichlorobenzidine	2017-11	ug/L									

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1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
3,3-Dichlorobenzidine	2020-06	ug/L									< 11.5							
3,3-Dichlorobenzidine	2020-11	ug/L											< 11.8	< 10.5				
3,3-Dichlorobenzidine	2021-05	ug/L											< 11.2	< 11.9				
3,3-Dichlorobenzidine	2021-09	ug/L													< 10.5			
3,3-Dichlorobenzidine	2022-03	ug/L											< 11.9	< 10.4				
3,3-Dichlorobenzidine	2022-09	ug/L													< 10.4			
3,3-Dichlorobenzidine	2023-06	ug/L						< 11.6										
3,3-Dichlorobenzidine	2023-11	ug/L																
3,3-Dichlorobenzidine	2024-06	ug/L																
3,3-Dichlorobenzidine	2024-07	ug/L																
3,3-Dichlorobenzidine	2025-06	ug/L																
3,3-Dichlorobenzidine	2025-10	ug/L								< 10.9								
3,3-Dimethylbenzidine	2014-10	ug/L							< 11.1									
3,3-Dimethylbenzidine	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
3,3-Dimethylbenzidine	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
3,3-Dimethylbenzidine	2017-11	ug/L						< 11.8	< 10.9									
3,3-Dimethylbenzidine	2020-06	ug/L									< 11.5							
3,3-Dimethylbenzidine	2020-11	ug/L											< 11.8	< 10.5				
3,3-Dimethylbenzidine	2021-05	ug/L											< 11.2	< 11.9				
3,3-Dimethylbenzidine	2021-09	ug/L													< 10.5			
3,3-Dimethylbenzidine	2022-03	ug/L											< 11.9	< 10.4				
3,3-Dimethylbenzidine	2022-09	ug/L													< 10.4			
3,3-Dimethylbenzidine	2023-06	ug/L						< 11.6										
3,3-Dimethylbenzidine	2023-11	ug/L																
3,3-Dimethylbenzidine	2024-06	ug/L																
3,3-Dimethylbenzidine	2024-07	ug/L																
3,3-Dimethylbenzidine	2025-06	ug/L																
3,3-Dimethylbenzidine	2025-10	ug/L								< 10.9								
3-Methylcholanthrene	2014-10	ug/L							< 11.1									
3-Methylcholanthrene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
3-Methylcholanthrene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
3-Methylcholanthrene	2017-11	ug/L						< 11.8	< 10.9									
3-Methylcholanthrene	2020-06	ug/L									< 11.5							
3-Methylcholanthrene	2020-11	ug/L											< 11.8	< 10.5				
3-Methylcholanthrene	2021-05	ug/L											< 11.2	< 11.9				
3-Methylcholanthrene	2021-09	ug/L													< 10.5			
3-Methylcholanthrene	2022-03	ug/L											< 11.9	< 10.4				
3-Methylcholanthrene	2022-09	ug/L													< 10.4			
3-Methylcholanthrene	2023-06	ug/L						< 11.6										
3-Methylcholanthrene	2023-11	ug/L																
3-Methylcholanthrene	2024-06	ug/L																
3-Methylcholanthrene	2024-07	ug/L																
3-Methylcholanthrene	2025-06	ug/L																
3-Methylcholanthrene	2025-10	ug/L								< 10.9								
3-Nitroaniline	2014-10	ug/L							< 11.1									
3-Nitroaniline	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
3-Nitroaniline	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
3-Nitroaniline	2017-11	ug/L						< 11.8	< 10.9									
3-Nitroaniline	2020-06	ug/L									< 11.5							
3-Nitroaniline	2020-11	ug/L											< 11.8	< 10.5				
3-Nitroaniline	2021-05	ug/L											< 11.2	< 11.9				
3-Nitroaniline	2021-09	ug/L													< 10.5			
3-Nitroaniline	2022-03	ug/L											< 11.9	< 10.4				
3-Nitroaniline	2022-09	ug/L													< 10.4			
3-Nitroaniline	2023-06	ug/L						< 11.6										
3-Nitroaniline	2023-11	ug/L																

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
3,3-Dichlorobenzidine	2020-06	ug/L									
3,3-Dichlorobenzidine	2020-11	ug/L									
3,3-Dichlorobenzidine	2021-05	ug/L									
3,3-Dichlorobenzidine	2021-09	ug/L									
3,3-Dichlorobenzidine	2022-03	ug/L									
3,3-Dichlorobenzidine	2022-09	ug/L									
3,3-Dichlorobenzidine	2023-06	ug/L									
3,3-Dichlorobenzidine	2023-11	ug/L		< 10.0							
3,3-Dichlorobenzidine	2024-06	ug/L		< 10.4				< 10.0			
3,3-Dichlorobenzidine	2024-07	ug/L					< 12.5				
3,3-Dichlorobenzidine	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
3,3-Dichlorobenzidine	2025-10	ug/L								< 10.2	
3,3-Dimethylbenzidine	2014-10	ug/L									
3,3-Dimethylbenzidine	2015-09	ug/L									
3,3-Dimethylbenzidine	2016-11	ug/L									
3,3-Dimethylbenzidine	2017-11	ug/L									
3,3-Dimethylbenzidine	2020-06	ug/L									
3,3-Dimethylbenzidine	2020-11	ug/L									
3,3-Dimethylbenzidine	2021-05	ug/L									
3,3-Dimethylbenzidine	2021-09	ug/L									
3,3-Dimethylbenzidine	2022-03	ug/L									
3,3-Dimethylbenzidine	2022-09	ug/L									
3,3-Dimethylbenzidine	2023-06	ug/L									
3,3-Dimethylbenzidine	2023-11	ug/L		< 10.0							
3,3-Dimethylbenzidine	2024-06	ug/L		< 10.4				< 10.0			
3,3-Dimethylbenzidine	2024-07	ug/L					< 12.5				
3,3-Dimethylbenzidine	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
3,3-Dimethylbenzidine	2025-10	ug/L								< 10.2	
3-Methylcholanthrene	2014-10	ug/L									
3-Methylcholanthrene	2015-09	ug/L									
3-Methylcholanthrene	2016-11	ug/L									
3-Methylcholanthrene	2017-11	ug/L									
3-Methylcholanthrene	2020-06	ug/L									
3-Methylcholanthrene	2020-11	ug/L									
3-Methylcholanthrene	2021-05	ug/L									
3-Methylcholanthrene	2021-09	ug/L									
3-Methylcholanthrene	2022-03	ug/L									
3-Methylcholanthrene	2022-09	ug/L									
3-Methylcholanthrene	2023-06	ug/L									
3-Methylcholanthrene	2023-11	ug/L		< 10.0							
3-Methylcholanthrene	2024-06	ug/L		< 10.4				< 10.0			
3-Methylcholanthrene	2024-07	ug/L					< 12.5				
3-Methylcholanthrene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
3-Methylcholanthrene	2025-10	ug/L								< 10.2	
3-Nitroaniline	2014-10	ug/L									
3-Nitroaniline	2015-09	ug/L									
3-Nitroaniline	2016-11	ug/L									
3-Nitroaniline	2017-11	ug/L									
3-Nitroaniline	2020-06	ug/L									
3-Nitroaniline	2020-11	ug/L									
3-Nitroaniline	2021-05	ug/L									
3-Nitroaniline	2021-09	ug/L									
3-Nitroaniline	2022-03	ug/L									
3-Nitroaniline	2022-09	ug/L									
3-Nitroaniline	2023-06	ug/L									
3-Nitroaniline	2023-11	ug/L		< 10.0							

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
3-Nitroaniline	2024-06	ug/L																
3-Nitroaniline	2024-07	ug/L																
3-Nitroaniline	2025-06	ug/L																
3-Nitroaniline	2025-10	ug/L								< 10.9								
4,4'-DDD	2014-10	ug/L							< 0.0320									
4,4'-DDD	2015-09	ug/L			< 0.0364			< 0.0327	< 0.0356									
4,4'-DDD	2016-11	ug/L			< 0.0352			< 0.0352	< 0.0364									
4,4'-DDD	2017-11	ug/L						< 0.0348	< 0.0344									
4,4'-DDD	2020-06	ug/L									**0.00195 J**							
4,4'-DDD	2020-11	ug/L											< 0.0386	< 0.0390				
4,4'-DDD	2021-05	ug/L											< 0.0356	< 0.0364				
4,4'-DDD	2021-09	ug/L													< 0.0364			
4,4'-DDD	2022-03	ug/L											< 0.0667	< 0.0727				
4,4'-DDD	2022-09	ug/L													< 0.0667			
4,4'-DDD	2023-06	ug/L						< 0.0640										
4,4'-DDD	2023-11	ug/L																
4,4'-DDD	2024-06	ug/L																
4,4'-DDD	2024-07	ug/L																
4,4'-DDD	2025-06	ug/L																
4,4'-DDD	2025-10	ug/L								< 0.0931								
4,4'-DDE	2014-10	ug/L							< 0.0320									
4,4'-DDE	2015-09	ug/L			**0.00427 J**			< 0.0327	< 0.0356									
4,4'-DDE	2015-12	ug/L			**0.00671 J**													
4,4'-DDE	2016-11	ug/L			< 0.0352			< 0.0352	< 0.0364									
4,4'-DDE	2017-11	ug/L						< 0.0348	< 0.0344									
4,4'-DDE	2020-06	ug/L									< 0.0337							
4,4'-DDE	2020-11	ug/L											< 0.0386	**0.0101 J**				
4,4'-DDE	2021-05	ug/L											< 0.0356	< 0.0364				
4,4'-DDE	2021-09	ug/L													< 0.0364			
4,4'-DDE	2022-03	ug/L											< 0.0667	< 0.0727				
4,4'-DDE	2022-09	ug/L													< 0.0667			
4,4'-DDE	2023-06	ug/L						< 0.0640										
4,4'-DDE	2023-11	ug/L																
4,4'-DDE	2024-06	ug/L																
4,4'-DDE	2024-07	ug/L																
4,4'-DDE	2025-06	ug/L																
4,4'-DDE	2025-10	ug/L								< 0.0931								
4,4'-DDT	2014-10	ug/L							< 0.0320									
4,4'-DDT	2015-09	ug/L			**0.00632 J**			< 0.0327	< 0.0356									
4,4'-DDT	2015-12	ug/L			**0.00947 J**													
4,4'-DDT	2016-11	ug/L			< 0.0352			< 0.0352	< 0.0364									
4,4'-DDT	2017-11	ug/L						< 0.0348	< 0.0344									
4,4'-DDT	2020-06	ug/L									< 0.0337							
4,4'-DDT	2020-11	ug/L											< 0.0386	< 0.0390				
4,4'-DDT	2021-05	ug/L											< 0.0356	< 0.0364				
4,4'-DDT	2021-09	ug/L													< 0.0364			
4,4'-DDT	2022-03	ug/L											< 0.0667	< 0.0727				
4,4'-DDT	2022-09	ug/L													< 0.0667			
4,4'-DDT	2023-06	ug/L						< 0.0640										
4,4'-DDT	2023-11	ug/L																
4,4'-DDT	2024-06	ug/L																
4,4'-DDT	2024-07	ug/L																
4,4'-DDT	2025-06	ug/L																
4,4'-DDT	2025-10	ug/L								< 0.0931								
4,6-Dinitro-2-methylphenol	2014-10	ug/L							< 11.1									
4,6-Dinitro-2-methylphenol	2015-09	ug/L			< 10.5			< 11.2	< 10.8									

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
3-Nitroaniline	2024-06	ug/L		< 10.4				< 10.0			
3-Nitroaniline	2024-07	ug/L					< 12.5				
3-Nitroaniline	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
3-Nitroaniline	2025-10	ug/L								< 10.2	
4,4'-DDD	2014-10	ug/L									
4,4'-DDD	2015-09	ug/L									
4,4'-DDD	2016-11	ug/L									
4,4'-DDD	2017-11	ug/L									
4,4'-DDD	2020-06	ug/L									
4,4'-DDD	2020-11	ug/L									
4,4'-DDD	2021-05	ug/L									
4,4'-DDD	2021-09	ug/L									
4,4'-DDD	2022-03	ug/L									
4,4'-DDD	2022-09	ug/L									
4,4'-DDD	2023-06	ug/L									
4,4'-DDD	2023-11	ug/L		< 0.0604							
4,4'-DDD	2024-06	ug/L		< 0.0909				< 0.0909			
4,4'-DDD	2024-07	ug/L					< 0.0873				
4,4'-DDD	2025-06	ug/L				< 0.0911	< 0.0911	< 0.0907			
4,4'-DDD	2025-10	ug/L								< 0.0936	
4,4'-DDE	2014-10	ug/L									
4,4'-DDE	2015-09	ug/L									
4,4'-DDE	2015-12	ug/L									
4,4'-DDE	2016-11	ug/L									
4,4'-DDE	2017-11	ug/L									
4,4'-DDE	2020-06	ug/L									
4,4'-DDE	2020-11	ug/L									
4,4'-DDE	2021-05	ug/L									
4,4'-DDE	2021-09	ug/L									
4,4'-DDE	2022-03	ug/L									
4,4'-DDE	2022-09	ug/L									
4,4'-DDE	2023-06	ug/L									
4,4'-DDE	2023-11	ug/L		< 0.0604							
4,4'-DDE	2024-06	ug/L		< 0.0909				< 0.0909			
4,4'-DDE	2024-07	ug/L					< 0.0873				
4,4'-DDE	2025-06	ug/L				< 0.0911	< 0.0911	< 0.0907			
4,4'-DDE	2025-10	ug/L								< 0.0936	
4,4'-DDT	2014-10	ug/L									
4,4'-DDT	2015-09	ug/L									
4,4'-DDT	2015-12	ug/L									
4,4'-DDT	2016-11	ug/L									
4,4'-DDT	2017-11	ug/L									
4,4'-DDT	2020-06	ug/L									
4,4'-DDT	2020-11	ug/L									
4,4'-DDT	2021-05	ug/L									
4,4'-DDT	2021-09	ug/L									
4,4'-DDT	2022-03	ug/L									
4,4'-DDT	2022-09	ug/L									
4,4'-DDT	2023-06	ug/L									
4,4'-DDT	2023-11	ug/L		< 0.0604							
4,4'-DDT	2024-06	ug/L		< 0.0909				< 0.0909			
4,4'-DDT	2024-07	ug/L					< 0.0873				
4,4'-DDT	2025-06	ug/L				< 0.0911	< 0.0911	< 0.0907			
4,4'-DDT	2025-10	ug/L								< 0.0936	
4,6-Dinitro-2-methylphenol	2014-10	ug/L									
4,6-Dinitro-2-methylphenol	2015-09	ug/L									

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
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Winneshiek County Area Solid Waste Agency
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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
4,6-Dinitro-2-methylphenol	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
4,6-Dinitro-2-methylphenol	2017-11	ug/L						< 11.8	< 10.9									
4,6-Dinitro-2-methylphenol	2020-06	ug/L									< 11.5							
4,6-Dinitro-2-methylphenol	2020-11	ug/L											< 11.8	< 10.5				
4,6-Dinitro-2-methylphenol	2021-05	ug/L											< 11.2	< 11.9				
4,6-Dinitro-2-methylphenol	2021-09	ug/L													< 10.5			
4,6-Dinitro-2-methylphenol	2022-03	ug/L											< 11.9	< 10.4				
4,6-Dinitro-2-methylphenol	2022-09	ug/L													< 10.4			
4,6-Dinitro-2-methylphenol	2023-06	ug/L						< 11.6										
4,6-Dinitro-2-methylphenol	2023-11	ug/L																
4,6-Dinitro-2-methylphenol	2024-06	ug/L																
4,6-Dinitro-2-methylphenol	2024-07	ug/L																
4,6-Dinitro-2-methylphenol	2025-06	ug/L																
4,6-Dinitro-2-methylphenol	2025-10	ug/L								< 10.9								
4-Aminobiphenyl	2014-10	ug/L							< 11.1									
4-Aminobiphenyl	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
4-Aminobiphenyl	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
4-Aminobiphenyl	2017-11	ug/L						< 11.8	< 10.9									
4-Aminobiphenyl	2020-06	ug/L									< 11.5							
4-Aminobiphenyl	2020-11	ug/L											< 11.8	< 10.5				
4-Aminobiphenyl	2021-05	ug/L											< 11.2	< 11.9				
4-Aminobiphenyl	2021-09	ug/L													< 10.5			
4-Aminobiphenyl	2022-03	ug/L											< 11.9	< 10.4				
4-Aminobiphenyl	2022-09	ug/L													< 10.4			
4-Aminobiphenyl	2023-06	ug/L						< 11.6										
4-Aminobiphenyl	2023-11	ug/L																
4-Aminobiphenyl	2024-06	ug/L																
4-Aminobiphenyl	2024-07	ug/L																
4-Aminobiphenyl	2025-06	ug/L																
4-Aminobiphenyl	2025-10	ug/L								< 10.9								
4-Bromophenyl Phenyl Ether	2014-10	ug/L							< 11.1									
4-Bromophenyl Phenyl Ether	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
4-Bromophenyl Phenyl Ether	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
4-Bromophenyl Phenyl Ether	2017-11	ug/L						< 11.8	< 10.9									
4-Bromophenyl Phenyl Ether	2020-06	ug/L									< 11.5							
4-Bromophenyl Phenyl Ether	2020-11	ug/L											< 11.8	< 10.5				
4-Bromophenyl Phenyl Ether	2021-05	ug/L											< 11.2	< 11.9				
4-Bromophenyl Phenyl Ether	2021-09	ug/L													< 10.5			
4-Bromophenyl Phenyl Ether	2022-03	ug/L											< 11.9	< 10.4				
4-Bromophenyl Phenyl Ether	2022-09	ug/L													< 10.4			
4-Bromophenyl Phenyl Ether	2023-06	ug/L						< 11.6										
4-Bromophenyl Phenyl Ether	2023-11	ug/L																
4-Bromophenyl Phenyl Ether	2024-06	ug/L																
4-Bromophenyl Phenyl Ether	2024-07	ug/L																
4-Bromophenyl Phenyl Ether	2025-06	ug/L																
4-Bromophenyl Phenyl Ether	2025-10	ug/L								< 10.9								
4-Chloro-3-methylphenol	2014-10	ug/L							< 11.1									
4-Chloro-3-methylphenol	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
4-Chloro-3-methylphenol	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
4-Chloro-3-methylphenol	2017-11	ug/L						< 11.8	< 10.9									
4-Chloro-3-methylphenol	2020-06	ug/L									< 11.5							
4-Chloro-3-methylphenol	2020-11	ug/L											< 11.8	< 10.5				
4-Chloro-3-methylphenol	2021-05	ug/L											< 11.2	< 11.9				
4-Chloro-3-methylphenol	2021-09	ug/L													< 10.5			
4-Chloro-3-methylphenol	2022-03	ug/L											< 11.9	< 10.4				
4-Chloro-3-methylphenol	2022-09	ug/L													< 10.4			

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
4,6-Dinitro-2-methylphenol	2016-11	ug/L									
4,6-Dinitro-2-methylphenol	2017-11	ug/L									
4,6-Dinitro-2-methylphenol	2020-06	ug/L									
4,6-Dinitro-2-methylphenol	2020-11	ug/L									
4,6-Dinitro-2-methylphenol	2021-05	ug/L									
4,6-Dinitro-2-methylphenol	2021-09	ug/L									
4,6-Dinitro-2-methylphenol	2022-03	ug/L									
4,6-Dinitro-2-methylphenol	2022-09	ug/L									
4,6-Dinitro-2-methylphenol	2023-06	ug/L									
4,6-Dinitro-2-methylphenol	2023-11	ug/L		< 10.0							
4,6-Dinitro-2-methylphenol	2024-06	ug/L		< 10.4				< 10.0			
4,6-Dinitro-2-methylphenol	2024-07	ug/L					< 12.5				
4,6-Dinitro-2-methylphenol	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
4,6-Dinitro-2-methylphenol	2025-10	ug/L								< 10.2	
4-Aminobiphenyl	2014-10	ug/L									
4-Aminobiphenyl	2015-09	ug/L									
4-Aminobiphenyl	2016-11	ug/L									
4-Aminobiphenyl	2017-11	ug/L									
4-Aminobiphenyl	2020-06	ug/L									
4-Aminobiphenyl	2020-11	ug/L									
4-Aminobiphenyl	2021-05	ug/L									
4-Aminobiphenyl	2021-09	ug/L									
4-Aminobiphenyl	2022-03	ug/L									
4-Aminobiphenyl	2022-09	ug/L									
4-Aminobiphenyl	2023-06	ug/L									
4-Aminobiphenyl	2023-11	ug/L		< 10.0							
4-Aminobiphenyl	2024-06	ug/L		< 10.4				< 10.0			
4-Aminobiphenyl	2024-07	ug/L					< 12.5				
4-Aminobiphenyl	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
4-Aminobiphenyl	2025-10	ug/L								< 10.2	
4-Bromophenyl Phenyl Ether	2014-10	ug/L									
4-Bromophenyl Phenyl Ether	2015-09	ug/L									
4-Bromophenyl Phenyl Ether	2016-11	ug/L									
4-Bromophenyl Phenyl Ether	2017-11	ug/L									
4-Bromophenyl Phenyl Ether	2020-06	ug/L									
4-Bromophenyl Phenyl Ether	2020-11	ug/L									
4-Bromophenyl Phenyl Ether	2021-05	ug/L									
4-Bromophenyl Phenyl Ether	2021-09	ug/L									
4-Bromophenyl Phenyl Ether	2022-03	ug/L									
4-Bromophenyl Phenyl Ether	2022-09	ug/L									
4-Bromophenyl Phenyl Ether	2023-06	ug/L									
4-Bromophenyl Phenyl Ether	2023-11	ug/L		< 10.0							
4-Bromophenyl Phenyl Ether	2024-06	ug/L		< 10.4				< 10.0			
4-Bromophenyl Phenyl Ether	2024-07	ug/L					< 12.5				
4-Bromophenyl Phenyl Ether	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
4-Bromophenyl Phenyl Ether	2025-10	ug/L								< 10.2	
4-Chloro-3-methylphenol	2014-10	ug/L									
4-Chloro-3-methylphenol	2015-09	ug/L									
4-Chloro-3-methylphenol	2016-11	ug/L									
4-Chloro-3-methylphenol	2017-11	ug/L									
4-Chloro-3-methylphenol	2020-06	ug/L									
4-Chloro-3-methylphenol	2020-11	ug/L									
4-Chloro-3-methylphenol	2021-05	ug/L									
4-Chloro-3-methylphenol	2021-09	ug/L									
4-Chloro-3-methylphenol	2022-03	ug/L									
4-Chloro-3-methylphenol	2022-09	ug/L									

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
4-Chloro-3-methylphenol	2023-06	ug/L						< 11.6										
4-Chloro-3-methylphenol	2023-11	ug/L																
4-Chloro-3-methylphenol	2024-06	ug/L																
4-Chloro-3-methylphenol	2024-07	ug/L																
4-Chloro-3-methylphenol	2025-06	ug/L																
4-Chloro-3-methylphenol	2025-10	ug/L								< 10.9								
4-Chloroaniline	2014-10	ug/L							< 11.1									
4-Chloroaniline	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
4-Chloroaniline	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
4-Chloroaniline	2017-11	ug/L						< 11.8	< 10.9									
4-Chloroaniline	2020-06	ug/L									< 11.5							
4-Chloroaniline	2020-11	ug/L											< 11.8	< 10.5				
4-Chloroaniline	2021-05	ug/L											< 11.2	< 11.9				
4-Chloroaniline	2021-09	ug/L													< 10.5			
4-Chloroaniline	2022-03	ug/L											< 11.9	< 10.4				
4-Chloroaniline	2022-09	ug/L													< 10.4			
4-Chloroaniline	2023-06	ug/L						< 11.6										
4-Chloroaniline	2023-11	ug/L																
4-Chloroaniline	2024-06	ug/L																
4-Chloroaniline	2024-07	ug/L																
4-Chloroaniline	2025-06	ug/L																
4-Chloroaniline	2025-10	ug/L								< 10.9								
4-Chlorophenyl Phenyl Ether	2014-10	ug/L							< 11.1									
4-Chlorophenyl Phenyl Ether	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
4-Chlorophenyl Phenyl Ether	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
4-Chlorophenyl Phenyl Ether	2017-11	ug/L						< 11.8	< 10.9									
4-Chlorophenyl Phenyl Ether	2020-06	ug/L									< 11.5							
4-Chlorophenyl Phenyl Ether	2020-11	ug/L											< 11.8	< 10.5				
4-Chlorophenyl Phenyl Ether	2021-05	ug/L											< 11.2	< 11.9				
4-Chlorophenyl Phenyl Ether	2021-09	ug/L													< 10.5			
4-Chlorophenyl Phenyl Ether	2022-03	ug/L											< 11.9	< 10.4				
4-Chlorophenyl Phenyl Ether	2022-09	ug/L													< 10.4			
4-Chlorophenyl Phenyl Ether	2023-06	ug/L						< 11.6										
4-Chlorophenyl Phenyl Ether	2023-11	ug/L																
4-Chlorophenyl Phenyl Ether	2024-06	ug/L																
4-Chlorophenyl Phenyl Ether	2024-07	ug/L																
4-Chlorophenyl Phenyl Ether	2025-06	ug/L																
4-Chlorophenyl Phenyl Ether	2025-10	ug/L								< 10.9								
4-Methyl-2-pentanone	2014-10	ug/L							< 10.0	< 10.0								
4-Methyl-2-pentanone	2014-11	ug/L			< 10.0	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0						
4-Methyl-2-pentanone	2015-05	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
4-Methyl-2-pentanone	2015-09	ug/L			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
4-Methyl-2-pentanone	2016-03	ug/L						< 10.0	< 10.0									
4-Methyl-2-pentanone	2016-04	ug/L	< 10.0		< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0						
4-Methyl-2-pentanone	2016-11	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0						
4-Methyl-2-pentanone	2017-05	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
4-Methyl-2-pentanone	2017-11	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0						
4-Methyl-2-pentanone	2018-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
4-Methyl-2-pentanone	2018-08	ug/L		< 10.0														
4-Methyl-2-pentanone	2018-10	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
4-Methyl-2-pentanone	2019-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
4-Methyl-2-pentanone	2019-08	ug/L		< 10.0														
4-Methyl-2-pentanone	2019-10	ug/L						< 10.0	< 10.0									
4-Methyl-2-pentanone	2019-11	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
4-Methyl-2-pentanone	2020-02	ug/L											< 10.0	< 10.0	< 10.0	< 10.0		
4-Methyl-2-pentanone	2020-06	ug/L			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0			

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
4-Chloro-3-methylphenol	2023-06	ug/L									
4-Chloro-3-methylphenol	2023-11	ug/L		< 10.0							
4-Chloro-3-methylphenol	2024-06	ug/L		< 10.4				< 10.0			
4-Chloro-3-methylphenol	2024-07	ug/L					< 12.5				
4-Chloro-3-methylphenol	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
4-Chloro-3-methylphenol	2025-10	ug/L								< 10.2	
4-Chloroaniline	2014-10	ug/L									
4-Chloroaniline	2015-09	ug/L									
4-Chloroaniline	2016-11	ug/L									
4-Chloroaniline	2017-11	ug/L									
4-Chloroaniline	2020-06	ug/L									
4-Chloroaniline	2020-11	ug/L									
4-Chloroaniline	2021-05	ug/L									
4-Chloroaniline	2021-09	ug/L									
4-Chloroaniline	2022-03	ug/L									
4-Chloroaniline	2022-09	ug/L									
4-Chloroaniline	2023-06	ug/L									
4-Chloroaniline	2023-11	ug/L		< 10.0							
4-Chloroaniline	2024-06	ug/L		< 10.4				< 10.0			
4-Chloroaniline	2024-07	ug/L					< 12.5				
4-Chloroaniline	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
4-Chloroaniline	2025-10	ug/L								< 10.2	
4-Chlorophenyl Phenyl Ether	2014-10	ug/L									
4-Chlorophenyl Phenyl Ether	2015-09	ug/L									
4-Chlorophenyl Phenyl Ether	2016-11	ug/L									
4-Chlorophenyl Phenyl Ether	2017-11	ug/L									
4-Chlorophenyl Phenyl Ether	2020-06	ug/L									
4-Chlorophenyl Phenyl Ether	2020-11	ug/L									
4-Chlorophenyl Phenyl Ether	2021-05	ug/L									
4-Chlorophenyl Phenyl Ether	2021-09	ug/L									
4-Chlorophenyl Phenyl Ether	2022-03	ug/L									
4-Chlorophenyl Phenyl Ether	2022-09	ug/L									
4-Chlorophenyl Phenyl Ether	2023-06	ug/L									
4-Chlorophenyl Phenyl Ether	2023-11	ug/L		< 10.0							
4-Chlorophenyl Phenyl Ether	2024-06	ug/L		< 10.4				< 10.0			
4-Chlorophenyl Phenyl Ether	2024-07	ug/L					< 12.5				
4-Chlorophenyl Phenyl Ether	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
4-Chlorophenyl Phenyl Ether	2025-10	ug/L								< 10.2	
4-Methyl-2-pentanone	2014-10	ug/L									
4-Methyl-2-pentanone	2014-11	ug/L									
4-Methyl-2-pentanone	2015-05	ug/L									
4-Methyl-2-pentanone	2015-09	ug/L									
4-Methyl-2-pentanone	2016-03	ug/L									
4-Methyl-2-pentanone	2016-04	ug/L									
4-Methyl-2-pentanone	2016-11	ug/L									
4-Methyl-2-pentanone	2017-05	ug/L									
4-Methyl-2-pentanone	2017-11	ug/L									
4-Methyl-2-pentanone	2018-06	ug/L									
4-Methyl-2-pentanone	2018-08	ug/L									
4-Methyl-2-pentanone	2018-10	ug/L									
4-Methyl-2-pentanone	2019-06	ug/L									< 10.0
4-Methyl-2-pentanone	2019-08	ug/L									< 10.0
4-Methyl-2-pentanone	2019-10	ug/L									
4-Methyl-2-pentanone	2019-11	ug/L									< 10.0
4-Methyl-2-pentanone	2020-02	ug/L									< 10.0
4-Methyl-2-pentanone	2020-06	ug/L									< 10.0

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
4-Methyl-2-pentanone	2020-07	ug/L	< 10.0	< 10.0												< 10.0		
4-Methyl-2-pentanone	2020-08	ug/L											< 10.0	< 10.0	< 10.0	< 10.0		
4-Methyl-2-pentanone	2020-11	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
4-Methyl-2-pentanone	2021-05	ug/L			< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0				
4-Methyl-2-pentanone	2021-06	ug/L	< 10.0				< 10.0								< 10.0	< 10.0		
4-Methyl-2-pentanone	2021-08	ug/L													< 10.0			
4-Methyl-2-pentanone	2021-09	ug/L	< 10.0	< 100	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2021-12	ug/L															< 10.0	< 10.0
4-Methyl-2-pentanone	2022-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2022-06	ug/L															< 10.0	< 10.0
4-Methyl-2-pentanone	2022-08	ug/L			< 10.0					< 10.0	< 10.0	< 10.0					< 10.0	< 10.0
4-Methyl-2-pentanone	2022-09	ug/L	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0				< 10.0	< 10.0	< 10.0	< 10.0		
4-Methyl-2-pentanone	2022-12	ug/L															< 10.0	< 10.0
4-Methyl-2-pentanone	2023-06	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2023-08	ug/L																
4-Methyl-2-pentanone	2023-11	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0		< 10.0		< 10.0
4-Methyl-2-pentanone	2024-01	ug/L																
4-Methyl-2-pentanone	2024-06	ug/L			< 10.0			< 10.0	< 10.0			< 10.0	< 10.0		< 10.0		< 10.0	< 10.0
4-Methyl-2-pentanone	2024-07	ug/L	< 10.0			< 10.0 J	< 10.0 J							< 10.0 J		< 10.0		
4-Methyl-2-pentanone	2024-09	ug/L																
4-Methyl-2-pentanone	2024-11	ug/L				< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
4-Methyl-2-pentanone	2024-12	ug/L	< 10.0		< 10.0		< 10.0						< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2025-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2025-10	ug/L			< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10 J	< 10	< 10	< 10	< 10	< 10
4-Methylphenol	2014-10	ug/L							< 11.1									
4-Methylphenol	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
4-Methylphenol	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
4-Methylphenol	2017-11	ug/L						< 11.8	< 10.9									
4-Methylphenol	2020-06	ug/L									< 11.5							
4-Methylphenol	2020-11	ug/L											< 11.8	< 10.5				
4-Methylphenol	2021-05	ug/L											< 11.2	< 11.9				
4-Methylphenol	2021-09	ug/L													< 10.5			
4-Methylphenol	2022-03	ug/L											< 11.9	< 10.4				
4-Methylphenol	2022-09	ug/L													< 10.4			
4-Methylphenol	2023-06	ug/L						< 11.6										
4-Methylphenol	2023-11	ug/L																
4-Methylphenol	2024-06	ug/L																
4-Methylphenol	2024-07	ug/L																
4-Methylphenol	2025-06	ug/L																
4-Nitroaniline	2014-10	ug/L							< 11.1									
4-Nitroaniline	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
4-Nitroaniline	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
4-Nitroaniline	2017-11	ug/L						< 11.8	< 10.9									
4-Nitroaniline	2020-06	ug/L									< 11.5							
4-Nitroaniline	2020-11	ug/L											< 11.8	< 10.5				
4-Nitroaniline	2021-05	ug/L											< 11.2	< 11.9				
4-Nitroaniline	2021-09	ug/L													< 10.5			
4-Nitroaniline	2022-03	ug/L											< 11.9	< 10.4				
4-Nitroaniline	2022-09	ug/L													< 10.4			
4-Nitroaniline	2023-06	ug/L						< 11.6										
4-Nitroaniline	2023-11	ug/L																
4-Nitroaniline	2024-06	ug/L																
4-Nitroaniline	2024-07	ug/L																
4-Nitroaniline	2025-06	ug/L																
4-Nitroaniline	2025-10	ug/L								< 10.9								
4-Nitrophenol	2014-10	ug/L							< 11.1									

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
4-Methyl-2-pentanone	2020-07	ug/L									
4-Methyl-2-pentanone	2020-08	ug/L									
4-Methyl-2-pentanone	2020-11	ug/L									< 10.0
4-Methyl-2-pentanone	2021-05	ug/L									< 10.0
4-Methyl-2-pentanone	2021-06	ug/L									
4-Methyl-2-pentanone	2021-08	ug/L									
4-Methyl-2-pentanone	2021-09	ug/L	< 10.0	< 10.0							< 10.0
4-Methyl-2-pentanone	2021-12	ug/L	< 10.0	< 10.0							
4-Methyl-2-pentanone	2022-03	ug/L	< 10.0	< 10.0							
4-Methyl-2-pentanone	2022-06	ug/L	< 10.0	< 10.0							
4-Methyl-2-pentanone	2022-08	ug/L	< 10.0	< 10.0		< 10.0					
4-Methyl-2-pentanone	2022-09	ug/L			< 10.0		< 10.0	< 10.0			< 10.0
4-Methyl-2-pentanone	2022-12	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0			
4-Methyl-2-pentanone	2023-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0			< 10.0
4-Methyl-2-pentanone	2023-08	ug/L			< 10.0	< 10.0	< 10.0	< 10.0			
4-Methyl-2-pentanone	2023-11	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	
4-Methyl-2-pentanone	2024-01	ug/L							< 10.0	< 10.0	
4-Methyl-2-pentanone	2024-06	ug/L	< 10.0	< 10.0			< 10.0	< 10.0		< 10.0	< 10.0
4-Methyl-2-pentanone	2024-07	ug/L			< 10.0 J				< 10.0 J		
4-Methyl-2-pentanone	2024-09	ug/L							< 10.0	< 10.0	
4-Methyl-2-pentanone	2024-11	ug/L							< 10.0		
4-Methyl-2-pentanone	2024-12	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0
4-Methyl-2-pentanone	2025-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2025-10	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
4-Methylphenol	2014-10	ug/L									
4-Methylphenol	2015-09	ug/L									
4-Methylphenol	2016-11	ug/L									
4-Methylphenol	2017-11	ug/L									
4-Methylphenol	2020-06	ug/L									
4-Methylphenol	2020-11	ug/L									
4-Methylphenol	2021-05	ug/L									
4-Methylphenol	2021-09	ug/L									
4-Methylphenol	2022-03	ug/L									
4-Methylphenol	2022-09	ug/L									
4-Methylphenol	2023-06	ug/L									
4-Methylphenol	2023-11	ug/L		< 10.0							
4-Methylphenol	2024-06	ug/L		< 10.4				< 10.0			
4-Methylphenol	2024-07	ug/L					< 12.5				
4-Methylphenol	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
4-Nitroaniline	2014-10	ug/L									
4-Nitroaniline	2015-09	ug/L									
4-Nitroaniline	2016-11	ug/L									
4-Nitroaniline	2017-11	ug/L									
4-Nitroaniline	2020-06	ug/L									
4-Nitroaniline	2020-11	ug/L									
4-Nitroaniline	2021-05	ug/L									
4-Nitroaniline	2021-09	ug/L									
4-Nitroaniline	2022-03	ug/L									
4-Nitroaniline	2022-09	ug/L									
4-Nitroaniline	2023-06	ug/L									
4-Nitroaniline	2023-11	ug/L		< 10.0							
4-Nitroaniline	2024-06	ug/L		< 10.4				< 10.0			
4-Nitroaniline	2024-07	ug/L					< 12.5				
4-Nitroaniline	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
4-Nitroaniline	2025-10	ug/L								< 10.2	
4-Nitrophenol	2014-10	ug/L									

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
4-Nitrophenol	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
4-Nitrophenol	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
4-Nitrophenol	2017-11	ug/L						< 11.8	< 10.9									
4-Nitrophenol	2020-06	ug/L									< 11.5							
4-Nitrophenol	2020-11	ug/L											< 11.8	< 10.5				
4-Nitrophenol	2021-05	ug/L											< 11.2	< 11.9				
4-Nitrophenol	2021-09	ug/L													< 10.5			
4-Nitrophenol	2022-03	ug/L											< 11.9	< 10.4				
4-Nitrophenol	2022-09	ug/L													< 10.4			
4-Nitrophenol	2023-06	ug/L						< 11.6										
4-Nitrophenol	2023-11	ug/L																
4-Nitrophenol	2024-06	ug/L																
4-Nitrophenol	2024-07	ug/L																
4-Nitrophenol	2025-06	ug/L																
4-Nitrophenol	2025-10	ug/L								< 10.9								
5-Nitro-o-toluidine	2014-10	ug/L							< 11.1									
5-Nitro-o-toluidine	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
5-Nitro-o-toluidine	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
5-Nitro-o-toluidine	2017-11	ug/L						< 11.8	< 10.9									
5-Nitro-o-toluidine	2020-06	ug/L									< 11.5							
5-Nitro-o-toluidine	2020-11	ug/L											< 11.8	< 10.5				
5-Nitro-o-toluidine	2021-05	ug/L											< 11.2	< 11.9				
5-Nitro-o-toluidine	2021-09	ug/L													< 10.5			
5-Nitro-o-toluidine	2022-03	ug/L											< 11.9	< 10.4				
5-Nitro-o-toluidine	2022-09	ug/L													< 10.4			
5-Nitro-o-toluidine	2023-06	ug/L						< 11.6										
5-Nitro-o-toluidine	2023-11	ug/L																
5-Nitro-o-toluidine	2024-06	ug/L																
5-Nitro-o-toluidine	2024-07	ug/L																
5-Nitro-o-toluidine	2025-06	ug/L																
5-Nitro-o-toluidine	2025-10	ug/L								< 10.9								
7,12-Dimethylbenz(a)anthracene	2014-10	ug/L							< 11.1									
7,12-Dimethylbenz(a)anthracene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
7,12-Dimethylbenz(a)anthracene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
7,12-Dimethylbenz(a)anthracene	2017-11	ug/L						< 11.8	< 10.9									
7,12-Dimethylbenz(a)anthracene	2020-06	ug/L									< 11.5							
7,12-Dimethylbenz(a)anthracene	2020-11	ug/L											< 11.8	< 10.5				
7,12-Dimethylbenz(a)anthracene	2021-05	ug/L											< 11.2	< 11.9				
7,12-Dimethylbenz(a)anthracene	2021-09	ug/L													< 10.5			
7,12-Dimethylbenz(a)anthracene	2022-03	ug/L											< 11.9	< 10.4				
7,12-Dimethylbenz(a)anthracene	2022-09	ug/L													< 10.4			
7,12-Dimethylbenz(a)anthracene	2023-06	ug/L						< 11.6										
7,12-Dimethylbenz(a)anthracene	2023-11	ug/L																
7,12-Dimethylbenz(a)anthracene	2024-06	ug/L																
7,12-Dimethylbenz(a)anthracene	2024-07	ug/L																
7,12-Dimethylbenz(a)anthracene	2025-06	ug/L																
7,12-Dimethylbenz(a)anthracene	2025-10	ug/L								< 10.9								
Acenaphthene	2014-10	ug/L							< 11.1									
Acenaphthene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Acenaphthene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Acenaphthene	2017-11	ug/L						< 11.8	< 10.9									
Acenaphthene	2020-06	ug/L									< 11.5							
Acenaphthene	2020-11	ug/L											< 11.8	< 10.5				
Acenaphthene	2021-05	ug/L											< 11.2	< 11.9				
Acenaphthene	2021-09	ug/L													< 10.5			
Acenaphthene	2022-03	ug/L											< 11.9	< 10.4				

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
4-Nitrophenol	2015-09	ug/L									
4-Nitrophenol	2016-11	ug/L									
4-Nitrophenol	2017-11	ug/L									
4-Nitrophenol	2020-06	ug/L									
4-Nitrophenol	2020-11	ug/L									
4-Nitrophenol	2021-05	ug/L									
4-Nitrophenol	2021-09	ug/L									
4-Nitrophenol	2022-03	ug/L									
4-Nitrophenol	2022-09	ug/L									
4-Nitrophenol	2023-06	ug/L									
4-Nitrophenol	2023-11	ug/L		< 10.0							
4-Nitrophenol	2024-06	ug/L		< 10.4				< 10.0			
4-Nitrophenol	2024-07	ug/L					< 12.5				
4-Nitrophenol	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
4-Nitrophenol	2025-10	ug/L								< 10.2	
5-Nitro-o-toluidine	2014-10	ug/L									
5-Nitro-o-toluidine	2015-09	ug/L									
5-Nitro-o-toluidine	2016-11	ug/L									
5-Nitro-o-toluidine	2017-11	ug/L									
5-Nitro-o-toluidine	2020-06	ug/L									
5-Nitro-o-toluidine	2020-11	ug/L									
5-Nitro-o-toluidine	2021-05	ug/L									
5-Nitro-o-toluidine	2021-09	ug/L									
5-Nitro-o-toluidine	2022-03	ug/L									
5-Nitro-o-toluidine	2022-09	ug/L									
5-Nitro-o-toluidine	2023-06	ug/L									
5-Nitro-o-toluidine	2023-11	ug/L		< 10.0							
5-Nitro-o-toluidine	2024-06	ug/L		< 10.4				< 10.0			
5-Nitro-o-toluidine	2024-07	ug/L					< 12.5				
5-Nitro-o-toluidine	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
5-Nitro-o-toluidine	2025-10	ug/L								< 10.2	
7,12-Dimethylbenz(a)anthracene	2014-10	ug/L									
7,12-Dimethylbenz(a)anthracene	2015-09	ug/L									
7,12-Dimethylbenz(a)anthracene	2016-11	ug/L									
7,12-Dimethylbenz(a)anthracene	2017-11	ug/L									
7,12-Dimethylbenz(a)anthracene	2020-06	ug/L									
7,12-Dimethylbenz(a)anthracene	2020-11	ug/L									
7,12-Dimethylbenz(a)anthracene	2021-05	ug/L									
7,12-Dimethylbenz(a)anthracene	2021-09	ug/L									
7,12-Dimethylbenz(a)anthracene	2022-03	ug/L									
7,12-Dimethylbenz(a)anthracene	2022-09	ug/L									
7,12-Dimethylbenz(a)anthracene	2023-06	ug/L									
7,12-Dimethylbenz(a)anthracene	2023-11	ug/L		< 10.0							
7,12-Dimethylbenz(a)anthracene	2024-06	ug/L		< 10.4				< 10.0			
7,12-Dimethylbenz(a)anthracene	2024-07	ug/L					< 12.5				
7,12-Dimethylbenz(a)anthracene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
7,12-Dimethylbenz(a)anthracene	2025-10	ug/L								< 10.2	
Acenaphthene	2014-10	ug/L									
Acenaphthene	2015-09	ug/L									
Acenaphthene	2016-11	ug/L									
Acenaphthene	2017-11	ug/L									
Acenaphthene	2020-06	ug/L									
Acenaphthene	2020-11	ug/L									
Acenaphthene	2021-05	ug/L									
Acenaphthene	2021-09	ug/L									
Acenaphthene	2022-03	ug/L									

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Acenaphthene	2022-09	ug/L													< 10.4			
Acenaphthene	2023-06	ug/L						< 11.6										
Acenaphthene	2023-11	ug/L																
Acenaphthene	2024-06	ug/L																
Acenaphthene	2024-07	ug/L																
Acenaphthene	2025-06	ug/L																
Acenaphthene	2025-10	ug/L								< 10.9								
Acenaphthylene	2014-10	ug/L							< 11.1									
Acenaphthylene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Acenaphthylene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Acenaphthylene	2017-11	ug/L						< 11.8	< 10.9									
Acenaphthylene	2020-06	ug/L									< 11.5							
Acenaphthylene	2020-11	ug/L											< 11.8	< 10.5				
Acenaphthylene	2021-05	ug/L											< 11.2	< 11.9				
Acenaphthylene	2021-09	ug/L													< 10.5			
Acenaphthylene	2022-03	ug/L											< 11.9	< 10.4				
Acenaphthylene	2022-09	ug/L													< 10.4			
Acenaphthylene	2023-06	ug/L						< 11.6										
Acenaphthylene	2023-11	ug/L																
Acenaphthylene	2024-06	ug/L																
Acenaphthylene	2024-07	ug/L																
Acenaphthylene	2025-06	ug/L																
Acenaphthylene	2025-10	ug/L								< 10.9								
Acetone	2014-10	ug/L							< 10.0	< 10.0								
Acetone	2014-11	ug/L			< 10.0	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0						
Acetone	2015-05	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
Acetone	2015-09	ug/L			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Acetone	2016-03	ug/L						< 10.0	< 10.0									
Acetone	2016-04	ug/L	< 10.0		< 10.0	< 10.0	< 10.0			**2.04 J**	**1.94 J**	< 10.0						
Acetone	2016-11	ug/L	< 10.0		< 10.0	**2.01 J**	**2.41 J**	< 10.0	< 10.0	< 10.0		< 10.0						
Acetone	2017-05	ug/L	< 10.0		< 10.0	**4.35 J**	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
Acetone	2017-11	ug/L	**1.96 J**		**1.98 J**	< 10.0	< 10.0	< 10.0	< 10.0	**2.2 J**		**2.39 J**						
Acetone	2018-06	ug/L	< 10.0	**8.43 J**	**3.88 J**	**4.19 J**	**3.16 J**	**3.88 J**	< 10.0	< 10.0	< 10.0	< 10.0						
Acetone	2018-08	ug/L		**7.35 J**														
Acetone	2018-10	ug/L	< 10.0	**3.17 J**	< 10.0	< 10.0	< 10.0	**4.28 J**	< 10.0	< 10.0	< 10.0	< 10.0						
Acetone	2019-06	ug/L	**4.25 J**	**3.8 J**	< 10.0	< 10.0	< 10.0	< 10.0	**3.97 J**	< 10.0	**3.49 J**	< 10.0						
Acetone	2019-08	ug/L		< 10.0														
Acetone	2019-10	ug/L						< 10.0	< 10.0									
Acetone	2019-11	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Acetone	2020-02	ug/L											< 10.0	< 10.0	**3.69 J**	< 10.0		
Acetone	2020-06	ug/L			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	**11.8**	< 10.0			
Acetone	2020-07	ug/L	< 10.0	< 10.0												< 10.0		
Acetone	2020-08	ug/L											< 10.0	< 10.0	< 10.0	< 10.0		
Acetone	2020-11	ug/L	< 10.0	**13.2**	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	**3.74 J**	< 10.0	< 10.0		
Acetone	2021-05	ug/L			< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0				
Acetone	2021-06	ug/L	< 10.0				< 10.0								< 10.0	< 10.0		
Acetone	2021-08	ug/L													< 10.0			
Acetone	2021-09	ug/L	< 10.0	**90 J**	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	**4.88 J**	< 10.0	< 10.0	< 10.0	< 10.0
Acetone	2021-12	ug/L															< 10.0	< 10.0
Acetone	2022-03	ug/L	< 10.0	**47**	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acetone	2022-06	ug/L															< 10.0	< 10.0
Acetone	2022-08	ug/L			< 10.0					< 10.0	< 10.0	< 10.0					< 10.0	< 10.0
Acetone	2022-09	ug/L	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0				< 10.0	**9.48 J**	< 10.0	< 10.0		
Acetone	2022-12	ug/L															< 10.0	< 10.0
Acetone	2023-06	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acetone	2023-08	ug/L																

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Acenaphthene	2022-09	ug/L									
Acenaphthene	2023-06	ug/L									
Acenaphthene	2023-11	ug/L		< 10.0							
Acenaphthene	2024-06	ug/L		< 10.4				< 10.0			
Acenaphthene	2024-07	ug/L					< 12.5				
Acenaphthene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Acenaphthene	2025-10	ug/L								< 10.2	
Acenaphthylene	2014-10	ug/L									
Acenaphthylene	2015-09	ug/L									
Acenaphthylene	2016-11	ug/L									
Acenaphthylene	2017-11	ug/L									
Acenaphthylene	2020-06	ug/L									
Acenaphthylene	2020-11	ug/L									
Acenaphthylene	2021-05	ug/L									
Acenaphthylene	2021-09	ug/L									
Acenaphthylene	2022-03	ug/L									
Acenaphthylene	2022-09	ug/L									
Acenaphthylene	2023-06	ug/L									
Acenaphthylene	2023-11	ug/L		< 10.0							
Acenaphthylene	2024-06	ug/L		< 10.4				< 10.0			
Acenaphthylene	2024-07	ug/L					< 12.5				
Acenaphthylene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Acenaphthylene	2025-10	ug/L								< 10.2	
Acetone	2014-10	ug/L									
Acetone	2014-11	ug/L									
Acetone	2015-05	ug/L									
Acetone	2015-09	ug/L									
Acetone	2016-03	ug/L									
Acetone	2016-04	ug/L									
Acetone	2016-11	ug/L									
Acetone	2017-05	ug/L									
Acetone	2017-11	ug/L									
Acetone	2018-06	ug/L									
Acetone	2018-08	ug/L									
Acetone	2018-10	ug/L									
Acetone	2019-06	ug/L									< 10.0
Acetone	2019-08	ug/L									< 10.0
Acetone	2019-10	ug/L									
Acetone	2019-11	ug/L									< 10.0
Acetone	2020-02	ug/L									< 10.0
Acetone	2020-06	ug/L									< 10.0
Acetone	2020-07	ug/L									
Acetone	2020-08	ug/L									
Acetone	2020-11	ug/L									< 10.0
Acetone	2021-05	ug/L									< 10.0
Acetone	2021-06	ug/L									
Acetone	2021-08	ug/L									
Acetone	2021-09	ug/L	< 10.0	< 10.0							< 10.0
Acetone	2021-12	ug/L	< 10.0	< 10.0							
Acetone	2022-03	ug/L	< 10.0	< 10.0							
Acetone	2022-06	ug/L	< 10.0	< 10.0							
Acetone	2022-08	ug/L	< 10.0	< 10.0		**3.14 J**					
Acetone	2022-09	ug/L			< 10.0		< 10.0	< 10.0			< 10.0
Acetone	2022-12	ug/L	< 10.0	< 10.0	< 10.0	**3.47 J**	< 10.0	< 10.0			
Acetone	2023-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	**3.17 J**			< 10.0
Acetone	2023-08	ug/L			< 10.0	< 10.0	< 10.0	< 10.0			

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1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Acetone	2023-11	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0		< 10.0		< 10.0
Acetone	2024-01	ug/L																
Acetone	2024-06	ug/L			< 10.0			< 10.0	< 10.0			< 10.0	< 10.0		**37.7**		**18.1**	< 10.0
Acetone	2024-07	ug/L	< 10.0			< 10.0 J	< 10.0 J							< 10.0 J		< 10.0		
Acetone	2024-08	ug/L													< 10.0			
Acetone	2024-09	ug/L																
Acetone	2024-11	ug/L				< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
Acetone	2024-12	ug/L	< 10.0		< 10.0		< 10.0						< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acetone	2025-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	**240**	< 10.0	< 10.0	< 10.0
Acetone	2025-10	ug/L			< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10 J	< 10	< 10	< 10	< 10	< 10
Acetonitrile	2014-10	mg/L							< 10.0									
Acetonitrile	2015-09	mg/L			< 10.0			< 10.0										
Acetonitrile	2015-09	ug/L							< 10000									
Acetonitrile	2016-11	mg/L			**0.166 J**			< 20.0	< 20.0									
Acetonitrile	2017-11	mg/L						< 10.0	< 10.0									
Acetonitrile	2020-06	mg/L									< 10.0							
Acetonitrile	2020-11	mg/L											< 10.0	< 10.0				
Acetonitrile	2021-05	mg/L											< 10.0	< 10.0				
Acetonitrile	2021-09	mg/L													< 10.0			
Acetonitrile	2022-03	mg/L											< 10.0	< 10.0				
Acetonitrile	2022-09	ug/L													< 10000			
Acetonitrile	2023-06	ug/L						< 10000										
Acetonitrile	2023-11	mg/L																
Acetonitrile	2024-06	ug/L																
Acetonitrile	2024-07	ug/L																
Acetonitrile	2025-06	ug/L																
Acetonitrile	2025-10	ug/L								< 10000								
Acetophenone	2014-10	ug/L							< 11.1									
Acetophenone	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Acetophenone	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Acetophenone	2017-11	ug/L						< 11.8	< 10.9									
Acetophenone	2020-06	ug/L									< 11.5							
Acetophenone	2020-11	ug/L											< 11.8	< 10.5				
Acetophenone	2021-05	ug/L											< 11.2	< 11.9				
Acetophenone	2021-09	ug/L													< 10.5			
Acetophenone	2022-03	ug/L											< 11.9	< 10.4				
Acetophenone	2022-09	ug/L													< 10.4			
Acetophenone	2023-06	ug/L						< 11.6										
Acetophenone	2023-11	ug/L																
Acetophenone	2024-06	ug/L																
Acetophenone	2024-07	ug/L																
Acetophenone	2025-06	ug/L																
Acetophenone	2025-10	ug/L								< 10.9								
Acrolein	2014-10	ug/L							< 10.0									
Acrolein	2015-09	ug/L			< 10.0			< 10.0	< 10.0									
Acrolein	2016-11	ug/L			< 10.0			< 10.0	< 10.0									
Acrolein	2017-11	ug/L						< 10.0	< 10.0									
Acrolein	2020-06	ug/L									< 10.0							
Acrolein	2020-11	ug/L											< 10.0	< 10.0				
Acrolein	2021-05	ug/L											< 10.0	< 10.0				
Acrolein	2021-09	ug/L													< 10.0			
Acrolein	2022-03	ug/L											< 10.0	< 10.0				
Acrolein	2022-09	ug/L													< 10.0			
Acrolein	2023-06	ug/L						< 10.0										
Acrolein	2023-11	ug/L																
Acrolein	2024-06	ug/L																

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Acetone	2023-11	ug/L	< 10.0	**3.83 J**	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	
Acetone	2024-01	ug/L							< 10.0	< 10.0	
Acetone	2024-06	ug/L	< 10.0	< 10.0			< 10.0	< 10.0		**3.37 J**	< 10.0
Acetone	2024-07	ug/L			< 10.0 J				< 10.0 J		
Acetone	2024-08	ug/L									
Acetone	2024-09	ug/L							< 10.0	< 10.0	
Acetone	2024-11	ug/L							< 10.0		
Acetone	2024-12	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0
Acetone	2025-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Acetone	2025-10	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
Acetonitrile	2014-10	mg/L									
Acetonitrile	2015-09	mg/L									
Acetonitrile	2015-09	ug/L									
Acetonitrile	2016-11	mg/L									
Acetonitrile	2017-11	mg/L									
Acetonitrile	2020-06	mg/L									
Acetonitrile	2020-11	mg/L									
Acetonitrile	2021-05	mg/L									
Acetonitrile	2021-09	mg/L									
Acetonitrile	2022-03	mg/L									
Acetonitrile	2022-09	ug/L									
Acetonitrile	2023-06	ug/L									
Acetonitrile	2023-11	mg/L		< 10.0							
Acetonitrile	2024-06	ug/L		< 10000				< 10000			
Acetonitrile	2024-07	ug/L					< 10000				
Acetonitrile	2025-06	ug/L				< 10000	< 10000	< 10000			
Acetonitrile	2025-10	ug/L								< 10000	
Acetophenone	2014-10	ug/L									
Acetophenone	2015-09	ug/L									
Acetophenone	2016-11	ug/L									
Acetophenone	2017-11	ug/L									
Acetophenone	2020-06	ug/L									
Acetophenone	2020-11	ug/L									
Acetophenone	2021-05	ug/L									
Acetophenone	2021-09	ug/L									
Acetophenone	2022-03	ug/L									
Acetophenone	2022-09	ug/L									
Acetophenone	2023-06	ug/L									
Acetophenone	2023-11	ug/L		< 10.0							
Acetophenone	2024-06	ug/L		< 10.4				< 10.0			
Acetophenone	2024-07	ug/L					< 12.5				
Acetophenone	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Acetophenone	2025-10	ug/L								< 10.2	
Acrolein	2014-10	ug/L									
Acrolein	2015-09	ug/L									
Acrolein	2016-11	ug/L									
Acrolein	2017-11	ug/L									
Acrolein	2020-06	ug/L									
Acrolein	2020-11	ug/L									
Acrolein	2021-05	ug/L									
Acrolein	2021-09	ug/L									
Acrolein	2022-03	ug/L									
Acrolein	2022-09	ug/L									
Acrolein	2023-06	ug/L									
Acrolein	2023-11	ug/L		< 10.0							
Acrolein	2024-06	ug/L		< 10.0				< 10.0			

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Acrolein	2025-06	ug/L																
Acrolein	2025-10	ug/L								< 10								
Acrylonitrile	2014-10	ug/L							< 10.0	< 10.0								
Acrylonitrile	2014-11	ug/L			< 10.0	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0						
Acrylonitrile	2015-05	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
Acrylonitrile	2015-09	ug/L			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Acrylonitrile	2016-03	ug/L						< 10.0	< 10.0									
Acrylonitrile	2016-04	ug/L	< 10.0		< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0						
Acrylonitrile	2016-11	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0						
Acrylonitrile	2017-05	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Acrylonitrile	2017-11	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00						
Acrylonitrile	2018-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Acrylonitrile	2018-08	ug/L		< 5.00														
Acrylonitrile	2018-10	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Acrylonitrile	2019-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Acrylonitrile	2019-08	ug/L		< 5.00														
Acrylonitrile	2019-10	ug/L						< 5.00	< 5.00									
Acrylonitrile	2019-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 10.0			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 10.0	< 10.0		
Acrylonitrile	2020-02	ug/L											< 5.00	< 5.00	< 5.00	< 5.00		
Acrylonitrile	2020-06	ug/L			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			
Acrylonitrile	2020-07	ug/L	< 5.00	< 5.00												< 5.00		
Acrylonitrile	2020-08	ug/L											< 5.00	< 5.00	< 5.00	< 5.00		
Acrylonitrile	2020-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Acrylonitrile	2021-05	ug/L			< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00				
Acrylonitrile	2021-06	ug/L	< 5.00				< 5.00								< 5.00	< 5.00		
Acrylonitrile	2021-08	ug/L													< 5.00			
Acrylonitrile	2021-09	ug/L	< 5.00	< 50.0	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Acrylonitrile	2021-12	ug/L															< 5.00	< 5.00
Acrylonitrile	2022-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Acrylonitrile	2022-06	ug/L															< 5.00	< 5.00
Acrylonitrile	2022-08	ug/L			< 5.00					< 5.00	< 5.00	< 5.00					< 5.00	< 5.00
Acrylonitrile	2022-09	ug/L	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00				< 5.00	< 5.00	< 5.00	< 5.00		
Acrylonitrile	2022-12	ug/L															< 5.00	< 5.00
Acrylonitrile	2023-06	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Acrylonitrile	2023-08	ug/L																
Acrylonitrile	2023-11	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00		< 5.00		< 5.00
Acrylonitrile	2024-01	ug/L																
Acrylonitrile	2024-06	ug/L			< 5.00			< 5.00	< 5.00			< 5.00	< 5.00		< 5.00		< 5.00	< 5.00
Acrylonitrile	2024-07	ug/L	< 5.00			< 5.00 J	< 5.00 J							< 5.00 J		< 5.00		
Acrylonitrile	2024-09	ug/L																
Acrylonitrile	2024-11	ug/L				< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Acrylonitrile	2024-12	ug/L	< 5.00		< 5.00		< 5.00						< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Acrylonitrile	2025-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Acrylonitrile	2025-10	ug/L			< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5 J	< 5	< 5	< 5	< 5	< 5
Aldrin	2014-10	ug/L							< 0.0320									
Aldrin	2015-09	ug/L			< 0.0364			< 0.0327	< 0.0356									
Aldrin	2016-11	ug/L			< 0.0352			< 0.0352	< 0.0364									
Aldrin	2017-11	ug/L						< 0.0348	< 0.0344									
Aldrin	2020-06	ug/L									< 0.0337							
Aldrin	2020-11	ug/L											< 0.0386	**0.00639 J**				
Aldrin	2021-05	ug/L											< 0.0356	< 0.0364				
Aldrin	2021-09	ug/L													< 0.0364			
Aldrin	2022-03	ug/L											< 0.0667	< 0.0727				
Aldrin	2022-09	ug/L													< 0.0667			
Aldrin	2023-06	ug/L						< 0.0640										
Aldrin	2023-11	ug/L																

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Acrolein	2025-06	ug/L				< 10.0	< 10.0	< 10.0			
Acrolein	2025-10	ug/L								< 10	
Acrylonitrile	2014-10	ug/L									
Acrylonitrile	2014-11	ug/L									
Acrylonitrile	2015-05	ug/L									
Acrylonitrile	2015-09	ug/L									
Acrylonitrile	2016-03	ug/L									
Acrylonitrile	2016-04	ug/L									
Acrylonitrile	2016-11	ug/L									
Acrylonitrile	2017-05	ug/L									
Acrylonitrile	2017-11	ug/L									
Acrylonitrile	2018-06	ug/L									
Acrylonitrile	2018-08	ug/L									
Acrylonitrile	2018-10	ug/L									
Acrylonitrile	2019-06	ug/L									< 5.00
Acrylonitrile	2019-08	ug/L									< 5.00
Acrylonitrile	2019-10	ug/L									
Acrylonitrile	2019-11	ug/L									< 5.00
Acrylonitrile	2020-02	ug/L									< 5.00
Acrylonitrile	2020-06	ug/L									< 5.00
Acrylonitrile	2020-07	ug/L									
Acrylonitrile	2020-08	ug/L									
Acrylonitrile	2020-11	ug/L									< 5.00
Acrylonitrile	2021-05	ug/L									< 5.00
Acrylonitrile	2021-06	ug/L									
Acrylonitrile	2021-08	ug/L									
Acrylonitrile	2021-09	ug/L	< 5.00	< 5.00							< 5.00
Acrylonitrile	2021-12	ug/L	< 5.00	< 5.00							
Acrylonitrile	2022-03	ug/L	< 5.00	< 5.00							
Acrylonitrile	2022-06	ug/L	< 5.00	< 5.00							
Acrylonitrile	2022-08	ug/L	< 5.00	< 5.00		< 5.00					
Acrylonitrile	2022-09	ug/L			< 5.00		< 5.00	< 5.00			< 5.00
Acrylonitrile	2022-12	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			
Acrylonitrile	2023-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			< 5.00
Acrylonitrile	2023-08	ug/L			< 5.00	< 5.00	< 5.00	< 5.00			
Acrylonitrile	2023-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	
Acrylonitrile	2024-01	ug/L							< 5.00	< 5.00	
Acrylonitrile	2024-06	ug/L	< 5.00	< 5.00			< 5.00	< 5.00		< 5.00	< 5.00
Acrylonitrile	2024-07	ug/L			< 5.00 J				< 5.00 J		
Acrylonitrile	2024-09	ug/L							< 5.00	< 5.00	
Acrylonitrile	2024-11	ug/L							< 5.00		
Acrylonitrile	2024-12	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00
Acrylonitrile	2025-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Acrylonitrile	2025-10	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	
Aldrin	2014-10	ug/L									
Aldrin	2015-09	ug/L									
Aldrin	2016-11	ug/L									
Aldrin	2017-11	ug/L									
Aldrin	2020-06	ug/L									
Aldrin	2020-11	ug/L									
Aldrin	2021-05	ug/L									
Aldrin	2021-09	ug/L									
Aldrin	2022-03	ug/L									
Aldrin	2022-09	ug/L									
Aldrin	2023-06	ug/L									
Aldrin	2023-11	ug/L		< 0.0604							

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1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Aldrin	2024-06	ug/L																
Aldrin	2024-07	ug/L																
Aldrin	2025-06	ug/L																
Aldrin	2025-10	ug/L								< 0.0931								
Allyl Chloride	2014-10	ug/L							< 2.00									
Allyl Chloride	2015-09	ug/L			< 2.00			< 2.00	< 2.00									
Allyl Chloride	2016-11	ug/L			< 2.00			< 2.00	< 2.00									
Allyl Chloride	2017-11	ug/L						< 2.00	< 2.00									
Allyl Chloride	2020-06	ug/L									< 2.00							
Allyl Chloride	2020-11	ug/L											< 2.00	< 2.00				
Allyl Chloride	2021-05	ug/L											< 2.00	< 2.00				
Allyl Chloride	2021-09	ug/L													< 2.00			
Allyl Chloride	2022-03	ug/L											< 2.00	< 2.00				
Allyl Chloride	2022-09	ug/L													< 2.00			
Allyl Chloride	2023-06	ug/L						< 2.00										
Allyl Chloride	2023-11	ug/L																
Allyl Chloride	2024-06	ug/L																
Allyl Chloride	2025-06	ug/L																
Allyl Chloride	2025-10	ug/L								< 2								
alpha-BHC	2014-10	ug/L							< 0.0320									
alpha-BHC	2015-09	ug/L			**0.00287 J**			< 0.0327	< 0.0356									
alpha-BHC	2015-12	ug/L			< 0.0356													
alpha-BHC	2016-11	ug/L			< 0.0352			< 0.0352	< 0.0364									
alpha-BHC	2017-11	ug/L						< 0.0348	< 0.0344									
alpha-BHC	2020-06	ug/L									**0.00189 J**							
alpha-BHC	2020-11	ug/L											< 0.0386	< 0.0390				
alpha-BHC	2021-05	ug/L											< 0.0356	< 0.0364				
alpha-BHC	2021-09	ug/L													< 0.0364			
alpha-BHC	2022-03	ug/L											< 0.0667	< 0.0727				
alpha-BHC	2022-09	ug/L													< 0.0667			
alpha-BHC	2023-06	ug/L						< 0.0640										
alpha-BHC	2023-11	ug/L																
alpha-BHC	2024-06	ug/L																
alpha-BHC	2024-07	ug/L																
alpha-BHC	2025-06	ug/L																
alpha-BHC	2025-10	ug/L								< 0.0931								
Anthracene	2014-10	ug/L							< 11.1									
Anthracene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Anthracene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Anthracene	2017-11	ug/L						< 11.8	< 10.9									
Anthracene	2020-06	ug/L									< 11.5							
Anthracene	2020-11	ug/L											< 11.8	< 10.5				
Anthracene	2021-05	ug/L											< 11.2	< 11.9				
Anthracene	2021-09	ug/L													< 10.5			
Anthracene	2022-03	ug/L											< 11.9	< 10.4				
Anthracene	2022-09	ug/L													< 10.4			
Anthracene	2023-06	ug/L						< 11.6										
Anthracene	2023-11	ug/L																
Anthracene	2024-06	ug/L																
Anthracene	2024-07	ug/L																
Anthracene	2025-06	ug/L																
Anthracene	2025-10	ug/L								< 10.9								
Antimony	2014-10	ug/L							< 1.00	**0.164 J**								
Antimony	2014-11	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00						
Antimony	2015-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Antimony	2015-09	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								

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1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Aldrin	2024-06	ug/L		< 0.0909				< 0.0909			
Aldrin	2024-07	ug/L					< 0.0873				
Aldrin	2025-06	ug/L				< 0.0911	< 0.0911	< 0.0907			
Aldrin	2025-10	ug/L								< 0.0936	
Allyl Chloride	2014-10	ug/L									
Allyl Chloride	2015-09	ug/L									
Allyl Chloride	2016-11	ug/L									
Allyl Chloride	2017-11	ug/L									
Allyl Chloride	2020-06	ug/L									
Allyl Chloride	2020-11	ug/L									
Allyl Chloride	2021-05	ug/L									
Allyl Chloride	2021-09	ug/L									
Allyl Chloride	2022-03	ug/L									
Allyl Chloride	2022-09	ug/L									
Allyl Chloride	2023-06	ug/L									
Allyl Chloride	2023-11	ug/L		< 2.00							
Allyl Chloride	2024-06	ug/L		< 2.00			< 2.00	< 2.00			
Allyl Chloride	2025-06	ug/L				< 2.00	< 2.00	< 2.00			
Allyl Chloride	2025-10	ug/L								< 2	
alpha-BHC	2014-10	ug/L									
alpha-BHC	2015-09	ug/L									
alpha-BHC	2015-12	ug/L									
alpha-BHC	2016-11	ug/L									
alpha-BHC	2017-11	ug/L									
alpha-BHC	2020-06	ug/L									
alpha-BHC	2020-11	ug/L									
alpha-BHC	2021-05	ug/L									
alpha-BHC	2021-09	ug/L									
alpha-BHC	2022-03	ug/L									
alpha-BHC	2022-09	ug/L									
alpha-BHC	2023-06	ug/L									
alpha-BHC	2023-11	ug/L		< 0.0604							
alpha-BHC	2024-06	ug/L		< 0.0909				< 0.0909			
alpha-BHC	2024-07	ug/L					< 0.0873				
alpha-BHC	2025-06	ug/L				< 0.0911	< 0.0911	< 0.0907			
alpha-BHC	2025-10	ug/L								< 0.0936	
Anthracene	2014-10	ug/L									
Anthracene	2015-09	ug/L									
Anthracene	2016-11	ug/L									
Anthracene	2017-11	ug/L									
Anthracene	2020-06	ug/L									
Anthracene	2020-11	ug/L									
Anthracene	2021-05	ug/L									
Anthracene	2021-09	ug/L									
Anthracene	2022-03	ug/L									
Anthracene	2022-09	ug/L									
Anthracene	2023-06	ug/L									
Anthracene	2023-11	ug/L		< 10.0							
Anthracene	2024-06	ug/L		< 10.4				< 10.0			
Anthracene	2024-07	ug/L					< 12.5				
Anthracene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Anthracene	2025-10	ug/L								< 10.2	
Antimony	2014-10	ug/L									
Antimony	2014-11	ug/L									
Antimony	2015-05	ug/L									
Antimony	2015-09	ug/L									

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1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Antimony	2016-03	ug/L						< 1.00	< 1.00									
Antimony	2016-04	ug/L	< 1.00		< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00						
Antimony	2016-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
Antimony	2017-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Antimony	2017-11	ug/L	**0.331 J**		< 1.00	< 1.00	**0.207 J**	**0.691 J**	< 1.00	< 1.00		< 1.00						
Antimony	2018-06	ug/L	**5.76**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Antimony	2018-08	ug/L	**11.5**	< 1.00														
Antimony	2018-10	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**0.503 J**	< 1.00	< 1.00	< 1.00						
Antimony	2019-06	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00						
Antimony	2019-08	ug/L		< 3.00														
Antimony	2019-10	ug/L						< 1.00	< 1.00									
Antimony	2019-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Antimony	2020-02	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
Antimony	2020-06	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
Antimony	2020-07	ug/L	< 1.00	< 1.00												< 1.00		
Antimony	2020-08	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
Antimony	2020-11	ug/L	< 1.00	**3.75 J**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**1.67**	**1.99**	< 1.00	< 1.00	**0.771 J**	< 1.00	< 1.00		
Antimony	2021-02	ug/L								< 2.00								
Antimony	2021-05	ug/L			< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00				
Antimony	2021-06	ug/L	< 2.00				< 2.00								< 2.00	< 2.00		
Antimony	2021-08	ug/L													< 2.00			
Antimony	2021-09	ug/L	< 2.00	**3.29**	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Antimony	2021-12	ug/L															< 2.00	< 2.00
Antimony	2022-03	ug/L	**2.2**	**3.05**	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	**0.846 J**	< 2.00	< 2.00	< 2.00
Antimony	2022-06	ug/L															< 2.00	< 2.00
Antimony	2022-08	ug/L			< 2.00					< 2.00	< 2.00	< 2.00					< 2.00	< 2.00
Antimony	2022-09	ug/L	**1.94 J**	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00				< 8.00	**2.22**	< 2.00	< 2.00		
Antimony	2022-12	ug/L															< 2.00	< 2.00
Antimony	2023-06	ug/L	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Antimony	2023-08	ug/L																
Antimony	2023-11	ug/L	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00		< 2.00		< 2.00
Antimony	2024-01	ug/L																
Antimony	2024-06	mg/L						< 0.00200	< 0.00200									
Antimony	2024-06	ug/L			< 2.00							< 2.00	< 2.00		< 2.00		< 2.00	< 2.00
Antimony	2024-07	ug/L	< 2.00			< 2.00	< 2.00							< 2.00		< 2.00		
Antimony	2024-09	ug/L																
Antimony	2024-11	ug/L				< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00						
Antimony	2024-12	ug/L	< 2.00		< 2.00		< 2.00						< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Antimony	2025-06	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Antimony	2025-10	ug/L			< 2	< 2	< 2	< 2	< 2	< 2		< 2	< 2	< 2	< 2	< 2	< 2	< 2
Arsenic	2014-10	ug/L							< 2.00	< 2.00								
Arsenic	2014-11	ug/L			< 2.00	< 2.00	**2.03**	< 2.00			< 2.00	< 2.00						
Arsenic	2015-05	ug/L	**7.87**		< 2.00	< 2.00	**2.03**	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00						
Arsenic	2015-07	ug/L	< 2.00															
Arsenic	2015-09	ug/L			< 2.00	< 2.00	**1.61 J**	< 2.00	< 2.00	< 2.00								
Arsenic	2016-03	ug/L						< 2.00	**1.17 J**									
Arsenic	2016-04	ug/L	**0.942 J**		< 2.00	< 2.00	**2.09**			< 2.00	< 2.00	< 2.00						
Arsenic	2016-11	ug/L	< 2.00		< 2.00	< 2.00	**1.3 J**	< 2.00	< 2.00	< 2.00		< 2.00						
Arsenic	2017-05	ug/L	< 2.00		< 2.00	< 2.00	**0.61 J**	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00						
Arsenic	2017-11	ug/L	**0.696 J**		**0.662 J**	**0.533 J**	**0.992 J**	**0.784 J**	< 2.00	< 2.00		< 2.00						
Arsenic	2018-06	ug/L	**0.859 J**	**8.67**	< 2.00	< 2.00	< 2.00	**0.637 J**	< 2.00	< 2.00	< 2.00	< 2.00						
Arsenic	2018-08	ug/L		**7.76**														
Arsenic	2018-10	ug/L	**0.88 J**	**2.77**	< 2.00	< 2.00	**2.28**	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00						
Arsenic	2019-06	ug/L	**1.1**	**1.07**	**0.604 J**	**0.486 J**	**1.11**	**0.653 J**	**0.547 J**	**0.43 J**	**0.498 J**	**0.796 J**						
Arsenic	2019-08	ug/L		**0.931 J**														
Arsenic	2019-10	ug/L						< 2.00	< 2.00									

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Antimony	2016-03	ug/L									
Antimony	2016-04	ug/L									
Antimony	2016-11	ug/L									
Antimony	2017-05	ug/L									
Antimony	2017-11	ug/L									
Antimony	2018-06	ug/L									
Antimony	2018-08	ug/L									
Antimony	2018-10	ug/L									
Antimony	2019-06	ug/L									< 3.00
Antimony	2019-08	ug/L									< 3.00
Antimony	2019-10	ug/L									
Antimony	2019-11	ug/L									< 1.00
Antimony	2020-02	ug/L									< 1.00
Antimony	2020-06	ug/L									< 1.00
Antimony	2020-07	ug/L									
Antimony	2020-08	ug/L									
Antimony	2020-11	ug/L									< 1.00
Antimony	2021-02	ug/L									
Antimony	2021-05	ug/L									< 2.00
Antimony	2021-06	ug/L									
Antimony	2021-08	ug/L									
Antimony	2021-09	ug/L	< 2.00	< 2.00							< 2.00
Antimony	2021-12	ug/L	< 2.00	< 2.00							
Antimony	2022-03	ug/L	< 2.00	< 2.00							
Antimony	2022-06	ug/L	< 2.00	< 2.00							
Antimony	2022-08	ug/L	< 2.00	< 2.00		< 2.00					
Antimony	2022-09	ug/L			**0.761 J**		< 2.00	< 2.00			< 2.00
Antimony	2022-12	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00			
Antimony	2023-06	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00			< 2.00
Antimony	2023-08	ug/L			< 2.00	< 2.00	< 8.00	< 2.00			
Antimony	2023-11	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	
Antimony	2024-01	ug/L							< 2.00	< 2.00	
Antimony	2024-06	mg/L					< 0.00200			< 0.00200	
Antimony	2024-06	ug/L	< 2.00	< 2.00				< 2.00			< 2.00
Antimony	2024-07	ug/L			< 2.00				< 2.00		
Antimony	2024-09	ug/L							< 2.00	< 2.00	
Antimony	2024-11	ug/L							< 2.00		
Antimony	2024-12	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00
Antimony	2025-06	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Antimony	2025-10	ug/L	< 2	< 2	< 2	< 2	**1.82 J**	**1.82 J**	< 2	< 2	
Arsenic	2014-10	ug/L									
Arsenic	2014-11	ug/L									
Arsenic	2015-05	ug/L									
Arsenic	2015-07	ug/L									
Arsenic	2015-09	ug/L									
Arsenic	2016-03	ug/L									
Arsenic	2016-04	ug/L									
Arsenic	2016-11	ug/L									
Arsenic	2017-05	ug/L									
Arsenic	2017-11	ug/L									
Arsenic	2018-06	ug/L									
Arsenic	2018-08	ug/L									
Arsenic	2018-10	ug/L									
Arsenic	2019-06	ug/L									**0.735 J**
Arsenic	2019-08	ug/L									**0.506 J**
Arsenic	2019-10	ug/L									

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Arsenic	2019-11	ug/L	**0.887 J**	**1.68 J**	< 2.00	< 2.00	**0.988 J**			< 2.00	< 2.00	< 2.00	**1.74 JO**	**2.95**	**42.4**	< 2.00		
Arsenic	2020-02	ug/L											**2.28**	**1.42 J**	**80.9**	< 2.00		
Arsenic	2020-06	ug/L			< 2.00	< 2.00	**2.24**	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	**3.4**	**2.47**	**5.23**			
Arsenic	2020-07	ug/L	< 2.00	< 2.00												< 2.00		
Arsenic	2020-08	ug/L											**6.84**	**3.83**	**65.8**	< 2.00		
Arsenic	2020-11	ug/L	< 2.00	**345**	< 2.00	< 2.00	**1.22 J**	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	**4.59**	**2.57**	**17.9**	< 2.00		
Arsenic	2021-05	ug/L			< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	**4.09**	**0.821 J**				
Arsenic	2021-06	ug/L	< 2.00				**1.39 J**								**35.3**	< 2.00		
Arsenic	2021-08	ug/L													**52.7**			
Arsenic	2021-09	ug/L	< 2.00	**10.1**	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00	**6.09**	< 2.00	**18.4**	< 2.00	~~**1.38 J**~~	< 2.00
Arsenic	2021-12	ug/L															< 2.00	< 2.00
Arsenic	2022-03	ug/L	**1.87 J**	**3.94**	< 2.00	< 2.00	**3.7**	< 2.00	< 2.00	< 2.00		< 2.00	**5.57**	< 2.00	**11.3**	< 2.00	**4.57**	< 2.00
Arsenic	2022-06	ug/L					< 2.00										< 2.00	**20.8**
Arsenic	2022-08	ug/L			< 2.00					< 2.00	< 2.00	< 2.00					< 2.00	< 2.00
Arsenic	2022-09	ug/L	< 2.00	**1.25 J**		< 2.00	**0.858 J**	**0.762 J**	< 2.00				**10.2**	< 8.00	**13.8**	< 2.00		
Arsenic	2022-12	ug/L															**0.91 J**	< 2.00
Arsenic	2023-06	ug/L	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	**4.37**	**0.602 J**	**1.16 J**	< 2.00	< 2.00	< 2.00
Arsenic	2023-08	ug/L																
Arsenic	2023-11	ug/L	< 2.00		~~**1.03 J**~~	< 2.00	**1.06 J**	**1.15 J**	< 2.00	< 2.00		< 2.00	**6.49**	**0.571 J**		< 2.00		< 2.00
Arsenic	2024-01	ug/L																
Arsenic	2024-06	mg/L						**0.000792 J**	< 0.00200									
Arsenic	2024-06	ug/L			< 2.00							< 2.00	**4.54**		**24.3**		**1.62 J**	< 2.00
Arsenic	2024-07	ug/L	< 2.00			< 2.00	< 2.00							< 2.00		< 2.00		
Arsenic	2024-08	ug/L													**51.8**			
Arsenic	2024-09	ug/L																
Arsenic	2024-11	ug/L				< 2.00		**1.05 J**	< 2.00	< 2.00	< 2.00	< 2.00						
Arsenic	2024-12	ug/L	< 2.00		< 2.00		**1.34 J**						**6.75**	**0.562 J**	**112**	< 2.00	~~**153**~~	< 2.00
Arsenic	2025-06	ug/L	< 2.00	**0.707 J**	< 2.00	< 2.00	**1.39 J**	**0.759 J**	< 2.00	< 2.00		< 2.00	**1.91 J**	< 2.00	**9.86**	< 2.00	**0.826 J**	< 2.00
Arsenic	2025-10	ug/L			**0.651 J**	< 2	**1.42 J**	**1.05 J**	< 2	< 2		< 2	**4.3**	**0.751 J**	**88.5**	< 2	**220**	< 2
Barium	2014-10	ug/L							**144**	**184**								
Barium	2014-11	ug/L			~~**190**~~	**127**	**193**	**469**			**187**	**212**						
Barium	2015-05	ug/L	**514**		**104**	**107**	**170**	**463**	**307**	**152**	**168**	**160**						
Barium	2015-09	ug/L			**166**	**123**	**180**	**479**	**237**	**240**								
Barium	2016-03	ug/L						**484**	**396**									
Barium	2016-04	ug/L	**262**		**93.8**	**103**	**180**			**165**	**124**	**150**						
Barium	2016-11	ug/L	**242**		**114**	**128**	**184**	**539**	**205**	**315**		**208**						
Barium	2017-05	ug/L	**262**		**95.1**	**119**	**168**	**482**	**213**	**150**	**142**	**176**						
Barium	2017-11	ug/L	**249**		**130**	**121**	**166**	**40.6 O**	**217**	**172**		**205**						
Barium	2018-06	ug/L	**253**	**294**	**119**	**103**	**176**	**530**	**305**	**166**	**130**	**163**						
Barium	2018-08	ug/L		**530**														
Barium	2018-10	ug/L	**222**	**276**	**142**	**97.5**	**189**	**464**	**206**	**171**	**145**	**190**						
Barium	2019-06	ug/L	**220**	**173**	**93.8**	**82.8**	**158**	**451**	**187**	**160**	**94.1**	**153**						
Barium	2019-08	ug/L		**199**														
Barium	2019-10	ug/L						**191**	**455**									
Barium	2019-11	ug/L	**250**	**172**	**124**	**86.2**	**163**			**185**	**122**	**188**	**272**	**602**	**144**	**80.4**		
Barium	2020-02	ug/L							**168**	**174**		**174**	**217**	**591**	**176**	**80**		
Barium	2020-06	ug/L			**94.9**	**79**	**176**	**421**	**180**	**139**	**97.8**	**147**	**168**	**279**	**105**			
Barium	2020-07	ug/L	**222**	**93.6**												**76.3**		
Barium	2020-08	ug/L											**180**	**317**	**203**	**75.2**		
Barium	2020-11	ug/L	**215**	**2300**	**184**	**124**	**193**	**409**	**178**	**160**	**108**	**197**	**138**	**449**	**177**	**73.6**		
Barium	2021-02	ug/L																
Barium	2021-05	ug/L			**146**	**120**		**475**	**176**	**166**	**105**	**199**	**150**	**160**				
Barium	2021-06	ug/L	**248**				**199**								**168**	**76.9**		
Barium	2021-08	ug/L					**171**								**149**			
Barium	2021-09	ug/L	**220**	**108**	**111**	**129**	**188**	**482**	**189**	**156**		**192**	**173**	**205**	**152**	**74.9**	~~**202**~~	**148**
Barium	2021-12	ug/L															**137**	**94.3**

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Arsenic	2019-11	ug/L									< 2.00
Arsenic	2020-02	ug/L									< 2.00
Arsenic	2020-06	ug/L									< 2.00
Arsenic	2020-07	ug/L									
Arsenic	2020-08	ug/L									
Arsenic	2020-11	ug/L									< 2.00
Arsenic	2021-05	ug/L									< 2.00
Arsenic	2021-06	ug/L									
Arsenic	2021-08	ug/L									
Arsenic	2021-09	ug/L	< 2.00	< 2.00							< 2.00
Arsenic	2021-12	ug/L	< 2.00	**0.759 J**							
Arsenic	2022-03	ug/L	< 2.00	< 2.00							
Arsenic	2022-06	ug/L	< 2.00	< 2.00							
Arsenic	2022-08	ug/L	< 2.00	< 2.00		< 2.00					
Arsenic	2022-09	ug/L			< 2.00		**8.06**	< 2.00			< 2.00
Arsenic	2022-12	ug/L	< 2.00	< 2.00	< 2.00	**2.96**	**7.34**	< 2.00			
Arsenic	2023-06	ug/L	< 2.00	< 2.00	**0.708 J**	< 2.00	**8.28**	< 2.00			< 2.00
Arsenic	2023-08	ug/L			**0.866 J**	**0.56 J**	**8.85**	< 2.00			
Arsenic	2023-11	ug/L	< 2.00	**0.558 J**	< 2.00	**0.541 J**	**9.81**	**0.666 J**	< 2.00	**0.78 J**	
Arsenic	2024-01	ug/L							< 2.00	**0.984 J**	
Arsenic	2024-06	mg/L					**0.00628**			**0.000714 J**	
Arsenic	2024-06	ug/L	< 2.00	< 2.00				**0.663 J**			**0.541 J**
Arsenic	2024-07	ug/L			**0.595 J**				< 2.00		
Arsenic	2024-08	ug/L									
Arsenic	2024-09	ug/L							< 2.00	**0.77 J**	
Arsenic	2024-11	ug/L							< 2.00		
Arsenic	2024-12	ug/L	< 2.00	< 2.00	**0.967 J**	**0.547 J**	**6.32**	< 2.00		**0.805 J**	< 2.00
Arsenic	2025-06	ug/L	< 2.00	< 2.00	**1.2 J**	< 2.00	**7.28**	< 2.00	< 2.00	**0.64 J**	< 2.00
Arsenic	2025-10	ug/L	< 2	**0.64 J**	**0.665 J**	**0.588 J**	**6.33**	**0.671 J**	< 2	**0.837 J**	
Barium	2014-10	ug/L									
Barium	2014-11	ug/L									
Barium	2015-05	ug/L									
Barium	2015-09	ug/L									
Barium	2016-03	ug/L									
Barium	2016-04	ug/L									
Barium	2016-11	ug/L									
Barium	2017-05	ug/L									
Barium	2017-11	ug/L									
Barium	2018-06	ug/L									
Barium	2018-08	ug/L									
Barium	2018-10	ug/L									
Barium	2019-06	ug/L									**196**
Barium	2019-08	ug/L									**213**
Barium	2019-10	ug/L									
Barium	2019-11	ug/L									**207**
Barium	2020-02	ug/L									**194**
Barium	2020-06	ug/L									**198**
Barium	2020-07	ug/L									
Barium	2020-08	ug/L									
Barium	2020-11	ug/L									**205**
Barium	2021-02	ug/L									**191**
Barium	2021-05	ug/L									**183**
Barium	2021-06	ug/L									
Barium	2021-08	ug/L									
Barium	2021-09	ug/L	**156**	**279**							**212**
Barium	2021-12	ug/L	**146**	**278**							

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Barium	2022-03	ug/L	237	117	112	120	210	503	184	143		154	182	145	176	69.7	273	139
Barium	2022-06	ug/L															144	200
Barium	2022-08	ug/L			112					71.9	109	159					122	133
Barium	2022-09	ug/L	228	251		86.6	205	536	209				191	441	138	79.5		
Barium	2022-12	ug/L															247	145
Barium	2023-06	ug/L	209		106	96.7	176	134 O	183	323	132	189	187	220	108	65.5	111	133
Barium	2023-08	ug/L								366								
Barium	2023-11	ug/L	238		~~282~~	118	193	514	267	451		219	163	247		69.3		141
Barium	2024-01	ug/L							413									
Barium	2024-06	mg/L						0.485	0.184									
Barium	2024-06	ug/L			94.7							178	151		255		134	153
Barium	2024-07	ug/L	228			91	146							243		70.1		
Barium	2024-09	ug/L																
Barium	2024-11	ug/L				129		518	225	425	117	229						
Barium	2024-12	ug/L	241		201		205						161	279	199	67.5	~~849~~	153
Barium	2025-02	ug/L								196								
Barium	2025-06	ug/L	238	161	100	110	205	505	199	176		191	130	240	361	70.5	156	140
Barium	2025-10	ug/L			184	130	178	476	189	319		203	133	206	209	66.7	630	142
Benzene	2014-10	ug/L							< 0.500	< 0.500								
Benzene	2014-11	ug/L			< 0.500	< 0.500	0.613	< 0.500			< 0.500	< 0.500						
Benzene	2015-05	ug/L	< 0.500		< 0.500	< 0.500	< 0.500	< 0.500	0.481 J	< 0.500	< 0.500	< 0.500						
Benzene	2015-09	ug/L			< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500								
Benzene	2016-03	ug/L						0.269 J	0.496 J									
Benzene	2016-04	ug/L	< 0.500		< 0.500	< 0.500	< 0.500			< 0.500	< 0.500	< 0.500						
Benzene	2016-11	ug/L	< 0.500		< 0.500	< 0.500	< 0.500	0.138 J	< 0.500	< 0.500		< 0.500						
Benzene	2017-05	ug/L	< 0.500		< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500						
Benzene	2017-11	ug/L	< 0.500		< 0.500	< 0.500	< 0.500	0.156 J	< 0.500	< 0.500		< 0.500						
Benzene	2018-06	ug/L	< 0.500	4.3	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	0.242 J	< 0.500	< 0.500						
Benzene	2018-08	ug/L		0.222 J														
Benzene	2018-10	ug/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500						
Benzene	2019-06	ug/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500						
Benzene	2019-08	ug/L		< 0.500														
Benzene	2019-10	ug/L						< 0.500	< 0.500									
Benzene	2019-11	ug/L	< 0.500	< 0.500	< 0.500	< 0.500	< 1.00			< 0.500	< 0.500	< 0.500	< 0.500	0.457 J	< 1.00	< 1.00		
Benzene	2020-02	ug/L											< 0.500	0.266 J	< 0.500	< 0.500		
Benzene	2020-06	ug/L			< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	0.225 J	< 0.500			
Benzene	2020-07	ug/L	< 0.500	< 0.500												< 0.500		
Benzene	2020-08	ug/L											< 0.500	0.288 J	< 0.500	< 0.500		
Benzene	2020-11	ug/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	0.253 J	0.614	< 0.500		
Benzene	2021-05	ug/L			< 0.500	< 0.500		< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500				
Benzene	2021-06	ug/L	< 0.500				< 0.500								< 0.500	< 0.500		
Benzene	2021-08	ug/L													< 0.500			
Benzene	2021-09	ug/L	< 0.500	< 5.00	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500		< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
Benzene	2021-12	ug/L															< 0.500	< 0.500
Benzene	2022-03	ug/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500		< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
Benzene	2022-06	ug/L															< 0.500	< 0.500
Benzene	2022-08	ug/L			< 0.500					< 0.500	< 0.500	< 0.500					< 0.500	< 0.500
Benzene	2022-09	ug/L	< 0.500	< 0.500		< 0.500	< 0.500	0.372 J	< 0.500				< 0.500	0.264 J	< 0.500	< 0.500		
Benzene	2022-12	ug/L															< 0.500	< 0.500
Benzene	2023-06	ug/L	< 0.500		< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
Benzene	2023-08	ug/L																
Benzene	2023-11	ug/L	< 0.500		< 0.500	< 0.500	< 0.500	0.413 J	< 0.500	0.404 J		< 0.500	< 0.500	< 0.500		< 0.500		< 0.500
Benzene	2024-01	ug/L																
Benzene	2024-06	ug/L			< 0.500			0.223 J	< 0.500			< 0.500	< 0.500		< 0.500		< 0.500	< 0.500
Benzene	2024-07	ug/L	< 0.500			< 0.500 J	< 0.500 J							< 0.500 J		< 0.500		
Benzene	2024-09	ug/L																

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Barium	2022-03	ug/L	**144**	**260**							
Barium	2022-06	ug/L	**152**	**257**							
Barium	2022-08	ug/L	**136**	**162**		**281**					
Barium	2022-09	ug/L			**154**		**157**	**168**			**214**
Barium	2022-12	ug/L	**149**	**238**	**143**	**119**	**167**	**212**			
Barium	2023-06	ug/L	**138**	**216**	**145**	**83.4**	**180**	**157**			**175**
Barium	2023-08	ug/L			**141**	**125**	**250**	**239**			
Barium	2023-11	ug/L	**145**	**228**	**169**	**101**	**274**	**253**	**218**	**262**	
Barium	2024-01	ug/L							**137**	**275**	
Barium	2024-06	mg/L					**0.163**			**0.213**	
Barium	2024-06	ug/L	**152**	**210**				**137**			**177**
Barium	2024-07	ug/L			**125**				**103**		
Barium	2024-09	ug/L							**118**	**236**	
Barium	2024-11	ug/L							**128**		
Barium	2024-12	ug/L	**156**	**215**	**159**	**177**	**214**	**159**		**262**	**221**
Barium	2025-02	ug/L									
Barium	2025-06	ug/L	**146**	**202**	**159**	**152**	**186**	**173**	**136**	**245**	**171**
Barium	2025-10	ug/L	**143**	**229**	**157**	**150**	**198**	**222**	**133**	**277**	
Benzene	2014-10	ug/L									
Benzene	2014-11	ug/L									
Benzene	2015-05	ug/L									
Benzene	2015-09	ug/L									
Benzene	2016-03	ug/L									
Benzene	2016-04	ug/L									
Benzene	2016-11	ug/L									
Benzene	2017-05	ug/L									
Benzene	2017-11	ug/L									
Benzene	2018-06	ug/L									
Benzene	2018-08	ug/L									
Benzene	2018-10	ug/L									
Benzene	2019-06	ug/L									< 0.500
Benzene	2019-08	ug/L									< 0.500
Benzene	2019-10	ug/L									
Benzene	2019-11	ug/L									< 0.500
Benzene	2020-02	ug/L									< 0.500
Benzene	2020-06	ug/L									< 0.500
Benzene	2020-07	ug/L									
Benzene	2020-08	ug/L									
Benzene	2020-11	ug/L									< 0.500
Benzene	2021-05	ug/L									< 0.500
Benzene	2021-06	ug/L									
Benzene	2021-08	ug/L									
Benzene	2021-09	ug/L	< 0.500	**0.543**							< 0.500
Benzene	2021-12	ug/L	< 0.500	**0.768**							
Benzene	2022-03	ug/L	< 0.500	< 0.500							
Benzene	2022-06	ug/L	< 0.500	< 0.500							
Benzene	2022-08	ug/L	< 0.500	< 0.500		< 0.500					
Benzene	2022-09	ug/L			< 0.500		< 0.500	< 0.500			< 0.500
Benzene	2022-12	ug/L	< 0.500	**0.994**	**0.323 J**	**0.539**	< 0.500	< 0.500			
Benzene	2023-06	ug/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500			< 0.500
Benzene	2023-08	ug/L			< 0.500	< 0.500	< 0.500	< 0.500			
Benzene	2023-11	ug/L	< 0.500	**0.521**	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	
Benzene	2024-01	ug/L							< 0.500	< 0.500	
Benzene	2024-06	ug/L	< 0.500	**0.25 J**			< 0.500	< 0.500		< 0.500	< 0.500
Benzene	2024-07	ug/L			< 0.500 J				< 0.500 J		
Benzene	2024-09	ug/L							< 0.500	< 0.500	

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Benzene	2024-11	ug/L				< 0.500		< 0.500	< 0.500	< 0.500	< 0.500	< 0.500						
Benzene	2024-12	ug/L	< 0.500		< 0.500		< 0.500						< 0.500	< 0.500	**2.45**	< 0.500	**6.01**	< 0.500
Benzene	2025-06	ug/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	**0.266 J**	< 0.500	< 0.500		< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
Benzene	2025-10	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5		< 0.5	< 0.5 J	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)anthracene	2014-10	ug/L							< 11.1									
Benzo(a)anthracene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Benzo(a)anthracene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Benzo(a)anthracene	2017-11	ug/L						< 11.8	< 10.9									
Benzo(a)anthracene	2020-06	ug/L									< 11.5							
Benzo(a)anthracene	2020-11	ug/L											< 11.8	< 10.5				
Benzo(a)anthracene	2021-05	ug/L											< 11.2	< 11.9				
Benzo(a)anthracene	2021-09	ug/L													< 10.5			
Benzo(a)anthracene	2022-03	ug/L											< 11.9	< 10.4				
Benzo(a)anthracene	2022-09	ug/L													< 10.4			
Benzo(a)anthracene	2023-06	ug/L						< 11.6										
Benzo(a)anthracene	2023-11	ug/L																
Benzo(a)anthracene	2024-06	ug/L																
Benzo(a)anthracene	2024-07	ug/L																
Benzo(a)anthracene	2025-06	ug/L																
Benzo(a)anthracene	2025-10	ug/L								< 10.9								
Benzo(a)pyrene	2014-10	ug/L							**0.535 J**									
Benzo(a)pyrene	2014-12	ug/L							< 10.5									
Benzo(a)pyrene	2015-05	ug/L							< 10.2									
Benzo(a)pyrene	2015-07	ug/L							< 10.6									
Benzo(a)pyrene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Benzo(a)pyrene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Benzo(a)pyrene	2017-11	ug/L						< 11.8	< 10.9									
Benzo(a)pyrene	2020-06	ug/L									< 11.5							
Benzo(a)pyrene	2020-11	ug/L											< 11.8	< 10.5				
Benzo(a)pyrene	2021-05	ug/L											< 11.2	< 11.9				
Benzo(a)pyrene	2021-09	ug/L													< 10.5			
Benzo(a)pyrene	2022-03	ug/L											< 11.9	< 10.4				
Benzo(a)pyrene	2022-09	ug/L													< 10.4			
Benzo(a)pyrene	2023-06	ug/L						< 11.6										
Benzo(a)pyrene	2023-11	ug/L																
Benzo(a)pyrene	2024-06	ug/L																
Benzo(a)pyrene	2024-07	ug/L																
Benzo(a)pyrene	2025-06	ug/L																
Benzo(a)pyrene	2025-10	ug/L								< 10.9								
Benzo(b)fluoranthene	2014-10	ug/L							**0.514 J**									
Benzo(b)fluoranthene	2014-12	ug/L							< 10.5									
Benzo(b)fluoranthene	2015-05	ug/L							< 10.2									
Benzo(b)fluoranthene	2015-07	ug/L							< 10.6									
Benzo(b)fluoranthene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Benzo(b)fluoranthene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Benzo(b)fluoranthene	2017-11	ug/L						< 11.8	< 10.9									
Benzo(b)fluoranthene	2020-06	ug/L									< 11.5							
Benzo(b)fluoranthene	2020-11	ug/L											< 11.8	< 10.5				
Benzo(b)fluoranthene	2021-05	ug/L											< 11.2	< 11.9				
Benzo(b)fluoranthene	2021-09	ug/L													< 10.5			
Benzo(b)fluoranthene	2022-03	ug/L											< 11.9	< 10.4				
Benzo(b)fluoranthene	2022-09	ug/L													< 10.4			
Benzo(b)fluoranthene	2023-06	ug/L						< 11.6										
Benzo(b)fluoranthene	2023-11	ug/L																
Benzo(b)fluoranthene	2024-06	ug/L																
Benzo(b)fluoranthene	2024-07	ug/L																

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1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Benzene	2024-11	ug/L							< 0.500		
Benzene	2024-12	ug/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500		< 0.500	< 0.500
Benzene	2025-06	ug/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
Benzene	2025-10	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
Benzo(a)anthracene	2014-10	ug/L									
Benzo(a)anthracene	2015-09	ug/L									
Benzo(a)anthracene	2016-11	ug/L									
Benzo(a)anthracene	2017-11	ug/L									
Benzo(a)anthracene	2020-06	ug/L									
Benzo(a)anthracene	2020-11	ug/L									
Benzo(a)anthracene	2021-05	ug/L									
Benzo(a)anthracene	2021-09	ug/L									
Benzo(a)anthracene	2022-03	ug/L									
Benzo(a)anthracene	2022-09	ug/L									
Benzo(a)anthracene	2023-06	ug/L									
Benzo(a)anthracene	2023-11	ug/L		< 10.0							
Benzo(a)anthracene	2024-06	ug/L		< 10.4				< 10.0			
Benzo(a)anthracene	2024-07	ug/L					< 12.5				
Benzo(a)anthracene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Benzo(a)anthracene	2025-10	ug/L								< 10.2	
Benzo(a)pyrene	2014-10	ug/L									
Benzo(a)pyrene	2014-12	ug/L									
Benzo(a)pyrene	2015-05	ug/L									
Benzo(a)pyrene	2015-07	ug/L									
Benzo(a)pyrene	2015-09	ug/L									
Benzo(a)pyrene	2016-11	ug/L									
Benzo(a)pyrene	2017-11	ug/L									
Benzo(a)pyrene	2020-06	ug/L									
Benzo(a)pyrene	2020-11	ug/L									
Benzo(a)pyrene	2021-05	ug/L									
Benzo(a)pyrene	2021-09	ug/L									
Benzo(a)pyrene	2022-03	ug/L									
Benzo(a)pyrene	2022-09	ug/L									
Benzo(a)pyrene	2023-06	ug/L									
Benzo(a)pyrene	2023-11	ug/L		< 10.0							
Benzo(a)pyrene	2024-06	ug/L		< 10.4				< 10.0			
Benzo(a)pyrene	2024-07	ug/L					< 12.5				
Benzo(a)pyrene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Benzo(a)pyrene	2025-10	ug/L								< 10.2	
Benzo(b)fluoranthene	2014-10	ug/L									
Benzo(b)fluoranthene	2014-12	ug/L									
Benzo(b)fluoranthene	2015-05	ug/L									
Benzo(b)fluoranthene	2015-07	ug/L									
Benzo(b)fluoranthene	2015-09	ug/L									
Benzo(b)fluoranthene	2016-11	ug/L									
Benzo(b)fluoranthene	2017-11	ug/L									
Benzo(b)fluoranthene	2020-06	ug/L									
Benzo(b)fluoranthene	2020-11	ug/L									
Benzo(b)fluoranthene	2021-05	ug/L									
Benzo(b)fluoranthene	2021-09	ug/L									
Benzo(b)fluoranthene	2022-03	ug/L									
Benzo(b)fluoranthene	2022-09	ug/L									
Benzo(b)fluoranthene	2023-06	ug/L									
Benzo(b)fluoranthene	2023-11	ug/L		< 10.0							
Benzo(b)fluoranthene	2024-06	ug/L		< 10.4				< 10.0			
Benzo(b)fluoranthene	2024-07	ug/L					< 12.5				

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1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Benzo(b)fluoranthene	2025-06	ug/L																
Benzo(b)fluoranthene	2025-10	ug/L								< 10.9								
Benzo(ghi)perylene	2014-10	ug/L							**0.394 J**									
Benzo(ghi)perylene	2014-12	ug/L							< 10.5									
Benzo(ghi)perylene	2015-05	ug/L							< 10.2									
Benzo(ghi)perylene	2015-07	ug/L							< 10.6									
Benzo(ghi)perylene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Benzo(ghi)perylene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Benzo(ghi)perylene	2017-11	ug/L						< 11.8	< 10.9									
Benzo(ghi)perylene	2020-06	ug/L									< 11.5							
Benzo(ghi)perylene	2020-11	ug/L											< 11.8	< 10.5				
Benzo(ghi)perylene	2021-05	ug/L											< 11.2	< 11.9				
Benzo(ghi)perylene	2021-09	ug/L													< 10.5			
Benzo(ghi)perylene	2022-03	ug/L											< 11.9	< 10.4				
Benzo(ghi)perylene	2022-09	ug/L													< 10.4			
Benzo(ghi)perylene	2023-06	ug/L						< 11.6										
Benzo(ghi)perylene	2023-11	ug/L																
Benzo(ghi)perylene	2024-06	ug/L																
Benzo(ghi)perylene	2024-07	ug/L																
Benzo(ghi)perylene	2025-06	ug/L																
Benzo(ghi)perylene	2025-10	ug/L								< 10.9								
Benzo(k)fluoranthene	2014-10	ug/L							**0.723 J**									
Benzo(k)fluoranthene	2014-12	ug/L							< 10.5									
Benzo(k)fluoranthene	2015-05	ug/L							< 10.2									
Benzo(k)fluoranthene	2015-07	ug/L							< 10.6									
Benzo(k)fluoranthene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Benzo(k)fluoranthene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Benzo(k)fluoranthene	2017-11	ug/L						< 11.8	< 10.9									
Benzo(k)fluoranthene	2020-06	ug/L									< 11.5							
Benzo(k)fluoranthene	2020-11	ug/L											< 11.8	< 10.5				
Benzo(k)fluoranthene	2021-05	ug/L											< 11.2	< 11.9				
Benzo(k)fluoranthene	2021-09	ug/L													< 10.5			
Benzo(k)fluoranthene	2022-03	ug/L											< 11.9	< 10.4				
Benzo(k)fluoranthene	2022-09	ug/L													< 10.4			
Benzo(k)fluoranthene	2023-06	ug/L						< 11.6										
Benzo(k)fluoranthene	2023-11	ug/L																
Benzo(k)fluoranthene	2024-06	ug/L																
Benzo(k)fluoranthene	2024-07	ug/L																
Benzo(k)fluoranthene	2025-06	ug/L																
Benzo(k)fluoranthene	2025-10	ug/L								< 10.9								
Benzyl Alcohol	2014-10	ug/L							< 11.1									
Benzyl Alcohol	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Benzyl Alcohol	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Benzyl Alcohol	2017-11	ug/L						< 11.8	< 10.9									
Benzyl Alcohol	2020-06	ug/L									< 11.5							
Benzyl Alcohol	2020-11	ug/L											< 11.8	< 10.5				
Benzyl Alcohol	2021-05	ug/L											< 11.2	< 11.9				
Benzyl Alcohol	2021-09	ug/L													< 10.5			
Benzyl Alcohol	2022-03	ug/L											< 11.9	< 10.4				
Benzyl Alcohol	2022-09	ug/L													< 10.4			
Benzyl Alcohol	2023-06	ug/L						< 11.6										
Benzyl Alcohol	2023-11	ug/L																
Benzyl Alcohol	2024-06	ug/L																
Benzyl Alcohol	2024-07	ug/L																
Benzyl Alcohol	2025-06	ug/L																
Benzyl Alcohol	2025-10	ug/L								< 10.9								

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1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Benzo(b)fluoranthene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Benzo(b)fluoranthene	2025-10	ug/L								< 10.2	
Benzo(ghi)perylene	2014-10	ug/L									
Benzo(ghi)perylene	2014-12	ug/L									
Benzo(ghi)perylene	2015-05	ug/L									
Benzo(ghi)perylene	2015-07	ug/L									
Benzo(ghi)perylene	2015-09	ug/L									
Benzo(ghi)perylene	2016-11	ug/L									
Benzo(ghi)perylene	2017-11	ug/L									
Benzo(ghi)perylene	2020-06	ug/L									
Benzo(ghi)perylene	2020-11	ug/L									
Benzo(ghi)perylene	2021-05	ug/L									
Benzo(ghi)perylene	2021-09	ug/L									
Benzo(ghi)perylene	2022-03	ug/L									
Benzo(ghi)perylene	2022-09	ug/L									
Benzo(ghi)perylene	2023-06	ug/L									
Benzo(ghi)perylene	2023-11	ug/L		< 10.0							
Benzo(ghi)perylene	2024-06	ug/L		< 10.4				< 10.0			
Benzo(ghi)perylene	2024-07	ug/L					< 12.5				
Benzo(ghi)perylene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Benzo(ghi)perylene	2025-10	ug/L								< 10.2	
Benzo(k)fluoranthene	2014-10	ug/L									
Benzo(k)fluoranthene	2014-12	ug/L									
Benzo(k)fluoranthene	2015-05	ug/L									
Benzo(k)fluoranthene	2015-07	ug/L									
Benzo(k)fluoranthene	2015-09	ug/L									
Benzo(k)fluoranthene	2016-11	ug/L									
Benzo(k)fluoranthene	2017-11	ug/L									
Benzo(k)fluoranthene	2020-06	ug/L									
Benzo(k)fluoranthene	2020-11	ug/L									
Benzo(k)fluoranthene	2021-05	ug/L									
Benzo(k)fluoranthene	2021-09	ug/L									
Benzo(k)fluoranthene	2022-03	ug/L									
Benzo(k)fluoranthene	2022-09	ug/L									
Benzo(k)fluoranthene	2023-06	ug/L									
Benzo(k)fluoranthene	2023-11	ug/L		< 10.0							
Benzo(k)fluoranthene	2024-06	ug/L		< 10.4				< 10.0			
Benzo(k)fluoranthene	2024-07	ug/L					< 12.5				
Benzo(k)fluoranthene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Benzo(k)fluoranthene	2025-10	ug/L								< 10.2	
Benzyl Alcohol	2014-10	ug/L									
Benzyl Alcohol	2015-09	ug/L									
Benzyl Alcohol	2016-11	ug/L									
Benzyl Alcohol	2017-11	ug/L									
Benzyl Alcohol	2020-06	ug/L									
Benzyl Alcohol	2020-11	ug/L									
Benzyl Alcohol	2021-05	ug/L									
Benzyl Alcohol	2021-09	ug/L									
Benzyl Alcohol	2022-03	ug/L									
Benzyl Alcohol	2022-09	ug/L									
Benzyl Alcohol	2023-06	ug/L									
Benzyl Alcohol	2023-11	ug/L		< 10.0							
Benzyl Alcohol	2024-06	ug/L		< 10.4				< 10.0			
Benzyl Alcohol	2024-07	ug/L					< 12.5				
Benzyl Alcohol	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Benzyl Alcohol	2025-10	ug/L								< 10.2	

Table 14
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Winneshiek County Area Solid Waste Agency
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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Beryllium	2014-10	ug/L							< 1.00	< 1.00								
Beryllium	2014-11	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00						
Beryllium	2015-05	ug/L	**0.06 J**		< 1.00	< 1.00	**0.049 J**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Beryllium	2015-09	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	**0.052 J**	< 1.00								
Beryllium	2016-03	ug/L						< 1.00	< 1.00									
Beryllium	2016-04	ug/L	< 1.00		< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00						
Beryllium	2016-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
Beryllium	2017-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Beryllium	2017-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
Beryllium	2018-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Beryllium	2018-08	ug/L		< 1.00														
Beryllium	2018-10	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Beryllium	2019-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Beryllium	2019-08	ug/L		< 1.00														
Beryllium	2019-10	ug/L						< 1.00	< 1.00									
Beryllium	2019-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Beryllium	2020-02	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
Beryllium	2020-06	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
Beryllium	2020-07	ug/L	< 1.00	< 1.00												< 1.00		
Beryllium	2020-08	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
Beryllium	2020-11	ug/L	< 1.00	< 4.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Beryllium	2021-05	ug/L			< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00				
Beryllium	2021-06	ug/L	< 1.00				< 1.00								< 1.00	< 1.00		
Beryllium	2021-08	ug/L													< 1.00			
Beryllium	2021-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Beryllium	2021-12	ug/L															< 1.00	< 1.00
Beryllium	2022-03	ug/L	**0.863 J**	**1.08**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Beryllium	2022-06	ug/L															< 1.00	< 1.00
Beryllium	2022-08	ug/L			< 1.00					< 1.00	< 1.00	< 1.00					< 1.00	< 1.00
Beryllium	2022-09	ug/L	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00				< 4.00	< 1.00	< 1.00	< 1.00		
Beryllium	2022-12	ug/L															< 1.00	< 1.00
Beryllium	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Beryllium	2023-08	ug/L																
Beryllium	2023-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00		< 1.00		< 1.00
Beryllium	2024-01	ug/L																
Beryllium	2024-06	mg/L						< 0.00100	< 0.00100									
Beryllium	2024-06	ug/L			< 1.00							< 1.00	< 1.00		< 1.00		< 1.00	< 1.00
Beryllium	2024-07	ug/L	< 1.00			< 1.00	< 1.00							< 1.00		< 1.00		
Beryllium	2024-09	ug/L																
Beryllium	2024-11	ug/L				< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Beryllium	2024-12	ug/L	< 1.00		< 1.00		< 1.00						< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Beryllium	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Beryllium	2025-10	ug/L			< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1
beta-BHC	2014-10	ug/L							< 0.0320									
beta-BHC	2014-11	ug/L			< 0.0368													
beta-BHC	2014-12	ug/L			< 0.0348													
beta-BHC	2015-05	ug/L			< 0.0327													
beta-BHC	2015-09	ug/L			< 0.0364			< 0.0327	< 0.0356									
beta-BHC	2016-11	ug/L			< 0.0352			< 0.0352	< 0.0364									
beta-BHC	2017-11	ug/L						< 0.0348	< 0.0344									
beta-BHC	2020-06	ug/L									< 0.0337							
beta-BHC	2020-11	ug/L											< 0.0386	< 0.0390				
beta-BHC	2021-05	ug/L											< 0.0356	< 0.0364				
beta-BHC	2021-09	ug/L													< 0.0364			
beta-BHC	2022-03	ug/L											< 0.0667	< 0.0727				
beta-BHC	2022-09	ug/L													< 0.0667			

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Beryllium	2014-10	ug/L									
Beryllium	2014-11	ug/L									
Beryllium	2015-05	ug/L									
Beryllium	2015-09	ug/L									
Beryllium	2016-03	ug/L									
Beryllium	2016-04	ug/L									
Beryllium	2016-11	ug/L									
Beryllium	2017-05	ug/L									
Beryllium	2017-11	ug/L									
Beryllium	2018-06	ug/L									
Beryllium	2018-08	ug/L									
Beryllium	2018-10	ug/L									
Beryllium	2019-06	ug/L									< 1.00
Beryllium	2019-08	ug/L									< 1.00
Beryllium	2019-10	ug/L									
Beryllium	2019-11	ug/L									< 1.00
Beryllium	2020-02	ug/L									< 1.00
Beryllium	2020-06	ug/L									< 1.00
Beryllium	2020-07	ug/L									
Beryllium	2020-08	ug/L									
Beryllium	2020-11	ug/L									< 1.00
Beryllium	2021-05	ug/L									< 1.00
Beryllium	2021-06	ug/L									
Beryllium	2021-08	ug/L									
Beryllium	2021-09	ug/L	< 1.00	< 1.00							< 1.00
Beryllium	2021-12	ug/L	< 1.00	< 1.00							
Beryllium	2022-03	ug/L	< 1.00	< 1.00							
Beryllium	2022-06	ug/L	< 1.00	< 1.00							
Beryllium	2022-08	ug/L	< 1.00	< 1.00		< 1.00					
Beryllium	2022-09	ug/L			< 1.00		< 1.00	< 1.00			< 1.00
Beryllium	2022-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
Beryllium	2023-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00
Beryllium	2023-08	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			
Beryllium	2023-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
Beryllium	2024-01	ug/L							< 1.00	< 1.00	
Beryllium	2024-06	mg/L					< 0.00100			< 0.00100	
Beryllium	2024-06	ug/L	**0.353 J**	< 1.00				< 1.00			< 1.00
Beryllium	2024-07	ug/L			< 1.00				< 1.00		
Beryllium	2024-09	ug/L							< 1.00	< 1.00	
Beryllium	2024-11	ug/L							< 1.00		
Beryllium	2024-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00
Beryllium	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Beryllium	2025-10	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
beta-BHC	2014-10	ug/L									
beta-BHC	2014-11	ug/L									
beta-BHC	2014-12	ug/L									
beta-BHC	2015-05	ug/L									
beta-BHC	2015-09	ug/L									
beta-BHC	2016-11	ug/L									
beta-BHC	2017-11	ug/L									
beta-BHC	2020-06	ug/L									
beta-BHC	2020-11	ug/L									
beta-BHC	2021-05	ug/L									
beta-BHC	2021-09	ug/L									
beta-BHC	2022-03	ug/L									
beta-BHC	2022-09	ug/L									

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
beta-BHC	2023-06	ug/L						< 0.0640										
beta-BHC	2023-11	ug/L																
beta-BHC	2024-06	ug/L																
beta-BHC	2024-07	ug/L																
beta-BHC	2025-06	ug/L																
beta-BHC	2025-10	ug/L								< 0.0931								
bis(2-Chloroethoxy)methane	2014-10	ug/L							< 11.1									
bis(2-Chloroethoxy)methane	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
bis(2-Chloroethoxy)methane	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
bis(2-Chloroethoxy)methane	2017-11	ug/L						< 11.8	< 10.9									
bis(2-Chloroethoxy)methane	2020-06	ug/L									< 11.5							
bis(2-Chloroethoxy)methane	2020-11	ug/L											< 11.8	< 10.5				
bis(2-Chloroethoxy)methane	2021-05	ug/L											< 11.2	< 11.9				
bis(2-Chloroethoxy)methane	2021-09	ug/L													< 10.5			
bis(2-Chloroethoxy)methane	2022-03	ug/L											< 11.9	< 10.4				
bis(2-Chloroethoxy)methane	2022-09	ug/L													< 10.4			
bis(2-Chloroethoxy)methane	2023-06	ug/L						< 11.6										
bis(2-Chloroethoxy)methane	2023-11	ug/L																
bis(2-Chloroethoxy)methane	2024-06	ug/L																
bis(2-Chloroethoxy)methane	2024-07	ug/L																
bis(2-Chloroethoxy)methane	2025-06	ug/L																
bis(2-Chloroethoxy)methane	2025-10	ug/L								< 10.9								
bis(2-Chloroethyl)ether	2014-10	ug/L							< 11.1									
bis(2-Chloroethyl)ether	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
bis(2-Chloroethyl)ether	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
bis(2-Chloroethyl)ether	2017-11	ug/L						< 11.8	< 10.9									
bis(2-Chloroethyl)ether	2020-06	ug/L									< 11.5							
bis(2-Chloroethyl)ether	2020-11	ug/L											< 11.8	< 10.5				
bis(2-Chloroethyl)ether	2021-05	ug/L											< 11.2	< 11.9				
bis(2-Chloroethyl)ether	2021-09	ug/L													< 10.5			
bis(2-Chloroethyl)ether	2022-03	ug/L											< 11.9	< 10.4				
bis(2-Chloroethyl)ether	2022-09	ug/L													< 10.4			
bis(2-Chloroethyl)ether	2023-06	ug/L						< 11.6										
bis(2-Chloroethyl)ether	2023-11	ug/L																
bis(2-Chloroethyl)ether	2024-06	ug/L																
bis(2-Chloroethyl)ether	2024-07	ug/L																
bis(2-Chloroethyl)ether	2025-06	ug/L																
bis(2-Chloroethyl)ether	2025-10	ug/L								< 10.9								
bis(2-Ethylhexyl)phthalate	2014-10	ug/L							**3.25 J**									
bis(2-Ethylhexyl)phthalate	2015-09	ug/L			**7.65 J**			**5.55 J**	**5.21 J**									
bis(2-Ethylhexyl)phthalate	2016-11	ug/L			**0.679 J**			< 11.0	< 11.0									
bis(2-Ethylhexyl)phthalate	2017-11	ug/L						< 11.8	< 10.9									
bis(2-Ethylhexyl)phthalate	2020-06	ug/L									< 11.5							
bis(2-Ethylhexyl)phthalate	2020-11	ug/L											< 11.8	< 10.5				
bis(2-Ethylhexyl)phthalate	2021-05	ug/L											< 11.2	< 11.9				
bis(2-Ethylhexyl)phthalate	2021-09	ug/L													< 10.5			
bis(2-Ethylhexyl)phthalate	2022-03	ug/L											< 11.9	< 10.4				
bis(2-Ethylhexyl)phthalate	2022-09	ug/L													< 10.4			
bis(2-Ethylhexyl)phthalate	2023-06	ug/L						< 11.6										
bis(2-Ethylhexyl)phthalate	2023-11	ug/L																
bis(2-Ethylhexyl)phthalate	2024-06	ug/L																
bis(2-Ethylhexyl)phthalate	2024-07	ug/L																
bis(2-Ethylhexyl)phthalate	2025-06	ug/L																
bis(2-Ethylhexyl)phthalate	2025-10	ug/L								< 10.9								
Bromochloromethane	2014-10	ug/L							< 5.00	< 5.00								
Bromochloromethane	2014-11	ug/L			< 5.00	< 5.00	< 5.00	< 5.00			< 5.00	< 5.00						

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
beta-BHC	2023-06	ug/L									
beta-BHC	2023-11	ug/L		< 0.0604							
beta-BHC	2024-06	ug/L		< 0.0909				< 0.0909			
beta-BHC	2024-07	ug/L					< 0.0873				
beta-BHC	2025-06	ug/L				< 0.0911	< 0.0911	< 0.0907			
beta-BHC	2025-10	ug/L								< 0.0936	
bis(2-Chloroethoxy)methane	2014-10	ug/L									
bis(2-Chloroethoxy)methane	2015-09	ug/L									
bis(2-Chloroethoxy)methane	2016-11	ug/L									
bis(2-Chloroethoxy)methane	2017-11	ug/L									
bis(2-Chloroethoxy)methane	2020-06	ug/L									
bis(2-Chloroethoxy)methane	2020-11	ug/L									
bis(2-Chloroethoxy)methane	2021-05	ug/L									
bis(2-Chloroethoxy)methane	2021-09	ug/L									
bis(2-Chloroethoxy)methane	2022-03	ug/L									
bis(2-Chloroethoxy)methane	2022-09	ug/L									
bis(2-Chloroethoxy)methane	2023-06	ug/L									
bis(2-Chloroethoxy)methane	2023-11	ug/L		< 10.0							
bis(2-Chloroethoxy)methane	2024-06	ug/L		< 10.4				< 10.0			
bis(2-Chloroethoxy)methane	2024-07	ug/L					< 12.5				
bis(2-Chloroethoxy)methane	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
bis(2-Chloroethoxy)methane	2025-10	ug/L								< 10.2	
bis(2-Chloroethyl)ether	2014-10	ug/L									
bis(2-Chloroethyl)ether	2015-09	ug/L									
bis(2-Chloroethyl)ether	2016-11	ug/L									
bis(2-Chloroethyl)ether	2017-11	ug/L									
bis(2-Chloroethyl)ether	2020-06	ug/L									
bis(2-Chloroethyl)ether	2020-11	ug/L									
bis(2-Chloroethyl)ether	2021-05	ug/L									
bis(2-Chloroethyl)ether	2021-09	ug/L									
bis(2-Chloroethyl)ether	2022-03	ug/L									
bis(2-Chloroethyl)ether	2022-09	ug/L									
bis(2-Chloroethyl)ether	2023-06	ug/L									
bis(2-Chloroethyl)ether	2023-11	ug/L		< 10.0							
bis(2-Chloroethyl)ether	2024-06	ug/L		< 10.4				< 10.0			
bis(2-Chloroethyl)ether	2024-07	ug/L					< 12.5				
bis(2-Chloroethyl)ether	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
bis(2-Chloroethyl)ether	2025-10	ug/L								< 10.2	
bis(2-Ethylhexyl)phthalate	2014-10	ug/L									
bis(2-Ethylhexyl)phthalate	2015-09	ug/L									
bis(2-Ethylhexyl)phthalate	2016-11	ug/L									
bis(2-Ethylhexyl)phthalate	2017-11	ug/L									
bis(2-Ethylhexyl)phthalate	2020-06	ug/L									
bis(2-Ethylhexyl)phthalate	2020-11	ug/L									
bis(2-Ethylhexyl)phthalate	2021-05	ug/L									
bis(2-Ethylhexyl)phthalate	2021-09	ug/L									
bis(2-Ethylhexyl)phthalate	2022-03	ug/L									
bis(2-Ethylhexyl)phthalate	2022-09	ug/L									
bis(2-Ethylhexyl)phthalate	2023-06	ug/L									
bis(2-Ethylhexyl)phthalate	2023-11	ug/L		**7.47 J**							
bis(2-Ethylhexyl)phthalate	2024-06	ug/L		< 10.4				< 10.0			
bis(2-Ethylhexyl)phthalate	2024-07	ug/L					< 12.5				
bis(2-Ethylhexyl)phthalate	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
bis(2-Ethylhexyl)phthalate	2025-10	ug/L								< 10.2	
Bromochloromethane	2014-10	ug/L									
Bromochloromethane	2014-11	ug/L									

Table 14

Winneshiek County Area Solid Waste Agency — **Analytical Data Summary - Shallow Groundwater Appendix II**

Permit No. 57-SDP-01-74P — **2025 Annual Water Quality Report**

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Bromochloromethane	2015-05	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Bromochloromethane	2015-09	ug/L			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Bromochloromethane	2016-03	ug/L						< 5.00	< 5.00									
Bromochloromethane	2016-04	ug/L	< 5.00		< 5.00	< 5.00	< 5.00			< 5.00	< 5.00	< 5.00						
Bromochloromethane	2016-11	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00						
Bromochloromethane	2017-05	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Bromochloromethane	2017-11	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00						
Bromochloromethane	2018-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Bromochloromethane	2018-08	ug/L		< 5.00														
Bromochloromethane	2018-10	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Bromochloromethane	2019-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Bromochloromethane	2019-08	ug/L		< 5.00														
Bromochloromethane	2019-10	ug/L						< 5.00	< 5.00									
Bromochloromethane	2019-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Bromochloromethane	2020-02	ug/L											< 5.00	< 5.00	< 5.00	< 5.00		
Bromochloromethane	2020-06	ug/L			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			
Bromochloromethane	2020-07	ug/L	< 5.00	< 5.00												< 5.00		
Bromochloromethane	2020-08	ug/L											< 5.00	< 5.00	< 5.00	< 5.00		
Bromochloromethane	2020-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Bromochloromethane	2021-05	ug/L			< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00				
Bromochloromethane	2021-06	ug/L	< 5.00				< 5.00								< 5.00	< 5.00		
Bromochloromethane	2021-08	ug/L													< 5.00			
Bromochloromethane	2021-09	ug/L	< 5.00	< 50.0	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromochloromethane	2021-12	ug/L															< 5.00	< 5.00
Bromochloromethane	2022-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromochloromethane	2022-06	ug/L															< 5.00	< 5.00
Bromochloromethane	2022-08	ug/L			< 5.00					< 5.00	< 5.00	< 5.00					< 5.00	< 5.00
Bromochloromethane	2022-09	ug/L	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00				< 5.00	< 5.00	< 5.00	< 5.00		
Bromochloromethane	2022-12	ug/L															< 5.00	< 5.00
Bromochloromethane	2023-06	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromochloromethane	2023-08	ug/L																
Bromochloromethane	2023-11	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00		< 5.00		< 5.00
Bromochloromethane	2024-01	ug/L																
Bromochloromethane	2024-06	ug/L			< 5.00			< 5.00	< 5.00			< 5.00	< 5.00		< 5.00		< 5.00	< 5.00
Bromochloromethane	2024-07	ug/L	< 5.00			< 5.00 J	< 5.00 J							< 5.00 J		< 5.00		
Bromochloromethane	2024-09	ug/L																
Bromochloromethane	2024-11	ug/L				< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Bromochloromethane	2024-12	ug/L	< 5.00		< 5.00		< 5.00						< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromochloromethane	2025-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromochloromethane	2025-10	ug/L			< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5 J	< 5	< 5	< 5	< 5	< 5
Bromodichloromethane	2014-10	ug/L							< 1.00	< 1.00								
Bromodichloromethane	2014-11	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00						
Bromodichloromethane	2015-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Bromodichloromethane	2015-09	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Bromodichloromethane	2016-03	ug/L						< 1.00	< 1.00									
Bromodichloromethane	2016-04	ug/L	< 1.00		< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00						
Bromodichloromethane	2016-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
Bromodichloromethane	2017-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Bromodichloromethane	2017-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
Bromodichloromethane	2018-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Bromodichloromethane	2018-08	ug/L		< 1.00														
Bromodichloromethane	2018-10	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Bromodichloromethane	2019-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Bromodichloromethane	2019-08	ug/L		< 1.00														
Bromodichloromethane	2019-10	ug/L						< 1.00	< 1.00									
Bromodichloromethane	2019-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Bromochloromethane	2015-05	ug/L									
Bromochloromethane	2015-09	ug/L									
Bromochloromethane	2016-03	ug/L									
Bromochloromethane	2016-04	ug/L									
Bromochloromethane	2016-11	ug/L									
Bromochloromethane	2017-05	ug/L									
Bromochloromethane	2017-11	ug/L									
Bromochloromethane	2018-06	ug/L									
Bromochloromethane	2018-08	ug/L									
Bromochloromethane	2018-10	ug/L									
Bromochloromethane	2019-06	ug/L									< 5.00
Bromochloromethane	2019-08	ug/L									< 5.00
Bromochloromethane	2019-10	ug/L									
Bromochloromethane	2019-11	ug/L									< 5.00
Bromochloromethane	2020-02	ug/L									< 5.00
Bromochloromethane	2020-06	ug/L									< 5.00
Bromochloromethane	2020-07	ug/L									
Bromochloromethane	2020-08	ug/L									
Bromochloromethane	2020-11	ug/L									< 5.00
Bromochloromethane	2021-05	ug/L									< 5.00
Bromochloromethane	2021-06	ug/L									
Bromochloromethane	2021-08	ug/L									
Bromochloromethane	2021-09	ug/L	< 5.00	< 5.00							< 5.00
Bromochloromethane	2021-12	ug/L	< 5.00	< 5.00							
Bromochloromethane	2022-03	ug/L	< 5.00	< 5.00							
Bromochloromethane	2022-06	ug/L	< 5.00	< 5.00							
Bromochloromethane	2022-08	ug/L	< 5.00	< 5.00		< 5.00					
Bromochloromethane	2022-09	ug/L			< 5.00		< 5.00	< 5.00			< 5.00
Bromochloromethane	2022-12	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			
Bromochloromethane	2023-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			< 5.00
Bromochloromethane	2023-08	ug/L			< 5.00	< 5.00	< 5.00	< 5.00			
Bromochloromethane	2023-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	
Bromochloromethane	2024-01	ug/L							< 5.00	< 5.00	
Bromochloromethane	2024-06	ug/L	< 5.00	< 5.00			< 5.00	< 5.00		< 5.00	< 5.00
Bromochloromethane	2024-07	ug/L			< 5.00 J				< 5.00 J		
Bromochloromethane	2024-09	ug/L							< 5.00	< 5.00	
Bromochloromethane	2024-11	ug/L							< 5.00		
Bromochloromethane	2024-12	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00
Bromochloromethane	2025-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromochloromethane	2025-10	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	
Bromodichloromethane	2014-10	ug/L									
Bromodichloromethane	2014-11	ug/L									
Bromodichloromethane	2015-05	ug/L									
Bromodichloromethane	2015-09	ug/L									
Bromodichloromethane	2016-03	ug/L									
Bromodichloromethane	2016-04	ug/L									
Bromodichloromethane	2016-11	ug/L									
Bromodichloromethane	2017-05	ug/L									
Bromodichloromethane	2017-11	ug/L									
Bromodichloromethane	2018-06	ug/L									
Bromodichloromethane	2018-08	ug/L									
Bromodichloromethane	2018-10	ug/L									
Bromodichloromethane	2019-06	ug/L									< 1.00
Bromodichloromethane	2019-08	ug/L									< 1.00
Bromodichloromethane	2019-10	ug/L									
Bromodichloromethane	2019-11	ug/L									< 1.00

Table 14

Winneshiek County Area Solid Waste Agency — **Analytical Data Summary - Shallow Groundwater Appendix II**

Permit No. 57-SDP-01-74P — **2025 Annual Water Quality Report**

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Bromodichloromethane	2020-02	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
Bromodichloromethane	2020-06	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
Bromodichloromethane	2020-07	ug/L	< 1.00	< 1.00												< 1.00		
Bromodichloromethane	2020-08	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
Bromodichloromethane	2020-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Bromodichloromethane	2021-05	ug/L			< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00				
Bromodichloromethane	2021-06	ug/L	< 1.00				< 1.00								< 1.00	< 1.00		
Bromodichloromethane	2021-08	ug/L													< 1.00			
Bromodichloromethane	2021-09	ug/L	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Bromodichloromethane	2021-12	ug/L															< 1.00	< 1.00
Bromodichloromethane	2022-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Bromodichloromethane	2022-06	ug/L															< 1.00	< 1.00
Bromodichloromethane	2022-08	ug/L			< 1.00					< 1.00	< 1.00	< 1.00					< 1.00	< 1.00
Bromodichloromethane	2022-09	ug/L	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00				< 1.00	< 1.00	< 1.00	< 1.00		
Bromodichloromethane	2022-12	ug/L															< 1.00	< 1.00
Bromodichloromethane	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Bromodichloromethane	2023-08	ug/L																
Bromodichloromethane	2023-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00		< 1.00		< 1.00
Bromodichloromethane	2024-01	ug/L																
Bromodichloromethane	2024-06	ug/L			< 1.00			< 1.00	< 1.00			< 1.00	< 1.00		< 1.00		< 1.00	< 1.00
Bromodichloromethane	2024-07	ug/L	< 1.00			< 1.00 J	< 1.00 J							< 1.00 J		< 1.00		
Bromodichloromethane	2024-09	ug/L																
Bromodichloromethane	2024-11	ug/L				< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Bromodichloromethane	2024-12	ug/L	< 1.00		< 1.00		< 1.00						< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Bromodichloromethane	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Bromodichloromethane	2025-10	ug/L			< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1 J	< 1	< 1	< 1	< 1	< 1
Bromoform	2014-10	ug/L							< 5.00	< 5.00								
Bromoform	2014-11	ug/L			< 5.00	< 5.00	< 5.00	< 5.00			< 5.00	< 5.00						
Bromoform	2015-05	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Bromoform	2015-09	ug/L			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Bromoform	2016-03	ug/L						< 5.00	< 5.00									
Bromoform	2016-04	ug/L	< 5.00		< 5.00	< 5.00	< 5.00			< 5.00	< 5.00	< 5.00						
Bromoform	2016-11	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00						
Bromoform	2017-05	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Bromoform	2017-11	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00						
Bromoform	2018-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Bromoform	2018-08	ug/L		< 5.00														
Bromoform	2018-10	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Bromoform	2019-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Bromoform	2019-08	ug/L		< 5.00														
Bromoform	2019-10	ug/L						< 5.00	< 5.00									
Bromoform	2019-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Bromoform	2020-02	ug/L											< 5.00	< 5.00	< 5.00	< 5.00		
Bromoform	2020-06	ug/L			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			
Bromoform	2020-07	ug/L	< 5.00	< 5.00												< 5.00		
Bromoform	2020-08	ug/L											< 5.00	< 5.00	< 5.00	< 5.00		
Bromoform	2020-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Bromoform	2021-05	ug/L			< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00				
Bromoform	2021-06	ug/L	< 5.00				< 5.00								< 5.00	< 5.00		
Bromoform	2021-08	ug/L													< 5.00			
Bromoform	2021-09	ug/L	< 5.00	< 50.0	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromoform	2021-12	ug/L															< 5.00	< 5.00
Bromoform	2022-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromoform	2022-06	ug/L															< 5.00	< 5.00
Bromoform	2022-08	ug/L			< 5.00					< 5.00	< 5.00	< 5.00					< 5.00	< 5.00
Bromoform	2022-09	ug/L	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00				< 5.00	< 5.00	< 5.00	< 5.00		

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Bromodichloromethane	2020-02	ug/L									< 1.00
Bromodichloromethane	2020-06	ug/L									< 1.00
Bromodichloromethane	2020-07	ug/L									
Bromodichloromethane	2020-08	ug/L									
Bromodichloromethane	2020-11	ug/L									< 1.00
Bromodichloromethane	2021-05	ug/L									< 1.00
Bromodichloromethane	2021-06	ug/L									
Bromodichloromethane	2021-08	ug/L									
Bromodichloromethane	2021-09	ug/L	< 1.00	< 1.00							< 1.00
Bromodichloromethane	2021-12	ug/L	< 1.00	< 1.00							
Bromodichloromethane	2022-03	ug/L	< 1.00	< 1.00							
Bromodichloromethane	2022-06	ug/L	< 1.00	< 1.00							
Bromodichloromethane	2022-08	ug/L	< 1.00	< 1.00		< 1.00					
Bromodichloromethane	2022-09	ug/L			< 1.00		< 1.00	< 1.00			< 1.00
Bromodichloromethane	2022-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
Bromodichloromethane	2023-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00
Bromodichloromethane	2023-08	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			
Bromodichloromethane	2023-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
Bromodichloromethane	2024-01	ug/L							< 1.00	< 1.00	
Bromodichloromethane	2024-06	ug/L	< 1.00	< 1.00			< 1.00	< 1.00		< 1.00	< 1.00
Bromodichloromethane	2024-07	ug/L			< 1.00 J				< 1.00 J		
Bromodichloromethane	2024-09	ug/L							< 1.00	< 1.00	
Bromodichloromethane	2024-11	ug/L							< 1.00		
Bromodichloromethane	2024-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00
Bromodichloromethane	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Bromodichloromethane	2025-10	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
Bromoform	2014-10	ug/L									
Bromoform	2014-11	ug/L									
Bromoform	2015-05	ug/L									
Bromoform	2015-09	ug/L									
Bromoform	2016-03	ug/L									
Bromoform	2016-04	ug/L									
Bromoform	2016-11	ug/L									
Bromoform	2017-05	ug/L									
Bromoform	2017-11	ug/L									
Bromoform	2018-06	ug/L									
Bromoform	2018-08	ug/L									
Bromoform	2018-10	ug/L									
Bromoform	2019-06	ug/L									< 5.00
Bromoform	2019-08	ug/L									< 5.00
Bromoform	2019-10	ug/L									
Bromoform	2019-11	ug/L									< 5.00
Bromoform	2020-02	ug/L									< 5.00
Bromoform	2020-06	ug/L									< 5.00
Bromoform	2020-07	ug/L									
Bromoform	2020-08	ug/L									
Bromoform	2020-11	ug/L									< 5.00
Bromoform	2021-05	ug/L									< 5.00
Bromoform	2021-06	ug/L									
Bromoform	2021-08	ug/L									
Bromoform	2021-09	ug/L	< 5.00	< 5.00							< 5.00
Bromoform	2021-12	ug/L	< 5.00	< 5.00							
Bromoform	2022-03	ug/L	< 5.00	< 5.00							
Bromoform	2022-06	ug/L	< 5.00	< 5.00							
Bromoform	2022-08	ug/L	< 5.00	< 5.00		< 5.00					
Bromoform	2022-09	ug/L			< 5.00		< 5.00	< 5.00			< 5.00

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Bromoform	2022-12	ug/L															< 5.00	< 5.00
Bromoform	2023-06	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromoform	2023-08	ug/L																
Bromoform	2023-11	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00		< 5.00		< 5.00
Bromoform	2024-01	ug/L																
Bromoform	2024-06	ug/L			< 5.00			< 5.00	< 5.00			< 5.00	< 5.00		< 5.00		< 5.00	< 5.00
Bromoform	2024-07	ug/L	< 5.00			< 5.00 J	< 5.00 J							< 5.00 J		< 5.00		
Bromoform	2024-09	ug/L																
Bromoform	2024-11	ug/L				< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Bromoform	2024-12	ug/L	< 5.00		< 5.00		< 5.00						< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromoform	2025-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromoform	2025-10	ug/L			< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5 J	< 5	< 5	< 5	< 5	< 5
Bromomethane	2014-10	ug/L							< 4.00	< 4.00								
Bromomethane	2014-11	ug/L			< 4.00	< 4.00	< 4.00	< 4.00			< 4.00	< 4.00						
Bromomethane	2015-05	ug/L	< 4.00		< 4.00	**0.313 J**	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00						
Bromomethane	2015-09	ug/L			< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00								
Bromomethane	2016-03	ug/L						< 4.00	< 4.00									
Bromomethane	2016-04	ug/L	< 4.00		< 4.00	< 4.00	< 4.00			**0.37 J**	**0.615 J**	< 4.00						
Bromomethane	2016-11	ug/L	< 4.00		< 4.00	**0.404 J**	**0.487 J**	< 4.00	< 4.00	< 4.00		< 4.00						
Bromomethane	2017-05	ug/L	**0.389 J**		< 4.00	< 4.00	**0.479 J**	**0.344 J**	**0.577 J**	< 4.00	**0.283 J**	**0.45 J**						
Bromomethane	2017-11	ug/L	< 4.00		< 4.00	< 4.00	**0.676 J**	< 4.00	**0.549 J**	< 4.00		< 4.00						
Bromomethane	2018-06	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00						
Bromomethane	2018-08	ug/L		< 4.00														
Bromomethane	2018-10	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00						
Bromomethane	2019-06	ug/L	< 4.00	**1.97 J**	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00						
Bromomethane	2019-08	ug/L		< 4.00														
Bromomethane	2019-10	ug/L						< 4.00	< 4.00									
Bromomethane	2019-11	ug/L	< 4.00	< 4.00	< 4.00	< 5.00	< 4.00			< 5.00	< 5.00	< 5.00	< 4.00	< 4.00	< 4.00	< 4.00		
Bromomethane	2020-02	ug/L											< 4.00	< 4.00	< 4.00	< 4.00		
Bromomethane	2020-06	ug/L			< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00			
Bromomethane	2020-07	ug/L	< 4.00	< 4.00												< 4.00		
Bromomethane	2020-08	ug/L											< 4.00	< 4.00	< 4.00	< 4.00		
Bromomethane	2020-11	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Bromomethane	2021-05	ug/L			< 4.00	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00				
Bromomethane	2021-06	ug/L	< 4.00				< 4.00								< 4.00	< 4.00		
Bromomethane	2021-08	ug/L													< 4.00			
Bromomethane	2021-09	ug/L	< 4.00	< 40.0	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Bromomethane	2021-12	ug/L															< 4.00	< 4.00
Bromomethane	2022-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Bromomethane	2022-06	ug/L															< 4.00	< 4.00
Bromomethane	2022-08	ug/L			< 4.00					< 4.00	< 4.00	< 4.00					< 4.00	< 4.00
Bromomethane	2022-09	ug/L	< 4.00	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00				< 4.00	< 4.00	< 4.00	< 4.00		
Bromomethane	2022-12	ug/L															< 4.00	< 4.00
Bromomethane	2023-06	ug/L	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Bromomethane	2023-08	ug/L																
Bromomethane	2023-11	ug/L	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		< 4.00	< 4.00	< 4.00		< 4.00		< 4.00
Bromomethane	2024-01	ug/L																
Bromomethane	2024-06	ug/L			< 4.00			< 4.00	< 4.00			< 4.00	< 4.00		< 4.00		< 4.00	< 4.00
Bromomethane	2024-07	ug/L	< 4.00			< 4.00 J	< 4.00 J							< 4.00 J		< 4.00		
Bromomethane	2024-09	ug/L																
Bromomethane	2024-11	ug/L				< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00						
Bromomethane	2024-12	ug/L	< 4.00		< 4.00		< 4.00						< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Bromomethane	2025-06	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Bromomethane	2025-10	ug/L			< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4 J	< 4	< 4	< 4	< 4	< 4
Butylbenzylphthalate	2014-10	ug/L							**0.466 J**									
Butylbenzylphthalate	2014-12	ug/L							< 10.5									

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Bromoform	2022-12	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			
Bromoform	2023-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			< 5.00
Bromoform	2023-08	ug/L			< 5.00	< 5.00	< 5.00	< 5.00			
Bromoform	2023-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	
Bromoform	2024-01	ug/L							< 5.00	< 5.00	
Bromoform	2024-06	ug/L	< 5.00	< 5.00			< 5.00	< 5.00		< 5.00	< 5.00
Bromoform	2024-07	ug/L			< 5.00 J				< 5.00 J		
Bromoform	2024-09	ug/L							< 5.00	< 5.00	
Bromoform	2024-11	ug/L							< 5.00		
Bromoform	2024-12	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00
Bromoform	2025-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Bromoform	2025-10	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	
Bromomethane	2014-10	ug/L									
Bromomethane	2014-11	ug/L									
Bromomethane	2015-05	ug/L									
Bromomethane	2015-09	ug/L									
Bromomethane	2016-03	ug/L									
Bromomethane	2016-04	ug/L									
Bromomethane	2016-11	ug/L									
Bromomethane	2017-05	ug/L									
Bromomethane	2017-11	ug/L									
Bromomethane	2018-06	ug/L									
Bromomethane	2018-08	ug/L									
Bromomethane	2018-10	ug/L									
Bromomethane	2019-06	ug/L									< 4.00
Bromomethane	2019-08	ug/L									< 4.00
Bromomethane	2019-10	ug/L									
Bromomethane	2019-11	ug/L									< 4.00
Bromomethane	2020-02	ug/L									< 4.00
Bromomethane	2020-06	ug/L									< 4.00
Bromomethane	2020-07	ug/L									
Bromomethane	2020-08	ug/L									
Bromomethane	2020-11	ug/L									< 4.00
Bromomethane	2021-05	ug/L									< 4.00
Bromomethane	2021-06	ug/L									
Bromomethane	2021-08	ug/L									
Bromomethane	2021-09	ug/L	< 4.00	< 4.00							< 4.00
Bromomethane	2021-12	ug/L	< 4.00	< 4.00							
Bromomethane	2022-03	ug/L	< 4.00	< 4.00							
Bromomethane	2022-06	ug/L	< 4.00	< 4.00							
Bromomethane	2022-08	ug/L	< 4.00	< 4.00		< 4.00					
Bromomethane	2022-09	ug/L			< 4.00		< 4.00	< 4.00			< 4.00
Bromomethane	2022-12	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00			
Bromomethane	2023-06	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00			< 4.00
Bromomethane	2023-08	ug/L			< 4.00	< 4.00	< 4.00	< 4.00			
Bromomethane	2023-11	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	
Bromomethane	2024-01	ug/L							< 4.00	< 4.00	
Bromomethane	2024-06	ug/L	< 4.00	< 4.00			< 4.00	< 4.00		< 4.00	< 4.00
Bromomethane	2024-07	ug/L			< 4.00 J				< 4.00 J		
Bromomethane	2024-09	ug/L							< 4.00	< 4.00	
Bromomethane	2024-11	ug/L							< 4.00		
Bromomethane	2024-12	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		< 4.00	< 4.00
Bromomethane	2025-06	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Bromomethane	2025-10	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	
Butylbenzylphthalate	2014-10	ug/L									
Butylbenzylphthalate	2014-12	ug/L									

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Butylbenzylphthalate	2015-05	ug/L							< 10.2									
Butylbenzylphthalate	2015-07	ug/L							< 10.6									
Butylbenzylphthalate	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Butylbenzylphthalate	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Butylbenzylphthalate	2017-11	ug/L						< 11.8	< 10.9									
Butylbenzylphthalate	2020-06	ug/L									< 11.5							
Butylbenzylphthalate	2020-11	ug/L											< 11.8	< 10.5				
Butylbenzylphthalate	2021-05	ug/L											< 11.2	< 11.9				
Butylbenzylphthalate	2021-09	ug/L													< 10.5			
Butylbenzylphthalate	2022-03	ug/L											< 11.9	< 10.4				
Butylbenzylphthalate	2022-09	ug/L													< 10.4			
Butylbenzylphthalate	2023-06	ug/L						< 11.6										
Butylbenzylphthalate	2023-11	ug/L																
Butylbenzylphthalate	2024-06	ug/L																
Butylbenzylphthalate	2024-07	ug/L																
Butylbenzylphthalate	2025-06	ug/L																
Butylbenzylphthalate	2025-10	ug/L								< 10.9								
Cadmium	2014-10	ug/L							< 0.500	< 0.500								
Cadmium	2014-11	ug/L			< 0.500	< 0.500	< 0.500	**0.117 J**			**0.372 J**	< 0.500						
Cadmium	2015-05	ug/L	< 0.500		< 0.500	< 0.500	< 0.500	**0.149 J**	< 0.500	< 0.500	**0.188 J**	< 0.500						
Cadmium	2015-09	ug/L			< 0.500	< 0.500	< 0.500	**0.133 J**	< 0.500	< 0.500								
Cadmium	2016-03	ug/L						**0.17 J**	**0.121 J**									
Cadmium	2016-04	ug/L	< 0.500		< 0.500	< 0.500	< 0.500			< 0.500	**0.084 J**	< 0.500						
Cadmium	2016-11	ug/L	< 0.500		< 0.500	< 0.500	< 0.500	**0.142 J**	< 0.500	< 0.500		< 0.500						
Cadmium	2017-05	ug/L	< 0.500		< 0.500	< 0.500	< 0.500	**0.168 J**	< 0.500	< 0.500	**0.085 J**	**0.054 J**						
Cadmium	2017-11	ug/L	< 0.500		< 0.500	< 0.500	< 0.500	**0.273 J**	< 0.500	< 0.500		< 0.500						
Cadmium	2018-06	ug/L	**0.062 J**	< 0.500	< 0.500	< 0.500	< 0.500	**0.124 J**	< 0.500	< 0.500	**0.077 J**	< 0.500						
Cadmium	2018-08	ug/L		< 0.500														
Cadmium	2018-10	ug/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	**0.158 J**	< 0.500	< 0.500	**0.144 J**	**0.094 J**						
Cadmium	2019-06	ug/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500						
Cadmium	2019-08	ug/L		< 0.500														
Cadmium	2019-10	ug/L						< 0.100	**0.135**									
Cadmium	2019-11	ug/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100			**0.061 J**	**0.128**	< 0.100	**0.131**	**0.179**	< 0.100	< 0.100		
Cadmium	2020-02	ug/L							< 0.100				**0.104**	**0.08 J**	< 0.100	< 0.100		
Cadmium	2020-06	ug/L			< 0.100	< 0.100	< 0.100	**0.139**	< 0.100	< 0.100	**0.053 J**	< 0.100	< 0.100	**0.316**	< 0.100			
Cadmium	2020-07	ug/L	< 0.100	< 0.100												< 0.100		
Cadmium	2020-08	ug/L											**0.18**	< 0.100	< 0.100	< 0.100		
Cadmium	2020-11	ug/L	< 0.100	**0.644**	< 0.100	< 0.100	< 0.100	**0.163**	< 0.100	**0.058 J**	**0.333**	< 0.100	< 0.100	**0.424**	< 0.100	< 0.100		
Cadmium	2021-05	ug/L			< 0.100	< 0.100		**0.184**	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	**0.26**				
Cadmium	2021-06	ug/L	< 0.100				< 0.100								< 0.100	< 0.100		
Cadmium	2021-08	ug/L													**0.098 J**			
Cadmium	2021-09	ug/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	**0.122**	< 0.100	< 0.100		< 0.100	**0.059 J**	**2.04**	**0.068 J**	< 0.100	~~**0.052 J**~~	< 0.100
Cadmium	2021-12	ug/L															< 0.100	< 0.100
Cadmium	2022-03	ug/L	< 0.100	**0.075 J**	< 0.100	< 0.100	< 0.100	**0.118**	< 0.100	< 0.100		< 0.100	**0.066 J**	**0.302**	**0.062 J**	< 0.100	< 0.100	< 0.100
Cadmium	2022-06	ug/L															< 0.100	< 0.100
Cadmium	2022-08	ug/L			< 0.100					< 0.100	**0.08 J**	**0.064 J**					< 0.100	< 0.100
Cadmium	2022-09	ug/L	< 0.100	< 0.100		< 0.100	< 0.100	**0.076 J**	< 0.100				**0.092 J**	**0.984**	**0.108**	< 0.100		
Cadmium	2022-12	ug/L															< 0.100	< 0.100
Cadmium	2023-06	ug/L	< 0.200		< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	**0.12 J**	**0.34**	**0.113 J**	< 0.200	< 0.200	< 0.200
Cadmium	2023-08	ug/L																
Cadmium	2023-11	ug/L	< 0.200		~~**0.209**~~	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200		< 0.200	< 0.200	< 0.200		< 0.200		< 0.200
Cadmium	2024-01	ug/L																
Cadmium	2024-06	mg/L						< 0.000200	< 0.000200									
Cadmium	2024-06	ug/L			< 0.200							< 0.200	< 0.200		< 0.200		< 0.200	< 0.200
Cadmium	2024-07	ug/L	< 0.200			< 0.200	< 0.200							**0.16 J**		< 0.200		
Cadmium	2024-09	ug/L																

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Butylbenzylphthalate	2015-05	ug/L									
Butylbenzylphthalate	2015-07	ug/L									
Butylbenzylphthalate	2015-09	ug/L									
Butylbenzylphthalate	2016-11	ug/L									
Butylbenzylphthalate	2017-11	ug/L									
Butylbenzylphthalate	2020-06	ug/L									
Butylbenzylphthalate	2020-11	ug/L									
Butylbenzylphthalate	2021-05	ug/L									
Butylbenzylphthalate	2021-09	ug/L									
Butylbenzylphthalate	2022-03	ug/L									
Butylbenzylphthalate	2022-09	ug/L									
Butylbenzylphthalate	2023-06	ug/L									
Butylbenzylphthalate	2023-11	ug/L		< 10.0							
Butylbenzylphthalate	2024-06	ug/L		< 10.4				< 10.0			
Butylbenzylphthalate	2024-07	ug/L					< 12.5				
Butylbenzylphthalate	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Butylbenzylphthalate	2025-10	ug/L								< 10.2	
Cadmium	2014-10	ug/L									
Cadmium	2014-11	ug/L									
Cadmium	2015-05	ug/L									
Cadmium	2015-09	ug/L									
Cadmium	2016-03	ug/L									
Cadmium	2016-04	ug/L									
Cadmium	2016-11	ug/L									
Cadmium	2017-05	ug/L									
Cadmium	2017-11	ug/L									
Cadmium	2018-06	ug/L									
Cadmium	2018-08	ug/L									
Cadmium	2018-10	ug/L									
Cadmium	2019-06	ug/L									< 0.500
Cadmium	2019-08	ug/L									< 0.500
Cadmium	2019-10	ug/L									
Cadmium	2019-11	ug/L									**0.045 J**
Cadmium	2020-02	ug/L									< 0.100
Cadmium	2020-06	ug/L									< 0.100
Cadmium	2020-07	ug/L									
Cadmium	2020-08	ug/L									
Cadmium	2020-11	ug/L									< 0.100
Cadmium	2021-05	ug/L									< 0.100
Cadmium	2021-06	ug/L									
Cadmium	2021-08	ug/L									
Cadmium	2021-09	ug/L	< 0.100	< 0.100							< 0.100
Cadmium	2021-12	ug/L	< 0.100	< 0.100							
Cadmium	2022-03	ug/L	< 0.100	< 0.100							
Cadmium	2022-06	ug/L	< 0.100	< 0.100							
Cadmium	2022-08	ug/L	< 0.100	**0.064 J**		**0.281**					
Cadmium	2022-09	ug/L			< 0.100		< 0.100	< 0.100			< 0.100
Cadmium	2022-12	ug/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	**0.082 J**			
Cadmium	2023-06	ug/L	< 0.200	**0.163 J**	< 0.200	< 0.200	< 0.200	**0.306**			< 0.200
Cadmium	2023-08	ug/L			< 0.200	< 0.200	< 0.200	**0.416**			
Cadmium	2023-11	ug/L	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	**0.795**	< 0.200	< 0.200	
Cadmium	2024-01	ug/L							< 0.200	**0.123 J**	
Cadmium	2024-06	mg/L					< 0.000200			< 0.000200	
Cadmium	2024-06	ug/L	< 0.200	< 0.200				**0.389**			< 0.200
Cadmium	2024-07	ug/L			< 0.200				< 0.200		
Cadmium	2024-09	ug/L							**0.194 J**	< 0.200	

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Cadmium	2024-11	ug/L				< 0.200		**0.254**	< 0.200	< 0.200	< 0.200	< 0.200						
Cadmium	2024-12	ug/L	< 0.200		< 0.200		< 0.200						< 0.200	**0.161 J**	< 0.200	< 0.200	< 0.200	< 0.200
Cadmium	2025-02	ug/L						< 0.200										
Cadmium	2025-06	ug/L	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200		< 0.200	< 0.200	**0.186 J**	**0.107 J**	< 0.200	< 0.200	< 0.200
Cadmium	2025-10	ug/L			< 0.2	< 0.2	< 0.2	**0.471**	< 0.2	< 0.2		< 0.2	< 0.2	**0.161 J**	< 0.2	< 0.2	< 0.2	< 0.2
Carbon Disulfide	2014-10	ug/L							< 1.00	**0.642 J**								
Carbon Disulfide	2014-11	ug/L			< 1.00	**1.97**	**1.08**	< 1.00			**0.451 J**	**0.751 J**						
Carbon Disulfide	2015-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Carbon Disulfide	2015-09	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Carbon Disulfide	2016-03	ug/L						< 1.00	< 1.00									
Carbon Disulfide	2016-04	ug/L	< 1.00		< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00						
Carbon Disulfide	2016-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
Carbon Disulfide	2017-05	ug/L	< 1.00		< 1.00	**0.777 J**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Carbon Disulfide	2017-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
Carbon Disulfide	2018-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Carbon Disulfide	2018-08	ug/L		< 1.00														
Carbon Disulfide	2018-10	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Carbon Disulfide	2019-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Carbon Disulfide	2019-08	ug/L		< 1.00														
Carbon Disulfide	2019-10	ug/L						< 1.00	< 1.00									
Carbon Disulfide	2019-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Carbon Disulfide	2020-02	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
Carbon Disulfide	2020-06	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
Carbon Disulfide	2020-07	ug/L	< 1.00	< 1.00												< 1.00		
Carbon Disulfide	2020-08	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
Carbon Disulfide	2020-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Carbon Disulfide	2021-05	ug/L			< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00				
Carbon Disulfide	2021-06	ug/L	< 1.00				< 1.00								< 1.00	< 1.00		
Carbon Disulfide	2021-08	ug/L													< 1.00			
Carbon Disulfide	2021-09	ug/L	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Carbon Disulfide	2021-12	ug/L															< 1.00	< 1.00
Carbon Disulfide	2022-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Carbon Disulfide	2022-06	ug/L															< 1.00	< 1.00
Carbon Disulfide	2022-08	ug/L			< 1.00					< 1.00	< 1.00	< 1.00					< 1.00	< 1.00
Carbon Disulfide	2022-09	ug/L	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00				< 1.00	< 1.00	< 1.00	< 1.00		
Carbon Disulfide	2022-12	ug/L															< 1.00	< 1.00
Carbon Disulfide	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Carbon Disulfide	2023-08	ug/L																
Carbon Disulfide	2023-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00		< 1.00		< 1.00
Carbon Disulfide	2024-01	ug/L																
Carbon Disulfide	2024-06	ug/L			< 1.00			< 1.00	< 1.00			< 1.00	< 1.00		< 1.00		< 1.00	< 1.00
Carbon Disulfide	2024-07	ug/L	< 1.00			< 1.00 J	< 1.00 J							< 1.00 J		< 1.00		
Carbon Disulfide	2024-09	ug/L																
Carbon Disulfide	2024-11	ug/L				< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Carbon Disulfide	2024-12	ug/L	< 1.00		< 1.00		< 1.00						< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Carbon Disulfide	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Carbon Disulfide	2025-10	ug/L			< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1 J	< 1	< 1	< 1	< 1	< 1
Carbon Tetrachloride	2014-10	ug/L							< 2.00	< 2.00								
Carbon Tetrachloride	2014-11	ug/L			< 2.00	< 2.00	< 2.00	< 2.00			< 2.00	< 2.00						
Carbon Tetrachloride	2015-05	ug/L	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00						
Carbon Tetrachloride	2015-09	ug/L			< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00								
Carbon Tetrachloride	2016-03	ug/L						< 2.00	< 2.00									
Carbon Tetrachloride	2016-04	ug/L	< 2.00		< 2.00	< 2.00	< 2.00			< 2.00	< 2.00	< 2.00						
Carbon Tetrachloride	2016-11	ug/L	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00						
Carbon Tetrachloride	2017-05	ug/L	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00						
Carbon Tetrachloride	2017-11	ug/L	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00						

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Cadmium	2024-11	ug/L							**0.132 J**		
Cadmium	2024-12	ug/L	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	**0.181 J**		**0.115 J**	< 0.200
Cadmium	2025-02	ug/L									
Cadmium	2025-06	ug/L	< 0.200	< 0.200	< 0.200	< 0.200	< 0.200	**0.499**	< 0.200	< 0.200	< 0.200
Cadmium	2025-10	ug/L	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	**0.104 J**	
Carbon Disulfide	2014-10	ug/L									
Carbon Disulfide	2014-11	ug/L									
Carbon Disulfide	2015-05	ug/L									
Carbon Disulfide	2015-09	ug/L									
Carbon Disulfide	2016-03	ug/L									
Carbon Disulfide	2016-04	ug/L									
Carbon Disulfide	2016-11	ug/L									
Carbon Disulfide	2017-05	ug/L									
Carbon Disulfide	2017-11	ug/L									
Carbon Disulfide	2018-06	ug/L									
Carbon Disulfide	2018-08	ug/L									
Carbon Disulfide	2018-10	ug/L									
Carbon Disulfide	2019-06	ug/L									< 1.00
Carbon Disulfide	2019-08	ug/L									< 1.00
Carbon Disulfide	2019-10	ug/L									
Carbon Disulfide	2019-11	ug/L									< 1.00
Carbon Disulfide	2020-02	ug/L									< 1.00
Carbon Disulfide	2020-06	ug/L									< 1.00
Carbon Disulfide	2020-07	ug/L									
Carbon Disulfide	2020-08	ug/L									
Carbon Disulfide	2020-11	ug/L									< 1.00
Carbon Disulfide	2021-05	ug/L									< 1.00
Carbon Disulfide	2021-06	ug/L									
Carbon Disulfide	2021-08	ug/L									
Carbon Disulfide	2021-09	ug/L	< 1.00	**0.737 J**							< 1.00
Carbon Disulfide	2021-12	ug/L	< 1.00	< 1.00							
Carbon Disulfide	2022-03	ug/L	< 1.00	< 1.00							
Carbon Disulfide	2022-06	ug/L	< 1.00	< 1.00							
Carbon Disulfide	2022-08	ug/L	< 1.00	< 1.00		< 1.00					
Carbon Disulfide	2022-09	ug/L			< 1.00		< 1.00	< 1.00			< 1.00
Carbon Disulfide	2022-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
Carbon Disulfide	2023-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00
Carbon Disulfide	2023-08	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			
Carbon Disulfide	2023-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
Carbon Disulfide	2024-01	ug/L							< 1.00	< 1.00	
Carbon Disulfide	2024-06	ug/L	< 1.00	< 1.00			< 1.00	< 1.00		< 1.00	< 1.00
Carbon Disulfide	2024-07	ug/L			< 1.00 J				< 1.00 J		
Carbon Disulfide	2024-09	ug/L							< 1.00	< 1.00	
Carbon Disulfide	2024-11	ug/L							< 1.00		
Carbon Disulfide	2024-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00
Carbon Disulfide	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Carbon Disulfide	2025-10	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
Carbon Tetrachloride	2014-10	ug/L									
Carbon Tetrachloride	2014-11	ug/L									
Carbon Tetrachloride	2015-05	ug/L									
Carbon Tetrachloride	2015-09	ug/L									
Carbon Tetrachloride	2016-03	ug/L									
Carbon Tetrachloride	2016-04	ug/L									
Carbon Tetrachloride	2016-11	ug/L									
Carbon Tetrachloride	2017-05	ug/L									
Carbon Tetrachloride	2017-11	ug/L									

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Carbon Tetrachloride	2018-06	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00						
Carbon Tetrachloride	2018-08	ug/L		< 2.00														
Carbon Tetrachloride	2018-10	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00						
Carbon Tetrachloride	2019-06	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00						
Carbon Tetrachloride	2019-08	ug/L		< 2.00														
Carbon Tetrachloride	2019-10	ug/L						< 2.00	< 2.00									
Carbon Tetrachloride	2019-11	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00			< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
Carbon Tetrachloride	2020-02	ug/L											< 2.00	< 2.00	< 2.00	< 2.00		
Carbon Tetrachloride	2020-06	ug/L			< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00			
Carbon Tetrachloride	2020-07	ug/L	< 2.00	< 2.00												< 2.00		
Carbon Tetrachloride	2020-08	ug/L											< 2.00	< 2.00	< 2.00	< 2.00		
Carbon Tetrachloride	2020-11	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		
Carbon Tetrachloride	2021-05	ug/L			< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00				
Carbon Tetrachloride	2021-06	ug/L	< 2.00				< 2.00								< 2.00	< 2.00		
Carbon Tetrachloride	2021-08	ug/L													< 2.00			
Carbon Tetrachloride	2021-09	ug/L	< 2.00	< 20.0	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2021-12	ug/L															< 2.00	< 2.00
Carbon Tetrachloride	2022-03	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2022-06	ug/L															< 2.00	< 2.00
Carbon Tetrachloride	2022-08	ug/L			< 2.00					< 2.00	< 2.00	< 2.00					< 2.00	< 2.00
Carbon Tetrachloride	2022-09	ug/L	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00				< 2.00	< 2.00	< 2.00	< 2.00		
Carbon Tetrachloride	2022-12	ug/L															< 2.00	< 2.00
Carbon Tetrachloride	2023-06	ug/L	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2023-08	ug/L																
Carbon Tetrachloride	2023-11	ug/L	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00		< 2.00		< 2.00
Carbon Tetrachloride	2024-01	ug/L																
Carbon Tetrachloride	2024-06	ug/L			< 2.00			< 2.00	< 2.00			< 2.00	< 2.00		< 2.00		< 2.00	< 2.00
Carbon Tetrachloride	2024-07	ug/L	< 2.00			< 2.00 J	< 2.00 J							< 2.00 J		< 2.00		
Carbon Tetrachloride	2024-09	ug/L																
Carbon Tetrachloride	2024-11	ug/L				< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00						
Carbon Tetrachloride	2024-12	ug/L	< 2.00		< 2.00		< 2.00						< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2025-06	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2025-10	ug/L			< 2	< 2	< 2	< 2	< 2	< 2		< 2	< 2 J	< 2	< 2	< 2	< 2	< 2
Chlorobenzene	2014-10	ug/L							< 1.00	< 1.00								
Chlorobenzene	2014-11	ug/L			**1.42**	< 1.00	< 1.00	**0.236 J**			< 1.00	< 1.00						
Chlorobenzene	2015-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	**1.29**	< 1.00	< 1.00	< 1.00						
Chlorobenzene	2015-09	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Chlorobenzene	2016-03	ug/L						< 1.00	< 1.00									
Chlorobenzene	2016-04	ug/L	< 1.00		< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00						
Chlorobenzene	2016-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
Chlorobenzene	2017-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Chlorobenzene	2017-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	**0.205 J**	**0.254 J**	< 1.00		< 1.00						
Chlorobenzene	2018-06	ug/L	< 1.00	**2.33**	< 1.00	< 1.00	< 1.00	< 1.00	**0.525 J**	< 1.00	< 1.00	< 1.00						
Chlorobenzene	2018-08	ug/L		< 1.00														
Chlorobenzene	2018-10	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Chlorobenzene	2019-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Chlorobenzene	2019-08	ug/L		< 1.00														
Chlorobenzene	2019-10	ug/L						< 1.00	< 1.00									
Chlorobenzene	2019-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Chlorobenzene	2020-02	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
Chlorobenzene	2020-06	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
Chlorobenzene	2020-07	ug/L	< 1.00	< 1.00												< 1.00		
Chlorobenzene	2020-08	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
Chlorobenzene	2020-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**1.27**	< 1.00		
Chlorobenzene	2021-05	ug/L			< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00				
Chlorobenzene	2021-06	ug/L	< 1.00				< 1.00								< 1.00	< 1.00		

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Carbon Tetrachloride	2018-06	ug/L									
Carbon Tetrachloride	2018-08	ug/L									
Carbon Tetrachloride	2018-10	ug/L									
Carbon Tetrachloride	2019-06	ug/L									< 2.00
Carbon Tetrachloride	2019-08	ug/L									< 2.00
Carbon Tetrachloride	2019-10	ug/L									
Carbon Tetrachloride	2019-11	ug/L									< 2.00
Carbon Tetrachloride	2020-02	ug/L									< 2.00
Carbon Tetrachloride	2020-06	ug/L									< 2.00
Carbon Tetrachloride	2020-07	ug/L									
Carbon Tetrachloride	2020-08	ug/L									
Carbon Tetrachloride	2020-11	ug/L									< 2.00
Carbon Tetrachloride	2021-05	ug/L									< 2.00
Carbon Tetrachloride	2021-06	ug/L									
Carbon Tetrachloride	2021-08	ug/L									
Carbon Tetrachloride	2021-09	ug/L	< 2.00	< 2.00							< 2.00
Carbon Tetrachloride	2021-12	ug/L	< 2.00	< 2.00							
Carbon Tetrachloride	2022-03	ug/L	< 2.00	< 2.00							
Carbon Tetrachloride	2022-06	ug/L	< 2.00	< 2.00							
Carbon Tetrachloride	2022-08	ug/L	< 2.00	< 2.00		< 2.00					
Carbon Tetrachloride	2022-09	ug/L			< 2.00		< 2.00	< 2.00			< 2.00
Carbon Tetrachloride	2022-12	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00			
Carbon Tetrachloride	2023-06	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00			< 2.00
Carbon Tetrachloride	2023-08	ug/L			< 2.00	< 2.00	< 2.00	< 2.00			
Carbon Tetrachloride	2023-11	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	
Carbon Tetrachloride	2024-01	ug/L							< 2.00	< 2.00	
Carbon Tetrachloride	2024-06	ug/L	< 2.00	< 2.00			< 2.00	< 2.00		< 2.00	< 2.00
Carbon Tetrachloride	2024-07	ug/L			< 2.00 J				< 2.00 J		
Carbon Tetrachloride	2024-09	ug/L							< 2.00	< 2.00	
Carbon Tetrachloride	2024-11	ug/L							< 2.00		
Carbon Tetrachloride	2024-12	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00		< 2.00	< 2.00
Carbon Tetrachloride	2025-06	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2025-10	ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	
Chlorobenzene	2014-10	ug/L									
Chlorobenzene	2014-11	ug/L									
Chlorobenzene	2015-05	ug/L									
Chlorobenzene	2015-09	ug/L									
Chlorobenzene	2016-03	ug/L									
Chlorobenzene	2016-04	ug/L									
Chlorobenzene	2016-11	ug/L									
Chlorobenzene	2017-05	ug/L									
Chlorobenzene	2017-11	ug/L									
Chlorobenzene	2018-06	ug/L									
Chlorobenzene	2018-08	ug/L									
Chlorobenzene	2018-10	ug/L									
Chlorobenzene	2019-06	ug/L									< 1.00
Chlorobenzene	2019-08	ug/L									< 1.00
Chlorobenzene	2019-10	ug/L									
Chlorobenzene	2019-11	ug/L									< 1.00
Chlorobenzene	2020-02	ug/L									< 1.00
Chlorobenzene	2020-06	ug/L									< 1.00
Chlorobenzene	2020-07	ug/L									
Chlorobenzene	2020-08	ug/L									
Chlorobenzene	2020-11	ug/L									< 1.00
Chlorobenzene	2021-05	ug/L									< 1.00
Chlorobenzene	2021-06	ug/L									

Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Chlorobenzene	2021-08	ug/L													< 1.00			
Chlorobenzene	2021-09	ug/L	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Chlorobenzene	2021-12	ug/L															< 1.00	< 1.00
Chlorobenzene	2022-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Chlorobenzene	2022-06	ug/L															< 1.00	< 1.00
Chlorobenzene	2022-08	ug/L			< 1.00					< 1.00	< 1.00	< 1.00					< 1.00	< 1.00
Chlorobenzene	2022-09	ug/L	< 1.00	< 1.00		< 1.00	< 1.00	**0.402 J**	< 1.00				< 1.00	< 1.00	< 1.00	< 1.00		
Chlorobenzene	2022-12	ug/L															< 1.00	< 1.00
Chlorobenzene	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Chlorobenzene	2023-08	ug/L																
Chlorobenzene	2023-11	ug/L	< 1.00		**2.89**	< 1.00	< 1.00	< 1.00	**0.607 J**	< 1.00		< 1.00	< 1.00	< 1.00		< 1.00		< 1.00
Chlorobenzene	2024-01	ug/L			**4.64**													
Chlorobenzene	2024-06	ug/L			< 1.00			< 1.00	< 1.00			< 1.00	< 1.00		< 1.00		< 1.00	< 1.00
Chlorobenzene	2024-07	ug/L	< 1.00			< 1.00 J	< 1.00 J							< 1.00 J		< 1.00		
Chlorobenzene	2024-09	ug/L																
Chlorobenzene	2024-11	ug/L				< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Chlorobenzene	2024-12	ug/L	< 1.00		**0.966 J**		< 1.00						< 1.00	< 1.00	**2.37**	< 1.00	**0.71 J**	< 1.00
Chlorobenzene	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Chlorobenzene	2025-10	ug/L			**0.927 J+**	< 1	< 1	< 1	< 1	< 1		< 1	< 1 J	< 1	< 1	< 1	< 1	< 1
Chlorobenzilate	2014-10	ug/L							< 11.1									
Chlorobenzilate	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Chlorobenzilate	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Chlorobenzilate	2017-11	ug/L						< 11.8	< 10.9									
Chlorobenzilate	2020-06	ug/L									< 11.5							
Chlorobenzilate	2020-11	ug/L											< 11.8	< 10.5				
Chlorobenzilate	2021-05	ug/L											< 11.2	< 11.9				
Chlorobenzilate	2021-09	ug/L													< 10.5			
Chlorobenzilate	2022-03	ug/L											< 11.9	< 10.4				
Chlorobenzilate	2022-09	ug/L													< 10.4			
Chlorobenzilate	2023-06	ug/L						< 11.6										
Chlorobenzilate	2023-11	ug/L																
Chlorobenzilate	2024-06	ug/L																
Chlorobenzilate	2024-07	ug/L																
Chlorobenzilate	2025-06	ug/L																
Chlorobenzilate	2025-10	ug/L								< 10.9								
Chlorodibromomethane	2014-10	ug/L							< 5.00	< 5.00								
Chlorodibromomethane	2014-11	ug/L			< 5.00	< 5.00	< 5.00	< 5.00			< 5.00	< 5.00						
Chlorodibromomethane	2015-05	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Chlorodibromomethane	2015-09	ug/L			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Chlorodibromomethane	2016-03	ug/L						< 5.00	< 5.00									
Chlorodibromomethane	2016-04	ug/L	< 5.00		< 5.00	< 5.00	< 5.00			< 5.00	< 5.00	< 5.00						
Chlorodibromomethane	2016-11	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00						
Chlorodibromomethane	2017-05	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Chlorodibromomethane	2017-11	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00						
Chlorodibromomethane	2018-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Chlorodibromomethane	2018-08	ug/L		< 5.00														
Chlorodibromomethane	2018-10	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Chlorodibromomethane	2019-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Chlorodibromomethane	2019-08	ug/L		< 5.00														
Chlorodibromomethane	2019-10	ug/L						< 5.00	< 5.00									
Chlorodibromomethane	2019-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Chlorodibromomethane	2020-02	ug/L											< 5.00	< 5.00	< 5.00	< 5.00		
Chlorodibromomethane	2020-06	ug/L			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			
Chlorodibromomethane	2020-07	ug/L	< 5.00	< 5.00												< 5.00		
Chlorodibromomethane	2020-08	ug/L											< 5.00	< 5.00	< 5.00	< 5.00		
Chlorodibromomethane	2020-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Chlorobenzene	2021-08	ug/L									
Chlorobenzene	2021-09	ug/L	< 1.00	< 1.00							< 1.00
Chlorobenzene	2021-12	ug/L	< 1.00	< 1.00							
Chlorobenzene	2022-03	ug/L	< 1.00	< 1.00							
Chlorobenzene	2022-06	ug/L	< 1.00	< 1.00							
Chlorobenzene	2022-08	ug/L	< 1.00	< 1.00		< 1.00					
Chlorobenzene	2022-09	ug/L			< 1.00		< 1.00	< 1.00			< 1.00
Chlorobenzene	2022-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
Chlorobenzene	2023-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00
Chlorobenzene	2023-08	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			
Chlorobenzene	2023-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
Chlorobenzene	2024-01	ug/L							< 1.00	< 1.00	
Chlorobenzene	2024-06	ug/L	< 1.00	< 1.00			< 1.00	< 1.00		< 1.00	< 1.00
Chlorobenzene	2024-07	ug/L			< 1.00 J				< 1.00 J		
Chlorobenzene	2024-09	ug/L							< 1.00	< 1.00	
Chlorobenzene	2024-11	ug/L							< 1.00		
Chlorobenzene	2024-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00
Chlorobenzene	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Chlorobenzene	2025-10	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
Chlorobenzilate	2014-10	ug/L									
Chlorobenzilate	2015-09	ug/L									
Chlorobenzilate	2016-11	ug/L									
Chlorobenzilate	2017-11	ug/L									
Chlorobenzilate	2020-06	ug/L									
Chlorobenzilate	2020-11	ug/L									
Chlorobenzilate	2021-05	ug/L									
Chlorobenzilate	2021-09	ug/L									
Chlorobenzilate	2022-03	ug/L									
Chlorobenzilate	2022-09	ug/L									
Chlorobenzilate	2023-06	ug/L									
Chlorobenzilate	2023-11	ug/L		< 10.0							
Chlorobenzilate	2024-06	ug/L		< 10.4				< 10.0			
Chlorobenzilate	2024-07	ug/L					< 12.5				
Chlorobenzilate	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Chlorobenzilate	2025-10	ug/L								< 10.2	
Chlorodibromomethane	2014-10	ug/L									
Chlorodibromomethane	2014-11	ug/L									
Chlorodibromomethane	2015-05	ug/L									
Chlorodibromomethane	2015-09	ug/L									
Chlorodibromomethane	2016-03	ug/L									
Chlorodibromomethane	2016-04	ug/L									
Chlorodibromomethane	2016-11	ug/L									
Chlorodibromomethane	2017-05	ug/L									
Chlorodibromomethane	2017-11	ug/L									
Chlorodibromomethane	2018-06	ug/L									
Chlorodibromomethane	2018-08	ug/L									
Chlorodibromomethane	2018-10	ug/L									
Chlorodibromomethane	2019-06	ug/L									< 5.00
Chlorodibromomethane	2019-08	ug/L									< 5.00
Chlorodibromomethane	2019-10	ug/L									
Chlorodibromomethane	2019-11	ug/L									< 5.00
Chlorodibromomethane	2020-02	ug/L									< 5.00
Chlorodibromomethane	2020-06	ug/L									< 5.00
Chlorodibromomethane	2020-07	ug/L									
Chlorodibromomethane	2020-08	ug/L									
Chlorodibromomethane	2020-11	ug/L									< 5.00

Table 14

Winneshiek County Area Solid Waste Agency | **Analytical Data Summary - Shallow Groundwater Appendix II**

Permit No. 57-SDP-01-74P | **2025 Annual Water Quality Report**

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Chlorodibromomethane	2021-05	ug/L			< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00				
Chlorodibromomethane	2021-06	ug/L	< 5.00				< 5.00								< 5.00	< 5.00		
Chlorodibromomethane	2021-08	ug/L													< 5.00			
Chlorodibromomethane	2021-09	ug/L	< 5.00	< 50.0	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2021-12	ug/L															< 5.00	< 5.00
Chlorodibromomethane	2022-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2022-06	ug/L															< 5.00	< 5.00
Chlorodibromomethane	2022-08	ug/L			< 5.00					< 5.00	< 5.00	< 5.00					< 5.00	< 5.00
Chlorodibromomethane	2022-09	ug/L	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00				< 5.00	< 5.00	< 5.00	< 5.00		
Chlorodibromomethane	2022-12	ug/L															< 5.00	< 5.00
Chlorodibromomethane	2023-06	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2023-08	ug/L																
Chlorodibromomethane	2023-11	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00		< 5.00		< 5.00
Chlorodibromomethane	2024-01	ug/L																
Chlorodibromomethane	2024-06	ug/L			< 5.00			< 5.00	< 5.00			< 5.00	< 5.00		< 5.00		< 5.00	< 5.00
Chlorodibromomethane	2024-07	ug/L	< 5.00			< 5.00 J	< 5.00 J							< 5.00 J		< 5.00		
Chlorodibromomethane	2024-09	ug/L																
Chlorodibromomethane	2024-11	ug/L				< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Chlorodibromomethane	2024-12	ug/L	< 5.00		< 5.00		< 5.00						< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2025-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2025-10	ug/L			< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5 J	< 5	< 5	< 5	< 5	< 5
Chloroethane	2014-10	ug/L							< 4.00	< 4.00								
Chloroethane	2014-11	ug/L			< 4.00	< 4.00	< 4.00	< 4.00			< 4.00	< 4.00						
Chloroethane	2015-05	ug/L	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00						
Chloroethane	2015-09	ug/L			< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00								
Chloroethane	2016-03	ug/L						< 4.00	< 4.00									
Chloroethane	2016-04	ug/L	< 4.00		< 4.00	< 4.00	< 4.00			< 4.00	< 4.00	< 4.00						
Chloroethane	2016-11	ug/L	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		< 4.00						
Chloroethane	2017-05	ug/L	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00						
Chloroethane	2017-11	ug/L	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		< 4.00						
Chloroethane	2018-06	ug/L	< 4.00	**0.912 J**	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00						
Chloroethane	2018-08	ug/L		< 4.00														
Chloroethane	2018-10	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00						
Chloroethane	2019-06	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00						
Chloroethane	2019-08	ug/L		< 4.00														
Chloroethane	2019-10	ug/L						< 4.00	< 4.00									
Chloroethane	2019-11	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00			< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Chloroethane	2020-02	ug/L											< 4.00	< 4.00	< 4.00	**4.44**		
Chloroethane	2020-06	ug/L			< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00			
Chloroethane	2020-07	ug/L	< 4.00	< 4.00												< 4.00		
Chloroethane	2020-08	ug/L											< 4.00	< 4.00	< 4.00	< 4.00		
Chloroethane	2020-11	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Chloroethane	2021-05	ug/L			< 4.00	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00				
Chloroethane	2021-06	ug/L	< 4.00				< 4.00								< 4.00	< 4.00		
Chloroethane	2021-08	ug/L													< 4.00			
Chloroethane	2021-09	ug/L	< 4.00	< 40.0	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Chloroethane	2021-12	ug/L															< 4.00	< 4.00
Chloroethane	2022-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Chloroethane	2022-06	ug/L															< 4.00	< 4.00
Chloroethane	2022-08	ug/L			< 4.00					< 4.00	< 4.00	< 4.00					< 4.00	< 4.00
Chloroethane	2022-09	ug/L	< 4.00	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00				< 4.00	< 4.00	< 4.00	< 4.00		
Chloroethane	2022-12	ug/L															< 4.00	< 4.00
Chloroethane	2023-06	ug/L	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Chloroethane	2023-08	ug/L																
Chloroethane	2023-11	ug/L	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		< 4.00	< 4.00	< 4.00		< 4.00		< 4.00
Chloroethane	2024-01	ug/L																

Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Chlorodibromomethane	2021-05	ug/L									< 5.00
Chlorodibromomethane	2021-06	ug/L									
Chlorodibromomethane	2021-08	ug/L									
Chlorodibromomethane	2021-09	ug/L	< 5.00	< 5.00							< 5.00
Chlorodibromomethane	2021-12	ug/L	< 5.00	< 5.00							
Chlorodibromomethane	2022-03	ug/L	< 5.00	< 5.00							
Chlorodibromomethane	2022-06	ug/L	< 5.00	< 5.00							
Chlorodibromomethane	2022-08	ug/L	< 5.00	< 5.00		< 5.00					
Chlorodibromomethane	2022-09	ug/L			< 5.00		< 5.00	< 5.00			< 5.00
Chlorodibromomethane	2022-12	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			
Chlorodibromomethane	2023-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			< 5.00
Chlorodibromomethane	2023-08	ug/L			< 5.00	< 5.00	< 5.00	< 5.00			
Chlorodibromomethane	2023-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	
Chlorodibromomethane	2024-01	ug/L							< 5.00	< 5.00	
Chlorodibromomethane	2024-06	ug/L	< 5.00	< 5.00			< 5.00	< 5.00		< 5.00	< 5.00
Chlorodibromomethane	2024-07	ug/L			< 5.00 J				< 5.00 J		
Chlorodibromomethane	2024-09	ug/L							< 5.00	< 5.00	
Chlorodibromomethane	2024-11	ug/L							< 5.00		
Chlorodibromomethane	2024-12	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00
Chlorodibromomethane	2025-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2025-10	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	
Chloroethane	2014-10	ug/L									
Chloroethane	2014-11	ug/L									
Chloroethane	2015-05	ug/L									
Chloroethane	2015-09	ug/L									
Chloroethane	2016-03	ug/L									
Chloroethane	2016-04	ug/L									
Chloroethane	2016-11	ug/L									
Chloroethane	2017-05	ug/L									
Chloroethane	2017-11	ug/L									
Chloroethane	2018-06	ug/L									
Chloroethane	2018-08	ug/L									
Chloroethane	2018-10	ug/L									
Chloroethane	2019-06	ug/L									< 4.00
Chloroethane	2019-08	ug/L									< 4.00
Chloroethane	2019-10	ug/L									
Chloroethane	2019-11	ug/L									< 4.00
Chloroethane	2020-02	ug/L									< 4.00
Chloroethane	2020-06	ug/L									< 4.00
Chloroethane	2020-07	ug/L									
Chloroethane	2020-08	ug/L									
Chloroethane	2020-11	ug/L									< 4.00
Chloroethane	2021-05	ug/L									< 4.00
Chloroethane	2021-06	ug/L									
Chloroethane	2021-08	ug/L									
Chloroethane	2021-09	ug/L	< 4.00	< 4.00							< 4.00
Chloroethane	2021-12	ug/L	< 4.00	< 4.00							
Chloroethane	2022-03	ug/L	< 4.00	< 4.00							
Chloroethane	2022-06	ug/L	< 4.00	< 4.00							
Chloroethane	2022-08	ug/L	< 4.00	< 4.00		< 4.00					
Chloroethane	2022-09	ug/L			< 4.00		< 4.00	< 4.00			< 4.00
Chloroethane	2022-12	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00			
Chloroethane	2023-06	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00			< 4.00
Chloroethane	2023-08	ug/L			< 4.00	< 4.00	< 4.00	< 4.00			
Chloroethane	2023-11	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	
Chloroethane	2024-01	ug/L							< 4.00	< 4.00	

Table 14

Winneshiek County Area Solid Waste Agency | **Analytical Data Summary - Shallow Groundwater Appendix II**

Permit No. 57-SDP-01-74P | **2025 Annual Water Quality Report**

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Chloroethane	2024-06	ug/L			< 4.00			< 4.00	< 4.00			< 4.00	< 4.00		< 4.00		< 4.00	< 4.00
Chloroethane	2024-07	ug/L	< 4.00			< 4.00 J	< 4.00 J							< 4.00 J		< 4.00		
Chloroethane	2024-09	ug/L																
Chloroethane	2024-11	ug/L				< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00						
Chloroethane	2024-12	ug/L	< 4.00		< 4.00		< 4.00						< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Chloroethane	2025-06	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Chloroethane	2025-10	ug/L			< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4 J	< 4	< 4	< 4	< 4	< 4
Chloroform	2014-10	ug/L							< 1.00	< 1.00								
Chloroform	2014-11	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00						
Chloroform	2015-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Chloroform	2015-09	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Chloroform	2016-03	ug/L						< 1.00	< 1.00									
Chloroform	2016-04	ug/L	< 1.00		< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00						
Chloroform	2016-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
Chloroform	2017-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Chloroform	2017-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
Chloroform	2018-06	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00						
Chloroform	2018-08	ug/L		< 3.00														
Chloroform	2018-10	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00						
Chloroform	2019-06	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00						
Chloroform	2019-08	ug/L		< 3.00														
Chloroform	2019-10	ug/L						< 3.00	< 3.00									
Chloroform	2019-11	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00			< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		
Chloroform	2020-02	ug/L											< 3.00	< 3.00	< 3.00	< 3.00		
Chloroform	2020-06	ug/L			< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00			
Chloroform	2020-07	ug/L	< 3.00	< 3.00												< 3.00		
Chloroform	2020-08	ug/L											< 3.00	< 3.00	< 3.00	< 3.00		
Chloroform	2020-11	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		
Chloroform	2021-05	ug/L			< 3.00	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00				
Chloroform	2021-06	ug/L	< 3.00				< 3.00								< 3.00	< 3.00		
Chloroform	2021-08	ug/L													< 3.00			
Chloroform	2021-09	ug/L	< 3.00	< 30.0	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Chloroform	2021-12	ug/L															< 3.00	< 3.00
Chloroform	2022-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Chloroform	2022-06	ug/L															< 3.00	< 3.00
Chloroform	2022-08	ug/L			< 3.00					< 3.00	< 3.00	< 3.00					< 3.00	< 3.00
Chloroform	2022-09	ug/L	< 3.00	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00				< 3.00	< 3.00	< 3.00	< 3.00		
Chloroform	2022-12	ug/L															< 3.00	< 3.00
Chloroform	2023-06	ug/L	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Chloroform	2023-08	ug/L																
Chloroform	2023-11	ug/L	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		< 3.00	< 3.00	< 3.00		< 3.00		< 3.00
Chloroform	2024-01	ug/L																
Chloroform	2024-06	ug/L			< 3.00			< 3.00	< 3.00			< 3.00	< 3.00		< 3.00		< 3.00	< 3.00
Chloroform	2024-07	ug/L	< 3.00			< 3.00 J	< 3.00 J							< 3.00 J		< 3.00		
Chloroform	2024-09	ug/L																
Chloroform	2024-11	ug/L				< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00						
Chloroform	2024-12	ug/L	< 3.00		< 3.00		< 3.00						< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Chloroform	2025-06	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Chloroform	2025-10	ug/L			< 3	< 3	< 3	< 3	< 3	< 3		< 3	< 3 J	< 3	< 3	< 3	< 3	< 3
Chloromethane	2014-10	ug/L							< 3.00	< 3.00								
Chloromethane	2014-11	ug/L			< 3.00	< 3.00	< 3.00	< 3.00			< 3.00	< 3.00						
Chloromethane	2015-05	ug/L	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00						
Chloromethane	2015-09	ug/L			< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00								
Chloromethane	2016-03	ug/L						< 3.00	< 3.00									
Chloromethane	2016-04	ug/L	< 3.00		< 3.00	< 3.00	< 3.00			< 3.00	< 3.00	< 3.00						
Chloromethane	2016-11	ug/L	< 3.00		< 3.00	< 3.00	**0.366 J**	< 3.00	< 3.00	< 3.00		< 3.00						

Table 14
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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Chloroethane	2024-06	ug/L	< 4.00	< 4.00			< 4.00	< 4.00		< 4.00	< 4.00
Chloroethane	2024-07	ug/L			< 4.00 J				< 4.00 J		
Chloroethane	2024-09	ug/L							< 4.00	< 4.00	
Chloroethane	2024-11	ug/L							< 4.00		
Chloroethane	2024-12	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		< 4.00	< 4.00
Chloroethane	2025-06	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Chloroethane	2025-10	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	
Chloroform	2014-10	ug/L									
Chloroform	2014-11	ug/L									
Chloroform	2015-05	ug/L									
Chloroform	2015-09	ug/L									
Chloroform	2016-03	ug/L									
Chloroform	2016-04	ug/L									
Chloroform	2016-11	ug/L									
Chloroform	2017-05	ug/L									
Chloroform	2017-11	ug/L									
Chloroform	2018-06	ug/L									
Chloroform	2018-08	ug/L									
Chloroform	2018-10	ug/L									
Chloroform	2019-06	ug/L									< 3.00
Chloroform	2019-08	ug/L									< 3.00
Chloroform	2019-10	ug/L									
Chloroform	2019-11	ug/L									< 3.00
Chloroform	2020-02	ug/L									< 3.00
Chloroform	2020-06	ug/L									< 3.00
Chloroform	2020-07	ug/L									
Chloroform	2020-08	ug/L									
Chloroform	2020-11	ug/L									< 3.00
Chloroform	2021-05	ug/L									< 3.00
Chloroform	2021-06	ug/L									
Chloroform	2021-08	ug/L									
Chloroform	2021-09	ug/L	< 3.00	< 3.00							< 3.00
Chloroform	2021-12	ug/L	< 3.00	< 3.00							
Chloroform	2022-03	ug/L	< 3.00	< 3.00							
Chloroform	2022-06	ug/L	< 3.00	< 3.00							
Chloroform	2022-08	ug/L	< 3.00	< 3.00		< 3.00					
Chloroform	2022-09	ug/L			< 3.00		< 3.00	< 3.00			< 3.00
Chloroform	2022-12	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00			
Chloroform	2023-06	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00			< 3.00
Chloroform	2023-08	ug/L			< 3.00	< 3.00	< 3.00	< 3.00			
Chloroform	2023-11	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	
Chloroform	2024-01	ug/L							< 3.00	< 3.00	
Chloroform	2024-06	ug/L	< 3.00	< 3.00			< 3.00	< 3.00		< 3.00	< 3.00
Chloroform	2024-07	ug/L			< 3.00 J				< 3.00 J		
Chloroform	2024-09	ug/L							< 3.00	< 3.00	
Chloroform	2024-11	ug/L							< 3.00		
Chloroform	2024-12	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		< 3.00	< 3.00
Chloroform	2025-06	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Chloroform	2025-10	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	
Chloromethane	2014-10	ug/L									
Chloromethane	2014-11	ug/L									
Chloromethane	2015-05	ug/L									
Chloromethane	2015-09	ug/L									
Chloromethane	2016-03	ug/L									
Chloromethane	2016-04	ug/L									
Chloromethane	2016-11	ug/L									

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Chloromethane	2017-05	ug/L	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00						
Chloromethane	2017-11	ug/L	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		< 3.00						
Chloromethane	2018-06	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00						
Chloromethane	2018-08	ug/L		< 3.00														
Chloromethane	2018-10	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00						
Chloromethane	2019-06	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00						
Chloromethane	2019-08	ug/L		< 3.00														
Chloromethane	2019-10	ug/L						< 3.00	< 3.00									
Chloromethane	2019-11	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00			< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		
Chloromethane	2020-02	ug/L											< 3.00	< 3.00	< 3.00	< 3.00		
Chloromethane	2020-06	ug/L			< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00			
Chloromethane	2020-07	ug/L	< 3.00	< 3.00												< 3.00		
Chloromethane	2020-08	ug/L											< 3.00	< 3.00	< 3.00	< 3.00		
Chloromethane	2020-11	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		
Chloromethane	2021-05	ug/L			< 3.00	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00				
Chloromethane	2021-06	ug/L	< 3.00				< 3.00								< 3.00	< 3.00		
Chloromethane	2021-08	ug/L													< 3.00			
Chloromethane	2021-09	ug/L	< 3.00	< 30.0	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Chloromethane	2021-12	ug/L															< 3.00	< 3.00
Chloromethane	2022-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Chloromethane	2022-06	ug/L															< 3.00	< 3.00
Chloromethane	2022-08	ug/L			< 3.00					< 3.00	< 3.00	< 3.00					< 3.00	< 3.00
Chloromethane	2022-09	ug/L	< 3.00	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00				< 3.00	< 3.00	< 3.00	< 3.00		
Chloromethane	2022-12	ug/L															**0.815 J**	**0.747 J**
Chloromethane	2023-06	ug/L	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Chloromethane	2023-08	ug/L																
Chloromethane	2023-11	ug/L	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		< 3.00	< 3.00	< 3.00		< 3.00		< 3.00
Chloromethane	2024-01	ug/L																
Chloromethane	2024-06	ug/L			< 3.00			< 3.00	< 3.00			< 3.00	< 3.00		< 3.00		< 3.00	< 3.00
Chloromethane	2024-07	ug/L	< 3.00			< 3.00 J	< 3.00 J							< 3.00 J		< 3.00		
Chloromethane	2024-09	ug/L																
Chloromethane	2024-11	ug/L				< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00						
Chloromethane	2024-12	ug/L	< 3.00		< 3.00		< 3.00						< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Chloromethane	2025-06	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Chloromethane	2025-10	ug/L			< 3	< 3	< 3	< 3	< 3	< 3		< 3	< 3 J	< 3	< 3	< 3	< 3	< 3
Chloroprene	2014-10	ug/L							< 1.00									
Chloroprene	2015-09	ug/L			< 1.00			< 1.00	< 1.00									
Chloroprene	2016-11	ug/L			< 1.00			< 1.00	< 1.00									
Chloroprene	2017-11	ug/L						< 1.00	< 1.00									
Chloroprene	2020-06	ug/L									< 1.00							
Chloroprene	2020-11	ug/L											< 1.00	< 1.00				
Chloroprene	2021-05	ug/L											< 1.00	< 1.00				
Chloroprene	2021-09	ug/L													< 1.00			
Chloroprene	2022-03	ug/L											< 1.00	< 1.00				
Chloroprene	2022-09	ug/L													< 1.00			
Chloroprene	2023-06	ug/L						< 1.00										
Chloroprene	2023-11	ug/L																
Chloroprene	2024-06	ug/L																
Chloroprene	2025-06	ug/L																
Chloroprene	2025-10	ug/L								< 1								
Chromium	2014-10	ug/L							< 5.00	**4.2 J**								
Chromium	2014-11	ug/L			< 5.00	< 5.00	< 5.00	< 5.00			< 5.00	< 5.00						
Chromium	2015-05	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	**3.75 J**	< 5.00	< 5.00						
Chromium	2015-09	ug/L			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Chromium	2016-03	ug/L						< 5.00	**0.4 J**									
Chromium	2016-04	ug/L	< 5.00		**0.852 J**	< 5.00	< 5.00			**4.02 J**	**1.42 J**	**1.82 J**						

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Chloromethane	2017-05	ug/L									
Chloromethane	2017-11	ug/L									
Chloromethane	2018-06	ug/L									
Chloromethane	2018-08	ug/L									
Chloromethane	2018-10	ug/L									
Chloromethane	2019-06	ug/L									< 3.00
Chloromethane	2019-08	ug/L									< 3.00
Chloromethane	2019-10	ug/L									
Chloromethane	2019-11	ug/L									< 3.00
Chloromethane	2020-02	ug/L									< 3.00
Chloromethane	2020-06	ug/L									< 3.00
Chloromethane	2020-07	ug/L									
Chloromethane	2020-08	ug/L									
Chloromethane	2020-11	ug/L									< 3.00
Chloromethane	2021-05	ug/L									< 3.00
Chloromethane	2021-06	ug/L									
Chloromethane	2021-08	ug/L									
Chloromethane	2021-09	ug/L	< 3.00	< 3.00							< 3.00
Chloromethane	2021-12	ug/L	< 3.00	< 3.00							
Chloromethane	2022-03	ug/L	< 3.00	< 3.00							
Chloromethane	2022-06	ug/L	< 3.00	< 3.00							
Chloromethane	2022-08	ug/L	< 3.00	< 3.00		< 3.00					
Chloromethane	2022-09	ug/L			< 3.00		< 3.00	< 3.00			< 3.00
Chloromethane	2022-12	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00			
Chloromethane	2023-06	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00			< 3.00
Chloromethane	2023-08	ug/L			< 3.00	< 3.00	< 3.00	< 3.00			
Chloromethane	2023-11	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	
Chloromethane	2024-01	ug/L							< 3.00	< 3.00	
Chloromethane	2024-06	ug/L	< 3.00	< 3.00			< 3.00	< 3.00		< 3.00	< 3.00
Chloromethane	2024-07	ug/L			< 3.00 J				< 3.00 J		
Chloromethane	2024-09	ug/L							< 3.00	< 3.00	
Chloromethane	2024-11	ug/L							< 3.00		
Chloromethane	2024-12	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		< 3.00	< 3.00
Chloromethane	2025-06	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Chloromethane	2025-10	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	
Chloroprene	2014-10	ug/L									
Chloroprene	2015-09	ug/L									
Chloroprene	2016-11	ug/L									
Chloroprene	2017-11	ug/L									
Chloroprene	2020-06	ug/L									
Chloroprene	2020-11	ug/L									
Chloroprene	2021-05	ug/L									
Chloroprene	2021-09	ug/L									
Chloroprene	2022-03	ug/L									
Chloroprene	2022-09	ug/L									
Chloroprene	2023-06	ug/L									
Chloroprene	2023-11	ug/L		< 1.00							
Chloroprene	2024-06	ug/L		< 1.00			< 1.00	< 1.00			
Chloroprene	2025-06	ug/L				< 1.00	< 1.00	< 1.00			
Chloroprene	2025-10	ug/L								< 1	
Chromium	2014-10	ug/L									
Chromium	2014-11	ug/L									
Chromium	2015-05	ug/L									
Chromium	2015-09	ug/L									
Chromium	2016-03	ug/L									
Chromium	2016-04	ug/L									

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Chromium	2016-11	ug/L	< 5.00		**0.423 J**	< 5.00	< 5.00	< 5.00	**0.451 J**	**0.425 J**		< 5.00						
Chromium	2017-05	ug/L	< 5.00		**0.87 J**	< 5.00	< 5.00	< 5.00	< 5.00	**2.45 J**	**1.91 J**	< 5.00						
Chromium	2017-11	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	**2.28 J**	< 5.00	**3.22 J**		< 5.00						
Chromium	2018-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	**5.26**	**1.35 J**	**1.59 J**						
Chromium	2018-08	ug/L		< 5.00														
Chromium	2018-10	ug/L	**1.06 J**	< 5.00	**1.15 J**	< 5.00	**1.12 J**	< 5.00	**1.04 J**	**3.27 J**	**1.08 J**	**1.42 J**						
Chromium	2019-06	ug/L	< 5.00	< 5.00	**2.08 J**	< 5.00	< 5.00	**1.68 J**	**2.13 J**	**4.92 J**	**2.53 J**	**1.84 J**						
Chromium	2019-08	ug/L		< 5.00														
Chromium	2019-10	ug/L						< 5.00	< 5.00									
Chromium	2019-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			**2.95 J**	**1.24 J**	**1.81 J**	< 5.00	< 5.00	< 5.00	**1.37 J**		
Chromium	2020-02	ug/L											< 5.00	< 5.00	< 5.00	**1.66 J**		
Chromium	2020-06	ug/L			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	**2.12 J**	< 5.00	**1.52 J**	< 5.00	**1.34 J**	< 5.00			
Chromium	2020-07	ug/L	< 5.00	< 5.00												**1.63 J**		
Chromium	2020-08	ug/L											< 5.00	< 5.00	< 5.00	**3.06 J**		
Chromium	2020-11	ug/L	< 5.00	**8.83 J**	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	**2.39 J**	< 5.00	< 5.00	< 5.00	**2.5 J**	< 5.00	**1.36 J**		
Chromium	2021-05	ug/L			< 5.00	< 5.00		< 5.00	< 5.00	**3.29 J**	< 5.00	< 5.00	< 5.00	**1.31 J**				
Chromium	2021-06	ug/L	< 5.00				< 5.00								< 5.00	**1.29 J**		
Chromium	2021-08	ug/L													< 5.00			
Chromium	2021-09	ug/L	< 5.00	**10.2**	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	**3.38 J**		**1.58 J**	< 5.00	**1.39 J**	< 5.00	**1.41 J**	~~**1.5 J**~~	< 5.00
Chromium	2021-12	ug/L															**1.16 J**	< 5.00
Chromium	2022-03	ug/L	**2.33 J**	**3.18 J**	< 5.00	< 5.00	< 5.00	< 5.00	**1.67 J**	**3.01 J**		**1.65 J**	**1.67 J**	< 5.00	< 5.00	**1.56 J**	< 5.00	< 5.00
Chromium	2022-06	ug/L															**1.57 J**	< 5.00
Chromium	2022-08	ug/L			< 5.00					< 5.00	< 5.00	**1.36 J**					**1.33 J**	< 5.00
Chromium	2022-09	ug/L	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00				< 5.00	**7.31**	< 5.00	**1.81 J**		
Chromium	2022-12	ug/L															< 5.00	< 5.00
Chromium	2023-06	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	**1.18 J**	< 5.00	< 5.00	< 5.00	< 5.00	**1.48 J**	**1.33 J**	< 5.00
Chromium	2023-08	ug/L																
Chromium	2023-11	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00		**1.96 J**		< 5.00
Chromium	2024-01	ug/L																
Chromium	2024-06	mg/L						< 0.00500	< 0.00500									
Chromium	2024-06	ug/L			< 5.00							**2.64 J**	< 5.00		< 5.00		< 5.00	< 5.00
Chromium	2024-07	ug/L	< 5.00			< 5.00	< 5.00							< 5.00		**1.31 J**		
Chromium	2024-09	ug/L																
Chromium	2024-11	ug/L				< 5.00		< 5.00	< 5.00	< 5.00	**1.91 J**	< 5.00						
Chromium	2024-12	ug/L	< 5.00		< 5.00		< 5.00						< 5.00	< 5.00	< 5.00	**1.88 J**	< 5.00	< 5.00
Chromium	2025-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	**3.29 J**		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Chromium	2025-10	ug/L			**2.66 J**	< 5	**3.09 J**	< 5	< 5	**6.92**		< 5	< 5	< 5	**2.63 J**	**3.34 J**	**4.26 J**	**3.13 J**
Chrysene	2014-10	ug/L							< 11.1									
Chrysene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Chrysene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Chrysene	2017-11	ug/L						< 11.8	< 10.9									
Chrysene	2020-06	ug/L									< 11.5							
Chrysene	2020-11	ug/L											< 11.8	< 10.5				
Chrysene	2021-05	ug/L											< 11.2	< 11.9				
Chrysene	2021-09	ug/L													< 10.5			
Chrysene	2022-03	ug/L											< 11.9	< 10.4				
Chrysene	2022-09	ug/L													< 10.4			
Chrysene	2023-06	ug/L						< 11.6										
Chrysene	2023-11	ug/L																
Chrysene	2024-06	ug/L																
Chrysene	2024-07	ug/L																
Chrysene	2025-06	ug/L																
Chrysene	2025-10	ug/L								< 10.9								
cis-1,2-Dichloroethene	2014-10	ug/L							< 1.00	< 1.00								
cis-1,2-Dichloroethene	2014-11	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00						
cis-1,2-Dichloroethene	2015-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Chromium	2016-11	ug/L									
Chromium	2017-05	ug/L									
Chromium	2017-11	ug/L									
Chromium	2018-06	ug/L									
Chromium	2018-08	ug/L									
Chromium	2018-10	ug/L									
Chromium	2019-06	ug/L									< 5.00
Chromium	2019-08	ug/L									< 5.00
Chromium	2019-10	ug/L									
Chromium	2019-11	ug/L									< 5.00
Chromium	2020-02	ug/L									< 5.00
Chromium	2020-06	ug/L									< 5.00
Chromium	2020-07	ug/L									
Chromium	2020-08	ug/L									
Chromium	2020-11	ug/L									< 5.00
Chromium	2021-05	ug/L									< 5.00
Chromium	2021-06	ug/L									
Chromium	2021-08	ug/L									
Chromium	2021-09	ug/L	< 5.00	< 5.00							< 5.00
Chromium	2021-12	ug/L	< 5.00	< 5.00							
Chromium	2022-03	ug/L	< 5.00	< 5.00							
Chromium	2022-06	ug/L	< 5.00	< 5.00							
Chromium	2022-08	ug/L	< 5.00	< 5.00		**1.95 J**					
Chromium	2022-09	ug/L			< 5.00		< 5.00	< 5.00			< 5.00
Chromium	2022-12	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			
Chromium	2023-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			< 5.00
Chromium	2023-08	ug/L			< 5.00	< 5.00	< 5.00	< 5.00			
Chromium	2023-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	**12**	< 5.00	**2.02 J**	< 5.00	
Chromium	2024-01	ug/L							< 5.00	**1.12 J**	
Chromium	2024-06	mg/L					< 0.00500			< 0.00500	
Chromium	2024-06	ug/L	< 5.00	< 5.00				< 5.00			< 5.00
Chromium	2024-07	ug/L			< 5.00				< 5.00		
Chromium	2024-09	ug/L							< 5.00	< 5.00	
Chromium	2024-11	ug/L							< 5.00		
Chromium	2024-12	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00
Chromium	2025-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Chromium	2025-10	ug/L	< 5	**2.81 J**	< 5	< 5	< 5	< 5	**2.2 J**	< 5	
Chrysene	2014-10	ug/L									
Chrysene	2015-09	ug/L									
Chrysene	2016-11	ug/L									
Chrysene	2017-11	ug/L									
Chrysene	2020-06	ug/L									
Chrysene	2020-11	ug/L									
Chrysene	2021-05	ug/L									
Chrysene	2021-09	ug/L									
Chrysene	2022-03	ug/L									
Chrysene	2022-09	ug/L									
Chrysene	2023-06	ug/L									
Chrysene	2023-11	ug/L		< 10.0							
Chrysene	2024-06	ug/L		< 10.4				< 10.0			
Chrysene	2024-07	ug/L					< 12.5				
Chrysene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Chrysene	2025-10	ug/L								< 10.2	
cis-1,2-Dichloroethene	2014-10	ug/L									
cis-1,2-Dichloroethene	2014-11	ug/L									
cis-1,2-Dichloroethene	2015-05	ug/L									

Table 14

Winneshiek County Area Solid Waste Agency | **Analytical Data Summary - Shallow Groundwater Appendix II**

Permit No. 57-SDP-01-74P | **2025 Annual Water Quality Report**

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
cis-1,2-Dichloroethene	2015-09	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
cis-1,2-Dichloroethene	2016-03	ug/L						< 1.00	< 1.00									
cis-1,2-Dichloroethene	2016-04	ug/L	< 1.00		< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00						
cis-1,2-Dichloroethene	2016-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
cis-1,2-Dichloroethene	2017-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
cis-1,2-Dichloroethene	2017-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
cis-1,2-Dichloroethene	2018-06	ug/L	< 1.00	**0.628 J**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
cis-1,2-Dichloroethene	2018-08	ug/L		< 1.00														
cis-1,2-Dichloroethene	2018-10	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
cis-1,2-Dichloroethene	2019-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
cis-1,2-Dichloroethene	2019-08	ug/L		< 1.00														
cis-1,2-Dichloroethene	2019-10	ug/L						< 1.00	< 1.00									
cis-1,2-Dichloroethene	2019-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
cis-1,2-Dichloroethene	2020-02	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
cis-1,2-Dichloroethene	2020-06	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
cis-1,2-Dichloroethene	2020-07	ug/L	< 1.00	< 1.00												< 1.00		
cis-1,2-Dichloroethene	2020-08	ug/L											< 1.00	**0.232 J**	< 1.00	< 1.00		
cis-1,2-Dichloroethene	2020-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
cis-1,2-Dichloroethene	2021-05	ug/L			< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00				
cis-1,2-Dichloroethene	2021-06	ug/L	< 1.00				< 1.00								< 1.00	< 1.00		
cis-1,2-Dichloroethene	2021-08	ug/L													< 1.00			
cis-1,2-Dichloroethene	2021-09	ug/L	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
cis-1,2-Dichloroethene	2021-12	ug/L															< 1.00	< 1.00
cis-1,2-Dichloroethene	2022-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
cis-1,2-Dichloroethene	2022-06	ug/L															< 1.00	< 1.00
cis-1,2-Dichloroethene	2022-08	ug/L			< 1.00					< 1.00	< 1.00	< 1.00					< 1.00	< 1.00
cis-1,2-Dichloroethene	2022-09	ug/L	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00				< 1.00	< 1.00	< 1.00	< 1.00		
cis-1,2-Dichloroethene	2022-12	ug/L															< 1.00	< 1.00
cis-1,2-Dichloroethene	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**0.222 J**	< 1.00	< 1.00	< 1.00	< 1.00
cis-1,2-Dichloroethene	2023-08	ug/L																
cis-1,2-Dichloroethene	2023-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00		< 1.00		< 1.00
cis-1,2-Dichloroethene	2024-01	ug/L																
cis-1,2-Dichloroethene	2024-06	ug/L			< 1.00			< 1.00	< 1.00			< 1.00	< 1.00		< 1.00		< 1.00	< 1.00
cis-1,2-Dichloroethene	2024-07	ug/L	< 1.00			< 1.00 J	< 1.00 J							< 1.00 J		< 1.00		
cis-1,2-Dichloroethene	2024-09	ug/L																
cis-1,2-Dichloroethene	2024-11	ug/L				< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
cis-1,2-Dichloroethene	2024-12	ug/L	< 1.00		< 1.00		< 1.00						< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
cis-1,2-Dichloroethene	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
cis-1,2-Dichloroethene	2025-10	ug/L			< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1 J	< 1	< 1	< 1	< 1	< 1
cis-1,3-Dichloropropene	2014-10	ug/L							< 5.00	< 5.00								
cis-1,3-Dichloropropene	2014-11	ug/L			< 5.00	< 5.00	< 5.00	< 5.00			< 5.00	< 5.00						
cis-1,3-Dichloropropene	2015-05	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
cis-1,3-Dichloropropene	2015-09	ug/L			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
cis-1,3-Dichloropropene	2016-03	ug/L						< 5.00	< 5.00									
cis-1,3-Dichloropropene	2016-04	ug/L	< 5.00		< 5.00	< 5.00	< 5.00			< 5.00	< 5.00	< 5.00						
cis-1,3-Dichloropropene	2016-11	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00						
cis-1,3-Dichloropropene	2017-05	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
cis-1,3-Dichloropropene	2017-11	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00						
cis-1,3-Dichloropropene	2018-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
cis-1,3-Dichloropropene	2018-08	ug/L		< 5.00														
cis-1,3-Dichloropropene	2018-10	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
cis-1,3-Dichloropropene	2019-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
cis-1,3-Dichloropropene	2019-08	ug/L		< 5.00														
cis-1,3-Dichloropropene	2019-10	ug/L						< 5.00	< 5.00									
cis-1,3-Dichloropropene	2019-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
cis-1,3-Dichloropropene	2020-02	ug/L											< 5.00	< 5.00	< 5.00	< 5.00		

Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
cis-1,2-Dichloroethene	2015-09	ug/L									
cis-1,2-Dichloroethene	2016-03	ug/L									
cis-1,2-Dichloroethene	2016-04	ug/L									
cis-1,2-Dichloroethene	2016-11	ug/L									
cis-1,2-Dichloroethene	2017-05	ug/L									
cis-1,2-Dichloroethene	2017-11	ug/L									
cis-1,2-Dichloroethene	2018-06	ug/L									
cis-1,2-Dichloroethene	2018-08	ug/L									
cis-1,2-Dichloroethene	2018-10	ug/L									
cis-1,2-Dichloroethene	2019-06	ug/L									< 1.00
cis-1,2-Dichloroethene	2019-08	ug/L									< 1.00
cis-1,2-Dichloroethene	2019-10	ug/L									
cis-1,2-Dichloroethene	2019-11	ug/L									< 1.00
cis-1,2-Dichloroethene	2020-02	ug/L									< 1.00
cis-1,2-Dichloroethene	2020-06	ug/L									< 1.00
cis-1,2-Dichloroethene	2020-07	ug/L									
cis-1,2-Dichloroethene	2020-08	ug/L									
cis-1,2-Dichloroethene	2020-11	ug/L									< 1.00
cis-1,2-Dichloroethene	2021-05	ug/L									< 1.00
cis-1,2-Dichloroethene	2021-06	ug/L									
cis-1,2-Dichloroethene	2021-08	ug/L									
cis-1,2-Dichloroethene	2021-09	ug/L	< 1.00	< 1.00							< 1.00
cis-1,2-Dichloroethene	2021-12	ug/L	< 1.00	< 1.00							
cis-1,2-Dichloroethene	2022-03	ug/L	< 1.00	< 1.00							
cis-1,2-Dichloroethene	2022-06	ug/L	< 1.00	< 1.00							
cis-1,2-Dichloroethene	2022-08	ug/L	< 1.00	< 1.00		< 1.00					
cis-1,2-Dichloroethene	2022-09	ug/L			< 1.00		< 1.00	< 1.00			< 1.00
cis-1,2-Dichloroethene	2022-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
cis-1,2-Dichloroethene	2023-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00
cis-1,2-Dichloroethene	2023-08	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			
cis-1,2-Dichloroethene	2023-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
cis-1,2-Dichloroethene	2024-01	ug/L							< 1.00	< 1.00	
cis-1,2-Dichloroethene	2024-06	ug/L	< 1.00	< 1.00			< 1.00	< 1.00		< 1.00	< 1.00
cis-1,2-Dichloroethene	2024-07	ug/L			< 1.00 J				< 1.00 J		
cis-1,2-Dichloroethene	2024-09	ug/L							< 1.00	< 1.00	
cis-1,2-Dichloroethene	2024-11	ug/L							< 1.00		
cis-1,2-Dichloroethene	2024-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00
cis-1,2-Dichloroethene	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
cis-1,2-Dichloroethene	2025-10	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
cis-1,3-Dichloropropene	2014-10	ug/L									
cis-1,3-Dichloropropene	2014-11	ug/L									
cis-1,3-Dichloropropene	2015-05	ug/L									
cis-1,3-Dichloropropene	2015-09	ug/L									
cis-1,3-Dichloropropene	2016-03	ug/L									
cis-1,3-Dichloropropene	2016-04	ug/L									
cis-1,3-Dichloropropene	2016-11	ug/L									
cis-1,3-Dichloropropene	2017-05	ug/L									
cis-1,3-Dichloropropene	2017-11	ug/L									
cis-1,3-Dichloropropene	2018-06	ug/L									
cis-1,3-Dichloropropene	2018-08	ug/L									
cis-1,3-Dichloropropene	2018-10	ug/L									
cis-1,3-Dichloropropene	2019-06	ug/L									< 5.00
cis-1,3-Dichloropropene	2019-08	ug/L									< 5.00
cis-1,3-Dichloropropene	2019-10	ug/L									
cis-1,3-Dichloropropene	2019-11	ug/L									< 5.00
cis-1,3-Dichloropropene	2020-02	ug/L									< 5.00

Table 14

Winneshiek County Area Solid Waste Agency — **Analytical Data Summary - Shallow Groundwater Appendix II**

Permit No. 57-SDP-01-74P — **2025 Annual Water Quality Report**

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
cis-1,3-Dichloropropene	2020-06	ug/L			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			
cis-1,3-Dichloropropene	2020-07	ug/L	< 5.00	< 5.00												< 5.00		
cis-1,3-Dichloropropene	2020-08	ug/L											< 5.00	< 5.00	< 5.00	< 5.00		
cis-1,3-Dichloropropene	2020-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
cis-1,3-Dichloropropene	2021-05	ug/L			< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00				
cis-1,3-Dichloropropene	2021-06	ug/L	< 5.00				< 5.00								< 5.00	< 5.00		
cis-1,3-Dichloropropene	2021-08	ug/L													< 5.00			
cis-1,3-Dichloropropene	2021-09	ug/L	< 5.00	< 50.0	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2021-12	ug/L															< 5.00	< 5.00
cis-1,3-Dichloropropene	2022-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2022-06	ug/L															< 5.00	< 5.00
cis-1,3-Dichloropropene	2022-08	ug/L			< 5.00					< 5.00	< 5.00	< 5.00					< 5.00	< 5.00
cis-1,3-Dichloropropene	2022-09	ug/L	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00				< 5.00	< 5.00	< 5.00	< 5.00		
cis-1,3-Dichloropropene	2022-12	ug/L															< 5.00	< 5.00
cis-1,3-Dichloropropene	2023-06	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2023-08	ug/L																
cis-1,3-Dichloropropene	2023-11	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00		< 5.00		< 5.00
cis-1,3-Dichloropropene	2024-01	ug/L																
cis-1,3-Dichloropropene	2024-06	ug/L			< 5.00			< 5.00	< 5.00			< 5.00	< 5.00		< 5.00		< 5.00	< 5.00
cis-1,3-Dichloropropene	2024-07	ug/L	< 5.00			< 5.00 J	< 5.00 J							< 5.00 J		< 5.00		
cis-1,3-Dichloropropene	2024-09	ug/L																
cis-1,3-Dichloropropene	2024-11	ug/L				< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
cis-1,3-Dichloropropene	2024-12	ug/L	< 5.00		< 5.00		< 5.00						< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2025-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2025-10	ug/L			< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5 J	< 5	< 5	< 5	< 5	< 5
Cobalt	2014-10	ug/L							**0.968**	< 0.500								
Cobalt	2014-11	ug/L			~~**0.168 J**~~	**0.162 J**	**0.083 J**	**0.967**			**0.549**	< 0.500						
Cobalt	2015-05	ug/L	**0.214 J**		< 0.500	**0.099 J**	**0.082 J**	**0.448 J**	**2.05**	< 0.500	**0.351 J**	**0.073 J**						
Cobalt	2015-09	ug/L			**0.182 J**	**0.141 J**	**0.079 J**	**0.33 J**	**1.77**	**0.078 J**								
Cobalt	2016-03	ug/L						**0.411 J**	**6.05**									
Cobalt	2016-04	ug/L	**2.1**		**0.052 J**	**0.093 J**	**0.091 J**			< 0.500	**0.306 J**	**0.094 J**						
Cobalt	2016-11	ug/L	**0.247 J**		**0.047 J**	**0.163 J**	**0.051 J**	**0.441 J**	**0.035 J**	**0.029 J**		**0.075 J**						
Cobalt	2017-05	ug/L	**0.261 J**		**0.065 J**	**0.176 J**	**0.049 J**	**0.242 J**	**0.059 J**	< 0.500	**0.303 J**	**0.06 J**						
Cobalt	2017-11	ug/L	**0.192 J**		**0.083 J**	**0.114 J**	**0.068 J**	**3.75**	**0.362 J**	< 0.500		**0.058 J**						
Cobalt	2018-06	ug/L	**2.45**	**6.19**	< 0.500	**0.067 J**	**0.283 J**	**1.44**	**0.834**	**0.066 J**	**0.339 J**	**0.074 J**						
Cobalt	2018-08	ug/L		**7.06**														
Cobalt	2018-10	ug/L	**0.829**	**8.54**	**0.096 J**	**0.095 J**	**0.289 J**	**0.458 J**	**0.068 J**	< 0.500	**0.44 J**	**0.32 J**						
Cobalt	2019-06	ug/L	**0.476 J**	**0.649 J**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Cobalt	2019-08	ug/L		**0.538 J**														
Cobalt	2019-10	ug/L						< 0.500	**0.221 J**									
Cobalt	2019-11	ug/L	**0.392 J**	**0.699**	< 0.500	< 0.500	< 0.500			< 0.500	**0.383 J**	< 0.500	**8.43**	**13.4**	**3**	< 0.500		
Cobalt	2020-02	ug/L											**9.64**	**12.4**	**2.59**	**0.122 J**		
Cobalt	2020-06	ug/L			< 0.500	< 0.500	**0.114 J**	**0.264 J**	< 0.500	< 0.500	**0.32 J**	< 0.500	**9.98**	**13.6**	**0.478 J**			
Cobalt	2020-07	ug/L	**0.544**	**0.339 J**												< 0.500		
Cobalt	2020-08	ug/L											**10.7**	**12**	**2.34**	< 0.500		
Cobalt	2020-11	ug/L	**0.153 J**	**25.3**	**0.105 J**	< 0.500	< 0.500	**1.48**	**0.149 J**	< 0.500	**0.57**	< 0.500	**10.1**	**10**	**1.83**	< 0.500		
Cobalt	2021-05	ug/L			< 0.500	**0.107 J**		**0.937**	< 0.500	< 0.500	**0.363 J**	**0.135 J**	**11.9**	**10.4**				
Cobalt	2021-06	ug/L	**0.208 J**				< 0.500								**3.2**	< 0.500		
Cobalt	2021-08	ug/L													**3.2**			
Cobalt	2021-09	ug/L	**0.387 J**	**7.22**	< 0.500	< 0.500	< 0.500	**1.07**	< 0.500	< 0.500		< 0.500	**7.9**	**3.37**	**2.03**	< 0.500	~~**0.681**~~	**0.249 J**
Cobalt	2021-12	ug/L															**0.194 J**	< 0.500
Cobalt	2022-03	ug/L	**1.37**	**3.05**	**0.317 J**	< 0.500	< 0.500	**1.44**	< 0.500	< 0.500		< 0.500	**7.38**	**3.01**	**0.503**	< 0.500	**0.263 J**	< 0.500
Cobalt	2022-06	ug/L															< 0.500	< 0.500
Cobalt	2022-08	ug/L			< 0.500					**0.339 J**	**0.361 J**	< 0.500					< 0.500	< 0.500
Cobalt	2022-09	ug/L	**1.33**	**0.786**		< 0.500	< 0.500	**1.61**	< 0.500				**10.1**	**32.2**	**0.743**	< 0.500		
Cobalt	2022-12	ug/L															< 0.500	< 0.500

Winneshiek County Area Solid Waste Agency
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Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
cis-1,3-Dichloropropene	2020-06	ug/L									< 5.00
cis-1,3-Dichloropropene	2020-07	ug/L									
cis-1,3-Dichloropropene	2020-08	ug/L									
cis-1,3-Dichloropropene	2020-11	ug/L									< 5.00
cis-1,3-Dichloropropene	2021-05	ug/L									< 5.00
cis-1,3-Dichloropropene	2021-06	ug/L									
cis-1,3-Dichloropropene	2021-08	ug/L									
cis-1,3-Dichloropropene	2021-09	ug/L	< 5.00	< 5.00							< 5.00
cis-1,3-Dichloropropene	2021-12	ug/L	< 5.00	< 5.00							
cis-1,3-Dichloropropene	2022-03	ug/L	< 5.00	< 5.00							
cis-1,3-Dichloropropene	2022-06	ug/L	< 5.00	< 5.00							
cis-1,3-Dichloropropene	2022-08	ug/L	< 5.00	< 5.00		< 5.00					
cis-1,3-Dichloropropene	2022-09	ug/L			< 5.00		< 5.00	< 5.00			< 5.00
cis-1,3-Dichloropropene	2022-12	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			
cis-1,3-Dichloropropene	2023-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			< 5.00
cis-1,3-Dichloropropene	2023-08	ug/L			< 5.00	< 5.00	< 5.00	< 5.00			
cis-1,3-Dichloropropene	2023-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	
cis-1,3-Dichloropropene	2024-01	ug/L							< 5.00	< 5.00	
cis-1,3-Dichloropropene	2024-06	ug/L	< 5.00	< 5.00			< 5.00	< 5.00		< 5.00	< 5.00
cis-1,3-Dichloropropene	2024-07	ug/L			< 5.00 J				< 5.00 J		
cis-1,3-Dichloropropene	2024-09	ug/L							< 5.00	< 5.00	
cis-1,3-Dichloropropene	2024-11	ug/L							< 5.00		
cis-1,3-Dichloropropene	2024-12	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00
cis-1,3-Dichloropropene	2025-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2025-10	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	
Cobalt	2014-10	ug/L									
Cobalt	2014-11	ug/L									
Cobalt	2015-05	ug/L									
Cobalt	2015-09	ug/L									
Cobalt	2016-03	ug/L									
Cobalt	2016-04	ug/L									
Cobalt	2016-11	ug/L									
Cobalt	2017-05	ug/L									
Cobalt	2017-11	ug/L									
Cobalt	2018-06	ug/L									
Cobalt	2018-08	ug/L									
Cobalt	2018-10	ug/L									
Cobalt	2019-06	ug/L									< 1.00
Cobalt	2019-08	ug/L									**0.521 J**
Cobalt	2019-10	ug/L									
Cobalt	2019-11	ug/L									**0.48 J**
Cobalt	2020-02	ug/L									**0.434 J**
Cobalt	2020-06	ug/L									< 0.500
Cobalt	2020-07	ug/L									
Cobalt	2020-08	ug/L									
Cobalt	2020-11	ug/L									**0.113 J**
Cobalt	2021-05	ug/L									**0.399 J**
Cobalt	2021-06	ug/L									
Cobalt	2021-08	ug/L									
Cobalt	2021-09	ug/L	**0.857**	**3.22**							**0.241 J**
Cobalt	2021-12	ug/L	**0.382 J**	**1.06**							
Cobalt	2022-03	ug/L	< 0.500	**1.17**							
Cobalt	2022-06	ug/L	< 0.500	**0.807**							
Cobalt	2022-08	ug/L	< 0.500	**1.47**		**3.98**					
Cobalt	2022-09	ug/L			**0.647**		**3.68**	**0.53**			< 0.500
Cobalt	2022-12	ug/L	**0.199 J**	**2.19**	**0.415 J**	**3.31**	**3.27**	**0.583**			

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2025 Annual Water Quality Report

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Cobalt	2023-06	ug/L	**0.844**		< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	**0.411 J**	**0.176 J**	**12.5**	**3.75**	**0.396 J**	< 0.500	**0.179 J**	**0.181 J**
Cobalt	2023-08	ug/L																
Cobalt	2023-11	ug/L	**0.409 J**		~~**0.844**~~	< 0.500	< 0.500	**1.54**	**0.213 J**	**0.257 J**		**0.391 J**	**18.7**	**4.62**		< 0.500		< 0.500
Cobalt	2024-01	ug/L																
Cobalt	2024-06	mg/L						**0.00185**	< 0.000500									
Cobalt	2024-06	ug/L			< 0.500							< 0.500	**11.2**		**4.51**		**0.714**	< 0.500
Cobalt	2024-07	ug/L	**0.325 J**			< 0.500	< 0.500							**3.48**		< 0.500		
Cobalt	2024-09	ug/L																
Cobalt	2024-11	ug/L				< 0.500		**2.04**	< 0.500	< 0.500	**0.204 J**	**0.276 J**						
Cobalt	2024-12	ug/L	**0.513**		**0.225 J**		< 0.500						**16.5**	**2.09**	**2.4**	< 0.500	~~**9.58**~~	< 0.500
Cobalt	2025-06	ug/L	**0.546**	**0.4 J**	< 0.500	< 0.500	< 0.500	**2.25**	< 0.500	< 0.500		< 0.500	**3.47**	**2.04**	**5.21**	< 0.500	< 0.500	< 0.500
Cobalt	2025-10	ug/L			**0.251 J**	< 0.5	< 0.5	**2.21**	< 0.5	**0.192 J**		< 0.5	**19.3**	**2.63**	**1.6**	< 0.5	**2.72**	< 0.5
Copper	2014-10	ug/L							**4.11**	< 2.00								
Copper	2014-11	ug/L			~~**0.906 J**~~	**0.669 J**	< 2.00	**0.52 J**			**1.25 J**	< 2.00						
Copper	2015-05	ug/L	< 2.00		< 2.00	**0.825 J**	< 2.00	< 2.00	**1.67 J**	< 2.00	**1.25 J**	< 2.00						
Copper	2015-09	ug/L			**0.526 J**	< 2.00	< 2.00	< 2.00	**0.618 J**	< 2.00								
Copper	2016-03	ug/L						< 5.00	**1.88 J**									
Copper	2016-04	ug/L	< 5.00		< 5.00	< 5.00	< 5.00			< 5.00	**2.27 J**	< 5.00						
Copper	2016-11	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00						
Copper	2017-05	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Copper	2017-11	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	**5.84**	< 5.00	< 5.00		< 5.00						
Copper	2018-06	mg/L	< 0.0200	< 0.0200		< 0.0200	< 0.0200	< 0.0200	< 0.0200		< 0.0200	< 0.0200						
Copper	2018-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	**5.26**	< 5.00						
Copper	2018-08	ug/L		< 5.00														
Copper	2018-10	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	**1.68 J**	< 5.00						
Copper	2019-06	ug/L	**0.733 J**	**1.13 J**	**0.991 J**	**2.25**	**0.686 J**	**0.966 J**	**2.09**	**1.02 J**	**2.12**	**1.31 J**						
Copper	2019-08	ug/L		**0.694 J**														
Copper	2019-10	ug/L						< 5.00	< 5.00									
Copper	2019-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Copper	2020-02	ug/L											< 5.00	< 5.00	< 5.00	< 5.00		
Copper	2020-06	ug/L			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	**1.79 J**	< 5.00	< 5.00	**1.84 J**	< 5.00			
Copper	2020-07	ug/L	< 5.00	< 5.00												< 5.00		
Copper	2020-08	ug/L											< 5.00	< 5.00	< 5.00	< 5.00		
Copper	2020-11	ug/L	< 5.00	**17.2 J**	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	**1.8 J**	< 5.00	< 5.00	**5.01**	< 5.00	< 5.00		
Copper	2021-05	ug/L			< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	**1.78 J**	< 5.00	< 5.00	**3.47 J**				
Copper	2021-06	ug/L	**1.6 J**				< 5.00								< 5.00	< 5.00		
Copper	2021-08	ug/L													< 5.00			
Copper	2021-09	ug/L	< 5.00	**3.01 J**	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	**9.84**	< 5.00	< 5.00	~~**2.5 J**~~	< 5.00
Copper	2021-12	ug/L															< 5.00	< 5.00
Copper	2022-03	ug/L	**4.38 J**	**8.77**	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	**3.31 J**	< 5.00	< 5.00	< 5.00	< 5.00
Copper	2022-06	ug/L															< 5.00	< 5.00
Copper	2022-08	ug/L			< 5.00					< 5.00	< 5.00	< 5.00					< 5.00	< 5.00
Copper	2022-09	ug/L	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00				< 5.00	**21.3**	< 5.00	< 5.00		
Copper	2022-12	ug/L															< 5.00	< 5.00
Copper	2023-06	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	**2.82 J**	< 5.00	< 5.00	**3.61 J**	< 5.00	< 5.00	< 5.00	< 5.00
Copper	2023-08	ug/L																
Copper	2023-11	ug/L	< 5.00		~~**5.27**~~	**2.66 J**	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00		< 5.00		< 5.00
Copper	2024-01	ug/L																
Copper	2024-06	mg/L						< 0.00500	< 0.00500									
Copper	2024-06	ug/L			< 5.00							< 5.00	**1.82 J**		**4.25 J**		< 5.00	< 5.00
Copper	2024-07	ug/L	< 5.00			< 5.00	< 5.00							**1.91 J**		< 5.00		
Copper	2024-09	ug/L																
Copper	2024-11	ug/L				< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Copper	2024-12	ug/L	< 5.00		< 5.00		< 5.00						< 5.00	**2.6 J**	< 5.00	< 5.00	< 5.00	< 5.00
Copper	2025-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	**8.96**	< 5.00	< 5.00	< 5.00
Copper	2025-10	ug/L			< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5

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Table 14
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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Cobalt	2023-06	ug/L	**0.345 J**	**1.51**	**0.71**	**0.518**	**4.51**	**0.251 JO**			**0.232 J**
Cobalt	2023-08	ug/L			**0.541**	**2.46**	**4.93**	**0.603**			
Cobalt	2023-11	ug/L	**0.376 J**	**1.86**	**1.01**	**2.56**	**4.75**	**0.327 JO**	**0.394 J**	**0.405 J**	
Cobalt	2024-01	ug/L			< 0.500				**0.263 J**	**0.253 J**	
Cobalt	2024-06	mg/L					**0.00349**			< 0.000500	
Cobalt	2024-06	ug/L	**0.175 J**	**1.69**				**0.423 J**			**1.36**
Cobalt	2024-07	ug/L			**0.215 J**				**0.257 J**		
Cobalt	2024-09	ug/L							**0.389 J**	**0.241 J**	
Cobalt	2024-11	ug/L							**0.296 J**		
Cobalt	2024-12	ug/L	**0.812**	**2.14**	**0.211 J**	**2.77**	**3.83**	**0.435 J**		**0.288 J**	**0.189 J**
Cobalt	2025-06	ug/L	**0.329 J**	**1.57**	**0.22 J**	**1.37**	**3.92**	**0.256 J**	**0.329 J**	**0.178 J**	< 0.500
Cobalt	2025-10	ug/L	**0.335 J**	**2.57**	< 0.5	**0.991**	**3**	**0.492 J**	**0.299 J**	**0.222 J**	
Copper	2014-10	ug/L									
Copper	2014-11	ug/L									
Copper	2015-05	ug/L									
Copper	2015-09	ug/L									
Copper	2016-03	ug/L									
Copper	2016-04	ug/L									
Copper	2016-11	ug/L									
Copper	2017-05	ug/L									
Copper	2017-11	ug/L									
Copper	2018-06	mg/L									
Copper	2018-06	ug/L									
Copper	2018-08	ug/L									
Copper	2018-10	ug/L									
Copper	2019-06	ug/L									**1.67 J**
Copper	2019-08	ug/L									**0.898 J**
Copper	2019-10	ug/L									
Copper	2019-11	ug/L									< 5.00
Copper	2020-02	ug/L									< 5.00
Copper	2020-06	ug/L									< 5.00
Copper	2020-07	ug/L									
Copper	2020-08	ug/L									
Copper	2020-11	ug/L									< 5.00
Copper	2021-05	ug/L									< 5.00
Copper	2021-06	ug/L									
Copper	2021-08	ug/L									
Copper	2021-09	ug/L	< 5.00	**2.64 J**							< 5.00
Copper	2021-12	ug/L	< 5.00	< 5.00							
Copper	2022-03	ug/L	< 5.00	< 5.00							
Copper	2022-06	ug/L	< 5.00	< 5.00							
Copper	2022-08	ug/L	< 5.00	**2.08 J**		**9.67**					
Copper	2022-09	ug/L			< 5.00		< 5.00	< 5.00			< 5.00
Copper	2022-12	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			
Copper	2023-06	ug/L	< 5.00	**7.71**	< 5.00	< 5.00	< 5.00	< 5.00			< 5.00
Copper	2023-08	ug/L			< 5.00	< 5.00	< 5.00	< 5.00			
Copper	2023-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	**6.4**	**2.58 J**	< 5.00	< 5.00	
Copper	2024-01	ug/L							< 5.00	**2.39 J**	
Copper	2024-06	mg/L					< 0.00500			< 0.00500	
Copper	2024-06	ug/L	< 5.00	< 5.00				**9.56**			**3.57 J**
Copper	2024-07	ug/L			< 5.00				< 5.00		
Copper	2024-09	ug/L							< 5.00	**1.99 J**	
Copper	2024-11	ug/L							< 5.00		
Copper	2024-12	ug/L	**2.08 J**	< 5.00	< 5.00	**2 J**	< 5.00	< 5.00		**1.99 J**	< 5.00
Copper	2025-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Copper	2025-10	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Cyanide	2014-10	mg/L							< 0.0100									
Cyanide	2015-09	mg/L			< 0.0100			< 0.0100										
Cyanide	2015-09	ug/L							< 10.0									
Cyanide	2016-11	mg/L			< 0.0100			< 0.0100	< 0.0100									
Cyanide	2017-11	mg/L						< 0.0100	< 0.0100									
Cyanide	2020-06	mg/L									< 0.0100							
Cyanide	2020-11	mg/L											< 0.0100	< 0.0100				
Cyanide	2021-05	mg/L											< 0.0100	< 0.0100				
Cyanide	2021-09	mg/L													< 0.0100			
Cyanide	2022-03	mg/L											< 0.0100	< 0.0100				
Cyanide	2022-09	ug/L													< 10.0			
Cyanide	2023-06	ug/L						< 10.0										
Cyanide	2023-11	ug/L																
Cyanide	2024-06	ug/L																
Cyanide	2024-07	ug/L																
Cyanide	2025-06	ug/L																
Cyanide	2025-10	ug/L								< 10								
delta-BHC	2014-10	ug/L							< 0.0320									
delta-BHC	2015-09	ug/L			**0.00458 J**			< 0.0327	< 0.0356									
delta-BHC	2015-12	ug/L			< 0.0356													
delta-BHC	2016-11	ug/L			< 0.0352			< 0.0352	< 0.0364									
delta-BHC	2017-11	ug/L						< 0.0348	< 0.0344									
delta-BHC	2020-06	ug/L									< 0.0337							
delta-BHC	2020-11	ug/L											< 0.0386	**0.00462 J**				
delta-BHC	2021-05	ug/L											< 0.0356	< 0.0364				
delta-BHC	2021-09	ug/L													< 0.0364			
delta-BHC	2022-03	ug/L											< 0.0667	< 0.0727				
delta-BHC	2022-09	ug/L													< 0.0667			
delta-BHC	2023-06	ug/L						< 0.0640										
delta-BHC	2023-11	ug/L																
delta-BHC	2024-06	ug/L																
delta-BHC	2024-07	ug/L																
delta-BHC	2025-06	ug/L																
delta-BHC	2025-10	ug/L								< 0.0931								
Diallate	2014-10	ug/L							< 11.1									
Diallate	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Diallate	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Diallate	2017-11	ug/L						< 11.8	< 10.9									
Diallate	2020-06	ug/L									< 11.5							
Diallate	2020-11	ug/L											< 11.8	< 10.5				
Diallate	2021-05	ug/L											< 11.2	< 11.9				
Diallate	2021-09	ug/L													< 10.5			
Diallate	2022-03	ug/L											< 11.9	< 10.4				
Diallate	2022-09	ug/L													< 10.4			
Diallate	2023-06	ug/L						< 11.6										
Diallate	2023-11	ug/L																
Diallate	2024-06	ug/L																
Diallate	2024-07	ug/L																
Diallate	2025-06	ug/L																
Diallate	2025-10	ug/L								< 10.9								
Dibenzo(a,h)anthracene	2014-10	ug/L							**0.364 J**									
Dibenzo(a,h)anthracene	2014-12	ug/L							< 10.5									
Dibenzo(a,h)anthracene	2015-05	ug/L							< 10.2									
Dibenzo(a,h)anthracene	2015-07	ug/L							< 10.6									
Dibenzo(a,h)anthracene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Dibenzo(a,h)anthracene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Cyanide	2014-10	mg/L									
Cyanide	2015-09	mg/L									
Cyanide	2015-09	ug/L									
Cyanide	2016-11	mg/L									
Cyanide	2017-11	mg/L									
Cyanide	2020-06	mg/L									
Cyanide	2020-11	mg/L									
Cyanide	2021-05	mg/L									
Cyanide	2021-09	mg/L									
Cyanide	2022-03	mg/L									
Cyanide	2022-09	ug/L									
Cyanide	2023-06	ug/L									
Cyanide	2023-11	ug/L		< 10.0							
Cyanide	2024-06	ug/L		< 10.0				< 10.0			
Cyanide	2024-07	ug/L					< 10.0				
Cyanide	2025-06	ug/L				< 10.0	< 10.0	< 10.0			
Cyanide	2025-10	ug/L								< 10	
delta-BHC	2014-10	ug/L									
delta-BHC	2015-09	ug/L									
delta-BHC	2015-12	ug/L									
delta-BHC	2016-11	ug/L									
delta-BHC	2017-11	ug/L									
delta-BHC	2020-06	ug/L									
delta-BHC	2020-11	ug/L									
delta-BHC	2021-05	ug/L									
delta-BHC	2021-09	ug/L									
delta-BHC	2022-03	ug/L									
delta-BHC	2022-09	ug/L									
delta-BHC	2023-06	ug/L									
delta-BHC	2023-11	ug/L		< 0.0604							
delta-BHC	2024-06	ug/L		< 0.0909				< 0.0909			
delta-BHC	2024-07	ug/L					< 0.0873				
delta-BHC	2025-06	ug/L				< 0.0911	< 0.0911	< 0.0907			
delta-BHC	2025-10	ug/L								< 0.0936	
Diallate	2014-10	ug/L									
Diallate	2015-09	ug/L									
Diallate	2016-11	ug/L									
Diallate	2017-11	ug/L									
Diallate	2020-06	ug/L									
Diallate	2020-11	ug/L									
Diallate	2021-05	ug/L									
Diallate	2021-09	ug/L									
Diallate	2022-03	ug/L									
Diallate	2022-09	ug/L									
Diallate	2023-06	ug/L									
Diallate	2023-11	ug/L		< 10.0							
Diallate	2024-06	ug/L		< 10.4				< 10.0			
Diallate	2024-07	ug/L					< 12.5				
Diallate	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Diallate	2025-10	ug/L								< 10.2	
Dibenzo(a,h)anthracene	2014-10	ug/L									
Dibenzo(a,h)anthracene	2014-12	ug/L									
Dibenzo(a,h)anthracene	2015-05	ug/L									
Dibenzo(a,h)anthracene	2015-07	ug/L									
Dibenzo(a,h)anthracene	2015-09	ug/L									
Dibenzo(a,h)anthracene	2016-11	ug/L									

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Dibenzo(a,h)anthracene	2017-11	ug/L						< 11.8	< 10.9									
Dibenzo(a,h)anthracene	2020-06	ug/L									< 11.5							
Dibenzo(a,h)anthracene	2020-11	ug/L											< 11.8	< 10.5				
Dibenzo(a,h)anthracene	2021-05	ug/L											< 11.2	< 11.9				
Dibenzo(a,h)anthracene	2021-09	ug/L													< 10.5			
Dibenzo(a,h)anthracene	2022-03	ug/L											< 11.9	< 10.4				
Dibenzo(a,h)anthracene	2022-09	ug/L													< 10.4			
Dibenzo(a,h)anthracene	2023-06	ug/L						< 11.6										
Dibenzo(a,h)anthracene	2023-11	ug/L																
Dibenzo(a,h)anthracene	2024-06	ug/L																
Dibenzo(a,h)anthracene	2024-07	ug/L																
Dibenzo(a,h)anthracene	2025-06	ug/L																
Dibenzo(a,h)anthracene	2025-10	ug/L								< 10.9								
Dibenzofuran	2014-10	ug/L							< 11.1									
Dibenzofuran	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Dibenzofuran	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Dibenzofuran	2017-11	ug/L						< 11.8	< 10.9									
Dibenzofuran	2020-06	ug/L									< 11.5							
Dibenzofuran	2020-11	ug/L											< 11.8	< 10.5				
Dibenzofuran	2021-05	ug/L											< 11.2	< 11.9				
Dibenzofuran	2021-09	ug/L													< 10.5			
Dibenzofuran	2022-03	ug/L											< 11.9	< 10.4				
Dibenzofuran	2022-09	ug/L													< 10.4			
Dibenzofuran	2023-06	ug/L						< 11.6										
Dibenzofuran	2023-11	ug/L																
Dibenzofuran	2024-06	ug/L																
Dibenzofuran	2024-07	ug/L																
Dibenzofuran	2025-06	ug/L																
Dibenzofuran	2025-10	ug/L								< 10.9								
Dibromomethane	2014-10	ug/L							< 1.00	< 1.00								
Dibromomethane	2014-11	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00						
Dibromomethane	2015-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Dibromomethane	2015-09	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Dibromomethane	2016-03	ug/L						< 1.00	< 1.00									
Dibromomethane	2016-04	ug/L	< 1.00		< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00						
Dibromomethane	2016-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
Dibromomethane	2017-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Dibromomethane	2017-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
Dibromomethane	2018-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Dibromomethane	2018-08	ug/L		< 1.00														
Dibromomethane	2018-10	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Dibromomethane	2019-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Dibromomethane	2019-08	ug/L		< 1.00														
Dibromomethane	2019-10	ug/L						< 1.00	< 1.00									
Dibromomethane	2019-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Dibromomethane	2020-02	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
Dibromomethane	2020-06	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
Dibromomethane	2020-07	ug/L	< 1.00	< 1.00												< 1.00		
Dibromomethane	2020-08	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
Dibromomethane	2020-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Dibromomethane	2021-05	ug/L			< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00				
Dibromomethane	2021-06	ug/L	< 1.00				< 1.00								< 1.00	< 1.00		
Dibromomethane	2021-08	ug/L													< 1.00			
Dibromomethane	2021-09	ug/L	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Dibromomethane	2021-12	ug/L															< 1.00	< 1.00
Dibromomethane	2022-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Dibenzo(a,h)anthracene	2017-11	ug/L									
Dibenzo(a,h)anthracene	2020-06	ug/L									
Dibenzo(a,h)anthracene	2020-11	ug/L									
Dibenzo(a,h)anthracene	2021-05	ug/L									
Dibenzo(a,h)anthracene	2021-09	ug/L									
Dibenzo(a,h)anthracene	2022-03	ug/L									
Dibenzo(a,h)anthracene	2022-09	ug/L									
Dibenzo(a,h)anthracene	2023-06	ug/L									
Dibenzo(a,h)anthracene	2023-11	ug/L		< 10.0							
Dibenzo(a,h)anthracene	2024-06	ug/L		< 10.4				< 10.0			
Dibenzo(a,h)anthracene	2024-07	ug/L					< 12.5				
Dibenzo(a,h)anthracene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Dibenzo(a,h)anthracene	2025-10	ug/L								< 10.2	
Dibenzofuran	2014-10	ug/L									
Dibenzofuran	2015-09	ug/L									
Dibenzofuran	2016-11	ug/L									
Dibenzofuran	2017-11	ug/L									
Dibenzofuran	2020-06	ug/L									
Dibenzofuran	2020-11	ug/L									
Dibenzofuran	2021-05	ug/L									
Dibenzofuran	2021-09	ug/L									
Dibenzofuran	2022-03	ug/L									
Dibenzofuran	2022-09	ug/L									
Dibenzofuran	2023-06	ug/L									
Dibenzofuran	2023-11	ug/L		< 10.0							
Dibenzofuran	2024-06	ug/L		< 10.4				< 10.0			
Dibenzofuran	2024-07	ug/L					< 12.5				
Dibenzofuran	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Dibenzofuran	2025-10	ug/L								< 10.2	
Dibromomethane	2014-10	ug/L									
Dibromomethane	2014-11	ug/L									
Dibromomethane	2015-05	ug/L									
Dibromomethane	2015-09	ug/L									
Dibromomethane	2016-03	ug/L									
Dibromomethane	2016-04	ug/L									
Dibromomethane	2016-11	ug/L									
Dibromomethane	2017-05	ug/L									
Dibromomethane	2017-11	ug/L									
Dibromomethane	2018-06	ug/L									
Dibromomethane	2018-08	ug/L									
Dibromomethane	2018-10	ug/L									
Dibromomethane	2019-06	ug/L									< 1.00
Dibromomethane	2019-08	ug/L									< 1.00
Dibromomethane	2019-10	ug/L									
Dibromomethane	2019-11	ug/L									< 1.00
Dibromomethane	2020-02	ug/L									< 1.00
Dibromomethane	2020-06	ug/L									< 1.00
Dibromomethane	2020-07	ug/L									
Dibromomethane	2020-08	ug/L									
Dibromomethane	2020-11	ug/L									< 1.00
Dibromomethane	2021-05	ug/L									< 1.00
Dibromomethane	2021-06	ug/L									
Dibromomethane	2021-08	ug/L									
Dibromomethane	2021-09	ug/L	< 1.00	< 1.00							< 1.00
Dibromomethane	2021-12	ug/L	< 1.00	< 1.00							
Dibromomethane	2022-03	ug/L	< 1.00	< 1.00							

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Dibromomethane	2022-06	ug/L															< 1.00	< 1.00
Dibromomethane	2022-08	ug/L			< 1.00					< 1.00	< 1.00	< 1.00					< 1.00	< 1.00
Dibromomethane	2022-09	ug/L	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00				< 1.00	< 1.00	< 1.00	< 1.00		
Dibromomethane	2022-12	ug/L															< 1.00	< 1.00
Dibromomethane	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Dibromomethane	2023-08	ug/L																
Dibromomethane	2023-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00		< 1.00		< 1.00
Dibromomethane	2024-01	ug/L																
Dibromomethane	2024-06	ug/L			< 1.00			< 1.00	< 1.00			< 1.00	< 1.00		< 1.00		< 1.00	< 1.00
Dibromomethane	2024-07	ug/L	< 1.00			< 1.00 J	< 1.00 J							< 1.00 J		< 1.00		
Dibromomethane	2024-09	ug/L																
Dibromomethane	2024-11	ug/L				< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Dibromomethane	2024-12	ug/L	< 1.00		< 1.00		< 1.00						< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Dibromomethane	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Dibromomethane	2025-10	ug/L			< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1 J	< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	2014-10	ug/L							< 3.00									
Dichlorodifluoromethane	2015-09	ug/L			< 3.00			< 3.00	< 3.00									
Dichlorodifluoromethane	2016-11	ug/L			< 3.00			< 3.00	< 3.00									
Dichlorodifluoromethane	2017-11	ug/L						< 3.00	< 3.00									
Dichlorodifluoromethane	2020-06	ug/L									< 3.00							
Dichlorodifluoromethane	2020-11	ug/L											< 3.00	< 3.00				
Dichlorodifluoromethane	2021-05	ug/L											< 3.00	< 3.00				
Dichlorodifluoromethane	2021-09	ug/L													< 3.00			
Dichlorodifluoromethane	2022-03	ug/L											< 3.00	< 3.00				
Dichlorodifluoromethane	2022-09	ug/L													< 3.00			
Dichlorodifluoromethane	2023-06	ug/L						< 3.00										
Dichlorodifluoromethane	2023-11	ug/L																
Dichlorodifluoromethane	2024-06	ug/L																
Dichlorodifluoromethane	2025-06	ug/L																
Dichlorodifluoromethane	2025-10	ug/L								< 3								
Dieldrin	2014-10	ug/L							< 0.0320									
Dieldrin	2015-09	ug/L			**0.00683 J**			< 0.0327	< 0.0356									
Dieldrin	2015-12	ug/L			< 0.0356													
Dieldrin	2016-11	ug/L			< 0.0352			< 0.0352	< 0.0364									
Dieldrin	2017-11	ug/L						< 0.0348	< 0.0344									
Dieldrin	2020-06	ug/L									< 0.0337							
Dieldrin	2020-11	ug/L											< 0.0386	**0.00422 J**				
Dieldrin	2021-05	ug/L											< 0.0356	< 0.0364				
Dieldrin	2021-09	ug/L													< 0.0364			
Dieldrin	2022-03	ug/L											< 0.0667	< 0.0727				
Dieldrin	2022-09	ug/L													< 0.0667			
Dieldrin	2023-06	ug/L						< 0.0640										
Dieldrin	2023-11	ug/L																
Dieldrin	2024-06	ug/L																
Dieldrin	2024-07	ug/L																
Dieldrin	2025-06	ug/L																
Dieldrin	2025-10	ug/L								< 0.0931								
Diethylphthalate	2014-10	ug/L							< 11.1									
Diethylphthalate	2014-11	ug/L			**1.06 J**			< 11.0										
Diethylphthalate	2014-12	ug/L			**0.348 J**			< 10.9										
Diethylphthalate	2015-05	ug/L			< 10.2			< 10.4										
Diethylphthalate	2015-09	ug/L			**0.453 J**			< 11.2	< 10.8									
Diethylphthalate	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Diethylphthalate	2017-11	ug/L						< 11.8	< 10.9									
Diethylphthalate	2020-06	ug/L									< 11.5							
Diethylphthalate	2020-11	ug/L											< 11.8	< 10.5				

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1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Dibromomethane	2022-06	ug/L	< 1.00	< 1.00							
Dibromomethane	2022-08	ug/L	< 1.00	< 1.00		< 1.00					
Dibromomethane	2022-09	ug/L			< 1.00		< 1.00	< 1.00			< 1.00
Dibromomethane	2022-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
Dibromomethane	2023-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00
Dibromomethane	2023-08	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			
Dibromomethane	2023-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
Dibromomethane	2024-01	ug/L							< 1.00	< 1.00	
Dibromomethane	2024-06	ug/L	< 1.00	< 1.00			< 1.00	< 1.00		< 1.00	< 1.00
Dibromomethane	2024-07	ug/L			< 1.00 J				< 1.00 J		
Dibromomethane	2024-09	ug/L							< 1.00	< 1.00	
Dibromomethane	2024-11	ug/L							< 1.00		
Dibromomethane	2024-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00
Dibromomethane	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Dibromomethane	2025-10	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
Dichlorodifluoromethane	2014-10	ug/L									
Dichlorodifluoromethane	2015-09	ug/L									
Dichlorodifluoromethane	2016-11	ug/L									
Dichlorodifluoromethane	2017-11	ug/L									
Dichlorodifluoromethane	2020-06	ug/L									
Dichlorodifluoromethane	2020-11	ug/L									
Dichlorodifluoromethane	2021-05	ug/L									
Dichlorodifluoromethane	2021-09	ug/L									
Dichlorodifluoromethane	2022-03	ug/L									
Dichlorodifluoromethane	2022-09	ug/L									
Dichlorodifluoromethane	2023-06	ug/L									
Dichlorodifluoromethane	2023-11	ug/L		< 3.00							
Dichlorodifluoromethane	2024-06	ug/L		< 3.00			< 3.00	< 3.00			
Dichlorodifluoromethane	2025-06	ug/L				< 3.00	< 3.00	< 3.00			
Dichlorodifluoromethane	2025-10	ug/L								< 3	
Dieldrin	2014-10	ug/L									
Dieldrin	2015-09	ug/L									
Dieldrin	2015-12	ug/L									
Dieldrin	2016-11	ug/L									
Dieldrin	2017-11	ug/L									
Dieldrin	2020-06	ug/L									
Dieldrin	2020-11	ug/L									
Dieldrin	2021-05	ug/L									
Dieldrin	2021-09	ug/L									
Dieldrin	2022-03	ug/L									
Dieldrin	2022-09	ug/L									
Dieldrin	2023-06	ug/L									
Dieldrin	2023-11	ug/L		< 0.0604							
Dieldrin	2024-06	ug/L		< 0.0909				< 0.0909			
Dieldrin	2024-07	ug/L					< 0.0873				
Dieldrin	2025-06	ug/L				< 0.0911	< 0.0911	< 0.0907			
Dieldrin	2025-10	ug/L								< 0.0936	
Diethylphthalate	2014-10	ug/L									
Diethylphthalate	2014-11	ug/L									
Diethylphthalate	2014-12	ug/L									
Diethylphthalate	2015-05	ug/L									
Diethylphthalate	2015-09	ug/L									
Diethylphthalate	2016-11	ug/L									
Diethylphthalate	2017-11	ug/L									
Diethylphthalate	2020-06	ug/L									
Diethylphthalate	2020-11	ug/L									

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Diethylphthalate	2021-05	ug/L											< 11.2	< 11.9				
Diethylphthalate	2021-09	ug/L													< 10.5			
Diethylphthalate	2022-03	ug/L											< 11.9	< 10.4				
Diethylphthalate	2022-09	ug/L													< 10.4			
Diethylphthalate	2023-06	ug/L						< 11.6										
Diethylphthalate	2023-11	ug/L																
Diethylphthalate	2024-06	ug/L																
Diethylphthalate	2024-07	ug/L																
Diethylphthalate	2025-06	ug/L																
Diethylphthalate	2025-10	ug/L								< 10.9								
Dimethoate	2014-10	ug/L							< 11.1									
Dimethoate	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Dimethoate	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Dimethoate	2017-11	ug/L						< 11.8	< 10.9									
Dimethoate	2020-06	ug/L									< 11.5							
Dimethoate	2020-11	ug/L											< 11.8	< 10.5				
Dimethoate	2021-05	ug/L											< 11.2	< 11.9				
Dimethoate	2021-09	ug/L													< 10.5			
Dimethoate	2022-03	ug/L											< 11.9	< 10.4				
Dimethoate	2022-09	ug/L													< 10.4			
Dimethoate	2023-06	ug/L						< 11.6										
Dimethoate	2023-11	ug/L																
Dimethoate	2024-06	ug/L																
Dimethoate	2024-07	ug/L																
Dimethoate	2025-06	ug/L																
Dimethoate	2025-10	ug/L								< 10.9								
Dimethylphthalate	2014-10	ug/L							< 11.1									
Dimethylphthalate	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Dimethylphthalate	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Dimethylphthalate	2017-11	ug/L						< 11.8	< 10.9									
Dimethylphthalate	2020-06	ug/L									< 11.5							
Dimethylphthalate	2020-11	ug/L											< 11.8	< 10.5				
Dimethylphthalate	2021-05	ug/L											< 11.2	< 11.9				
Dimethylphthalate	2021-09	ug/L													< 10.5			
Dimethylphthalate	2022-03	ug/L											< 11.9	< 10.4				
Dimethylphthalate	2022-09	ug/L													< 10.4			
Dimethylphthalate	2023-06	ug/L						< 11.6										
Dimethylphthalate	2023-11	ug/L																
Dimethylphthalate	2024-06	ug/L																
Dimethylphthalate	2024-07	ug/L																
Dimethylphthalate	2025-06	ug/L																
Dimethylphthalate	2025-10	ug/L								< 10.9								
Di-n-butylphthalate	2014-10	ug/L							< 11.1									
Di-n-butylphthalate	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Di-n-butylphthalate	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Di-n-butylphthalate	2017-11	ug/L						< 11.8	< 10.9									
Di-n-butylphthalate	2020-06	ug/L									< 11.5							
Di-n-butylphthalate	2020-11	ug/L											< 11.8	< 10.5				
Di-n-butylphthalate	2021-05	ug/L											< 11.2	< 11.9				
Di-n-butylphthalate	2021-09	ug/L													< 10.5			
Di-n-butylphthalate	2022-03	ug/L											< 11.9	< 10.4				
Di-n-butylphthalate	2022-09	ug/L													< 10.4			
Di-n-butylphthalate	2023-06	ug/L						< 11.6										
Di-n-butylphthalate	2023-11	ug/L																
Di-n-butylphthalate	2024-06	ug/L																
Di-n-butylphthalate	2024-07	ug/L																

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Diethylphthalate	2021-05	ug/L									
Diethylphthalate	2021-09	ug/L									
Diethylphthalate	2022-03	ug/L									
Diethylphthalate	2022-09	ug/L									
Diethylphthalate	2023-06	ug/L									
Diethylphthalate	2023-11	ug/L		< 10.0							
Diethylphthalate	2024-06	ug/L		< 10.4				< 10.0			
Diethylphthalate	2024-07	ug/L					< 12.5				
Diethylphthalate	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Diethylphthalate	2025-10	ug/L								< 10.2	
Dimethoate	2014-10	ug/L									
Dimethoate	2015-09	ug/L									
Dimethoate	2016-11	ug/L									
Dimethoate	2017-11	ug/L									
Dimethoate	2020-06	ug/L									
Dimethoate	2020-11	ug/L									
Dimethoate	2021-05	ug/L									
Dimethoate	2021-09	ug/L									
Dimethoate	2022-03	ug/L									
Dimethoate	2022-09	ug/L									
Dimethoate	2023-06	ug/L									
Dimethoate	2023-11	ug/L		< 10.0							
Dimethoate	2024-06	ug/L		< 10.4				< 10.0			
Dimethoate	2024-07	ug/L					< 12.5				
Dimethoate	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Dimethoate	2025-10	ug/L								< 10.2	
Dimethylphthalate	2014-10	ug/L									
Dimethylphthalate	2015-09	ug/L									
Dimethylphthalate	2016-11	ug/L									
Dimethylphthalate	2017-11	ug/L									
Dimethylphthalate	2020-06	ug/L									
Dimethylphthalate	2020-11	ug/L									
Dimethylphthalate	2021-05	ug/L									
Dimethylphthalate	2021-09	ug/L									
Dimethylphthalate	2022-03	ug/L									
Dimethylphthalate	2022-09	ug/L									
Dimethylphthalate	2023-06	ug/L									
Dimethylphthalate	2023-11	ug/L		< 10.0							
Dimethylphthalate	2024-06	ug/L		< 10.4				< 10.0			
Dimethylphthalate	2024-07	ug/L					< 12.5				
Dimethylphthalate	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Dimethylphthalate	2025-10	ug/L								< 10.2	
Di-n-butylphthalate	2014-10	ug/L									
Di-n-butylphthalate	2015-09	ug/L									
Di-n-butylphthalate	2016-11	ug/L									
Di-n-butylphthalate	2017-11	ug/L									
Di-n-butylphthalate	2020-06	ug/L									
Di-n-butylphthalate	2020-11	ug/L									
Di-n-butylphthalate	2021-05	ug/L									
Di-n-butylphthalate	2021-09	ug/L									
Di-n-butylphthalate	2022-03	ug/L									
Di-n-butylphthalate	2022-09	ug/L									
Di-n-butylphthalate	2023-06	ug/L									
Di-n-butylphthalate	2023-11	ug/L		< 10.0							
Di-n-butylphthalate	2024-06	ug/L		< 10.4				< 10.0			
Di-n-butylphthalate	2024-07	ug/L					< 12.5				

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1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Di-n-butylphthalate	2025-06	ug/L																
Di-n-butylphthalate	2025-10	ug/L								< 10.9								
Di-n-octylphthalate	2014-10	ug/L							**1.36 J**									
Di-n-octylphthalate	2014-11	ug/L			< 22.2													
Di-n-octylphthalate	2014-12	ug/L			< 20.2				< 21.1									
Di-n-octylphthalate	2015-05	ug/L			**1.08 J**				< 20.4									
Di-n-octylphthalate	2015-07	ug/L							< 21.3									
Di-n-octylphthalate	2015-09	ug/L			< 21.1			< 22.5	< 21.5									
Di-n-octylphthalate	2016-11	ug/L			**1.79 J**			**1.38 J**	**1.43 J**									
Di-n-octylphthalate	2017-11	ug/L						< 23.5	< 21.7									
Di-n-octylphthalate	2020-06	ug/L									< 23.0							
Di-n-octylphthalate	2020-11	ug/L											< 23.5	< 21.1				
Di-n-octylphthalate	2021-05	ug/L											< 22.5	< 23.8				
Di-n-octylphthalate	2021-09	ug/L													< 21.1			
Di-n-octylphthalate	2022-03	ug/L											< 23.8	< 20.8				
Di-n-octylphthalate	2022-09	ug/L													< 20.8			
Di-n-octylphthalate	2023-06	ug/L						**13.6 J**										
Di-n-octylphthalate	2023-11	ug/L																
Di-n-octylphthalate	2024-06	ug/L																
Di-n-octylphthalate	2024-07	ug/L																
Di-n-octylphthalate	2025-06	ug/L																
Di-n-octylphthalate	2025-10	ug/L								< 21.7								
Dinoseb	2014-10	ug/L							< 11.1									
Dinoseb	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Dinoseb	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Dinoseb	2017-11	ug/L						< 11.8	< 10.9									
Dinoseb	2020-06	ug/L									< 11.5							
Dinoseb	2020-11	ug/L											< 11.8	< 10.5				
Dinoseb	2021-05	ug/L											< 11.2	< 11.9				
Dinoseb	2021-09	ug/L													< 10.5			
Dinoseb	2022-03	ug/L											< 11.9	< 10.4				
Dinoseb	2022-09	ug/L													< 10.4			
Dinoseb	2023-06	ug/L						< 11.6										
Dinoseb	2023-11	ug/L																
Dinoseb	2023-11	ug/L																
Dinoseb	2024-06	ug/L																
Dinoseb	2024-07	ug/L																
Dinoseb	2025-06	ug/L																
Dinoseb	2025-10	ug/L								< 10.9								
Diphenylamine	2014-10	ug/L							< 11.1									
Diphenylamine	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Diphenylamine	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Diphenylamine	2017-11	ug/L						< 11.8	< 10.9									
Diphenylamine	2020-06	ug/L									< 11.5							
Diphenylamine	2020-11	ug/L											< 11.8	< 10.5				
Diphenylamine	2021-05	ug/L											< 11.2	< 11.9				
Diphenylamine	2021-09	ug/L													< 10.5			
Diphenylamine	2022-03	ug/L											< 11.9	< 10.4				
Diphenylamine	2022-09	ug/L													< 10.4			
Diphenylamine	2023-06	ug/L						< 11.6										
Diphenylamine	2023-11	ug/L																
Diphenylamine	2024-06	ug/L																
Diphenylamine	2024-07	ug/L																
Diphenylamine	2025-06	ug/L																
Diphenylamine	2025-10	ug/L								< 10.9								
Disulfoton	2014-10	ug/L							< 11.1									

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Di-n-butylphthalate	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Di-n-butylphthalate	2025-10	ug/L								< 10.2	
Di-n-octylphthalate	2014-10	ug/L									
Di-n-octylphthalate	2014-11	ug/L									
Di-n-octylphthalate	2014-12	ug/L									
Di-n-octylphthalate	2015-05	ug/L									
Di-n-octylphthalate	2015-07	ug/L									
Di-n-octylphthalate	2015-09	ug/L									
Di-n-octylphthalate	2016-11	ug/L									
Di-n-octylphthalate	2017-11	ug/L									
Di-n-octylphthalate	2020-06	ug/L									
Di-n-octylphthalate	2020-11	ug/L									
Di-n-octylphthalate	2021-05	ug/L									
Di-n-octylphthalate	2021-09	ug/L									
Di-n-octylphthalate	2022-03	ug/L									
Di-n-octylphthalate	2022-09	ug/L									
Di-n-octylphthalate	2023-06	ug/L									
Di-n-octylphthalate	2023-11	ug/L		< 20.0							
Di-n-octylphthalate	2024-06	ug/L		< 20.8				< 20.0			
Di-n-octylphthalate	2024-07	ug/L					< 25.0				
Di-n-octylphthalate	2025-06	ug/L				< 21.7	< 21.3	< 20.8			
Di-n-octylphthalate	2025-10	ug/L								< 20.4	
Dinoseb	2014-10	ug/L									
Dinoseb	2015-09	ug/L									
Dinoseb	2016-11	ug/L									
Dinoseb	2017-11	ug/L									
Dinoseb	2020-06	ug/L									
Dinoseb	2020-11	ug/L									
Dinoseb	2021-05	ug/L									
Dinoseb	2021-09	ug/L									
Dinoseb	2022-03	ug/L									
Dinoseb	2022-09	ug/L									
Dinoseb	2023-06	ug/L									
Dinoseb	2023-11	ug/L		< 0.617							
Dinoseb	2023-11	ug/L		< 10.0							
Dinoseb	2024-06	ug/L		< 10.4				< 10.0			
Dinoseb	2024-07	ug/L					< 12.5				
Dinoseb	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Dinoseb	2025-10	ug/L								< 10.2	
Diphenylamine	2014-10	ug/L									
Diphenylamine	2015-09	ug/L									
Diphenylamine	2016-11	ug/L									
Diphenylamine	2017-11	ug/L									
Diphenylamine	2020-06	ug/L									
Diphenylamine	2020-11	ug/L									
Diphenylamine	2021-05	ug/L									
Diphenylamine	2021-09	ug/L									
Diphenylamine	2022-03	ug/L									
Diphenylamine	2022-09	ug/L									
Diphenylamine	2023-06	ug/L									
Diphenylamine	2023-11	ug/L		< 10.0							
Diphenylamine	2024-06	ug/L		< 10.4				< 10.0			
Diphenylamine	2024-07	ug/L					< 12.5				
Diphenylamine	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Diphenylamine	2025-10	ug/L								< 10.2	
Disulfoton	2014-10	ug/L									

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1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Disulfoton	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Disulfoton	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Disulfoton	2017-11	ug/L						< 11.8	< 10.9									
Disulfoton	2020-06	ug/L									< 11.5							
Disulfoton	2020-11	ug/L											< 11.8	< 10.5				
Disulfoton	2021-05	ug/L											< 11.2	< 11.9				
Disulfoton	2021-09	ug/L													< 10.5			
Disulfoton	2022-03	ug/L											< 11.9	< 10.4				
Disulfoton	2022-09	ug/L													< 10.4			
Disulfoton	2023-06	ug/L						< 11.6										
Disulfoton	2023-11	ug/L																
Disulfoton	2024-06	ug/L																
Disulfoton	2024-07	ug/L																
Disulfoton	2025-06	ug/L																
Disulfoton	2025-10	ug/L								< 10.9								
Endosulfan I	2014-10	ug/L							< 0.0320									
Endosulfan I	2015-09	ug/L			< 0.0364			< 0.0327	**0.00257 J**									
Endosulfan I	2015-12	ug/L							**0.0149 J**									
Endosulfan I	2016-11	ug/L			< 0.0352			< 0.0352	< 0.0364									
Endosulfan I	2017-11	ug/L						< 0.0348	< 0.0344									
Endosulfan I	2020-06	ug/L									< 0.0337							
Endosulfan I	2020-11	ug/L											< 0.0386	**0.0531**				
Endosulfan I	2021-02	ug/L												**0.00598 J**				
Endosulfan I	2021-05	ug/L											< 0.0356	**0.026 J**				
Endosulfan I	2021-08	ug/L												< 0.0368				
Endosulfan I	2021-09	ug/L												**0.058**	< 0.0364			
Endosulfan I	2022-03	ug/L											< 0.0667	< 0.0727				
Endosulfan I	2022-09	ug/L												< 0.0744	< 0.0667			
Endosulfan I	2023-06	ug/L						< 0.0640						< 0.0640				
Endosulfan I	2023-11	ug/L												< 0.0727				
Endosulfan I	2024-06	ug/L																
Endosulfan I	2024-07	ug/L												< 0.0938 J				
Endosulfan I	2024-12	ug/L												< 0.0931				
Endosulfan I	2025-06	ug/L												< 0.0900				
Endosulfan I	2025-10	ug/L			< 0.0921					< 0.0931				< 0.0916			< 0.09	
Endosulfan II	2014-10	ug/L							< 0.0320									
Endosulfan II	2014-11	ug/L			**0.00589 J**													
Endosulfan II	2014-12	ug/L			< 0.0348													
Endosulfan II	2015-05	ug/L			< 0.0327													
Endosulfan II	2015-09	ug/L			< 0.0364			< 0.0327	< 0.0356									
Endosulfan II	2016-11	ug/L			< 0.0352			< 0.0352	< 0.0364									
Endosulfan II	2017-11	ug/L						< 0.0348	< 0.0344									
Endosulfan II	2020-06	ug/L									**0.0043 J**							
Endosulfan II	2020-11	ug/L											< 0.0386	**0.0125 J**				
Endosulfan II	2021-05	ug/L											< 0.0356	< 0.0364				
Endosulfan II	2021-09	ug/L													< 0.0364			
Endosulfan II	2022-03	ug/L											< 0.0667	< 0.0727				
Endosulfan II	2022-09	ug/L													< 0.0667			
Endosulfan II	2023-06	ug/L						< 0.0640										
Endosulfan II	2023-11	ug/L																
Endosulfan II	2024-06	ug/L																
Endosulfan II	2024-07	ug/L																
Endosulfan II	2025-06	ug/L																
Endosulfan II	2025-10	ug/L								< 0.0931								
Endosulfan Sulfate	2014-10	ug/L							< 0.0320									
Endosulfan Sulfate	2015-09	ug/L			**0.00544 J**			< 0.0327	< 0.0356									

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1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Disulfoton	2015-09	ug/L									
Disulfoton	2016-11	ug/L									
Disulfoton	2017-11	ug/L									
Disulfoton	2020-06	ug/L									
Disulfoton	2020-11	ug/L									
Disulfoton	2021-05	ug/L									
Disulfoton	2021-09	ug/L									
Disulfoton	2022-03	ug/L									
Disulfoton	2022-09	ug/L									
Disulfoton	2023-06	ug/L									
Disulfoton	2023-11	ug/L		< 10.0							
Disulfoton	2024-06	ug/L		< 10.4				< 10.0			
Disulfoton	2024-07	ug/L					< 12.5				
Disulfoton	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Disulfoton	2025-10	ug/L								< 10.2	
Endosulfan I	2014-10	ug/L									
Endosulfan I	2015-09	ug/L									
Endosulfan I	2015-12	ug/L									
Endosulfan I	2016-11	ug/L									
Endosulfan I	2017-11	ug/L									
Endosulfan I	2020-06	ug/L									
Endosulfan I	2020-11	ug/L									
Endosulfan I	2021-02	ug/L									
Endosulfan I	2021-05	ug/L									
Endosulfan I	2021-08	ug/L									
Endosulfan I	2021-09	ug/L									
Endosulfan I	2022-03	ug/L									
Endosulfan I	2022-09	ug/L									
Endosulfan I	2023-06	ug/L									
Endosulfan I	2023-11	ug/L		< 0.0604							
Endosulfan I	2024-06	ug/L		< 0.0909				< 0.0909			
Endosulfan I	2024-07	ug/L					< 0.0873				
Endosulfan I	2024-12	ug/L									
Endosulfan I	2025-06	ug/L				< 0.0911	< 0.0911	< 0.0907			
Endosulfan I	2025-10	ug/L								< 0.0936	
Endosulfan II	2014-10	ug/L									
Endosulfan II	2014-11	ug/L									
Endosulfan II	2014-12	ug/L									
Endosulfan II	2015-05	ug/L									
Endosulfan II	2015-09	ug/L									
Endosulfan II	2016-11	ug/L									
Endosulfan II	2017-11	ug/L									
Endosulfan II	2020-06	ug/L									
Endosulfan II	2020-11	ug/L									
Endosulfan II	2021-05	ug/L									
Endosulfan II	2021-09	ug/L									
Endosulfan II	2022-03	ug/L									
Endosulfan II	2022-09	ug/L									
Endosulfan II	2023-06	ug/L									
Endosulfan II	2023-11	ug/L		< 0.0604							
Endosulfan II	2024-06	ug/L		< 0.0909				< 0.0909			
Endosulfan II	2024-07	ug/L					< 0.0873				
Endosulfan II	2025-06	ug/L				< 0.0911	< 0.0911	< 0.0907			
Endosulfan II	2025-10	ug/L								< 0.0936	
Endosulfan Sulfate	2014-10	ug/L									
Endosulfan Sulfate	2015-09	ug/L									

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1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Endosulfan Sulfate	2015-12	ug/L			**0.00772 J**													
Endosulfan Sulfate	2016-11	ug/L			< 0.0352			< 0.0352	< 0.0364									
Endosulfan Sulfate	2017-11	ug/L						**0.00282 J**	< 0.0344									
Endosulfan Sulfate	2020-06	ug/L									< 0.0337							
Endosulfan Sulfate	2020-11	ug/L											< 0.0386	< 0.0390				
Endosulfan Sulfate	2021-05	ug/L											< 0.0356	< 0.0364				
Endosulfan Sulfate	2021-09	ug/L													< 0.0364			
Endosulfan Sulfate	2022-03	ug/L											< 0.0667	< 0.0727				
Endosulfan Sulfate	2022-09	ug/L													< 0.0667			
Endosulfan Sulfate	2023-06	ug/L						< 0.0640										
Endosulfan Sulfate	2023-11	ug/L																
Endosulfan Sulfate	2024-06	ug/L																
Endosulfan Sulfate	2024-07	ug/L																
Endosulfan Sulfate	2025-06	ug/L																
Endosulfan Sulfate	2025-10	ug/L								< 0.0931								
Endrin	2014-10	ug/L							< 0.0320									
Endrin	2015-09	ug/L			**0.00247 J**			< 0.0327	< 0.0356									
Endrin	2015-12	ug/L			< 0.0356													
Endrin	2016-11	ug/L			< 0.0352			< 0.0352	< 0.0364									
Endrin	2017-11	ug/L						< 0.0348	< 0.0344									
Endrin	2020-06	ug/L									< 0.0337							
Endrin	2020-11	ug/L											< 0.0386	**0.00985 J**				
Endrin	2021-05	ug/L											< 0.0356	< 0.0364				
Endrin	2021-09	ug/L													< 0.0364			
Endrin	2022-03	ug/L											< 0.0667	< 0.0727				
Endrin	2022-09	ug/L													< 0.0667			
Endrin	2023-06	ug/L						< 0.0640										
Endrin	2023-11	ug/L																
Endrin	2024-06	ug/L																
Endrin	2024-07	ug/L																
Endrin	2025-06	ug/L																
Endrin	2025-10	ug/L								< 0.0931								
Endrin Aldehyde	2014-10	ug/L							< 0.0320									
Endrin Aldehyde	2015-09	ug/L			< 0.0364			< 0.0327	< 0.0356									
Endrin Aldehyde	2016-11	ug/L			< 0.0352			< 0.0352	< 0.0364									
Endrin Aldehyde	2017-11	ug/L						**0.00884 J**	< 0.0344									
Endrin Aldehyde	2020-06	ug/L									< 0.0337							
Endrin Aldehyde	2020-11	ug/L											< 0.0386	< 0.0390				
Endrin Aldehyde	2021-05	ug/L											< 0.0356	< 0.0364				
Endrin Aldehyde	2021-09	ug/L													< 0.0364			
Endrin Aldehyde	2022-03	ug/L											< 0.0667	< 0.0727				
Endrin Aldehyde	2022-09	ug/L													< 0.0667			
Endrin Aldehyde	2023-06	ug/L						< 0.0640										
Endrin Aldehyde	2023-11	ug/L																
Endrin Aldehyde	2024-06	ug/L																
Endrin Aldehyde	2024-07	ug/L																
Endrin Aldehyde	2025-06	ug/L																
Endrin Aldehyde	2025-10	ug/L								< 0.0931								
Ethyl Methacrylate	2014-10	ug/L							< 2.00									
Ethyl Methacrylate	2015-09	ug/L			< 2.00			< 2.00	< 2.00									
Ethyl Methacrylate	2016-11	ug/L			< 2.00			< 2.00	< 2.00									
Ethyl Methacrylate	2017-11	ug/L						< 2.00	< 2.00									
Ethyl Methacrylate	2020-06	ug/L									< 2.00							
Ethyl Methacrylate	2020-11	ug/L											< 2.00	< 2.00				
Ethyl Methacrylate	2021-05	ug/L											< 2.00	< 2.00				
Ethyl Methacrylate	2021-09	ug/L													< 2.00			

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1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Endosulfan Sulfate	2015-12	ug/L									
Endosulfan Sulfate	2016-11	ug/L									
Endosulfan Sulfate	2017-11	ug/L									
Endosulfan Sulfate	2020-06	ug/L									
Endosulfan Sulfate	2020-11	ug/L									
Endosulfan Sulfate	2021-05	ug/L									
Endosulfan Sulfate	2021-09	ug/L									
Endosulfan Sulfate	2022-03	ug/L									
Endosulfan Sulfate	2022-09	ug/L									
Endosulfan Sulfate	2023-06	ug/L									
Endosulfan Sulfate	2023-11	ug/L		< 0.0604							
Endosulfan Sulfate	2024-06	ug/L		< 0.0909				< 0.0909			
Endosulfan Sulfate	2024-07	ug/L					< 0.0873				
Endosulfan Sulfate	2025-06	ug/L				< 0.0911	< 0.0911	< 0.0907			
Endosulfan Sulfate	2025-10	ug/L								< 0.0936	
Endrin	2014-10	ug/L									
Endrin	2015-09	ug/L									
Endrin	2015-12	ug/L									
Endrin	2016-11	ug/L									
Endrin	2017-11	ug/L									
Endrin	2020-06	ug/L									
Endrin	2020-11	ug/L									
Endrin	2021-05	ug/L									
Endrin	2021-09	ug/L									
Endrin	2022-03	ug/L									
Endrin	2022-09	ug/L									
Endrin	2023-06	ug/L									
Endrin	2023-11	ug/L		< 0.0604							
Endrin	2024-06	ug/L		< 0.0909				< 0.0909			
Endrin	2024-07	ug/L					< 0.0873				
Endrin	2025-06	ug/L				< 0.0911	< 0.0911	< 0.0907			
Endrin	2025-10	ug/L								< 0.0936	
Endrin Aldehyde	2014-10	ug/L									
Endrin Aldehyde	2015-09	ug/L									
Endrin Aldehyde	2016-11	ug/L									
Endrin Aldehyde	2017-11	ug/L									
Endrin Aldehyde	2020-06	ug/L									
Endrin Aldehyde	2020-11	ug/L									
Endrin Aldehyde	2021-05	ug/L									
Endrin Aldehyde	2021-09	ug/L									
Endrin Aldehyde	2022-03	ug/L									
Endrin Aldehyde	2022-09	ug/L									
Endrin Aldehyde	2023-06	ug/L									
Endrin Aldehyde	2023-11	ug/L		< 0.0604							
Endrin Aldehyde	2024-06	ug/L		< 0.0909				< 0.0909			
Endrin Aldehyde	2024-07	ug/L					< 0.0873				
Endrin Aldehyde	2025-06	ug/L				< 0.0911	< 0.0911	< 0.0907			
Endrin Aldehyde	2025-10	ug/L								< 0.0936	
Ethyl Methacrylate	2014-10	ug/L									
Ethyl Methacrylate	2015-09	ug/L									
Ethyl Methacrylate	2016-11	ug/L									
Ethyl Methacrylate	2017-11	ug/L									
Ethyl Methacrylate	2020-06	ug/L									
Ethyl Methacrylate	2020-11	ug/L									
Ethyl Methacrylate	2021-05	ug/L									
Ethyl Methacrylate	2021-09	ug/L									

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
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Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Ethyl Methacrylate	2022-03	ug/L											< 2.00	< 2.00				
Ethyl Methacrylate	2022-09	ug/L													< 2.00			
Ethyl Methacrylate	2023-06	ug/L						< 2.00										
Ethyl Methacrylate	2023-11	ug/L																
Ethyl Methacrylate	2024-06	ug/L																
Ethyl Methacrylate	2025-06	ug/L																
Ethyl Methacrylate	2025-10	ug/L								< 2								
Ethyl Methanesulfonate	2014-10	ug/L							< 11.1									
Ethyl Methanesulfonate	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Ethyl Methanesulfonate	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Ethyl Methanesulfonate	2017-11	ug/L						< 11.8	< 10.9									
Ethyl Methanesulfonate	2020-06	ug/L									< 11.5							
Ethyl Methanesulfonate	2020-11	ug/L											< 11.8	< 10.5				
Ethyl Methanesulfonate	2021-05	ug/L											< 11.2	< 11.9				
Ethyl Methanesulfonate	2021-09	ug/L													< 10.5			
Ethyl Methanesulfonate	2022-03	ug/L											< 11.9	< 10.4				
Ethyl Methanesulfonate	2022-09	ug/L													< 10.4			
Ethyl Methanesulfonate	2023-06	ug/L						< 11.6										
Ethyl Methanesulfonate	2023-11	ug/L																
Ethyl Methanesulfonate	2024-06	ug/L																
Ethyl Methanesulfonate	2024-07	ug/L																
Ethyl Methanesulfonate	2025-06	ug/L																
Ethyl Methanesulfonate	2025-10	ug/L								< 10.9								
Ethylbenzene	2014-10	ug/L							< 1.00	< 1.00								
Ethylbenzene	2014-11	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00						
Ethylbenzene	2015-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Ethylbenzene	2015-09	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Ethylbenzene	2016-03	ug/L						< 1.00	< 1.00									
Ethylbenzene	2016-04	ug/L	< 1.00		< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00						
Ethylbenzene	2016-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
Ethylbenzene	2017-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Ethylbenzene	2017-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
Ethylbenzene	2018-06	ug/L	< 1.00	**5.2**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Ethylbenzene	2018-08	ug/L		**0.427 J**														
Ethylbenzene	2018-10	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Ethylbenzene	2019-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Ethylbenzene	2019-08	ug/L		< 1.00														
Ethylbenzene	2019-10	ug/L						< 1.00	< 1.00									
Ethylbenzene	2019-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	**0.442 J**	< 1.00	< 1.00		
Ethylbenzene	2020-02	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
Ethylbenzene	2020-06	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
Ethylbenzene	2020-07	ug/L	< 1.00	< 1.00												< 1.00		
Ethylbenzene	2020-08	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
Ethylbenzene	2020-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Ethylbenzene	2021-05	ug/L			< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00				
Ethylbenzene	2021-06	ug/L	< 1.00				< 1.00								< 1.00	< 1.00		
Ethylbenzene	2021-08	ug/L													< 1.00			
Ethylbenzene	2021-09	ug/L	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	2021-12	ug/L															< 1.00	< 1.00
Ethylbenzene	2022-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	2022-06	ug/L															< 1.00	< 1.00
Ethylbenzene	2022-08	ug/L			< 1.00					< 1.00	< 1.00	< 1.00					< 1.00	< 1.00
Ethylbenzene	2022-09	ug/L	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00				< 1.00	< 1.00	< 1.00	< 1.00		
Ethylbenzene	2022-12	ug/L															< 1.00	< 1.00
Ethylbenzene	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	2023-08	ug/L																

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Ethyl Methacrylate	2022-03	ug/L									
Ethyl Methacrylate	2022-09	ug/L									
Ethyl Methacrylate	2023-06	ug/L									
Ethyl Methacrylate	2023-11	ug/L		< 2.00							
Ethyl Methacrylate	2024-06	ug/L		< 2.00			< 2.00	< 2.00			
Ethyl Methacrylate	2025-06	ug/L				< 2.00	< 2.00	< 2.00			
Ethyl Methacrylate	2025-10	ug/L								< 2	
Ethyl Methanesulfonate	2014-10	ug/L									
Ethyl Methanesulfonate	2015-09	ug/L									
Ethyl Methanesulfonate	2016-11	ug/L									
Ethyl Methanesulfonate	2017-11	ug/L									
Ethyl Methanesulfonate	2020-06	ug/L									
Ethyl Methanesulfonate	2020-11	ug/L									
Ethyl Methanesulfonate	2021-05	ug/L									
Ethyl Methanesulfonate	2021-09	ug/L									
Ethyl Methanesulfonate	2022-03	ug/L									
Ethyl Methanesulfonate	2022-09	ug/L									
Ethyl Methanesulfonate	2023-06	ug/L									
Ethyl Methanesulfonate	2023-11	ug/L		< 10.0							
Ethyl Methanesulfonate	2024-06	ug/L		< 10.4				< 10.0			
Ethyl Methanesulfonate	2024-07	ug/L					< 12.5				
Ethyl Methanesulfonate	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Ethyl Methanesulfonate	2025-10	ug/L								< 10.2	
Ethylbenzene	2014-10	ug/L									
Ethylbenzene	2014-11	ug/L									
Ethylbenzene	2015-05	ug/L									
Ethylbenzene	2015-09	ug/L									
Ethylbenzene	2016-03	ug/L									
Ethylbenzene	2016-04	ug/L									
Ethylbenzene	2016-11	ug/L									
Ethylbenzene	2017-05	ug/L									
Ethylbenzene	2017-11	ug/L									
Ethylbenzene	2018-06	ug/L									
Ethylbenzene	2018-08	ug/L									
Ethylbenzene	2018-10	ug/L									
Ethylbenzene	2019-06	ug/L									< 1.00
Ethylbenzene	2019-08	ug/L									< 1.00
Ethylbenzene	2019-10	ug/L									
Ethylbenzene	2019-11	ug/L									< 1.00
Ethylbenzene	2020-02	ug/L									< 1.00
Ethylbenzene	2020-06	ug/L									< 1.00
Ethylbenzene	2020-07	ug/L									
Ethylbenzene	2020-08	ug/L									
Ethylbenzene	2020-11	ug/L									< 1.00
Ethylbenzene	2021-05	ug/L									< 1.00
Ethylbenzene	2021-06	ug/L									
Ethylbenzene	2021-08	ug/L									
Ethylbenzene	2021-09	ug/L	< 1.00	< 1.00							< 1.00
Ethylbenzene	2021-12	ug/L	< 1.00	< 1.00							
Ethylbenzene	2022-03	ug/L	< 1.00	< 1.00							
Ethylbenzene	2022-06	ug/L	< 1.00	< 1.00							
Ethylbenzene	2022-08	ug/L	< 1.00	< 1.00		< 1.00					
Ethylbenzene	2022-09	ug/L			< 1.00		< 1.00	< 1.00			< 1.00
Ethylbenzene	2022-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
Ethylbenzene	2023-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00
Ethylbenzene	2023-08	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Ethylbenzene	2023-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		**0.316 J**	< 1.00	< 1.00		< 1.00		< 1.00
Ethylbenzene	2024-01	ug/L																
Ethylbenzene	2024-06	ug/L			< 1.00			< 1.00	< 1.00			< 1.00	< 1.00		< 1.00		< 1.00	< 1.00
Ethylbenzene	2024-07	ug/L	< 1.00			< 1.00 J	< 1.00 J							< 1.00 J		< 1.00		
Ethylbenzene	2024-09	ug/L																
Ethylbenzene	2024-11	ug/L				< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Ethylbenzene	2024-12	ug/L	< 1.00		< 1.00		< 1.00						< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	2025-10	ug/L			< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1 J	< 1	< 1	< 1	< 1	< 1
Famphur	2014-10	ug/L							< 22.2									
Famphur	2015-09	ug/L			< 21.1			< 22.5	< 21.5									
Famphur	2016-11	ug/L			< 22.0			< 22.0	< 22.0									
Famphur	2017-11	ug/L						< 23.5	< 21.7									
Famphur	2020-06	ug/L									< 11.5							
Famphur	2020-11	ug/L											< 11.8	< 10.5				
Famphur	2021-05	ug/L											< 11.2	< 11.9				
Famphur	2021-09	ug/L													< 10.5			
Famphur	2022-03	ug/L											< 11.9	< 10.4				
Famphur	2022-09	ug/L													< 10.4			
Famphur	2023-06	ug/L						< 11.6										
Famphur	2023-11	ug/L																
Famphur	2024-06	ug/L																
Famphur	2024-07	ug/L																
Famphur	2025-06	ug/L																
Famphur	2025-10	ug/L								< 10.9								
Fluoranthene	2014-10	ug/L							< 11.1									
Fluoranthene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Fluoranthene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Fluoranthene	2017-11	ug/L						< 11.8	< 10.9									
Fluoranthene	2020-06	ug/L									< 11.5							
Fluoranthene	2020-11	ug/L											< 11.8	< 10.5				
Fluoranthene	2021-05	ug/L											< 11.2	< 11.9				
Fluoranthene	2021-09	ug/L													< 10.5			
Fluoranthene	2022-03	ug/L											< 11.9	< 10.4				
Fluoranthene	2022-09	ug/L													< 10.4			
Fluoranthene	2023-06	ug/L						< 11.6										
Fluoranthene	2023-11	ug/L																
Fluoranthene	2024-06	ug/L																
Fluoranthene	2024-07	ug/L																
Fluoranthene	2025-06	ug/L																
Fluoranthene	2025-10	ug/L								< 10.9								
Fluorene	2014-10	ug/L							< 11.1									
Fluorene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Fluorene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Fluorene	2017-11	ug/L						< 11.8	< 10.9									
Fluorene	2020-06	ug/L									< 11.5							
Fluorene	2020-11	ug/L											< 11.8	< 10.5				
Fluorene	2021-05	ug/L											< 11.2	< 11.9				
Fluorene	2021-09	ug/L													< 10.5			
Fluorene	2022-03	ug/L											< 11.9	< 10.4				
Fluorene	2022-09	ug/L													< 10.4			
Fluorene	2023-06	ug/L						< 11.6										
Fluorene	2023-11	ug/L																
Fluorene	2024-06	ug/L																
Fluorene	2024-07	ug/L																
Fluorene	2025-06	ug/L																

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Ethylbenzene	2023-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
Ethylbenzene	2024-01	ug/L							< 1.00	< 1.00	
Ethylbenzene	2024-06	ug/L	< 1.00	< 1.00			< 1.00	< 1.00		< 1.00	< 1.00
Ethylbenzene	2024-07	ug/L			< 1.00 J				< 1.00 J		
Ethylbenzene	2024-09	ug/L							< 1.00	< 1.00	
Ethylbenzene	2024-11	ug/L							< 1.00		
Ethylbenzene	2024-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00
Ethylbenzene	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	2025-10	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
Famphur	2014-10	ug/L									
Famphur	2015-09	ug/L									
Famphur	2016-11	ug/L									
Famphur	2017-11	ug/L									
Famphur	2020-06	ug/L									
Famphur	2020-11	ug/L									
Famphur	2021-05	ug/L									
Famphur	2021-09	ug/L									
Famphur	2022-03	ug/L									
Famphur	2022-09	ug/L									
Famphur	2023-06	ug/L									
Famphur	2023-11	ug/L		< 10.0							
Famphur	2024-06	ug/L		< 10.4				< 10.0			
Famphur	2024-07	ug/L					< 12.5				
Famphur	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Famphur	2025-10	ug/L								< 10.2	
Fluoranthene	2014-10	ug/L									
Fluoranthene	2015-09	ug/L									
Fluoranthene	2016-11	ug/L									
Fluoranthene	2017-11	ug/L									
Fluoranthene	2020-06	ug/L									
Fluoranthene	2020-11	ug/L									
Fluoranthene	2021-05	ug/L									
Fluoranthene	2021-09	ug/L									
Fluoranthene	2022-03	ug/L									
Fluoranthene	2022-09	ug/L									
Fluoranthene	2023-06	ug/L									
Fluoranthene	2023-11	ug/L		< 10.0							
Fluoranthene	2024-06	ug/L		< 10.4				< 10.0			
Fluoranthene	2024-07	ug/L					< 12.5				
Fluoranthene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Fluoranthene	2025-10	ug/L								< 10.2	
Fluorene	2014-10	ug/L									
Fluorene	2015-09	ug/L									
Fluorene	2016-11	ug/L									
Fluorene	2017-11	ug/L									
Fluorene	2020-06	ug/L									
Fluorene	2020-11	ug/L									
Fluorene	2021-05	ug/L									
Fluorene	2021-09	ug/L									
Fluorene	2022-03	ug/L									
Fluorene	2022-09	ug/L									
Fluorene	2023-06	ug/L									
Fluorene	2023-11	ug/L		< 10.0							
Fluorene	2024-06	ug/L		< 10.4				< 10.0			
Fluorene	2024-07	ug/L					< 12.5				
Fluorene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Fluorene	2025-10	ug/L								< 10.9								
Fluorotrichloromethane	2014-10	ug/L							< 4.00	< 4.00								
Fluorotrichloromethane	2014-11	ug/L			< 4.00	< 4.00	< 4.00	< 4.00			< 4.00	< 4.00						
Fluorotrichloromethane	2015-05	ug/L	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00						
Fluorotrichloromethane	2015-09	ug/L			< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00								
Fluorotrichloromethane	2016-03	ug/L						< 4.00	< 4.00									
Fluorotrichloromethane	2016-04	ug/L	< 4.00		< 4.00	< 4.00	< 4.00			< 4.00	< 4.00	< 4.00						
Fluorotrichloromethane	2016-11	ug/L	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		< 4.00						
Fluorotrichloromethane	2017-05	ug/L	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00						
Fluorotrichloromethane	2017-11	ug/L	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		< 4.00						
Fluorotrichloromethane	2018-06	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00						
Fluorotrichloromethane	2018-08	ug/L		< 4.00														
Fluorotrichloromethane	2018-10	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00						
Fluorotrichloromethane	2019-06	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00						
Fluorotrichloromethane	2019-08	ug/L		< 4.00														
Fluorotrichloromethane	2019-10	ug/L						< 4.00	< 4.00									
Fluorotrichloromethane	2019-11	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00			< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Fluorotrichloromethane	2020-02	ug/L											< 4.00	< 4.00	< 4.00	< 4.00		
Fluorotrichloromethane	2020-06	ug/L			< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00			
Fluorotrichloromethane	2020-07	ug/L	< 4.00	< 4.00												< 4.00		
Fluorotrichloromethane	2020-08	ug/L											< 4.00	< 4.00	< 4.00	< 4.00		
Fluorotrichloromethane	2020-11	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		
Fluorotrichloromethane	2021-05	ug/L			< 4.00	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00				
Fluorotrichloromethane	2021-06	ug/L	< 4.00				< 4.00								< 4.00	< 4.00		
Fluorotrichloromethane	2021-08	ug/L													< 4.00			
Fluorotrichloromethane	2021-09	ug/L	< 4.00	< 40.0	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2021-12	ug/L															< 4.00	< 4.00
Fluorotrichloromethane	2022-03	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2022-06	ug/L															< 4.00	< 4.00
Fluorotrichloromethane	2022-08	ug/L			< 4.00					< 4.00	< 4.00	< 4.00					< 4.00	< 4.00
Fluorotrichloromethane	2022-09	ug/L	< 4.00	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00				< 4.00	< 4.00	< 4.00	< 4.00		
Fluorotrichloromethane	2022-12	ug/L															< 4.00	< 4.00
Fluorotrichloromethane	2023-06	ug/L	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2023-08	ug/L																
Fluorotrichloromethane	2023-11	ug/L	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		< 4.00	< 4.00	< 4.00		< 4.00		< 4.00
Fluorotrichloromethane	2024-01	ug/L																
Fluorotrichloromethane	2024-06	ug/L			< 4.00			< 4.00	< 4.00			< 4.00	< 4.00		< 4.00		< 4.00	< 4.00
Fluorotrichloromethane	2024-07	ug/L	< 4.00			< 4.00 J	< 4.00 J							< 4.00 J		< 4.00		
Fluorotrichloromethane	2024-09	ug/L																
Fluorotrichloromethane	2024-11	ug/L				< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00						
Fluorotrichloromethane	2024-12	ug/L	< 4.00		< 4.00		< 4.00						< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2025-06	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2025-10	ug/L			< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4 J	< 4	< 4	< 4	< 4	< 4
Heptachlor	2014-10	ug/L							< 0.0320									
Heptachlor	2015-09	ug/L			**0.00335 J**			< 0.0327	< 0.0356									
Heptachlor	2015-12	ug/L			**0.0049 J**													
Heptachlor	2016-11	ug/L			< 0.0352			< 0.0352	< 0.0364									
Heptachlor	2017-11	ug/L						< 0.0348	< 0.0344									
Heptachlor	2020-06	ug/L									< 0.0337							
Heptachlor	2020-11	ug/L											< 0.0386	< 0.0390				
Heptachlor	2021-05	ug/L											< 0.0356	< 0.0364				
Heptachlor	2021-09	ug/L													< 0.0364			
Heptachlor	2022-03	ug/L											< 0.0667	< 0.0727				
Heptachlor	2022-09	ug/L													< 0.0667			
Heptachlor	2023-06	ug/L						< 0.0640										
Heptachlor	2023-11	ug/L																

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Fluorene	2025-10	ug/L								< 10.2	
Fluorotrichloromethane	2014-10	ug/L									
Fluorotrichloromethane	2014-11	ug/L									
Fluorotrichloromethane	2015-05	ug/L									
Fluorotrichloromethane	2015-09	ug/L									
Fluorotrichloromethane	2016-03	ug/L									
Fluorotrichloromethane	2016-04	ug/L									
Fluorotrichloromethane	2016-11	ug/L									
Fluorotrichloromethane	2017-05	ug/L									
Fluorotrichloromethane	2017-11	ug/L									
Fluorotrichloromethane	2018-06	ug/L									
Fluorotrichloromethane	2018-08	ug/L									
Fluorotrichloromethane	2018-10	ug/L									
Fluorotrichloromethane	2019-06	ug/L									< 4.00
Fluorotrichloromethane	2019-08	ug/L									< 4.00
Fluorotrichloromethane	2019-10	ug/L									
Fluorotrichloromethane	2019-11	ug/L									< 4.00
Fluorotrichloromethane	2020-02	ug/L									< 4.00
Fluorotrichloromethane	2020-06	ug/L									< 4.00
Fluorotrichloromethane	2020-07	ug/L									
Fluorotrichloromethane	2020-08	ug/L									
Fluorotrichloromethane	2020-11	ug/L									< 4.00
Fluorotrichloromethane	2021-05	ug/L									< 4.00
Fluorotrichloromethane	2021-06	ug/L									
Fluorotrichloromethane	2021-08	ug/L									
Fluorotrichloromethane	2021-09	ug/L	< 4.00	< 4.00							< 4.00
Fluorotrichloromethane	2021-12	ug/L	< 4.00	< 4.00							
Fluorotrichloromethane	2022-03	ug/L	< 4.00	< 4.00							
Fluorotrichloromethane	2022-06	ug/L	< 4.00	< 4.00							
Fluorotrichloromethane	2022-08	ug/L	< 4.00	< 4.00		< 4.00					
Fluorotrichloromethane	2022-09	ug/L			< 4.00		< 4.00	< 4.00			< 4.00
Fluorotrichloromethane	2022-12	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00			
Fluorotrichloromethane	2023-06	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00			< 4.00
Fluorotrichloromethane	2023-08	ug/L			< 4.00	< 4.00	< 4.00	< 4.00			
Fluorotrichloromethane	2023-11	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	
Fluorotrichloromethane	2024-01	ug/L							< 4.00	< 4.00	
Fluorotrichloromethane	2024-06	ug/L	< 4.00	< 4.00			< 4.00	< 4.00		< 4.00	< 4.00
Fluorotrichloromethane	2024-07	ug/L			< 4.00 J				< 4.00 J		
Fluorotrichloromethane	2024-09	ug/L							< 4.00	< 4.00	
Fluorotrichloromethane	2024-11	ug/L							< 4.00		
Fluorotrichloromethane	2024-12	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00		< 4.00	< 4.00
Fluorotrichloromethane	2025-06	ug/L	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2025-10	ug/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	
Heptachlor	2014-10	ug/L									
Heptachlor	2015-09	ug/L									
Heptachlor	2015-12	ug/L									
Heptachlor	2016-11	ug/L									
Heptachlor	2017-11	ug/L									
Heptachlor	2020-06	ug/L									
Heptachlor	2020-11	ug/L									
Heptachlor	2021-05	ug/L									
Heptachlor	2021-09	ug/L									
Heptachlor	2022-03	ug/L									
Heptachlor	2022-09	ug/L									
Heptachlor	2023-06	ug/L									
Heptachlor	2023-11	ug/L		< 0.0604							

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Heptachlor	2024-06	ug/L																
Heptachlor	2024-07	ug/L																
Heptachlor	2025-06	ug/L																
Heptachlor	2025-10	ug/L								< 0.0931								
Heptachlor Epoxide	2014-10	ug/L							< 0.0320									
Heptachlor Epoxide	2015-09	ug/L			< 0.0364			< 0.0327	< 0.0356									
Heptachlor Epoxide	2016-11	ug/L			< 0.0352			< 0.0352	< 0.0364									
Heptachlor Epoxide	2017-11	ug/L						< 0.0348	< 0.0344									
Heptachlor Epoxide	2020-06	ug/L									< 0.0337							
Heptachlor Epoxide	2020-11	ug/L											< 0.0386	< 0.0390				
Heptachlor Epoxide	2021-05	ug/L											< 0.0356	< 0.0364				
Heptachlor Epoxide	2021-09	ug/L													< 0.0364			
Heptachlor Epoxide	2022-03	ug/L											< 0.0667	< 0.0727				
Heptachlor Epoxide	2022-09	ug/L													< 0.0667			
Heptachlor Epoxide	2023-06	ug/L						< 0.0640										
Heptachlor Epoxide	2023-11	ug/L																
Heptachlor Epoxide	2024-06	ug/L																
Heptachlor Epoxide	2024-07	ug/L																
Heptachlor Epoxide	2025-06	ug/L																
Heptachlor Epoxide	2025-10	ug/L								< 0.0931								
Hexachlorobenzene	2014-10	ug/L							< 11.1									
Hexachlorobenzene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Hexachlorobenzene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Hexachlorobenzene	2017-11	ug/L						< 11.8	< 10.9									
Hexachlorobenzene	2020-06	ug/L									< 11.5							
Hexachlorobenzene	2020-11	ug/L											< 11.8	< 10.5				
Hexachlorobenzene	2021-05	ug/L											< 11.2	< 11.9				
Hexachlorobenzene	2021-09	ug/L													< 10.5			
Hexachlorobenzene	2022-03	ug/L											< 11.9	< 10.4				
Hexachlorobenzene	2022-09	ug/L													< 10.4			
Hexachlorobenzene	2023-06	ug/L						< 11.6										
Hexachlorobenzene	2023-11	ug/L																
Hexachlorobenzene	2024-06	ug/L																
Hexachlorobenzene	2024-07	ug/L																
Hexachlorobenzene	2025-06	ug/L																
Hexachlorobenzene	2025-10	ug/L								< 10.9								
Hexachlorobutadiene	2014-10	ug/L							< 11.1									
Hexachlorobutadiene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Hexachlorobutadiene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Hexachlorobutadiene	2017-11	ug/L						< 11.8	< 10.9									
Hexachlorobutadiene	2020-06	ug/L									< 11.5							
Hexachlorobutadiene	2020-11	ug/L											< 11.8	< 10.5				
Hexachlorobutadiene	2021-05	ug/L											< 11.2	< 11.9				
Hexachlorobutadiene	2021-09	ug/L													< 10.5			
Hexachlorobutadiene	2022-03	ug/L											< 11.9	< 10.4				
Hexachlorobutadiene	2022-09	ug/L													< 10.4			
Hexachlorobutadiene	2023-06	ug/L						< 11.6										
Hexachlorobutadiene	2023-11	ug/L																
Hexachlorobutadiene	2024-06	ug/L																
Hexachlorobutadiene	2024-07	ug/L																
Hexachlorobutadiene	2025-06	ug/L																
Hexachlorobutadiene	2025-10	ug/L								< 10.9								
Hexachlorocyclopentadiene	2014-10	ug/L							< 22.2									
Hexachlorocyclopentadiene	2015-09	ug/L			< 21.1			< 22.5	< 21.5									
Hexachlorocyclopentadiene	2016-11	ug/L			< 22.0			< 22.0	< 22.0									
Hexachlorocyclopentadiene	2017-11	ug/L						< 23.5	< 21.7									

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Heptachlor	2024-06	ug/L		< 0.0909				< 0.0909			
Heptachlor	2024-07	ug/L					< 0.0873				
Heptachlor	2025-06	ug/L				< 0.0911	< 0.0911	< 0.0907			
Heptachlor	2025-10	ug/L								< 0.0936	
Heptachlor Epoxide	2014-10	ug/L									
Heptachlor Epoxide	2015-09	ug/L									
Heptachlor Epoxide	2016-11	ug/L									
Heptachlor Epoxide	2017-11	ug/L									
Heptachlor Epoxide	2020-06	ug/L									
Heptachlor Epoxide	2020-11	ug/L									
Heptachlor Epoxide	2021-05	ug/L									
Heptachlor Epoxide	2021-09	ug/L									
Heptachlor Epoxide	2022-03	ug/L									
Heptachlor Epoxide	2022-09	ug/L									
Heptachlor Epoxide	2023-06	ug/L									
Heptachlor Epoxide	2023-11	ug/L		< 0.0604							
Heptachlor Epoxide	2024-06	ug/L		< 0.0909				< 0.0909			
Heptachlor Epoxide	2024-07	ug/L					< 0.0873				
Heptachlor Epoxide	2025-06	ug/L				< 0.0911	< 0.0911	< 0.0907			
Heptachlor Epoxide	2025-10	ug/L								< 0.0936	
Hexachlorobenzene	2014-10	ug/L									
Hexachlorobenzene	2015-09	ug/L									
Hexachlorobenzene	2016-11	ug/L									
Hexachlorobenzene	2017-11	ug/L									
Hexachlorobenzene	2020-06	ug/L									
Hexachlorobenzene	2020-11	ug/L									
Hexachlorobenzene	2021-05	ug/L									
Hexachlorobenzene	2021-09	ug/L									
Hexachlorobenzene	2022-03	ug/L									
Hexachlorobenzene	2022-09	ug/L									
Hexachlorobenzene	2023-06	ug/L									
Hexachlorobenzene	2023-11	ug/L		< 10.0							
Hexachlorobenzene	2024-06	ug/L		< 10.4				< 10.0			
Hexachlorobenzene	2024-07	ug/L					< 12.5				
Hexachlorobenzene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Hexachlorobenzene	2025-10	ug/L								< 10.2	
Hexachlorobutadiene	2014-10	ug/L									
Hexachlorobutadiene	2015-09	ug/L									
Hexachlorobutadiene	2016-11	ug/L									
Hexachlorobutadiene	2017-11	ug/L									
Hexachlorobutadiene	2020-06	ug/L									
Hexachlorobutadiene	2020-11	ug/L									
Hexachlorobutadiene	2021-05	ug/L									
Hexachlorobutadiene	2021-09	ug/L									
Hexachlorobutadiene	2022-03	ug/L									
Hexachlorobutadiene	2022-09	ug/L									
Hexachlorobutadiene	2023-06	ug/L									
Hexachlorobutadiene	2023-11	ug/L		< 10.0							
Hexachlorobutadiene	2024-06	ug/L		< 10.4				< 10.0			
Hexachlorobutadiene	2024-07	ug/L					< 12.5				
Hexachlorobutadiene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Hexachlorobutadiene	2025-10	ug/L								< 10.2	
Hexachlorocyclopentadiene	2014-10	ug/L									
Hexachlorocyclopentadiene	2015-09	ug/L									
Hexachlorocyclopentadiene	2016-11	ug/L									
Hexachlorocyclopentadiene	2017-11	ug/L									

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Hexachlorocyclopentadiene	2020-06	ug/L									< 11.5							
Hexachlorocyclopentadiene	2020-11	ug/L											< 11.8	< 10.5				
Hexachlorocyclopentadiene	2021-05	ug/L											< 11.2	< 11.9				
Hexachlorocyclopentadiene	2021-09	ug/L													< 10.5			
Hexachlorocyclopentadiene	2022-03	ug/L											< 11.9	< 10.4				
Hexachlorocyclopentadiene	2022-09	ug/L													< 10.4			
Hexachlorocyclopentadiene	2023-06	ug/L						< 11.6										
Hexachlorocyclopentadiene	2023-11	ug/L																
Hexachlorocyclopentadiene	2024-06	ug/L																
Hexachlorocyclopentadiene	2024-07	ug/L																
Hexachlorocyclopentadiene	2025-06	ug/L																
Hexachlorocyclopentadiene	2025-10	ug/L								< 10.9								
Hexachloroethane	2014-10	ug/L							< 11.1									
Hexachloroethane	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Hexachloroethane	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Hexachloroethane	2017-11	ug/L						< 11.8	< 10.9									
Hexachloroethane	2020-06	ug/L									< 11.5							
Hexachloroethane	2020-11	ug/L											< 11.8	< 10.5				
Hexachloroethane	2021-05	ug/L											< 11.2	< 11.9				
Hexachloroethane	2021-09	ug/L													< 10.5			
Hexachloroethane	2022-03	ug/L											< 11.9	< 10.4				
Hexachloroethane	2022-09	ug/L													< 10.4			
Hexachloroethane	2023-06	ug/L						< 11.6										
Hexachloroethane	2023-11	ug/L																
Hexachloroethane	2024-06	ug/L																
Hexachloroethane	2024-07	ug/L																
Hexachloroethane	2025-06	ug/L																
Hexachloroethane	2025-10	ug/L								< 10.9								
Hexachloropropene	2014-10	ug/L							< 11.1									
Hexachloropropene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Hexachloropropene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Hexachloropropene	2017-11	ug/L						< 11.8	< 10.9									
Hexachloropropene	2020-06	ug/L									< 11.5							
Hexachloropropene	2020-11	ug/L											< 11.8	< 10.5				
Hexachloropropene	2021-05	ug/L											< 11.2	< 11.9				
Hexachloropropene	2021-09	ug/L													< 10.5			
Hexachloropropene	2022-03	ug/L											< 11.9	< 10.4				
Hexachloropropene	2022-09	ug/L													< 10.4			
Hexachloropropene	2023-06	ug/L						< 11.6										
Hexachloropropene	2023-11	ug/L																
Hexachloropropene	2024-06	ug/L																
Hexachloropropene	2024-07	ug/L																
Hexachloropropene	2025-06	ug/L																
Hexachloropropene	2025-10	ug/L								< 10.9								
Indeno(1,2,3-cd)pyrene	2014-10	ug/L							**0.403 J**									
Indeno(1,2,3-cd)pyrene	2014-12	ug/L							< 10.5									
Indeno(1,2,3-cd)pyrene	2015-05	ug/L							< 10.2									
Indeno(1,2,3-cd)pyrene	2015-07	ug/L							< 10.6									
Indeno(1,2,3-cd)pyrene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Indeno(1,2,3-cd)pyrene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Indeno(1,2,3-cd)pyrene	2017-11	ug/L						< 11.8	< 10.9									
Indeno(1,2,3-cd)pyrene	2020-06	ug/L									< 11.5							
Indeno(1,2,3-cd)pyrene	2020-11	ug/L											< 11.8	< 10.5				
Indeno(1,2,3-cd)pyrene	2021-05	ug/L											< 11.2	< 11.9				
Indeno(1,2,3-cd)pyrene	2021-09	ug/L													< 10.5			
Indeno(1,2,3-cd)pyrene	2022-03	ug/L											< 11.9	< 10.4				

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Hexachlorocyclopentadiene	2020-06	ug/L									
Hexachlorocyclopentadiene	2020-11	ug/L									
Hexachlorocyclopentadiene	2021-05	ug/L									
Hexachlorocyclopentadiene	2021-09	ug/L									
Hexachlorocyclopentadiene	2022-03	ug/L									
Hexachlorocyclopentadiene	2022-09	ug/L									
Hexachlorocyclopentadiene	2023-06	ug/L									
Hexachlorocyclopentadiene	2023-11	ug/L		< 10.0							
Hexachlorocyclopentadiene	2024-06	ug/L		< 10.4				< 10.0			
Hexachlorocyclopentadiene	2024-07	ug/L					< 12.5				
Hexachlorocyclopentadiene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Hexachlorocyclopentadiene	2025-10	ug/L								< 10.2	
Hexachloroethane	2014-10	ug/L									
Hexachloroethane	2015-09	ug/L									
Hexachloroethane	2016-11	ug/L									
Hexachloroethane	2017-11	ug/L									
Hexachloroethane	2020-06	ug/L									
Hexachloroethane	2020-11	ug/L									
Hexachloroethane	2021-05	ug/L									
Hexachloroethane	2021-09	ug/L									
Hexachloroethane	2022-03	ug/L									
Hexachloroethane	2022-09	ug/L									
Hexachloroethane	2023-06	ug/L									
Hexachloroethane	2023-11	ug/L		< 10.0							
Hexachloroethane	2024-06	ug/L		< 10.4				< 10.0			
Hexachloroethane	2024-07	ug/L					< 12.5				
Hexachloroethane	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Hexachloroethane	2025-10	ug/L								< 10.2	
Hexachloropropene	2014-10	ug/L									
Hexachloropropene	2015-09	ug/L									
Hexachloropropene	2016-11	ug/L									
Hexachloropropene	2017-11	ug/L									
Hexachloropropene	2020-06	ug/L									
Hexachloropropene	2020-11	ug/L									
Hexachloropropene	2021-05	ug/L									
Hexachloropropene	2021-09	ug/L									
Hexachloropropene	2022-03	ug/L									
Hexachloropropene	2022-09	ug/L									
Hexachloropropene	2023-06	ug/L									
Hexachloropropene	2023-11	ug/L		< 10.0							
Hexachloropropene	2024-06	ug/L		< 10.4				< 10.0			
Hexachloropropene	2024-07	ug/L					< 12.5				
Hexachloropropene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Hexachloropropene	2025-10	ug/L								< 10.2	
Indeno(1,2,3-cd)pyrene	2014-10	ug/L									
Indeno(1,2,3-cd)pyrene	2014-12	ug/L									
Indeno(1,2,3-cd)pyrene	2015-05	ug/L									
Indeno(1,2,3-cd)pyrene	2015-07	ug/L									
Indeno(1,2,3-cd)pyrene	2015-09	ug/L									
Indeno(1,2,3-cd)pyrene	2016-11	ug/L									
Indeno(1,2,3-cd)pyrene	2017-11	ug/L									
Indeno(1,2,3-cd)pyrene	2020-06	ug/L									
Indeno(1,2,3-cd)pyrene	2020-11	ug/L									
Indeno(1,2,3-cd)pyrene	2021-05	ug/L									
Indeno(1,2,3-cd)pyrene	2021-09	ug/L									
Indeno(1,2,3-cd)pyrene	2022-03	ug/L									

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Indeno(1,2,3-cd)pyrene	2022-09	ug/L													< 10.4			
Indeno(1,2,3-cd)pyrene	2023-06	ug/L						< 11.6										
Indeno(1,2,3-cd)pyrene	2023-11	ug/L																
Indeno(1,2,3-cd)pyrene	2024-06	ug/L																
Indeno(1,2,3-cd)pyrene	2024-07	ug/L																
Indeno(1,2,3-cd)pyrene	2025-06	ug/L																
Indeno(1,2,3-cd)pyrene	2025-10	ug/L								< 10.9								
Iodomethane	2014-10	ug/L							< 10.0	< 10.0								
Iodomethane	2014-11	ug/L			< 10.0	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0						
Iodomethane	2015-05	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
Iodomethane	2015-09	ug/L			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Iodomethane	2016-03	ug/L						< 10.0	< 10.0									
Iodomethane	2016-04	ug/L	< 10.0		< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0						
Iodomethane	2016-11	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0						
Iodomethane	2017-05	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
Iodomethane	2017-11	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0						
Iodomethane	2018-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
Iodomethane	2018-08	ug/L		< 10.0														
Iodomethane	2018-10	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
Iodomethane	2019-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
Iodomethane	2019-08	ug/L		< 10.0														
Iodomethane	2019-10	ug/L						< 10.0	< 10.0									
Iodomethane	2019-11	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 100			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 100	< 100		
Iodomethane	2020-02	ug/L											< 10.0	< 10.0	< 10.0	< 10.0		
Iodomethane	2020-06	ug/L			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0			
Iodomethane	2020-07	ug/L	< 10.0	< 10.0												< 10.0		
Iodomethane	2020-08	ug/L											< 10.0	< 10.0	< 10.0	< 10.0		
Iodomethane	2020-11	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Iodomethane	2021-05	ug/L			< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0				
Iodomethane	2021-06	ug/L	< 10.0				**8 J**								< 10.0	< 10.0		
Iodomethane	2021-08	ug/L													< 10.0			
Iodomethane	2021-09	ug/L	< 10.0	< 100	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Iodomethane	2021-12	ug/L															< 10.0	< 10.0
Iodomethane	2022-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Iodomethane	2022-06	ug/L															< 10.0	< 10.0
Iodomethane	2022-08	ug/L			< 10.0					< 10.0	< 10.0	< 10.0					< 10.0	< 10.0
Iodomethane	2022-09	ug/L	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0				< 10.0	< 10.0	< 10.0	< 10.0		
Iodomethane	2022-12	ug/L															< 10.0	< 10.0
Iodomethane	2023-06	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Iodomethane	2023-08	ug/L																
Iodomethane	2023-11	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0		< 10.0		< 10.0
Iodomethane	2024-01	ug/L																
Iodomethane	2024-06	ug/L			< 10.0			< 10.0	< 10.0			< 10.0	< 10.0		< 10.0		< 10.0	< 10.0
Iodomethane	2024-07	ug/L	< 10.0			< 10.0 J	< 10.0 J							< 10.0 J		< 10.0		
Iodomethane	2024-09	ug/L																
Iodomethane	2024-11	ug/L				< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
Iodomethane	2024-12	ug/L	< 10.0		< 10.0		< 10.0						< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Iodomethane	2025-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Iodomethane	2025-10	ug/L			< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10 J	< 10	< 10	< 10	< 10	< 10
Isobutanol	2014-10	mg/L							< 10.0									
Isobutanol	2015-09	mg/L			< 10.0			< 10.0										
Isobutanol	2015-09	ug/L							< 10000									
Isobutanol	2016-11	mg/L			< 10.0			< 20.0	< 20.0									
Isobutanol	2017-11	mg/L						< 10.0	< 10.0									
Isobutanol	2020-06	mg/L									< 10.0							
Isobutanol	2020-11	mg/L											< 10.0	< 10.0				

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Indeno(1,2,3-cd)pyrene	2022-09	ug/L									
Indeno(1,2,3-cd)pyrene	2023-06	ug/L									
Indeno(1,2,3-cd)pyrene	2023-11	ug/L		< 10.0							
Indeno(1,2,3-cd)pyrene	2024-06	ug/L		< 10.4				< 10.0			
Indeno(1,2,3-cd)pyrene	2024-07	ug/L					< 12.5				
Indeno(1,2,3-cd)pyrene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Indeno(1,2,3-cd)pyrene	2025-10	ug/L								< 10.2	
Iodomethane	2014-10	ug/L									
Iodomethane	2014-11	ug/L									
Iodomethane	2015-05	ug/L									
Iodomethane	2015-09	ug/L									
Iodomethane	2016-03	ug/L									
Iodomethane	2016-04	ug/L									
Iodomethane	2016-11	ug/L									
Iodomethane	2017-05	ug/L									
Iodomethane	2017-11	ug/L									
Iodomethane	2018-06	ug/L									
Iodomethane	2018-08	ug/L									
Iodomethane	2018-10	ug/L									
Iodomethane	2019-06	ug/L									< 10.0
Iodomethane	2019-08	ug/L									< 10.0
Iodomethane	2019-10	ug/L									
Iodomethane	2019-11	ug/L									< 10.0
Iodomethane	2020-02	ug/L									< 10.0
Iodomethane	2020-06	ug/L									< 10.0
Iodomethane	2020-07	ug/L									
Iodomethane	2020-08	ug/L									
Iodomethane	2020-11	ug/L									< 10.0
Iodomethane	2021-05	ug/L									< 10.0
Iodomethane	2021-06	ug/L									
Iodomethane	2021-08	ug/L									
Iodomethane	2021-09	ug/L	< 10.0	< 10.0							< 10.0
Iodomethane	2021-12	ug/L	< 10.0	< 10.0							
Iodomethane	2022-03	ug/L	< 10.0	< 10.0							
Iodomethane	2022-06	ug/L	< 10.0	< 10.0							
Iodomethane	2022-08	ug/L	< 10.0	< 10.0		< 10.0					
Iodomethane	2022-09	ug/L			< 10.0		< 10.0	< 10.0			< 10.0
Iodomethane	2022-12	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0			
Iodomethane	2023-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0			< 10.0
Iodomethane	2023-08	ug/L			< 10.0	< 10.0	< 10.0	< 10.0			
Iodomethane	2023-11	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	
Iodomethane	2024-01	ug/L							< 10.0	< 10.0	
Iodomethane	2024-06	ug/L	< 10.0	< 10.0			< 10.0	< 10.0		< 10.0	< 10.0
Iodomethane	2024-07	ug/L			< 10.0 J				< 10.0 J		
Iodomethane	2024-09	ug/L							< 10.0	< 10.0	
Iodomethane	2024-11	ug/L							< 10.0		
Iodomethane	2024-12	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0
Iodomethane	2025-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Iodomethane	2025-10	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
Isobutanol	2014-10	mg/L									
Isobutanol	2015-09	mg/L									
Isobutanol	2015-09	ug/L									
Isobutanol	2016-11	mg/L									
Isobutanol	2017-11	mg/L									
Isobutanol	2020-06	mg/L									
Isobutanol	2020-11	mg/L									

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Isobutanol	2021-05	mg/L											< 10.0	< 10.0				
Isobutanol	2021-09	mg/L													< 10.0			
Isobutanol	2022-03	mg/L											< 10.0	< 10.0				
Isobutanol	2022-09	ug/L													< 10000			
Isobutanol	2023-06	ug/L						< 10000										
Isobutanol	2023-11	mg/L																
Isobutanol	2024-06	ug/L																
Isobutanol	2024-07	ug/L																
Isobutanol	2025-06	ug/L																
Isobutanol	2025-10	ug/L								< 10000								
Isodrin	2014-10	ug/L							< 11.1									
Isodrin	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Isodrin	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Isodrin	2017-11	ug/L						< 11.8	< 10.9									
Isodrin	2020-06	ug/L									< 11.5							
Isodrin	2020-11	ug/L											< 11.8	< 10.5				
Isodrin	2021-05	ug/L											< 11.2	< 11.9				
Isodrin	2021-09	ug/L													< 10.5			
Isodrin	2022-03	ug/L											< 11.9	< 10.4				
Isodrin	2022-09	ug/L													< 10.4			
Isodrin	2023-06	ug/L						< 11.6										
Isodrin	2023-11	ug/L																
Isodrin	2024-06	ug/L																
Isodrin	2024-07	ug/L																
Isodrin	2025-06	ug/L																
Isodrin	2025-10	ug/L								< 10.9								
Isophorone	2014-10	ug/L							< 11.1									
Isophorone	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Isophorone	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Isophorone	2017-11	ug/L						< 11.8	< 10.9									
Isophorone	2020-06	ug/L									< 11.5							
Isophorone	2020-11	ug/L											< 11.8	< 10.5				
Isophorone	2021-05	ug/L											< 11.2	< 11.9				
Isophorone	2021-09	ug/L													< 10.5			
Isophorone	2022-03	ug/L											< 11.9	< 10.4				
Isophorone	2022-09	ug/L													< 10.4			
Isophorone	2023-06	ug/L						< 11.6										
Isophorone	2023-11	ug/L																
Isophorone	2024-06	ug/L																
Isophorone	2024-07	ug/L																
Isophorone	2025-06	ug/L																
Isophorone	2025-10	ug/L								< 10.9								
Isosafrole	2014-10	ug/L							< 11.1									
Isosafrole	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Isosafrole	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Isosafrole	2017-11	ug/L						< 11.8	< 10.9									
Isosafrole	2020-06	ug/L									< 11.5							
Isosafrole	2020-11	ug/L											< 11.8	< 10.5				
Isosafrole	2021-05	ug/L											< 11.2	< 11.9				
Isosafrole	2021-09	ug/L													< 10.5			
Isosafrole	2022-03	ug/L											< 11.9	< 10.4				
Isosafrole	2022-09	ug/L													< 10.4			
Isosafrole	2023-06	ug/L						< 11.6										
Isosafrole	2023-11	ug/L																
Isosafrole	2024-06	ug/L																
Isosafrole	2024-07	ug/L																

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Isobutanol	2021-05	mg/L									
Isobutanol	2021-09	mg/L									
Isobutanol	2022-03	mg/L									
Isobutanol	2022-09	ug/L									
Isobutanol	2023-06	ug/L									
Isobutanol	2023-11	mg/L		< 10.0							
Isobutanol	2024-06	ug/L		< 10000				< 10000			
Isobutanol	2024-07	ug/L					< 10000				
Isobutanol	2025-06	ug/L				< 10000	< 10000	< 10000			
Isobutanol	2025-10	ug/L								< 10000	
Isodrin	2014-10	ug/L									
Isodrin	2015-09	ug/L									
Isodrin	2016-11	ug/L									
Isodrin	2017-11	ug/L									
Isodrin	2020-06	ug/L									
Isodrin	2020-11	ug/L									
Isodrin	2021-05	ug/L									
Isodrin	2021-09	ug/L									
Isodrin	2022-03	ug/L									
Isodrin	2022-09	ug/L									
Isodrin	2023-06	ug/L									
Isodrin	2023-11	ug/L		< 10.0							
Isodrin	2024-06	ug/L		< 10.4				< 10.0			
Isodrin	2024-07	ug/L					< 12.5				
Isodrin	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Isodrin	2025-10	ug/L								< 10.2	
Isophorone	2014-10	ug/L									
Isophorone	2015-09	ug/L									
Isophorone	2016-11	ug/L									
Isophorone	2017-11	ug/L									
Isophorone	2020-06	ug/L									
Isophorone	2020-11	ug/L									
Isophorone	2021-05	ug/L									
Isophorone	2021-09	ug/L									
Isophorone	2022-03	ug/L									
Isophorone	2022-09	ug/L									
Isophorone	2023-06	ug/L									
Isophorone	2023-11	ug/L		< 10.0							
Isophorone	2024-06	ug/L		< 10.4				< 10.0			
Isophorone	2024-07	ug/L					< 12.5				
Isophorone	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Isophorone	2025-10	ug/L								< 10.2	
Isosafrole	2014-10	ug/L									
Isosafrole	2015-09	ug/L									
Isosafrole	2016-11	ug/L									
Isosafrole	2017-11	ug/L									
Isosafrole	2020-06	ug/L									
Isosafrole	2020-11	ug/L									
Isosafrole	2021-05	ug/L									
Isosafrole	2021-09	ug/L									
Isosafrole	2022-03	ug/L									
Isosafrole	2022-09	ug/L									
Isosafrole	2023-06	ug/L									
Isosafrole	2023-11	ug/L		< 10.0							
Isosafrole	2024-06	ug/L		< 10.4				< 10.0			
Isosafrole	2024-07	ug/L					< 12.5				

Table 14

Winneshiek County Area Solid Waste Agency | **Analytical Data Summary - Shallow Groundwater Appendix II**

Permit No. 57-SDP-01-74P | **2025 Annual Water Quality Report**

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Isosafrole	2025-06	ug/L																
Isosafrole	2025-10	ug/L								< 10.9								
Kepone	2014-10	ug/L							< 11.1									
Kepone	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Kepone	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Kepone	2017-11	ug/L						< 11.8	< 10.9									
Kepone	2020-06	ug/L									< 11.5							
Kepone	2020-11	ug/L											< 11.8	< 10.5				
Kepone	2021-05	ug/L											< 11.2	< 11.9				
Kepone	2021-09	ug/L													< 10.5			
Kepone	2022-03	ug/L											< 11.9	< 10.4				
Kepone	2022-09	ug/L													< 10.4			
Kepone	2023-06	ug/L						< 11.6										
Kepone	2023-11	ug/L																
Kepone	2024-06	ug/L																
Kepone	2024-07	ug/L																
Kepone	2025-06	ug/L																
Kepone	2025-10	ug/L								< 10.9								
Lead	2014-10	ug/L							**0.117 J**	**0.113 J**								
Lead	2014-11	ug/L			< 0.500	< 0.500	**0.097 J**	**0.109 J**			< 0.500	< 0.500						
Lead	2015-05	ug/L	**0.308 J**		< 0.500	< 0.500	**0.172 J**	< 0.500	< 0.500	< 0.500	**0.103 J**	**0.252 J**						
Lead	2015-09	ug/L			**0.303 J**	< 0.500	< 0.500	< 0.500	**0.141 J**	**0.8**								
Lead	2016-03	ug/L						< 0.500	< 0.500									
Lead	2016-04	ug/L	< 0.500		< 0.500	< 0.500	< 0.500			< 0.500	< 0.500	< 0.500						
Lead	2016-11	ug/L	< 0.500		< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500		< 0.500						
Lead	2017-05	ug/L	< 0.500		< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500						
Lead	2017-11	ug/L	< 0.500		< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500		< 0.500						
Lead	2018-06	ug/L	< 0.500	**0.308 J**	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500						
Lead	2018-08	ug/L		**0.305 J**														
Lead	2018-10	ug/L	< 0.500	< 0.500	**0.459 J**	< 0.500	**0.408 J**	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500						
Lead	2019-06	ug/L	< 0.500	< 0.500	< 0.500	**0.52**	**0.206 J**	< 0.500	< 0.500	< 0.500	< 0.500	**0.357 J**						
Lead	2019-08	ug/L		< 0.500														
Lead	2019-10	ug/L						< 0.500	< 0.500									
Lead	2019-11	ug/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500			< 0.500	< 0.500	< 0.500	< 0.500	**1.15**	< 0.500	< 0.500		
Lead	2020-02	ug/L											< 0.500	< 0.500	< 0.500	< 0.500		
Lead	2020-06	ug/L			< 0.500	< 0.500	**0.122 J**	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	**1.37**	< 0.500			
Lead	2020-07	ug/L	< 0.500	**0.565**												< 0.500		
Lead	2020-08	ug/L											< 0.500	< 0.500	**0.316 J**	< 0.500		
Lead	2020-11	ug/L	< 0.500	**8.09**	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	**0.295 J**	< 0.500	< 0.500	**0.583**	**0.116 J**	< 0.500		
Lead	2021-05	ug/L			< 0.500	< 0.500		< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	**0.609**				
Lead	2021-06	ug/L	< 0.500				< 0.500								< 0.500	< 0.500		
Lead	2021-08	ug/L													**0.303 J**			
Lead	2021-09	ug/L	< 0.500	**0.494 J**	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500		< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	~~1.06~~	< 0.500
Lead	2021-12	ug/L															**0.275 J**	< 0.500
Lead	2022-03	ug/L	**1.85**	**3.57**	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500		< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
Lead	2022-06	ug/L															< 0.500	< 0.500
Lead	2022-08	ug/L			< 0.500					< 0.500	< 0.500	< 0.500					< 0.500	< 0.500
Lead	2022-09	ug/L	< 0.500	< 0.500		< 0.500	< 0.500	< 0.500	< 0.500				< 0.500	**1.68**	< 0.500	< 0.500		
Lead	2022-12	ug/L															< 0.500	< 0.500
Lead	2023-06	ug/L	< 0.500		< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	**0.283 J**	< 0.500	< 0.500	**0.244 J**	< 0.500
Lead	2023-08	ug/L																
Lead	2023-11	ug/L	< 0.500		~~0.994~~	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500		< 0.500	< 0.500	< 0.500		< 0.500		< 0.500
Lead	2024-01	ug/L																
Lead	2024-06	mg/L						**0.00027 J**	< 0.000500									
Lead	2024-06	ug/L			< 0.500							< 0.500	< 0.500		**0.692**		< 0.500	< 0.500
Lead	2024-07	ug/L	< 0.500			< 0.500	< 0.500							< 0.500		< 0.500		

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Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Isosafrole	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Isosafrole	2025-10	ug/L								< 10.2	
Kepone	2014-10	ug/L									
Kepone	2015-09	ug/L									
Kepone	2016-11	ug/L									
Kepone	2017-11	ug/L									
Kepone	2020-06	ug/L									
Kepone	2020-11	ug/L									
Kepone	2021-05	ug/L									
Kepone	2021-09	ug/L									
Kepone	2022-03	ug/L									
Kepone	2022-09	ug/L									
Kepone	2023-06	ug/L									
Kepone	2023-11	ug/L		< 10.0							
Kepone	2024-06	ug/L		< 10.4				< 10.0			
Kepone	2024-07	ug/L					< 12.5				
Kepone	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Kepone	2025-10	ug/L								< 10.2	
Lead	2014-10	ug/L									
Lead	2014-11	ug/L									
Lead	2015-05	ug/L									
Lead	2015-09	ug/L									
Lead	2016-03	ug/L									
Lead	2016-04	ug/L									
Lead	2016-11	ug/L									
Lead	2017-05	ug/L									
Lead	2017-11	ug/L									
Lead	2018-06	ug/L									
Lead	2018-08	ug/L									
Lead	2018-10	ug/L									
Lead	2019-06	ug/L									**0.261 J**
Lead	2019-08	ug/L									< 0.500
Lead	2019-10	ug/L									
Lead	2019-11	ug/L									< 0.500
Lead	2020-02	ug/L									< 0.500
Lead	2020-06	ug/L									< 0.500
Lead	2020-07	ug/L									
Lead	2020-08	ug/L									
Lead	2020-11	ug/L									< 0.500
Lead	2021-05	ug/L									< 0.500
Lead	2021-06	ug/L									
Lead	2021-08	ug/L									
Lead	2021-09	ug/L	**0.259 J**	**0.379 J**							< 0.500
Lead	2021-12	ug/L	**0.343 J**	**0.271 J**							
Lead	2022-03	ug/L	< 0.500	< 0.500							
Lead	2022-06	ug/L	< 0.500	< 0.500							
Lead	2022-08	ug/L	< 0.500	**0.272 J**		**0.41 J**					
Lead	2022-09	ug/L			< 0.500		< 0.500	< 0.500			< 0.500
Lead	2022-12	ug/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500			
Lead	2023-06	ug/L	**0.339 J**	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500			< 0.500
Lead	2023-08	ug/L			< 0.500	< 0.500	< 0.500	< 0.500			
Lead	2023-11	ug/L	**0.252 J**	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	
Lead	2024-01	ug/L							< 0.500	**0.393 J**	
Lead	2024-06	mg/L					< 0.000500			< 0.000500	
Lead	2024-06	ug/L	< 0.500	< 0.500				**0.313 J**			< 0.500
Lead	2024-07	ug/L			< 0.500				< 0.500		

Table 14

Winneshiek County Area Solid Waste Agency | **Analytical Data Summary - Shallow Groundwater Appendix II**

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Lead	2024-09	ug/L																
Lead	2024-11	ug/L				< 0.500		< 0.500	< 0.500	< 0.500	< 0.500	< 0.500						
Lead	2024-12	ug/L	< 0.500		< 0.500		< 0.500						< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
Lead	2025-06	ug/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500		< 0.500	< 0.500	< 0.500	**3.29**	< 0.500	< 0.500	< 0.500
Lead	2025-10	ug/L			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Lindane (BHC, Gamma-)	2014-10	ug/L							< 0.0320									
Lindane (BHC, Gamma-)	2015-09	ug/L			**0.00267 J**			< 0.0327	< 0.0356									
Lindane (BHC, Gamma-)	2015-12	ug/L			< 0.0356													
Lindane (BHC, Gamma-)	2016-11	ug/L			< 0.0352			< 0.0352	< 0.0364									
Lindane (BHC, Gamma-)	2017-11	ug/L						< 0.0348	< 0.0344									
Lindane (BHC, Gamma-)	2020-06	ug/L									< 0.0337							
Lindane (BHC, Gamma-)	2020-11	ug/L											**0.00384 J**	**0.00481 J**				
Lindane (BHC, Gamma-)	2021-05	ug/L											< 0.0356	< 0.0364				
Lindane (BHC, Gamma-)	2021-09	ug/L													< 0.0364			
Lindane (BHC, Gamma-)	2022-03	ug/L											< 0.0667	< 0.0727				
Lindane (BHC, Gamma-)	2022-09	ug/L													< 0.0667			
Lindane (BHC, Gamma-)	2023-06	ug/L						< 0.0640										
Lindane (BHC, Gamma-)	2023-11	ug/L																
Lindane (BHC, Gamma-)	2024-06	ug/L																
Lindane (BHC, Gamma-)	2024-07	ug/L																
Lindane (BHC, Gamma-)	2025-06	ug/L																
Lindane (BHC, Gamma-)	2025-10	ug/L								< 0.0931								
Mercury	2014-10	mg/L							< 0.000200									
Mercury	2015-09	mg/L			< 0.000200			< 0.000200										
Mercury	2015-09	ug/L							< 0.200									
Mercury	2016-11	mg/L			< 0.000200			< 0.000200	< 0.000200									
Mercury	2017-11	mg/L						< 0.000200	< 0.000200									
Mercury	2020-06	mg/L									< 0.000200							
Mercury	2020-11	mg/L											< 0.000200	< 0.000200				
Mercury	2021-05	mg/L											< 0.000200	< 0.000200				
Mercury	2021-09	mg/L													< 0.000200			
Mercury	2022-03	mg/L											< 0.000200	< 0.000200				
Mercury	2022-09	mg/L													< 0.000200			
Mercury	2023-06	mg/L						< 0.000200										
Mercury	2023-11	mg/L																
Mercury	2024-06	ug/L																
Mercury	2025-06	ug/L																
Mercury	2025-10	ug/L								< 0.2								
Methacrylonitrile	2014-10	ug/L							< 10.0									
Methacrylonitrile	2015-09	ug/L			< 10.0			< 10.0	< 10.0									
Methacrylonitrile	2016-11	ug/L			< 10.0			< 10.0	< 10.0									
Methacrylonitrile	2017-11	ug/L						< 10.0	< 10.0									
Methacrylonitrile	2020-06	ug/L									< 10.0							
Methacrylonitrile	2020-11	ug/L											< 10.0	< 10.0				
Methacrylonitrile	2021-05	ug/L											< 10.0	< 10.0				
Methacrylonitrile	2021-09	ug/L													< 10.0			
Methacrylonitrile	2022-03	ug/L											< 10.0	< 10.0				
Methacrylonitrile	2022-09	ug/L													< 10.0			
Methacrylonitrile	2023-06	ug/L						< 10.0										
Methacrylonitrile	2023-11	ug/L																
Methacrylonitrile	2024-06	ug/L																
Methacrylonitrile	2025-06	ug/L																
Methacrylonitrile	2025-10	ug/L								< 10								
Methapyrilene	2014-10	ug/L							< 11.1									
Methapyrilene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Methapyrilene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Lead	2024-09	ug/L							**0.265 J**	**0.386 J**	
Lead	2024-11	ug/L							< 0.500		
Lead	2024-12	ug/L	**0.589**	**0.282 J**	< 0.500	< 0.500	< 0.500	< 0.500		**0.307 J**	< 0.500
Lead	2025-06	ug/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
Lead	2025-10	ug/L	< 0.5	**0.482 J**	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
Lindane (BHC, Gamma-)	2014-10	ug/L									
Lindane (BHC, Gamma-)	2015-09	ug/L									
Lindane (BHC, Gamma-)	2015-12	ug/L									
Lindane (BHC, Gamma-)	2016-11	ug/L									
Lindane (BHC, Gamma-)	2017-11	ug/L									
Lindane (BHC, Gamma-)	2020-06	ug/L									
Lindane (BHC, Gamma-)	2020-11	ug/L									
Lindane (BHC, Gamma-)	2021-05	ug/L									
Lindane (BHC, Gamma-)	2021-09	ug/L									
Lindane (BHC, Gamma-)	2022-03	ug/L									
Lindane (BHC, Gamma-)	2022-09	ug/L									
Lindane (BHC, Gamma-)	2023-06	ug/L									
Lindane (BHC, Gamma-)	2023-11	ug/L		< 0.0604							
Lindane (BHC, Gamma-)	2024-06	ug/L		< 0.0909				< 0.0909			
Lindane (BHC, Gamma-)	2024-07	ug/L					< 0.0873				
Lindane (BHC, Gamma-)	2025-06	ug/L				< 0.0911	< 0.0911	< 0.0907			
Lindane (BHC, Gamma-)	2025-10	ug/L								< 0.0936	
Mercury	2014-10	mg/L									
Mercury	2015-09	mg/L									
Mercury	2015-09	ug/L									
Mercury	2016-11	mg/L									
Mercury	2017-11	mg/L									
Mercury	2020-06	mg/L									
Mercury	2020-11	mg/L									
Mercury	2021-05	mg/L									
Mercury	2021-09	mg/L									
Mercury	2022-03	mg/L									
Mercury	2022-09	mg/L									
Mercury	2023-06	mg/L									
Mercury	2023-11	mg/L		< 0.000200							
Mercury	2024-06	ug/L		< 0.200				< 0.200			
Mercury	2025-06	ug/L				< 0.200	< 0.200	< 0.200			
Mercury	2025-10	ug/L								< 0.2	
Methacrylonitrile	2014-10	ug/L									
Methacrylonitrile	2015-09	ug/L									
Methacrylonitrile	2016-11	ug/L									
Methacrylonitrile	2017-11	ug/L									
Methacrylonitrile	2020-06	ug/L									
Methacrylonitrile	2020-11	ug/L									
Methacrylonitrile	2021-05	ug/L									
Methacrylonitrile	2021-09	ug/L									
Methacrylonitrile	2022-03	ug/L									
Methacrylonitrile	2022-09	ug/L									
Methacrylonitrile	2023-06	ug/L									
Methacrylonitrile	2023-11	ug/L		< 10.0							
Methacrylonitrile	2024-06	ug/L		< 10.0			< 10.0	< 10.0			
Methacrylonitrile	2025-06	ug/L				< 10.0	< 10.0	< 10.0			
Methacrylonitrile	2025-10	ug/L								< 10	
Methapyrilene	2014-10	ug/L									
Methapyrilene	2015-09	ug/L									
Methapyrilene	2016-11	ug/L									

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Methapyrilene	2017-11	ug/L						< 11.8	< 10.9									
Methapyrilene	2020-06	ug/L									< 11.5							
Methapyrilene	2020-11	ug/L											< 11.8	< 10.5				
Methapyrilene	2021-05	ug/L											< 11.2	< 11.9				
Methapyrilene	2021-09	ug/L													< 10.5			
Methapyrilene	2022-03	ug/L											< 11.9	< 10.4				
Methapyrilene	2022-09	ug/L													< 10.4			
Methapyrilene	2023-06	ug/L						< 11.6										
Methapyrilene	2023-11	ug/L																
Methapyrilene	2024-06	ug/L																
Methapyrilene	2024-07	ug/L																
Methapyrilene	2025-06	ug/L																
Methapyrilene	2025-10	ug/L								< 10.9								
Methoxychlor	2014-10	ug/L							< 0.0320									
Methoxychlor	2014-11	ug/L			< 0.0368													
Methoxychlor	2014-12	ug/L			**0.00889 J**													
Methoxychlor	2015-05	ug/L			**0.0117 J**													
Methoxychlor	2015-09	ug/L			< 0.0364			< 0.0327	< 0.0356									
Methoxychlor	2016-04	ug/L			< 0.0352													
Methoxychlor	2016-11	ug/L			< 0.0352			< 0.0352	< 0.0364									
Methoxychlor	2017-11	ug/L						< 0.0348	< 0.0344									
Methoxychlor	2020-06	ug/L									< 0.0337							
Methoxychlor	2020-11	ug/L											< 0.0386	< 0.0390				
Methoxychlor	2021-05	ug/L											< 0.0356	< 0.0364				
Methoxychlor	2021-09	ug/L													< 0.0364			
Methoxychlor	2022-03	ug/L											< 0.0667	< 0.0727				
Methoxychlor	2022-09	ug/L													< 0.0667			
Methoxychlor	2023-06	ug/L						< 0.0640										
Methoxychlor	2023-11	ug/L																
Methoxychlor	2024-06	ug/L																
Methoxychlor	2024-07	ug/L																
Methoxychlor	2025-06	ug/L																
Methoxychlor	2025-10	ug/L								< 0.0931								
Methyl Methacrylate	2014-10	ug/L							< 2.00									
Methyl Methacrylate	2015-09	ug/L			< 2.00			< 2.00	< 2.00									
Methyl Methacrylate	2016-11	ug/L			< 2.00			< 2.00	< 2.00									
Methyl Methacrylate	2017-11	ug/L						< 2.00	< 2.00									
Methyl Methacrylate	2020-06	ug/L									< 2.00							
Methyl Methacrylate	2020-11	ug/L											< 2.00	< 2.00				
Methyl Methacrylate	2021-05	ug/L											< 2.00	< 2.00				
Methyl Methacrylate	2021-09	ug/L													< 2.00			
Methyl Methacrylate	2022-03	ug/L											< 2.00	< 2.00				
Methyl Methacrylate	2022-09	ug/L													< 2.00			
Methyl Methacrylate	2023-06	ug/L						< 2.00										
Methyl Methacrylate	2023-11	ug/L																
Methyl Methacrylate	2024-06	ug/L																
Methyl Methacrylate	2025-06	ug/L																
Methyl Methacrylate	2025-10	ug/L								< 2								
Methyl Methanesulfonate	2014-10	ug/L							< 11.1									
Methyl Methanesulfonate	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Methyl Methanesulfonate	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Methyl Methanesulfonate	2017-11	ug/L						< 11.8	< 10.9									
Methyl Methanesulfonate	2020-06	ug/L									< 11.5							
Methyl Methanesulfonate	2020-11	ug/L											< 11.8	< 10.5				
Methyl Methanesulfonate	2021-05	ug/L											< 11.2	< 11.9				
Methyl Methanesulfonate	2021-09	ug/L													< 10.5			

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Methapyrilene	2017-11	ug/L									
Methapyrilene	2020-06	ug/L									
Methapyrilene	2020-11	ug/L									
Methapyrilene	2021-05	ug/L									
Methapyrilene	2021-09	ug/L									
Methapyrilene	2022-03	ug/L									
Methapyrilene	2022-09	ug/L									
Methapyrilene	2023-06	ug/L									
Methapyrilene	2023-11	ug/L		< 10.0							
Methapyrilene	2024-06	ug/L		< 10.4				< 10.0			
Methapyrilene	2024-07	ug/L					< 12.5				
Methapyrilene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Methapyrilene	2025-10	ug/L								< 10.2	
Methoxychlor	2014-10	ug/L									
Methoxychlor	2014-11	ug/L									
Methoxychlor	2014-12	ug/L									
Methoxychlor	2015-05	ug/L									
Methoxychlor	2015-09	ug/L									
Methoxychlor	2016-04	ug/L									
Methoxychlor	2016-11	ug/L									
Methoxychlor	2017-11	ug/L									
Methoxychlor	2020-06	ug/L									
Methoxychlor	2020-11	ug/L									
Methoxychlor	2021-05	ug/L									
Methoxychlor	2021-09	ug/L									
Methoxychlor	2022-03	ug/L									
Methoxychlor	2022-09	ug/L									
Methoxychlor	2023-06	ug/L									
Methoxychlor	2023-11	ug/L		< 0.0604							
Methoxychlor	2024-06	ug/L		< 0.0909				< 0.0909			
Methoxychlor	2024-07	ug/L					< 0.0873				
Methoxychlor	2025-06	ug/L				< 0.0911	< 0.0911	< 0.0907			
Methoxychlor	2025-10	ug/L								< 0.0936	
Methyl Methacrylate	2014-10	ug/L									
Methyl Methacrylate	2015-09	ug/L									
Methyl Methacrylate	2016-11	ug/L									
Methyl Methacrylate	2017-11	ug/L									
Methyl Methacrylate	2020-06	ug/L									
Methyl Methacrylate	2020-11	ug/L									
Methyl Methacrylate	2021-05	ug/L									
Methyl Methacrylate	2021-09	ug/L									
Methyl Methacrylate	2022-03	ug/L									
Methyl Methacrylate	2022-09	ug/L									
Methyl Methacrylate	2023-06	ug/L									
Methyl Methacrylate	2023-11	ug/L		< 2.00							
Methyl Methacrylate	2024-06	ug/L		< 2.00			< 2.00	< 2.00			
Methyl Methacrylate	2025-06	ug/L				< 2.00	< 2.00	< 2.00			
Methyl Methacrylate	2025-10	ug/L								< 2	
Methyl Methanesulfonate	2014-10	ug/L									
Methyl Methanesulfonate	2015-09	ug/L									
Methyl Methanesulfonate	2016-11	ug/L									
Methyl Methanesulfonate	2017-11	ug/L									
Methyl Methanesulfonate	2020-06	ug/L									
Methyl Methanesulfonate	2020-11	ug/L									
Methyl Methanesulfonate	2021-05	ug/L									
Methyl Methanesulfonate	2021-09	ug/L									

Table 14

Winneshiek County Area Solid Waste Agency — **Analytical Data Summary - Shallow Groundwater Appendix II**

Permit No. 57-SDP-01-74P — **2025 Annual Water Quality Report**

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Methyl Methanesulfonate	2022-03	ug/L											< 11.9	< 10.4				
Methyl Methanesulfonate	2022-09	ug/L													< 10.4			
Methyl Methanesulfonate	2023-06	ug/L						< 11.6										
Methyl Methanesulfonate	2023-11	ug/L																
Methyl Methanesulfonate	2024-06	ug/L																
Methyl Methanesulfonate	2024-07	ug/L																
Methyl Methanesulfonate	2025-06	ug/L																
Methyl Methanesulfonate	2025-10	ug/L								< 10.9								
Methyl Parathion	2014-10	ug/L							< 11.1									
Methyl Parathion	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Methyl Parathion	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Methyl Parathion	2017-11	ug/L						< 11.8	< 10.9									
Methyl Parathion	2020-06	ug/L									< 11.5							
Methyl Parathion	2020-11	ug/L											< 11.8	< 10.5				
Methyl Parathion	2021-05	ug/L											< 11.2	< 11.9				
Methyl Parathion	2021-09	ug/L													< 10.5			
Methyl Parathion	2022-03	ug/L											< 11.9	< 10.4				
Methyl Parathion	2022-09	ug/L													< 10.4			
Methyl Parathion	2023-06	ug/L						< 11.6										
Methyl Parathion	2023-11	ug/L																
Methyl Parathion	2024-06	ug/L																
Methyl Parathion	2024-07	ug/L																
Methyl Parathion	2025-06	ug/L																
Methyl Parathion	2025-10	ug/L								< 10.9								
Methylene Chloride	2014-10	ug/L							**1.6 J**	< 5.00								
Methylene Chloride	2014-11	ug/L			< 5.00	< 5.00	< 5.00	< 5.00			< 5.00	< 5.00						
Methylene Chloride	2015-05	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Methylene Chloride	2015-09	ug/L			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Methylene Chloride	2016-03	ug/L						< 5.00	< 5.00									
Methylene Chloride	2016-04	ug/L	< 5.00		< 5.00	< 5.00	< 5.00			< 5.00	< 5.00	< 5.00						
Methylene Chloride	2016-11	ug/L	**0.213 J**		**0.925 J**	**1.05 J**	**0.803 J**	**0.355 J**	**0.197 J**	**0.301 J**		**0.608 J**						
Methylene Chloride	2017-05	ug/L	**0.563 J**		**0.341 J**	**0.637 J**	**0.457 J**	**0.629 J**	**0.738 J**	**0.348 J**	**0.439 J**	**0.66 J**						
Methylene Chloride	2017-11	ug/L	**0.573 J**		**0.286 J**	**0.293 J**	< 5.00	**0.226 J**	< 5.00	**0.78 J**		**0.494 J**						
Methylene Chloride	2018-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Methylene Chloride	2018-08	ug/L		< 5.00														
Methylene Chloride	2018-10	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Methylene Chloride	2019-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Methylene Chloride	2019-08	ug/L		< 5.00														
Methylene Chloride	2019-10	ug/L						< 5.00	< 5.00									
Methylene Chloride	2019-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Methylene Chloride	2020-02	ug/L											< 5.00	< 5.00	< 5.00	< 5.00		
Methylene Chloride	2020-06	ug/L			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			
Methylene Chloride	2020-07	ug/L	< 5.00	< 5.00												< 5.00		
Methylene Chloride	2020-08	ug/L											< 5.00	< 5.00	< 5.00	< 5.00		
Methylene Chloride	2020-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
Methylene Chloride	2021-05	ug/L			< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00				
Methylene Chloride	2021-06	ug/L	< 5.00				< 5.00								< 5.00	< 5.00		
Methylene Chloride	2021-08	ug/L													< 5.00			
Methylene Chloride	2021-09	ug/L	< 5.00	< 50.0	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Methylene Chloride	2021-12	ug/L															< 5.00	< 5.00
Methylene Chloride	2022-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Methylene Chloride	2022-06	ug/L															< 5.00	< 5.00
Methylene Chloride	2022-08	ug/L			< 5.00					< 5.00	< 5.00	< 5.00					< 5.00	< 5.00
Methylene Chloride	2022-09	ug/L	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00				< 5.00	< 5.00	< 5.00	< 5.00		
Methylene Chloride	2022-12	ug/L															< 5.00	< 5.00
Methylene Chloride	2023-06	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00

Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Methyl Methanesulfonate	2022-03	ug/L									
Methyl Methanesulfonate	2022-09	ug/L									
Methyl Methanesulfonate	2023-06	ug/L									
Methyl Methanesulfonate	2023-11	ug/L		< 10.0							
Methyl Methanesulfonate	2024-06	ug/L		< 10.4				< 10.0			
Methyl Methanesulfonate	2024-07	ug/L					< 12.5				
Methyl Methanesulfonate	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Methyl Methanesulfonate	2025-10	ug/L								< 10.2	
Methyl Parathion	2014-10	ug/L									
Methyl Parathion	2015-09	ug/L									
Methyl Parathion	2016-11	ug/L									
Methyl Parathion	2017-11	ug/L									
Methyl Parathion	2020-06	ug/L									
Methyl Parathion	2020-11	ug/L									
Methyl Parathion	2021-05	ug/L									
Methyl Parathion	2021-09	ug/L									
Methyl Parathion	2022-03	ug/L									
Methyl Parathion	2022-09	ug/L									
Methyl Parathion	2023-06	ug/L									
Methyl Parathion	2023-11	ug/L		< 10.0							
Methyl Parathion	2024-06	ug/L		< 10.4				< 10.0			
Methyl Parathion	2024-07	ug/L					< 12.5				
Methyl Parathion	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Methyl Parathion	2025-10	ug/L								< 10.2	
Methylene Chloride	2014-10	ug/L									
Methylene Chloride	2014-11	ug/L									
Methylene Chloride	2015-05	ug/L									
Methylene Chloride	2015-09	ug/L									
Methylene Chloride	2016-03	ug/L									
Methylene Chloride	2016-04	ug/L									
Methylene Chloride	2016-11	ug/L									
Methylene Chloride	2017-05	ug/L									
Methylene Chloride	2017-11	ug/L									
Methylene Chloride	2018-06	ug/L									
Methylene Chloride	2018-08	ug/L									
Methylene Chloride	2018-10	ug/L									
Methylene Chloride	2019-06	ug/L									< 5.00
Methylene Chloride	2019-08	ug/L									< 5.00
Methylene Chloride	2019-10	ug/L									
Methylene Chloride	2019-11	ug/L									< 5.00
Methylene Chloride	2020-02	ug/L									< 5.00
Methylene Chloride	2020-06	ug/L									< 5.00
Methylene Chloride	2020-07	ug/L									
Methylene Chloride	2020-08	ug/L									
Methylene Chloride	2020-11	ug/L									< 5.00
Methylene Chloride	2021-05	ug/L									< 5.00
Methylene Chloride	2021-06	ug/L									
Methylene Chloride	2021-08	ug/L									
Methylene Chloride	2021-09	ug/L	< 5.00	< 5.00							< 5.00
Methylene Chloride	2021-12	ug/L	< 5.00	< 5.00							
Methylene Chloride	2022-03	ug/L	< 5.00	< 5.00							
Methylene Chloride	2022-06	ug/L	< 5.00	< 5.00							
Methylene Chloride	2022-08	ug/L	< 5.00	< 5.00		< 5.00					
Methylene Chloride	2022-09	ug/L			< 5.00		< 5.00	< 5.00			< 5.00
Methylene Chloride	2022-12	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			
Methylene Chloride	2023-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			< 5.00

Table 14

Winneshiek County Area Solid Waste Agency — **Analytical Data Summary - Shallow Groundwater Appendix II**

Permit No. 57-SDP-01-74P — **2025 Annual Water Quality Report**

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Methylene Chloride	2023-08	ug/L																
Methylene Chloride	2023-11	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00		< 5.00		< 5.00
Methylene Chloride	2024-01	ug/L																
Methylene Chloride	2024-06	ug/L			< 5.00			< 5.00	< 5.00			< 5.00	< 5.00		< 5.00		< 5.00	< 5.00
Methylene Chloride	2024-07	ug/L	< 5.00			< 5.00 J	< 5.00 J							< 5.00 J		< 5.00		
Methylene Chloride	2024-09	ug/L																
Methylene Chloride	2024-11	ug/L				< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Methylene Chloride	2024-12	ug/L	< 5.00		< 5.00		< 5.00						< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Methylene Chloride	2025-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Methylene Chloride	2025-10	ug/L			< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5 J	< 5	< 5	< 5	< 5	< 5
Naphthalene	2014-10	ug/L							< 5.00									
Naphthalene	2015-09	ug/L			< 5.00			< 5.00	< 5.00									
Naphthalene	2016-11	ug/L			< 5.00			< 5.00	< 5.00									
Naphthalene	2017-11	ug/L						< 5.00	< 5.00									
Naphthalene	2020-06	ug/L									< 5.00							
Naphthalene	2020-11	ug/L											< 5.00	< 5.00				
Naphthalene	2021-05	ug/L											< 5.00	< 5.00				
Naphthalene	2021-09	ug/L													< 5.00			
Naphthalene	2022-03	ug/L											< 5.00	< 5.00				
Naphthalene	2022-09	ug/L													< 5.00			
Naphthalene	2023-06	ug/L						< 5.00										
Naphthalene	2023-11	ug/L																
Naphthalene	2024-06	ug/L						< 5.00										
Naphthalene	2025-06	ug/L																
Naphthalene	2025-10	ug/L								< 5								
Nickel	2014-10	ug/L							**2.51 J**	**0.586 J**								
Nickel	2014-11	ug/L			~~6.2~~	**2.04 J**	< 5.00	**5.99**			**17.5**	**1.4 J**						
Nickel	2015-05	ug/L	**12.1**		**1.49 J**	**1.9 J**	< 5.00	**5.63**	**9.83**	< 5.00	**14.6**	**0.972 J**						
Nickel	2015-09	ug/L			**5.87**	**2.16 J**	**0.788 J**	**4.31 J**	**4.5 J**	**3.6 J**								
Nickel	2016-03	ug/L						**5.7**	**13.4**									
Nickel	2016-04	ug/L	**14.2**		< 5.00	**1.6 J**	< 5.00			< 5.00	**8.78**	< 5.00						
Nickel	2016-11	ug/L	**13.1**		< 5.00	**3.51 J**	< 5.00	**4.28 J**	< 5.00	**6.7**		< 5.00						
Nickel	2017-05	ug/L	**14.7**		**0.971 J**	**2.64 J**	< 5.00	**3.22 J**	< 5.00	**1.11 J**	**8.8**	**2.06 J**						
Nickel	2017-11	ug/L	**15.1**		**1.53 J**	**2.68 J**	< 5.00	**11.9**	**2.91 J**	< 5.00		**1.72 J**						
Nickel	2018-06	ug/L	**18.7**	**11.3**	**1.32 J**	**1.47 J**	**1.39 J**	**5.78**	**5.11**	**1.68 J**	**9.67**	**1.17 J**						
Nickel	2018-08	ug/L	**15.8**	**12**														
Nickel	2018-10	ug/L	**16.3**	**31.4**	**1.84 J**	< 5.00	**2.15 J**	**3.99 J**	< 5.00	< 5.00	**10.6**	**3.8 J**						
Nickel	2019-06	ug/L	**14.2**	**5.16**	**1.88 J**	**0.921 J**	**0.888 J**	**5.23**	**1.57 J**	**2.07**	**8.67**	**1.13 J**						
Nickel	2019-08	ug/L		**4.7**							**6.78**							
Nickel	2019-10	ug/L						< 5.00	**3.57 J**									
Nickel	2019-11	ug/L	**16.2**	**4.9 J**	< 5.00	< 5.00	< 5.00			< 5.00	**7.39**	< 5.00	**49.7**	**20.4**	**2.65 J**	< 5.00		
Nickel	2020-02	ug/L											**49.2**	**21.6**	**2.37 J**	< 5.00		
Nickel	2020-06	ug/L			< 5.00	< 5.00	< 5.00	**3.58 J**	< 5.00	< 5.00	**5.83**	< 5.00	**51.1**	**27.5**	**2.79 J**			
Nickel	2020-07	ug/L	**14.4**	< 5.00												< 5.00		
Nickel	2020-08	ug/L											**57**	**47**	**2.89 J**	< 5.00		
Nickel	2020-11	ug/L	**15**	**43.9**	**3.25 J**	< 5.00	< 5.00	**11.9**	< 5.00	< 5.00	**5.28**	< 5.00	**47.2**	**52.8**	**3.32 J**	< 5.00		
Nickel	2021-02	ug/L																
Nickel	2021-05	ug/L			< 5.00	< 5.00		**5.36**	< 5.00	< 5.00	**5.49**	< 5.00	**55.5**	**53.4**				
Nickel	2021-06	ug/L	**16.7**				< 5.00								**2.95 J**	< 5.00		
Nickel	2021-08	ug/L													**2.95 J**			
Nickel	2021-09	ug/L	**14.8**	**81.5**	< 5.00	< 5.00	< 5.00	**5.05**	< 5.00	< 5.00		< 5.00	**51**	**47.7**	< 5.00	< 5.00	< 5.00	< 5.00
Nickel	2021-12	ug/L															< 5.00	< 5.00
Nickel	2022-03	ug/L	**17.7**	**11.6**	< 5.00	< 5.00	< 5.00	**7.47**	< 5.00	< 5.00		< 5.00	**63.6**	**28.1**	**2.82 J**	< 5.00	< 5.00	< 5.00
Nickel	2022-06	ug/L															< 5.00	< 5.00
Nickel	2022-08	ug/L			< 5.00					< 5.00	**6.42**	**2.26 J**					< 5.00	< 5.00
Nickel	2022-09	ug/L	**18.3**	**6.52**		< 5.00	< 5.00	**7.16**	< 5.00				**69.1**	**112**	**5.16**	< 5.00		

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Methylene Chloride	2023-08	ug/L			< 5.00	< 5.00	< 5.00	< 5.00			
Methylene Chloride	2023-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	
Methylene Chloride	2024-01	ug/L							< 5.00	< 5.00	
Methylene Chloride	2024-06	ug/L	< 5.00	< 5.00			< 5.00	< 5.00		< 5.00	< 5.00
Methylene Chloride	2024-07	ug/L			< 5.00 J				< 5.00 J		
Methylene Chloride	2024-09	ug/L							< 5.00	< 5.00	
Methylene Chloride	2024-11	ug/L							< 5.00		
Methylene Chloride	2024-12	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00
Methylene Chloride	2025-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Methylene Chloride	2025-10	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	
Naphthalene	2014-10	ug/L									
Naphthalene	2015-09	ug/L									
Naphthalene	2016-11	ug/L									
Naphthalene	2017-11	ug/L									
Naphthalene	2020-06	ug/L									
Naphthalene	2020-11	ug/L									
Naphthalene	2021-05	ug/L									
Naphthalene	2021-09	ug/L									
Naphthalene	2022-03	ug/L									
Naphthalene	2022-09	ug/L									
Naphthalene	2023-06	ug/L									
Naphthalene	2023-11	ug/L		< 5.00							
Naphthalene	2024-06	ug/L		< 5.00			< 5.00	< 5.00		< 5.00	
Naphthalene	2025-06	ug/L				< 5.00	< 5.00	< 5.00			
Naphthalene	2025-10	ug/L								< 5	
Nickel	2014-10	ug/L									
Nickel	2014-11	ug/L									
Nickel	2015-05	ug/L									
Nickel	2015-09	ug/L									
Nickel	2016-03	ug/L									
Nickel	2016-04	ug/L									
Nickel	2016-11	ug/L									
Nickel	2017-05	ug/L									
Nickel	2017-11	ug/L									
Nickel	2018-06	ug/L									
Nickel	2018-08	ug/L									
Nickel	2018-10	ug/L									
Nickel	2019-06	ug/L									**7.24**
Nickel	2019-08	ug/L									**8.82**
Nickel	2019-10	ug/L									
Nickel	2019-11	ug/L									**9.54**
Nickel	2020-02	ug/L									**8.93**
Nickel	2020-06	ug/L									**4.61 JO**
Nickel	2020-07	ug/L									
Nickel	2020-08	ug/L									
Nickel	2020-11	ug/L									**7.15**
Nickel	2021-02	ug/L									**10.1**
Nickel	2021-05	ug/L									**10.4**
Nickel	2021-06	ug/L									
Nickel	2021-08	ug/L									
Nickel	2021-09	ug/L	**3.68 J**	**17**							**8.31**
Nickel	2021-12	ug/L	**2.01 J**	**7.32**							
Nickel	2022-03	ug/L	< 5.00	**11**							
Nickel	2022-06	ug/L	< 5.00	**7.85**							
Nickel	2022-08	ug/L	< 5.00	**10.2**		**37.2**					
Nickel	2022-09	ug/L			< 5.00		**24.4**	**21.7**			**3.73 JO**

Table 14

Winneshiek County Area Solid Waste Agency | **Analytical Data Summary - Shallow Groundwater Appendix II**

Permit No. 57-SDP-01-74P | **2025 Annual Water Quality Report**

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Nickel	2022-12	ug/L															< 5.00	< 5.00
Nickel	2023-06	ug/L	**18**		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	**5.11**	**7.85**	< 5.00	**76**	**39.7**	< 5.00	< 5.00	< 5.00	< 5.00
Nickel	2023-08	ug/L																
Nickel	2023-11	ug/L	**18.3**		~~20.9~~	< 5.00	< 5.00	**5.36**	**3.5 J**	**12.8**		**17**	**87**	**30.8**		< 5.00		**2.01 J**
Nickel	2024-01	ug/L										**3.93 J**						
Nickel	2024-06	mg/L						**0.00627**	< 0.00500									
Nickel	2024-06	ug/L			< 5.00							< 5.00	**63.9**		**3.31 J**		< 5.00	< 5.00
Nickel	2024-07	ug/L	**16.6**			< 5.00	< 5.00							**30.3**		< 5.00		
Nickel	2024-09	ug/L																
Nickel	2024-11	ug/L				< 5.00		**6.17**	< 5.00	**8.81**	**2.95 J**	**9.12**						
Nickel	2024-12	ug/L	**16.1**		**9.01**		< 5.00						**69.6**	**32.3**	**2.15 J**	< 5.00	~~**4.39 J**~~	< 5.00
Nickel	2025-02	ug/L																
Nickel	2025-06	ug/L	**17.2**	**2.96 J**	< 5.00	< 5.00	< 5.00	**8.82**	< 5.00	< 5.00		< 5.00	**54**	**30.8**	**5.53**	< 5.00	< 5.00	< 5.00
Nickel	2025-10	ug/L			**9.27**	< 5	< 5	**10.1**	< 5	**10.8**		**2.47 J**	**71**	**28.7**	< 5	< 5	**3.98 J**	**2.99 J**
Nitrobenzene	2014-10	ug/L							< 11.1									
Nitrobenzene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Nitrobenzene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Nitrobenzene	2017-11	ug/L						< 11.8	< 10.9									
Nitrobenzene	2020-06	ug/L									< 11.5							
Nitrobenzene	2020-11	ug/L											< 11.8	< 10.5				
Nitrobenzene	2021-05	ug/L											< 11.2	< 11.9				
Nitrobenzene	2021-09	ug/L													< 10.5			
Nitrobenzene	2022-03	ug/L											< 11.9	< 10.4				
Nitrobenzene	2022-09	ug/L													< 10.4			
Nitrobenzene	2023-06	ug/L						< 11.6										
Nitrobenzene	2023-11	ug/L																
Nitrobenzene	2024-06	ug/L																
Nitrobenzene	2024-07	ug/L																
Nitrobenzene	2025-06	ug/L																
Nitrobenzene	2025-10	ug/L								< 10.9								
N-Nitrosodiethylamine	2014-10	ug/L							< 11.1									
N-Nitrosodiethylamine	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
N-Nitrosodiethylamine	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
N-Nitrosodiethylamine	2017-11	ug/L						< 11.8	< 10.9									
N-Nitrosodiethylamine	2020-06	ug/L									< 11.5							
N-Nitrosodiethylamine	2020-11	ug/L											< 11.8	< 10.5				
N-Nitrosodiethylamine	2021-05	ug/L											< 11.2	< 11.9				
N-Nitrosodiethylamine	2021-09	ug/L													< 10.5			
N-Nitrosodiethylamine	2022-03	ug/L											< 11.9	< 10.4				
N-Nitrosodiethylamine	2022-09	ug/L													< 10.4			
N-Nitrosodiethylamine	2023-06	ug/L						< 11.6										
N-Nitrosodiethylamine	2023-11	ug/L																
N-Nitrosodiethylamine	2024-06	ug/L																
N-Nitrosodiethylamine	2024-07	ug/L																
N-Nitrosodiethylamine	2025-06	ug/L																
N-Nitrosodiethylamine	2025-10	ug/L								< 10.9								
N-Nitrosodimethylamine	2014-10	ug/L							< 11.1									
N-Nitrosodimethylamine	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
N-Nitrosodimethylamine	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
N-Nitrosodimethylamine	2017-11	ug/L						< 11.8	< 10.9									
N-Nitrosodimethylamine	2020-06	ug/L									< 11.5							
N-Nitrosodimethylamine	2020-11	ug/L											< 11.8	< 10.5				
N-Nitrosodimethylamine	2021-05	ug/L											< 11.2	< 11.9				
N-Nitrosodimethylamine	2021-09	ug/L													< 10.5			
N-Nitrosodimethylamine	2022-03	ug/L											< 11.9	< 10.4				
N-Nitrosodimethylamine	2022-09	ug/L													< 10.4			

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Nickel	2022-12	ug/L	< 5.00	**12.7**	< 5.00	**14.7**	**25.6**	**51.8**			
Nickel	2023-06	ug/L	< 5.00	**19**	< 5.00	**8.62**	**31**	**28.7**			**9.62**
Nickel	2023-08	ug/L			< 5.00	**19.3**	**41.5**	**70.2**			
Nickel	2023-11	ug/L	**2.54 J**	**17.4**	< 5.00	**14.8**	**36.4**	**66.6**	< 5.00	**33.8**	
Nickel	2024-01	ug/L							< 5.00	**35**	
Nickel	2024-06	mg/L					**0.0173**			**0.0266**	
Nickel	2024-06	ug/L	< 5.00	**11.1**				**21.6**			**6.92**
Nickel	2024-07	ug/L			< 5.00				< 5.00		
Nickel	2024-09	ug/L							< 5.00	**26.6**	
Nickel	2024-11	ug/L							< 5.00		
Nickel	2024-12	ug/L	**2.86 J**	**16.8**	< 5.00	**27.6**	**25.9**	**34.2**		**28.2**	**8.19**
Nickel	2025-02	ug/L				**23.5**					
Nickel	2025-06	ug/L	< 5.00	**14.1**	< 5.00	**26.1**	**22.5**	**39.1**	< 5.00	**24**	**7.93**
Nickel	2025-10	ug/L	**2.56 J**	**26**	< 5	**26.3**	**24.5**	**62.6**	< 5	**32.2**	
Nitrobenzene	2014-10	ug/L									
Nitrobenzene	2015-09	ug/L									
Nitrobenzene	2016-11	ug/L									
Nitrobenzene	2017-11	ug/L									
Nitrobenzene	2020-06	ug/L									
Nitrobenzene	2020-11	ug/L									
Nitrobenzene	2021-05	ug/L									
Nitrobenzene	2021-09	ug/L									
Nitrobenzene	2022-03	ug/L									
Nitrobenzene	2022-09	ug/L									
Nitrobenzene	2023-06	ug/L									
Nitrobenzene	2023-11	ug/L		< 10.0							
Nitrobenzene	2024-06	ug/L		< 10.4				< 10.0			
Nitrobenzene	2024-07	ug/L					< 12.5				
Nitrobenzene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Nitrobenzene	2025-10	ug/L								< 10.2	
N-Nitrosodiethylamine	2014-10	ug/L									
N-Nitrosodiethylamine	2015-09	ug/L									
N-Nitrosodiethylamine	2016-11	ug/L									
N-Nitrosodiethylamine	2017-11	ug/L									
N-Nitrosodiethylamine	2020-06	ug/L									
N-Nitrosodiethylamine	2020-11	ug/L									
N-Nitrosodiethylamine	2021-05	ug/L									
N-Nitrosodiethylamine	2021-09	ug/L									
N-Nitrosodiethylamine	2022-03	ug/L									
N-Nitrosodiethylamine	2022-09	ug/L									
N-Nitrosodiethylamine	2023-06	ug/L									
N-Nitrosodiethylamine	2023-11	ug/L		< 10.0							
N-Nitrosodiethylamine	2024-06	ug/L		< 10.4				< 10.0			
N-Nitrosodiethylamine	2024-07	ug/L					< 12.5				
N-Nitrosodiethylamine	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
N-Nitrosodiethylamine	2025-10	ug/L								< 10.2	
N-Nitrosodimethylamine	2014-10	ug/L									
N-Nitrosodimethylamine	2015-09	ug/L									
N-Nitrosodimethylamine	2016-11	ug/L									
N-Nitrosodimethylamine	2017-11	ug/L									
N-Nitrosodimethylamine	2020-06	ug/L									
N-Nitrosodimethylamine	2020-11	ug/L									
N-Nitrosodimethylamine	2021-05	ug/L									
N-Nitrosodimethylamine	2021-09	ug/L									
N-Nitrosodimethylamine	2022-03	ug/L									
N-Nitrosodimethylamine	2022-09	ug/L									

Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
N-Nitrosodimethylamine	2023-06	ug/L						< 11.6										
N-Nitrosodimethylamine	2023-11	ug/L																
N-Nitrosodimethylamine	2024-06	ug/L																
N-Nitrosodimethylamine	2024-07	ug/L																
N-Nitrosodimethylamine	2025-06	ug/L																
N-Nitrosodimethylamine	2025-10	ug/L								< 10.9								
N-Nitrosodi-n-butylamine	2014-10	ug/L							< 11.1									
N-Nitrosodi-n-butylamine	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
N-Nitrosodi-n-butylamine	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
N-Nitrosodi-n-butylamine	2017-11	ug/L						< 11.8	< 10.9									
N-Nitrosodi-n-butylamine	2020-06	ug/L									< 11.5							
N-Nitrosodi-n-butylamine	2020-11	ug/L											< 11.8	< 10.5				
N-Nitrosodi-n-butylamine	2021-05	ug/L											< 11.2	< 11.9				
N-Nitrosodi-n-butylamine	2021-09	ug/L													< 10.5			
N-Nitrosodi-n-butylamine	2022-03	ug/L											< 11.9	< 10.4				
N-Nitrosodi-n-butylamine	2022-09	ug/L													< 10.4			
N-Nitrosodi-n-butylamine	2023-06	ug/L						< 11.6										
N-Nitrosodi-n-butylamine	2023-11	ug/L																
N-Nitrosodi-n-butylamine	2024-06	ug/L																
N-Nitrosodi-n-butylamine	2024-07	ug/L																
N-Nitrosodi-n-butylamine	2025-06	ug/L																
N-Nitrosodi-n-butylamine	2025-10	ug/L								< 10.9								
N-Nitrosodi-n-propylamine	2014-10	ug/L							< 11.1									
N-Nitrosodi-n-propylamine	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
N-Nitrosodi-n-propylamine	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
N-Nitrosodi-n-propylamine	2017-11	ug/L						< 11.8	< 10.9									
N-Nitrosodi-n-propylamine	2020-06	ug/L									< 11.5							
N-Nitrosodi-n-propylamine	2020-11	ug/L											< 11.8	< 10.5				
N-Nitrosodi-n-propylamine	2021-05	ug/L											< 11.2	< 11.9				
N-Nitrosodi-n-propylamine	2021-09	ug/L													< 10.5			
N-Nitrosodi-n-propylamine	2022-03	ug/L											< 11.9	< 10.4				
N-Nitrosodi-n-propylamine	2022-09	ug/L													< 10.4			
N-Nitrosodi-n-propylamine	2023-06	ug/L						< 11.6										
N-Nitrosodi-n-propylamine	2023-11	ug/L																
N-Nitrosodi-n-propylamine	2024-06	ug/L																
N-Nitrosodi-n-propylamine	2024-07	ug/L																
N-Nitrosodi-n-propylamine	2025-06	ug/L																
N-Nitrosodi-n-propylamine	2025-10	ug/L								< 10.9								
N-Nitrosodiphenylamine	2014-10	ug/L							< 11.1									
N-Nitrosodiphenylamine	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
N-Nitrosodiphenylamine	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
N-Nitrosodiphenylamine	2017-11	ug/L						< 11.8	< 10.9									
N-Nitrosodiphenylamine	2020-06	ug/L									< 11.5							
N-Nitrosodiphenylamine	2020-11	ug/L											< 11.8	< 10.5				
N-Nitrosodiphenylamine	2021-05	ug/L											< 11.2	< 11.9				
N-Nitrosodiphenylamine	2021-09	ug/L													< 10.5			
N-Nitrosodiphenylamine	2022-03	ug/L											< 11.9	< 10.4				
N-Nitrosodiphenylamine	2022-09	ug/L													< 10.4			
N-Nitrosodiphenylamine	2023-06	ug/L						< 11.6										
N-Nitrosodiphenylamine	2023-11	ug/L																
N-Nitrosodiphenylamine	2024-06	ug/L																
N-Nitrosodiphenylamine	2024-07	ug/L																
N-Nitrosodiphenylamine	2025-06	ug/L																
N-Nitrosodiphenylamine	2025-10	ug/L								< 10.9								
N-Nitrosomethylethylamine	2014-10	ug/L							< 11.1									
N-Nitrosomethylethylamine	2015-09	ug/L			< 10.5			< 11.2	< 10.8									

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
N-Nitrosodimethylamine	2023-06	ug/L									
N-Nitrosodimethylamine	2023-11	ug/L		< 10.0							
N-Nitrosodimethylamine	2024-06	ug/L		< 10.4				< 10.0			
N-Nitrosodimethylamine	2024-07	ug/L					< 12.5				
N-Nitrosodimethylamine	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
N-Nitrosodimethylamine	2025-10	ug/L								< 10.2	
N-Nitrosodi-n-butylamine	2014-10	ug/L									
N-Nitrosodi-n-butylamine	2015-09	ug/L									
N-Nitrosodi-n-butylamine	2016-11	ug/L									
N-Nitrosodi-n-butylamine	2017-11	ug/L									
N-Nitrosodi-n-butylamine	2020-06	ug/L									
N-Nitrosodi-n-butylamine	2020-11	ug/L									
N-Nitrosodi-n-butylamine	2021-05	ug/L									
N-Nitrosodi-n-butylamine	2021-09	ug/L									
N-Nitrosodi-n-butylamine	2022-03	ug/L									
N-Nitrosodi-n-butylamine	2022-09	ug/L									
N-Nitrosodi-n-butylamine	2023-06	ug/L									
N-Nitrosodi-n-butylamine	2023-11	ug/L		< 10.0							
N-Nitrosodi-n-butylamine	2024-06	ug/L		< 10.4				< 10.0			
N-Nitrosodi-n-butylamine	2024-07	ug/L					< 12.5				
N-Nitrosodi-n-butylamine	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
N-Nitrosodi-n-butylamine	2025-10	ug/L								< 10.2	
N-Nitrosodi-n-propylamine	2014-10	ug/L									
N-Nitrosodi-n-propylamine	2015-09	ug/L									
N-Nitrosodi-n-propylamine	2016-11	ug/L									
N-Nitrosodi-n-propylamine	2017-11	ug/L									
N-Nitrosodi-n-propylamine	2020-06	ug/L									
N-Nitrosodi-n-propylamine	2020-11	ug/L									
N-Nitrosodi-n-propylamine	2021-05	ug/L									
N-Nitrosodi-n-propylamine	2021-09	ug/L									
N-Nitrosodi-n-propylamine	2022-03	ug/L									
N-Nitrosodi-n-propylamine	2022-09	ug/L									
N-Nitrosodi-n-propylamine	2023-06	ug/L									
N-Nitrosodi-n-propylamine	2023-11	ug/L		< 10.0							
N-Nitrosodi-n-propylamine	2024-06	ug/L		< 10.4				< 10.0			
N-Nitrosodi-n-propylamine	2024-07	ug/L					< 12.5				
N-Nitrosodi-n-propylamine	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
N-Nitrosodi-n-propylamine	2025-10	ug/L								< 10.2	
N-Nitrosodiphenylamine	2014-10	ug/L									
N-Nitrosodiphenylamine	2015-09	ug/L									
N-Nitrosodiphenylamine	2016-11	ug/L									
N-Nitrosodiphenylamine	2017-11	ug/L									
N-Nitrosodiphenylamine	2020-06	ug/L									
N-Nitrosodiphenylamine	2020-11	ug/L									
N-Nitrosodiphenylamine	2021-05	ug/L									
N-Nitrosodiphenylamine	2021-09	ug/L									
N-Nitrosodiphenylamine	2022-03	ug/L									
N-Nitrosodiphenylamine	2022-09	ug/L									
N-Nitrosodiphenylamine	2023-06	ug/L									
N-Nitrosodiphenylamine	2023-11	ug/L		< 10.0							
N-Nitrosodiphenylamine	2024-06	ug/L		< 10.4				< 10.0			
N-Nitrosodiphenylamine	2024-07	ug/L					< 12.5				
N-Nitrosodiphenylamine	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
N-Nitrosodiphenylamine	2025-10	ug/L								< 10.2	
N-Nitrosomethylethylamine	2014-10	ug/L									
N-Nitrosomethylethylamine	2015-09	ug/L									

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
N-Nitrosomethylethylamine	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
N-Nitrosomethylethylamine	2017-11	ug/L						< 11.8	< 10.9									
N-Nitrosomethylethylamine	2020-06	ug/L									< 11.5							
N-Nitrosomethylethylamine	2020-11	ug/L											< 11.8	< 10.5				
N-Nitrosomethylethylamine	2021-05	ug/L											< 11.2	< 11.9				
N-Nitrosomethylethylamine	2021-09	ug/L													< 10.5			
N-Nitrosomethylethylamine	2022-03	ug/L											< 11.9	< 10.4				
N-Nitrosomethylethylamine	2022-09	ug/L													< 10.4			
N-Nitrosomethylethylamine	2023-06	ug/L						< 11.6										
N-Nitrosomethylethylamine	2023-11	ug/L																
N-Nitrosomethylethylamine	2024-06	ug/L																
N-Nitrosomethylethylamine	2024-07	ug/L																
N-Nitrosomethylethylamine	2025-06	ug/L																
N-Nitrosomethylethylamine	2025-10	ug/L								< 10.9								
N-Nitrosopiperidine	2014-10	ug/L							< 11.1									
N-Nitrosopiperidine	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
N-Nitrosopiperidine	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
N-Nitrosopiperidine	2017-11	ug/L						< 11.8	< 10.9									
N-Nitrosopiperidine	2020-06	ug/L									< 11.5							
N-Nitrosopiperidine	2020-11	ug/L											< 11.8	< 10.5				
N-Nitrosopiperidine	2021-05	ug/L											< 11.2	< 11.9				
N-Nitrosopiperidine	2021-09	ug/L													< 10.5			
N-Nitrosopiperidine	2022-03	ug/L											< 11.9	< 10.4				
N-Nitrosopiperidine	2022-09	ug/L													< 10.4			
N-Nitrosopiperidine	2023-06	ug/L						< 11.6										
N-Nitrosopiperidine	2023-11	ug/L																
N-Nitrosopiperidine	2024-06	ug/L																
N-Nitrosopiperidine	2024-07	ug/L																
N-Nitrosopiperidine	2025-06	ug/L																
N-Nitrosopiperidine	2025-10	ug/L								< 10.9								
N-Nitrosopyrrolidine	2014-10	ug/L							< 11.1									
N-Nitrosopyrrolidine	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
N-Nitrosopyrrolidine	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
N-Nitrosopyrrolidine	2017-11	ug/L						< 11.8	< 10.9									
N-Nitrosopyrrolidine	2020-06	ug/L									< 11.5							
N-Nitrosopyrrolidine	2020-11	ug/L											< 11.8	< 10.5				
N-Nitrosopyrrolidine	2021-05	ug/L											< 11.2	< 11.9				
N-Nitrosopyrrolidine	2021-09	ug/L													< 10.5			
N-Nitrosopyrrolidine	2022-03	ug/L											< 11.9	< 10.4				
N-Nitrosopyrrolidine	2022-09	ug/L													< 10.4			
N-Nitrosopyrrolidine	2023-06	ug/L						< 11.6										
N-Nitrosopyrrolidine	2023-11	ug/L																
N-Nitrosopyrrolidine	2024-06	ug/L																
N-Nitrosopyrrolidine	2024-07	ug/L																
N-Nitrosopyrrolidine	2025-06	ug/L																
N-Nitrosopyrrolidine	2025-10	ug/L								< 10.9								
o,o,o-Triethylphosphorothioate	2014-10	ug/L							< 11.1									
o,o,o-Triethylphosphorothioate	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
o,o,o-Triethylphosphorothioate	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
o,o,o-Triethylphosphorothioate	2017-11	ug/L						< 11.8	< 10.9									
o,o,o-Triethylphosphorothioate	2020-06	ug/L									< 11.5							
o,o,o-Triethylphosphorothioate	2020-11	ug/L											< 11.8	< 10.5				
o,o,o-Triethylphosphorothioate	2021-05	ug/L											< 11.2	< 11.9				
o,o,o-Triethylphosphorothioate	2021-09	ug/L													< 10.5			
o,o,o-Triethylphosphorothioate	2022-03	ug/L											< 11.9	< 10.4				
o,o,o-Triethylphosphorothioate	2022-09	ug/L													< 10.4			

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
N-Nitrosomethylethylamine	2016-11	ug/L									
N-Nitrosomethylethylamine	2017-11	ug/L									
N-Nitrosomethylethylamine	2020-06	ug/L									
N-Nitrosomethylethylamine	2020-11	ug/L									
N-Nitrosomethylethylamine	2021-05	ug/L									
N-Nitrosomethylethylamine	2021-09	ug/L									
N-Nitrosomethylethylamine	2022-03	ug/L									
N-Nitrosomethylethylamine	2022-09	ug/L									
N-Nitrosomethylethylamine	2023-06	ug/L									
N-Nitrosomethylethylamine	2023-11	ug/L		< 10.0							
N-Nitrosomethylethylamine	2024-06	ug/L		< 10.4				< 10.0			
N-Nitrosomethylethylamine	2024-07	ug/L					< 12.5				
N-Nitrosomethylethylamine	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
N-Nitrosomethylethylamine	2025-10	ug/L								< 10.2	
N-Nitrosopiperidine	2014-10	ug/L									
N-Nitrosopiperidine	2015-09	ug/L									
N-Nitrosopiperidine	2016-11	ug/L									
N-Nitrosopiperidine	2017-11	ug/L									
N-Nitrosopiperidine	2020-06	ug/L									
N-Nitrosopiperidine	2020-11	ug/L									
N-Nitrosopiperidine	2021-05	ug/L									
N-Nitrosopiperidine	2021-09	ug/L									
N-Nitrosopiperidine	2022-03	ug/L									
N-Nitrosopiperidine	2022-09	ug/L									
N-Nitrosopiperidine	2023-06	ug/L									
N-Nitrosopiperidine	2023-11	ug/L		< 10.0							
N-Nitrosopiperidine	2024-06	ug/L		< 10.4				< 10.0			
N-Nitrosopiperidine	2024-07	ug/L					< 12.5				
N-Nitrosopiperidine	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
N-Nitrosopiperidine	2025-10	ug/L								< 10.2	
N-Nitrosopyrrolidine	2014-10	ug/L									
N-Nitrosopyrrolidine	2015-09	ug/L									
N-Nitrosopyrrolidine	2016-11	ug/L									
N-Nitrosopyrrolidine	2017-11	ug/L									
N-Nitrosopyrrolidine	2020-06	ug/L									
N-Nitrosopyrrolidine	2020-11	ug/L									
N-Nitrosopyrrolidine	2021-05	ug/L									
N-Nitrosopyrrolidine	2021-09	ug/L									
N-Nitrosopyrrolidine	2022-03	ug/L									
N-Nitrosopyrrolidine	2022-09	ug/L									
N-Nitrosopyrrolidine	2023-06	ug/L									
N-Nitrosopyrrolidine	2023-11	ug/L		< 10.0							
N-Nitrosopyrrolidine	2024-06	ug/L		< 10.4				< 10.0			
N-Nitrosopyrrolidine	2024-07	ug/L					< 12.5				
N-Nitrosopyrrolidine	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
N-Nitrosopyrrolidine	2025-10	ug/L								< 10.2	
o,o,o-Triethylphosphorothioate	2014-10	ug/L									
o,o,o-Triethylphosphorothioate	2015-09	ug/L									
o,o,o-Triethylphosphorothioate	2016-11	ug/L									
o,o,o-Triethylphosphorothioate	2017-11	ug/L									
o,o,o-Triethylphosphorothioate	2020-06	ug/L									
o,o,o-Triethylphosphorothioate	2020-11	ug/L									
o,o,o-Triethylphosphorothioate	2021-05	ug/L									
o,o,o-Triethylphosphorothioate	2021-09	ug/L									
o,o,o-Triethylphosphorothioate	2022-03	ug/L									
o,o,o-Triethylphosphorothioate	2022-09	ug/L									

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Winneshiek County Area Solid Waste Agency
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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
o,o,o-Triethylphosphorothioate	2023-06	ug/L						< 11.6										
o,o,o-Triethylphosphorothioate	2023-11	ug/L																
o,o,o-Triethylphosphorothioate	2024-06	ug/L																
o,o,o-Triethylphosphorothioate	2024-07	ug/L																
o,o,o-Triethylphosphorothioate	2025-06	ug/L																
o,o,o-Triethylphosphorothioate	2025-10	ug/L								< 10.9								
o-Toluidine	2014-10	ug/L							< 11.1									
o-Toluidine	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
o-Toluidine	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
o-Toluidine	2017-11	ug/L						< 11.8	< 10.9									
o-Toluidine	2020-06	ug/L									< 11.5							
o-Toluidine	2020-11	ug/L											< 11.8	< 10.5				
o-Toluidine	2021-05	ug/L											< 11.2	< 11.9				
o-Toluidine	2021-09	ug/L													< 10.5			
o-Toluidine	2022-03	ug/L											< 11.9	< 10.4				
o-Toluidine	2022-09	ug/L													< 10.4			
o-Toluidine	2023-06	ug/L						< 11.6										
o-Toluidine	2023-11	ug/L																
o-Toluidine	2024-06	ug/L																
o-Toluidine	2024-07	ug/L																
o-Toluidine	2025-06	ug/L																
o-Toluidine	2025-10	ug/L								< 10.9								
p-(Dimethylamino)azobenzene	2014-10	ug/L							< 11.1									
p-(Dimethylamino)azobenzene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
p-(Dimethylamino)azobenzene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
p-(Dimethylamino)azobenzene	2017-11	ug/L						< 11.8	< 10.9									
p-(Dimethylamino)azobenzene	2020-06	ug/L									< 11.5							
p-(Dimethylamino)azobenzene	2020-11	ug/L											< 11.8	< 10.5				
p-(Dimethylamino)azobenzene	2021-05	ug/L											< 11.2	< 11.9				
p-(Dimethylamino)azobenzene	2021-09	ug/L													< 10.5			
p-(Dimethylamino)azobenzene	2022-03	ug/L											< 11.9	< 10.4				
p-(Dimethylamino)azobenzene	2022-09	ug/L													< 10.4			
p-(Dimethylamino)azobenzene	2023-06	ug/L						< 11.6										
p-(Dimethylamino)azobenzene	2023-11	ug/L																
p-(Dimethylamino)azobenzene	2024-06	ug/L																
p-(Dimethylamino)azobenzene	2024-07	ug/L																
p-(Dimethylamino)azobenzene	2025-06	ug/L																
p-(Dimethylamino)azobenzene	2025-10	ug/L								< 10.9								
Parathion	2014-10	ug/L							< 11.1									
Parathion	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Parathion	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Parathion	2017-11	ug/L						< 11.8	< 10.9									
Parathion	2020-06	ug/L									< 11.5							
Parathion	2020-11	ug/L											< 11.8	< 10.5				
Parathion	2021-05	ug/L											< 11.2	< 11.9				
Parathion	2021-09	ug/L													< 10.5			
Parathion	2022-03	ug/L											< 11.9	< 10.4				
Parathion	2022-09	ug/L													< 10.4			
Parathion	2023-06	ug/L						< 11.6										
Parathion	2023-11	ug/L																
Parathion	2024-06	ug/L																
Parathion	2024-07	ug/L																
Parathion	2025-06	ug/L																
Parathion	2025-10	ug/L								< 10.9								
PCBs - Aroclor 1016	2014-10	ug/L							< 0.879									
PCBs - Aroclor 1016	2015-09	ug/L			< 0.889			< 0.889	< 0.899									

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
o,o,o-Triethylphosphorothioate	2023-06	ug/L									
o,o,o-Triethylphosphorothioate	2023-11	ug/L		< 10.0							
o,o,o-Triethylphosphorothioate	2024-06	ug/L		< 10.4				< 10.0			
o,o,o-Triethylphosphorothioate	2024-07	ug/L					< 12.5				
o,o,o-Triethylphosphorothioate	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
o,o,o-Triethylphosphorothioate	2025-10	ug/L								< 10.2	
o-Toluidine	2014-10	ug/L									
o-Toluidine	2015-09	ug/L									
o-Toluidine	2016-11	ug/L									
o-Toluidine	2017-11	ug/L									
o-Toluidine	2020-06	ug/L									
o-Toluidine	2020-11	ug/L									
o-Toluidine	2021-05	ug/L									
o-Toluidine	2021-09	ug/L									
o-Toluidine	2022-03	ug/L									
o-Toluidine	2022-09	ug/L									
o-Toluidine	2023-06	ug/L									
o-Toluidine	2023-11	ug/L		< 10.0							
o-Toluidine	2024-06	ug/L		< 10.4				< 10.0			
o-Toluidine	2024-07	ug/L					< 12.5				
o-Toluidine	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
o-Toluidine	2025-10	ug/L								< 10.2	
p-(Dimethylamino)azobenzene	2014-10	ug/L									
p-(Dimethylamino)azobenzene	2015-09	ug/L									
p-(Dimethylamino)azobenzene	2016-11	ug/L									
p-(Dimethylamino)azobenzene	2017-11	ug/L									
p-(Dimethylamino)azobenzene	2020-06	ug/L									
p-(Dimethylamino)azobenzene	2020-11	ug/L									
p-(Dimethylamino)azobenzene	2021-05	ug/L									
p-(Dimethylamino)azobenzene	2021-09	ug/L									
p-(Dimethylamino)azobenzene	2022-03	ug/L									
p-(Dimethylamino)azobenzene	2022-09	ug/L									
p-(Dimethylamino)azobenzene	2023-06	ug/L									
p-(Dimethylamino)azobenzene	2023-11	ug/L		< 10.0							
p-(Dimethylamino)azobenzene	2024-06	ug/L		< 10.4				< 10.0			
p-(Dimethylamino)azobenzene	2024-07	ug/L					< 12.5				
p-(Dimethylamino)azobenzene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
p-(Dimethylamino)azobenzene	2025-10	ug/L								< 10.2	
Parathion	2014-10	ug/L									
Parathion	2015-09	ug/L									
Parathion	2016-11	ug/L									
Parathion	2017-11	ug/L									
Parathion	2020-06	ug/L									
Parathion	2020-11	ug/L									
Parathion	2021-05	ug/L									
Parathion	2021-09	ug/L									
Parathion	2022-03	ug/L									
Parathion	2022-09	ug/L									
Parathion	2023-06	ug/L									
Parathion	2023-11	ug/L		< 10.0							
Parathion	2024-06	ug/L		< 10.4				< 10.0			
Parathion	2024-07	ug/L					< 12.5				
Parathion	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Parathion	2025-10	ug/L								< 10.2	
PCBs - Aroclor 1016	2014-10	ug/L									
PCBs - Aroclor 1016	2015-09	ug/L									

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
PCBs - Aroclor 1016	2016-11	ug/L			< 0.879			< 0.842	< 0.889									
PCBs - Aroclor 1016	2017-11	ug/L						< 0.870	< 0.860									
PCBs - Aroclor 1016	2020-06	ug/L									< 0.842							
PCBs - Aroclor 1016	2020-11	ug/L											< 0.964	< 0.976				
PCBs - Aroclor 1016	2021-05	ug/L											< 0.889	< 0.909				
PCBs - Aroclor 1016	2021-09	ug/L													< 0.909			
PCBs - Aroclor 1016	2022-03	ug/L											< 0.833	< 0.909				
PCBs - Aroclor 1016	2022-09	ug/L													< 0.833			
PCBs - Aroclor 1016	2023-06	ug/L						< 0.800										
PCBs - Aroclor 1016	2023-11	ug/L																
PCBs - Aroclor 1016	2024-06	ug/L																
PCBs - Aroclor 1016	2024-07	ug/L																
PCBs - Aroclor 1016	2025-06	ug/L																
PCBs - Aroclor 1016	2025-10	ug/L								< 1.86								
PCBs - Aroclor 1221	2014-10	ug/L							< 0.879									
PCBs - Aroclor 1221	2015-09	ug/L			< 0.889			< 0.889	< 0.899									
PCBs - Aroclor 1221	2016-11	ug/L			< 0.879			< 0.842	< 0.889									
PCBs - Aroclor 1221	2017-11	ug/L						< 0.870	< 0.860									
PCBs - Aroclor 1221	2020-06	ug/L									< 0.842							
PCBs - Aroclor 1221	2020-11	ug/L											< 0.964	< 0.976				
PCBs - Aroclor 1221	2021-05	ug/L											< 0.889	< 0.909				
PCBs - Aroclor 1221	2021-09	ug/L													< 0.909			
PCBs - Aroclor 1221	2022-03	ug/L											< 0.833	< 0.909				
PCBs - Aroclor 1221	2022-09	ug/L													< 0.833			
PCBs - Aroclor 1221	2023-06	ug/L						< 0.800										
PCBs - Aroclor 1221	2023-11	ug/L																
PCBs - Aroclor 1221	2024-06	ug/L																
PCBs - Aroclor 1221	2024-07	ug/L																
PCBs - Aroclor 1221	2025-06	ug/L																
PCBs - Aroclor 1221	2025-10	ug/L								< 1.86								
PCBs - Aroclor 1232	2014-10	ug/L							< 0.879									
PCBs - Aroclor 1232	2015-09	ug/L			< 0.889			< 0.889	< 0.899									
PCBs - Aroclor 1232	2016-11	ug/L			< 0.879			< 0.842	< 0.889									
PCBs - Aroclor 1232	2017-11	ug/L						< 0.870	< 0.860									
PCBs - Aroclor 1232	2020-06	ug/L									< 0.842							
PCBs - Aroclor 1232	2020-11	ug/L											< 0.964	< 0.976				
PCBs - Aroclor 1232	2021-05	ug/L											< 0.889	< 0.909				
PCBs - Aroclor 1232	2021-09	ug/L													< 0.909			
PCBs - Aroclor 1232	2022-03	ug/L											< 0.833	< 0.909				
PCBs - Aroclor 1232	2022-09	ug/L													< 0.833			
PCBs - Aroclor 1232	2023-06	ug/L						< 0.800										
PCBs - Aroclor 1232	2023-11	ug/L																
PCBs - Aroclor 1232	2024-06	ug/L																
PCBs - Aroclor 1232	2024-07	ug/L																
PCBs - Aroclor 1232	2025-06	ug/L																
PCBs - Aroclor 1232	2025-10	ug/L								< 1.86								
PCBs - Aroclor 1242	2014-10	ug/L							< 0.879									
PCBs - Aroclor 1242	2015-09	ug/L			< 0.889			< 0.889	< 0.899									
PCBs - Aroclor 1242	2016-11	ug/L			< 0.879			< 0.842	< 0.889									
PCBs - Aroclor 1242	2017-11	ug/L						< 0.870	< 0.860									
PCBs - Aroclor 1242	2020-06	ug/L									< 0.842							
PCBs - Aroclor 1242	2020-11	ug/L											< 0.964	< 0.976				
PCBs - Aroclor 1242	2021-05	ug/L											< 0.889	< 0.909				
PCBs - Aroclor 1242	2021-09	ug/L													< 0.909			
PCBs - Aroclor 1242	2022-03	ug/L											< 0.833	< 0.909				
PCBs - Aroclor 1242	2022-09	ug/L													< 0.833			

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
PCBs - Aroclor 1016	2016-11	ug/L									
PCBs - Aroclor 1016	2017-11	ug/L									
PCBs - Aroclor 1016	2020-06	ug/L									
PCBs - Aroclor 1016	2020-11	ug/L									
PCBs - Aroclor 1016	2021-05	ug/L									
PCBs - Aroclor 1016	2021-09	ug/L									
PCBs - Aroclor 1016	2022-03	ug/L									
PCBs - Aroclor 1016	2022-09	ug/L									
PCBs - Aroclor 1016	2023-06	ug/L									
PCBs - Aroclor 1016	2023-11	ug/L		< 0.755							
PCBs - Aroclor 1016	2024-06	ug/L		< 1.82				< 1.82			
PCBs - Aroclor 1016	2024-07	ug/L					< 1.75				
PCBs - Aroclor 1016	2025-06	ug/L				< 1.82	< 1.82	< 1.81			
PCBs - Aroclor 1016	2025-10	ug/L								< 1.87	
PCBs - Aroclor 1221	2014-10	ug/L									
PCBs - Aroclor 1221	2015-09	ug/L									
PCBs - Aroclor 1221	2016-11	ug/L									
PCBs - Aroclor 1221	2017-11	ug/L									
PCBs - Aroclor 1221	2020-06	ug/L									
PCBs - Aroclor 1221	2020-11	ug/L									
PCBs - Aroclor 1221	2021-05	ug/L									
PCBs - Aroclor 1221	2021-09	ug/L									
PCBs - Aroclor 1221	2022-03	ug/L									
PCBs - Aroclor 1221	2022-09	ug/L									
PCBs - Aroclor 1221	2023-06	ug/L									
PCBs - Aroclor 1221	2023-11	ug/L		< 0.755							
PCBs - Aroclor 1221	2024-06	ug/L		< 1.82				< 1.82			
PCBs - Aroclor 1221	2024-07	ug/L					< 1.75				
PCBs - Aroclor 1221	2025-06	ug/L				< 1.82	< 1.82	< 1.81			
PCBs - Aroclor 1221	2025-10	ug/L								< 1.87	
PCBs - Aroclor 1232	2014-10	ug/L									
PCBs - Aroclor 1232	2015-09	ug/L									
PCBs - Aroclor 1232	2016-11	ug/L									
PCBs - Aroclor 1232	2017-11	ug/L									
PCBs - Aroclor 1232	2020-06	ug/L									
PCBs - Aroclor 1232	2020-11	ug/L									
PCBs - Aroclor 1232	2021-05	ug/L									
PCBs - Aroclor 1232	2021-09	ug/L									
PCBs - Aroclor 1232	2022-03	ug/L									
PCBs - Aroclor 1232	2022-09	ug/L									
PCBs - Aroclor 1232	2023-06	ug/L									
PCBs - Aroclor 1232	2023-11	ug/L		< 0.755							
PCBs - Aroclor 1232	2024-06	ug/L		< 1.82				< 1.82			
PCBs - Aroclor 1232	2024-07	ug/L					< 1.75				
PCBs - Aroclor 1232	2025-06	ug/L				< 1.82	< 1.82	< 1.81			
PCBs - Aroclor 1232	2025-10	ug/L								< 1.87	
PCBs - Aroclor 1242	2014-10	ug/L									
PCBs - Aroclor 1242	2015-09	ug/L									
PCBs - Aroclor 1242	2016-11	ug/L									
PCBs - Aroclor 1242	2017-11	ug/L									
PCBs - Aroclor 1242	2020-06	ug/L									
PCBs - Aroclor 1242	2020-11	ug/L									
PCBs - Aroclor 1242	2021-05	ug/L									
PCBs - Aroclor 1242	2021-09	ug/L									
PCBs - Aroclor 1242	2022-03	ug/L									
PCBs - Aroclor 1242	2022-09	ug/L									

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
PCBs - Aroclor 1242	2023-06	ug/L						< 0.800										
PCBs - Aroclor 1242	2023-11	ug/L																
PCBs - Aroclor 1242	2024-06	ug/L																
PCBs - Aroclor 1242	2024-07	ug/L																
PCBs - Aroclor 1242	2025-06	ug/L																
PCBs - Aroclor 1242	2025-10	ug/L								< 1.86								
PCBs - Aroclor 1248	2014-10	ug/L							< 0.879									
PCBs - Aroclor 1248	2015-09	ug/L			< 0.889			< 0.889	< 0.899									
PCBs - Aroclor 1248	2016-11	ug/L			< 0.879			< 0.842	< 0.889									
PCBs - Aroclor 1248	2017-11	ug/L						< 0.870	< 0.860									
PCBs - Aroclor 1248	2020-06	ug/L									< 0.842							
PCBs - Aroclor 1248	2020-11	ug/L											< 0.964	< 0.976				
PCBs - Aroclor 1248	2021-05	ug/L											< 0.889	< 0.909				
PCBs - Aroclor 1248	2021-09	ug/L													< 0.909			
PCBs - Aroclor 1248	2022-03	ug/L											< 0.833	< 0.909				
PCBs - Aroclor 1248	2022-09	ug/L													< 0.833			
PCBs - Aroclor 1248	2023-06	ug/L						< 0.800										
PCBs - Aroclor 1248	2023-11	ug/L																
PCBs - Aroclor 1248	2024-06	ug/L																
PCBs - Aroclor 1248	2024-07	ug/L																
PCBs - Aroclor 1248	2025-06	ug/L																
PCBs - Aroclor 1248	2025-10	ug/L								< 1.86								
PCBs - Aroclor 1254	2014-10	ug/L							< 0.879									
PCBs - Aroclor 1254	2015-09	ug/L			< 0.889			< 0.889	< 0.899									
PCBs - Aroclor 1254	2016-11	ug/L			< 0.879			< 0.842	< 0.889									
PCBs - Aroclor 1254	2017-11	ug/L						< 0.870	< 0.860									
PCBs - Aroclor 1254	2020-06	ug/L									< 0.842							
PCBs - Aroclor 1254	2020-11	ug/L											< 0.964	< 0.976				
PCBs - Aroclor 1254	2021-05	ug/L											< 0.889	< 0.909				
PCBs - Aroclor 1254	2021-09	ug/L													< 0.909			
PCBs - Aroclor 1254	2022-03	ug/L											< 0.833	< 0.909				
PCBs - Aroclor 1254	2022-09	ug/L													< 0.833			
PCBs - Aroclor 1254	2023-06	ug/L						< 0.800										
PCBs - Aroclor 1254	2023-11	ug/L																
PCBs - Aroclor 1254	2024-06	ug/L																
PCBs - Aroclor 1254	2024-07	ug/L																
PCBs - Aroclor 1254	2025-06	ug/L																
PCBs - Aroclor 1254	2025-10	ug/L								< 1.86								
PCBs - Aroclor 1260	2014-10	ug/L							< 0.879									
PCBs - Aroclor 1260	2015-09	ug/L			< 0.889			< 0.889	< 0.899									
PCBs - Aroclor 1260	2016-11	ug/L			< 0.879			< 0.842	< 0.889									
PCBs - Aroclor 1260	2017-11	ug/L						< 0.870	< 0.860									
PCBs - Aroclor 1260	2020-06	ug/L									< 0.842							
PCBs - Aroclor 1260	2020-11	ug/L											< 0.964	< 0.976				
PCBs - Aroclor 1260	2021-05	ug/L											< 0.889	< 0.909				
PCBs - Aroclor 1260	2021-09	ug/L													< 0.909			
PCBs - Aroclor 1260	2022-03	ug/L											< 0.833	< 0.909				
PCBs - Aroclor 1260	2022-09	ug/L													< 0.833			
PCBs - Aroclor 1260	2023-06	ug/L						< 0.800										
PCBs - Aroclor 1260	2023-11	ug/L																
PCBs - Aroclor 1260	2024-06	ug/L																
PCBs - Aroclor 1260	2024-07	ug/L																
PCBs - Aroclor 1260	2025-06	ug/L																
PCBs - Aroclor 1260	2025-10	ug/L								< 1.86								
Pentachlorobenzene	2014-10	ug/L							< 11.1									
Pentachlorobenzene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
PCBs - Aroclor 1242	2023-06	ug/L									
PCBs - Aroclor 1242	2023-11	ug/L		< 0.755							
PCBs - Aroclor 1242	2024-06	ug/L		< 1.82				< 1.82			
PCBs - Aroclor 1242	2024-07	ug/L					< 1.75				
PCBs - Aroclor 1242	2025-06	ug/L				< 1.82	< 1.82	< 1.81			
PCBs - Aroclor 1242	2025-10	ug/L								< 1.87	
PCBs - Aroclor 1248	2014-10	ug/L									
PCBs - Aroclor 1248	2015-09	ug/L									
PCBs - Aroclor 1248	2016-11	ug/L									
PCBs - Aroclor 1248	2017-11	ug/L									
PCBs - Aroclor 1248	2020-06	ug/L									
PCBs - Aroclor 1248	2020-11	ug/L									
PCBs - Aroclor 1248	2021-05	ug/L									
PCBs - Aroclor 1248	2021-09	ug/L									
PCBs - Aroclor 1248	2022-03	ug/L									
PCBs - Aroclor 1248	2022-09	ug/L									
PCBs - Aroclor 1248	2023-06	ug/L									
PCBs - Aroclor 1248	2023-11	ug/L		< 0.755							
PCBs - Aroclor 1248	2024-06	ug/L		< 1.82				< 1.82			
PCBs - Aroclor 1248	2024-07	ug/L					< 1.75				
PCBs - Aroclor 1248	2025-06	ug/L				< 1.82	< 1.82	< 1.81			
PCBs - Aroclor 1248	2025-10	ug/L								< 1.87	
PCBs - Aroclor 1254	2014-10	ug/L									
PCBs - Aroclor 1254	2015-09	ug/L									
PCBs - Aroclor 1254	2016-11	ug/L									
PCBs - Aroclor 1254	2017-11	ug/L									
PCBs - Aroclor 1254	2020-06	ug/L									
PCBs - Aroclor 1254	2020-11	ug/L									
PCBs - Aroclor 1254	2021-05	ug/L									
PCBs - Aroclor 1254	2021-09	ug/L									
PCBs - Aroclor 1254	2022-03	ug/L									
PCBs - Aroclor 1254	2022-09	ug/L									
PCBs - Aroclor 1254	2023-06	ug/L									
PCBs - Aroclor 1254	2023-11	ug/L		< 0.755							
PCBs - Aroclor 1254	2024-06	ug/L		< 1.82				< 1.82			
PCBs - Aroclor 1254	2024-07	ug/L					< 1.75				
PCBs - Aroclor 1254	2025-06	ug/L				< 1.82	< 1.82	< 1.81			
PCBs - Aroclor 1254	2025-10	ug/L								< 1.87	
PCBs - Aroclor 1260	2014-10	ug/L									
PCBs - Aroclor 1260	2015-09	ug/L									
PCBs - Aroclor 1260	2016-11	ug/L									
PCBs - Aroclor 1260	2017-11	ug/L									
PCBs - Aroclor 1260	2020-06	ug/L									
PCBs - Aroclor 1260	2020-11	ug/L									
PCBs - Aroclor 1260	2021-05	ug/L									
PCBs - Aroclor 1260	2021-09	ug/L									
PCBs - Aroclor 1260	2022-03	ug/L									
PCBs - Aroclor 1260	2022-09	ug/L									
PCBs - Aroclor 1260	2023-06	ug/L									
PCBs - Aroclor 1260	2023-11	ug/L		< 0.755							
PCBs - Aroclor 1260	2024-06	ug/L		< 1.82				< 1.82			
PCBs - Aroclor 1260	2024-07	ug/L					< 1.75				
PCBs - Aroclor 1260	2025-06	ug/L				< 1.82	< 1.82	< 1.81			
PCBs - Aroclor 1260	2025-10	ug/L								< 1.87	
Pentachlorobenzene	2014-10	ug/L									
Pentachlorobenzene	2015-09	ug/L									

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Pentachlorobenzene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Pentachlorobenzene	2017-11	ug/L						< 11.8	< 10.9									
Pentachlorobenzene	2020-06	ug/L									< 11.5							
Pentachlorobenzene	2020-11	ug/L											< 11.8	< 10.5				
Pentachlorobenzene	2021-05	ug/L											< 11.2	< 11.9				
Pentachlorobenzene	2021-09	ug/L													< 10.5			
Pentachlorobenzene	2022-03	ug/L											< 11.9	< 10.4				
Pentachlorobenzene	2022-09	ug/L													< 10.4			
Pentachlorobenzene	2023-06	ug/L						< 11.6										
Pentachlorobenzene	2023-11	ug/L																
Pentachlorobenzene	2024-06	ug/L																
Pentachlorobenzene	2024-07	ug/L																
Pentachlorobenzene	2025-06	ug/L																
Pentachlorobenzene	2025-10	ug/L								< 10.9								
Pentachloronitrobenzene	2014-10	ug/L							< 11.1									
Pentachloronitrobenzene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Pentachloronitrobenzene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Pentachloronitrobenzene	2017-11	ug/L						< 11.8	< 10.9									
Pentachloronitrobenzene	2020-06	ug/L									< 11.5							
Pentachloronitrobenzene	2020-11	ug/L											< 11.8	< 10.5				
Pentachloronitrobenzene	2021-05	ug/L											< 11.2	< 11.9				
Pentachloronitrobenzene	2021-09	ug/L													< 10.5			
Pentachloronitrobenzene	2022-03	ug/L											< 11.9	< 10.4				
Pentachloronitrobenzene	2022-09	ug/L													< 10.4			
Pentachloronitrobenzene	2023-06	ug/L						< 11.6										
Pentachloronitrobenzene	2023-11	ug/L																
Pentachloronitrobenzene	2024-06	ug/L																
Pentachloronitrobenzene	2024-07	ug/L																
Pentachloronitrobenzene	2025-06	ug/L																
Pentachloronitrobenzene	2025-10	ug/L								< 10.9								
Pentachlorophenol	2014-10	ug/L							< 11.1									
Pentachlorophenol	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Pentachlorophenol	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Pentachlorophenol	2017-11	ug/L						< 11.8	**1.7 J**									
Pentachlorophenol	2020-06	ug/L									< 11.5							
Pentachlorophenol	2020-11	ug/L											< 11.8	< 10.5				
Pentachlorophenol	2021-05	ug/L											< 11.2	< 11.9				
Pentachlorophenol	2021-09	ug/L													< 10.5			
Pentachlorophenol	2022-03	ug/L											< 11.9	< 10.4				
Pentachlorophenol	2022-09	ug/L													< 10.4			
Pentachlorophenol	2023-06	ug/L						< 11.6										
Pentachlorophenol	2023-11	ug/L																
Pentachlorophenol	2023-11	ug/L																
Pentachlorophenol	2024-06	ug/L																
Pentachlorophenol	2024-07	ug/L																
Pentachlorophenol	2025-06	ug/L																
Pentachlorophenol	2025-10	ug/L								< 10.9								
Phenacetin	2014-10	ug/L							< 11.1									
Phenacetin	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Phenacetin	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Phenacetin	2017-11	ug/L						< 11.8	< 10.9									
Phenacetin	2020-06	ug/L									< 11.5							
Phenacetin	2020-11	ug/L											< 11.8	< 10.5				
Phenacetin	2021-05	ug/L											< 11.2	< 11.9				
Phenacetin	2021-09	ug/L													< 10.5			
Phenacetin	2022-03	ug/L											< 11.9	< 10.4				

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Pentachlorobenzene	2016-11	ug/L									
Pentachlorobenzene	2017-11	ug/L									
Pentachlorobenzene	2020-06	ug/L									
Pentachlorobenzene	2020-11	ug/L									
Pentachlorobenzene	2021-05	ug/L									
Pentachlorobenzene	2021-09	ug/L									
Pentachlorobenzene	2022-03	ug/L									
Pentachlorobenzene	2022-09	ug/L									
Pentachlorobenzene	2023-06	ug/L									
Pentachlorobenzene	2023-11	ug/L		< 10.0							
Pentachlorobenzene	2024-06	ug/L		< 10.4				< 10.0			
Pentachlorobenzene	2024-07	ug/L					< 12.5				
Pentachlorobenzene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Pentachlorobenzene	2025-10	ug/L								< 10.2	
Pentachloronitrobenzene	2014-10	ug/L									
Pentachloronitrobenzene	2015-09	ug/L									
Pentachloronitrobenzene	2016-11	ug/L									
Pentachloronitrobenzene	2017-11	ug/L									
Pentachloronitrobenzene	2020-06	ug/L									
Pentachloronitrobenzene	2020-11	ug/L									
Pentachloronitrobenzene	2021-05	ug/L									
Pentachloronitrobenzene	2021-09	ug/L									
Pentachloronitrobenzene	2022-03	ug/L									
Pentachloronitrobenzene	2022-09	ug/L									
Pentachloronitrobenzene	2023-06	ug/L									
Pentachloronitrobenzene	2023-11	ug/L		< 10.0							
Pentachloronitrobenzene	2024-06	ug/L		< 10.4				< 10.0			
Pentachloronitrobenzene	2024-07	ug/L					< 12.5				
Pentachloronitrobenzene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Pentachloronitrobenzene	2025-10	ug/L								< 10.2	
Pentachlorophenol	2014-10	ug/L									
Pentachlorophenol	2015-09	ug/L									
Pentachlorophenol	2016-11	ug/L									
Pentachlorophenol	2017-11	ug/L									
Pentachlorophenol	2020-06	ug/L									
Pentachlorophenol	2020-11	ug/L									
Pentachlorophenol	2021-05	ug/L									
Pentachlorophenol	2021-09	ug/L									
Pentachlorophenol	2022-03	ug/L									
Pentachlorophenol	2022-09	ug/L									
Pentachlorophenol	2023-06	ug/L									
Pentachlorophenol	2023-11	ug/L		< 0.0719							
Pentachlorophenol	2023-11	ug/L		< 10.0							
Pentachlorophenol	2024-06	ug/L		< 10.4				< 10.0			
Pentachlorophenol	2024-07	ug/L					< 12.5				
Pentachlorophenol	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Pentachlorophenol	2025-10	ug/L								< 10.2	
Phenacetin	2014-10	ug/L									
Phenacetin	2015-09	ug/L									
Phenacetin	2016-11	ug/L									
Phenacetin	2017-11	ug/L									
Phenacetin	2020-06	ug/L									
Phenacetin	2020-11	ug/L									
Phenacetin	2021-05	ug/L									
Phenacetin	2021-09	ug/L									
Phenacetin	2022-03	ug/L									

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Phenacetin	2022-09	ug/L													< 10.4			
Phenacetin	2023-06	ug/L						< 11.6										
Phenacetin	2023-11	ug/L																
Phenacetin	2024-06	ug/L																
Phenacetin	2024-07	ug/L																
Phenacetin	2025-06	ug/L																
Phenacetin	2025-10	ug/L								< 10.9								
Phenanthrene	2014-10	ug/L							< 11.1									
Phenanthrene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Phenanthrene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Phenanthrene	2017-11	ug/L						< 11.8	< 10.9									
Phenanthrene	2020-06	ug/L									< 11.5							
Phenanthrene	2020-11	ug/L											< 11.8	< 10.5				
Phenanthrene	2021-05	ug/L											< 11.2	< 11.9				
Phenanthrene	2021-09	ug/L													< 10.5			
Phenanthrene	2022-03	ug/L											< 11.9	< 10.4				
Phenanthrene	2022-09	ug/L													< 10.4			
Phenanthrene	2023-06	ug/L						< 11.6										
Phenanthrene	2023-11	ug/L																
Phenanthrene	2024-06	ug/L																
Phenanthrene	2024-07	ug/L																
Phenanthrene	2025-06	ug/L																
Phenanthrene	2025-10	ug/L								< 10.9								
Phenol	2014-10	ug/L							< 11.1									
Phenol	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Phenol	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Phenol	2017-11	ug/L						< 11.8	< 10.9									
Phenol	2020-06	ug/L									< 11.5							
Phenol	2020-11	ug/L											< 11.8	< 10.5				
Phenol	2021-05	ug/L											< 11.2	< 11.9				
Phenol	2021-09	ug/L													< 10.5			
Phenol	2022-03	ug/L											< 11.9	< 10.4				
Phenol	2022-09	ug/L													< 10.4			
Phenol	2023-06	ug/L						< 11.6										
Phenol	2023-11	ug/L																
Phenol	2024-06	ug/L																
Phenol	2024-07	ug/L																
Phenol	2025-06	ug/L																
Phenol	2025-10	ug/L								< 10.9								
Phorate	2014-10	ug/L							< 11.1									
Phorate	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Phorate	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Phorate	2017-11	ug/L						< 11.8	< 10.9									
Phorate	2020-06	ug/L									< 11.5							
Phorate	2020-11	ug/L											< 11.8	< 10.5				
Phorate	2021-05	ug/L											< 11.2	< 11.9				
Phorate	2021-09	ug/L													< 10.5			
Phorate	2022-03	ug/L											< 11.9	< 10.4				
Phorate	2022-09	ug/L													< 10.4			
Phorate	2023-06	ug/L						< 11.6										
Phorate	2023-11	ug/L																
Phorate	2024-06	ug/L																
Phorate	2024-07	ug/L																
Phorate	2025-06	ug/L																
Phorate	2025-10	ug/L								< 10.9								
p-Phenylenediamine	2014-10	ug/L							< 11.1									

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Phenacetin	2022-09	ug/L									
Phenacetin	2023-06	ug/L									
Phenacetin	2023-11	ug/L		< 10.0							
Phenacetin	2024-06	ug/L		< 10.4				< 10.0			
Phenacetin	2024-07	ug/L					< 12.5				
Phenacetin	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Phenacetin	2025-10	ug/L								< 10.2	
Phenanthrene	2014-10	ug/L									
Phenanthrene	2015-09	ug/L									
Phenanthrene	2016-11	ug/L									
Phenanthrene	2017-11	ug/L									
Phenanthrene	2020-06	ug/L									
Phenanthrene	2020-11	ug/L									
Phenanthrene	2021-05	ug/L									
Phenanthrene	2021-09	ug/L									
Phenanthrene	2022-03	ug/L									
Phenanthrene	2022-09	ug/L									
Phenanthrene	2023-06	ug/L									
Phenanthrene	2023-11	ug/L		< 10.0							
Phenanthrene	2024-06	ug/L		< 10.4				< 10.0			
Phenanthrene	2024-07	ug/L					< 12.5				
Phenanthrene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Phenanthrene	2025-10	ug/L								< 10.2	
Phenol	2014-10	ug/L									
Phenol	2015-09	ug/L									
Phenol	2016-11	ug/L									
Phenol	2017-11	ug/L									
Phenol	2020-06	ug/L									
Phenol	2020-11	ug/L									
Phenol	2021-05	ug/L									
Phenol	2021-09	ug/L									
Phenol	2022-03	ug/L									
Phenol	2022-09	ug/L									
Phenol	2023-06	ug/L									
Phenol	2023-11	ug/L		< 10.0							
Phenol	2024-06	ug/L		< 10.4				< 10.0			
Phenol	2024-07	ug/L					< 12.5				
Phenol	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Phenol	2025-10	ug/L								< 10.2	
Phorate	2014-10	ug/L									
Phorate	2015-09	ug/L									
Phorate	2016-11	ug/L									
Phorate	2017-11	ug/L									
Phorate	2020-06	ug/L									
Phorate	2020-11	ug/L									
Phorate	2021-05	ug/L									
Phorate	2021-09	ug/L									
Phorate	2022-03	ug/L									
Phorate	2022-09	ug/L									
Phorate	2023-06	ug/L									
Phorate	2023-11	ug/L		< 10.0							
Phorate	2024-06	ug/L		< 10.4				< 10.0			
Phorate	2024-07	ug/L					< 12.5				
Phorate	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Phorate	2025-10	ug/L								< 10.2	
p-Phenylenediamine	2014-10	ug/L									

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
p-Phenylenediamine	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
p-Phenylenediamine	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
p-Phenylenediamine	2017-11	ug/L						< 11.8	< 10.9									
p-Phenylenediamine	2020-06	ug/L									< 11.5							
p-Phenylenediamine	2020-11	ug/L											< 11.8	< 10.5				
p-Phenylenediamine	2021-05	ug/L											< 11.2	< 11.9				
p-Phenylenediamine	2021-09	ug/L													< 10.5			
p-Phenylenediamine	2022-03	ug/L											< 11.9	< 10.4				
p-Phenylenediamine	2022-09	ug/L													< 10.4			
p-Phenylenediamine	2023-06	ug/L						< 11.6										
p-Phenylenediamine	2023-11	ug/L																
p-Phenylenediamine	2024-06	ug/L																
p-Phenylenediamine	2024-07	ug/L																
p-Phenylenediamine	2025-06	ug/L																
p-Phenylenediamine	2025-10	ug/L								< 10.9								
Pronamide	2014-10	ug/L							< 11.1									
Pronamide	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Pronamide	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Pronamide	2017-11	ug/L						< 11.8	< 10.9									
Pronamide	2020-06	ug/L									< 11.5							
Pronamide	2020-11	ug/L											< 11.8	< 10.5				
Pronamide	2021-05	ug/L											< 11.2	< 11.9				
Pronamide	2021-09	ug/L													< 10.5			
Pronamide	2022-03	ug/L											< 11.9	< 10.4				
Pronamide	2022-09	ug/L													< 10.4			
Pronamide	2023-06	ug/L						< 11.6										
Pronamide	2023-11	ug/L																
Pronamide	2024-06	ug/L																
Pronamide	2024-07	ug/L																
Pronamide	2025-06	ug/L																
Pronamide	2025-10	ug/L								< 10.9								
Propionitrile	2014-10	ug/L							< 10.0									
Propionitrile	2015-09	ug/L			< 10.0			< 10.0	< 10.0									
Propionitrile	2016-11	ug/L			< 10.0			< 10.0	< 10.0									
Propionitrile	2017-11	ug/L						< 10.0	< 10.0									
Propionitrile	2020-06	ug/L									< 10.0							
Propionitrile	2020-11	ug/L											< 10.0	< 10.0				
Propionitrile	2021-05	ug/L											< 10.0	< 10.0				
Propionitrile	2021-09	ug/L													< 10.0			
Propionitrile	2022-03	ug/L											< 10.0	< 10.0				
Propionitrile	2022-09	ug/L													< 10.0			
Propionitrile	2023-06	ug/L						< 10.0										
Propionitrile	2023-11	ug/L																
Propionitrile	2024-06	ug/L																
Propionitrile	2025-06	ug/L																
Propionitrile	2025-10	ug/L								< 10								
Pyrene	2014-10	ug/L							< 11.1									
Pyrene	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Pyrene	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Pyrene	2017-11	ug/L						< 11.8	< 10.9									
Pyrene	2020-06	ug/L									< 11.5							
Pyrene	2020-11	ug/L											< 11.8	< 10.5				
Pyrene	2021-05	ug/L											< 11.2	< 11.9				
Pyrene	2021-09	ug/L													< 10.5			
Pyrene	2022-03	ug/L											< 11.9	< 10.4				
Pyrene	2022-09	ug/L													< 10.4			

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
p-Phenylenediamine	2015-09	ug/L									
p-Phenylenediamine	2016-11	ug/L									
p-Phenylenediamine	2017-11	ug/L									
p-Phenylenediamine	2020-06	ug/L									
p-Phenylenediamine	2020-11	ug/L									
p-Phenylenediamine	2021-05	ug/L									
p-Phenylenediamine	2021-09	ug/L									
p-Phenylenediamine	2022-03	ug/L									
p-Phenylenediamine	2022-09	ug/L									
p-Phenylenediamine	2023-06	ug/L									
p-Phenylenediamine	2023-11	ug/L		< 10.0							
p-Phenylenediamine	2024-06	ug/L		< 10.4				< 10.0			
p-Phenylenediamine	2024-07	ug/L					< 12.5				
p-Phenylenediamine	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
p-Phenylenediamine	2025-10	ug/L								< 10.2	
Pronamide	2014-10	ug/L									
Pronamide	2015-09	ug/L									
Pronamide	2016-11	ug/L									
Pronamide	2017-11	ug/L									
Pronamide	2020-06	ug/L									
Pronamide	2020-11	ug/L									
Pronamide	2021-05	ug/L									
Pronamide	2021-09	ug/L									
Pronamide	2022-03	ug/L									
Pronamide	2022-09	ug/L									
Pronamide	2023-06	ug/L									
Pronamide	2023-11	ug/L		< 10.0							
Pronamide	2024-06	ug/L		< 10.4				< 10.0			
Pronamide	2024-07	ug/L					< 12.5				
Pronamide	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Pronamide	2025-10	ug/L								< 10.2	
Propionitrile	2014-10	ug/L									
Propionitrile	2015-09	ug/L									
Propionitrile	2016-11	ug/L									
Propionitrile	2017-11	ug/L									
Propionitrile	2020-06	ug/L									
Propionitrile	2020-11	ug/L									
Propionitrile	2021-05	ug/L									
Propionitrile	2021-09	ug/L									
Propionitrile	2022-03	ug/L									
Propionitrile	2022-09	ug/L									
Propionitrile	2023-06	ug/L									
Propionitrile	2023-11	ug/L		< 10.0							
Propionitrile	2024-06	ug/L		< 10.0			< 10.0	< 10.0			
Propionitrile	2025-06	ug/L				< 10.0	< 10.0	< 10.0			
Propionitrile	2025-10	ug/L								< 10	
Pyrene	2014-10	ug/L									
Pyrene	2015-09	ug/L									
Pyrene	2016-11	ug/L									
Pyrene	2017-11	ug/L									
Pyrene	2020-06	ug/L									
Pyrene	2020-11	ug/L									
Pyrene	2021-05	ug/L									
Pyrene	2021-09	ug/L									
Pyrene	2022-03	ug/L									
Pyrene	2022-09	ug/L									

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Pyrene	2023-06	ug/L						< 11.6										
Pyrene	2023-11	ug/L																
Pyrene	2024-06	ug/L																
Pyrene	2024-07	ug/L																
Pyrene	2025-06	ug/L																
Pyrene	2025-10	ug/L								< 10.9								
Safrole	2014-10	ug/L							< 11.1									
Safrole	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Safrole	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Safrole	2017-11	ug/L						< 11.8	< 10.9									
Safrole	2020-06	ug/L									< 11.5							
Safrole	2020-11	ug/L											< 11.8	< 10.5				
Safrole	2021-05	ug/L											< 11.2	< 11.9				
Safrole	2021-09	ug/L													< 10.5			
Safrole	2022-03	ug/L											< 11.9	< 10.4				
Safrole	2022-09	ug/L													< 10.4			
Safrole	2023-06	ug/L						< 11.6										
Safrole	2023-11	ug/L																
Safrole	2024-06	ug/L																
Safrole	2024-07	ug/L																
Safrole	2025-06	ug/L																
Safrole	2025-10	ug/L								< 10.9								
Selenium	2014-10	ug/L							< 5.00	< 5.00								
Selenium	2014-11	ug/L			< 5.00	< 5.00	< 5.00	< 5.00			< 5.00	< 5.00						
Selenium	2015-05	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Selenium	2015-09	ug/L			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
Selenium	2016-03	ug/L						< 5.00	< 5.00									
Selenium	2016-04	ug/L	< 5.00		**1.41 J**	**1.15 J**	**0.785 J**			**0.821 J**	**0.653 J**	**1.97 J**						
Selenium	2016-11	ug/L	< 5.00		< 5.00	**1.18 J**	**0.674 J**	< 5.00	**0.884 J**	< 5.00		**0.696 J**						
Selenium	2017-05	ug/L	< 5.00		< 5.00	**0.986 J**	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Selenium	2017-11	ug/L	< 5.00		< 5.00	< 5.00	**1.09 J**	**31.6**	**1.03 J**	< 5.00		**1.4 J**						
Selenium	2018-06	ug/L	< 5.00	< 5.00	< 5.00	**1.17 J**	< 5.00	< 5.00	< 5.00	< 5.00	**1.17 J**	**1.19 J**						
Selenium	2018-08	ug/L		< 5.00														
Selenium	2018-10	ug/L	< 5.00	< 5.00	< 5.00	**0.989 J**	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	**0.994 J**						
Selenium	2019-06	ug/L	< 2.50	< 2.50	< 2.50	< 2.50	< 2.50	< 2.50	< 2.50	< 2.50	< 2.50	**1.07 J**						
Selenium	2019-08	ug/L		< 2.50														
Selenium	2019-10	ug/L						< 5.00	< 5.00									
Selenium	2019-11	ug/L	< 5.00	< 5.00	< 5.00	**1.01 J**	< 5.00			< 5.00	**1.03 J**	**1.36 J**	< 5.00	< 5.00	< 5.00	**1.85 J**		
Selenium	2020-02	ug/L											< 5.00	< 5.00	< 5.00	**1.95 J**		
Selenium	2020-06	ug/L			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	**1.3 J**	< 5.00	< 5.00	< 5.00			
Selenium	2020-07	ug/L	< 5.00	< 5.00												**1.23 J**		
Selenium	2020-08	ug/L											< 5.00	< 5.00	< 5.00	< 5.00		
Selenium	2020-11	ug/L	< 5.00	< 20.0	< 5.00	**1.14 J**	< 5.00	< 5.00	< 5.00	< 5.00	**1.39 J**	**1.08 J**	< 5.00	**1.13 J**	< 5.00	**1.69 J**		
Selenium	2021-05	ug/L			< 5.00	**1.4 J**		< 5.00	< 5.00	< 5.00	< 5.00	**2.69 J**	< 5.00	< 5.00				
Selenium	2021-06	ug/L	**1.42 J**				< 5.00								< 5.00	**1.59 J**		
Selenium	2021-08	ug/L													< 5.00			
Selenium	2021-09	ug/L	< 5.00	**1.07 J**	< 5.00	**2.04 J**	< 5.00	< 5.00	< 5.00	< 5.00		**1.96 J**	< 5.00	< 5.00	< 5.00	**1.59 J**	< 5.00	< 5.00
Selenium	2021-12	ug/L															< 5.00	< 5.00
Selenium	2022-03	ug/L	**3.37 J**	**4.12 J**	< 5.00	**1.51 J**	< 5.00	< 5.00	< 5.00	< 5.00		**1.76 J**	< 5.00	< 5.00	**1.56 J**	**1.74 J**	< 5.00	< 5.00
Selenium	2022-06	ug/L															< 5.00	**2.77 J**
Selenium	2022-08	ug/L			< 5.00					< 5.00	< 5.00	< 5.00					< 5.00	< 5.00
Selenium	2022-09	ug/L	< 5.00	< 5.00		**1 J**	< 5.00	< 5.00	< 5.00				< 5.00	**1.86 J**	< 5.00	**2.27 J**		
Selenium	2022-12	ug/L															< 5.00	< 5.00
Selenium	2023-06	ug/L	< 5.00		< 5.00	**2.08 J**	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	**1.46 J**	< 5.00	< 5.00
Selenium	2023-08	ug/L																
Selenium	2023-11	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00		**2.12 J**		< 5.00

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Pyrene	2023-06	ug/L									
Pyrene	2023-11	ug/L		< 10.0							
Pyrene	2024-06	ug/L		< 10.4				< 10.0			
Pyrene	2024-07	ug/L					< 12.5				
Pyrene	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Pyrene	2025-10	ug/L								< 10.2	
Safrole	2014-10	ug/L									
Safrole	2015-09	ug/L									
Safrole	2016-11	ug/L									
Safrole	2017-11	ug/L									
Safrole	2020-06	ug/L									
Safrole	2020-11	ug/L									
Safrole	2021-05	ug/L									
Safrole	2021-09	ug/L									
Safrole	2022-03	ug/L									
Safrole	2022-09	ug/L									
Safrole	2023-06	ug/L									
Safrole	2023-11	ug/L		< 10.0							
Safrole	2024-06	ug/L		< 10.4				< 10.0			
Safrole	2024-07	ug/L					< 12.5				
Safrole	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Safrole	2025-10	ug/L								< 10.2	
Selenium	2014-10	ug/L									
Selenium	2014-11	ug/L									
Selenium	2015-05	ug/L									
Selenium	2015-09	ug/L									
Selenium	2016-03	ug/L									
Selenium	2016-04	ug/L									
Selenium	2016-11	ug/L									
Selenium	2017-05	ug/L									
Selenium	2017-11	ug/L									
Selenium	2018-06	ug/L									
Selenium	2018-08	ug/L									
Selenium	2018-10	ug/L									
Selenium	2019-06	ug/L									< 2.50
Selenium	2019-08	ug/L									< 2.50
Selenium	2019-10	ug/L									
Selenium	2019-11	ug/L									< 5.00
Selenium	2020-02	ug/L									< 5.00
Selenium	2020-06	ug/L									< 5.00
Selenium	2020-07	ug/L									
Selenium	2020-08	ug/L									
Selenium	2020-11	ug/L									< 5.00
Selenium	2021-05	ug/L									< 5.00
Selenium	2021-06	ug/L									
Selenium	2021-08	ug/L									
Selenium	2021-09	ug/L	< 5.00	**1.55 J**							< 5.00
Selenium	2021-12	ug/L	< 5.00	< 5.00							
Selenium	2022-03	ug/L	< 5.00	< 5.00							
Selenium	2022-06	ug/L	< 5.00	< 5.00							
Selenium	2022-08	ug/L	< 5.00	< 5.00		< 5.00					
Selenium	2022-09	ug/L			< 5.00		< 5.00	< 5.00			< 5.00
Selenium	2022-12	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			
Selenium	2023-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			< 5.00
Selenium	2023-08	ug/L			< 5.00	< 5.00	< 5.00	< 5.00			
Selenium	2023-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Selenium	2024-01	ug/L																
Selenium	2024-06	mg/L						< 0.00500	< 0.00500									
Selenium	2024-06	ug/L			< 5.00							**2.02 J**	< 5.00		< 5.00		< 5.00	< 5.00
Selenium	2024-07	ug/L	< 5.00			< 5.00	< 5.00							< 5.00		< 5.00		
Selenium	2024-09	ug/L																
Selenium	2024-11	ug/L				< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Selenium	2024-12	ug/L	< 5.00		< 5.00		< 5.00						< 5.00	< 5.00	< 5.00	**2.01 J**	< 5.00	< 5.00
Selenium	2025-06	ug/L	< 5.00	< 5.00	**1.43 J**	**2.89 J**	< 5.00	< 5.00	< 5.00	< 5.00		**2.4 J**	< 5.00	< 5.00	**3.17 J**	**1.99 J**	< 5.00	< 5.00
Selenium	2025-10	ug/L			< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	**1.76 J**	< 5	< 5
Silver	2014-10	ug/L							< 1.00	< 1.00								
Silver	2014-11	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00						
Silver	2015-05	ug/L	< 1.00		< 1.00	< 1.00	**0.06 J**	< 1.00	**0.053 J**	< 1.00	< 1.00	< 1.00						
Silver	2015-09	ug/L			**0.117 J**	**0.128 J**	**0.091 J**	**0.105 J**	**0.095 J**	< 1.00								
Silver	2016-03	ug/L						**0.165 J**	**0.173 J**									
Silver	2016-04	ug/L	< 1.00		< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00						
Silver	2016-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
Silver	2017-05	ug/L	< 1.00		**0.142 J**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Silver	2017-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		**0.146 J**						
Silver	2018-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**0.34 J**	< 1.00						
Silver	2018-08	ug/L		< 1.00														
Silver	2018-10	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Silver	2019-06	ug/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500						
Silver	2019-08	ug/L		< 0.500														
Silver	2019-10	ug/L						< 1.00	< 1.00									
Silver	2019-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Silver	2020-02	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
Silver	2020-06	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
Silver	2020-07	ug/L	< 1.00	< 1.00												< 1.00		
Silver	2020-08	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
Silver	2020-11	ug/L	< 1.00	< 4.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Silver	2021-05	ug/L			< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00				
Silver	2021-06	ug/L	< 1.00				< 1.00								< 1.00	< 1.00		
Silver	2021-08	ug/L													< 1.00			
Silver	2021-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	~~**0.503 J**~~	< 1.00
Silver	2021-12	ug/L															< 1.00	< 1.00
Silver	2022-03	ug/L	**0.776 J**	**0.909 J**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Silver	2022-06	ug/L															< 1.00	< 1.00
Silver	2022-08	ug/L			< 1.00					< 1.00	< 1.00	< 1.00					< 1.00	< 1.00
Silver	2022-09	ug/L	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00				< 4.00	< 1.00	< 1.00	**0.747 J**		
Silver	2022-12	ug/L															< 1.00	< 1.00
Silver	2023-06	ug/L	< 1.00		< 1.00	< 1.00	**0.702 J**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Silver	2023-08	ug/L																
Silver	2023-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00		< 1.00		< 1.00
Silver	2024-01	ug/L																
Silver	2024-06	mg/L						**0.00121**	**0.00537**									
Silver	2024-06	ug/L			< 1.00							< 1.00	**1.1**		< 1.00		< 1.00	< 1.00
Silver	2024-07	ug/L	< 1.00			< 1.00	< 1.00							< 1.00		< 1.00		
Silver	2024-08	ug/L							< 1.00									
Silver	2024-09	ug/L																
Silver	2024-11	ug/L				< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Silver	2024-12	ug/L	< 1.00		< 1.00		< 1.00						< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Silver	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Silver	2025-10	ug/L			< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	2014-10	ug/L							< 1.00	< 1.00								
Styrene	2014-11	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00						
Styrene	2015-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Selenium	2024-01	ug/L							< 5.00	< 5.00	
Selenium	2024-06	mg/L					< 0.00500			< 0.00500	
Selenium	2024-06	ug/L	< 5.00	< 5.00				**1.99 J**			< 5.00
Selenium	2024-07	ug/L			< 5.00				< 5.00		
Selenium	2024-09	ug/L							< 5.00	< 5.00	
Selenium	2024-11	ug/L							< 5.00		
Selenium	2024-12	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00
Selenium	2025-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Selenium	2025-10	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	
Silver	2014-10	ug/L									
Silver	2014-11	ug/L									
Silver	2015-05	ug/L									
Silver	2015-09	ug/L									
Silver	2016-03	ug/L									
Silver	2016-04	ug/L									
Silver	2016-11	ug/L									
Silver	2017-05	ug/L									
Silver	2017-11	ug/L									
Silver	2018-06	ug/L									
Silver	2018-08	ug/L									
Silver	2018-10	ug/L									
Silver	2019-06	ug/L									< 0.500
Silver	2019-08	ug/L									< 0.500
Silver	2019-10	ug/L									
Silver	2019-11	ug/L									< 1.00
Silver	2020-02	ug/L									< 1.00
Silver	2020-06	ug/L									< 1.00
Silver	2020-07	ug/L									
Silver	2020-08	ug/L									
Silver	2020-11	ug/L									< 1.00
Silver	2021-05	ug/L									< 1.00
Silver	2021-06	ug/L									
Silver	2021-08	ug/L									
Silver	2021-09	ug/L	< 1.00	< 1.00							< 1.00
Silver	2021-12	ug/L	< 1.00	< 1.00							
Silver	2022-03	ug/L	< 1.00	< 1.00							
Silver	2022-06	ug/L	< 1.00	< 1.00							
Silver	2022-08	ug/L	< 1.00	< 1.00		< 1.00					
Silver	2022-09	ug/L			< 1.00		< 1.00	< 1.00			< 1.00
Silver	2022-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
Silver	2023-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00
Silver	2023-08	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			
Silver	2023-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
Silver	2024-01	ug/L							< 1.00	< 1.00	
Silver	2024-06	mg/L					**0.00936**			**0.00906**	
Silver	2024-06	ug/L	< 1.00	< 1.00				**1.01**			< 1.00
Silver	2024-07	ug/L			< 1.00				< 1.00		
Silver	2024-08	ug/L					< 1.00				
Silver	2024-09	ug/L							< 1.00	< 1.00	
Silver	2024-11	ug/L							< 1.00		
Silver	2024-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00
Silver	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Silver	2025-10	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
Styrene	2014-10	ug/L									
Styrene	2014-11	ug/L									
Styrene	2015-05	ug/L									

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Styrene	2015-09	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Styrene	2016-03	ug/L						< 1.00	< 1.00									
Styrene	2016-04	ug/L	< 1.00		< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00						
Styrene	2016-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
Styrene	2017-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Styrene	2017-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
Styrene	2018-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Styrene	2018-08	ug/L		< 1.00														
Styrene	2018-10	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Styrene	2019-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Styrene	2019-08	ug/L		< 1.00														
Styrene	2019-10	ug/L						< 1.00	< 1.00									
Styrene	2019-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Styrene	2020-02	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
Styrene	2020-06	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
Styrene	2020-07	ug/L	< 1.00	< 1.00												< 1.00		
Styrene	2020-08	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
Styrene	2020-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Styrene	2021-05	ug/L			< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00				
Styrene	2021-06	ug/L	< 1.00				< 1.00								< 1.00	< 1.00		
Styrene	2021-08	ug/L													**0.819 J**			
Styrene	2021-09	ug/L	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Styrene	2021-12	ug/L															< 1.00	< 1.00
Styrene	2022-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Styrene	2022-06	ug/L															< 1.00	< 1.00
Styrene	2022-08	ug/L			< 1.00					< 1.00	< 1.00	< 1.00					< 1.00	< 1.00
Styrene	2022-09	ug/L	**0.435 J**	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00				< 1.00	< 1.00	< 1.00	< 1.00		
Styrene	2022-12	ug/L															< 1.00	< 1.00
Styrene	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Styrene	2023-08	ug/L																
Styrene	2023-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00		< 1.00		< 1.00
Styrene	2024-01	ug/L																
Styrene	2024-06	ug/L			< 1.00			< 1.00	< 1.00			< 1.00	< 1.00		< 1.00		< 1.00	< 1.00
Styrene	2024-07	ug/L	< 1.00			< 1.00 J	< 1.00 J							< 1.00 J		< 1.00		
Styrene	2024-09	ug/L																
Styrene	2024-11	ug/L				< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Styrene	2024-12	ug/L	< 1.00		< 1.00		< 1.00						< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Styrene	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Styrene	2025-10	ug/L			< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1 J	< 1	< 1	< 1	< 1	< 1
Sulfide	2014-10	mg/L							< 1.00									
Sulfide	2015-09	mg/L			< 1.00			< 1.00	< 1.00									
Sulfide	2016-11	mg/L			< 1.00			< 1.00	< 1.00									
Sulfide	2017-11	mg/L						< 1.00	< 1.00									
Sulfide	2020-06	mg/L									< 10.0							
Sulfide	2020-11	mg/L											< 10.0	< 10.0				
Sulfide	2021-05	mg/L											**21**					
Sulfide	2021-06	mg/L												< 1.00				
Sulfide	2021-09	mg/L													< 1.00			
Sulfide	2022-03	mg/L											< 1.00	< 1.00				
Sulfide	2022-06	mg/L											< 1.00					
Sulfide	2022-09	ug/L											< 1000		< 1000			
Sulfide	2022-12	ug/L											< 1000					
Sulfide	2023-06	ug/L						< 1000					< 1000					
Sulfide	2023-11	ug/L											< 1000					
Sulfide	2024-06	ug/L											< 3000					
Sulfide	2024-07	ug/L																

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Styrene	2015-09	ug/L									
Styrene	2016-03	ug/L									
Styrene	2016-04	ug/L									
Styrene	2016-11	ug/L									
Styrene	2017-05	ug/L									
Styrene	2017-11	ug/L									
Styrene	2018-06	ug/L									
Styrene	2018-08	ug/L									
Styrene	2018-10	ug/L									
Styrene	2019-06	ug/L									< 1.00
Styrene	2019-08	ug/L									< 1.00
Styrene	2019-10	ug/L									
Styrene	2019-11	ug/L									< 1.00
Styrene	2020-02	ug/L									< 1.00
Styrene	2020-06	ug/L									< 1.00
Styrene	2020-07	ug/L									
Styrene	2020-08	ug/L									
Styrene	2020-11	ug/L									< 1.00
Styrene	2021-05	ug/L									< 1.00
Styrene	2021-06	ug/L									
Styrene	2021-08	ug/L									
Styrene	2021-09	ug/L	< 1.00	< 1.00							< 1.00
Styrene	2021-12	ug/L	< 1.00	< 1.00							
Styrene	2022-03	ug/L	< 1.00	< 1.00							
Styrene	2022-06	ug/L	< 1.00	< 1.00							
Styrene	2022-08	ug/L	< 1.00	< 1.00		< 1.00					
Styrene	2022-09	ug/L			< 1.00		< 1.00	< 1.00			< 1.00
Styrene	2022-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
Styrene	2023-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00
Styrene	2023-08	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			
Styrene	2023-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
Styrene	2024-01	ug/L							< 1.00	< 1.00	
Styrene	2024-06	ug/L	< 1.00	< 1.00			< 1.00	< 1.00		< 1.00	< 1.00
Styrene	2024-07	ug/L			< 1.00 J				< 1.00 J		
Styrene	2024-09	ug/L							< 1.00	< 1.00	
Styrene	2024-11	ug/L							< 1.00		
Styrene	2024-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00
Styrene	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Styrene	2025-10	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
Sulfide	2014-10	mg/L									
Sulfide	2015-09	mg/L									
Sulfide	2016-11	mg/L									
Sulfide	2017-11	mg/L									
Sulfide	2020-06	mg/L									
Sulfide	2020-11	mg/L									
Sulfide	2021-05	mg/L									
Sulfide	2021-06	mg/L									
Sulfide	2021-09	mg/L									
Sulfide	2022-03	mg/L									
Sulfide	2022-06	mg/L									
Sulfide	2022-09	ug/L									
Sulfide	2022-12	ug/L									
Sulfide	2023-06	ug/L									
Sulfide	2023-11	ug/L		< 1000							
Sulfide	2024-06	ug/L		< 3000				< 3000			
Sulfide	2024-07	ug/L					< 3000				

Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Sulfide	2024-12	ug/L											**2930 J**					
Sulfide	2025-06	ug/L											< 3000					
Sulfide	2025-10	ug/L			< 3000					< 3000			**3070**				< 3000	
Technical Chlordane	2020-06	ug/L									< 2.11							
Technical Chlordane	2020-11	ug/L											< 2.41	< 2.44				
Technical Chlordane	2021-05	ug/L											< 2.22	< 2.27				
Technical Chlordane	2021-09	ug/L													< 2.27			
Technical Chlordane	2022-03	ug/L											< 2.08	< 2.27				
Technical Chlordane	2022-09	ug/L													< 2.08			
Technical Chlordane	2023-06	ug/L						< 2.00										
Technical Chlordane	2023-11	ug/L																
Technical Chlordane	2024-06	ug/L																
Technical Chlordane	2024-07	ug/L																
Technical Chlordane	2025-06	ug/L																
Technical Chlordane	2025-10	ug/L								< 1.86								
Tetrachloroethene	2014-10	ug/L							< 1.00	< 1.00								
Tetrachloroethene	2014-11	ug/L			< 1.00	< 1.00	< 1.00	**0.507 J**			< 1.00	< 1.00						
Tetrachloroethene	2015-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	**0.648 J**	< 1.00	< 1.00	< 1.00	< 1.00						
Tetrachloroethene	2015-09	ug/L			< 1.00	< 1.00	< 1.00	**0.453 J**	< 1.00	< 1.00								
Tetrachloroethene	2016-03	ug/L						**0.532 J**	< 1.00									
Tetrachloroethene	2016-04	ug/L	< 1.00		< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00						
Tetrachloroethene	2016-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	**0.598 J**	< 1.00	< 1.00		< 1.00						
Tetrachloroethene	2017-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	**0.53 J**	< 1.00	< 1.00	< 1.00	< 1.00						
Tetrachloroethene	2017-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	**0.491 J**	< 1.00	< 1.00		< 1.00						
Tetrachloroethene	2018-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**0.493 J**	< 1.00	< 1.00	< 1.00	< 1.00						
Tetrachloroethene	2018-08	ug/L		< 1.00														
Tetrachloroethene	2018-10	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Tetrachloroethene	2019-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Tetrachloroethene	2019-08	ug/L		< 1.00														
Tetrachloroethene	2019-10	ug/L						< 1.00	< 1.00									
Tetrachloroethene	2019-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Tetrachloroethene	2020-02	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
Tetrachloroethene	2020-06	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
Tetrachloroethene	2020-07	ug/L	< 1.00	< 1.00												< 1.00		
Tetrachloroethene	2020-08	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
Tetrachloroethene	2020-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Tetrachloroethene	2021-05	ug/L			< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00				
Tetrachloroethene	2021-06	ug/L	< 1.00				< 1.00								< 1.00	< 1.00		
Tetrachloroethene	2021-08	ug/L													< 1.00			
Tetrachloroethene	2021-09	ug/L	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Tetrachloroethene	2021-12	ug/L															< 1.00	< 1.00
Tetrachloroethene	2022-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**0.94 J**	**0.772 J**
Tetrachloroethene	2022-06	ug/L															< 1.00	< 1.00
Tetrachloroethene	2022-08	ug/L			< 1.00					< 1.00	< 1.00	< 1.00					< 1.00	< 1.00
Tetrachloroethene	2022-09	ug/L	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00				< 1.00	< 1.00	< 1.00	< 1.00		
Tetrachloroethene	2022-12	ug/L															< 1.00	< 1.00
Tetrachloroethene	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Tetrachloroethene	2023-08	ug/L																
Tetrachloroethene	2023-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00		< 1.00		< 1.00
Tetrachloroethene	2024-01	ug/L																
Tetrachloroethene	2024-06	ug/L			< 1.00			< 1.00	< 1.00			< 1.00	< 1.00		< 1.00		< 1.00	< 1.00
Tetrachloroethene	2024-07	ug/L	< 1.00			< 1.00 J	< 1.00 J							< 1.00 J		< 1.00		
Tetrachloroethene	2024-09	ug/L																
Tetrachloroethene	2024-11	ug/L				< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Tetrachloroethene	2024-12	ug/L	< 1.00		< 1.00		< 1.00						< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Tetrachloroethene	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Sulfide	2024-12	ug/L									
Sulfide	2025-06	ug/L				< 3000	< 3000	< 3000			
Sulfide	2025-10	ug/L								**2270 J**	
Technical Chlordane	2020-06	ug/L									
Technical Chlordane	2020-11	ug/L									
Technical Chlordane	2021-05	ug/L									
Technical Chlordane	2021-09	ug/L									
Technical Chlordane	2022-03	ug/L									
Technical Chlordane	2022-09	ug/L									
Technical Chlordane	2023-06	ug/L									
Technical Chlordane	2023-11	ug/L		< 1.89							
Technical Chlordane	2024-06	ug/L		< 1.82				< 1.82			
Technical Chlordane	2024-07	ug/L					< 1.75				
Technical Chlordane	2025-06	ug/L				< 1.82	< 1.82	< 1.81			
Technical Chlordane	2025-10	ug/L								< 1.87	
Tetrachloroethene	2014-10	ug/L									
Tetrachloroethene	2014-11	ug/L									
Tetrachloroethene	2015-05	ug/L									
Tetrachloroethene	2015-09	ug/L									
Tetrachloroethene	2016-03	ug/L									
Tetrachloroethene	2016-04	ug/L									
Tetrachloroethene	2016-11	ug/L									
Tetrachloroethene	2017-05	ug/L									
Tetrachloroethene	2017-11	ug/L									
Tetrachloroethene	2018-06	ug/L									
Tetrachloroethene	2018-08	ug/L									
Tetrachloroethene	2018-10	ug/L									
Tetrachloroethene	2019-06	ug/L									< 1.00
Tetrachloroethene	2019-08	ug/L									< 1.00
Tetrachloroethene	2019-10	ug/L									
Tetrachloroethene	2019-11	ug/L									< 1.00
Tetrachloroethene	2020-02	ug/L									< 1.00
Tetrachloroethene	2020-06	ug/L									< 1.00
Tetrachloroethene	2020-07	ug/L									
Tetrachloroethene	2020-08	ug/L									
Tetrachloroethene	2020-11	ug/L									< 1.00
Tetrachloroethene	2021-05	ug/L									< 1.00
Tetrachloroethene	2021-06	ug/L									
Tetrachloroethene	2021-08	ug/L									
Tetrachloroethene	2021-09	ug/L	< 1.00	< 1.00							< 1.00
Tetrachloroethene	2021-12	ug/L	< 1.00	< 1.00							
Tetrachloroethene	2022-03	ug/L	**0.721 J**	< 1.00							
Tetrachloroethene	2022-06	ug/L	< 1.00	< 1.00							
Tetrachloroethene	2022-08	ug/L	< 1.00	< 1.00		< 1.00					
Tetrachloroethene	2022-09	ug/L			< 1.00		< 1.00	< 1.00			< 1.00
Tetrachloroethene	2022-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
Tetrachloroethene	2023-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00
Tetrachloroethene	2023-08	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			
Tetrachloroethene	2023-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
Tetrachloroethene	2024-01	ug/L							< 1.00	< 1.00	
Tetrachloroethene	2024-06	ug/L	< 1.00	< 1.00			< 1.00	< 1.00		< 1.00	< 1.00
Tetrachloroethene	2024-07	ug/L			< 1.00 J				< 1.00 J		
Tetrachloroethene	2024-09	ug/L							< 1.00	< 1.00	
Tetrachloroethene	2024-11	ug/L							< 1.00		
Tetrachloroethene	2024-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00
Tetrachloroethene	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Tetrachloroethene	2025-10	ug/L			< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1 J	< 1	< 1	< 1	< 1	< 1
Thallium	2014-10	ug/L							< 1.00	< 1.00								
Thallium	2014-11	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00						
Thallium	2015-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Thallium	2015-09	ug/L			**0.038 J**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Thallium	2016-03	ug/L						**0.031 J**	**0.03 J**									
Thallium	2016-04	ug/L	< 1.00		< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00						
Thallium	2016-11	ug/L	**0.032 J**		< 1.00	< 1.00	< 1.00	**0.028 J**	< 1.00	**0.05 J**		< 1.00						
Thallium	2017-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	**0.101 J**	**0.071 J**	< 1.00	< 1.00	< 1.00						
Thallium	2017-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
Thallium	2018-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Thallium	2018-08	ug/L		< 1.00														
Thallium	2018-10	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Thallium	2019-06	ug/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00						
Thallium	2019-08	ug/L		< 2.00														
Thallium	2019-10	ug/L						< 1.00	< 1.00									
Thallium	2019-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Thallium	2020-02	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
Thallium	2020-06	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
Thallium	2020-07	ug/L	< 1.00	< 1.00												< 1.00		
Thallium	2020-08	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
Thallium	2020-11	ug/L	**0.994 J**	< 4.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**0.352 J**	< 1.00	< 1.00	**0.286 J**	< 1.00	< 1.00		
Thallium	2021-05	ug/L			< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00				
Thallium	2021-06	ug/L	**1.54**				< 1.00								< 1.00	< 1.00		
Thallium	2021-08	ug/L													**0.91 J**			
Thallium	2021-09	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	**0.355 J**	< 1.00	< 1.00	< 1.00	< 1.00
Thallium	2021-12	ug/L															< 1.00	< 1.00
Thallium	2022-03	ug/L	**2.56**	**3.16**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Thallium	2022-06	ug/L															< 1.00	< 1.00
Thallium	2022-08	ug/L			< 1.00					< 1.00	< 1.00	< 1.00					< 1.00	< 1.00
Thallium	2022-09	ug/L	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00				< 1.00	**0.777 J**	< 1.00	< 1.00		
Thallium	2022-12	ug/L															< 1.00	< 1.00
Thallium	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Thallium	2023-08	ug/L																
Thallium	2023-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00		< 1.00		< 1.00
Thallium	2024-01	ug/L																
Thallium	2024-06	mg/L						< 0.00100	< 0.00100									
Thallium	2024-06	ug/L			< 1.00							< 1.00	< 1.00		< 1.00		< 1.00	< 1.00
Thallium	2024-07	ug/L	< 1.00			< 1.00	< 1.00							< 1.00		< 1.00		
Thallium	2024-09	ug/L																
Thallium	2024-11	ug/L				< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Thallium	2024-12	ug/L	< 1.00		< 1.00		< 1.00						< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Thallium	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Thallium	2025-10	ug/L			< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1	< 1	< 1	< 1
Thionazin	2014-10	ug/L							< 11.1									
Thionazin	2015-09	ug/L			< 10.5			< 11.2	< 10.8									
Thionazin	2016-11	ug/L			< 11.0			< 11.0	< 11.0									
Thionazin	2017-11	ug/L						< 11.8	< 10.9									
Thionazin	2020-06	ug/L									< 11.5							
Thionazin	2020-11	ug/L											< 11.8	< 10.5				
Thionazin	2021-05	ug/L											< 11.2	< 11.9				
Thionazin	2021-09	ug/L													< 10.5			
Thionazin	2022-03	ug/L											< 11.9	< 10.4				
Thionazin	2022-09	ug/L													< 10.4			
Thionazin	2023-06	ug/L						< 11.6										
Thionazin	2023-11	ug/L																

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Tetrachloroethene	2025-10	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
Thallium	2014-10	ug/L									
Thallium	2014-11	ug/L									
Thallium	2015-05	ug/L									
Thallium	2015-09	ug/L									
Thallium	2016-03	ug/L									
Thallium	2016-04	ug/L									
Thallium	2016-11	ug/L									
Thallium	2017-05	ug/L									
Thallium	2017-11	ug/L									
Thallium	2018-06	ug/L									
Thallium	2018-08	ug/L									
Thallium	2018-10	ug/L									
Thallium	2019-06	ug/L									< 2.00
Thallium	2019-08	ug/L									< 2.00
Thallium	2019-10	ug/L									
Thallium	2019-11	ug/L									< 1.00
Thallium	2020-02	ug/L									< 1.00
Thallium	2020-06	ug/L									< 1.00
Thallium	2020-07	ug/L									
Thallium	2020-08	ug/L									
Thallium	2020-11	ug/L									< 1.00
Thallium	2021-05	ug/L									< 1.00
Thallium	2021-06	ug/L									
Thallium	2021-08	ug/L									
Thallium	2021-09	ug/L	< 1.00	< 1.00							< 1.00
Thallium	2021-12	ug/L	< 1.00	< 1.00							
Thallium	2022-03	ug/L	< 1.00	< 1.00							
Thallium	2022-06	ug/L	< 1.00	< 1.00							
Thallium	2022-08	ug/L	< 1.00	< 1.00		**0.385 J**					
Thallium	2022-09	ug/L			< 1.00		< 1.00	< 1.00			< 1.00
Thallium	2022-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
Thallium	2023-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00
Thallium	2023-08	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			
Thallium	2023-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
Thallium	2024-01	ug/L							< 1.00	< 1.00	
Thallium	2024-06	mg/L					< 0.00100			< 0.00100	
Thallium	2024-06	ug/L	< 1.00	< 1.00				**0.748 J**			< 1.00
Thallium	2024-07	ug/L			< 1.00				< 1.00		
Thallium	2024-09	ug/L							< 1.00	< 1.00	
Thallium	2024-11	ug/L							< 1.00		
Thallium	2024-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00
Thallium	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Thallium	2025-10	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
Thionazin	2014-10	ug/L									
Thionazin	2015-09	ug/L									
Thionazin	2016-11	ug/L									
Thionazin	2017-11	ug/L									
Thionazin	2020-06	ug/L									
Thionazin	2020-11	ug/L									
Thionazin	2021-05	ug/L									
Thionazin	2021-09	ug/L									
Thionazin	2022-03	ug/L									
Thionazin	2022-09	ug/L									
Thionazin	2023-06	ug/L									
Thionazin	2023-11	ug/L		< 10.0							

Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Thionazin	2024-06	ug/L																
Thionazin	2024-07	ug/L																
Thionazin	2025-06	ug/L																
Thionazin	2025-10	ug/L								< 10.9								
Tin	2014-10	mg/L							**0.0754 J**									
Tin	2014-12	mg/L							**0.0903 J**									
Tin	2015-05	ug/L							< 5.00									
Tin	2015-07	mg/L							< 0.100									
Tin	2015-09	ug/L			< 5.00			< 5.00	< 5.00									
Tin	2016-11	ug/L			< 5.00			< 5.00	< 5.00									
Tin	2017-11	ug/L						< 5.00	< 5.00									
Tin	2020-06	ug/L									< 5.00							
Tin	2020-11	ug/L											< 5.00	< 5.00				
Tin	2021-05	ug/L											< 5.00	< 5.00				
Tin	2021-09	ug/L													< 5.00			
Tin	2022-03	ug/L											< 5.00	< 5.00				
Tin	2022-09	ug/L													< 5.00			
Tin	2023-06	ug/L						< 5.00										
Tin	2023-11	ug/L																
Tin	2024-06	ug/L																
Tin	2025-06	ug/L																
Tin	2025-10	ug/L								< 5								
Toluene	2014-10	ug/L							< 1.00	< 1.00								
Toluene	2014-11	ug/L			< 1.00	< 1.00	**0.58 J**	< 1.00			< 1.00	< 1.00						
Toluene	2015-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Toluene	2015-09	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Toluene	2016-03	ug/L						< 1.00	< 1.00									
Toluene	2016-04	ug/L	< 1.00		< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00						
Toluene	2016-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
Toluene	2017-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Toluene	2017-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
Toluene	2018-06	ug/L	< 1.00	**30**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Toluene	2018-08	ug/L		< 1.00														
Toluene	2018-10	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Toluene	2019-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Toluene	2019-08	ug/L		< 1.00														
Toluene	2019-10	ug/L						< 1.00	< 1.00									
Toluene	2019-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Toluene	2020-02	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
Toluene	2020-06	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
Toluene	2020-07	ug/L	< 1.00	< 1.00												< 1.00		
Toluene	2020-08	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
Toluene	2020-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Toluene	2021-05	ug/L			< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00				
Toluene	2021-06	ug/L	< 1.00				< 1.00								< 1.00	< 1.00		
Toluene	2021-08	ug/L													< 1.00			
Toluene	2021-09	ug/L	< 1.00	**7.58 J**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Toluene	2021-12	ug/L															< 1.00	< 1.00
Toluene	2022-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Toluene	2022-06	ug/L															< 1.00	< 1.00
Toluene	2022-08	ug/L			< 1.00					< 1.00	< 1.00	< 1.00					< 1.00	< 1.00
Toluene	2022-09	ug/L	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00				< 1.00	< 1.00	< 1.00	< 1.00		
Toluene	2022-12	ug/L															< 1.00	< 1.00
Toluene	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Toluene	2023-08	ug/L																
Toluene	2023-11	ug/L	< 1.00		< 1.00	**1.42**	**1.2**	**2.09**	**0.875 J**	**2**		**2.86**	< 1.00	< 1.00		< 1.00		< 1.00

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Thionazin	2024-06	ug/L		< 10.4				< 10.0			
Thionazin	2024-07	ug/L					< 12.5				
Thionazin	2025-06	ug/L				< 10.9	< 10.6	< 10.4			
Thionazin	2025-10	ug/L								< 10.2	
Tin	2014-10	mg/L									
Tin	2014-12	mg/L									
Tin	2015-05	ug/L									
Tin	2015-07	mg/L									
Tin	2015-09	ug/L									
Tin	2016-11	ug/L									
Tin	2017-11	ug/L									
Tin	2020-06	ug/L									
Tin	2020-11	ug/L									
Tin	2021-05	ug/L									
Tin	2021-09	ug/L									
Tin	2022-03	ug/L									
Tin	2022-09	ug/L									
Tin	2023-06	ug/L									
Tin	2023-11	ug/L		< 5.00							
Tin	2024-06	ug/L		< 5.00				**3.28 J**			
Tin	2025-06	ug/L				< 5.00	< 5.00	< 5.00			
Tin	2025-10	ug/L								< 5	
Toluene	2014-10	ug/L									
Toluene	2014-11	ug/L									
Toluene	2015-05	ug/L									
Toluene	2015-09	ug/L									
Toluene	2016-03	ug/L									
Toluene	2016-04	ug/L									
Toluene	2016-11	ug/L									
Toluene	2017-05	ug/L									
Toluene	2017-11	ug/L									
Toluene	2018-06	ug/L									
Toluene	2018-08	ug/L									
Toluene	2018-10	ug/L									
Toluene	2019-06	ug/L									< 1.00
Toluene	2019-08	ug/L									< 1.00
Toluene	2019-10	ug/L									
Toluene	2019-11	ug/L									< 1.00
Toluene	2020-02	ug/L									< 1.00
Toluene	2020-06	ug/L									< 1.00
Toluene	2020-07	ug/L									
Toluene	2020-08	ug/L									
Toluene	2020-11	ug/L									< 1.00
Toluene	2021-05	ug/L									< 1.00
Toluene	2021-06	ug/L									
Toluene	2021-08	ug/L									
Toluene	2021-09	ug/L	< 1.00	< 1.00							< 1.00
Toluene	2021-12	ug/L	< 1.00	< 1.00							
Toluene	2022-03	ug/L	< 1.00	< 1.00							
Toluene	2022-06	ug/L	< 1.00	< 1.00							
Toluene	2022-08	ug/L	< 1.00	< 1.00		< 1.00					
Toluene	2022-09	ug/L			< 1.00		< 1.00	< 1.00			< 1.00
Toluene	2022-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
Toluene	2023-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00
Toluene	2023-08	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			
Toluene	2023-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	

Table 14

Winneshiek County Area Solid Waste Agency | **Analytical Data Summary - Shallow Groundwater Appendix II**

Permit No. 57-SDP-01-74P | **2025 Annual Water Quality Report**

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Toluene	2024-01	ug/L				< 1.00	< 1.00					< 1.00						
Toluene	2024-06	ug/L			< 1.00			< 1.00	< 1.00			< 1.00	< 1.00		< 1.00		< 1.00	< 1.00
Toluene	2024-07	ug/L	< 1.00			< 1.00 J	< 1.00 J							< 1.00 J		< 1.00		
Toluene	2024-09	ug/L																
Toluene	2024-11	ug/L				< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Toluene	2024-12	ug/L	< 1.00		< 1.00		< 1.00						< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Toluene	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Toluene	2025-10	ug/L			< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1 J	< 1	< 1	< 1	< 1	< 1
Total Suspended Solids	2014-10	mg/L							**2.13**	< 1.88								
Total Suspended Solids	2014-11	mg/L			**2.17 J**	**1.5 J**	**9.17**	**4.83**			< 1.88	< 1.88						
Total Suspended Solids	2015-05	mg/L	**84.5**		< 1.88	< 1.88	**7.67**	< 1.88	**6.83**	< 1.76	< 1.88	< 1.88						
Total Suspended Solids	2015-07	mg/L	**1.63 J**						**15.5**									
Total Suspended Solids	2015-09	mg/L			< 5.00	**1.38 J**	**5.63**	< 1.88	**6**	< 1.88								
Total Suspended Solids	2015-12	mg/L			**3.38**				**37**									
Total Suspended Solids	2016-03	mg/L						< 1.88	**14.4**									
Total Suspended Solids	2016-04	mg/L	**5.75**		< 1.88	**2.13**	**6.5**			**0.75 J**	< 1.88	< 1.88						
Total Suspended Solids	2016-11	mg/L	**1.5 J**		**0.875 J**	**2.13**	**3.25**	< 1.88	< 1.88	**0.875 J**		**1.63 J**						
Total Suspended Solids	2017-05	mg/L	**3 J**		**1.75 J**	**1.75 J**	**2**	**2.88**	< 1.88	**1.13 J**	< 1.88	**0.625 J**						
Total Suspended Solids	2017-11	mg/L	**1.38 J**		**6.87**	**1 J**	**5.63**	**1.88**	**1.38 J**	**0.75 J**		**1.13 J**						
Total Suspended Solids	2018-06	mg/L	**3.33 J**	**20**	< 1.88	< 3.00	**1.38 J**	**2.5**	**5.37**	**1.25 J**	< 2.61	< 1.88						
Total Suspended Solids	2018-08	mg/L		**72**														
Total Suspended Solids	2018-10	mg/L	**5.5**	**23.1**	**2.88**	**1.38 J**	**11**	**2.75**	**1 J**	**2.5**	**1.63 J**	**3.13**						
Total Suspended Solids	2019-06	mg/L	**3.63**	**1.13 J**	< 1.88	**0.875 J**	**3.63**	< 1.88	**1.25 J**	< 1.88	< 1.88	**4.13**						
Total Suspended Solids	2019-08	mg/L		**1.5 J**							< 1.88							
Total Suspended Solids	2019-10	mg/L						**0.75 J**	< 1.88									
Total Suspended Solids	2019-11	mg/L	**3.25**	**4.62**	< 1.88	**1.25 J**	**4.13**			**2.63**	**1.88**	**0.875 J**	**3.25 J**	**9**	**47**	**1.88**		
Total Suspended Solids	2020-02	mg/L							**0.875 J**	< 1.88		< 1.88	**5**	**2.63**	**52**	**4.5**		
Total Suspended Solids	2020-06	mg/L			**1.25 J**	< 1.88	**9.5**	**0.75 J**	**1.25 J**	**2.5**	< 1.88	**0.75 J**	**6.25**	**19**	**5.25**			
Total Suspended Solids	2020-07	mg/L	**4.25**	**22.8**												**3.13**		
Total Suspended Solids	2020-08	mg/L											**10.4**	**10.4**	**74**	**1.63 J**		
Total Suspended Solids	2020-11	mg/L	**1.38 J**	**4700**	< 5.00	< 1.88	**3.38**	< 1.88	**0.75 J**	**1 J**	**1.13 J**	< 1.88	**4.8**	**7.25**	**8.75**	**1.25 J**		
Total Suspended Solids	2021-02	mg/L								**0.875 J**								
Total Suspended Solids	2021-05	mg/L			**1.5 J**	**0.875 J**		**1 J**	< 1.88	< 1.88	**0.875 J**	< 1.88	**5.38**	**1.88**				
Total Suspended Solids	2021-06	mg/L	**1.88**				**4.13**								**50.3**	**2.75**		
Total Suspended Solids	2021-08	mg/L					**3.75**								**29.9**			
Total Suspended Solids	2021-09	mg/L	**2.75**	**117**	**0.75 J**	**0.75 J**	**3.13**	**1.38 J**	**1.13 J**	**1 J**		< 1.88	**7.5**	**1.63 J**	**8.33**	**2**	**159**	**8.63**
Total Suspended Solids	2021-12	mg/L															**45.6**	**14.3**
Total Suspended Solids	2022-03	mg/L	**13.3**	**74**	< 1.88	**0.75 J**	**14.3**	< 5.00	< 5.00	< 1.88		**1.38 J**	**4.33 J**	< 1.88	**7.62**	**2.88**	**17.3**	**2.67 J**
Total Suspended Solids	2022-06	mg/L					**5.88**										**31.3**	**0.875 J**
Total Suspended Solids	2022-08	mg/L			< 1.88					**1.88**	< 1.88	**1.13 J**					**1 J**	< 1.88
Total Suspended Solids	2022-09	mg/L	**3.25**	**2.63**		< 1.88	**3.25**	**1.63 J**	< 1.88				**14.3**	**5**	**14.8**	< 6.52		
Total Suspended Solids	2022-12	mg/L															**4.88**	**1.13 J**
Total Suspended Solids	2023-06	mg/L	**2.88**		< 1.88	**1.5 J**	**2.63**	**1.38 J**	**0.75 J**	< 1.88	**1.13 J**	< 1.88	**3.87**	**6.07**	**4.5**	**2.5**	**26.5**	**9.12**
Total Suspended Solids	2023-08	mg/L								**5.13**								
Total Suspended Solids	2023-11	mg/L	**2**		**276**	**1.38 J**	**2.88**	**8.5**	**1.75 J**	**3.13**		< 1.88	**4**	**1.25 J**		**2.25**		**3.5**
Total Suspended Solids	2024-01	mg/L				**1.75 J**			**2.13**			< 1.88						
Total Suspended Solids	2024-06	mg/L			< 1.88			**2.25**	< 1.88			< 1.88	**7**		**59**		**4.62**	**3.13**
Total Suspended Solids	2024-07	mg/L	**1.5 J**			< 1.88 J	**2.38 J**							**2.25 J**		< 1.88		
Total Suspended Solids	2024-08	mg/L							< 1.88						**52**			
Total Suspended Solids	2024-09	mg/L																
Total Suspended Solids	2024-11	mg/L				**2.63**		**2.45**	< 1.94	< 2.08	< 2.00	< 2.00						
Total Suspended Solids	2024-12	mg/L	< 5.00		**3.86**		**5**						**13.7**	< 5.00	**43**	**6**	**18**	**3**
Total Suspended Solids	2025-06	mg/L	**5.33**	**4.33 J**	**2.13**	< 1.88	**3.87**	**2.5**	**1.38 J**	**2**		< 1.88	**2.25**	< 1.88	**53**	**11.6**	**6.5**	**6.25**
Total Suspended Solids	2025-10	mg/L			**3.38**	< 1.88	**5.17**	**2.75**	**16.6**	< 1.9		**1.88**	**7.25**	**3.25**	**62**	**3.13**	**11.3**	< 1.88
Toxaphene	2014-10	ug/L							< 2.00									
Toxaphene	2015-09	ug/L			< 2.27			< 2.04	< 2.22									

Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Toluene	2024-01	ug/L							< 1.00	< 1.00	
Toluene	2024-06	ug/L	< 1.00	< 1.00			< 1.00	< 1.00		< 1.00	< 1.00
Toluene	2024-07	ug/L			< 1.00 J				< 1.00 J		
Toluene	2024-09	ug/L							< 1.00	< 1.00	
Toluene	2024-11	ug/L							< 1.00		
Toluene	2024-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00
Toluene	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Toluene	2025-10	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
Total Suspended Solids	2014-10	mg/L									
Total Suspended Solids	2014-11	mg/L									
Total Suspended Solids	2015-05	mg/L									
Total Suspended Solids	2015-07	mg/L									
Total Suspended Solids	2015-09	mg/L									
Total Suspended Solids	2015-12	mg/L									
Total Suspended Solids	2016-03	mg/L									
Total Suspended Solids	2016-04	mg/L									
Total Suspended Solids	2016-11	mg/L									
Total Suspended Solids	2017-05	mg/L									
Total Suspended Solids	2017-11	mg/L									
Total Suspended Solids	2018-06	mg/L									
Total Suspended Solids	2018-08	mg/L									
Total Suspended Solids	2018-10	mg/L									
Total Suspended Solids	2019-06	mg/L									**1.63 J**
Total Suspended Solids	2019-08	mg/L									**1.25 J**
Total Suspended Solids	2019-10	mg/L									
Total Suspended Solids	2019-11	mg/L									**1.63 J**
Total Suspended Solids	2020-02	mg/L									**3.25**
Total Suspended Solids	2020-06	mg/L									**1.63 J**
Total Suspended Solids	2020-07	mg/L									
Total Suspended Solids	2020-08	mg/L									
Total Suspended Solids	2020-11	mg/L									**2.63**
Total Suspended Solids	2021-02	mg/L									**1.88**
Total Suspended Solids	2021-05	mg/L									**27.6**
Total Suspended Solids	2021-06	mg/L									
Total Suspended Solids	2021-08	mg/L									
Total Suspended Solids	2021-09	mg/L	**54.6**	**81.5**							**3.13**
Total Suspended Solids	2021-12	mg/L	**45.2**	**33**							
Total Suspended Solids	2022-03	mg/L	**3.67 J**	**12.3**							
Total Suspended Solids	2022-06	mg/L	**5.63**	**21.4**							
Total Suspended Solids	2022-08	mg/L	**0.75 J**	**47.7**		**6.25**					
Total Suspended Solids	2022-09	mg/L			**4.38**		**31.5**	**8**			**2**
Total Suspended Solids	2022-12	mg/L	**13.3**	**24.5**	**3.13**	**13.3**	**26**	**2.88**			
Total Suspended Solids	2023-06	mg/L	**43.7**	**6.75**	**4.13**	**18.6**	**30.3**	**1.13 J**			< 5.00
Total Suspended Solids	2023-08	mg/L			**3.63**	**7**	**39**	**1.5 J**			
Total Suspended Solids	2023-11	mg/L	**52**	**8.25**	**1.5 J**	**8**	**37**	**0.875 J**	**2.5**	**11.5**	
Total Suspended Solids	2024-01	mg/L			**1.75 J**				**1.13 J**	**36.1**	
Total Suspended Solids	2024-06	mg/L	**14.3**	**7.13**			**22**	**1.88**		**10.3**	**1.75 J**
Total Suspended Solids	2024-07	mg/L			**2.63 J**				< 1.88 J		
Total Suspended Solids	2024-08	mg/L	**34.6**				**28.5**				
Total Suspended Solids	2024-09	mg/L							**2.63**	**26.3**	
Total Suspended Solids	2024-11	mg/L							**3.25**		
Total Suspended Solids	2024-12	mg/L	**116**	**22.3**	**6**	**14.1**	**29**	**7.67**		**19.6**	< 2.07
Total Suspended Solids	2025-06	mg/L	**27.5**	**9.63**	**6.63**	**6.25**	**21**	< 1.88	**1.88**	**25.5**	**1.63 J**
Total Suspended Solids	2025-10	mg/L	**62**	**68.5**	< 1.88	< 2.31	**16.7**	< 1.88	< 1.88	**4.25**	
Toxaphene	2014-10	ug/L									
Toxaphene	2015-09	ug/L									

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Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Toxaphene	2016-11	ug/L			< 2.20			< 2.20	< 2.27									
Toxaphene	2017-11	ug/L						< 2.17	< 2.15									
Toxaphene	2020-06	ug/L									< 2.11							
Toxaphene	2020-11	ug/L											< 2.41	< 2.44				
Toxaphene	2021-05	ug/L											< 2.22	< 2.27				
Toxaphene	2021-09	ug/L													< 2.27			
Toxaphene	2022-03	ug/L											< 2.08	< 2.27				
Toxaphene	2022-09	ug/L													< 2.08			
Toxaphene	2023-06	ug/L						< 2.00										
Toxaphene	2023-11	ug/L																
Toxaphene	2024-06	ug/L																
Toxaphene	2024-07	ug/L																
Toxaphene	2025-06	ug/L																
Toxaphene	2025-10	ug/L								< 1.86								
trans-1,2-Dichloroethene	2014-10	ug/L							< 1.00	< 1.00								
trans-1,2-Dichloroethene	2014-11	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00						
trans-1,2-Dichloroethene	2015-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
trans-1,2-Dichloroethene	2015-09	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
trans-1,2-Dichloroethene	2016-03	ug/L						< 1.00	< 1.00									
trans-1,2-Dichloroethene	2016-04	ug/L	< 1.00		< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00						
trans-1,2-Dichloroethene	2016-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
trans-1,2-Dichloroethene	2017-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
trans-1,2-Dichloroethene	2017-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
trans-1,2-Dichloroethene	2018-06	ug/L	< 1.00	**0.971 J**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
trans-1,2-Dichloroethene	2018-08	ug/L		< 1.00														
trans-1,2-Dichloroethene	2018-10	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
trans-1,2-Dichloroethene	2019-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
trans-1,2-Dichloroethene	2019-08	ug/L		< 1.00														
trans-1,2-Dichloroethene	2019-10	ug/L						< 1.00	< 1.00									
trans-1,2-Dichloroethene	2019-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
trans-1,2-Dichloroethene	2020-02	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
trans-1,2-Dichloroethene	2020-06	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
trans-1,2-Dichloroethene	2020-07	ug/L	< 1.00	< 1.00												< 1.00		
trans-1,2-Dichloroethene	2020-08	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
trans-1,2-Dichloroethene	2020-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
trans-1,2-Dichloroethene	2021-05	ug/L			< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00				
trans-1,2-Dichloroethene	2021-06	ug/L	< 1.00				< 1.00								< 1.00	< 1.00		
trans-1,2-Dichloroethene	2021-08	ug/L													< 1.00			
trans-1,2-Dichloroethene	2021-09	ug/L	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2021-12	ug/L															< 1.00	< 1.00
trans-1,2-Dichloroethene	2022-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2022-06	ug/L															< 1.00	< 1.00
trans-1,2-Dichloroethene	2022-08	ug/L			< 1.00					< 1.00	< 1.00	< 1.00					< 1.00	< 1.00
trans-1,2-Dichloroethene	2022-09	ug/L	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00				< 1.00	< 1.00	< 1.00	< 1.00		
trans-1,2-Dichloroethene	2022-12	ug/L															< 1.00	< 1.00
trans-1,2-Dichloroethene	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2023-08	ug/L																
trans-1,2-Dichloroethene	2023-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00		< 1.00		< 1.00
trans-1,2-Dichloroethene	2024-01	ug/L																
trans-1,2-Dichloroethene	2024-06	ug/L			< 1.00			< 1.00	< 1.00			< 1.00	< 1.00		< 1.00		< 1.00	< 1.00
trans-1,2-Dichloroethene	2024-07	ug/L	< 1.00			< 1.00 J	< 1.00 J							< 1.00 J		< 1.00		
trans-1,2-Dichloroethene	2024-09	ug/L																
trans-1,2-Dichloroethene	2024-11	ug/L				< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
trans-1,2-Dichloroethene	2024-12	ug/L	< 1.00		< 1.00		< 1.00						< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2025-10	ug/L			< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1 J	< 1	< 1	< 1	< 1	< 1

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Toxaphene	2016-11	ug/L									
Toxaphene	2017-11	ug/L									
Toxaphene	2020-06	ug/L									
Toxaphene	2020-11	ug/L									
Toxaphene	2021-05	ug/L									
Toxaphene	2021-09	ug/L									
Toxaphene	2022-03	ug/L									
Toxaphene	2022-09	ug/L									
Toxaphene	2023-06	ug/L									
Toxaphene	2023-11	ug/L		< 1.89							
Toxaphene	2024-06	ug/L		< 1.82				< 1.82			
Toxaphene	2024-07	ug/L					< 1.75				
Toxaphene	2025-06	ug/L				< 1.82	< 1.82	< 1.81			
Toxaphene	2025-10	ug/L								< 1.87	
trans-1,2-Dichloroethene	2014-10	ug/L									
trans-1,2-Dichloroethene	2014-11	ug/L									
trans-1,2-Dichloroethene	2015-05	ug/L									
trans-1,2-Dichloroethene	2015-09	ug/L									
trans-1,2-Dichloroethene	2016-03	ug/L									
trans-1,2-Dichloroethene	2016-04	ug/L									
trans-1,2-Dichloroethene	2016-11	ug/L									
trans-1,2-Dichloroethene	2017-05	ug/L									
trans-1,2-Dichloroethene	2017-11	ug/L									
trans-1,2-Dichloroethene	2018-06	ug/L									
trans-1,2-Dichloroethene	2018-08	ug/L									
trans-1,2-Dichloroethene	2018-10	ug/L									
trans-1,2-Dichloroethene	2019-06	ug/L									< 1.00
trans-1,2-Dichloroethene	2019-08	ug/L									< 1.00
trans-1,2-Dichloroethene	2019-10	ug/L									
trans-1,2-Dichloroethene	2019-11	ug/L									< 1.00
trans-1,2-Dichloroethene	2020-02	ug/L									< 1.00
trans-1,2-Dichloroethene	2020-06	ug/L									< 1.00
trans-1,2-Dichloroethene	2020-07	ug/L									
trans-1,2-Dichloroethene	2020-08	ug/L									
trans-1,2-Dichloroethene	2020-11	ug/L									< 1.00
trans-1,2-Dichloroethene	2021-05	ug/L									< 1.00
trans-1,2-Dichloroethene	2021-06	ug/L									
trans-1,2-Dichloroethene	2021-08	ug/L									
trans-1,2-Dichloroethene	2021-09	ug/L	< 1.00	< 1.00							< 1.00
trans-1,2-Dichloroethene	2021-12	ug/L	< 1.00	< 1.00							
trans-1,2-Dichloroethene	2022-03	ug/L	< 1.00	< 1.00							
trans-1,2-Dichloroethene	2022-06	ug/L	< 1.00	< 1.00							
trans-1,2-Dichloroethene	2022-08	ug/L	< 1.00	< 1.00		< 1.00					
trans-1,2-Dichloroethene	2022-09	ug/L			< 1.00		< 1.00	< 1.00			< 1.00
trans-1,2-Dichloroethene	2022-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
trans-1,2-Dichloroethene	2023-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00
trans-1,2-Dichloroethene	2023-08	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			
trans-1,2-Dichloroethene	2023-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
trans-1,2-Dichloroethene	2024-01	ug/L							< 1.00	< 1.00	
trans-1,2-Dichloroethene	2024-06	ug/L	< 1.00	< 1.00			< 1.00	< 1.00		< 1.00	< 1.00
trans-1,2-Dichloroethene	2024-07	ug/L			< 1.00 J				< 1.00 J		
trans-1,2-Dichloroethene	2024-09	ug/L							< 1.00	< 1.00	
trans-1,2-Dichloroethene	2024-11	ug/L							< 1.00		
trans-1,2-Dichloroethene	2024-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00
trans-1,2-Dichloroethene	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2025-10	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
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Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
trans-1,3-Dichloropropene	2014-10	ug/L							< 5.00	< 5.00								
trans-1,3-Dichloropropene	2014-11	ug/L			< 5.00	< 5.00	< 5.00	< 5.00			< 5.00	< 5.00						
trans-1,3-Dichloropropene	2015-05	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
trans-1,3-Dichloropropene	2015-09	ug/L			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00								
trans-1,3-Dichloropropene	2016-03	ug/L						< 5.00	< 5.00									
trans-1,3-Dichloropropene	2016-04	ug/L	< 5.00		< 5.00	< 5.00	< 5.00			< 5.00	< 5.00	< 5.00						
trans-1,3-Dichloropropene	2016-11	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00						
trans-1,3-Dichloropropene	2017-05	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
trans-1,3-Dichloropropene	2017-11	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00						
trans-1,3-Dichloropropene	2018-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
trans-1,3-Dichloropropene	2018-08	ug/L		< 5.00														
trans-1,3-Dichloropropene	2018-10	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
trans-1,3-Dichloropropene	2019-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
trans-1,3-Dichloropropene	2019-08	ug/L		< 5.00														
trans-1,3-Dichloropropene	2019-10	ug/L						< 5.00	< 5.00									
trans-1,3-Dichloropropene	2019-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
trans-1,3-Dichloropropene	2020-02	ug/L											< 5.00	< 5.00	< 5.00	< 5.00		
trans-1,3-Dichloropropene	2020-06	ug/L			< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			
trans-1,3-Dichloropropene	2020-07	ug/L	< 5.00	< 5.00												< 5.00		
trans-1,3-Dichloropropene	2020-08	ug/L											< 5.00	< 5.00	< 5.00	< 5.00		
trans-1,3-Dichloropropene	2020-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		
trans-1,3-Dichloropropene	2021-05	ug/L			< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00				
trans-1,3-Dichloropropene	2021-06	ug/L	< 5.00				< 5.00								< 5.00	< 5.00		
trans-1,3-Dichloropropene	2021-08	ug/L													< 5.00			
trans-1,3-Dichloropropene	2021-09	ug/L	< 5.00	< 50.0	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2021-12	ug/L															< 5.00	< 5.00
trans-1,3-Dichloropropene	2022-03	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2022-06	ug/L															< 5.00	< 5.00
trans-1,3-Dichloropropene	2022-08	ug/L			< 5.00					< 5.00	< 5.00	< 5.00					< 5.00	< 5.00
trans-1,3-Dichloropropene	2022-09	ug/L	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00				< 5.00	< 5.00	< 5.00	< 5.00		
trans-1,3-Dichloropropene	2022-12	ug/L															< 5.00	< 5.00
trans-1,3-Dichloropropene	2023-06	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2023-08	ug/L																
trans-1,3-Dichloropropene	2023-11	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00		< 5.00		< 5.00
trans-1,3-Dichloropropene	2024-01	ug/L																
trans-1,3-Dichloropropene	2024-06	ug/L			< 5.00			< 5.00	< 5.00			< 5.00	< 5.00		< 5.00		< 5.00	< 5.00
trans-1,3-Dichloropropene	2024-07	ug/L	< 5.00			< 5.00 J	< 5.00 J							< 5.00 J		< 5.00		
trans-1,3-Dichloropropene	2024-09	ug/L																
trans-1,3-Dichloropropene	2024-11	ug/L				< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
trans-1,3-Dichloropropene	2024-12	ug/L	< 5.00		< 5.00		< 5.00						< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2025-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2025-10	ug/L			< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5 J	< 5	< 5	< 5	< 5	< 5
trans-1,4-Dichloro-2-butene	2014-10	ug/L							< 10.0	< 10.0								
trans-1,4-Dichloro-2-butene	2014-11	ug/L			< 10.0	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0						
trans-1,4-Dichloro-2-butene	2015-05	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
trans-1,4-Dichloro-2-butene	2015-09	ug/L			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
trans-1,4-Dichloro-2-butene	2016-03	ug/L						< 10.0	< 10.0									
trans-1,4-Dichloro-2-butene	2016-04	ug/L	< 10.0		< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0						
trans-1,4-Dichloro-2-butene	2016-11	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0						
trans-1,4-Dichloro-2-butene	2017-05	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
trans-1,4-Dichloro-2-butene	2017-11	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0						
trans-1,4-Dichloro-2-butene	2018-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
trans-1,4-Dichloro-2-butene	2018-08	ug/L		< 10.0														
trans-1,4-Dichloro-2-butene	2018-10	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
trans-1,4-Dichloro-2-butene	2019-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
trans-1,4-Dichloro-2-butene	2019-08	ug/L		< 10.0														

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
trans-1,3-Dichloropropene	2014-10	ug/L									
trans-1,3-Dichloropropene	2014-11	ug/L									
trans-1,3-Dichloropropene	2015-05	ug/L									
trans-1,3-Dichloropropene	2015-09	ug/L									
trans-1,3-Dichloropropene	2016-03	ug/L									
trans-1,3-Dichloropropene	2016-04	ug/L									
trans-1,3-Dichloropropene	2016-11	ug/L									
trans-1,3-Dichloropropene	2017-05	ug/L									
trans-1,3-Dichloropropene	2017-11	ug/L									
trans-1,3-Dichloropropene	2018-06	ug/L									
trans-1,3-Dichloropropene	2018-08	ug/L									
trans-1,3-Dichloropropene	2018-10	ug/L									
trans-1,3-Dichloropropene	2019-06	ug/L									< 5.00
trans-1,3-Dichloropropene	2019-08	ug/L									< 5.00
trans-1,3-Dichloropropene	2019-10	ug/L									
trans-1,3-Dichloropropene	2019-11	ug/L									< 5.00
trans-1,3-Dichloropropene	2020-02	ug/L									< 5.00
trans-1,3-Dichloropropene	2020-06	ug/L									< 5.00
trans-1,3-Dichloropropene	2020-07	ug/L									
trans-1,3-Dichloropropene	2020-08	ug/L									
trans-1,3-Dichloropropene	2020-11	ug/L									< 5.00
trans-1,3-Dichloropropene	2021-05	ug/L									< 5.00
trans-1,3-Dichloropropene	2021-06	ug/L									
trans-1,3-Dichloropropene	2021-08	ug/L									
trans-1,3-Dichloropropene	2021-09	ug/L	< 5.00	< 5.00							< 5.00
trans-1,3-Dichloropropene	2021-12	ug/L	< 5.00	< 5.00							
trans-1,3-Dichloropropene	2022-03	ug/L	< 5.00	< 5.00							
trans-1,3-Dichloropropene	2022-06	ug/L	< 5.00	< 5.00							
trans-1,3-Dichloropropene	2022-08	ug/L	< 5.00	< 5.00		< 5.00					
trans-1,3-Dichloropropene	2022-09	ug/L			< 5.00		< 5.00	< 5.00			< 5.00
trans-1,3-Dichloropropene	2022-12	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			
trans-1,3-Dichloropropene	2023-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			< 5.00
trans-1,3-Dichloropropene	2023-08	ug/L			< 5.00	< 5.00	< 5.00	< 5.00			
trans-1,3-Dichloropropene	2023-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	
trans-1,3-Dichloropropene	2024-01	ug/L							< 5.00	< 5.00	
trans-1,3-Dichloropropene	2024-06	ug/L	< 5.00	< 5.00			< 5.00	< 5.00		< 5.00	< 5.00
trans-1,3-Dichloropropene	2024-07	ug/L			< 5.00 J				< 5.00 J		
trans-1,3-Dichloropropene	2024-09	ug/L							< 5.00	< 5.00	
trans-1,3-Dichloropropene	2024-11	ug/L							< 5.00		
trans-1,3-Dichloropropene	2024-12	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00
trans-1,3-Dichloropropene	2025-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2025-10	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	
trans-1,4-Dichloro-2-butene	2014-10	ug/L									
trans-1,4-Dichloro-2-butene	2014-11	ug/L									
trans-1,4-Dichloro-2-butene	2015-05	ug/L									
trans-1,4-Dichloro-2-butene	2015-09	ug/L									
trans-1,4-Dichloro-2-butene	2016-03	ug/L									
trans-1,4-Dichloro-2-butene	2016-04	ug/L									
trans-1,4-Dichloro-2-butene	2016-11	ug/L									
trans-1,4-Dichloro-2-butene	2017-05	ug/L									
trans-1,4-Dichloro-2-butene	2017-11	ug/L									
trans-1,4-Dichloro-2-butene	2018-06	ug/L									
trans-1,4-Dichloro-2-butene	2018-08	ug/L									
trans-1,4-Dichloro-2-butene	2018-10	ug/L									
trans-1,4-Dichloro-2-butene	2019-06	ug/L									< 10.0
trans-1,4-Dichloro-2-butene	2019-08	ug/L									< 10.0

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
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Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
trans-1,4-Dichloro-2-butene	2019-10	ug/L						< 10.0	< 10.0									
trans-1,4-Dichloro-2-butene	2019-11	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
trans-1,4-Dichloro-2-butene	2020-02	ug/L											< 10.0	< 10.0	< 10.0	< 10.0		
trans-1,4-Dichloro-2-butene	2020-06	ug/L			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0			
trans-1,4-Dichloro-2-butene	2020-07	ug/L	< 10.0	< 10.0												< 10.0		
trans-1,4-Dichloro-2-butene	2020-08	ug/L											< 10.0	< 10.0	< 10.0	< 10.0		
trans-1,4-Dichloro-2-butene	2020-11	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
trans-1,4-Dichloro-2-butene	2021-05	ug/L			< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0				
trans-1,4-Dichloro-2-butene	2021-06	ug/L	< 10.0				< 10.0								< 10.0	< 10.0		
trans-1,4-Dichloro-2-butene	2021-08	ug/L													< 10.0			
trans-1,4-Dichloro-2-butene	2021-09	ug/L	< 10.0	< 100	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2021-12	ug/L															< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2022-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2022-06	ug/L															< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2022-08	ug/L			< 10.0					< 10.0	< 10.0	< 10.0					< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2022-09	ug/L	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0				< 10.0	< 10.0	< 10.0	< 10.0		
trans-1,4-Dichloro-2-butene	2022-12	ug/L															< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2023-06	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2023-08	ug/L																
trans-1,4-Dichloro-2-butene	2023-11	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0		< 10.0		< 10.0
trans-1,4-Dichloro-2-butene	2024-01	ug/L																
trans-1,4-Dichloro-2-butene	2024-06	ug/L			< 10.0			< 10.0	< 10.0			< 10.0	< 10.0		< 10.0		< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2024-07	ug/L	< 10.0			< 10.0 J	< 10.0 J							< 10.0 J		< 10.0		
trans-1,4-Dichloro-2-butene	2024-09	ug/L																
trans-1,4-Dichloro-2-butene	2024-11	ug/L				< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
trans-1,4-Dichloro-2-butene	2024-12	ug/L	< 10.0		< 10.0		< 10.0						< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2025-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2025-10	ug/L			< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10 J	< 10	< 10	< 10	< 10	< 10
Trichloroethene	2014-10	ug/L							< 1.00	< 1.00								
Trichloroethene	2014-11	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00						
Trichloroethene	2015-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Trichloroethene	2015-09	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Trichloroethene	2016-03	ug/L						< 1.00	< 1.00									
Trichloroethene	2016-04	ug/L	< 1.00		< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00						
Trichloroethene	2016-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
Trichloroethene	2017-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Trichloroethene	2017-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
Trichloroethene	2018-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Trichloroethene	2018-08	ug/L		< 1.00														
Trichloroethene	2018-10	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Trichloroethene	2019-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Trichloroethene	2019-08	ug/L		< 1.00														
Trichloroethene	2019-10	ug/L						< 1.00	< 1.00									
Trichloroethene	2019-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Trichloroethene	2020-02	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
Trichloroethene	2020-06	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
Trichloroethene	2020-07	ug/L	< 1.00	< 1.00												< 1.00		
Trichloroethene	2020-08	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
Trichloroethene	2020-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Trichloroethene	2021-05	ug/L			< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00				
Trichloroethene	2021-06	ug/L	< 1.00				< 1.00								< 1.00	< 1.00		
Trichloroethene	2021-08	ug/L													< 1.00			
Trichloroethene	2021-09	ug/L	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Trichloroethene	2021-12	ug/L															< 1.00	< 1.00
Trichloroethene	2022-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Trichloroethene	2022-06	ug/L															< 1.00	< 1.00

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Table 14
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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
trans-1,4-Dichloro-2-butene	2019-10	ug/L									
trans-1,4-Dichloro-2-butene	2019-11	ug/L									< 10.0
trans-1,4-Dichloro-2-butene	2020-02	ug/L									< 10.0
trans-1,4-Dichloro-2-butene	2020-06	ug/L									< 10.0
trans-1,4-Dichloro-2-butene	2020-07	ug/L									
trans-1,4-Dichloro-2-butene	2020-08	ug/L									
trans-1,4-Dichloro-2-butene	2020-11	ug/L									< 10.0
trans-1,4-Dichloro-2-butene	2021-05	ug/L									< 10.0
trans-1,4-Dichloro-2-butene	2021-06	ug/L									
trans-1,4-Dichloro-2-butene	2021-08	ug/L									
trans-1,4-Dichloro-2-butene	2021-09	ug/L	< 10.0	< 10.0							< 10.0
trans-1,4-Dichloro-2-butene	2021-12	ug/L	< 10.0	< 10.0							
trans-1,4-Dichloro-2-butene	2022-03	ug/L	< 10.0	< 10.0							
trans-1,4-Dichloro-2-butene	2022-06	ug/L	< 10.0	< 10.0							
trans-1,4-Dichloro-2-butene	2022-08	ug/L	< 10.0	< 10.0		< 10.0					
trans-1,4-Dichloro-2-butene	2022-09	ug/L			< 10.0		< 10.0	< 10.0			< 10.0
trans-1,4-Dichloro-2-butene	2022-12	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0			
trans-1,4-Dichloro-2-butene	2023-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0			< 10.0
trans-1,4-Dichloro-2-butene	2023-08	ug/L			< 10.0	< 10.0	< 10.0	< 10.0			
trans-1,4-Dichloro-2-butene	2023-11	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	
trans-1,4-Dichloro-2-butene	2024-01	ug/L							< 10.0	< 10.0	
trans-1,4-Dichloro-2-butene	2024-06	ug/L	< 10.0	< 10.0			< 10.0	< 10.0		< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2024-07	ug/L			< 10.0 J				< 10.0 J		
trans-1,4-Dichloro-2-butene	2024-09	ug/L							< 10.0	< 10.0	
trans-1,4-Dichloro-2-butene	2024-11	ug/L							< 10.0		
trans-1,4-Dichloro-2-butene	2024-12	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2025-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2025-10	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
Trichloroethene	2014-10	ug/L									
Trichloroethene	2014-11	ug/L									
Trichloroethene	2015-05	ug/L									
Trichloroethene	2015-09	ug/L									
Trichloroethene	2016-03	ug/L									
Trichloroethene	2016-04	ug/L									
Trichloroethene	2016-11	ug/L									
Trichloroethene	2017-05	ug/L									
Trichloroethene	2017-11	ug/L									
Trichloroethene	2018-06	ug/L									
Trichloroethene	2018-08	ug/L									
Trichloroethene	2018-10	ug/L									
Trichloroethene	2019-06	ug/L									< 1.00
Trichloroethene	2019-08	ug/L									< 1.00
Trichloroethene	2019-10	ug/L									
Trichloroethene	2019-11	ug/L									< 1.00
Trichloroethene	2020-02	ug/L									< 1.00
Trichloroethene	2020-06	ug/L									< 1.00
Trichloroethene	2020-07	ug/L									
Trichloroethene	2020-08	ug/L									
Trichloroethene	2020-11	ug/L									< 1.00
Trichloroethene	2021-05	ug/L									< 1.00
Trichloroethene	2021-06	ug/L									
Trichloroethene	2021-08	ug/L									
Trichloroethene	2021-09	ug/L	< 1.00	< 1.00							< 1.00
Trichloroethene	2021-12	ug/L	< 1.00	< 1.00							
Trichloroethene	2022-03	ug/L	< 1.00	< 1.00							
Trichloroethene	2022-06	ug/L	< 1.00	< 1.00							

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Trichloroethene	2022-08	ug/L			< 1.00					< 1.00	< 1.00	< 1.00					< 1.00	< 1.00
Trichloroethene	2022-09	ug/L	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00				< 1.00	< 1.00	< 1.00	< 1.00		
Trichloroethene	2022-12	ug/L															< 1.00	< 1.00
Trichloroethene	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Trichloroethene	2023-08	ug/L																
Trichloroethene	2023-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00		< 1.00		< 1.00
Trichloroethene	2024-01	ug/L																
Trichloroethene	2024-06	ug/L			< 1.00			< 1.00	< 1.00			< 1.00	< 1.00		< 1.00		< 1.00	< 1.00
Trichloroethene	2024-07	ug/L	< 1.00			< 1.00 J	< 1.00 J							< 1.00 J		< 1.00		
Trichloroethene	2024-09	ug/L																
Trichloroethene	2024-11	ug/L				< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Trichloroethene	2024-12	ug/L	< 1.00		< 1.00		< 1.00						< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Trichloroethene	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Trichloroethene	2025-10	ug/L			< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1 J	< 1	< 1	< 1	< 1	< 1
Vanadium	2014-10	ug/L							**1.11 J**	**0.727 J**								
Vanadium	2014-11	ug/L			~~**0.51 J**~~	< 5.00	< 5.00	**1.02 J**			**0.923 J**	**0.71 J**						
Vanadium	2015-05	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	**0.695 J**	**0.782 J**	**0.459 J**	**0.759 J**	**0.622 J**						
Vanadium	2015-09	ug/L			**0.542 J**	< 5.00	< 5.00	**0.787 J**	**0.707 J**	**0.666 J**								
Vanadium	2016-03	ug/L						**0.785 J**	**0.709 J**									
Vanadium	2016-04	ug/L	< 5.00		**0.466 J**	< 5.00	< 5.00			**0.429 J**	**0.674 J**	**0.75 J**						
Vanadium	2016-11	ug/L	< 5.00		**0.394 J**	< 5.00	< 5.00	**0.948 J**	**1.06 J**	**0.377 J**		**0.599 J**						
Vanadium	2017-05	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	**1.09 J**	< 5.00	< 5.00	< 5.00						
Vanadium	2017-11	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	**1.07 J**	**1.01 J**	**0.917 J**		< 5.00						
Vanadium	2018-06	ug/L	< 5.00	**0.527 J**	< 5.00	< 5.00	< 5.00	**0.913 J**	**0.99 J**	**0.603 J**	**0.848 J**	**0.763 J**						
Vanadium	2018-08	ug/L		< 5.00														
Vanadium	2018-10	ug/L	< 5.00	< 5.00	**0.973 J**	**0.534 J**	**1.18 J**	**1.23 J**	**1.36 J**	**0.673 J**	**1.3 J**	**1.09 J**						
Vanadium	2019-06	ug/L	**2.19 J**	**2.53 J**	< 5.00	**2.4 J**	**2.78 J**	< 5.00	< 5.00	< 5.00	< 5.00	**3 J**						
Vanadium	2019-08	ug/L		< 5.00														
Vanadium	2019-10	ug/L						**1.23 J**	**0.956 J**									
Vanadium	2019-11	ug/L	< 5.00	< 5.00	**1.04 J**	< 5.00	< 5.00			**0.862 J**	**1.37 J**	**1.32 J**	< 5.00	< 5.00	< 5.00	< 5.00		
Vanadium	2020-02	ug/L											< 5.00	< 5.00	< 5.00	< 5.00		
Vanadium	2020-06	ug/L			< 5.00	< 5.00	< 5.00	**0.892 J**	**1.06 J**	< 5.00	< 5.00	< 5.00	< 5.00	**0.997 J**	< 5.00			
Vanadium	2020-07	ug/L	< 5.00	**1.63 J**												< 5.00		
Vanadium	2020-08	ug/L											< 5.00	< 5.00	**2.91 J**	**1.72 J**		
Vanadium	2020-11	ug/L	< 5.00	**21.7**	< 5.00	< 5.00	< 5.00	**1.06 J**	**1.41 J**	< 5.00	**1.23 J**	**0.948 J**	< 5.00	**0.873 J**	**1.16 J**	< 5.00		
Vanadium	2021-05	ug/L			< 5.00	< 5.00		< 5.00	**1.14 J**	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00				
Vanadium	2021-06	ug/L	< 5.00				< 5.00								< 5.00	< 5.00		
Vanadium	2021-08	ug/L													< 5.00			
Vanadium	2021-09	ug/L	< 5.00	**2.6 J**	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	~~**1.67 J**~~	< 5.00
Vanadium	2021-12	ug/L															**1.3 J**	< 5.00
Vanadium	2022-03	ug/L	**1.33 J**	**4.24 J**	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	**1.21 J**		< 5.00	< 5.00	**1.62 J**	**1.15 J**	< 5.00	< 5.00	< 5.00
Vanadium	2022-06	ug/L															< 5.00	< 5.00
Vanadium	2022-08	ug/L			< 5.00					< 5.00	< 5.00	< 5.00					< 5.00	< 5.00
Vanadium	2022-09	ug/L	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	**1.15 J**				< 5.00	**3.26 J**	**2.48 J**	< 5.00		
Vanadium	2022-12	ug/L															< 5.00	< 5.00
Vanadium	2023-06	ug/L	< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Vanadium	2023-08	ug/L																
Vanadium	2023-11	ug/L	< 5.00		~~**1.53 J**~~	< 5.00	< 5.00	< 5.00	**1.5 J**	< 5.00		< 5.00	< 5.00	< 5.00		< 5.00		< 5.00
Vanadium	2024-01	ug/L																
Vanadium	2024-06	mg/L						< 0.00500	< 0.00500									
Vanadium	2024-06	ug/L			< 5.00							< 5.00	< 5.00		**1.11 J**		< 5.00	< 5.00
Vanadium	2024-07	ug/L	< 5.00			< 5.00	< 5.00							< 5.00		< 5.00		
Vanadium	2024-09	ug/L																
Vanadium	2024-11	ug/L				< 5.00		< 5.00	< 5.00	< 5.00	< 5.00	< 5.00						
Vanadium	2024-12	ug/L	< 5.00		< 5.00		< 5.00						< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Vanadium	2025-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		< 5.00	< 5.00	< 5.00	**2.29 J**	< 5.00	< 5.00	< 5.00

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1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Trichloroethene	2022-08	ug/L	< 1.00	< 1.00		< 1.00					
Trichloroethene	2022-09	ug/L			< 1.00		< 1.00	< 1.00			< 1.00
Trichloroethene	2022-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
Trichloroethene	2023-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00
Trichloroethene	2023-08	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			
Trichloroethene	2023-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
Trichloroethene	2024-01	ug/L							< 1.00	< 1.00	
Trichloroethene	2024-06	ug/L	< 1.00	< 1.00			< 1.00	< 1.00		< 1.00	< 1.00
Trichloroethene	2024-07	ug/L			< 1.00 J				< 1.00 J		
Trichloroethene	2024-09	ug/L							< 1.00	< 1.00	
Trichloroethene	2024-11	ug/L							< 1.00		
Trichloroethene	2024-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00
Trichloroethene	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Trichloroethene	2025-10	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
Vanadium	2014-10	ug/L									
Vanadium	2014-11	ug/L									
Vanadium	2015-05	ug/L									
Vanadium	2015-09	ug/L									
Vanadium	2016-03	ug/L									
Vanadium	2016-04	ug/L									
Vanadium	2016-11	ug/L									
Vanadium	2017-05	ug/L									
Vanadium	2017-11	ug/L									
Vanadium	2018-06	ug/L									
Vanadium	2018-08	ug/L									
Vanadium	2018-10	ug/L									
Vanadium	2019-06	ug/L									**2.61 J**
Vanadium	2019-08	ug/L									< 5.00
Vanadium	2019-10	ug/L									
Vanadium	2019-11	ug/L									< 5.00
Vanadium	2020-02	ug/L									< 5.00
Vanadium	2020-06	ug/L									< 5.00
Vanadium	2020-07	ug/L									
Vanadium	2020-08	ug/L									
Vanadium	2020-11	ug/L									< 5.00
Vanadium	2021-05	ug/L									< 5.00
Vanadium	2021-06	ug/L									
Vanadium	2021-08	ug/L									
Vanadium	2021-09	ug/L	< 5.00	< 5.00							< 5.00
Vanadium	2021-12	ug/L	< 5.00	< 5.00							
Vanadium	2022-03	ug/L	< 5.00	**1.12 J**							
Vanadium	2022-06	ug/L	< 5.00	< 5.00							
Vanadium	2022-08	ug/L	< 5.00	**1.69 J**		< 5.00					
Vanadium	2022-09	ug/L			< 5.00		< 5.00	< 5.00			< 5.00
Vanadium	2022-12	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00			
Vanadium	2023-06	ug/L	< 5.00	**1.91 J**	< 5.00	< 5.00	< 5.00	< 5.00			< 5.00
Vanadium	2023-08	ug/L			< 5.00	< 5.00	< 5.00	< 5.00			
Vanadium	2023-11	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	**1.13 J**	< 5.00	
Vanadium	2024-01	ug/L							< 5.00	**2.14 J**	
Vanadium	2024-06	mg/L					< 0.00500			< 0.00500	
Vanadium	2024-06	ug/L	< 5.00	< 5.00				< 5.00			< 5.00
Vanadium	2024-07	ug/L			< 5.00				< 5.00		
Vanadium	2024-09	ug/L							< 5.00	**1.17 J**	
Vanadium	2024-11	ug/L							< 5.00		
Vanadium	2024-12	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00		**1.35 J**	< 5.00
Vanadium	2025-06	ug/L	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Vanadium	2025-10	ug/L			< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5	< 5	< 5
Vinyl Acetate	2014-10	ug/L							< 10.0	< 10.0								
Vinyl Acetate	2014-11	ug/L			< 10.0	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0						
Vinyl Acetate	2015-05	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
Vinyl Acetate	2015-09	ug/L			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0								
Vinyl Acetate	2016-03	ug/L						< 10.0	< 10.0									
Vinyl Acetate	2016-04	ug/L	< 10.0		< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0						
Vinyl Acetate	2016-11	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0						
Vinyl Acetate	2017-05	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
Vinyl Acetate	2017-11	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0						
Vinyl Acetate	2018-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
Vinyl Acetate	2018-08	ug/L		< 10.0														
Vinyl Acetate	2018-10	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
Vinyl Acetate	2019-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
Vinyl Acetate	2019-08	ug/L		< 10.0														
Vinyl Acetate	2019-10	ug/L						< 10.0	< 10.0									
Vinyl Acetate	2019-11	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Vinyl Acetate	2020-02	ug/L											< 10.0	< 10.0	< 10.0	< 10.0		
Vinyl Acetate	2020-06	ug/L			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0			
Vinyl Acetate	2020-07	ug/L	< 10.0	< 10.0												< 10.0		
Vinyl Acetate	2020-08	ug/L											< 10.0	< 10.0	< 10.0	< 10.0		
Vinyl Acetate	2020-11	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		
Vinyl Acetate	2021-05	ug/L			< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0				
Vinyl Acetate	2021-06	ug/L	< 10.0				< 10.0								< 10.0	< 10.0		
Vinyl Acetate	2021-08	ug/L													< 10.0			
Vinyl Acetate	2021-09	ug/L	< 10.0	< 100	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Vinyl Acetate	2021-12	ug/L															< 10.0	< 10.0
Vinyl Acetate	2022-03	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Vinyl Acetate	2022-06	ug/L															< 10.0	< 10.0
Vinyl Acetate	2022-08	ug/L			< 10.0					< 10.0	< 10.0	< 10.0					< 10.0	< 10.0
Vinyl Acetate	2022-09	ug/L	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0				< 10.0	< 10.0	< 10.0	< 10.0		
Vinyl Acetate	2022-12	ug/L															< 10.0	< 10.0
Vinyl Acetate	2023-06	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Vinyl Acetate	2023-08	ug/L																
Vinyl Acetate	2023-11	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0		< 10.0		< 10.0
Vinyl Acetate	2024-01	ug/L																
Vinyl Acetate	2024-06	ug/L			< 10.0			< 10.0	< 10.0			< 10.0	< 10.0		< 10.0		< 10.0	< 10.0
Vinyl Acetate	2024-07	ug/L	< 10.0			< 10.0 J	< 10.0 J							< 10.0 J		< 10.0		
Vinyl Acetate	2024-09	ug/L																
Vinyl Acetate	2024-11	ug/L				< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
Vinyl Acetate	2024-12	ug/L	< 10.0		< 10.0		< 10.0						< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Vinyl Acetate	2025-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Vinyl Acetate	2025-10	ug/L			< 10	< 10	< 10	< 10	< 10	< 10		< 10	< 10 J	< 10	< 10	< 10	< 10	< 10
Vinyl Chloride	2014-10	ug/L							< 1.00	< 1.00								
Vinyl Chloride	2014-11	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			< 1.00	< 1.00						
Vinyl Chloride	2015-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Vinyl Chloride	2015-09	ug/L			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00								
Vinyl Chloride	2016-03	ug/L						< 1.00	< 1.00									
Vinyl Chloride	2016-04	ug/L	< 1.00		< 1.00	< 1.00	< 1.00			< 1.00	< 1.00	< 1.00						
Vinyl Chloride	2016-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
Vinyl Chloride	2017-05	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Vinyl Chloride	2017-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00						
Vinyl Chloride	2018-06	ug/L	< 1.00	**1.47**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Vinyl Chloride	2018-08	ug/L		< 1.00														
Vinyl Chloride	2018-10	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Vinyl Chloride	2019-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Vanadium	2025-10	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	
Vinyl Acetate	2014-10	ug/L									
Vinyl Acetate	2014-11	ug/L									
Vinyl Acetate	2015-05	ug/L									
Vinyl Acetate	2015-09	ug/L									
Vinyl Acetate	2016-03	ug/L									
Vinyl Acetate	2016-04	ug/L									
Vinyl Acetate	2016-11	ug/L									
Vinyl Acetate	2017-05	ug/L									
Vinyl Acetate	2017-11	ug/L									
Vinyl Acetate	2018-06	ug/L									
Vinyl Acetate	2018-08	ug/L									
Vinyl Acetate	2018-10	ug/L									
Vinyl Acetate	2019-06	ug/L									< 10.0
Vinyl Acetate	2019-08	ug/L									< 10.0
Vinyl Acetate	2019-10	ug/L									
Vinyl Acetate	2019-11	ug/L									< 10.0
Vinyl Acetate	2020-02	ug/L									< 10.0
Vinyl Acetate	2020-06	ug/L									< 10.0
Vinyl Acetate	2020-07	ug/L									
Vinyl Acetate	2020-08	ug/L									
Vinyl Acetate	2020-11	ug/L									< 10.0
Vinyl Acetate	2021-05	ug/L									< 10.0
Vinyl Acetate	2021-06	ug/L									
Vinyl Acetate	2021-08	ug/L									
Vinyl Acetate	2021-09	ug/L	< 10.0	< 10.0							< 10.0
Vinyl Acetate	2021-12	ug/L	< 10.0	< 10.0							
Vinyl Acetate	2022-03	ug/L	< 10.0	< 10.0							
Vinyl Acetate	2022-06	ug/L	< 10.0	< 10.0							
Vinyl Acetate	2022-08	ug/L	< 10.0	< 10.0		< 10.0					
Vinyl Acetate	2022-09	ug/L			< 10.0		< 10.0	< 10.0			< 10.0
Vinyl Acetate	2022-12	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0			
Vinyl Acetate	2023-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0			< 10.0
Vinyl Acetate	2023-08	ug/L			< 10.0	< 10.0	< 10.0	< 10.0			
Vinyl Acetate	2023-11	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	
Vinyl Acetate	2024-01	ug/L							< 10.0	< 10.0	
Vinyl Acetate	2024-06	ug/L	< 10.0	< 10.0			< 10.0	< 10.0		< 10.0	< 10.0
Vinyl Acetate	2024-07	ug/L			< 10.0 J				< 10.0 J		
Vinyl Acetate	2024-09	ug/L							< 10.0	< 10.0	
Vinyl Acetate	2024-11	ug/L							< 10.0		
Vinyl Acetate	2024-12	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0	< 10.0
Vinyl Acetate	2025-06	ug/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Vinyl Acetate	2025-10	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
Vinyl Chloride	2014-10	ug/L									
Vinyl Chloride	2014-11	ug/L									
Vinyl Chloride	2015-05	ug/L									
Vinyl Chloride	2015-09	ug/L									
Vinyl Chloride	2016-03	ug/L									
Vinyl Chloride	2016-04	ug/L									
Vinyl Chloride	2016-11	ug/L									
Vinyl Chloride	2017-05	ug/L									
Vinyl Chloride	2017-11	ug/L									
Vinyl Chloride	2018-06	ug/L									
Vinyl Chloride	2018-08	ug/L									
Vinyl Chloride	2018-10	ug/L									
Vinyl Chloride	2019-06	ug/L									< 1.00

Winneshiek County Area Solid Waste Agency
Permit No. 57-SDP-01-74P

Table 14
Analytical Data Summary - Shallow Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Vinyl Chloride	2019-08	ug/L		< 1.00														
Vinyl Chloride	2019-10	ug/L						< 1.00	**0.373 J**									
Vinyl Chloride	2019-11	ug/L	< 1.00	< 1.00	**0.437 J**	< 1.00	< 2.00			< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.00	< 2.00		
Vinyl Chloride	2020-02	ug/L							< 1.00				< 1.00	< 1.00	< 1.00	< 1.00		
Vinyl Chloride	2020-06	ug/L			< 1.00	< 1.00	< 1.00	**0.315 J**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
Vinyl Chloride	2020-07	ug/L	< 1.00	< 1.00												< 1.00		
Vinyl Chloride	2020-08	ug/L											< 1.00	< 1.00	< 1.00	< 1.00		
Vinyl Chloride	2020-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	**0.438 J**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		
Vinyl Chloride	2021-05	ug/L			< 1.00	< 1.00		**0.28 J**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00				
Vinyl Chloride	2021-06	ug/L	< 1.00				< 1.00								< 1.00	< 1.00		
Vinyl Chloride	2021-08	ug/L													< 1.00			
Vinyl Chloride	2021-09	ug/L	< 1.00	< 10.0	< 1.00	< 1.00	< 1.00	**0.315 J**	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Vinyl Chloride	2021-12	ug/L															< 1.00	< 1.00
Vinyl Chloride	2022-03	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Vinyl Chloride	2022-06	ug/L															< 1.00	< 1.00
Vinyl Chloride	2022-08	ug/L			< 1.00					< 1.00	< 1.00	< 1.00					< 1.00	< 1.00
Vinyl Chloride	2022-09	ug/L	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00				< 1.00	< 1.00	< 1.00	< 1.00		
Vinyl Chloride	2022-12	ug/L															< 1.00	< 1.00
Vinyl Chloride	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	**0.305 J**	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Vinyl Chloride	2023-08	ug/L																
Vinyl Chloride	2023-11	ug/L	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00		< 1.00		< 1.00
Vinyl Chloride	2024-01	ug/L																
Vinyl Chloride	2024-06	ug/L			< 1.00			< 1.00	< 1.00			< 1.00	< 1.00		< 1.00		< 1.00	< 1.00
Vinyl Chloride	2024-07	ug/L	< 1.00			< 1.00 J	< 1.00 J							< 1.00 J		< 1.00		
Vinyl Chloride	2024-09	ug/L																
Vinyl Chloride	2024-11	ug/L				< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00						
Vinyl Chloride	2024-12	ug/L	< 1.00		< 1.00		< 1.00						< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Vinyl Chloride	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Vinyl Chloride	2025-10	ug/L			< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 1 J	< 1	< 1	< 1	< 1	< 1
Xylenes, Total	2014-10	ug/L							< 3.00	< 3.00								
Xylenes, Total	2014-11	ug/L			< 3.00	< 3.00	< 3.00	< 3.00			< 3.00	< 3.00						
Xylenes, Total	2015-05	ug/L	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00						
Xylenes, Total	2015-09	ug/L			< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00								
Xylenes, Total	2016-03	ug/L						< 3.00	< 3.00									
Xylenes, Total	2016-04	ug/L	< 3.00		< 3.00	< 3.00	< 3.00			< 3.00	< 3.00	< 3.00						
Xylenes, Total	2016-11	ug/L	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		< 3.00						
Xylenes, Total	2017-05	ug/L	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00						
Xylenes, Total	2017-11	ug/L	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		< 3.00						
Xylenes, Total	2018-06	ug/L	< 3.00	**14.2**	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00						
Xylenes, Total	2018-08	ug/L		**1.02 J**														
Xylenes, Total	2018-10	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00						
Xylenes, Total	2019-06	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00						
Xylenes, Total	2019-08	ug/L		< 3.00														
Xylenes, Total	2019-10	ug/L						< 3.00	< 3.00									
Xylenes, Total	2019-11	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00			< 3.00	< 3.00	< 3.00	< 3.00	**0.541 J**	< 3.00	< 3.00		
Xylenes, Total	2020-02	ug/L											< 3.00	< 3.00	< 3.00	< 3.00		
Xylenes, Total	2020-06	ug/L			< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00			
Xylenes, Total	2020-07	ug/L	< 3.00	< 3.00												< 3.00		
Xylenes, Total	2020-08	ug/L											< 3.00	< 3.00	< 3.00	< 3.00		
Xylenes, Total	2020-11	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		
Xylenes, Total	2021-05	ug/L			< 3.00	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00				
Xylenes, Total	2021-06	ug/L	< 3.00				< 3.00								< 3.00	**0.499 J**		
Xylenes, Total	2021-08	ug/L													< 3.00			
Xylenes, Total	2021-09	ug/L	< 3.00	**8.65 J**	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Xylenes, Total	2021-12	ug/L															< 3.00	< 3.00
Xylenes, Total	2022-03	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00

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Table 14
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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Vinyl Chloride	2019-08	ug/L									< 1.00
Vinyl Chloride	2019-10	ug/L									
Vinyl Chloride	2019-11	ug/L									< 1.00
Vinyl Chloride	2020-02	ug/L									< 1.00
Vinyl Chloride	2020-06	ug/L									< 1.00
Vinyl Chloride	2020-07	ug/L									
Vinyl Chloride	2020-08	ug/L									
Vinyl Chloride	2020-11	ug/L									< 1.00
Vinyl Chloride	2021-05	ug/L									< 1.00
Vinyl Chloride	2021-06	ug/L									
Vinyl Chloride	2021-08	ug/L									
Vinyl Chloride	2021-09	ug/L	< 1.00	< 1.00							< 1.00
Vinyl Chloride	2021-12	ug/L	< 1.00	< 1.00							
Vinyl Chloride	2022-03	ug/L	< 1.00	< 1.00							
Vinyl Chloride	2022-06	ug/L	< 1.00	< 1.00							
Vinyl Chloride	2022-08	ug/L	< 1.00	< 1.00		< 1.00					
Vinyl Chloride	2022-09	ug/L			< 1.00		< 1.00	< 1.00			< 1.00
Vinyl Chloride	2022-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			
Vinyl Chloride	2023-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00			< 1.00
Vinyl Chloride	2023-08	ug/L			< 1.00	< 1.00	< 1.00	< 1.00			
Vinyl Chloride	2023-11	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	
Vinyl Chloride	2024-01	ug/L							< 1.00	< 1.00	
Vinyl Chloride	2024-06	ug/L	< 1.00	< 1.00			< 1.00	< 1.00		< 1.00	< 1.00
Vinyl Chloride	2024-07	ug/L			< 1.00 J				< 1.00 J		
Vinyl Chloride	2024-09	ug/L							< 1.00	< 1.00	
Vinyl Chloride	2024-11	ug/L							< 1.00		
Vinyl Chloride	2024-12	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00		< 1.00	< 1.00
Vinyl Chloride	2025-06	ug/L	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Vinyl Chloride	2025-10	ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
Xylenes, Total	2014-10	ug/L									
Xylenes, Total	2014-11	ug/L									
Xylenes, Total	2015-05	ug/L									
Xylenes, Total	2015-09	ug/L									
Xylenes, Total	2016-03	ug/L									
Xylenes, Total	2016-04	ug/L									
Xylenes, Total	2016-11	ug/L									
Xylenes, Total	2017-05	ug/L									
Xylenes, Total	2017-11	ug/L									
Xylenes, Total	2018-06	ug/L									
Xylenes, Total	2018-08	ug/L									
Xylenes, Total	2018-10	ug/L									
Xylenes, Total	2019-06	ug/L									< 3.00
Xylenes, Total	2019-08	ug/L									< 3.00
Xylenes, Total	2019-10	ug/L									
Xylenes, Total	2019-11	ug/L									< 3.00
Xylenes, Total	2020-02	ug/L									< 3.00
Xylenes, Total	2020-06	ug/L									< 3.00
Xylenes, Total	2020-07	ug/L									
Xylenes, Total	2020-08	ug/L									
Xylenes, Total	2020-11	ug/L									< 3.00
Xylenes, Total	2021-05	ug/L									< 3.00
Xylenes, Total	2021-06	ug/L									
Xylenes, Total	2021-08	ug/L									
Xylenes, Total	2021-09	ug/L	< 3.00	< 3.00							< 3.00
Xylenes, Total	2021-12	ug/L	< 3.00	< 3.00							
Xylenes, Total	2022-03	ug/L	< 3.00	< 3.00							

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Constituent	Date	Units	GU-1 (DwnGrad)	GU-2 (DwnGrad)	MW-1 (Bkgrnd)	MW-2R (DwnGrad)	MW-3 (DwnGrad)	MW-4 (DwnGrad)	MW-4B (DwnGrad)	MW-7A (DwnGrad)	MW-24A (DwnGrad)	MW-25A (DwnGrad)	MW-29A (DwnGrad)	MW-31A (DwnGrad)	MW-33A (DwnGrad)	MW-34A (DwnGrad)	MW-37A (Bkgrnd)	MW-38A (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Xylenes, Total	2022-06	ug/L															< 3.00	< 3.00
Xylenes, Total	2022-08	ug/L			< 3.00					< 3.00	< 3.00	< 3.00					< 3.00	< 3.00
Xylenes, Total	2022-09	ug/L	< 3.00	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00				< 3.00	< 3.00	< 3.00	< 3.00		
Xylenes, Total	2022-12	ug/L															< 3.00	< 3.00
Xylenes, Total	2023-06	ug/L	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Xylenes, Total	2023-08	ug/L																
Xylenes, Total	2023-11	ug/L	< 3.00		< 3.00	**0.848 J**	**0.592 J**	**1.16 J**	< 3.00	**0.64 J**		**1.74 J**	< 3.00	< 3.00		< 3.00		< 3.00
Xylenes, Total	2024-01	ug/L																
Xylenes, Total	2024-06	ug/L			< 3.00			< 3.00	< 3.00			< 3.00	< 3.00		< 3.00		< 3.00	< 3.00
Xylenes, Total	2024-07	ug/L	< 3.00			< 3.00 J	< 3.00 J							< 3.00 J		< 3.00		
Xylenes, Total	2024-09	ug/L																
Xylenes, Total	2024-11	ug/L				< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00						
Xylenes, Total	2024-12	ug/L	< 3.00		< 3.00		< 3.00						< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Xylenes, Total	2025-06	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Xylenes, Total	2025-10	ug/L			< 3	< 3	< 3	< 3	< 3	< 3		< 3	< 3 J	< 3	< 3	< 3	< 3	< 3
Zinc	2014-10	ug/L							< 10.0	**7.01 J**								
Zinc	2014-11	ug/L			< 10.0	< 10.0	< 10.0	< 10.0			**7.53 J**	< 10.0						
Zinc	2015-05	ug/L	< 10.0		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0						
Zinc	2015-09	ug/L			< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	**26.5**								
Zinc	2016-03	ug/L						< 10.0	< 10.0									
Zinc	2016-04	ug/L	< 10.0		< 10.0	**5.35 J**	< 10.0			< 10.0	< 10.0	< 10.0						
Zinc	2016-11	ug/L	**6.02 J**		< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0		< 10.0						
Zinc	2017-05	ug/L	< 20.0		< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0						
Zinc	2017-11	ug/L	< 20.0		< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0		< 20.0						
Zinc	2018-06	ug/L	**126**	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0						
Zinc	2018-08	ug/L	**1380**	< 20.0														
Zinc	2018-10	ug/L	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0						
Zinc	2019-06	ug/L	< 20.0	< 20.0	< 20.0	**7.24 J**	< 20.0	< 20.0	< 20.0	**6.99 J**	< 20.0	**14.7 J**						
Zinc	2019-08	ug/L		< 20.0														
Zinc	2019-10	ug/L						< 20.0	< 20.0									
Zinc	2019-11	ug/L	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0			**35.8**	**65.4**	**85.2**	< 20.0	< 20.0	< 20.0	< 20.0		
Zinc	2020-02	ug/L								< 20.0		< 20.0	< 20.0	< 20.0	< 20.0	< 20.0		
Zinc	2020-06	ug/L			< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0			
Zinc	2020-07	ug/L	< 20.0	< 20.0												< 20.0		
Zinc	2020-08	ug/L											< 20.0	< 20.0	< 20.0	< 20.0		
Zinc	2020-11	ug/L	< 20.0	**97.5**	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	**13.8 J**	< 20.0	< 20.0		
Zinc	2021-05	ug/L			< 20.0	< 20.0		< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0				
Zinc	2021-06	ug/L	**13.4 J**				< 20.0								< 20.0	< 20.0		
Zinc	2021-08	ug/L													< 20.0			
Zinc	2021-09	ug/L	< 20.0	**41.3**	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0		< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0
Zinc	2021-12	ug/L															< 20.0	< 20.0
Zinc	2022-03	ug/L	**31.1**	**20.3**	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0		< 20.0	**42.1**	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0
Zinc	2022-06	ug/L															< 20.0	< 20.0
Zinc	2022-08	ug/L			< 20.0					< 20.0	< 20.0	< 20.0					< 20.0	< 20.0
Zinc	2022-09	ug/L	< 20.0	< 20.0		< 20.0	< 20.0	< 20.0	< 20.0				< 20.0	**18.1 J**	< 20.0	< 20.0		
Zinc	2022-12	ug/L															< 20.0	< 20.0
Zinc	2023-06	ug/L	**9.89 J**		< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	**7.9 J**	**23.5**	< 20.0	< 20.0	< 20.0	< 20.0
Zinc	2023-08	ug/L																
Zinc	2023-11	ug/L	**9.11 J**		< 20.0	**21**	< 20.0	< 20.0	< 20.0	< 20.0		< 20.0	**8.31 J**	< 20.0		**8.31 J**		< 20.0
Zinc	2024-01	ug/L				**8.48 J**												
Zinc	2024-06	mg/L						< 0.0200	< 0.0200									
Zinc	2024-06	ug/L			< 20.0							< 20.0	< 20.0		**12.9 J**		< 20.0	< 20.0
Zinc	2024-07	ug/L	< 20.0			< 20.0	< 20.0							< 20.0		< 20.0		
Zinc	2024-08	ug/L																
Zinc	2024-09	ug/L																
Zinc	2024-11	ug/L				< 20.0		< 20.0	< 20.0	< 20.0	< 20.0	< 20.0						

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1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Xylenes, Total	2022-06	ug/L	< 3.00	< 3.00							
Xylenes, Total	2022-08	ug/L	< 3.00	< 3.00		< 3.00					
Xylenes, Total	2022-09	ug/L			< 3.00		< 3.00	< 3.00			< 3.00
Xylenes, Total	2022-12	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00			
Xylenes, Total	2023-06	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00			< 3.00
Xylenes, Total	2023-08	ug/L			< 3.00	< 3.00	< 3.00	< 3.00			
Xylenes, Total	2023-11	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	
Xylenes, Total	2024-01	ug/L							< 3.00	< 3.00	
Xylenes, Total	2024-06	ug/L	< 3.00	< 3.00			< 3.00	< 3.00		< 3.00	< 3.00
Xylenes, Total	2024-07	ug/L			< 3.00 J				< 3.00 J		
Xylenes, Total	2024-09	ug/L							< 3.00	< 3.00	
Xylenes, Total	2024-11	ug/L							< 3.00		
Xylenes, Total	2024-12	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00		< 3.00	< 3.00
Xylenes, Total	2025-06	ug/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Xylenes, Total	2025-10	ug/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	
Zinc	2014-10	ug/L									
Zinc	2014-11	ug/L									
Zinc	2015-05	ug/L									
Zinc	2015-09	ug/L									
Zinc	2016-03	ug/L									
Zinc	2016-04	ug/L									
Zinc	2016-11	ug/L									
Zinc	2017-05	ug/L									
Zinc	2017-11	ug/L									
Zinc	2018-06	ug/L									
Zinc	2018-08	ug/L									
Zinc	2018-10	ug/L									
Zinc	2019-06	ug/L									**8.28 J**
Zinc	2019-08	ug/L									**7.3 J**
Zinc	2019-10	ug/L									
Zinc	2019-11	ug/L									< 20.0
Zinc	2020-02	ug/L									< 20.0
Zinc	2020-06	ug/L									< 20.0
Zinc	2020-07	ug/L									
Zinc	2020-08	ug/L									
Zinc	2020-11	ug/L									< 20.0
Zinc	2021-05	ug/L									< 20.0
Zinc	2021-06	ug/L									
Zinc	2021-08	ug/L									
Zinc	2021-09	ug/L	< 20.0	< 20.0							< 20.0
Zinc	2021-12	ug/L	< 20.0	< 20.0							
Zinc	2022-03	ug/L	< 20.0	< 20.0							
Zinc	2022-06	ug/L	< 20.0	< 20.0							
Zinc	2022-08	ug/L	< 20.0	< 20.0		< 20.0					
Zinc	2022-09	ug/L			< 20.0		< 20.0	**13.4 J**			< 20.0
Zinc	2022-12	ug/L	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	**21.3**			
Zinc	2023-06	ug/L	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	**18.1 J**			< 20.0
Zinc	2023-08	ug/L			< 20.0	< 20.0	**8.74 J**	**27.3**			
Zinc	2023-11	ug/L	< 20.0	< 20.0	< 20.0	< 20.0	**7.36 J**	**26**	< 20.0	< 20.0	
Zinc	2024-01	ug/L							**8.46 J**	**7.19 J**	
Zinc	2024-06	mg/L					< 0.0200			< 0.0200	
Zinc	2024-06	ug/L	**68.3**	< 20.0				**13.8 J**			< 20.0
Zinc	2024-07	ug/L			< 20.0				< 20.0		
Zinc	2024-08	ug/L	< 20.0								
Zinc	2024-09	ug/L							< 20.0	< 20.0	
Zinc	2024-11	ug/L							< 20.0		

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1,1,1,2-Tetrachloroethane	2014-10	ug/L							< 1.00	< 1.00								
Zinc	2024-12	ug/L	< 20.0		< 20.0		< 20.0						< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0
Zinc	2025-06	ug/L	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0		< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0
Zinc	2025-10	ug/L			< 20	< 20	< 20	< 20	< 20	< 20		< 20	< 20	< 20	< 20	< 20	< 20	< 20

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Constituent	Date	Units	MW-39A (Delin)	MW-40A (DwnGrad)	MW-41A (DwnGrad)	MW-42A (Delin)	MW-43A (Delin)	MW-44A (Delin)	MW-45A (DwnGrad)	MW-46A (DwnGrad)	MW-101 (DwnGrad)
1,1,1,2-Tetrachloroethane	2014-10	ug/L									
Zinc	2024-12	ug/L	< 20.0	< 20.0	< 20.0	< 20.0	**12.8 J**	**19.5 J**		< 20.0	< 20.0
Zinc	2025-06	ug/L	< 20.0	< 20.0	< 20.0	< 20.0	< 20.0	**26.5**	< 20.0	< 20.0	< 20.0
Zinc	2025-10	ug/L	< 20	< 20	< 20	< 20	< 20	**31.9**	< 20	< 20	

Table 14

Winneshiek County Area Solid Waste Agency **Analytical Data Summary - Deep Groundwater Appendix II**

Permit No. 57-SDP-01-74P **2025 Annual Water Quality Report**

Constituent	Date	Units	MW-11 (DwnGrad)	MW-18 (Bkgrnd)	MW-19R (Bkgrnd)	MW-22 (DwnGrad)	MW-35 (DwnGrad)
1,1,1,2-Tetrachloroethane	2018-10	ug/L	< 1.00				
1,1,1,2-Tetrachloroethane	2019-06	ug/L				< 1.00	
1,1,1,2-Tetrachloroethane	2019-08	ug/L				< 1.00	
1,1,1,2-Tetrachloroethane	2019-11	ug/L				< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2020-02	ug/L					< 1.00
1,1,1,2-Tetrachloroethane	2020-06	ug/L				< 1.00	
1,1,1,2-Tetrachloroethane	2020-07	ug/L					< 1.00
1,1,1,2-Tetrachloroethane	2020-08	ug/L				< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2020-11	ug/L				< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2021-06	ug/L	< 1.00			< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2021-09	ug/L			< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2021-12	ug/L			< 1.00		
1,1,1,2-Tetrachloroethane	2022-03	ug/L			< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2022-06	ug/L			< 1.00		
1,1,1,2-Tetrachloroethane	2022-08	ug/L			< 1.00	< 1.00	
1,1,1,2-Tetrachloroethane	2022-09	ug/L	< 1.00				< 1.00
1,1,1,2-Tetrachloroethane	2022-12	ug/L			< 1.00		
1,1,1,2-Tetrachloroethane	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2023-11	ug/L			< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2024-06	ug/L			< 1.00	< 1.00	
1,1,1,2-Tetrachloroethane	2024-07	ug/L	< 1.00 J	< 1.00 J			< 1.00
1,1,1,2-Tetrachloroethane	2024-08	ug/L		< 1.00			
1,1,1,2-Tetrachloroethane	2024-12	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2025-06	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
1,1,1,2-Tetrachloroethane	2025-10	ug/L		< 1	< 1		< 1
1,1,1-Trichloroethane	2018-10	ug/L	< 1.00				
1,1,1-Trichloroethane	2019-06	ug/L				< 1.00	
1,1,1-Trichloroethane	2019-08	ug/L				< 1.00	
1,1,1-Trichloroethane	2019-11	ug/L				< 1.00	< 1.00
1,1,1-Trichloroethane	2020-02	ug/L					< 1.00
1,1,1-Trichloroethane	2020-06	ug/L				< 1.00	
1,1,1-Trichloroethane	2020-07	ug/L					< 1.00
1,1,1-Trichloroethane	2020-08	ug/L				< 1.00	< 1.00
1,1,1-Trichloroethane	2020-11	ug/L				< 1.00	< 1.00
1,1,1-Trichloroethane	2021-06	ug/L	< 1.00			< 1.00	< 1.00
1,1,1-Trichloroethane	2021-09	ug/L			< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2021-12	ug/L			< 1.00		
1,1,1-Trichloroethane	2022-03	ug/L			< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2022-06	ug/L			< 1.00		
1,1,1-Trichloroethane	2022-08	ug/L			< 1.00	< 1.00	
1,1,1-Trichloroethane	2022-09	ug/L	< 1.00				< 1.00
1,1,1-Trichloroethane	2022-12	ug/L			< 1.00		
1,1,1-Trichloroethane	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2023-11	ug/L			< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2024-06	ug/L			< 1.00	< 1.00	
1,1,1-Trichloroethane	2024-07	ug/L	< 1.00 J	< 1.00 J			< 1.00
1,1,1-Trichloroethane	2024-08	ug/L		< 1.00			
1,1,1-Trichloroethane	2024-12	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2025-06	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	2025-10	ug/L		< 1	< 1		< 1
1,1,2,2-Tetrachloroethane	2018-10	ug/L	< 1.00				
1,1,2,2-Tetrachloroethane	2019-06	ug/L				< 1.00	
1,1,2,2-Tetrachloroethane	2019-08	ug/L				< 1.00	
1,1,2,2-Tetrachloroethane	2019-11	ug/L				< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2020-02	ug/L					< 1.00
1,1,2,2-Tetrachloroethane	2020-06	ug/L				< 1.00	
1,1,2,2-Tetrachloroethane	2020-07	ug/L					< 1.00
1,1,2,2-Tetrachloroethane	2020-08	ug/L				< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2020-11	ug/L				< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2021-06	ug/L	< 1.00			< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2021-09	ug/L			< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2021-12	ug/L			< 1.00		
1,1,2,2-Tetrachloroethane	2022-03	ug/L			< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2022-06	ug/L			< 1.00		
1,1,2,2-Tetrachloroethane	2022-08	ug/L			< 1.00	< 1.00	
1,1,2,2-Tetrachloroethane	2022-09	ug/L	< 1.00				< 1.00
1,1,2,2-Tetrachloroethane	2022-12	ug/L			< 1.00		
1,1,2,2-Tetrachloroethane	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2023-11	ug/L			< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2024-06	ug/L			< 1.00	< 1.00	
1,1,2,2-Tetrachloroethane	2024-07	ug/L	< 1.00 J	< 1.00 J			< 1.00
1,1,2,2-Tetrachloroethane	2024-08	ug/L		< 1.00			
1,1,2,2-Tetrachloroethane	2024-12	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2025-06	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
1,1,2,2-Tetrachloroethane	2025-10	ug/L		< 1	< 1		< 1
1,1,2-Trichloroethane	2018-10	ug/L	< 1.00				
1,1,2-Trichloroethane	2019-06	ug/L				< 1.00	
1,1,2-Trichloroethane	2019-08	ug/L				< 1.00	
1,1,2-Trichloroethane	2019-11	ug/L				< 1.00	< 1.00
1,1,2-Trichloroethane	2020-02	ug/L					< 1.00
1,1,2-Trichloroethane	2020-06	ug/L				< 1.00	
1,1,2-Trichloroethane	2020-07	ug/L					< 1.00
1,1,2-Trichloroethane	2020-08	ug/L				< 1.00	< 1.00
1,1,2-Trichloroethane	2020-11	ug/L				< 1.00	< 1.00
1,1,2-Trichloroethane	2021-06	ug/L	< 1.00			< 1.00	< 1.00
1,1,2-Trichloroethane	2021-09	ug/L			< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2021-12	ug/L			< 1.00		
1,1,2-Trichloroethane	2022-03	ug/L			< 1.00	< 1.00	< 1.00

Table 14

Winneshiek County Area Solid Waste Agency **Analytical Data Summary - Deep Groundwater Appendix II**
Permit No. 57-SDP-01-74P **2025 Annual Water Quality Report**

Constituent	Date	Units	MW-11 (DwnGrad)	MW-18 (Bkgrnd)	MW-19R (Bkgrnd)	MW-22 (DwnGrad)	MW-35 (DwnGrad)
1,1,1,2-Tetrachloroethane	2018-10	ug/L	< 1.00				
1,1,2-Trichloroethane	2022-06	ug/L			< 1.00		
1,1,2-Trichloroethane	2022-08	ug/L			< 1.00	< 1.00	
1,1,2-Trichloroethane	2022-09	ug/L	< 1.00				< 1.00
1,1,2-Trichloroethane	2022-12	ug/L			< 1.00		
1,1,2-Trichloroethane	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2023-11	ug/L			< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2024-06	ug/L			< 1.00	< 1.00	
1,1,2-Trichloroethane	2024-07	ug/L	< 1.00 J	< 1.00 J			< 1.00
1,1,2-Trichloroethane	2024-08	ug/L		< 1.00			
1,1,2-Trichloroethane	2024-12	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2025-06	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	2025-10	ug/L		< 1	< 1		< 1
1,1-Dichloroethane	2018-10	ug/L	< 1.00				
1,1-Dichloroethane	2019-06	ug/L				< 1.00	
1,1-Dichloroethane	2019-08	ug/L				< 1.00	
1,1-Dichloroethane	2019-11	ug/L				< 1.00	< 1.00
1,1-Dichloroethane	2020-02	ug/L					< 1.00
1,1-Dichloroethane	2020-06	ug/L				< 1.00	
1,1-Dichloroethane	2020-07	ug/L					**0.684 J**
1,1-Dichloroethane	2020-08	ug/L				< 1.00	**0.522 J**
1,1-Dichloroethane	2020-11	ug/L				< 1.00	**0.592 J**
1,1-Dichloroethane	2021-06	ug/L	< 1.00			< 1.00	**0.582 J**
1,1-Dichloroethane	2021-09	ug/L			< 1.00	< 1.00	**0.448 J**
1,1-Dichloroethane	2021-12	ug/L			< 1.00		
1,1-Dichloroethane	2022-03	ug/L			< 1.00	< 1.00	**0.545 J**
1,1-Dichloroethane	2022-06	ug/L			< 1.00		
1,1-Dichloroethane	2022-08	ug/L			< 1.00	< 1.00	
1,1-Dichloroethane	2022-09	ug/L	< 1.00				**0.52 J**
1,1-Dichloroethane	2022-12	ug/L			< 1.00		
1,1-Dichloroethane	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00
1,1-Dichloroethane	2023-11	ug/L			< 1.00	< 1.00	**0.557 J**
1,1-Dichloroethane	2024-06	ug/L			< 1.00	< 1.00	
1,1-Dichloroethane	2024-07	ug/L	< 1.00 J	< 1.00 J			**0.365 J**
1,1-Dichloroethane	2024-08	ug/L		< 1.00			
1,1-Dichloroethane	2024-12	ug/L		< 1.00	< 1.00	< 1.00	**0.338 J**
1,1-Dichloroethane	2025-06	ug/L		< 1.00	< 1.00	< 1.00	**0.418 J**
1,1-Dichloroethane	2025-10	ug/L		< 1	< 1		< 1
1,1-Dichloroethene	2018-10	ug/L	< 2.00				
1,1-Dichloroethene	2019-06	ug/L				< 2.00	
1,1-Dichloroethene	2019-08	ug/L				< 2.00	
1,1-Dichloroethene	2019-11	ug/L				< 2.00	< 2.00
1,1-Dichloroethene	2020-02	ug/L					< 2.00
1,1-Dichloroethene	2020-06	ug/L				< 2.00	
1,1-Dichloroethene	2020-07	ug/L					< 2.00
1,1-Dichloroethene	2020-08	ug/L				< 2.00	< 2.00
1,1-Dichloroethene	2020-11	ug/L				< 2.00	< 2.00
1,1-Dichloroethene	2021-06	ug/L	< 2.00			< 2.00	< 2.00
1,1-Dichloroethene	2021-09	ug/L			< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2021-12	ug/L			< 2.00		
1,1-Dichloroethene	2022-03	ug/L			< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2022-06	ug/L			< 2.00		
1,1-Dichloroethene	2022-08	ug/L			< 2.00	< 2.00	
1,1-Dichloroethene	2022-09	ug/L	< 2.00				< 2.00
1,1-Dichloroethene	2022-12	ug/L			< 2.00		
1,1-Dichloroethene	2023-06	ug/L	< 2.00		< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2023-11	ug/L			< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2024-06	ug/L			< 2.00	< 2.00	
1,1-Dichloroethene	2024-07	ug/L	< 2.00 J	< 2.00 J			< 2.00
1,1-Dichloroethene	2024-08	ug/L		< 2.00			
1,1-Dichloroethene	2024-12	ug/L		< 2.00	< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2025-06	ug/L		< 2.00	< 2.00	< 2.00	< 2.00
1,1-Dichloroethene	2025-10	ug/L		< 2	< 2		< 2
1,1-Dichloropropene	2020-11	ug/L					< 1.00
1,1-Dichloropropene	2021-06	ug/L					< 1.00
1,1-Dichloropropene	2023-06	ug/L	< 1.00				
1,1-Dichloropropene	2024-07	ug/L	< 1.00 J				
1,2,3-Trichloropropane	2018-10	ug/L	< 1.00				
1,2,3-Trichloropropane	2019-06	ug/L				< 1.00	
1,2,3-Trichloropropane	2019-08	ug/L				< 1.00	
1,2,3-Trichloropropane	2019-11	ug/L				< 1.00	< 1.00
1,2,3-Trichloropropane	2020-02	ug/L					< 1.00
1,2,3-Trichloropropane	2020-06	ug/L				< 1.00	
1,2,3-Trichloropropane	2020-07	ug/L					< 1.00
1,2,3-Trichloropropane	2020-08	ug/L				< 1.00	< 1.00
1,2,3-Trichloropropane	2020-11	ug/L				< 1.00	< 1.00
1,2,3-Trichloropropane	2021-06	ug/L	< 1.00			< 1.00	< 1.00
1,2,3-Trichloropropane	2021-09	ug/L			< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2021-12	ug/L			< 1.00		
1,2,3-Trichloropropane	2022-03	ug/L			< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2022-06	ug/L			< 1.00		
1,2,3-Trichloropropane	2022-08	ug/L			< 1.00	< 1.00	
1,2,3-Trichloropropane	2022-09	ug/L	< 1.00				< 1.00
1,2,3-Trichloropropane	2022-12	ug/L			< 1.00		
1,2,3-Trichloropropane	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2023-11	ug/L			< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2024-06	ug/L			< 1.00	< 1.00	
1,2,3-Trichloropropane	2024-07	ug/L	< 1.00 J	< 1.00 J			< 1.00

Table 14

Winneshiek County Area Solid Waste Agency **Analytical Data Summary - Deep Groundwater Appendix II**
Permit No. 57-SDP-01-74P **2025 Annual Water Quality Report**

Constituent	Date	Units	MW-11 (DwnGrad)	MW-18 (Bkgrnd)	MW-19R (Bkgrnd)	MW-22 (DwnGrad)	MW-35 (DwnGrad)
1,1,1,2-Tetrachloroethane	2018-10	ug/L	< 1.00				
1,2,3-Trichloropropane	2024-08	ug/L		< 1.00			
1,2,3-Trichloropropane	2024-12	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2025-06	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
1,2,3-Trichloropropane	2025-10	ug/L		< 1	< 1		< 1
1,2,4,5-Tetrachlorobenzene	2020-11	ug/L					< 11.8
1,2,4,5-Tetrachlorobenzene	2021-06	ug/L					< 12.0
1,2,4,5-Tetrachlorobenzene	2023-06	ug/L	< 11.4				
1,2,4,5-Tetrachlorobenzene	2024-07	ug/L	< 12.5 J				
1,2,4-Trichlorobenzene	2020-11	ug/L					< 5.00
1,2,4-Trichlorobenzene	2021-06	ug/L					< 5.00
1,2,4-Trichlorobenzene	2023-06	ug/L	< 5.00				
1,2,4-Trichlorobenzene	2024-07	ug/L	< 5.00 J				
1,2-Dibromo-3-chloropropane	2018-10	ug/L	< 5.00				
1,2-Dibromo-3-chloropropane	2019-06	ug/L				< 5.00	
1,2-Dibromo-3-chloropropane	2019-08	ug/L				< 5.00	
1,2-Dibromo-3-chloropropane	2019-11	ug/L				< 5.00	< 5.00
1,2-Dibromo-3-chloropropane	2020-02	ug/L					< 5.00
1,2-Dibromo-3-chloropropane	2020-06	ug/L				< 5.00	
1,2-Dibromo-3-chloropropane	2020-07	ug/L					< 5.00
1,2-Dibromo-3-chloropropane	2020-08	ug/L				< 5.00	< 5.00
1,2-Dibromo-3-chloropropane	2020-11	ug/L				< 5.00	< 5.00
1,2-Dibromo-3-chloropropane	2021-06	ug/L	< 5.00			< 5.00	< 5.00
1,2-Dibromo-3-chloropropane	2021-09	ug/L			< 5.00	< 5.00	< 5.00
1,2-Dibromo-3-chloropropane	2021-12	ug/L			< 5.00		
1,2-Dibromo-3-chloropropane	2022-03	ug/L			< 5.00	< 5.00	< 5.00
1,2-Dibromo-3-chloropropane	2022-06	ug/L			< 5.00		
1,2-Dibromo-3-chloropropane	2022-08	ug/L			< 5.00	< 5.00	
1,2-Dibromo-3-chloropropane	2022-09	ug/L	< 5.00				< 5.00
1,2-Dibromo-3-chloropropane	2022-12	ug/L			< 5.00		
1,2-Dibromo-3-chloropropane	2023-06	ug/L	< 5.00		< 5.00	< 5.00	< 5.00
1,2-Dibromo-3-chloropropane	2023-11	ug/L			< 5.00	< 5.00	< 5.00
1,2-Dibromo-3-chloropropane	2024-06	ug/L			< 5.00	< 5.00	
1,2-Dibromo-3-chloropropane	2024-07	ug/L	< 5.00 J	< 5.00 J			< 5.00
1,2-Dibromo-3-chloropropane	2024-08	ug/L		< 5.00			
1,2-Dibromo-3-chloropropane	2024-12	ug/L		< 5.00	< 5.00	< 5.00	< 5.00
1,2-Dibromo-3-chloropropane	2025-06	ug/L		< 5.00	< 5.00	< 5.00	< 5.00
1,2-Dibromo-3-chloropropane	2025-10	ug/L		< 5	< 5		< 5
1,2-Dibromoethane	2018-10	ug/L	< 1.00				
1,2-Dibromoethane	2019-06	ug/L				< 1.00	
1,2-Dibromoethane	2019-08	ug/L				< 1.00	
1,2-Dibromoethane	2019-11	ug/L				< 1.00	< 1.00
1,2-Dibromoethane	2020-02	ug/L					< 1.00
1,2-Dibromoethane	2020-06	ug/L				< 1.00	
1,2-Dibromoethane	2020-07	ug/L					< 1.00
1,2-Dibromoethane	2020-08	ug/L				< 1.00	< 1.00
1,2-Dibromoethane	2020-11	ug/L				< 1.00	< 1.00
1,2-Dibromoethane	2021-06	ug/L	< 1.00			< 1.00	< 1.00
1,2-Dibromoethane	2021-09	ug/L			< 1.00	< 1.00	< 1.00
1,2-Dibromoethane	2021-12	ug/L			< 1.00		
1,2-Dibromoethane	2022-03	ug/L			< 1.00	< 1.00	< 1.00
1,2-Dibromoethane	2022-06	ug/L			< 1.00		
1,2-Dibromoethane	2022-08	ug/L			< 1.00	< 1.00	
1,2-Dibromoethane	2022-09	ug/L	< 1.00				< 1.00
1,2-Dibromoethane	2022-12	ug/L			< 1.00		
1,2-Dibromoethane	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00
1,2-Dibromoethane	2023-11	ug/L			< 1.00	< 1.00	< 1.00
1,2-Dibromoethane	2024-06	ug/L			< 1.00	< 1.00	
1,2-Dibromoethane	2024-07	ug/L	< 1.00 J	< 1.00 J			< 1.00
1,2-Dibromoethane	2024-08	ug/L		< 1.00			
1,2-Dibromoethane	2024-12	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dibromoethane	2025-06	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dibromoethane	2025-10	ug/L		< 1	< 1		< 1
1,2-Dichlorobenzene	2018-10	ug/L	< 1.00				
1,2-Dichlorobenzene	2019-06	ug/L				< 1.00	
1,2-Dichlorobenzene	2019-08	ug/L				< 1.00	
1,2-Dichlorobenzene	2019-11	ug/L				< 1.00	< 1.00
1,2-Dichlorobenzene	2020-02	ug/L					< 1.00
1,2-Dichlorobenzene	2020-06	ug/L				< 1.00	
1,2-Dichlorobenzene	2020-07	ug/L					< 1.00
1,2-Dichlorobenzene	2020-08	ug/L				< 1.00	< 1.00
1,2-Dichlorobenzene	2020-11	ug/L				< 1.00	< 1.00
1,2-Dichlorobenzene	2021-06	ug/L	< 1.00			< 1.00	< 1.00
1,2-Dichlorobenzene	2021-09	ug/L			< 1.00	< 1.00	< 1.00
1,2-Dichlorobenzene	2021-12	ug/L			< 1.00		
1,2-Dichlorobenzene	2022-03	ug/L			< 1.00	< 1.00	< 1.00
1,2-Dichlorobenzene	2022-06	ug/L			< 1.00		
1,2-Dichlorobenzene	2022-08	ug/L			< 1.00	< 1.00	
1,2-Dichlorobenzene	2022-09	ug/L	< 1.00				< 1.00
1,2-Dichlorobenzene	2022-12	ug/L			< 1.00		
1,2-Dichlorobenzene	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00
1,2-Dichlorobenzene	2023-11	ug/L			< 1.00	< 1.00	< 1.00
1,2-Dichlorobenzene	2024-06	ug/L			< 1.00	< 1.00	
1,2-Dichlorobenzene	2024-07	ug/L	< 1.00 J	< 1.00 J			< 1.00
1,2-Dichlorobenzene	2024-08	ug/L		< 1.00			
1,2-Dichlorobenzene	2024-12	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichlorobenzene	2025-06	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichlorobenzene	2025-10	ug/L		< 1	< 1		< 1

Table 14

Winneshiek County Area Solid Waste Agency **Analytical Data Summary - Deep Groundwater Appendix II**
Permit No. 57-SDP-01-74P **2025 Annual Water Quality Report**

Constituent	Date	Units	MW-11 (DwnGrad)	MW-18 (Bkgrnd)	MW-19R (Bkgrnd)	MW-22 (DwnGrad)	MW-35 (DwnGrad)
1,1,1,2-Tetrachloroethane	2018-10	ug/L	< 1.00				
1,2-Dichloroethane	2018-10	ug/L	< 1.00				
1,2-Dichloroethane	2019-06	ug/L				< 1.00	
1,2-Dichloroethane	2019-08	ug/L				< 1.00	
1,2-Dichloroethane	2019-11	ug/L				< 1.00	< 1.00
1,2-Dichloroethane	2020-02	ug/L					< 1.00
1,2-Dichloroethane	2020-06	ug/L				< 1.00	
1,2-Dichloroethane	2020-07	ug/L					< 1.00
1,2-Dichloroethane	2020-08	ug/L				< 1.00	< 1.00
1,2-Dichloroethane	2020-11	ug/L				< 1.00	< 1.00
1,2-Dichloroethane	2021-06	ug/L	< 1.00			< 1.00	< 1.00
1,2-Dichloroethane	2021-09	ug/L			< 1.00	< 1.00	< 1.00
1,2-Dichloroethane	2021-12	ug/L			< 1.00		
1,2-Dichloroethane	2022-03	ug/L			< 1.00	< 1.00	< 1.00
1,2-Dichloroethane	2022-06	ug/L			< 1.00		
1,2-Dichloroethane	2022-08	ug/L			< 1.00	< 1.00	
1,2-Dichloroethane	2022-09	ug/L	< 1.00				< 1.00
1,2-Dichloroethane	2022-12	ug/L			< 1.00		
1,2-Dichloroethane	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00
1,2-Dichloroethane	2023-11	ug/L			< 1.00	< 1.00	< 1.00
1,2-Dichloroethane	2024-06	ug/L			< 1.00	< 1.00	
1,2-Dichloroethane	2024-07	ug/L	< 1.00 J	< 1.00 J			< 1.00
1,2-Dichloroethane	2024-08	ug/L		< 1.00			
1,2-Dichloroethane	2024-12	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichloroethane	2025-06	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichloroethane	2025-10	ug/L		< 1	< 1		< 1
1,2-Dichloropropane	2018-10	ug/L	< 1.00				
1,2-Dichloropropane	2019-06	ug/L				< 1.00	
1,2-Dichloropropane	2019-08	ug/L				< 1.00	
1,2-Dichloropropane	2019-11	ug/L				< 1.00	< 1.00
1,2-Dichloropropane	2020-02	ug/L					< 1.00
1,2-Dichloropropane	2020-06	ug/L				< 1.00	
1,2-Dichloropropane	2020-07	ug/L					< 1.00
1,2-Dichloropropane	2020-08	ug/L				< 1.00	< 1.00
1,2-Dichloropropane	2020-11	ug/L				< 1.00	< 1.00
1,2-Dichloropropane	2021-06	ug/L	< 1.00			< 1.00	< 1.00
1,2-Dichloropropane	2021-09	ug/L			< 1.00	< 1.00	< 1.00
1,2-Dichloropropane	2021-12	ug/L			< 1.00		
1,2-Dichloropropane	2022-03	ug/L			< 1.00	< 1.00	< 1.00
1,2-Dichloropropane	2022-06	ug/L			< 1.00		
1,2-Dichloropropane	2022-08	ug/L			< 1.00	< 1.00	
1,2-Dichloropropane	2022-09	ug/L	< 1.00				< 1.00
1,2-Dichloropropane	2022-12	ug/L			< 1.00		
1,2-Dichloropropane	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00
1,2-Dichloropropane	2023-11	ug/L			< 1.00	< 1.00	< 1.00
1,2-Dichloropropane	2024-06	ug/L			< 1.00	< 1.00	
1,2-Dichloropropane	2024-07	ug/L	< 1.00 J	< 1.00 J			< 1.00
1,2-Dichloropropane	2024-08	ug/L		< 1.00			
1,2-Dichloropropane	2024-12	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichloropropane	2025-06	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichloropropane	2025-10	ug/L		< 1	< 1		< 1
1,3,5-Trinitrobenzene	2020-11	ug/L					< 11.8
1,3,5-Trinitrobenzene	2021-06	ug/L					< 12.0
1,3,5-Trinitrobenzene	2023-06	ug/L	< 11.4				
1,3,5-Trinitrobenzene	2024-07	ug/L	< 12.5 J				
1,3-Dichlorobenzene	2020-11	ug/L					< 1.00
1,3-Dichlorobenzene	2021-06	ug/L					< 1.00
1,3-Dichlorobenzene	2023-06	ug/L	< 1.00				
1,3-Dichlorobenzene	2024-07	ug/L	< 1.00 J				
1,3-Dichloropropane	2020-11	ug/L					< 1.00
1,3-Dichloropropane	2021-06	ug/L					< 1.00
1,3-Dichloropropane	2023-06	ug/L	< 1.00				
1,3-Dichloropropane	2024-07	ug/L	< 1.00 J				
1,3-Dinitrobenzene	2020-11	ug/L					< 11.8
1,3-Dinitrobenzene	2021-06	ug/L					< 12.0
1,3-Dinitrobenzene	2023-06	ug/L	< 11.4				
1,3-Dinitrobenzene	2024-07	ug/L	< 12.5 J				
1,4-Dichlorobenzene	2018-10	ug/L	< 1.00				
1,4-Dichlorobenzene	2019-06	ug/L				< 1.00	
1,4-Dichlorobenzene	2019-08	ug/L				< 1.00	
1,4-Dichlorobenzene	2019-11	ug/L				< 1.00	< 1.00
1,4-Dichlorobenzene	2020-02	ug/L					< 1.00
1,4-Dichlorobenzene	2020-06	ug/L				< 1.00	
1,4-Dichlorobenzene	2020-07	ug/L					< 1.00
1,4-Dichlorobenzene	2020-08	ug/L				< 1.00	< 1.00
1,4-Dichlorobenzene	2020-11	ug/L				< 1.00	< 1.00
1,4-Dichlorobenzene	2021-06	ug/L	< 1.00			< 1.00	< 1.00
1,4-Dichlorobenzene	2021-09	ug/L			< 1.00	< 1.00	< 1.00
1,4-Dichlorobenzene	2021-12	ug/L			< 1.00		
1,4-Dichlorobenzene	2022-03	ug/L			< 1.00	< 1.00	< 1.00
1,4-Dichlorobenzene	2022-06	ug/L			< 1.00		
1,4-Dichlorobenzene	2022-08	ug/L			< 1.00	< 1.00	
1,4-Dichlorobenzene	2022-09	ug/L	< 1.00				< 1.00
1,4-Dichlorobenzene	2022-12	ug/L			< 1.00		
1,4-Dichlorobenzene	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00
1,4-Dichlorobenzene	2023-11	ug/L			< 1.00	< 1.00	< 1.00
1,4-Dichlorobenzene	2024-06	ug/L			< 1.00	< 1.00	
1,4-Dichlorobenzene	2024-07	ug/L	< 1.00 J	< 1.00 J			< 1.00

Table 14

Winneshiek County Area Solid Waste Agency **Analytical Data Summary - Deep Groundwater Appendix II**
Permit No. 57-SDP-01-74P **2025 Annual Water Quality Report**

Constituent	Date	Units	MW-11 (DwnGrad)	MW-18 (Bkgrnd)	MW-19R (Bkgrnd)	MW-22 (DwnGrad)	MW-35 (DwnGrad)
1,1,1,2-Tetrachloroethane	2018-10	ug/L	< 1.00				
1,4-Dichlorobenzene	2024-08	ug/L		< 1.00			
1,4-Dichlorobenzene	2024-12	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
1,4-Dichlorobenzene	2025-06	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
1,4-Dichlorobenzene	2025-10	ug/L		< 1	< 1		< 1
1,4-Naphthoquinone	2020-11	ug/L					< 11.8
1,4-Naphthoquinone	2021-06	ug/L					< 12.0
1,4-Naphthoquinone	2023-06	ug/L	< 11.4				
1,4-Naphthoquinone	2024-07	ug/L	< 12.5 J				
1-Naphthylamine	2020-11	ug/L					< 11.8
1-Naphthylamine	2021-06	ug/L					< 12.0
1-Naphthylamine	2023-06	ug/L	< 11.4				
1-Naphthylamine	2024-07	ug/L	< 12.5 J				
2,2-Dichloropropane	2020-11	ug/L					< 4.00
2,2-Dichloropropane	2021-06	ug/L					< 4.00
2,2-Dichloropropane	2023-06	ug/L	< 4.00				
2,2-Dichloropropane	2024-07	ug/L	< 4.00 J				
2,2'-oxybis(1-Chloropropane)	2020-11	ug/L					< 11.8
2,2'-oxybis(1-Chloropropane)	2021-06	ug/L					< 12.0
2,2'-oxybis(1-Chloropropane)	2023-06	ug/L	< 11.4				
2,2'-oxybis(1-Chloropropane)	2024-07	ug/L	< 12.5 J				
2,3,4,6-Tetrachlorophenol	2020-11	ug/L					< 11.8
2,3,4,6-Tetrachlorophenol	2021-06	ug/L					< 12.0
2,3,4,6-Tetrachlorophenol	2023-06	ug/L	< 11.4				
2,3,4,6-Tetrachlorophenol	2024-07	ug/L	< 12.5 J				
2,4,5-T	2020-11	ug/L					< 1.26
2,4,5-T	2021-06	ug/L					< 1.32
2,4,5-T	2023-06	ug/L	< 1.11				
2,4,5-T	2024-07	ug/L	< 0.213 J				
2,4,5-TP (Silvex)	2020-11	ug/L					< 1.26
2,4,5-TP (Silvex)	2021-06	ug/L					< 1.32
2,4,5-TP (Silvex)	2023-06	ug/L	< 1.11				
2,4,5-TP (Silvex)	2024-07	ug/L	< 0.0710 J				
2,4,5-Trichlorophenol	2020-11	ug/L					< 11.8
2,4,5-Trichlorophenol	2021-06	ug/L					< 12.0
2,4,5-Trichlorophenol	2023-06	ug/L	< 11.4				
2,4,5-Trichlorophenol	2024-07	ug/L	< 12.5 J				
2,4,6-Trichlorophenol	2020-11	ug/L					< 11.8
2,4,6-Trichlorophenol	2021-06	ug/L					< 12.0
2,4,6-Trichlorophenol	2023-06	ug/L	< 11.4				
2,4,6-Trichlorophenol	2024-07	ug/L	< 12.5 J				
2,4-D	2020-11	ug/L					< 1.26
2,4-D	2021-06	ug/L					< 1.32
2,4-D	2023-06	ug/L	< 1.11				
2,4-D	2024-07	ug/L	< 0.852 J				
2,4-Dichlorophenol	2020-11	ug/L					< 11.8
2,4-Dichlorophenol	2021-06	ug/L					< 12.0
2,4-Dichlorophenol	2023-06	ug/L	< 11.4				
2,4-Dichlorophenol	2024-07	ug/L	< 12.5 J				
2,4-Dimethylphenol	2020-11	ug/L					< 11.8
2,4-Dimethylphenol	2021-06	ug/L					< 12.0
2,4-Dimethylphenol	2023-06	ug/L	< 11.4				
2,4-Dimethylphenol	2024-07	ug/L	< 12.5 J				
2,4-Dinitrophenol	2020-11	ug/L					< 23.5
2,4-Dinitrophenol	2021-06	ug/L					< 24.1
2,4-Dinitrophenol	2023-06	ug/L	< 22.7				
2,4-Dinitrophenol	2024-07	ug/L	< 25.0 J				
2,4-Dinitrotoluene	2020-11	ug/L					< 11.8
2,4-Dinitrotoluene	2021-06	ug/L					< 12.0
2,4-Dinitrotoluene	2023-06	ug/L	< 11.4				
2,4-Dinitrotoluene	2024-07	ug/L	< 12.5 J				
2,6-Dichlorophenol	2020-11	ug/L					< 11.8
2,6-Dichlorophenol	2021-06	ug/L					< 12.0
2,6-Dichlorophenol	2023-06	ug/L	< 11.4				
2,6-Dichlorophenol	2024-07	ug/L	< 12.5 J				
2,6-Dinitrotoluene	2020-11	ug/L					< 11.8
2,6-Dinitrotoluene	2021-06	ug/L					< 12.0
2,6-Dinitrotoluene	2023-06	ug/L	< 11.4				
2,6-Dinitrotoluene	2024-07	ug/L	< 12.5 J				
2-Acetylaminofluorene	2020-11	ug/L					< 11.8
2-Acetylaminofluorene	2021-06	ug/L					< 12.0
2-Acetylaminofluorene	2023-06	ug/L	< 11.4				
2-Acetylaminofluorene	2024-07	ug/L	< 12.5 J				
2-Butanone	2018-10	ug/L	< 10.0				
2-Butanone	2019-06	ug/L				< 10.0	
2-Butanone	2019-08	ug/L				< 10.0	
2-Butanone	2019-11	ug/L				< 10.0	< 10.0
2-Butanone	2020-02	ug/L					< 10.0
2-Butanone	2020-06	ug/L				< 10.0	
2-Butanone	2020-07	ug/L					< 10.0
2-Butanone	2020-08	ug/L				< 10.0	< 10.0
2-Butanone	2020-11	ug/L				< 10.0	< 10.0
2-Butanone	2021-06	ug/L	< 10.0			< 10.0	< 10.0
2-Butanone	2021-09	ug/L			< 10.0	< 10.0	< 10.0
2-Butanone	2021-12	ug/L			< 10.0		
2-Butanone	2022-03	ug/L			< 10.0	< 10.0	< 10.0
2-Butanone	2022-06	ug/L			< 10.0		
2-Butanone	2022-08	ug/L			< 10.0	< 10.0	

Winneshiek County Area Solid Waste Agency
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Table 14
Analytical Data Summary - Deep Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	MW-11 (DwnGrad)	MW-18 (Bkgrnd)	MW-19R (Bkgrnd)	MW-22 (DwnGrad)	MW-35 (DwnGrad)
1,1,1,2-Tetrachloroethane	2018-10	ug/L	< 1.00				
2-Butanone	2022-09	ug/L	< 10.0				< 10.0
2-Butanone	2022-12	ug/L			< 10.0		
2-Butanone	2023-06	ug/L	< 10.0		< 10.0	< 10.0	< 10.0
2-Butanone	2023-11	ug/L			< 10.0	< 10.0	< 10.0
2-Butanone	2024-06	ug/L			< 10.0	**2.52 J**	
2-Butanone	2024-07	ug/L	**2.49 J**	< 10.0 J			< 10.0
2-Butanone	2024-08	ug/L		< 10.0			
2-Butanone	2024-12	ug/L		< 10.0	< 10.0	< 10.0	< 10.0
2-Butanone	2025-06	ug/L		< 10.0	< 10.0	< 10.0	< 10.0
2-Butanone	2025-10	ug/L		< 10	< 10		< 10
2-Chloronaphthalene	2020-11	ug/L					< 11.8
2-Chloronaphthalene	2021-06	ug/L					< 12.0
2-Chloronaphthalene	2023-06	ug/L	< 11.4				
2-Chloronaphthalene	2024-07	ug/L	< 12.5 J				
2-Chlorophenol	2020-11	ug/L					< 11.8
2-Chlorophenol	2021-06	ug/L					< 12.0
2-Chlorophenol	2023-06	ug/L	< 11.4				
2-Chlorophenol	2024-07	ug/L	< 12.5 J				
2-Hexanone	2018-10	ug/L	< 10.0				
2-Hexanone	2019-06	ug/L				< 10.0	
2-Hexanone	2019-08	ug/L				< 10.0	
2-Hexanone	2019-11	ug/L				< 10.0	< 10.0
2-Hexanone	2020-02	ug/L					< 10.0
2-Hexanone	2020-06	ug/L				< 10.0	
2-Hexanone	2020-07	ug/L					< 10.0
2-Hexanone	2020-08	ug/L				< 10.0	< 10.0
2-Hexanone	2020-11	ug/L				< 10.0	< 10.0
2-Hexanone	2021-06	ug/L	< 10.0			< 10.0	< 10.0
2-Hexanone	2021-09	ug/L			< 10.0	< 10.0	< 10.0
2-Hexanone	2021-12	ug/L			< 10.0		
2-Hexanone	2022-03	ug/L			< 10.0	< 10.0	< 10.0
2-Hexanone	2022-06	ug/L			< 10.0		
2-Hexanone	2022-08	ug/L			< 10.0	< 10.0	
2-Hexanone	2022-09	ug/L	< 10.0				< 10.0
2-Hexanone	2022-12	ug/L			< 10.0		
2-Hexanone	2023-06	ug/L	< 10.0		< 10.0	< 10.0	< 10.0
2-Hexanone	2023-11	ug/L			< 10.0	< 10.0	< 10.0
2-Hexanone	2024-06	ug/L			< 10.0	< 10.0	
2-Hexanone	2024-07	ug/L	< 10.0 J	< 10.0 J			< 10.0
2-Hexanone	2024-08	ug/L		< 10.0			
2-Hexanone	2024-12	ug/L		< 10.0	< 10.0	< 10.0	< 10.0
2-Hexanone	2025-06	ug/L		< 10.0	< 10.0	< 10.0	< 10.0
2-Hexanone	2025-10	ug/L		< 10	< 10		< 10
2-Methylnaphthalene	2020-11	ug/L					< 11.8
2-Methylnaphthalene	2021-06	ug/L					< 12.0
2-Methylnaphthalene	2023-06	ug/L	< 11.4				
2-Methylnaphthalene	2024-07	ug/L	< 12.5 J				
2-Methylphenol	2020-11	ug/L					< 11.8
2-Methylphenol	2021-06	ug/L					< 12.0
2-Methylphenol	2023-06	ug/L	< 11.4				
2-Methylphenol	2024-07	ug/L	< 12.5 J				
2-Naphthylamine	2020-11	ug/L					< 11.8
2-Naphthylamine	2021-06	ug/L					< 12.0
2-Naphthylamine	2023-06	ug/L	< 11.4				
2-Naphthylamine	2024-07	ug/L	< 12.5 J				
2-Nitroaniline	2020-11	ug/L					< 11.8
2-Nitroaniline	2021-06	ug/L					< 12.0
2-Nitroaniline	2023-06	ug/L	< 11.4				
2-Nitroaniline	2024-07	ug/L	< 12.5 J				
2-Nitrophenol	2020-11	ug/L					< 11.8
2-Nitrophenol	2021-06	ug/L					< 12.0
2-Nitrophenol	2023-06	ug/L	< 11.4				
2-Nitrophenol	2024-07	ug/L	< 12.5 J				
3,3-Dichlorobenzidine	2020-11	ug/L					< 11.8
3,3-Dichlorobenzidine	2021-06	ug/L					< 12.0
3,3-Dichlorobenzidine	2023-06	ug/L	< 11.4				
3,3-Dichlorobenzidine	2024-07	ug/L	< 12.5 J				
3,3-Dimethylbenzidine	2020-11	ug/L					< 11.8
3,3-Dimethylbenzidine	2021-06	ug/L					< 12.0
3,3-Dimethylbenzidine	2023-06	ug/L	< 11.4				
3,3-Dimethylbenzidine	2024-07	ug/L	< 12.5 J				
3-Methylcholanthrene	2020-11	ug/L					< 11.8
3-Methylcholanthrene	2021-06	ug/L					< 12.0
3-Methylcholanthrene	2023-06	ug/L	< 11.4				
3-Methylcholanthrene	2024-07	ug/L	< 12.5 J				
3-Nitroaniline	2020-11	ug/L					< 11.8
3-Nitroaniline	2021-06	ug/L					< 12.0
3-Nitroaniline	2023-06	ug/L	< 11.4				
3-Nitroaniline	2024-07	ug/L	< 12.5 J				
4,4'-DDD	2020-11	ug/L					**0.00285 J**
4,4'-DDD	2021-06	ug/L					< 0.0400
4,4'-DDD	2023-06	ug/L	< 0.0762				
4,4'-DDD	2024-07	ug/L	< 0.0936 J				
4,4'-DDE	2020-11	ug/L					< 0.0390
4,4'-DDE	2021-06	ug/L					< 0.0400
4,4'-DDE	2023-06	ug/L	< 0.0762				
4,4'-DDE	2024-07	ug/L	< 0.0936 J				

Table 14

Winneshiek County Area Solid Waste Agency **Analytical Data Summary - Deep Groundwater Appendix II**
Permit No. 57-SDP-01-74P **2025 Annual Water Quality Report**

Constituent	Date	Units	MW-11 (DwnGrad)	MW-18 (Bkgrnd)	MW-19R (Bkgrnd)	MW-22 (DwnGrad)	MW-35 (DwnGrad)
1,1,1,2-Tetrachloroethane	2018-10	ug/L	< 1.00				
4,4'-DDT	2020-11	ug/L					< 0.0390
4,4'-DDT	2021-06	ug/L					< 0.0400
4,4'-DDT	2023-06	ug/L	< 0.0762				
4,4'-DDT	2024-07	ug/L	< 0.0936 J				
4,6-Dinitro-2-methylphenol	2020-11	ug/L					< 11.8
4,6-Dinitro-2-methylphenol	2021-06	ug/L					< 12.0
4,6-Dinitro-2-methylphenol	2023-06	ug/L	< 11.4				
4,6-Dinitro-2-methylphenol	2024-07	ug/L	< 12.5 J				
4-Aminobiphenyl	2020-11	ug/L					< 11.8
4-Aminobiphenyl	2021-06	ug/L					< 12.0
4-Aminobiphenyl	2023-06	ug/L	< 11.4				
4-Aminobiphenyl	2024-07	ug/L	< 12.5 J				
4-Bromophenyl Phenyl Ether	2020-11	ug/L					< 11.8
4-Bromophenyl Phenyl Ether	2021-06	ug/L					< 12.0
4-Bromophenyl Phenyl Ether	2023-06	ug/L	< 11.4				
4-Bromophenyl Phenyl Ether	2024-07	ug/L	< 12.5 J				
4-Chloro-3-methylphenol	2020-11	ug/L					< 11.8
4-Chloro-3-methylphenol	2021-06	ug/L					< 12.0
4-Chloro-3-methylphenol	2023-06	ug/L	< 11.4				
4-Chloro-3-methylphenol	2024-07	ug/L	< 12.5 J				
4-Chloroaniline	2020-11	ug/L					< 11.8
4-Chloroaniline	2021-06	ug/L					< 12.0
4-Chloroaniline	2023-06	ug/L	< 11.4				
4-Chloroaniline	2024-07	ug/L	< 12.5 J				
4-Chlorophenyl Phenyl Ether	2020-11	ug/L					< 11.8
4-Chlorophenyl Phenyl Ether	2021-06	ug/L					< 12.0
4-Chlorophenyl Phenyl Ether	2023-06	ug/L	< 11.4				
4-Chlorophenyl Phenyl Ether	2024-07	ug/L	< 12.5 J				
4-Methyl-2-pentanone	2018-10	ug/L	< 10.0				
4-Methyl-2-pentanone	2019-06	ug/L				< 10.0	
4-Methyl-2-pentanone	2019-08	ug/L				< 10.0	
4-Methyl-2-pentanone	2019-11	ug/L				< 10.0	< 10.0
4-Methyl-2-pentanone	2020-02	ug/L					< 10.0
4-Methyl-2-pentanone	2020-06	ug/L				< 10.0	
4-Methyl-2-pentanone	2020-07	ug/L					< 10.0
4-Methyl-2-pentanone	2020-08	ug/L				< 10.0	< 10.0
4-Methyl-2-pentanone	2020-11	ug/L				< 10.0	< 10.0
4-Methyl-2-pentanone	2021-06	ug/L	< 10.0			< 10.0	< 10.0
4-Methyl-2-pentanone	2021-09	ug/L			< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2021-12	ug/L			< 10.0		
4-Methyl-2-pentanone	2022-03	ug/L			< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2022-06	ug/L			< 10.0		
4-Methyl-2-pentanone	2022-08	ug/L			< 10.0	< 10.0	
4-Methyl-2-pentanone	2022-09	ug/L	< 10.0				< 10.0
4-Methyl-2-pentanone	2022-12	ug/L			< 10.0		
4-Methyl-2-pentanone	2023-06	ug/L	< 10.0		< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2023-11	ug/L			< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2024-06	ug/L			< 10.0	< 10.0	
4-Methyl-2-pentanone	2024-07	ug/L	< 10.0 J	< 10.0 J			< 10.0
4-Methyl-2-pentanone	2024-08	ug/L		< 10.0			
4-Methyl-2-pentanone	2024-12	ug/L		< 10.0	< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2025-06	ug/L		< 10.0	< 10.0	< 10.0	< 10.0
4-Methyl-2-pentanone	2025-10	ug/L		< 10	< 10		< 10
4-Methylphenol	2020-11	ug/L					< 11.8
4-Methylphenol	2021-06	ug/L					< 12.0
4-Methylphenol	2023-06	ug/L	< 11.4				
4-Methylphenol	2024-07	ug/L	< 12.5 J				
4-Nitroaniline	2020-11	ug/L					< 11.8
4-Nitroaniline	2021-06	ug/L					< 12.0
4-Nitroaniline	2023-06	ug/L	< 11.4				
4-Nitroaniline	2024-07	ug/L	< 12.5 J				
4-Nitrophenol	2020-11	ug/L					< 11.8
4-Nitrophenol	2021-06	ug/L					< 12.0
4-Nitrophenol	2023-06	ug/L	< 11.4				
4-Nitrophenol	2024-07	ug/L	< 12.5 J				
5-Nitro-o-toluidine	2020-11	ug/L					< 11.8
5-Nitro-o-toluidine	2021-06	ug/L					< 12.0
5-Nitro-o-toluidine	2023-06	ug/L	< 11.4				
5-Nitro-o-toluidine	2024-07	ug/L	< 12.5 J				
7,12-Dimethylbenz(a)anthracene	2020-11	ug/L					< 11.8
7,12-Dimethylbenz(a)anthracene	2021-06	ug/L					< 12.0
7,12-Dimethylbenz(a)anthracene	2023-06	ug/L	< 11.4				
7,12-Dimethylbenz(a)anthracene	2024-07	ug/L	< 12.5 J				
Acenaphthene	2020-11	ug/L					< 11.8
Acenaphthene	2021-06	ug/L					< 12.0
Acenaphthene	2023-06	ug/L	< 11.4				
Acenaphthene	2024-07	ug/L	< 12.5 J				
Acenaphthylene	2020-11	ug/L					< 11.8
Acenaphthylene	2021-06	ug/L					< 12.0
Acenaphthylene	2023-06	ug/L	< 11.4				
Acenaphthylene	2024-07	ug/L	< 12.5 J				
Acetone	2018-10	ug/L	< 10.0				
Acetone	2019-06	ug/L				< 10.0	
Acetone	2019-08	ug/L				< 10.0	
Acetone	2019-11	ug/L				< 10.0	< 10.0
Acetone	2020-02	ug/L					< 10.0
Acetone	2020-06	ug/L				< 10.0	

Constituent	Date	Units	MW-11 (DwnGrad)	MW-18 (Bkgrnd)	MW-19R (Bkgrnd)	MW-22 (DwnGrad)	MW-35 (DwnGrad)
1,1,1,2-Tetrachloroethane	2018-10	ug/L	< 1.00				
Acetone	2020-07	ug/L					< 10.0
Acetone	2020-08	ug/L				< 10.0	< 10.0
Acetone	2020-11	ug/L				< 10.0	< 10.0
Acetone	2021-06	ug/L	< 10.0			< 10.0	< 10.0
Acetone	2021-09	ug/L			**10.3**	< 10.0	< 10.0
Acetone	2021-12	ug/L			< 10.0		
Acetone	2022-03	ug/L			< 10.0	< 10.0	< 10.0
Acetone	2022-06	ug/L			< 10.0		
Acetone	2022-08	ug/L			< 10.0	< 10.0	
Acetone	2022-09	ug/L	< 10.0				< 10.0
Acetone	2022-12	ug/L			< 10.0		
Acetone	2023-06	ug/L	< 10.0		< 10.0	< 10.0	< 10.0
Acetone	2023-11	ug/L			< 10.0	< 10.0	< 10.0
Acetone	2024-06	ug/L			< 10.0	< 10.0	
Acetone	2024-07	ug/L	< 10.0 J	< 10.0 J			< 10.0
Acetone	2024-08	ug/L		< 10.0			
Acetone	2024-12	ug/L		< 10.0	< 10.0	< 10.0	< 10.0
Acetone	2025-06	ug/L		< 10.0	< 10.0	< 10.0	< 10.0
Acetone	2025-10	ug/L		< 10	< 10		< 10
Acetonitrile	2020-11	mg/L					< 10.0
Acetonitrile	2021-06	mg/L					< 10.0
Acetonitrile	2023-06	mg/L	< 10.0				
Acetonitrile	2024-07	ug/L	< 10000 J				
Acetophenone	2020-11	ug/L					< 11.8
Acetophenone	2021-06	ug/L					< 12.0
Acetophenone	2023-06	ug/L	< 11.4				
Acetophenone	2024-07	ug/L	< 12.5 J				
Acrolein	2020-11	ug/L					< 10.0
Acrolein	2021-06	ug/L					< 10.0
Acrolein	2023-06	ug/L	< 10.0				
Acrolein	2024-07	ug/L	< 10.0 J				
Acrylonitrile	2018-10	ug/L	< 5.00				
Acrylonitrile	2019-06	ug/L				< 5.00	
Acrylonitrile	2019-08	ug/L				< 5.00	
Acrylonitrile	2019-11	ug/L				< 5.00	< 5.00
Acrylonitrile	2020-02	ug/L					< 5.00
Acrylonitrile	2020-06	ug/L				< 5.00	
Acrylonitrile	2020-07	ug/L					< 5.00
Acrylonitrile	2020-08	ug/L				< 5.00	< 5.00
Acrylonitrile	2020-11	ug/L				< 5.00	< 5.00
Acrylonitrile	2021-06	ug/L	< 5.00			< 5.00	< 5.00
Acrylonitrile	2021-09	ug/L			< 5.00	< 5.00	< 5.00
Acrylonitrile	2021-12	ug/L			< 5.00		
Acrylonitrile	2022-03	ug/L			< 5.00	< 5.00	< 5.00
Acrylonitrile	2022-06	ug/L			< 5.00		
Acrylonitrile	2022-08	ug/L			< 5.00	< 5.00	
Acrylonitrile	2022-09	ug/L	< 5.00				< 5.00
Acrylonitrile	2022-12	ug/L			< 5.00		
Acrylonitrile	2023-06	ug/L	< 5.00		< 5.00	< 5.00	< 5.00
Acrylonitrile	2023-11	ug/L			< 5.00	< 5.00	< 5.00
Acrylonitrile	2024-06	ug/L			< 5.00	< 5.00	
Acrylonitrile	2024-07	ug/L	< 5.00 J	< 5.00 J			< 5.00
Acrylonitrile	2024-08	ug/L		< 5.00			
Acrylonitrile	2024-12	ug/L		< 5.00	< 5.00	< 5.00	< 5.00
Acrylonitrile	2025-06	ug/L		< 5.00	< 5.00	< 5.00	< 5.00
Acrylonitrile	2025-10	ug/L		< 5	< 5		< 5
Aldrin	2020-11	ug/L					< 0.0390
Aldrin	2021-06	ug/L					< 0.0400
Aldrin	2023-06	ug/L	< 0.0762				
Aldrin	2024-07	ug/L	< 0.0936 J				
Allyl Chloride	2020-11	ug/L					< 2.00
Allyl Chloride	2021-06	ug/L					< 2.00
Allyl Chloride	2023-06	ug/L	< 2.00				
Allyl Chloride	2024-07	ug/L	< 2.00 J				
alpha-BHC	2020-11	ug/L					**0.00209 J**
alpha-BHC	2021-06	ug/L					< 0.0400
alpha-BHC	2023-06	ug/L	< 0.0762				
alpha-BHC	2024-07	ug/L	< 0.0936 J				
Anthracene	2020-11	ug/L					< 11.8
Anthracene	2021-06	ug/L					< 12.0
Anthracene	2023-06	ug/L	< 11.4				
Anthracene	2024-07	ug/L	< 12.5 J				
Antimony	2018-10	ug/L	**0.778 J**				
Antimony	2019-06	ug/L				< 3.00	
Antimony	2019-08	ug/L				< 3.00	
Antimony	2019-11	ug/L				< 1.00	< 1.00
Antimony	2020-02	ug/L					< 1.00
Antimony	2020-06	ug/L				< 1.00	
Antimony	2020-07	ug/L					< 1.00
Antimony	2020-08	ug/L				< 1.00	< 1.00
Antimony	2020-11	ug/L				**1.23**	< 1.00
Antimony	2021-06	ug/L	< 2.00			< 2.00	< 2.00
Antimony	2021-09	ug/L			< 2.00	< 2.00	< 2.00
Antimony	2021-12	ug/L			< 2.00		
Antimony	2022-03	ug/L			< 2.00	< 2.00	< 2.00
Antimony	2022-06	ug/L			< 2.00		
Antimony	2022-08	ug/L			< 2.00	< 2.00	

Table 14

Winneshiek County Area Solid Waste Agency **Analytical Data Summary - Deep Groundwater Appendix II**

Permit No. 57-SDP-01-74P **2025 Annual Water Quality Report**

Constituent	Date	Units	MW-11 (DwnGrad)	MW-18 (Bkgrnd)	MW-19R (Bkgrnd)	MW-22 (DwnGrad)	MW-35 (DwnGrad)
1,1,1,2-Tetrachloroethane	2018-10	ug/L	< 1.00				
Antimony	2022-09	ug/L	< 2.00				< 2.00
Antimony	2022-12	ug/L			< 2.00		
Antimony	2023-06	ug/L	< 2.00		< 2.00	< 2.00	< 2.00
Antimony	2023-11	ug/L			< 2.00	< 2.00	< 2.00
Antimony	2024-06	ug/L			< 2.00	< 2.00	
Antimony	2024-07	ug/L	< 2.00	< 2.00			< 2.00
Antimony	2024-08	ug/L		< 2.00			
Antimony	2024-12	ug/L		< 2.00	< 2.00	< 2.00	< 2.00
Antimony	2025-06	ug/L		< 2.00	< 2.00	< 2.00	< 2.00
Antimony	2025-10	ug/L		**1.27 J**	< 2		< 2
Arsenic	2018-10	ug/L	< 2.00				
Arsenic	2019-06	ug/L				**1.16**	
Arsenic	2019-08	ug/L				**0.899 J**	
Arsenic	2019-11	ug/L				**1.04 J**	< 2.00
Arsenic	2020-02	ug/L					< 2.00
Arsenic	2020-06	ug/L				< 2.00	
Arsenic	2020-07	ug/L					< 2.00
Arsenic	2020-08	ug/L				< 2.00	< 2.00
Arsenic	2020-11	ug/L				< 2.00	< 2.00
Arsenic	2021-06	ug/L	< 2.00			**0.872 J**	< 2.00
Arsenic	2021-09	ug/L			< 2.00	< 2.00	< 2.00
Arsenic	2021-12	ug/L			< 2.00		
Arsenic	2022-03	ug/L			~~**1.05 J**~~	< 2.00	**1.01 J**
Arsenic	2022-06	ug/L			< 2.00		
Arsenic	2022-08	ug/L			< 2.00	< 2.00	
Arsenic	2022-09	ug/L	< 2.00				**1.13 J**
Arsenic	2022-12	ug/L			< 2.00		
Arsenic	2023-06	ug/L	< 2.00		< 2.00	**0.618 J**	**0.761 J**
Arsenic	2023-11	ug/L			< 2.00	**0.834 J**	**1.73 J**
Arsenic	2024-06	ug/L			< 2.00	**0.801 J**	
Arsenic	2024-07	ug/L	< 2.00	< 2.00			**0.767 J**
Arsenic	2024-08	ug/L		< 2.00			
Arsenic	2024-12	ug/L		< 2.00	< 2.00	**0.864 J**	**1.09 J**
Arsenic	2025-06	ug/L		< 2.00	< 2.00	**0.66 J**	**0.786 J**
Arsenic	2025-10	ug/L		< 2	~~**0.561 J**~~		**0.867 J**
Barium	2018-10	ug/L	**16.9**				
Barium	2019-06	ug/L				**146**	
Barium	2019-08	ug/L				**176**	
Barium	2019-11	ug/L				**161**	**326**
Barium	2020-02	ug/L					**294**
Barium	2020-06	ug/L				**144**	
Barium	2020-07	ug/L					**337**
Barium	2020-08	ug/L				**174**	**288**
Barium	2020-11	ug/L				**154**	**278**
Barium	2021-06	ug/L	**18.7**			**147**	**276**
Barium	2021-09	ug/L			~~**190**~~	**151**	**301**
Barium	2021-12	ug/L			**100**		
Barium	2022-03	ug/L			~~**139**~~	**133**	**316**
Barium	2022-06	ug/L			**72.3**		
Barium	2022-08	ug/L			**168**	**156**	
Barium	2022-09	ug/L	**17.7**				**345**
Barium	2022-12	ug/L			**152**		
Barium	2023-06	ug/L	**15.4**		~~**82.4**~~	**148**	**264**
Barium	2023-11	ug/L			**84.1**	**159**	**467**
Barium	2024-06	ug/L			**58.4**	**137**	
Barium	2024-07	ug/L	**14.3**	**60.5**			**280**
Barium	2024-08	ug/L		**69.2**			
Barium	2024-12	ug/L		**76.2**	**96.3**	**146**	**186**
Barium	2025-06	ug/L		**75.9**	**75.8**	**155**	**279**
Barium	2025-10	ug/L		**72.5**	~~**92.1**~~		**256**
Benzene	2018-10	ug/L	< 0.500				
Benzene	2019-06	ug/L				< 0.500	
Benzene	2019-08	ug/L				< 0.500	
Benzene	2019-11	ug/L				< 0.500	< 0.500
Benzene	2020-02	ug/L					< 0.500
Benzene	2020-06	ug/L				< 0.500	
Benzene	2020-07	ug/L					< 0.500
Benzene	2020-08	ug/L				< 0.500	< 0.500
Benzene	2020-11	ug/L				< 0.500	< 0.500
Benzene	2021-06	ug/L	< 0.500			< 0.500	< 0.500
Benzene	2021-09	ug/L			**0.467 J**	< 0.500	< 0.500
Benzene	2021-12	ug/L			< 0.500		
Benzene	2022-03	ug/L			**0.394 J**	< 0.500	< 0.500
Benzene	2022-06	ug/L			< 0.500		
Benzene	2022-08	ug/L			< 0.500	< 0.500	
Benzene	2022-09	ug/L	< 0.500				< 0.500
Benzene	2022-12	ug/L			**0.343 J**		
Benzene	2023-06	ug/L	< 0.500		< 0.500	< 0.500	< 0.500
Benzene	2023-11	ug/L			**0.445 J**	< 0.500	< 0.500
Benzene	2024-06	ug/L			< 0.500	< 0.500	
Benzene	2024-07	ug/L	< 0.500 J	< 0.500 J			< 0.500
Benzene	2024-08	ug/L		< 0.500			
Benzene	2024-12	ug/L		< 0.500	**0.235 J**	< 0.500	< 0.500
Benzene	2025-06	ug/L		< 0.500	< 0.500	< 0.500	< 0.500
Benzene	2025-10	ug/L		< 0.5	< 0.5		< 0.5
Benzo(a)anthracene	2020-11	ug/L					< 11.8
Benzo(a)anthracene	2021-06	ug/L					< 12.0

Table 14

Winneshiek County Area Solid Waste Agency **Analytical Data Summary - Deep Groundwater Appendix II**
Permit No. 57-SDP-01-74P **2025 Annual Water Quality Report**

Constituent	Date	Units	MW-11 (DwnGrad)	MW-18 (Bkgrnd)	MW-19R (Bkgrnd)	MW-22 (DwnGrad)	MW-35 (DwnGrad)
1,1,1,2-Tetrachloroethane	2018-10	ug/L	< 1.00				
Benzo(a)anthracene	2023-06	ug/L	< 11.4				
Benzo(a)anthracene	2024-07	ug/L	< 12.5 J				
Benzo(a)pyrene	2020-11	ug/L					< 11.8
Benzo(a)pyrene	2021-06	ug/L					< 12.0
Benzo(a)pyrene	2023-06	ug/L	< 11.4				
Benzo(a)pyrene	2024-07	ug/L	< 12.5 J				
Benzo(b)fluoranthene	2020-11	ug/L					< 11.8
Benzo(b)fluoranthene	2021-06	ug/L					< 12.0
Benzo(b)fluoranthene	2023-06	ug/L	< 11.4				
Benzo(b)fluoranthene	2024-07	ug/L	< 12.5 J				
Benzo(ghi)perylene	2020-11	ug/L					< 11.8
Benzo(ghi)perylene	2021-06	ug/L					< 12.0
Benzo(ghi)perylene	2023-06	ug/L	< 11.4				
Benzo(ghi)perylene	2024-07	ug/L	< 12.5 J				
Benzo(k)fluoranthene	2020-11	ug/L					< 11.8
Benzo(k)fluoranthene	2021-06	ug/L					< 12.0
Benzo(k)fluoranthene	2023-06	ug/L	< 11.4				
Benzo(k)fluoranthene	2024-07	ug/L	< 12.5 J				
Benzyl Alcohol	2020-11	ug/L					< 11.8
Benzyl Alcohol	2021-06	ug/L					< 12.0
Benzyl Alcohol	2023-06	ug/L	< 11.4				
Benzyl Alcohol	2024-07	ug/L	< 12.5 J				
Beryllium	2018-10	ug/L	< 1.00				
Beryllium	2019-06	ug/L				< 1.00	
Beryllium	2019-08	ug/L				< 1.00	
Beryllium	2019-11	ug/L				< 1.00	< 1.00
Beryllium	2020-02	ug/L					< 1.00
Beryllium	2020-06	ug/L				< 1.00	
Beryllium	2020-07	ug/L					< 1.00
Beryllium	2020-08	ug/L				< 1.00	< 1.00
Beryllium	2020-11	ug/L				< 1.00	< 1.00
Beryllium	2021-06	ug/L	< 1.00			< 1.00	< 1.00
Beryllium	2021-09	ug/L			< 1.00	< 1.00	< 1.00
Beryllium	2021-12	ug/L			< 1.00		
Beryllium	2022-03	ug/L			< 1.00	< 1.00	< 1.00
Beryllium	2022-06	ug/L			< 1.00		
Beryllium	2022-08	ug/L			< 1.00	< 1.00	
Beryllium	2022-09	ug/L	< 1.00				< 1.00
Beryllium	2022-12	ug/L			< 1.00		
Beryllium	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00
Beryllium	2023-11	ug/L			< 1.00	< 1.00	< 1.00
Beryllium	2024-06	ug/L			< 1.00	< 1.00	
Beryllium	2024-07	ug/L	< 1.00	< 1.00			< 1.00
Beryllium	2024-08	ug/L		< 1.00			
Beryllium	2024-12	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
Beryllium	2025-06	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
Beryllium	2025-10	ug/L		< 1	< 1		< 1
beta-BHC	2020-11	ug/L					< 0.0390
beta-BHC	2021-06	ug/L					< 0.0400
beta-BHC	2023-06	ug/L	< 0.0762				
beta-BHC	2024-07	ug/L	< 0.0936 J				
bis(2-Chloroethoxy)methane	2020-11	ug/L					< 11.8
bis(2-Chloroethoxy)methane	2021-06	ug/L					< 12.0
bis(2-Chloroethoxy)methane	2023-06	ug/L	< 11.4				
bis(2-Chloroethoxy)methane	2024-07	ug/L	< 12.5 J				
bis(2-Chloroethyl)ether	2020-11	ug/L					< 11.8
bis(2-Chloroethyl)ether	2021-06	ug/L					< 12.0
bis(2-Chloroethyl)ether	2023-06	ug/L	< 11.4				
bis(2-Chloroethyl)ether	2024-07	ug/L	< 12.5 J				
bis(2-Ethylhexyl)phthalate	2020-11	ug/L					< 11.8
bis(2-Ethylhexyl)phthalate	2021-06	ug/L					< 12.0
bis(2-Ethylhexyl)phthalate	2023-06	ug/L	< 11.4				
bis(2-Ethylhexyl)phthalate	2024-07	ug/L	< 12.5 J				
Bromochloromethane	2018-10	ug/L	< 5.00				
Bromochloromethane	2019-06	ug/L				< 5.00	
Bromochloromethane	2019-08	ug/L				< 5.00	
Bromochloromethane	2019-11	ug/L				< 5.00	< 5.00
Bromochloromethane	2020-02	ug/L					< 5.00
Bromochloromethane	2020-06	ug/L				< 5.00	
Bromochloromethane	2020-07	ug/L					< 5.00
Bromochloromethane	2020-08	ug/L				< 5.00	< 5.00
Bromochloromethane	2020-11	ug/L				< 5.00	< 5.00
Bromochloromethane	2021-06	ug/L	< 5.00			< 5.00	< 5.00
Bromochloromethane	2021-09	ug/L			< 5.00	< 5.00	< 5.00
Bromochloromethane	2021-12	ug/L			< 5.00		
Bromochloromethane	2022-03	ug/L			< 5.00	< 5.00	< 5.00
Bromochloromethane	2022-06	ug/L			< 5.00		
Bromochloromethane	2022-08	ug/L			< 5.00	< 5.00	
Bromochloromethane	2022-09	ug/L	< 5.00				< 5.00
Bromochloromethane	2022-12	ug/L			< 5.00		
Bromochloromethane	2023-06	ug/L	< 5.00		< 5.00	< 5.00	< 5.00
Bromochloromethane	2023-11	ug/L			< 5.00	< 5.00	< 5.00
Bromochloromethane	2024-06	ug/L			< 5.00	< 5.00	
Bromochloromethane	2024-07	ug/L	< 5.00 J	< 5.00 J			< 5.00
Bromochloromethane	2024-08	ug/L		< 5.00			
Bromochloromethane	2024-12	ug/L		< 5.00	< 5.00	< 5.00	< 5.00
Bromochloromethane	2025-06	ug/L		< 5.00	< 5.00	< 5.00	< 5.00

Table 14

Winneshiek County Area Solid Waste Agency **Analytical Data Summary - Deep Groundwater Appendix II**

Permit No. 57-SDP-01-74P **2025 Annual Water Quality Report**

Constituent	Date	Units	MW-11 (DwnGrad)	MW-18 (Bkgrnd)	MW-19R (Bkgrnd)	MW-22 (DwnGrad)	MW-35 (DwnGrad)
1,1,1,2-Tetrachloroethane	2018-10	ug/L	< 1.00				
Bromochloromethane	2025-10	ug/L		< 5	< 5		< 5
Bromodichloromethane	2018-10	ug/L	< 1.00				
Bromodichloromethane	2019-06	ug/L				< 1.00	
Bromodichloromethane	2019-08	ug/L				< 1.00	
Bromodichloromethane	2019-11	ug/L				< 1.00	< 1.00
Bromodichloromethane	2020-02	ug/L					< 1.00
Bromodichloromethane	2020-06	ug/L				< 1.00	
Bromodichloromethane	2020-07	ug/L					< 1.00
Bromodichloromethane	2020-08	ug/L				< 1.00	< 1.00
Bromodichloromethane	2020-11	ug/L				< 1.00	< 1.00
Bromodichloromethane	2021-06	ug/L	< 1.00			< 1.00	< 1.00
Bromodichloromethane	2021-09	ug/L			< 1.00	< 1.00	< 1.00
Bromodichloromethane	2021-12	ug/L			< 1.00		
Bromodichloromethane	2022-03	ug/L			< 1.00	< 1.00	< 1.00
Bromodichloromethane	2022-06	ug/L			< 1.00		
Bromodichloromethane	2022-08	ug/L			< 1.00	< 1.00	
Bromodichloromethane	2022-09	ug/L	< 1.00				< 1.00
Bromodichloromethane	2022-12	ug/L			< 1.00		
Bromodichloromethane	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00
Bromodichloromethane	2023-11	ug/L			< 1.00	< 1.00	< 1.00
Bromodichloromethane	2024-06	ug/L			< 1.00	< 1.00	
Bromodichloromethane	2024-07	ug/L	< 1.00 J	< 1.00 J			< 1.00
Bromodichloromethane	2024-08	ug/L		< 1.00			
Bromodichloromethane	2024-12	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
Bromodichloromethane	2025-06	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
Bromodichloromethane	2025-10	ug/L		< 1	< 1		< 1
Bromoform	2018-10	ug/L	< 5.00				
Bromoform	2019-06	ug/L				< 5.00	
Bromoform	2019-08	ug/L				< 5.00	
Bromoform	2019-11	ug/L				< 5.00	< 5.00
Bromoform	2020-02	ug/L					< 5.00
Bromoform	2020-06	ug/L				< 5.00	
Bromoform	2020-07	ug/L					< 5.00
Bromoform	2020-08	ug/L				< 5.00	< 5.00
Bromoform	2020-11	ug/L				< 5.00	< 5.00
Bromoform	2021-06	ug/L	< 5.00			< 5.00	< 5.00
Bromoform	2021-09	ug/L			< 5.00	< 5.00	< 5.00
Bromoform	2021-12	ug/L			< 5.00		
Bromoform	2022-03	ug/L			< 5.00	< 5.00	< 5.00
Bromoform	2022-06	ug/L			< 5.00		
Bromoform	2022-08	ug/L			< 5.00	< 5.00	
Bromoform	2022-09	ug/L	< 5.00				< 5.00
Bromoform	2022-12	ug/L			< 5.00		
Bromoform	2023-06	ug/L	< 5.00		< 5.00	< 5.00	< 5.00
Bromoform	2023-11	ug/L			< 5.00	< 5.00	< 5.00
Bromoform	2024-06	ug/L			< 5.00	< 5.00	
Bromoform	2024-07	ug/L	< 5.00 J	< 5.00 J			< 5.00
Bromoform	2024-08	ug/L		< 5.00			
Bromoform	2024-12	ug/L		< 5.00	< 5.00	< 5.00	< 5.00
Bromoform	2025-06	ug/L		< 5.00	< 5.00	< 5.00	< 5.00
Bromoform	2025-10	ug/L		< 5	< 5		< 5
Bromomethane	2018-10	ug/L	< 4.00				
Bromomethane	2019-06	ug/L				**1.91 J**	
Bromomethane	2019-08	ug/L				< 4.00	
Bromomethane	2019-11	ug/L				< 4.00	< 4.00
Bromomethane	2020-02	ug/L					< 4.00
Bromomethane	2020-06	ug/L				< 4.00	
Bromomethane	2020-07	ug/L					< 4.00
Bromomethane	2020-08	ug/L				< 4.00	< 4.00
Bromomethane	2020-11	ug/L				< 4.00	< 4.00
Bromomethane	2021-06	ug/L	< 4.00			< 4.00	< 4.00
Bromomethane	2021-09	ug/L			< 4.00	< 4.00	< 4.00
Bromomethane	2021-12	ug/L			< 4.00		
Bromomethane	2022-03	ug/L			< 4.00	< 4.00	< 4.00
Bromomethane	2022-06	ug/L			< 4.00		
Bromomethane	2022-08	ug/L			< 4.00	< 4.00	
Bromomethane	2022-09	ug/L	< 4.00				< 4.00
Bromomethane	2022-12	ug/L			< 4.00		
Bromomethane	2023-06	ug/L	< 4.00		< 4.00	< 4.00	< 4.00
Bromomethane	2023-11	ug/L			< 4.00	< 4.00	< 4.00
Bromomethane	2024-06	ug/L			< 4.00	< 4.00	
Bromomethane	2024-07	ug/L	< 4.00 J	< 4.00 J			< 4.00
Bromomethane	2024-08	ug/L		< 4.00			
Bromomethane	2024-12	ug/L		< 4.00	< 4.00	< 4.00	< 4.00
Bromomethane	2025-06	ug/L		< 4.00	< 4.00	< 4.00	< 4.00
Bromomethane	2025-10	ug/L		< 4	< 4		< 4
Butylbenzylphthalate	2020-11	ug/L					< 11.8
Butylbenzylphthalate	2021-06	ug/L					< 12.0
Butylbenzylphthalate	2023-06	ug/L	< 11.4				
Butylbenzylphthalate	2024-07	ug/L	< 12.5 J				
Cadmium	2018-10	ug/L	< 0.500				
Cadmium	2019-06	ug/L				< 0.500	
Cadmium	2019-08	ug/L				< 0.500	
Cadmium	2019-11	ug/L				< 0.100	< 0.100
Cadmium	2020-02	ug/L					< 0.100
Cadmium	2020-06	ug/L				< 0.100	
Cadmium	2020-07	ug/L					< 0.100

Constituent	Date	Units	MW-11 (DwnGrad)	MW-18 (Bkgrnd)	MW-19R (Bkgrnd)	MW-22 (DwnGrad)	MW-35 (DwnGrad)
1,1,1,2-Tetrachloroethane	2018-10	ug/L	< 1.00				
Cadmium	2020-08	ug/L				< 0.100	< 0.100
Cadmium	2020-11	ug/L				< 0.100	< 0.100
Cadmium	2021-06	ug/L	< 0.100			**0.056 J**	< 0.100
Cadmium	2021-09	ug/L			< 0.100	< 0.100	< 0.100
Cadmium	2021-12	ug/L			< 0.100		
Cadmium	2022-03	ug/L			~~0.12~~	< 0.100	< 0.100
Cadmium	2022-06	ug/L			< 0.100		
Cadmium	2022-08	ug/L			< 0.100	**0.057 J**	
Cadmium	2022-09	ug/L	**0.056 J**				< 0.100
Cadmium	2022-12	ug/L			< 0.100		
Cadmium	2023-06	ug/L	< 0.200		< 0.200	< 0.200	< 0.200
Cadmium	2023-11	ug/L			< 0.200	< 0.200	< 0.200
Cadmium	2024-06	ug/L			< 0.200	< 0.200	
Cadmium	2024-07	ug/L	< 0.200	< 0.200			< 0.200
Cadmium	2024-08	ug/L		< 0.200			
Cadmium	2024-12	ug/L		< 0.200	< 0.200	< 0.200	< 0.200
Cadmium	2025-06	ug/L		< 0.200	< 0.200	< 0.200	< 0.200
Cadmium	2025-10	ug/L		< 0.2	< 0.2		< 0.2
Carbon Disulfide	2018-10	ug/L	< 1.00				
Carbon Disulfide	2019-06	ug/L				< 1.00	
Carbon Disulfide	2019-08	ug/L				< 1.00	
Carbon Disulfide	2019-11	ug/L				< 1.00	< 1.00
Carbon Disulfide	2020-02	ug/L					< 1.00
Carbon Disulfide	2020-06	ug/L				< 1.00	
Carbon Disulfide	2020-07	ug/L					< 1.00
Carbon Disulfide	2020-08	ug/L				< 1.00	< 1.00
Carbon Disulfide	2020-11	ug/L				< 1.00	< 1.00
Carbon Disulfide	2021-06	ug/L	< 1.00			< 1.00	< 1.00
Carbon Disulfide	2021-09	ug/L			< 1.00	< 1.00	< 1.00
Carbon Disulfide	2021-12	ug/L			< 1.00		
Carbon Disulfide	2022-03	ug/L			< 1.00	< 1.00	< 1.00
Carbon Disulfide	2022-06	ug/L			< 1.00		
Carbon Disulfide	2022-08	ug/L			< 1.00	< 1.00	
Carbon Disulfide	2022-09	ug/L	< 1.00				< 1.00
Carbon Disulfide	2022-12	ug/L			< 1.00		
Carbon Disulfide	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00
Carbon Disulfide	2023-11	ug/L			< 1.00	< 1.00	< 1.00
Carbon Disulfide	2024-06	ug/L			< 1.00	< 1.00	
Carbon Disulfide	2024-07	ug/L	< 1.00 J	< 1.00 J			< 1.00
Carbon Disulfide	2024-08	ug/L		< 1.00			
Carbon Disulfide	2024-12	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
Carbon Disulfide	2025-06	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
Carbon Disulfide	2025-10	ug/L		< 1	< 1		< 1
Carbon Tetrachloride	2018-10	ug/L	< 2.00				
Carbon Tetrachloride	2019-06	ug/L				< 2.00	
Carbon Tetrachloride	2019-08	ug/L				< 2.00	
Carbon Tetrachloride	2019-11	ug/L				< 2.00	< 2.00
Carbon Tetrachloride	2020-02	ug/L					< 2.00
Carbon Tetrachloride	2020-06	ug/L				< 2.00	
Carbon Tetrachloride	2020-07	ug/L					< 2.00
Carbon Tetrachloride	2020-08	ug/L				< 2.00	< 2.00
Carbon Tetrachloride	2020-11	ug/L				< 2.00	< 2.00
Carbon Tetrachloride	2021-06	ug/L	< 2.00			< 2.00	< 2.00
Carbon Tetrachloride	2021-09	ug/L			< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2021-12	ug/L			< 2.00		
Carbon Tetrachloride	2022-03	ug/L			< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2022-06	ug/L			< 2.00		
Carbon Tetrachloride	2022-08	ug/L			< 2.00	< 2.00	
Carbon Tetrachloride	2022-09	ug/L	< 2.00				< 2.00
Carbon Tetrachloride	2022-12	ug/L			< 2.00		
Carbon Tetrachloride	2023-06	ug/L	< 2.00		< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2023-11	ug/L			< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2024-06	ug/L			< 2.00	< 2.00	
Carbon Tetrachloride	2024-07	ug/L	< 2.00 J	< 2.00 J			< 2.00
Carbon Tetrachloride	2024-08	ug/L		< 2.00			
Carbon Tetrachloride	2024-12	ug/L		< 2.00	< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2025-06	ug/L		< 2.00	< 2.00	< 2.00	< 2.00
Carbon Tetrachloride	2025-10	ug/L		< 2	< 2		< 2
Chlorobenzene	2018-10	ug/L	< 1.00				
Chlorobenzene	2019-06	ug/L				< 1.00	
Chlorobenzene	2019-08	ug/L				< 1.00	
Chlorobenzene	2019-11	ug/L				< 1.00	< 1.00
Chlorobenzene	2020-02	ug/L					< 1.00
Chlorobenzene	2020-06	ug/L				< 1.00	
Chlorobenzene	2020-07	ug/L					< 1.00
Chlorobenzene	2020-08	ug/L				< 1.00	< 1.00
Chlorobenzene	2020-11	ug/L				< 1.00	< 1.00
Chlorobenzene	2021-06	ug/L	< 1.00			< 1.00	< 1.00
Chlorobenzene	2021-09	ug/L			< 1.00	< 1.00	< 1.00
Chlorobenzene	2021-12	ug/L			< 1.00		
Chlorobenzene	2022-03	ug/L			< 1.00	< 1.00	< 1.00
Chlorobenzene	2022-06	ug/L			< 1.00		
Chlorobenzene	2022-08	ug/L			< 1.00	< 1.00	
Chlorobenzene	2022-09	ug/L	< 1.00				< 1.00
Chlorobenzene	2022-12	ug/L			< 1.00		
Chlorobenzene	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00
Chlorobenzene	2023-11	ug/L			< 1.00	< 1.00	< 1.00

Table 14

Winneshiek County Area Solid Waste Agency **Analytical Data Summary - Deep Groundwater Appendix II**

Permit No. 57-SDP-01-74P **2025 Annual Water Quality Report**

Constituent	Date	Units	MW-11 (DwnGrad)	MW-18 (Bkgrnd)	MW-19R (Bkgrnd)	MW-22 (DwnGrad)	MW-35 (DwnGrad)
1,1,1,2-Tetrachloroethane	2018-10	ug/L	< 1.00				
Chlorobenzene	2024-06	ug/L			< 1.00	< 1.00	
Chlorobenzene	2024-07	ug/L	< 1.00 J	< 1.00 J			< 1.00
Chlorobenzene	2024-08	ug/L		< 1.00			
Chlorobenzene	2024-12	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
Chlorobenzene	2025-06	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
Chlorobenzene	2025-10	ug/L		< 1	< 1		< 1
Chlorobenzilate	2020-11	ug/L					< 11.8
Chlorobenzilate	2021-06	ug/L					< 12.0
Chlorobenzilate	2023-06	ug/L	< 11.4				
Chlorobenzilate	2024-07	ug/L	< 12.5 J				
Chlorodibromomethane	2018-10	ug/L	< 5.00				
Chlorodibromomethane	2019-06	ug/L				< 5.00	
Chlorodibromomethane	2019-08	ug/L				< 5.00	
Chlorodibromomethane	2019-11	ug/L				< 5.00	< 5.00
Chlorodibromomethane	2020-02	ug/L					< 5.00
Chlorodibromomethane	2020-06	ug/L				< 5.00	
Chlorodibromomethane	2020-07	ug/L					< 5.00
Chlorodibromomethane	2020-08	ug/L				< 5.00	< 5.00
Chlorodibromomethane	2020-11	ug/L				< 5.00	< 5.00
Chlorodibromomethane	2021-06	ug/L	< 5.00			< 5.00	< 5.00
Chlorodibromomethane	2021-09	ug/L			< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2021-12	ug/L			< 5.00		
Chlorodibromomethane	2022-03	ug/L			< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2022-06	ug/L			< 5.00		
Chlorodibromomethane	2022-08	ug/L			< 5.00	< 5.00	
Chlorodibromomethane	2022-09	ug/L	< 5.00				< 5.00
Chlorodibromomethane	2022-12	ug/L			< 5.00		
Chlorodibromomethane	2023-06	ug/L	< 5.00		< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2023-11	ug/L			< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2024-06	ug/L			< 5.00	< 5.00	
Chlorodibromomethane	2024-07	ug/L	< 5.00 J	< 5.00 J			< 5.00
Chlorodibromomethane	2024-08	ug/L		< 5.00			
Chlorodibromomethane	2024-12	ug/L		< 5.00	< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2025-06	ug/L		< 5.00	< 5.00	< 5.00	< 5.00
Chlorodibromomethane	2025-10	ug/L		< 5	< 5		< 5
Chloroethane	2018-10	ug/L	< 4.00				
Chloroethane	2019-06	ug/L				< 4.00	
Chloroethane	2019-08	ug/L				< 4.00	
Chloroethane	2019-11	ug/L				< 4.00	< 4.00
Chloroethane	2020-02	ug/L					< 4.00
Chloroethane	2020-06	ug/L				< 4.00	
Chloroethane	2020-07	ug/L					< 4.00
Chloroethane	2020-08	ug/L				< 4.00	< 4.00
Chloroethane	2020-11	ug/L				< 4.00	< 4.00
Chloroethane	2021-06	ug/L	< 4.00			< 4.00	< 4.00
Chloroethane	2021-09	ug/L			< 4.00	< 4.00	< 4.00
Chloroethane	2021-12	ug/L			< 4.00		
Chloroethane	2022-03	ug/L			< 4.00	< 4.00	< 4.00
Chloroethane	2022-06	ug/L			< 4.00		
Chloroethane	2022-08	ug/L			< 4.00	< 4.00	
Chloroethane	2022-09	ug/L	< 4.00				< 4.00
Chloroethane	2022-12	ug/L			< 4.00		
Chloroethane	2023-06	ug/L	< 4.00		< 4.00	< 4.00	< 4.00
Chloroethane	2023-11	ug/L			< 4.00	< 4.00	< 4.00
Chloroethane	2024-06	ug/L			< 4.00	< 4.00	
Chloroethane	2024-07	ug/L	< 4.00 J	< 4.00 J			< 4.00
Chloroethane	2024-08	ug/L		< 4.00			
Chloroethane	2024-12	ug/L		< 4.00	< 4.00	< 4.00	< 4.00
Chloroethane	2025-06	ug/L		< 4.00	< 4.00	< 4.00	< 4.00
Chloroethane	2025-10	ug/L		< 4	< 4		< 4
Chloroform	2018-10	ug/L	< 3.00				
Chloroform	2019-06	ug/L				< 3.00	
Chloroform	2019-08	ug/L				< 3.00	
Chloroform	2019-11	ug/L				< 3.00	< 3.00
Chloroform	2020-02	ug/L					< 3.00
Chloroform	2020-06	ug/L				< 3.00	
Chloroform	2020-07	ug/L					< 3.00
Chloroform	2020-08	ug/L				< 3.00	< 3.00
Chloroform	2020-11	ug/L				< 3.00	< 3.00
Chloroform	2021-06	ug/L	< 3.00			< 3.00	< 3.00
Chloroform	2021-09	ug/L			< 3.00	< 3.00	< 3.00
Chloroform	2021-12	ug/L			< 3.00		
Chloroform	2022-03	ug/L			< 3.00	< 3.00	< 3.00
Chloroform	2022-06	ug/L			< 3.00		
Chloroform	2022-08	ug/L			< 3.00	< 3.00	
Chloroform	2022-09	ug/L	< 3.00				< 3.00
Chloroform	2022-12	ug/L			< 3.00		
Chloroform	2023-06	ug/L	< 3.00		< 3.00	< 3.00	< 3.00
Chloroform	2023-11	ug/L			< 3.00	< 3.00	< 3.00
Chloroform	2024-06	ug/L			< 3.00	< 3.00	
Chloroform	2024-07	ug/L	< 3.00 J	< 3.00 J			< 3.00
Chloroform	2024-08	ug/L		< 3.00			
Chloroform	2024-12	ug/L		< 3.00	< 3.00	< 3.00	< 3.00
Chloroform	2025-06	ug/L		< 3.00	< 3.00	< 3.00	< 3.00
Chloroform	2025-10	ug/L		< 3	< 3		< 3
Chloromethane	2018-10	ug/L	< 3.00				
Chloromethane	2019-06	ug/L				< 3.00	

Table 14

Winneshiek County Area Solid Waste Agency **Analytical Data Summary - Deep Groundwater Appendix II**
Permit No. 57-SDP-01-74P **2025 Annual Water Quality Report**

Constituent	Date	Units	MW-11 (DwnGrad)	MW-18 (Bkgrnd)	MW-19R (Bkgrnd)	MW-22 (DwnGrad)	MW-35 (DwnGrad)
1,1,1,2-Tetrachloroethane	2018-10	ug/L	< 1.00				
Chloromethane	2019-08	ug/L				< 3.00	
Chloromethane	2019-11	ug/L				< 3.00	< 3.00
Chloromethane	2020-02	ug/L					< 3.00
Chloromethane	2020-06	ug/L				< 3.00	
Chloromethane	2020-07	ug/L					< 3.00
Chloromethane	2020-08	ug/L				< 3.00	< 3.00
Chloromethane	2020-11	ug/L				< 3.00	< 3.00
Chloromethane	2021-06	ug/L	< 3.00			< 3.00	< 3.00
Chloromethane	2021-09	ug/L			< 3.00	< 3.00	< 3.00
Chloromethane	2021-12	ug/L			< 3.00		
Chloromethane	2022-03	ug/L			< 3.00	< 3.00	< 3.00
Chloromethane	2022-06	ug/L			< 3.00		
Chloromethane	2022-08	ug/L			< 3.00	< 3.00	
Chloromethane	2022-09	ug/L	< 3.00				< 3.00
Chloromethane	2022-12	ug/L			< 3.00		
Chloromethane	2023-06	ug/L	< 3.00		< 3.00	< 3.00	< 3.00
Chloromethane	2023-11	ug/L			< 3.00	< 3.00	< 3.00
Chloromethane	2024-06	ug/L			< 3.00	< 3.00	
Chloromethane	2024-07	ug/L	< 3.00 J	< 3.00 J			< 3.00
Chloromethane	2024-08	ug/L		< 3.00			
Chloromethane	2024-12	ug/L		< 3.00	< 3.00	< 3.00	< 3.00
Chloromethane	2025-06	ug/L		< 3.00	< 3.00	< 3.00	< 3.00
Chloromethane	2025-10	ug/L		< 3	< 3		< 3
Chloroprene	2020-11	ug/L					< 1.00
Chloroprene	2021-06	ug/L					< 1.00
Chloroprene	2023-06	ug/L	< 1.00				
Chloroprene	2024-07	ug/L	< 1.00 J				
Chromium	2018-10	ug/L	**0.795 J**				
Chromium	2019-06	ug/L				< 5.00	
Chromium	2019-08	ug/L				< 5.00	
Chromium	2019-11	ug/L				< 5.00	< 5.00
Chromium	2020-02	ug/L					< 5.00
Chromium	2020-06	ug/L				< 5.00	
Chromium	2020-07	ug/L					< 5.00
Chromium	2020-08	ug/L				< 5.00	< 5.00
Chromium	2020-11	ug/L				< 5.00	< 5.00
Chromium	2021-06	ug/L	< 5.00			< 5.00	< 5.00
Chromium	2021-09	ug/L			< 5.00	< 5.00	< 5.00
Chromium	2021-12	ug/L			< 5.00		
Chromium	2022-03	ug/L			~~**4.31 J**~~	< 5.00	< 5.00
Chromium	2022-06	ug/L			< 5.00		
Chromium	2022-08	ug/L			**2.99 J**	< 5.00	
Chromium	2022-09	ug/L	< 5.00				< 5.00
Chromium	2022-12	ug/L			< 5.00		
Chromium	2023-06	ug/L	< 5.00		< 5.00	< 5.00	< 5.00
Chromium	2023-11	ug/L			< 5.00	< 5.00	< 5.00
Chromium	2024-06	ug/L			< 5.00	< 5.00	
Chromium	2024-07	ug/L	< 5.00	< 5.00			< 5.00
Chromium	2024-08	ug/L		< 5.00			
Chromium	2024-12	ug/L		< 5.00	< 5.00	< 5.00	< 5.00
Chromium	2025-06	ug/L		< 5.00	< 5.00	< 5.00	< 5.00
Chromium	2025-10	ug/L		< 5	< 5		< 5
Chrysene	2020-11	ug/L					< 11.8
Chrysene	2021-06	ug/L					< 12.0
Chrysene	2023-06	ug/L	< 11.4				
Chrysene	2024-07	ug/L	< 12.5 J				
cis-1,2-Dichloroethene	2018-10	ug/L	< 1.00				
cis-1,2-Dichloroethene	2019-06	ug/L				< 1.00	
cis-1,2-Dichloroethene	2019-08	ug/L				< 1.00	
cis-1,2-Dichloroethene	2019-11	ug/L				< 1.00	< 1.00
cis-1,2-Dichloroethene	2020-02	ug/L					< 1.00
cis-1,2-Dichloroethene	2020-06	ug/L				< 1.00	
cis-1,2-Dichloroethene	2020-07	ug/L					< 1.00
cis-1,2-Dichloroethene	2020-08	ug/L				< 1.00	< 1.00
cis-1,2-Dichloroethene	2020-11	ug/L				< 1.00	< 1.00
cis-1,2-Dichloroethene	2021-06	ug/L	< 1.00			< 1.00	< 1.00
cis-1,2-Dichloroethene	2021-09	ug/L			< 1.00	< 1.00	< 1.00
cis-1,2-Dichloroethene	2021-12	ug/L			< 1.00		
cis-1,2-Dichloroethene	2022-03	ug/L			< 1.00	< 1.00	< 1.00
cis-1,2-Dichloroethene	2022-06	ug/L			< 1.00		
cis-1,2-Dichloroethene	2022-08	ug/L			< 1.00	< 1.00	
cis-1,2-Dichloroethene	2022-09	ug/L	< 1.00				< 1.00
cis-1,2-Dichloroethene	2022-12	ug/L			< 1.00		
cis-1,2-Dichloroethene	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00
cis-1,2-Dichloroethene	2023-11	ug/L			< 1.00	< 1.00	< 1.00
cis-1,2-Dichloroethene	2024-06	ug/L			< 1.00	< 1.00	
cis-1,2-Dichloroethene	2024-07	ug/L	< 1.00 J	< 1.00 J			< 1.00
cis-1,2-Dichloroethene	2024-08	ug/L		< 1.00			
cis-1,2-Dichloroethene	2024-12	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
cis-1,2-Dichloroethene	2025-06	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
cis-1,2-Dichloroethene	2025-10	ug/L		< 1	< 1		< 1
cis-1,3-Dichloropropene	2018-10	ug/L	< 5.00				
cis-1,3-Dichloropropene	2019-06	ug/L				< 5.00	
cis-1,3-Dichloropropene	2019-08	ug/L				< 5.00	
cis-1,3-Dichloropropene	2019-11	ug/L				< 5.00	< 5.00
cis-1,3-Dichloropropene	2020-02	ug/L					< 5.00
cis-1,3-Dichloropropene	2020-06	ug/L				< 5.00	

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Permit No. 57-SDP-01-74P **2025 Annual Water Quality Report**

Constituent	Date	Units	MW-11 (DwnGrad)	MW-18 (Bkgrnd)	MW-19R (Bkgrnd)	MW-22 (DwnGrad)	MW-35 (DwnGrad)
1,1,1,2-Tetrachloroethane	2018-10	ug/L	< 1.00				
cis-1,3-Dichloropropene	2020-07	ug/L					< 5.00
cis-1,3-Dichloropropene	2020-08	ug/L				< 5.00	< 5.00
cis-1,3-Dichloropropene	2020-11	ug/L				< 5.00	< 5.00
cis-1,3-Dichloropropene	2021-06	ug/L	< 5.00			< 5.00	< 5.00
cis-1,3-Dichloropropene	2021-09	ug/L			< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2021-12	ug/L			< 5.00		
cis-1,3-Dichloropropene	2022-03	ug/L			< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2022-06	ug/L			< 5.00		
cis-1,3-Dichloropropene	2022-08	ug/L			< 5.00	< 5.00	
cis-1,3-Dichloropropene	2022-09	ug/L	< 5.00				< 5.00
cis-1,3-Dichloropropene	2022-12	ug/L			< 5.00		
cis-1,3-Dichloropropene	2023-06	ug/L	< 5.00		< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2023-11	ug/L			< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2024-06	ug/L			< 5.00	< 5.00	
cis-1,3-Dichloropropene	2024-07	ug/L	< 5.00 J	< 5.00 J			< 5.00
cis-1,3-Dichloropropene	2024-08	ug/L		< 5.00			
cis-1,3-Dichloropropene	2024-12	ug/L		< 5.00	< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2025-06	ug/L		< 5.00	< 5.00	< 5.00	< 5.00
cis-1,3-Dichloropropene	2025-10	ug/L		< 5	< 5		< 5
Cobalt	2018-10	ug/L	**7.89**				
Cobalt	2018-12	ug/L	**2.57**				
Cobalt	2019-06	ug/L				< 1.00	
Cobalt	2019-08	ug/L				< 1.00	
Cobalt	2019-11	ug/L				**0.099 J**	**8.27**
Cobalt	2020-02	ug/L					**6.6**
Cobalt	2020-06	ug/L				< 0.500	
Cobalt	2020-07	ug/L					**7.03**
Cobalt	2020-08	ug/L				**0.115 J**	**5.98**
Cobalt	2020-11	ug/L				< 0.500	**5.97**
Cobalt	2021-06	ug/L	**0.285 J**			**0.122 J**	**5.51**
Cobalt	2021-09	ug/L			~~1.43~~	< 0.500	**6.33**
Cobalt	2021-12	ug/L			**0.624**		
Cobalt	2022-03	ug/L			~~3.4~~	< 0.500	**6.39**
Cobalt	2022-06	ug/L			**0.363 J**		
Cobalt	2022-08	ug/L			< 0.500	< 0.500	
Cobalt	2022-09	ug/L	**0.244 J**				**6.74**
Cobalt	2022-12	ug/L			< 0.500		
Cobalt	2023-06	ug/L	< 0.500		~~0.49 J~~	< 0.500	**5.33**
Cobalt	2023-11	ug/L			**0.399 J**	< 0.500	**10.8**
Cobalt	2024-06	ug/L			< 0.500	< 0.500	
Cobalt	2024-07	ug/L	< 0.500	< 0.500			**4.96**
Cobalt	2024-08	ug/L		< 0.500			
Cobalt	2024-12	ug/L		< 0.500	**0.284 J**	< 0.500	**1.98 O**
Cobalt	2025-06	ug/L		**0.231 J**	**0.257 J**	< 0.500	**4.82**
Cobalt	2025-10	ug/L		**0.296 J**	~~0.848~~		**4.73**
Copper	2018-06	mg/L		< 0.0200			
Copper	2018-10	ug/L	< 5.00				
Copper	2019-06	ug/L				**0.813 J**	
Copper	2019-08	ug/L				**0.908 J**	
Copper	2019-11	ug/L				< 5.00	< 5.00
Copper	2020-02	ug/L					< 5.00
Copper	2020-06	ug/L				< 5.00	
Copper	2020-07	ug/L					< 5.00
Copper	2020-08	ug/L				< 5.00	< 5.00
Copper	2020-11	ug/L				< 5.00	< 5.00
Copper	2021-06	ug/L	< 5.00			< 5.00	< 5.00
Copper	2021-09	ug/L			< 5.00	< 5.00	< 5.00
Copper	2021-12	ug/L			< 5.00		
Copper	2022-03	ug/L			~~7.64~~	< 5.00	< 5.00
Copper	2022-06	ug/L			< 5.00		
Copper	2022-08	ug/L			< 5.00	< 5.00	
Copper	2022-09	ug/L	< 5.00				< 5.00
Copper	2022-12	ug/L			< 5.00		
Copper	2023-06	ug/L	< 5.00		~~3.19 J~~	< 5.00	< 5.00
Copper	2023-11	ug/L			< 5.00	< 5.00	< 5.00
Copper	2024-06	ug/L			< 5.00	< 5.00	
Copper	2024-07	ug/L	< 5.00	**2.72 J**			< 5.00
Copper	2024-08	ug/L		< 5.00			
Copper	2024-12	ug/L		< 5.00	< 5.00	< 5.00	< 5.00
Copper	2025-06	ug/L		< 5.00	< 5.00	< 5.00	< 5.00
Copper	2025-10	ug/L		< 5	< 5		< 5
Cyanide	2020-11	mg/L					< 0.0100
Cyanide	2021-06	mg/L					< 0.0100
Cyanide	2023-06	ug/L	< 10.0				
Cyanide	2024-07	ug/L	< 10.0 J				
delta-BHC	2020-11	ug/L					**0.00447 J**
delta-BHC	2021-06	ug/L					< 0.0400
delta-BHC	2023-06	ug/L	< 0.0762				
delta-BHC	2024-07	ug/L	< 0.0936 J				
Diallate	2020-11	ug/L					< 11.8
Diallate	2021-06	ug/L					< 12.0
Diallate	2023-06	ug/L	< 11.4				
Diallate	2024-07	ug/L	< 12.5 J				
Dibenzo(a,h)anthracene	2020-11	ug/L					< 11.8
Dibenzo(a,h)anthracene	2021-06	ug/L					< 12.0
Dibenzo(a,h)anthracene	2023-06	ug/L	< 11.4				
Dibenzo(a,h)anthracene	2024-07	ug/L	< 12.5 J				

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Constituent	Date	Units	MW-11 (DwnGrad)	MW-18 (Bkgrnd)	MW-19R (Bkgrnd)	MW-22 (DwnGrad)	MW-35 (DwnGrad)
1,1,1,2-Tetrachloroethane	2018-10	ug/L	< 1.00				
Dibenzofuran	2020-11	ug/L					< 11.8
Dibenzofuran	2021-06	ug/L					< 12.0
Dibenzofuran	2023-06	ug/L	< 11.4				
Dibenzofuran	2024-07	ug/L	< 12.5 J				
Dibromomethane	2018-10	ug/L	< 1.00				
Dibromomethane	2019-06	ug/L				< 1.00	
Dibromomethane	2019-08	ug/L				< 1.00	
Dibromomethane	2019-11	ug/L				< 1.00	< 1.00
Dibromomethane	2020-02	ug/L					< 1.00
Dibromomethane	2020-06	ug/L				< 1.00	
Dibromomethane	2020-07	ug/L					< 1.00
Dibromomethane	2020-08	ug/L				< 1.00	< 1.00
Dibromomethane	2020-11	ug/L				< 1.00	< 1.00
Dibromomethane	2021-06	ug/L	< 1.00			< 1.00	< 1.00
Dibromomethane	2021-09	ug/L			< 1.00	< 1.00	< 1.00
Dibromomethane	2021-12	ug/L			< 1.00		
Dibromomethane	2022-03	ug/L			< 1.00	< 1.00	< 1.00
Dibromomethane	2022-06	ug/L			< 1.00		
Dibromomethane	2022-08	ug/L			< 1.00	< 1.00	
Dibromomethane	2022-09	ug/L	< 1.00				< 1.00
Dibromomethane	2022-12	ug/L			< 1.00		
Dibromomethane	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00
Dibromomethane	2023-11	ug/L			< 1.00	< 1.00	< 1.00
Dibromomethane	2024-06	ug/L			< 1.00	< 1.00	
Dibromomethane	2024-07	ug/L	< 1.00 J	< 1.00 J			< 1.00
Dibromomethane	2024-08	ug/L		< 1.00			
Dibromomethane	2024-12	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
Dibromomethane	2025-06	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
Dibromomethane	2025-10	ug/L		< 1	< 1		< 1
Dichlorodifluoromethane	2020-11	ug/L					< 3.00
Dichlorodifluoromethane	2021-06	ug/L					< 3.00
Dichlorodifluoromethane	2023-06	ug/L	< 3.00				
Dichlorodifluoromethane	2024-07	ug/L	< 3.00 J				
Dieldrin	2020-11	ug/L					< 0.0390
Dieldrin	2021-06	ug/L					< 0.0400
Dieldrin	2023-06	ug/L	< 0.0762				
Dieldrin	2024-07	ug/L	< 0.0936 J				
Diethylphthalate	2020-11	ug/L					< 11.8
Diethylphthalate	2021-06	ug/L					< 12.0
Diethylphthalate	2023-06	ug/L	< 11.4				
Diethylphthalate	2024-07	ug/L	< 12.5 J				
Dimethoate	2020-11	ug/L					< 11.8
Dimethoate	2021-06	ug/L					< 12.0
Dimethoate	2023-06	ug/L	< 11.4				
Dimethoate	2024-07	ug/L	< 12.5 J				
Dimethylphthalate	2020-11	ug/L					< 11.8
Dimethylphthalate	2021-06	ug/L					< 12.0
Dimethylphthalate	2023-06	ug/L	< 11.4				
Dimethylphthalate	2024-07	ug/L	< 12.5 J				
Di-n-butylphthalate	2020-11	ug/L					< 11.8
Di-n-butylphthalate	2021-06	ug/L					< 12.0
Di-n-butylphthalate	2023-06	ug/L	< 11.4				
Di-n-butylphthalate	2024-07	ug/L	< 12.5 J				
Di-n-octylphthalate	2020-11	ug/L					< 23.5
Di-n-octylphthalate	2021-06	ug/L					< 24.1
Di-n-octylphthalate	2023-06	ug/L	< 22.7				
Di-n-octylphthalate	2024-07	ug/L	< 25.0 J				
Dinoseb	2020-11	ug/L					< 11.8
Dinoseb	2021-06	ug/L					< 12.0
Dinoseb	2023-06	ug/L	< 11.4				
Dinoseb	2024-07	ug/L	< 12.5 J				
Diphenylamine	2020-11	ug/L					< 11.8
Diphenylamine	2021-06	ug/L					< 12.0
Diphenylamine	2023-06	ug/L	< 11.4				
Diphenylamine	2024-07	ug/L	< 12.5 J				
Disulfoton	2020-11	ug/L					< 11.8
Disulfoton	2021-06	ug/L					< 12.0
Disulfoton	2023-06	ug/L	**4.14 J**				
Disulfoton	2024-07	ug/L	< 12.5 J				
Endosulfan I	2020-11	ug/L					< 0.0390
Endosulfan I	2021-06	ug/L					< 0.0400
Endosulfan I	2023-06	ug/L	< 0.0762				
Endosulfan I	2024-07	ug/L	< 0.0936 J				
Endosulfan I	2025-10	ug/L			< 0.0893		
Endosulfan II	2020-11	ug/L					< 0.0390
Endosulfan II	2021-06	ug/L					< 0.0400
Endosulfan II	2023-06	ug/L	< 0.0762				
Endosulfan II	2024-07	ug/L	< 0.0936 J				
Endosulfan Sulfate	2020-11	ug/L					< 0.0390
Endosulfan Sulfate	2021-06	ug/L					< 0.0400
Endosulfan Sulfate	2023-06	ug/L	< 0.0762				
Endosulfan Sulfate	2024-07	ug/L	< 0.0936 J				
Endrin	2020-11	ug/L					< 0.0390
Endrin	2021-06	ug/L					< 0.0400
Endrin	2023-06	ug/L	< 0.0762				
Endrin	2024-07	ug/L	< 0.0936 J				
Endrin Aldehyde	2020-11	ug/L					< 0.0390

Constituent	Date	Units	MW-11 (DwnGrad)	MW-18 (Bkgrnd)	MW-19R (Bkgrnd)	MW-22 (DwnGrad)	MW-35 (DwnGrad)
1,1,1,2-Tetrachloroethane	2018-10	ug/L	< 1.00				
Endrin Aldehyde	2021-06	ug/L					< 0.0400
Endrin Aldehyde	2023-06	ug/L	< 0.0762				
Endrin Aldehyde	2024-07	ug/L	< 0.0936 J				
Ethyl Methacrylate	2020-11	ug/L					< 2.00
Ethyl Methacrylate	2021-06	ug/L					< 2.00
Ethyl Methacrylate	2023-06	ug/L	< 2.00				
Ethyl Methacrylate	2024-07	ug/L	< 2.00 J				
Ethyl Methanesulfonate	2020-11	ug/L					< 11.8
Ethyl Methanesulfonate	2021-06	ug/L					< 12.0
Ethyl Methanesulfonate	2023-06	ug/L	< 11.4				
Ethyl Methanesulfonate	2024-07	ug/L	< 12.5 J				
Ethylbenzene	2018-10	ug/L	< 1.00				
Ethylbenzene	2019-06	ug/L				< 1.00	
Ethylbenzene	2019-08	ug/L				< 1.00	
Ethylbenzene	2019-11	ug/L				< 1.00	< 1.00
Ethylbenzene	2020-02	ug/L					< 1.00
Ethylbenzene	2020-06	ug/L				< 1.00	
Ethylbenzene	2020-07	ug/L					< 1.00
Ethylbenzene	2020-08	ug/L				< 1.00	< 1.00
Ethylbenzene	2020-11	ug/L				< 1.00	< 1.00
Ethylbenzene	2021-06	ug/L	< 1.00			< 1.00	< 1.00
Ethylbenzene	2021-09	ug/L			< 1.00	< 1.00	< 1.00
Ethylbenzene	2021-12	ug/L			< 1.00		
Ethylbenzene	2022-03	ug/L			< 1.00	< 1.00	< 1.00
Ethylbenzene	2022-06	ug/L			< 1.00		
Ethylbenzene	2022-08	ug/L			< 1.00	< 1.00	
Ethylbenzene	2022-09	ug/L	< 1.00				< 1.00
Ethylbenzene	2022-12	ug/L			< 1.00		
Ethylbenzene	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00
Ethylbenzene	2023-11	ug/L			< 1.00	< 1.00	< 1.00
Ethylbenzene	2024-06	ug/L			< 1.00	< 1.00	
Ethylbenzene	2024-07	ug/L	< 1.00 J	< 1.00 J			< 1.00
Ethylbenzene	2024-08	ug/L		< 1.00			
Ethylbenzene	2024-12	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	2025-06	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	2025-10	ug/L		< 1	< 1		< 1
Famphur	2020-11	ug/L					< 11.8
Famphur	2021-06	ug/L					< 12.0
Famphur	2023-06	ug/L	< 11.4				
Famphur	2024-07	ug/L	< 12.5 J				
Fluoranthene	2020-11	ug/L					< 11.8
Fluoranthene	2021-06	ug/L					< 12.0
Fluoranthene	2023-06	ug/L	< 11.4				
Fluoranthene	2024-07	ug/L	< 12.5 J				
Fluorene	2020-11	ug/L					< 11.8
Fluorene	2021-06	ug/L					< 12.0
Fluorene	2023-06	ug/L	< 11.4				
Fluorene	2024-07	ug/L	< 12.5 J				
Fluorotrichloromethane	2018-10	ug/L	< 4.00				
Fluorotrichloromethane	2019-06	ug/L				< 4.00	
Fluorotrichloromethane	2019-08	ug/L				< 4.00	
Fluorotrichloromethane	2019-11	ug/L				< 4.00	< 4.00
Fluorotrichloromethane	2020-02	ug/L					< 4.00
Fluorotrichloromethane	2020-06	ug/L				< 4.00	
Fluorotrichloromethane	2020-07	ug/L					< 4.00
Fluorotrichloromethane	2020-08	ug/L				< 4.00	< 4.00
Fluorotrichloromethane	2020-11	ug/L				< 4.00	< 4.00
Fluorotrichloromethane	2021-06	ug/L	< 4.00			< 4.00	< 4.00
Fluorotrichloromethane	2021-09	ug/L			< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2021-12	ug/L			< 4.00		
Fluorotrichloromethane	2022-03	ug/L			< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2022-06	ug/L			< 4.00		
Fluorotrichloromethane	2022-08	ug/L			< 4.00	< 4.00	
Fluorotrichloromethane	2022-09	ug/L	< 4.00				< 4.00
Fluorotrichloromethane	2022-12	ug/L			< 4.00		
Fluorotrichloromethane	2023-06	ug/L	< 4.00		< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2023-11	ug/L			< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2024-06	ug/L			< 4.00	< 4.00	
Fluorotrichloromethane	2024-07	ug/L	< 4.00 J	< 4.00 J			< 4.00
Fluorotrichloromethane	2024-08	ug/L		< 4.00			
Fluorotrichloromethane	2024-12	ug/L		< 4.00	< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2025-06	ug/L		< 4.00	< 4.00	< 4.00	< 4.00
Fluorotrichloromethane	2025-10	ug/L		< 4	< 4		< 4
Heptachlor	2020-11	ug/L					< 0.0390
Heptachlor	2021-06	ug/L					< 0.0400
Heptachlor	2023-06	ug/L	< 0.0762				
Heptachlor	2024-07	ug/L	< 0.0936 J				
Heptachlor Epoxide	2020-11	ug/L					< 0.0390
Heptachlor Epoxide	2021-06	ug/L					< 0.0400
Heptachlor Epoxide	2023-06	ug/L	< 0.0762				
Heptachlor Epoxide	2024-07	ug/L	< 0.0936 J				
Hexachlorobenzene	2020-11	ug/L					< 11.8
Hexachlorobenzene	2021-06	ug/L					< 12.0
Hexachlorobenzene	2023-06	ug/L	< 11.4				
Hexachlorobenzene	2024-07	ug/L	< 12.5 J				
Hexachlorobutadiene	2020-11	ug/L					< 11.8
Hexachlorobutadiene	2021-06	ug/L					< 12.0

Table 14

Winneshiek County Area Solid Waste Agency **Analytical Data Summary - Deep Groundwater Appendix II**
Permit No. 57-SDP-01-74P **2025 Annual Water Quality Report**

Constituent	Date	Units	MW-11 (DwnGrad)	MW-18 (Bkgrnd)	MW-19R (Bkgrnd)	MW-22 (DwnGrad)	MW-35 (DwnGrad)
1,1,1,2-Tetrachloroethane	2018-10	ug/L	< 1.00				
Hexachlorobutadiene	2023-06	ug/L	< 11.4				
Hexachlorobutadiene	2024-07	ug/L	< 12.5 J				
Hexachlorocyclopentadiene	2020-11	ug/L					< 11.8
Hexachlorocyclopentadiene	2021-06	ug/L					< 12.0
Hexachlorocyclopentadiene	2023-06	ug/L	< 11.4				
Hexachlorocyclopentadiene	2024-07	ug/L	< 12.5 J				
Hexachloroethane	2020-11	ug/L					< 11.8
Hexachloroethane	2021-06	ug/L					< 12.0
Hexachloroethane	2023-06	ug/L	< 11.4				
Hexachloroethane	2024-07	ug/L	< 12.5 J				
Hexachloropropene	2020-11	ug/L					< 11.8
Hexachloropropene	2021-06	ug/L					< 12.0
Hexachloropropene	2023-06	ug/L	< 11.4				
Hexachloropropene	2024-07	ug/L	< 12.5 J				
Indeno(1,2,3-cd)pyrene	2020-11	ug/L					< 11.8
Indeno(1,2,3-cd)pyrene	2021-06	ug/L					< 12.0
Indeno(1,2,3-cd)pyrene	2023-06	ug/L	< 11.4				
Indeno(1,2,3-cd)pyrene	2024-07	ug/L	< 12.5 J				
Iodomethane	2018-10	ug/L	< 10.0				
Iodomethane	2019-06	ug/L				< 10.0	
Iodomethane	2019-08	ug/L				< 10.0	
Iodomethane	2019-11	ug/L				< 10.0	< 10.0
Iodomethane	2020-02	ug/L					< 10.0
Iodomethane	2020-06	ug/L				< 10.0	
Iodomethane	2020-07	ug/L					< 10.0
Iodomethane	2020-08	ug/L				< 10.0	< 10.0
Iodomethane	2020-11	ug/L				< 10.0	< 10.0
Iodomethane	2021-06	ug/L	**7.99 J**			< 10.0	< 10.0
Iodomethane	2021-09	ug/L			< 10.0	< 10.0	< 10.0
Iodomethane	2021-12	ug/L			< 10.0		
Iodomethane	2022-03	ug/L			< 10.0	< 10.0	< 10.0
Iodomethane	2022-06	ug/L			< 10.0		
Iodomethane	2022-08	ug/L			< 10.0	< 10.0	
Iodomethane	2022-09	ug/L	< 10.0				< 10.0
Iodomethane	2022-12	ug/L			< 10.0		
Iodomethane	2023-06	ug/L	< 10.0		< 10.0	< 10.0	< 10.0
Iodomethane	2023-11	ug/L			< 10.0	< 10.0	< 10.0
Iodomethane	2024-06	ug/L			< 10.0	< 10.0	
Iodomethane	2024-07	ug/L	< 10.0 J	< 10.0 J			< 10.0
Iodomethane	2024-08	ug/L		< 10.0			
Iodomethane	2024-12	ug/L		< 10.0	< 10.0	< 10.0	< 10.0
Iodomethane	2025-06	ug/L		< 10.0	< 10.0	< 10.0	< 10.0
Iodomethane	2025-10	ug/L		< 10	< 10		< 10
Isobutanol	2020-11	mg/L					< 10.0
Isobutanol	2021-06	mg/L					< 10.0
Isobutanol	2023-06	mg/L	< 10.0				
Isobutanol	2024-07	ug/L	< 10000 J				
Isodrin	2020-11	ug/L					< 11.8
Isodrin	2021-06	ug/L					< 12.0
Isodrin	2023-06	ug/L	< 11.4				
Isodrin	2024-07	ug/L	< 12.5 J				
Isophorone	2020-11	ug/L					< 11.8
Isophorone	2021-06	ug/L					< 12.0
Isophorone	2023-06	ug/L	< 11.4				
Isophorone	2024-07	ug/L	< 12.5 J				
Isosafrole	2020-11	ug/L					< 11.8
Isosafrole	2021-06	ug/L					< 12.0
Isosafrole	2023-06	ug/L	< 11.4				
Isosafrole	2024-07	ug/L	< 12.5 J				
Kepone	2020-11	ug/L					< 11.8
Kepone	2021-06	ug/L					< 12.0
Kepone	2023-06	ug/L	< 11.4				
Kepone	2024-07	ug/L	< 12.5 J				
Lead	2018-10	ug/L	< 0.500				
Lead	2019-06	ug/L				< 0.500	
Lead	2019-08	ug/L				< 0.500	
Lead	2019-11	ug/L				< 0.500	< 0.500
Lead	2020-02	ug/L					< 0.500
Lead	2020-06	ug/L				< 0.500	
Lead	2020-07	ug/L					< 0.500
Lead	2020-08	ug/L				**0.207 J**	< 0.500
Lead	2020-11	ug/L				**0.121 J**	< 0.500
Lead	2021-06	ug/L	< 0.500			< 0.500	< 0.500
Lead	2021-09	ug/L			~~**0.581**~~	< 0.500	< 0.500
Lead	2021-12	ug/L			**0.268 J**		
Lead	2022-03	ug/L			~~**3.25**~~	< 0.500	< 0.500
Lead	2022-06	ug/L			< 0.500		
Lead	2022-08	ug/L			< 0.500	< 0.500	
Lead	2022-09	ug/L	< 0.500				< 0.500
Lead	2022-12	ug/L			< 0.500		
Lead	2023-06	ug/L	< 0.500		< 0.500	< 0.500	< 0.500
Lead	2023-11	ug/L			< 0.500	< 0.500	< 0.500
Lead	2024-06	ug/L			< 0.500	< 0.500	
Lead	2024-07	ug/L	< 0.500	< 0.500			< 0.500
Lead	2024-08	ug/L		< 0.500			
Lead	2024-12	ug/L		< 0.500	< 0.500	**0.293 J**	< 0.500
Lead	2025-06	ug/L		< 0.500	< 0.500	< 0.500	< 0.500

Constituent	Date	Units	MW-11 (DwnGrad)	MW-18 (Bkgrnd)	MW-19R (Bkgrnd)	MW-22 (DwnGrad)	MW-35 (DwnGrad)
1,1,1,2-Tetrachloroethane	2018-10	ug/L	< 1.00				
Lead	2025-10	ug/L		< 0.5	~~0.679~~		< 0.5
Lindane (BHC, Gamma-)	2020-11	ug/L					< 0.0390
Lindane (BHC, Gamma-)	2021-06	ug/L					< 0.0400
Lindane (BHC, Gamma-)	2023-06	ug/L	< 0.0762				
Lindane (BHC, Gamma-)	2024-07	ug/L	< 0.0936 J				
Mercury	2020-11	mg/L					< 0.000200
Mercury	2021-06	mg/L					< 0.000200
Mercury	2023-06	mg/L	< 0.000200				
Mercury	2024-07	ug/L	< 0.200 J				
Methacrylonitrile	2020-11	ug/L					< 10.0
Methacrylonitrile	2021-06	ug/L					< 10.0
Methacrylonitrile	2023-06	ug/L	< 10.0				
Methacrylonitrile	2024-07	ug/L	< 10.0 J				
Methapyrilene	2020-11	ug/L					< 11.8
Methapyrilene	2021-06	ug/L					< 12.0
Methapyrilene	2023-06	ug/L	< 11.4				
Methapyrilene	2024-07	ug/L	< 12.5 J				
Methoxychlor	2020-11	ug/L					< 0.0390
Methoxychlor	2021-06	ug/L					< 0.0400
Methoxychlor	2023-06	ug/L	< 0.0762				
Methoxychlor	2024-07	ug/L	< 0.0936 J				
Methyl Methacrylate	2020-11	ug/L					< 2.00
Methyl Methacrylate	2021-06	ug/L					< 2.00
Methyl Methacrylate	2023-06	ug/L	< 2.00				
Methyl Methacrylate	2024-07	ug/L	< 2.00 J				
Methyl Methanesulfonate	2020-11	ug/L					< 11.8
Methyl Methanesulfonate	2021-06	ug/L					< 12.0
Methyl Methanesulfonate	2023-06	ug/L	< 11.4				
Methyl Methanesulfonate	2024-07	ug/L	< 12.5 J				
Methyl Parathion	2020-11	ug/L					< 11.8
Methyl Parathion	2021-06	ug/L					< 12.0
Methyl Parathion	2023-06	ug/L	< 11.4				
Methyl Parathion	2024-07	ug/L	< 12.5 J				
Methylene Chloride	2018-10	ug/L	< 5.00				
Methylene Chloride	2019-06	ug/L				< 5.00	
Methylene Chloride	2019-08	ug/L				< 5.00	
Methylene Chloride	2019-11	ug/L				< 5.00	< 5.00
Methylene Chloride	2020-02	ug/L					< 5.00
Methylene Chloride	2020-06	ug/L				< 5.00	
Methylene Chloride	2020-07	ug/L					< 5.00
Methylene Chloride	2020-08	ug/L				< 5.00	< 5.00
Methylene Chloride	2020-11	ug/L				< 5.00	< 5.00
Methylene Chloride	2021-06	ug/L	< 5.00			< 5.00	< 5.00
Methylene Chloride	2021-09	ug/L			< 5.00	< 5.00	< 5.00
Methylene Chloride	2021-12	ug/L			< 5.00		
Methylene Chloride	2022-03	ug/L			< 5.00	< 5.00	< 5.00
Methylene Chloride	2022-06	ug/L			< 5.00		
Methylene Chloride	2022-08	ug/L			< 5.00	< 5.00	
Methylene Chloride	2022-09	ug/L	< 5.00				< 5.00
Methylene Chloride	2022-12	ug/L			< 5.00		
Methylene Chloride	2023-06	ug/L	< 5.00		< 5.00	< 5.00	< 5.00
Methylene Chloride	2023-11	ug/L			< 5.00	< 5.00	< 5.00
Methylene Chloride	2024-06	ug/L			< 5.00	< 5.00	
Methylene Chloride	2024-07	ug/L	< 5.00 J	< 5.00 J			< 5.00
Methylene Chloride	2024-08	ug/L		< 5.00			
Methylene Chloride	2024-12	ug/L		< 5.00	< 5.00	< 5.00	< 5.00
Methylene Chloride	2025-06	ug/L		< 5.00	< 5.00	< 5.00	< 5.00
Methylene Chloride	2025-10	ug/L		< 5	< 5		< 5
Naphthalene	2020-11	ug/L					< 5.00
Naphthalene	2021-06	ug/L					< 5.00
Naphthalene	2023-06	ug/L	< 5.00				
Naphthalene	2024-07	ug/L	< 5.00 J				
Nickel	2018-10	ug/L	**43.3**				
Nickel	2018-12	ug/L	**35.1**				
Nickel	2019-06	ug/L				**6.61**	
Nickel	2019-08	ug/L				**8.64**	
Nickel	2019-11	ug/L				**9.21**	**27.4**
Nickel	2020-02	ug/L					**23.2**
Nickel	2020-06	ug/L				**7.25**	
Nickel	2020-07	ug/L					**27.9**
Nickel	2020-08	ug/L				**9.85**	**22**
Nickel	2020-11	ug/L				**9.21**	**19.5**
Nickel	2021-06	ug/L	**34.1**			**6.72**	**18.8**
Nickel	2021-08	ug/L	**22.6**				
Nickel	2021-09	ug/L			~~**2.91 J**~~	**7.71**	**22.5**
Nickel	2021-12	ug/L			**2.06 J**		
Nickel	2022-03	ug/L			~~**6.52**~~	**5.54**	**24.9**
Nickel	2022-06	ug/L			< 5.00		
Nickel	2022-08	ug/L			< 5.00	**7.64**	
Nickel	2022-09	ug/L	**30.2**				**26.5**
Nickel	2022-12	ug/L			< 5.00		
Nickel	2023-06	ug/L	**21.6**		< 5.00	**4.45 JO**	**18.7**
Nickel	2023-11	ug/L			< 5.00	**9.26**	**32.7**
Nickel	2024-06	ug/L			< 5.00	**6.65**	
Nickel	2024-07	ug/L	**16.3**	< 5.00			**17.6**
Nickel	2024-08	ug/L		< 5.00			
Nickel	2024-12	ug/L		< 5.00	< 5.00	**7.63**	**11.8**

Table 14

Winneshiek County Area Solid Waste Agency **Analytical Data Summary - Deep Groundwater Appendix II**
Permit No. 57-SDP-01-74P **2025 Annual Water Quality Report**

Constituent	Date	Units	MW-11 (DwnGrad)	MW-18 (Bkgrnd)	MW-19R (Bkgrnd)	MW-22 (DwnGrad)	MW-35 (DwnGrad)
1,1,1,2-Tetrachloroethane	2018-10	ug/L	< 1.00				
Nickel	2025-06	ug/L		< 5.00	< 5.00	**5.24**	**18**
Nickel	2025-10	ug/L		< 5	< 5		**18.6**
Nitrobenzene	2020-11	ug/L					< 11.8
Nitrobenzene	2021-06	ug/L					< 12.0
Nitrobenzene	2023-06	ug/L	< 11.4				
Nitrobenzene	2024-07	ug/L	< 12.5 J				
N-Nitrosodiethylamine	2020-11	ug/L					< 11.8
N-Nitrosodiethylamine	2021-06	ug/L					< 12.0
N-Nitrosodiethylamine	2023-06	ug/L	< 11.4				
N-Nitrosodiethylamine	2024-07	ug/L	< 12.5 J				
N-Nitrosodimethylamine	2020-11	ug/L					< 11.8
N-Nitrosodimethylamine	2021-06	ug/L					< 12.0
N-Nitrosodimethylamine	2023-06	ug/L	< 11.4				
N-Nitrosodimethylamine	2024-07	ug/L	< 12.5 J				
N-Nitrosodi-n-butylamine	2020-11	ug/L					< 11.8
N-Nitrosodi-n-butylamine	2021-06	ug/L					< 12.0
N-Nitrosodi-n-butylamine	2023-06	ug/L	< 11.4				
N-Nitrosodi-n-butylamine	2024-07	ug/L	< 12.5 J				
N-Nitrosodi-n-propylamine	2020-11	ug/L					< 11.8
N-Nitrosodi-n-propylamine	2021-06	ug/L					< 12.0
N-Nitrosodi-n-propylamine	2023-06	ug/L	< 11.4				
N-Nitrosodi-n-propylamine	2024-07	ug/L	< 12.5 J				
N-Nitrosodiphenylamine	2020-11	ug/L					< 11.8
N-Nitrosodiphenylamine	2021-06	ug/L					< 12.0
N-Nitrosodiphenylamine	2023-06	ug/L	< 11.4				
N-Nitrosodiphenylamine	2024-07	ug/L	< 12.5 J				
N-Nitrosomethylethylamine	2020-11	ug/L					< 11.8
N-Nitrosomethylethylamine	2021-06	ug/L					< 12.0
N-Nitrosomethylethylamine	2023-06	ug/L	< 11.4				
N-Nitrosomethylethylamine	2024-07	ug/L	< 12.5 J				
N-Nitrosopiperidine	2020-11	ug/L					< 11.8
N-Nitrosopiperidine	2021-06	ug/L					< 12.0
N-Nitrosopiperidine	2023-06	ug/L	< 11.4				
N-Nitrosopiperidine	2024-07	ug/L	< 12.5 J				
N-Nitrosopyrrolidine	2020-11	ug/L					< 11.8
N-Nitrosopyrrolidine	2021-06	ug/L					< 12.0
N-Nitrosopyrrolidine	2023-06	ug/L	< 11.4				
N-Nitrosopyrrolidine	2024-07	ug/L	< 12.5 J				
o,o,o-Triethylphosphorothioate	2020-11	ug/L					< 11.8
o,o,o-Triethylphosphorothioate	2021-06	ug/L					< 12.0
o,o,o-Triethylphosphorothioate	2023-06	ug/L	< 11.4				
o,o,o-Triethylphosphorothioate	2024-07	ug/L	< 12.5 J				
o-Toluidine	2020-11	ug/L					< 11.8
o-Toluidine	2021-06	ug/L					< 12.0
o-Toluidine	2023-06	ug/L	< 11.4				
o-Toluidine	2024-07	ug/L	< 12.5 J				
p-(Dimethylamino)azobenzene	2020-11	ug/L					< 11.8
p-(Dimethylamino)azobenzene	2021-06	ug/L					< 12.0
p-(Dimethylamino)azobenzene	2023-06	ug/L	< 11.4				
p-(Dimethylamino)azobenzene	2024-07	ug/L	< 12.5 J				
Parathion	2020-11	ug/L					< 11.8
Parathion	2021-06	ug/L					< 12.0
Parathion	2023-06	ug/L	< 11.4				
Parathion	2024-07	ug/L	< 12.5 J				
PCBs - Aroclor 1016	2020-11	ug/L					< 0.976
PCBs - Aroclor 1016	2021-06	ug/L					< 1.00
PCBs - Aroclor 1016	2023-06	ug/L	< 0.952				
PCBs - Aroclor 1016	2024-07	ug/L	< 1.87				
PCBs - Aroclor 1221	2020-11	ug/L					< 0.976
PCBs - Aroclor 1221	2021-06	ug/L					< 1.00
PCBs - Aroclor 1221	2023-06	ug/L	< 0.952				
PCBs - Aroclor 1221	2024-07	ug/L	< 1.87				
PCBs - Aroclor 1232	2020-11	ug/L					< 0.976
PCBs - Aroclor 1232	2021-06	ug/L					< 1.00
PCBs - Aroclor 1232	2023-06	ug/L	< 0.952				
PCBs - Aroclor 1232	2024-07	ug/L	< 1.87				
PCBs - Aroclor 1242	2020-11	ug/L					< 0.976
PCBs - Aroclor 1242	2021-06	ug/L					< 1.00
PCBs - Aroclor 1242	2023-06	ug/L	< 0.952				
PCBs - Aroclor 1242	2024-07	ug/L	< 1.87				
PCBs - Aroclor 1248	2020-11	ug/L					< 0.976
PCBs - Aroclor 1248	2021-06	ug/L					< 1.00
PCBs - Aroclor 1248	2023-06	ug/L	< 0.952				
PCBs - Aroclor 1248	2024-07	ug/L	< 1.87				
PCBs - Aroclor 1254	2020-11	ug/L					< 0.976
PCBs - Aroclor 1254	2021-06	ug/L					< 1.00
PCBs - Aroclor 1254	2023-06	ug/L	< 0.952				
PCBs - Aroclor 1254	2024-07	ug/L	< 1.87				
PCBs - Aroclor 1260	2020-11	ug/L					< 0.976
PCBs - Aroclor 1260	2021-06	ug/L					< 1.00
PCBs - Aroclor 1260	2023-06	ug/L	< 0.952				
PCBs - Aroclor 1260	2024-07	ug/L	< 1.87				
Pentachlorobenzene	2020-11	ug/L					< 11.8
Pentachlorobenzene	2021-06	ug/L					< 12.0
Pentachlorobenzene	2023-06	ug/L	< 11.4				
Pentachlorobenzene	2024-07	ug/L	< 12.5 J				
Pentachloronitrobenzene	2020-11	ug/L					< 11.8

Table 14
Analytical Data Summary - Deep Groundwater Appendix II
2025 Annual Water Quality Report

Constituent	Date	Units	MW-11 (DwnGrad)	MW-18 (Bkgrnd)	MW-19R (Bkgrnd)	MW-22 (DwnGrad)	MW-35 (DwnGrad)
1,1,1,2-Tetrachloroethane	2018-10	ug/L	< 1.00				
Pentachloronitrobenzene	2021-06	ug/L					< 12.0
Pentachloronitrobenzene	2023-06	ug/L	< 11.4				
Pentachloronitrobenzene	2024-07	ug/L	< 12.5 J				
Pentachlorophenol	2020-11	ug/L					< 11.8
Pentachlorophenol	2021-06	ug/L					< 12.0
Pentachlorophenol	2023-06	ug/L	< 11.4				
Pentachlorophenol	2024-07	ug/L	< 12.5 J				
Phenacetin	2020-11	ug/L					< 11.8
Phenacetin	2021-06	ug/L					< 12.0
Phenacetin	2023-06	ug/L	< 11.4				
Phenacetin	2024-07	ug/L	< 12.5 J				
Phenanthrene	2020-11	ug/L					< 11.8
Phenanthrene	2021-06	ug/L					< 12.0
Phenanthrene	2023-06	ug/L	< 11.4				
Phenanthrene	2024-07	ug/L	< 12.5 J				
Phenol	2020-11	ug/L					< 11.8
Phenol	2021-06	ug/L					< 12.0
Phenol	2023-06	ug/L	< 11.4				
Phenol	2024-07	ug/L	< 12.5 J				
Phorate	2020-11	ug/L					< 11.8
Phorate	2021-06	ug/L					< 12.0
Phorate	2023-06	ug/L	< 11.4				
Phorate	2024-07	ug/L	< 12.5 J				
p-Phenylenediamine	2020-11	ug/L					< 11.8
p-Phenylenediamine	2021-06	ug/L					< 12.0
p-Phenylenediamine	2023-06	ug/L	< 11.4				
p-Phenylenediamine	2024-07	ug/L	~~< 12.5 R~~				
Pronamide	2020-11	ug/L					< 11.8
Pronamide	2021-06	ug/L					< 12.0
Pronamide	2023-06	ug/L	< 11.4				
Pronamide	2024-07	ug/L	< 12.5 J				
Propionitrile	2020-11	ug/L					< 10.0
Propionitrile	2021-06	ug/L					< 10.0
Propionitrile	2023-06	ug/L	< 10.0				
Propionitrile	2024-07	ug/L	< 10.0 J				
Pyrene	2020-11	ug/L					< 11.8
Pyrene	2021-06	ug/L					< 12.0
Pyrene	2023-06	ug/L	< 11.4				
Pyrene	2024-07	ug/L	< 12.5 J				
Safrole	2020-11	ug/L					< 11.8
Safrole	2021-06	ug/L					< 12.0
Safrole	2023-06	ug/L	< 11.4				
Safrole	2024-07	ug/L	< 12.5 J				
Selenium	2018-10	ug/L	< 5.00				
Selenium	2019-06	ug/L				< 2.50	
Selenium	2019-08	ug/L				< 2.50	
Selenium	2019-11	ug/L				< 5.00	< 5.00
Selenium	2020-02	ug/L					< 5.00
Selenium	2020-06	ug/L				< 5.00	
Selenium	2020-07	ug/L					< 5.00
Selenium	2020-08	ug/L				< 5.00	< 5.00
Selenium	2020-11	ug/L				< 5.00	< 5.00
Selenium	2021-06	ug/L	**2.51 J**			< 5.00	< 5.00
Selenium	2021-09	ug/L			< 5.00	< 5.00	< 5.00
Selenium	2021-12	ug/L			< 5.00		
Selenium	2022-03	ug/L			< 5.00	< 5.00	< 5.00
Selenium	2022-06	ug/L			< 5.00		
Selenium	2022-08	ug/L			< 5.00	< 5.00	
Selenium	2022-09	ug/L	**2.87 J**				< 5.00
Selenium	2022-12	ug/L			< 5.00		
Selenium	2023-06	ug/L	**2.16 J**		< 5.00	< 5.00	< 5.00
Selenium	2023-11	ug/L			< 5.00	< 5.00	< 5.00
Selenium	2024-06	ug/L			< 5.00	< 5.00	
Selenium	2024-07	ug/L	**1.91 J**	< 5.00			< 5.00
Selenium	2024-08	ug/L		< 5.00			
Selenium	2024-12	ug/L		< 5.00	< 5.00	< 5.00	< 5.00
Selenium	2025-06	ug/L		< 5.00	< 5.00	< 5.00	< 5.00
Selenium	2025-10	ug/L		< 5	< 5		< 5
Silver	2018-10	ug/L	< 1.00				
Silver	2019-06	ug/L				< 0.500	
Silver	2019-08	ug/L				< 0.500	
Silver	2019-11	ug/L				< 1.00	< 1.00
Silver	2020-02	ug/L					< 1.00
Silver	2020-06	ug/L				< 1.00	
Silver	2020-07	ug/L					< 1.00
Silver	2020-08	ug/L				< 1.00	< 1.00
Silver	2020-11	ug/L				< 1.00	< 1.00
Silver	2021-06	ug/L	< 1.00			< 1.00	< 1.00
Silver	2021-09	ug/L			< 1.00	< 1.00	< 1.00
Silver	2021-12	ug/L			< 1.00		
Silver	2022-03	ug/L			< 1.00	< 1.00	< 1.00
Silver	2022-06	ug/L			< 1.00		
Silver	2022-08	ug/L			< 1.00	< 1.00	
Silver	2022-09	ug/L	< 1.00				**0.759 J**
Silver	2022-12	ug/L			**1.24**		
Silver	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00
Silver	2023-11	ug/L			< 1.00	< 1.00	< 1.00

Constituent	Date	Units	MW-11 (DwnGrad)	MW-18 (Bkgrnd)	MW-19R (Bkgrnd)	MW-22 (DwnGrad)	MW-35 (DwnGrad)
1,1,1,2-Tetrachloroethane	2018-10	ug/L	< 1.00				
Silver	2024-06	ug/L			< 1.00	< 1.00	
Silver	2024-07	ug/L	< 1.00	< 1.00			< 1.00
Silver	2024-08	ug/L		< 1.00			
Silver	2024-12	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
Silver	2025-06	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
Silver	2025-10	ug/L		< 1	< 1		< 1
Styrene	2018-10	ug/L	< 1.00				
Styrene	2019-06	ug/L				< 1.00	
Styrene	2019-08	ug/L				< 1.00	
Styrene	2019-11	ug/L				< 1.00	< 1.00
Styrene	2020-02	ug/L					< 1.00
Styrene	2020-06	ug/L				< 1.00	
Styrene	2020-07	ug/L					< 1.00
Styrene	2020-08	ug/L				< 1.00	< 1.00
Styrene	2020-11	ug/L				< 1.00	< 1.00
Styrene	2021-06	ug/L	< 1.00			< 1.00	< 1.00
Styrene	2021-09	ug/L			< 1.00	< 1.00	< 1.00
Styrene	2021-12	ug/L			< 1.00		
Styrene	2022-03	ug/L			< 1.00	< 1.00	< 1.00
Styrene	2022-06	ug/L			< 1.00		
Styrene	2022-08	ug/L			< 1.00	< 1.00	
Styrene	2022-09	ug/L	< 1.00				< 1.00
Styrene	2022-12	ug/L			< 1.00		
Styrene	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00
Styrene	2023-11	ug/L			< 1.00	< 1.00	< 1.00
Styrene	2024-06	ug/L			< 1.00	< 1.00	
Styrene	2024-07	ug/L	< 1.00 J	< 1.00 J			< 1.00
Styrene	2024-08	ug/L		< 1.00			
Styrene	2024-12	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
Styrene	2025-06	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
Styrene	2025-10	ug/L		< 1	< 1		< 1
Sulfide	2020-11	mg/L					< 10.0
Sulfide	2021-06	mg/L					< 1.00
Sulfide	2021-12	mg/L			< 1.00		
Sulfide	2023-06	ug/L	< 1000				
Sulfide	2024-07	ug/L	< 3000 J				
Sulfide	2025-10	ug/L			< 3000		
Technical Chlordane	2020-11	ug/L					< 2.44
Technical Chlordane	2021-06	ug/L					< 2.50
Technical Chlordane	2023-06	ug/L	< 2.38				
Technical Chlordane	2024-07	ug/L	< 1.87 J				
Tetrachloroethene	2018-10	ug/L	< 1.00				
Tetrachloroethene	2019-06	ug/L				< 1.00	
Tetrachloroethene	2019-08	ug/L				< 1.00	
Tetrachloroethene	2019-11	ug/L				< 1.00	< 1.00
Tetrachloroethene	2020-02	ug/L					< 1.00
Tetrachloroethene	2020-06	ug/L				< 1.00	
Tetrachloroethene	2020-07	ug/L					< 1.00
Tetrachloroethene	2020-08	ug/L				< 1.00	< 1.00
Tetrachloroethene	2020-11	ug/L				< 1.00	< 1.00
Tetrachloroethene	2021-06	ug/L	< 1.00			< 1.00	< 1.00
Tetrachloroethene	2021-09	ug/L			< 1.00	< 1.00	< 1.00
Tetrachloroethene	2021-12	ug/L			< 1.00		
Tetrachloroethene	2022-03	ug/L			< 1.00	< 1.00	< 1.00
Tetrachloroethene	2022-06	ug/L			< 1.00		
Tetrachloroethene	2022-08	ug/L			< 1.00	< 1.00	
Tetrachloroethene	2022-09	ug/L	< 1.00				< 1.00
Tetrachloroethene	2022-12	ug/L			< 1.00		
Tetrachloroethene	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00
Tetrachloroethene	2023-11	ug/L			< 1.00	< 1.00	< 1.00
Tetrachloroethene	2024-06	ug/L			< 1.00	< 1.00	
Tetrachloroethene	2024-07	ug/L	< 1.00 J	< 1.00 J			< 1.00
Tetrachloroethene	2024-08	ug/L		< 1.00			
Tetrachloroethene	2024-12	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
Tetrachloroethene	2025-06	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
Tetrachloroethene	2025-10	ug/L		< 1	< 1		< 1
Thallium	2018-10	ug/L	< 1.00				
Thallium	2019-06	ug/L				< 2.00	
Thallium	2019-08	ug/L				< 2.00	
Thallium	2019-11	ug/L				< 1.00	**0.386 J**
Thallium	2020-02	ug/L					**0.304 J**
Thallium	2020-06	ug/L				< 1.00	
Thallium	2020-07	ug/L					**0.357 J**
Thallium	2020-08	ug/L				< 1.00	**0.339 J**
Thallium	2020-11	ug/L				< 1.00	**0.273 J**
Thallium	2021-06	ug/L	< 1.00			< 1.00	**0.307 J**
Thallium	2021-09	ug/L			< 1.00	< 1.00	**0.34 J**
Thallium	2021-12	ug/L			< 1.00		
Thallium	2022-03	ug/L			< 1.00	< 1.00	**0.361 J**
Thallium	2022-06	ug/L			< 1.00		
Thallium	2022-08	ug/L			< 1.00	< 1.00	
Thallium	2022-09	ug/L	< 1.00				**0.408 J**
Thallium	2022-12	ug/L			< 1.00		
Thallium	2023-06	ug/L	< 1.00		< 1.00	< 1.00	**0.337 J**
Thallium	2023-11	ug/L			< 1.00	< 1.00	**0.371 J**
Thallium	2024-06	ug/L			< 1.00	< 1.00	
Thallium	2024-07	ug/L	< 1.00	< 1.00			**1.14**

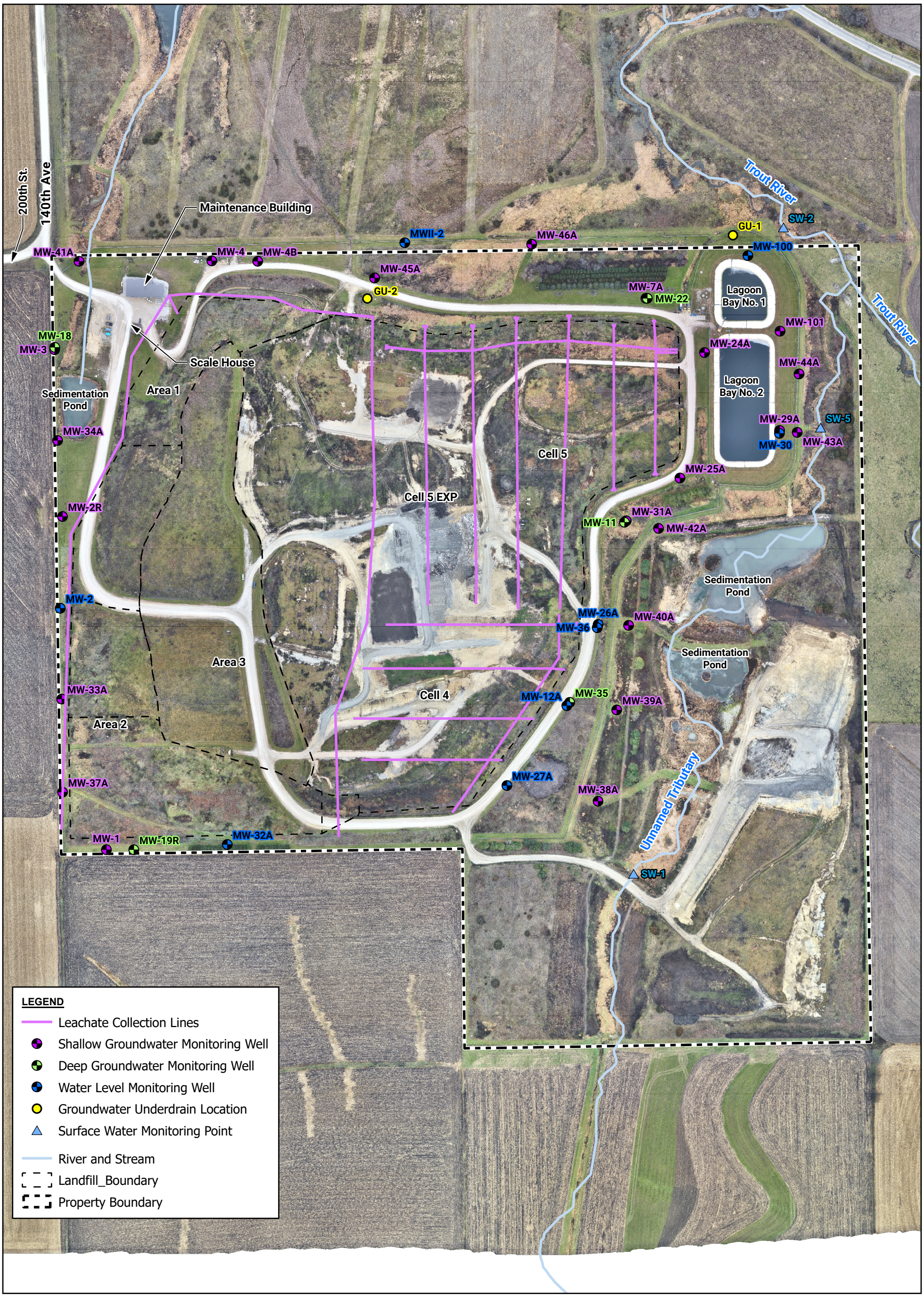
Constituent	Date	Units	MW-11 (DwnGrad)	MW-18 (Bkgrnd)	MW-19R (Bkgrnd)	MW-22 (DwnGrad)	MW-35 (DwnGrad)
1,1,1,2-Tetrachloroethane	2018-10	ug/L	< 1.00				
Thallium	2024-08	ug/L		< 1.00			
Thallium	2024-09	ug/L					< 1.00
Thallium	2024-12	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
Thallium	2025-06	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
Thallium	2025-10	ug/L		< 1	< 1		< 1
Thionazin	2020-11	ug/L					< 11.8
Thionazin	2021-06	ug/L					< 12.0
Thionazin	2023-06	ug/L	< 11.4				
Thionazin	2024-07	ug/L	< 12.5 J				
Tin	2020-11	ug/L					< 5.00
Tin	2021-06	ug/L					< 5.00
Tin	2023-06	ug/L	< 5.00				
Tin	2024-07	ug/L	< 5.00				
Toluene	2018-10	ug/L	< 1.00				
Toluene	2019-06	ug/L				< 1.00	
Toluene	2019-08	ug/L				< 1.00	
Toluene	2019-11	ug/L				< 1.00	< 1.00
Toluene	2020-02	ug/L					< 1.00
Toluene	2020-06	ug/L				< 1.00	
Toluene	2020-07	ug/L					< 1.00
Toluene	2020-08	ug/L				< 1.00	< 1.00
Toluene	2020-11	ug/L				< 1.00	< 1.00
Toluene	2021-06	ug/L	< 1.00			< 1.00	< 1.00
Toluene	2021-09	ug/L			< 1.00	< 1.00	< 1.00
Toluene	2021-12	ug/L			< 1.00		
Toluene	2022-03	ug/L			< 1.00	< 1.00	< 1.00
Toluene	2022-06	ug/L			< 1.00		
Toluene	2022-08	ug/L			< 1.00	< 1.00	
Toluene	2022-09	ug/L	< 1.00				< 1.00
Toluene	2022-12	ug/L			**0.431 J**		
Toluene	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00
Toluene	2023-11	ug/L			< 1.00	< 1.00	< 1.00
Toluene	2024-06	ug/L			< 1.00	< 1.00	
Toluene	2024-07	ug/L	< 1.00 J	< 1.00 J			< 1.00
Toluene	2024-08	ug/L		< 1.00			
Toluene	2024-12	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
Toluene	2025-06	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
Toluene	2025-10	ug/L		< 1	< 1		< 1
Total Suspended Solids	2018-10	mg/L	**2.13**				
Total Suspended Solids	2018-12	mg/L	< 1.88				
Total Suspended Solids	2019-06	mg/L				**1.13 J**	
Total Suspended Solids	2019-08	mg/L				**2.5**	
Total Suspended Solids	2019-11	mg/L				**3.5**	**2.13**
Total Suspended Solids	2020-02	mg/L					**7**
Total Suspended Solids	2020-06	mg/L				**2.75**	
Total Suspended Solids	2020-07	mg/L					**7.13**
Total Suspended Solids	2020-08	mg/L				**4.13**	**14.5**
Total Suspended Solids	2020-11	mg/L				**2.88**	**3.25**
Total Suspended Solids	2021-06	mg/L	**1.5 J**			**2.75**	**3.5**
Total Suspended Solids	2021-08	mg/L	< 1.88				
Total Suspended Solids	2021-09	mg/L			**182**	**2.25**	**4.62**
Total Suspended Solids	2021-12	mg/L			**31**		
Total Suspended Solids	2022-03	mg/L			**834**	**2.5**	**6.67**
Total Suspended Solids	2022-06	mg/L			**15**		
Total Suspended Solids	2022-08	mg/L			**12.8**	**5.88**	
Total Suspended Solids	2022-09	mg/L	< 1.88				**10.3**
Total Suspended Solids	2022-12	mg/L			**10.8**		
Total Suspended Solids	2023-06	mg/L	< 1.88	**5.88**	**109**	< 1.88	**6.63**
Total Suspended Solids	2023-11	mg/L			**10.5**	**2.25**	**7**
Total Suspended Solids	2024-06	mg/L			< 1.88	**1.88**	
Total Suspended Solids	2024-07	mg/L	< 1.88 J	< 1.88 J			**5.25**
Total Suspended Solids	2024-08	mg/L		**5.88**			
Total Suspended Solids	2024-09	mg/L					**2.25**
Total Suspended Solids	2024-12	mg/L		**5.33**	**12.1**	**7.25**	**3.31**
Total Suspended Solids	2025-06	mg/L		**3.38**	**52**	< 1.88	**4**
Total Suspended Solids	2025-10	mg/L		**2.28**	**151**		**5**
Toxaphene	2020-11	ug/L					< 2.44
Toxaphene	2021-06	ug/L					< 2.50
Toxaphene	2023-06	ug/L	< 2.38				
Toxaphene	2024-07	ug/L	< 1.87 J				
trans-1,2-Dichloroethene	2018-10	ug/L	< 1.00				
trans-1,2-Dichloroethene	2019-06	ug/L				< 1.00	
trans-1,2-Dichloroethene	2019-08	ug/L				< 1.00	
trans-1,2-Dichloroethene	2019-11	ug/L				< 1.00	< 1.00
trans-1,2-Dichloroethene	2020-02	ug/L					< 1.00
trans-1,2-Dichloroethene	2020-06	ug/L				< 1.00	
trans-1,2-Dichloroethene	2020-07	ug/L					< 1.00
trans-1,2-Dichloroethene	2020-08	ug/L				< 1.00	< 1.00
trans-1,2-Dichloroethene	2020-11	ug/L				< 1.00	< 1.00
trans-1,2-Dichloroethene	2021-06	ug/L	< 1.00			< 1.00	< 1.00
trans-1,2-Dichloroethene	2021-09	ug/L			< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2021-12	ug/L			< 1.00		
trans-1,2-Dichloroethene	2022-03	ug/L			< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2022-06	ug/L			< 1.00		
trans-1,2-Dichloroethene	2022-08	ug/L			< 1.00	< 1.00	
trans-1,2-Dichloroethene	2022-09	ug/L	< 1.00				< 1.00
trans-1,2-Dichloroethene	2022-12	ug/L			< 1.00		

Constituent	Date	Units	MW-11 (DwnGrad)	MW-18 (Bkgrnd)	MW-19R (Bkgrnd)	MW-22 (DwnGrad)	MW-35 (DwnGrad)
1,1,1,2-Tetrachloroethane	2018-10	ug/L	< 1.00				
trans-1,2-Dichloroethene	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2023-11	ug/L			< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2024-06	ug/L			< 1.00	< 1.00	
trans-1,2-Dichloroethene	2024-07	ug/L	< 1.00 J	< 1.00 J			< 1.00
trans-1,2-Dichloroethene	2024-08	ug/L		< 1.00			
trans-1,2-Dichloroethene	2024-12	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2025-06	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	2025-10	ug/L		< 1	< 1		< 1
trans-1,3-Dichloropropene	2018-10	ug/L	< 5.00				
trans-1,3-Dichloropropene	2019-06	ug/L				< 5.00	
trans-1,3-Dichloropropene	2019-08	ug/L				< 5.00	
trans-1,3-Dichloropropene	2019-11	ug/L				< 5.00	< 5.00
trans-1,3-Dichloropropene	2020-02	ug/L					< 5.00
trans-1,3-Dichloropropene	2020-06	ug/L				< 5.00	
trans-1,3-Dichloropropene	2020-07	ug/L					< 5.00
trans-1,3-Dichloropropene	2020-08	ug/L				< 5.00	< 5.00
trans-1,3-Dichloropropene	2020-11	ug/L				< 5.00	< 5.00
trans-1,3-Dichloropropene	2021-06	ug/L	< 5.00			< 5.00	< 5.00
trans-1,3-Dichloropropene	2021-09	ug/L			< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2021-12	ug/L			< 5.00		
trans-1,3-Dichloropropene	2022-03	ug/L			< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2022-06	ug/L			< 5.00		
trans-1,3-Dichloropropene	2022-08	ug/L			< 5.00	< 5.00	
trans-1,3-Dichloropropene	2022-09	ug/L	< 5.00				< 5.00
trans-1,3-Dichloropropene	2022-12	ug/L			< 5.00		
trans-1,3-Dichloropropene	2023-06	ug/L	< 5.00		< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2023-11	ug/L			< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2024-06	ug/L			< 5.00	< 5.00	
trans-1,3-Dichloropropene	2024-07	ug/L	< 5.00 J	< 5.00 J			< 5.00
trans-1,3-Dichloropropene	2024-08	ug/L		< 5.00			
trans-1,3-Dichloropropene	2024-12	ug/L		< 5.00	< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2025-06	ug/L		< 5.00	< 5.00	< 5.00	< 5.00
trans-1,3-Dichloropropene	2025-10	ug/L		< 5	< 5		< 5
trans-1,4-Dichloro-2-butene	2018-10	ug/L	< 10.0				
trans-1,4-Dichloro-2-butene	2019-06	ug/L				< 10.0	
trans-1,4-Dichloro-2-butene	2019-08	ug/L				< 10.0	
trans-1,4-Dichloro-2-butene	2019-11	ug/L				< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2020-02	ug/L					< 10.0
trans-1,4-Dichloro-2-butene	2020-06	ug/L				< 10.0	
trans-1,4-Dichloro-2-butene	2020-07	ug/L					< 10.0
trans-1,4-Dichloro-2-butene	2020-08	ug/L				< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2020-11	ug/L				< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2021-06	ug/L	< 10.0			< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2021-09	ug/L			< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2021-12	ug/L			< 10.0		
trans-1,4-Dichloro-2-butene	2022-03	ug/L			< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2022-06	ug/L			< 10.0		
trans-1,4-Dichloro-2-butene	2022-08	ug/L			< 10.0	< 10.0	
trans-1,4-Dichloro-2-butene	2022-09	ug/L	< 10.0				< 10.0
trans-1,4-Dichloro-2-butene	2022-12	ug/L			< 10.0		
trans-1,4-Dichloro-2-butene	2023-06	ug/L	< 10.0		< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2023-11	ug/L			< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2024-06	ug/L			< 10.0	< 10.0	
trans-1,4-Dichloro-2-butene	2024-07	ug/L	< 10.0 J	< 10.0 J			< 10.0
trans-1,4-Dichloro-2-butene	2024-08	ug/L		< 10.0			
trans-1,4-Dichloro-2-butene	2024-12	ug/L		< 10.0	< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2025-06	ug/L		< 10.0	< 10.0	< 10.0	< 10.0
trans-1,4-Dichloro-2-butene	2025-10	ug/L		< 10	< 10		< 10
Trichloroethene	2018-10	ug/L	< 1.00				
Trichloroethene	2019-06	ug/L				< 1.00	
Trichloroethene	2019-08	ug/L				< 1.00	
Trichloroethene	2019-11	ug/L				< 1.00	< 1.00
Trichloroethene	2020-02	ug/L					< 1.00
Trichloroethene	2020-06	ug/L				< 1.00	
Trichloroethene	2020-07	ug/L					< 1.00
Trichloroethene	2020-08	ug/L				< 1.00	< 1.00
Trichloroethene	2020-11	ug/L				< 1.00	< 1.00
Trichloroethene	2021-06	ug/L	< 1.00			< 1.00	< 1.00
Trichloroethene	2021-09	ug/L			< 1.00	< 1.00	< 1.00
Trichloroethene	2021-12	ug/L			< 1.00		
Trichloroethene	2022-03	ug/L			< 1.00	< 1.00	< 1.00
Trichloroethene	2022-06	ug/L			< 1.00		
Trichloroethene	2022-08	ug/L			< 1.00	< 1.00	
Trichloroethene	2022-09	ug/L	< 1.00				< 1.00
Trichloroethene	2022-12	ug/L			< 1.00		
Trichloroethene	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00
Trichloroethene	2023-11	ug/L			< 1.00	< 1.00	< 1.00
Trichloroethene	2024-06	ug/L			< 1.00	< 1.00	
Trichloroethene	2024-07	ug/L	< 1.00 J	< 1.00 J			< 1.00
Trichloroethene	2024-08	ug/L		< 1.00			
Trichloroethene	2024-12	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
Trichloroethene	2025-06	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
Trichloroethene	2025-10	ug/L		< 1	< 1		< 1
Vanadium	2018-10	ug/L	< 5.00				
Vanadium	2019-06	ug/L				**2.67 J**	
Vanadium	2019-08	ug/L				< 5.00	
Vanadium	2019-11	ug/L				< 5.00	< 5.00

Constituent	Date	Units	MW-11 (DwnGrad)	MW-18 (Bkgrnd)	MW-19R (Bkgrnd)	MW-22 (DwnGrad)	MW-35 (DwnGrad)
1,1,1,2-Tetrachloroethane	2018-10	ug/L	< 1.00				
Vanadium	2020-02	ug/L					< 5.00
Vanadium	2020-06	ug/L				< 5.00	
Vanadium	2020-07	ug/L					< 5.00
Vanadium	2020-08	ug/L				< 5.00	< 5.00
Vanadium	2020-11	ug/L				**0.923 J**	< 5.00
Vanadium	2021-06	ug/L	< 5.00			< 5.00	< 5.00
Vanadium	2021-09	ug/L			< 5.00	< 5.00	< 5.00
Vanadium	2021-12	ug/L			< 5.00		
Vanadium	2022-03	ug/L			~~**3.49 J**~~	**1.49 J**	< 5.00
Vanadium	2022-06	ug/L			< 5.00		
Vanadium	2022-08	ug/L			< 5.00	< 5.00	
Vanadium	2022-09	ug/L	< 5.00				< 5.00
Vanadium	2022-12	ug/L			< 5.00		
Vanadium	2023-06	ug/L	< 5.00		< 5.00	< 5.00	< 5.00
Vanadium	2023-11	ug/L			< 5.00	< 5.00	< 5.00
Vanadium	2024-06	ug/L			< 5.00	< 5.00	
Vanadium	2024-07	ug/L	< 5.00	< 5.00			< 5.00
Vanadium	2024-08	ug/L		< 5.00			
Vanadium	2024-12	ug/L		< 5.00	< 5.00	< 5.00	< 5.00
Vanadium	2025-06	ug/L		< 5.00	< 5.00	< 5.00	< 5.00
Vanadium	2025-10	ug/L		< 5	< 5		< 5
Vinyl Acetate	2018-10	ug/L	< 10.0				
Vinyl Acetate	2019-06	ug/L				< 10.0	
Vinyl Acetate	2019-08	ug/L				< 10.0	
Vinyl Acetate	2019-11	ug/L				< 10.0	< 10.0
Vinyl Acetate	2020-02	ug/L					< 10.0
Vinyl Acetate	2020-06	ug/L				< 10.0	
Vinyl Acetate	2020-07	ug/L					< 10.0
Vinyl Acetate	2020-08	ug/L				< 10.0	< 10.0
Vinyl Acetate	2020-11	ug/L				< 10.0	< 10.0
Vinyl Acetate	2021-06	ug/L	< 10.0			< 10.0	< 10.0
Vinyl Acetate	2021-09	ug/L			< 10.0	< 10.0	< 10.0
Vinyl Acetate	2021-12	ug/L			< 10.0		
Vinyl Acetate	2022-03	ug/L			< 10.0	< 10.0	< 10.0
Vinyl Acetate	2022-06	ug/L			< 10.0		
Vinyl Acetate	2022-08	ug/L			< 10.0	< 10.0	
Vinyl Acetate	2022-09	ug/L	< 10.0				< 10.0
Vinyl Acetate	2022-12	ug/L			< 10.0		
Vinyl Acetate	2023-06	ug/L	< 10.0		< 10.0	< 10.0	< 10.0
Vinyl Acetate	2023-11	ug/L			< 10.0	< 10.0	< 10.0
Vinyl Acetate	2024-06	ug/L			< 10.0	< 10.0	
Vinyl Acetate	2024-07	ug/L	< 10.0 J	< 10.0 J			< 10.0
Vinyl Acetate	2024-08	ug/L		< 10.0			
Vinyl Acetate	2024-12	ug/L		< 10.0	< 10.0	< 10.0	< 10.0
Vinyl Acetate	2025-06	ug/L		< 10.0	< 10.0	< 10.0	< 10.0
Vinyl Acetate	2025-10	ug/L		< 10	< 10		< 10
Vinyl Chloride	2018-10	ug/L	< 1.00				
Vinyl Chloride	2019-06	ug/L				< 1.00	
Vinyl Chloride	2019-08	ug/L				< 1.00	
Vinyl Chloride	2019-11	ug/L				< 1.00	< 1.00
Vinyl Chloride	2020-02	ug/L					< 1.00
Vinyl Chloride	2020-06	ug/L				< 1.00	
Vinyl Chloride	2020-07	ug/L					< 1.00
Vinyl Chloride	2020-08	ug/L				< 1.00	< 1.00
Vinyl Chloride	2020-11	ug/L				< 1.00	< 1.00
Vinyl Chloride	2021-06	ug/L	< 1.00			< 1.00	< 1.00
Vinyl Chloride	2021-09	ug/L			< 1.00	< 1.00	< 1.00
Vinyl Chloride	2021-12	ug/L			< 1.00		
Vinyl Chloride	2022-03	ug/L			< 1.00	< 1.00	< 1.00
Vinyl Chloride	2022-06	ug/L			< 1.00		
Vinyl Chloride	2022-08	ug/L			< 1.00	< 1.00	
Vinyl Chloride	2022-09	ug/L	< 1.00				< 1.00
Vinyl Chloride	2022-12	ug/L			< 1.00		
Vinyl Chloride	2023-06	ug/L	< 1.00		< 1.00	< 1.00	< 1.00
Vinyl Chloride	2023-11	ug/L			< 1.00	< 1.00	< 1.00
Vinyl Chloride	2024-06	ug/L			< 1.00	< 1.00	
Vinyl Chloride	2024-07	ug/L	< 1.00 J	< 1.00 J			< 1.00
Vinyl Chloride	2024-08	ug/L		< 1.00			
Vinyl Chloride	2024-12	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
Vinyl Chloride	2025-06	ug/L		< 1.00	< 1.00	< 1.00	< 1.00
Vinyl Chloride	2025-10	ug/L		< 1	< 1		< 1
Xylenes, Total	2018-10	ug/L	< 3.00				
Xylenes, Total	2019-06	ug/L				< 3.00	
Xylenes, Total	2019-08	ug/L				< 3.00	
Xylenes, Total	2019-11	ug/L				< 3.00	< 3.00
Xylenes, Total	2020-02	ug/L					< 3.00
Xylenes, Total	2020-06	ug/L				< 3.00	
Xylenes, Total	2020-07	ug/L					< 3.00
Xylenes, Total	2020-08	ug/L				< 3.00	< 3.00
Xylenes, Total	2020-11	ug/L				< 3.00	< 3.00
Xylenes, Total	2021-06	ug/L	< 3.00			< 3.00	< 3.00
Xylenes, Total	2021-09	ug/L			< 3.00	< 3.00	< 3.00
Xylenes, Total	2021-12	ug/L			< 3.00		
Xylenes, Total	2022-03	ug/L			< 3.00	< 3.00	< 3.00
Xylenes, Total	2022-06	ug/L			< 3.00		
Xylenes, Total	2022-08	ug/L			< 3.00	< 3.00	
Xylenes, Total	2022-09	ug/L	< 3.00				< 3.00

Constituent	Date	Units	MW-11 (DwnGrad)	MW-18 (Bkgrnd)	MW-19R (Bkgrnd)	MW-22 (DwnGrad)	MW-35 (DwnGrad)
1,1,1,2-Tetrachloroethane	2018-10	ug/L	< 1.00				
Xylenes, Total	2022-12	ug/L			< 3.00		
Xylenes, Total	2023-06	ug/L	< 3.00		< 3.00	< 3.00	< 3.00
Xylenes, Total	2023-11	ug/L			< 3.00	< 3.00	< 3.00
Xylenes, Total	2024-06	ug/L			< 3.00	< 3.00	
Xylenes, Total	2024-07	ug/L	< 3.00 J	< 3.00 J			< 3.00
Xylenes, Total	2024-08	ug/L		< 3.00			
Xylenes, Total	2024-12	ug/L		< 3.00	< 3.00	< 3.00	< 3.00
Xylenes, Total	2025-06	ug/L		< 3.00	< 3.00	< 3.00	< 3.00
Xylenes, Total	2025-10	ug/L		< 3	< 3		< 3
Zinc	2018-10	ug/L	**119**				
Zinc	2018-12	ug/L	**82.8**				
Zinc	2019-06	ug/L				**11 J**	
Zinc	2019-08	ug/L				**11.7 J**	
Zinc	2019-11	ug/L				< 20.0	< 20.0
Zinc	2020-02	ug/L					< 20.0
Zinc	2020-06	ug/L				< 20.0	
Zinc	2020-07	ug/L					< 20.0
Zinc	2020-08	ug/L				< 20.0	< 20.0
Zinc	2020-11	ug/L				< 20.0	< 20.0
Zinc	2021-06	ug/L	**140**			< 20.0	< 20.0
Zinc	2021-08	ug/L	**70.1**				
Zinc	2021-09	ug/L			< 20.0	< 20.0	< 20.0
Zinc	2021-12	ug/L			< 20.0		
Zinc	2022-03	ug/L			< 20.0	< 20.0	< 20.0
Zinc	2022-06	ug/L			< 20.0		
Zinc	2022-08	ug/L			< 20.0	< 20.0	
Zinc	2022-09	ug/L	**146**				< 20.0
Zinc	2022-12	ug/L			< 20.0		
Zinc	2023-06	ug/L	**98.5**		< 20.0	**9.53 J**	< 20.0
Zinc	2023-11	ug/L			< 20.0	**9.94 J**	< 20.0
Zinc	2024-06	ug/L			< 20.0	< 20.0	
Zinc	2024-07	ug/L	**60**	< 20.0			< 20.0
Zinc	2024-08	ug/L		< 20.0			
Zinc	2024-12	ug/L		< 20.0	< 20.0	< 20.0	< 20.0
Zinc	2025-06	ug/L		< 20.0	< 20.0	< 20.0	< 20.0
Zinc	2025-10	ug/L		< 20	< 20		< 20

Figures



NOTES:
1. Date of Aerial Imagery Acquisition: December, 2025
2. Coordinate system is: NAD83(2011) Iowa North Zone, US feet. Vertical Datum is NAVD88.

This drawing is neither a legally recorded map nor a survey and is not intended to be used as one. This drawing is a compilation of records, information and data used for reference purposes only.

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0 150 300 Feet

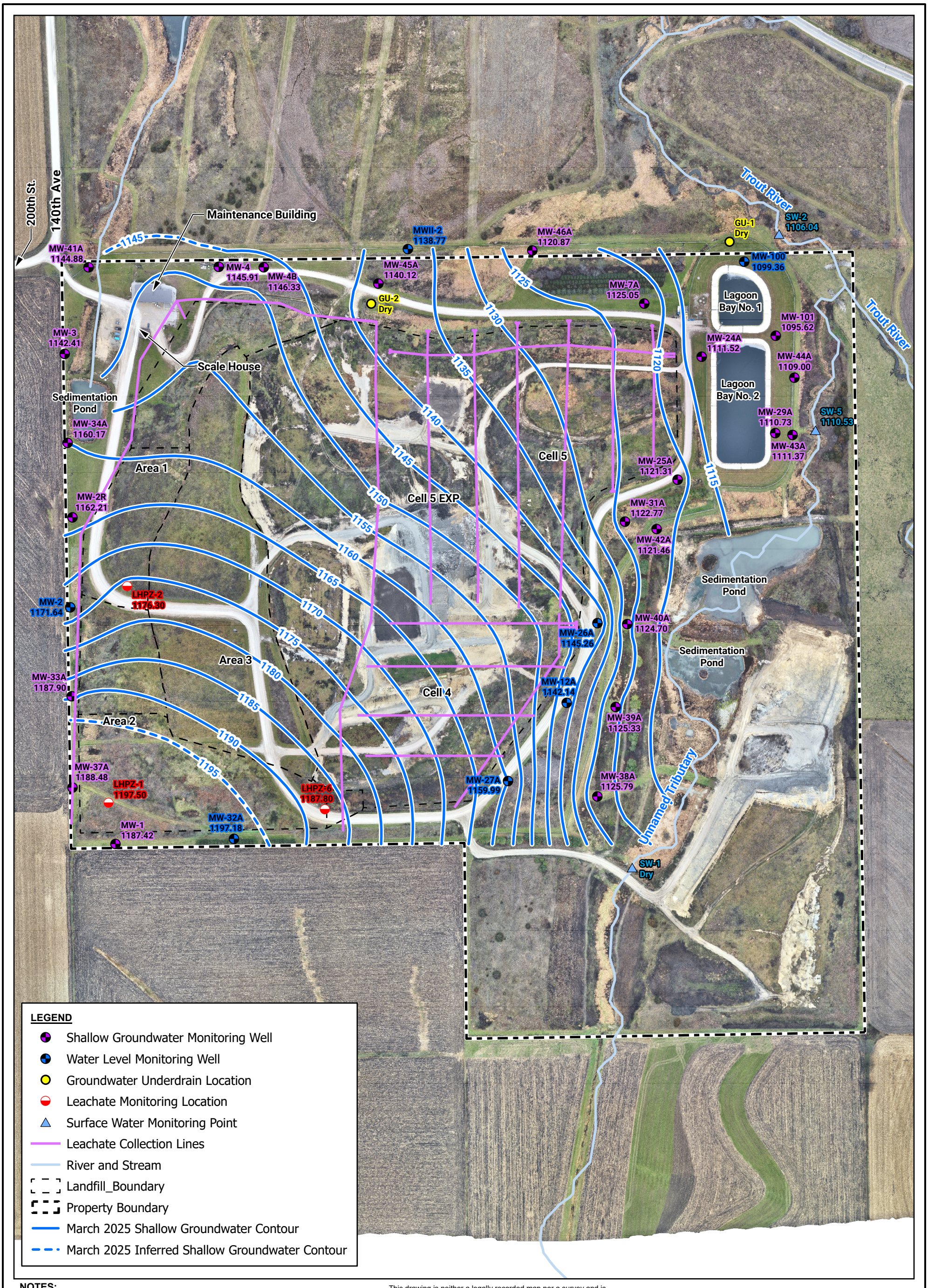
WINNESHIEK COUNTY SOLID WASTE AGENCY

FIGURE 1

HMSP MONITORING NETWORK
DECORAH, IOWA

Date: MARCH 2026	Revision Date:		
Drawn By: DAT	Checked By: HED	Project: 25W024.00	

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NOTES:

1. Date of Aerial Imagery Acquisition: December, 2025
2. Coordinate system is: NAD83(2011) Iowa North Zone, US feet. Vertical Datum is NAVD88.
3. Groundwater monitoring locations listed as dry were dry or had insufficient water for sample collection.
4. Leachate levels in the unlined cells are included prior to contouring the groundwater contours in Surfer.
5. For the groundwater cutoff trench along the western portion of the site that discharges into the sedimentation basin, as-built elevations from the base of the drainage way were included prior to contouring in Surfer.

This drawing is neither a legally recorded map nor a survey and is not intended to be used as one. This drawing is a compilation of records, information and data used for reference purposes only.

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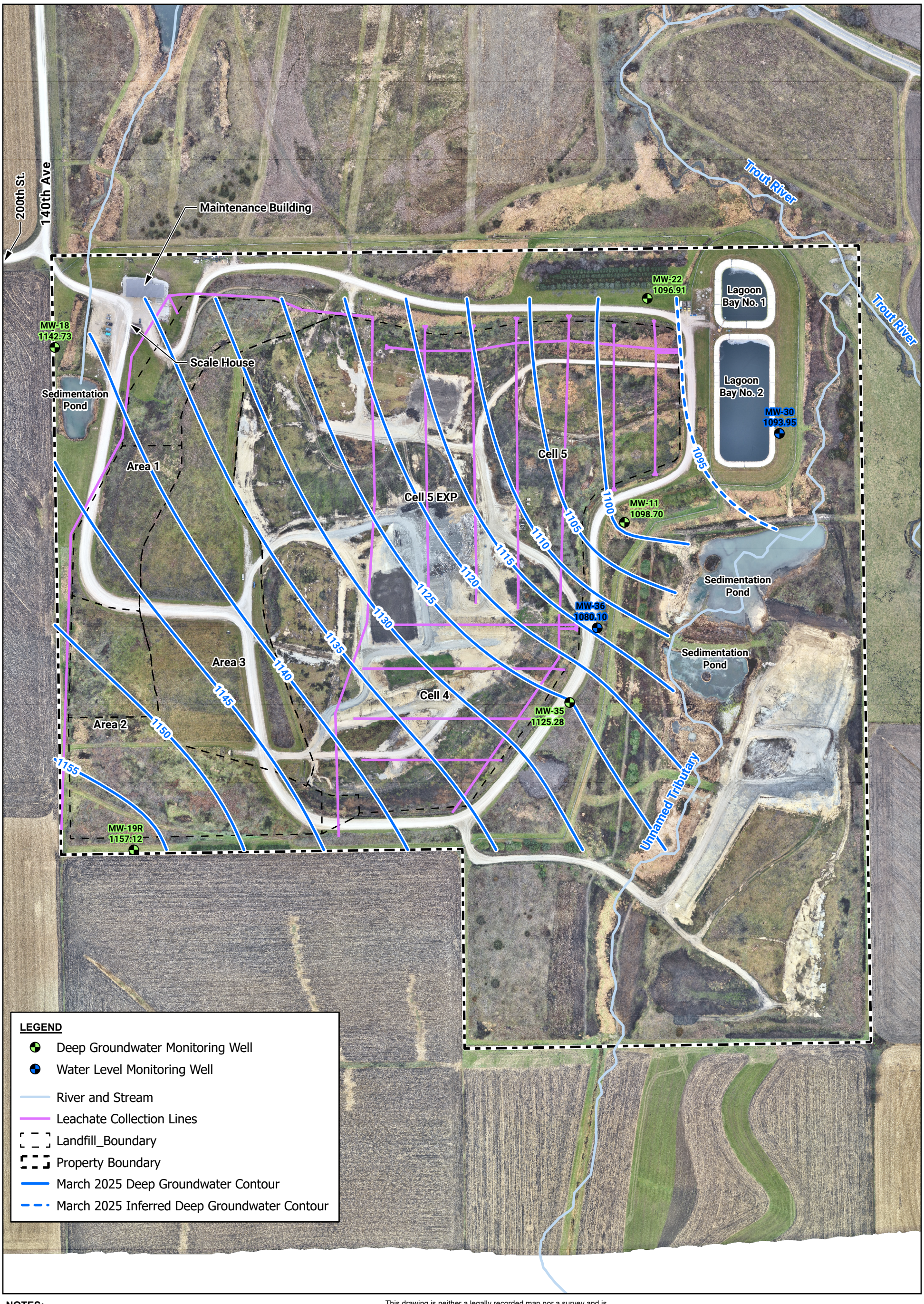
0 150 300 Feet

WINNESHIEK COUNTY SOLID WASTE AGENCY

FIGURE 2

SHALLOW GROUNDWATER CONTOUR MAP (MARCH 2025)
DECORAH, IOWA

Date: MARCH 2026	Revision Date:	
Drawn By: DAT	Checked By: HED	Project: 25W024.00



NOTES:
1. Date of Aerial Imagery Acquisition: December, 2025
2. Coordinate system is: NAD83(2011) Iowa North Zone, US feet. Vertical Datum is NAVD88.

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N

0 150 300 Feet

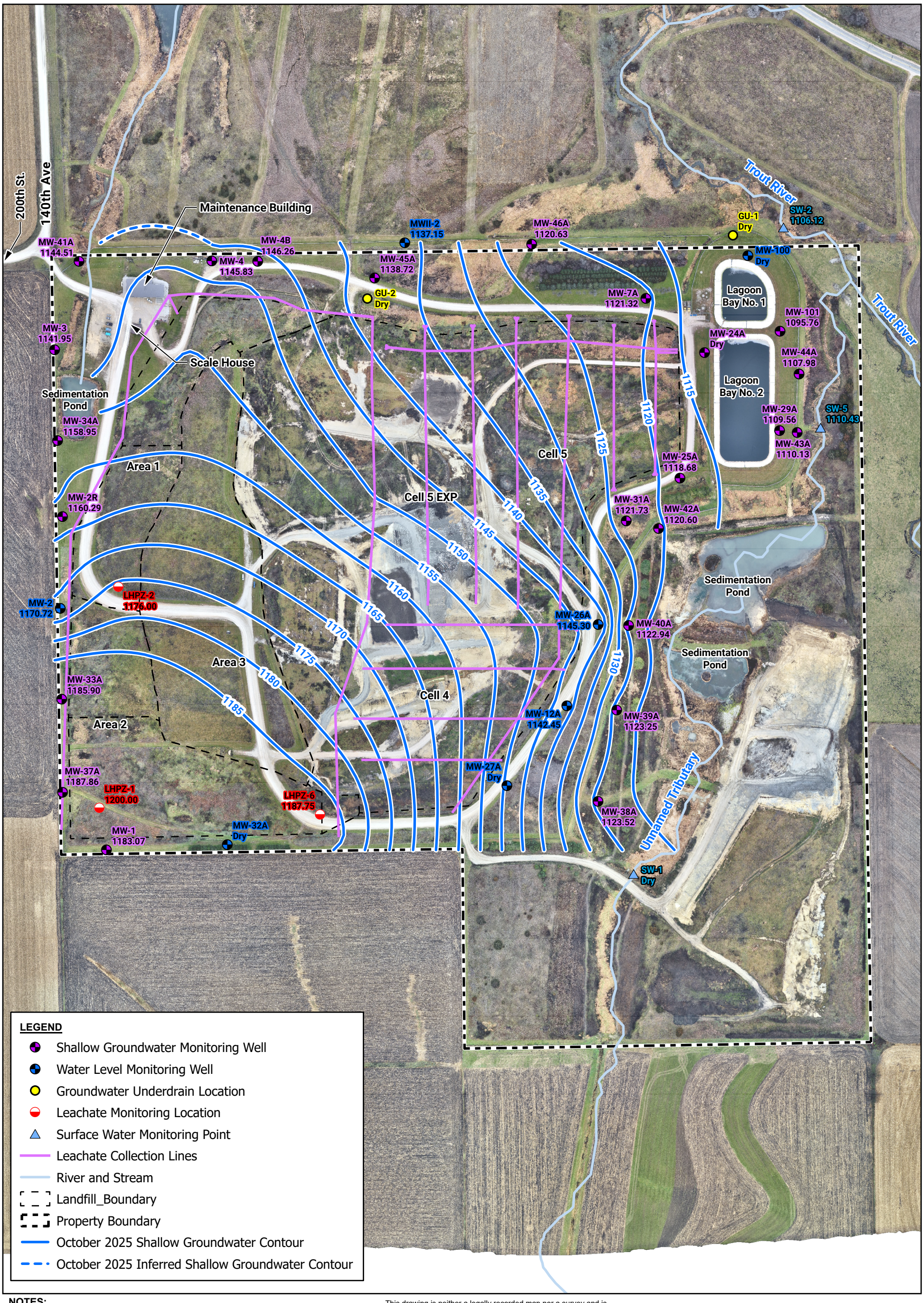
WINNESHIEK COUNTY SOLID WASTE AGENCY

FIGURE 3

DEEP GROUNDWATER CONTOUR MAP (MARCH 2025)
DECORAH, IOWA

Date: MARCH 2026	Revision Date:	
Drawn By: DAT	Checked By: HED	Project: 25W024.00

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LEGEND

- Shallow Groundwater Monitoring Well
- Water Level Monitoring Well
- Groundwater Underdrain Location
- Leachate Monitoring Location
- Surface Water Monitoring Point
- Leachate Collection Lines
- River and Stream
- Landfill_Boundary
- Property Boundary
- October 2025 Shallow Groundwater Contour
- October 2025 Inferred Shallow Groundwater Contour

NOTES:

1. Date of Aerial Imagery Acquisition: December, 2025
2. Coordinate system is: NAD83(2011) Iowa North Zone, US feet. Vertical Datum is NAVD88.
3. Groundwater monitoring locations listed as dry were dry or had insufficient water for sample collection.
4. Leachate levels in the unlined cells are included prior to contouring the groundwater contours in Surfer.
5. For the groundwater cutoff trench along the western portion of the site that discharges into the sedimentation basin, as-built elevations from the base of the drainage way were included prior to contouring in Surfer.

This drawing is neither a legally recorded map nor a survey and is not intended to be used as one. This drawing is a compilation of records, information and data used for reference purposes only.

Foth

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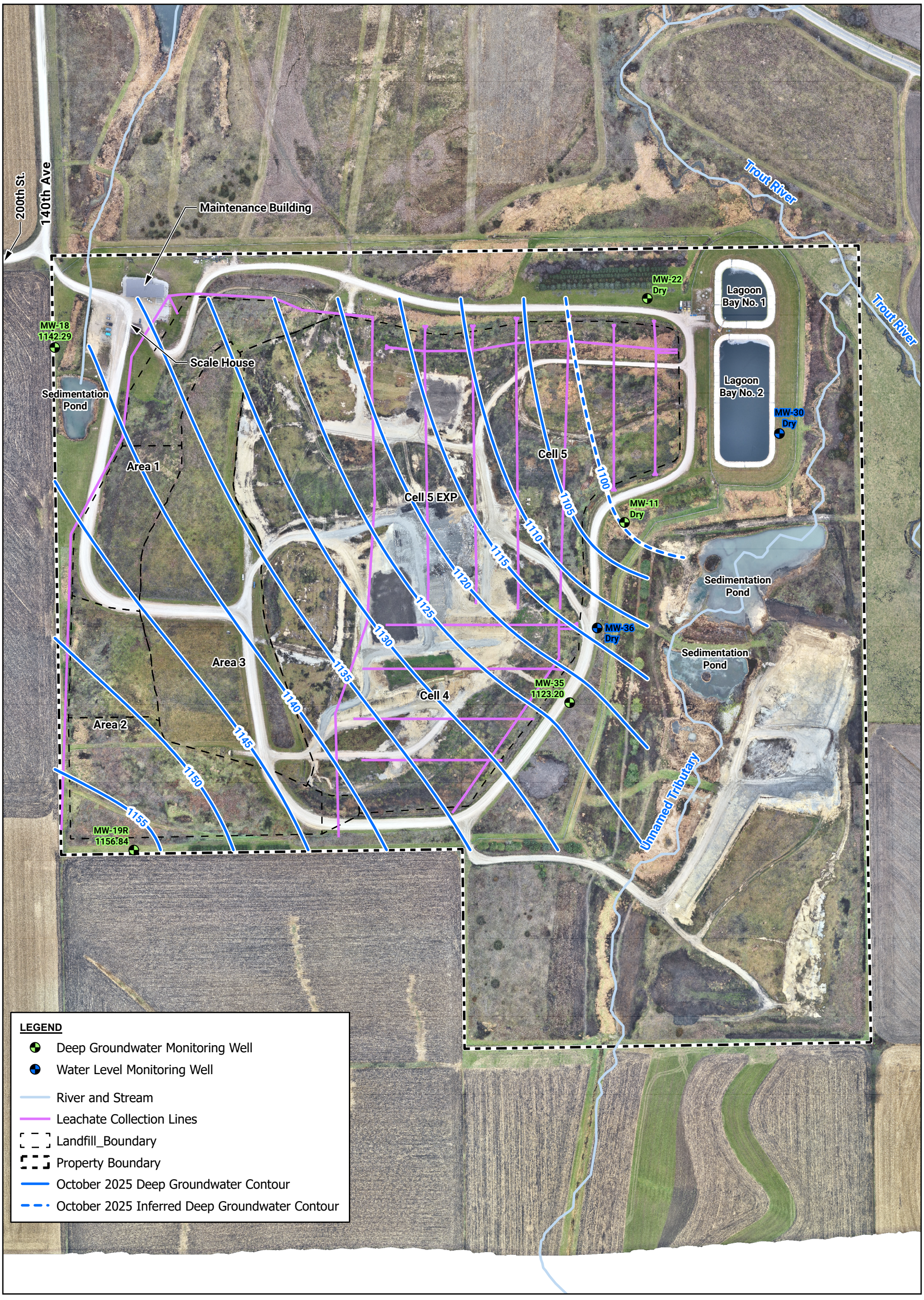
0 150 300 Feet

WINNESHIEK COUNTY SOLID WASTE AGENCY

FIGURE 4

SHALLOW GROUNDWATER CONTOUR MAP (OCTOBER 2025)
DECORAH, IOWA

Date: MARCH 2026	Revision Date:	
Drawn By: DAT	Checked By: HED	Project: 25W024.00



NOTES:
1. Date of Aerial Imagery Acquisition: December, 2025
2. Coordinate system is: NAD83(2011) Iowa North Zone, US feet. Vertical Datum is NAVD88.

This drawing is neither a legally recorded map nor a survey and is not intended to be used as one. This drawing is a compilation of records, information and data used for reference purposes only.

Foth

N

0 150 300 Feet

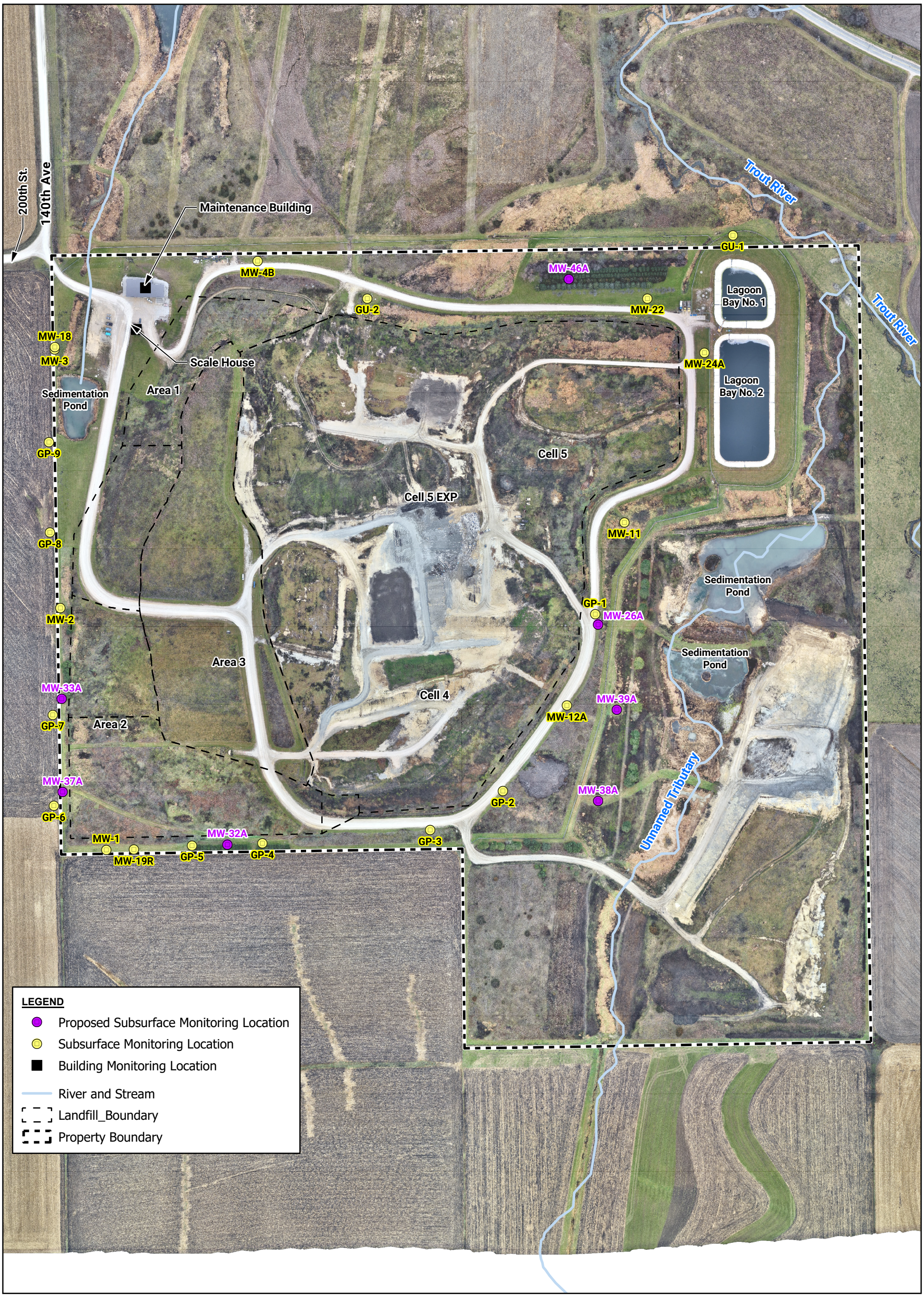
WINNESHIEK COUNTY SOLID WASTE AGENCY

FIGURE 5

DEEP GROUNDWATER CONTOUR MAP (OCTOBER 2025)
DECORAH, IOWA

Date: MARCH 2026	Revision Date:	
Drawn By: DAT	Checked By: HED	Project: 25W024.00

Q:\Winneshiek Co ASW IA\26W024\GIS\aprx\2025 AWQR\2025 AWQR.aprx 3/26/2026 1:35 PM



NOTES:

1. Date of Aerial Imagery Acquisition: December, 2025
2. Coordinate system is: NAD83(2011) Iowa North Zone, US feet. Vertical Datum is NAVD88.
3. As noted in Table 12 and the Report Priority, GP-01 through GP-09, GU-1, MW-3, MW-12A, MW-18, and MW-19R are recommended for removal.

This drawing is neither a legally recorded map nor a survey and is not intended to be used as one. This drawing is a compilation of records, information and data used for reference purposes only.

Foth

N

0 150 300 Feet

WINNESHIEK COUNTY SOLID WASTE AGENCY

FIGURE 6

METHANE MONITORING NETWORK
DECORAH, IOWA

Date: MARCH 2026	Revision Date:		
Drawn By: DAT	Checked By: HED	Project: 25W024.00	

Q:\Winneshiek Co ASW IA\26W024\GIS\aprx\2025 AWQR\2025 AWQR.aprx 3/26/2026 1:23 PM



NOTES:

1. Date of Aerial Imagery Acquisition: December, 2025
2. Coordinate system is: NAD83(2011) Iowa North Zone, US feet. Vertical Datum is NAVD88.
3. As noted in Table 13A and the Report Priority, MH-15, GU5-MH, GU5E-2, and GU-2 are recommended for removal.

This drawing is neither a legally recorded map nor a survey and is not intended to be used as one. This drawing is a compilation of records, information and data used for reference purposes only.

Foth

N

0 150 300 Feet

WINNESHIEK COUNTY SOLID WASTE AGENCY

FIGURE 7

LEACHATE MONITORING LOCATIONS
DECORAH, IOWA

Date: MARCH 2026	Revision Date:		
Drawn By: DAT	Checked By: HED	Project: 25W024.00	

Appendix A

Reporting Period Monitoring Documentation

March, June, and October 2025

Groundwater Elevation Form
IDNR Forms
Laboratory Analytical Reports (with Chain of Custody)
Data Validation Reports
Data Validation Standard Operating Procedure

March 2025 Groundwater Elevation Event

GROUNDWATER ELEVATION DATA COLLECTION FORM
WINNESHIEK COUNTY LANDFILL

Project Number: 60711359
Name: Nate Kilburg and Russ Henning
Date: 3/26/2025

Monitoring Well	Top-of-Pipe Elevation (ft. MSL)	Depth to Water (ft.)	Groundwater Elevation (ft MSL)	Measured Well Depth (ft. below TOC)	Constructed Well Depth (ft. below TOC)	Locked	Capped	Cracked	Obstructed	Comments - Include Information on Well Integrity
Shallow Wells										
MW-1	1200.92	13.50	1187.42	22.02	22.02	Y	Y	N	N	good condition
MW-2	1188.40	16.76	1171.64	18.05	18.70	N	Y	N	N	repair protective casing; lock, removed hornets nest, spider webs
MW-2R	1175.36	13.15	1162.21	28.49	28.50	N	Y	N	N	lock, landfill operator added extension to casing
MW-3	1162.81	20.40	1142.41	37.84	36.90	N	Y	N	N	lock
MW-4	1180.35	34.44	1145.91	44.88	44.80	Y	Y	N	N	outer casing very rusted, replace?
MW-4B	1180.15	33.82	1146.33	40.20	40.20	N	Y	N	N	good condition; lock
MW-7A	1136.05	11.00	1125.05	20.24	20.30	Y	Y	N	N	good condition; spider nests
MW-12A	1170.99	28.85	1142.14	29.60	29.31	N	Y	N	N	good condition; new lock
MW-24A	1132.98	21.46	1111.52	22.80	22.29	N	Y	N	N	Lock, soft bottom
MW-25A	1137.98	16.67	1121.31	21.72	21.27	Y	Y	N	N	good condition
MW-26A	1164.65	19.39	1145.26	20.16	19.62	Y	Y	N	N	good condition
MW-27A	1178.02	18.03	1159.99	18.06	18.14	N	Y	N	N	good condition, almost dry, outer casing is loose; lock
MW-29A	1133.85	23.12	1110.73	27.19	27.27	N	Y	N	N	Lock
MW-31A	1138.77	16.00	1122.77	22.70	22.81	N	Y	N	N	Lock, sediments present, soft bottom
MW-32A	1219.37	22.19	1197.18	22.59	22.66	N	Y	N	N	Lock, solids materials in well
MW-33A	1205.88	17.98	1187.90	22.18	22.45	N	Y	N	N	Lock
MW-34A	1166.70	6.53	1160.17	26.65	26.81	N	Y	N	N	1-in sediment; lock
MW-37A	1210.30	21.82	1188.48	26.31	26.48	N	Y	N	N	Lock
MW-38A	1148.37	22.58	1125.79	32.48	32.62	N	Y	N	N	Lock; 1-in sediment
MW-39A	1146.90	21.57	1125.33	32.37	32.47	N	Y	N	N	Lock, spider nests
MW-40A	1151.17	26.47	1124.70	41.68	41.81	N	Y	N	N	Lock
MW-41A	1149.75	4.87	1144.88	23.78	23.78	N	Y	N	N	Lock
MW-42A	1135.43	13.97	1121.46	23.73	23.22	N	Y	N	N	Lock
MW-43A	1119.21	7.84	1111.37	20.22	20.25	N	Y	N	N	Lock, casing has small hole
MW-44A	1117.88	8.88	1109.00	20.25	20.27	N	Y	N	N	Lock, bugs in outer casing
MW-45A	1147.69	7.57	1140.12	19.14	19.13	Y	Y	N	N	good condition; spider nests
MW-46A	1130.82	9.95	1120.87	18.10	18.18	N	Y	N	N	Lock
MWII-2	1145.20	6.43	1138.77	21.96	22.00	Y	Y	N	N	well casing protrudes up 3-4 in. and bent
MW-100	1134.14	34.78	1099.36	35.00	35.04	N	Y	N	N	Lock, solids materials present
MW-101	1134.55	38.93	1095.62	40.38	40.40	N	Y	N	N	Lock, soft bottom, slight solids material present
Deep Wells										
MW-11	1138.92	40.22	1098.70	42.32	42.42	Y	Y	N	N	good condition
MW-18	1163.02	20.29	1142.73	47.97	47.38	Y	Y	N	N	good condition, well is starting to lean
MW-19R	1204.15	47.03	1157.12	70.79	71.00	Y	Y	N	N	good condition, soft bottom, needs new label
MW-22	1135.52	38.61	1096.91	42.65	42.77	Y	Y	N	N	good condition
MW-30	1133.76	39.81	1093.95	40.12	40.23	N	Y	N	N	Lock
MW-35	1170.60	45.32	1125.28	55.55	55.64	N	Y	N	N	Lock
MW-36	1165.22	85.12	1080.10	85.33	85.46	N	Y	N	N	Lock
Surface Water										
SW-1	1127.98	dry	dry	N/A	N/A	N/A	N/A	N/A	Y	no flow, dry
SW-2	1106.22	0.18	1106.04	N/A	N/A	N/A	N/A	N/A	Y	good condition, slight flow, weeds present
SW-3	1121.65	-0.50	1122.15	N/A	N/A	N/A	N/A	N/A	Y	good condition, flowing, lower gauge down to flow
SW-4	1139.75	0.72	1139.03	N/A	N/A	N/A	N/A	N/A	Y	good condition; flowing
SW-5	1110.51	-0.02	1110.53	N/A	N/A	N/A	N/A	N/A	Y	good condition; flowing, lower gauge down to flow

Notes: TOC based on 2010 - 2022 Survey data (based on monitoring well installation).
NM - not measured

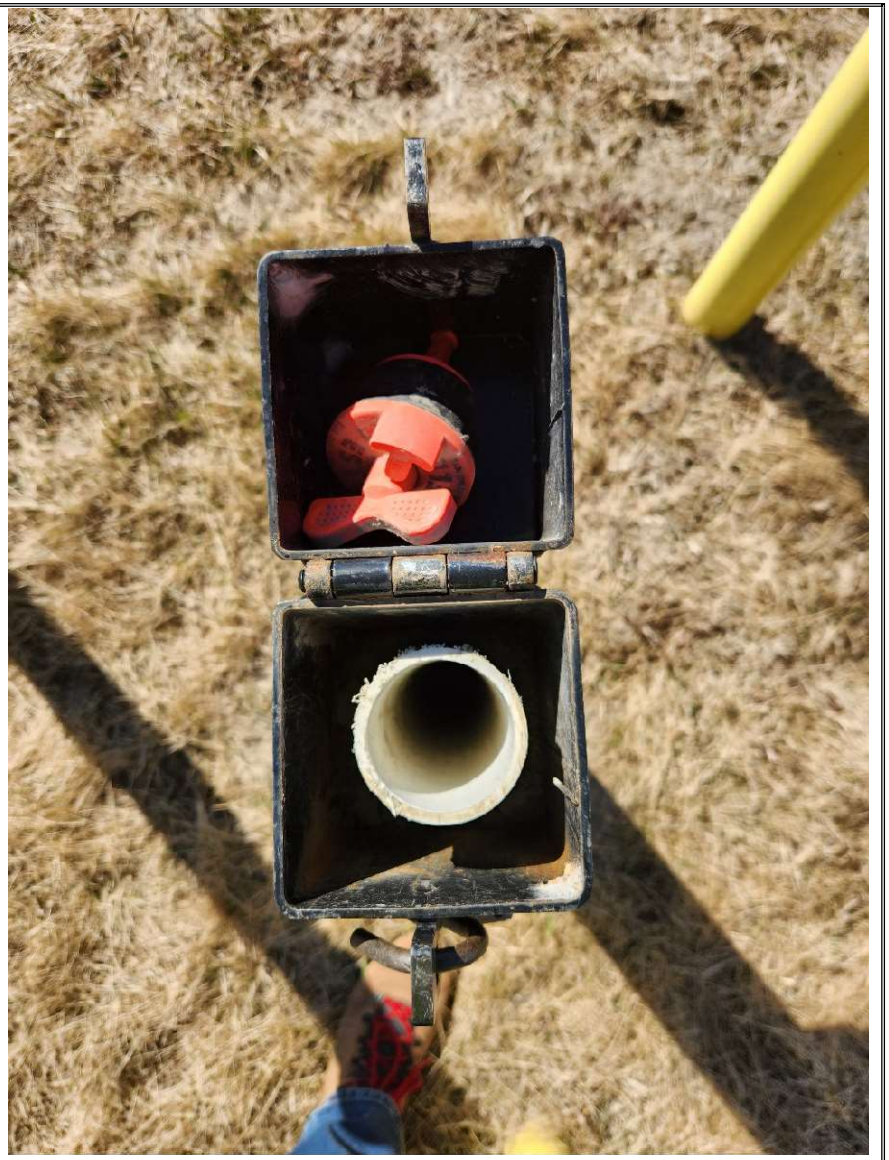
Winneshiek Co. LF
2025 AWQR
IDNR Well Maintenance
March 2025

Well	Maintenance Required	J-Plug	Sand	Weep	Paint	Labels	Nests	Lock	Resurvey	Notes
MW-1	good condition	N	N	N	N	N	N	N	N	
MW-2	permanent labels; needs lock	N	N	N	N	N	N	Y	N	Protective casing lid doesn't close all the way
MW-2R	permanent labels; needs lock	N	N	N	N	N	N	Y	N	
MW-3	outer casing cap does not close all the way; lock	N	N	N	N	N	Y	Y	N	
MW-4	good condition, but outer casing is very rusted	N	N	N	N	N	Y	N	N	
MW-4B	good condition; lock	N	N	N	N	N	Y	Y	N	
MW-7A	good condition	N	N	N	N	N	Y	N	N	
MW-11	permanent lables	N	N	N	N	N	N	N	N	
MW-12A	good condition; lock	N	N	Y	N	N	N	N	N	
MW-18	good condition; well is beginning to lean over, may need to be fixed	N	N	N	N	N	Y	N	N	
MW-19R	new monitoring well; permanent labels	N	N	N	N	Y	N	N	N	
MW-22	good condition	N	N	N	N	N	N	N	N	
MW-24A	good condition; lock; 1 in. of sediment at bottom of well	N	N	N	N	N	N	Y	N	
MW-25A	good condition	N	N	N	N	N	Y	N	N	
MW-26A	good condition	N	N	N	N	N	Y	N	N	
MW-27A	permanent labels; lock	N	Y	Y	N	N	Y	Y	N	
MW-29A	permanent labels, lock	N	N	N	N	N	N	Y	N	
MW-30	permanent labels, lock	N	N	N	N	N	Y	Y	N	
MW-31A	permanent labels, lock; 1 in. of sediment at bottom of well	N	N	N	N	N	N	Y	N	
MW-32A	permanent labels, lock	N	N	N	N	N	N	Y	N	
MW-33A	permanent labels, lock	N	N	N	N	Y	Y	Y	N	
MW-34A	permanent labels, lock; 1 in. of sediment at bottom of well	N	N	N	N	Y	N	Y	N	
MW-35	permanent labels, lock	N	N	N	N	N	N	Y	N	
MW-36	permanent labels, lock	N	N	N	N	N	N	Y	N	
MW-37A	permanent labels, lock	N	N	N	N	N	N	Y	N	
MW-38A	permanent labels; lock; 1 in. of sediment at bottom of well	N	N	N	N	N	Y	Y	N	
MW-39A	permanent labels, lock; 1 in. of sediment at bottom of well	N	N	N	N	N	N	Y	N	
MW-40A	permanent labels, lock	N	N	N	N	N	Y	Y	N	
MW-41A	permanent labels, lock	N	N	N	N	N	N	Y	N	
MW-42A	permanent labels, lock	N	N	N	N	N	N	Y	N	
MW-43A	permanent labels, lock	N	N	N	N	N	Y	Y	N	
MW-44A	permanent labels, lock; 1 in. of sediment at bottom of well	N	N	N	N	N	N	Y	N	
MW-45A	permanent labels	N	N	N	N	N	N	N	N	
MW-46A	permanent labels, lock	N	N	N	N	N	Y	Y	N	
MW-100	good condition; lock	N	N	N	N	N	N	Y	N	
MW-101	good condition; lock	N	N	N	N	N	N	Y	N	
MWII-2	good condition, but outer casing is bent; hard to open outer cap over PVC piping	N	N	N	N	N	Y	N	N	
SW-1	good condition; dry, no flow	NA	NA	NA	NA	NA	NA	NA	NA	
SW-2	good condition	NA	NA	NA	NA	NA	NA	NA	NA	
SW-3	good condition, lower gauge down to flow	NA	NA	NA	NA	NA	NA	NA	NA	
SW-4	good condition	NA	NA	NA	NA	NA	NA	NA	NA	
SW-5	good condition, lower gauge down to flow	NA	NA	NA	NA	NA	NA	NA	NA	

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-19R Side View



MW-19R Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-1 Side View



MW-1 Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-18 Side View



MW-18 Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-3 Side View

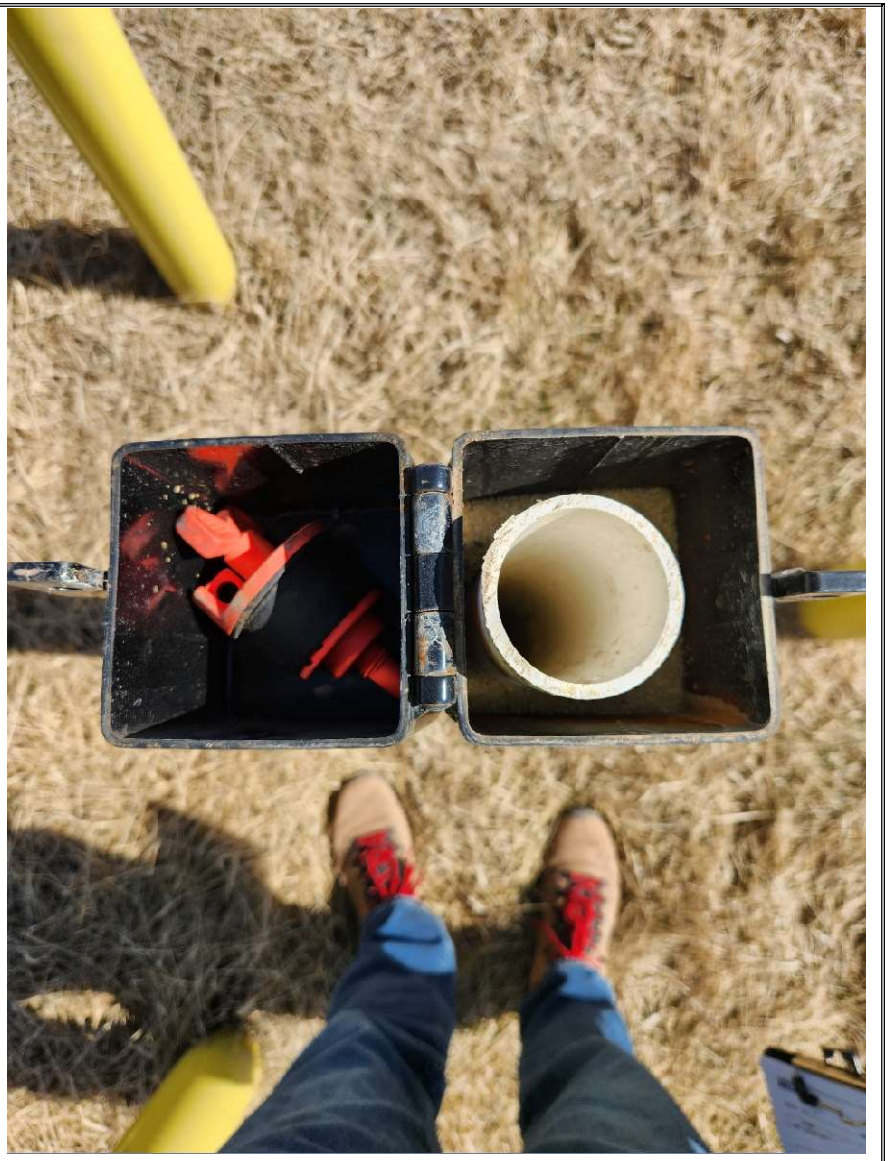


MW-3 Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-41A Side View



MW-41A Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



SG-4 Side View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-37A Side View



MW-37A Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-33A Side View



MW-33A Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-2 Side View



MW-2 Top View

Location: Winneshiek, IA
Date Photos Taken: 03/26/2025
Permit No.: 96-SDP-1-74P
Photographer: Nate Kilburg
Camera: Galaxy S22
Complier: Nate Kilburg



MW-2R Side View

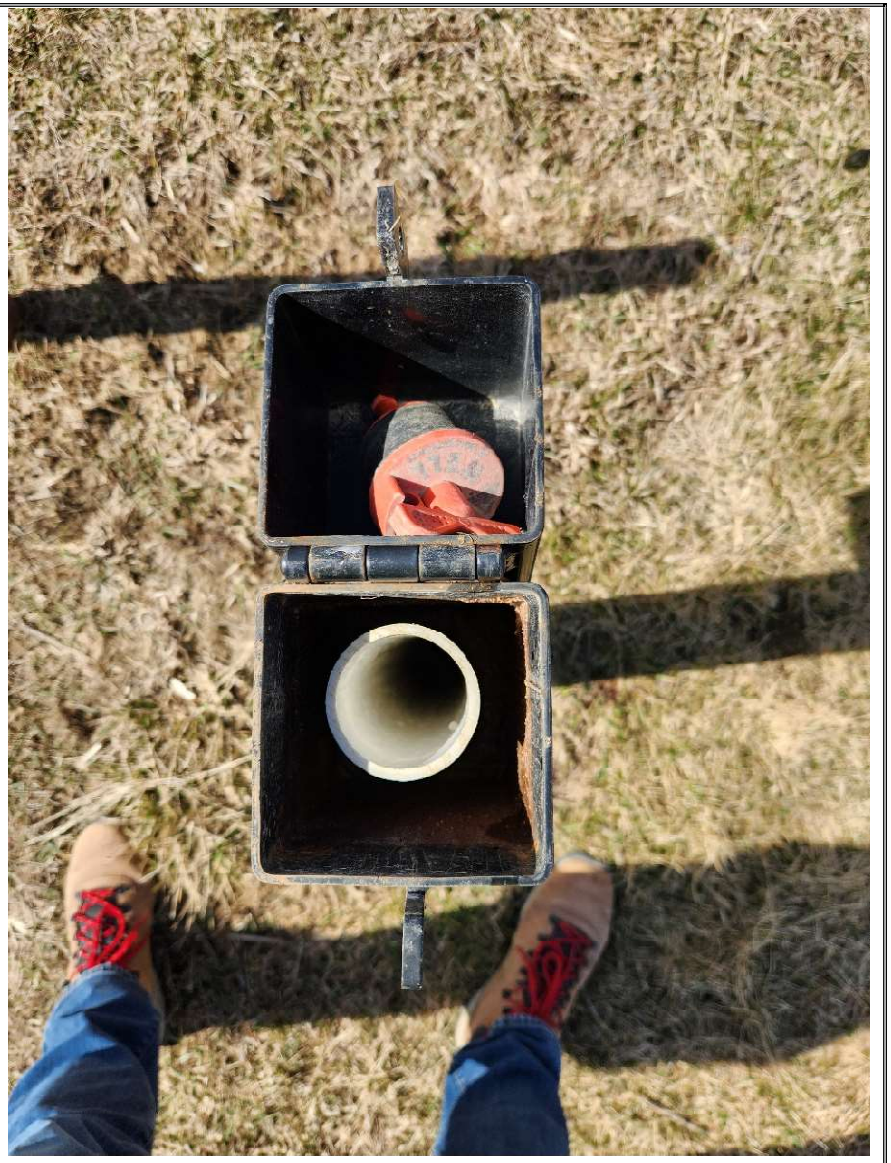


MW-2R Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-34A Side View



MW-34A Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-32A Side View

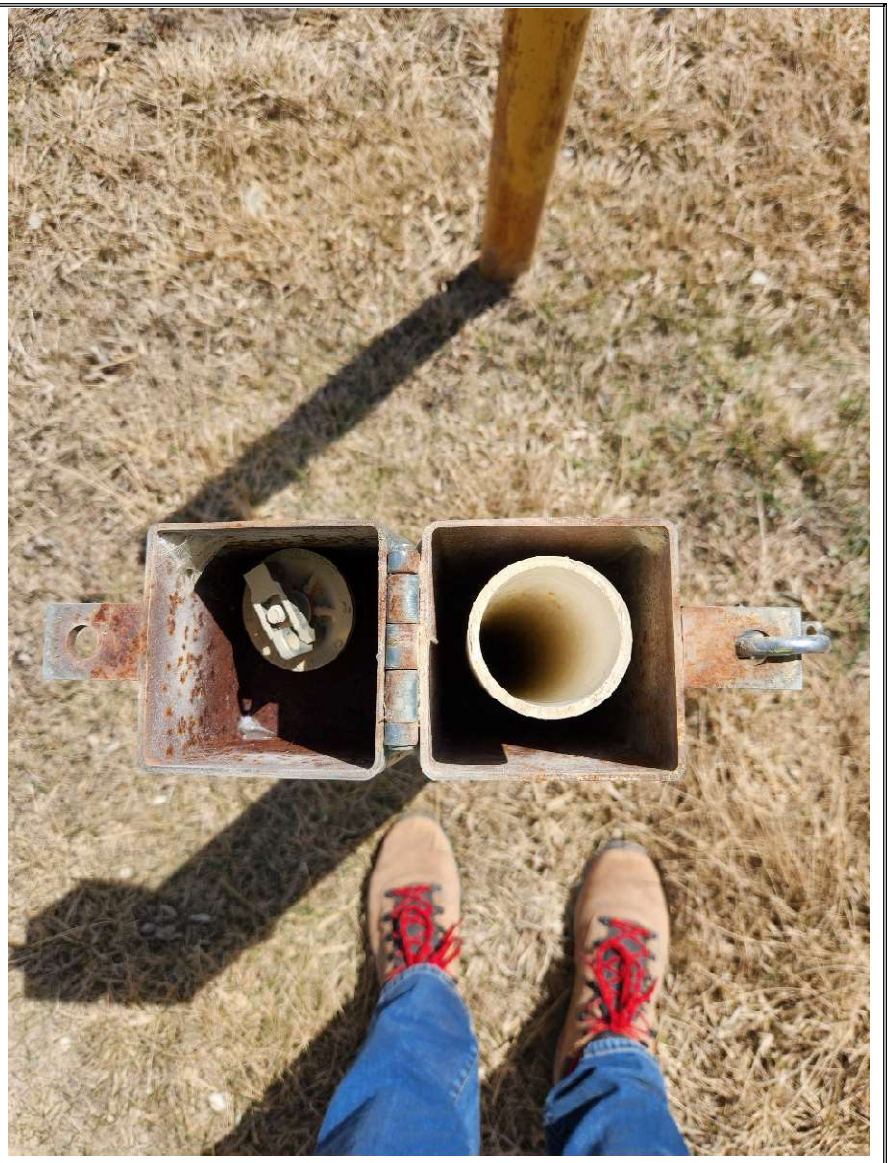


MW-32A Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-27A Side View



MW-27A Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-35 Side View

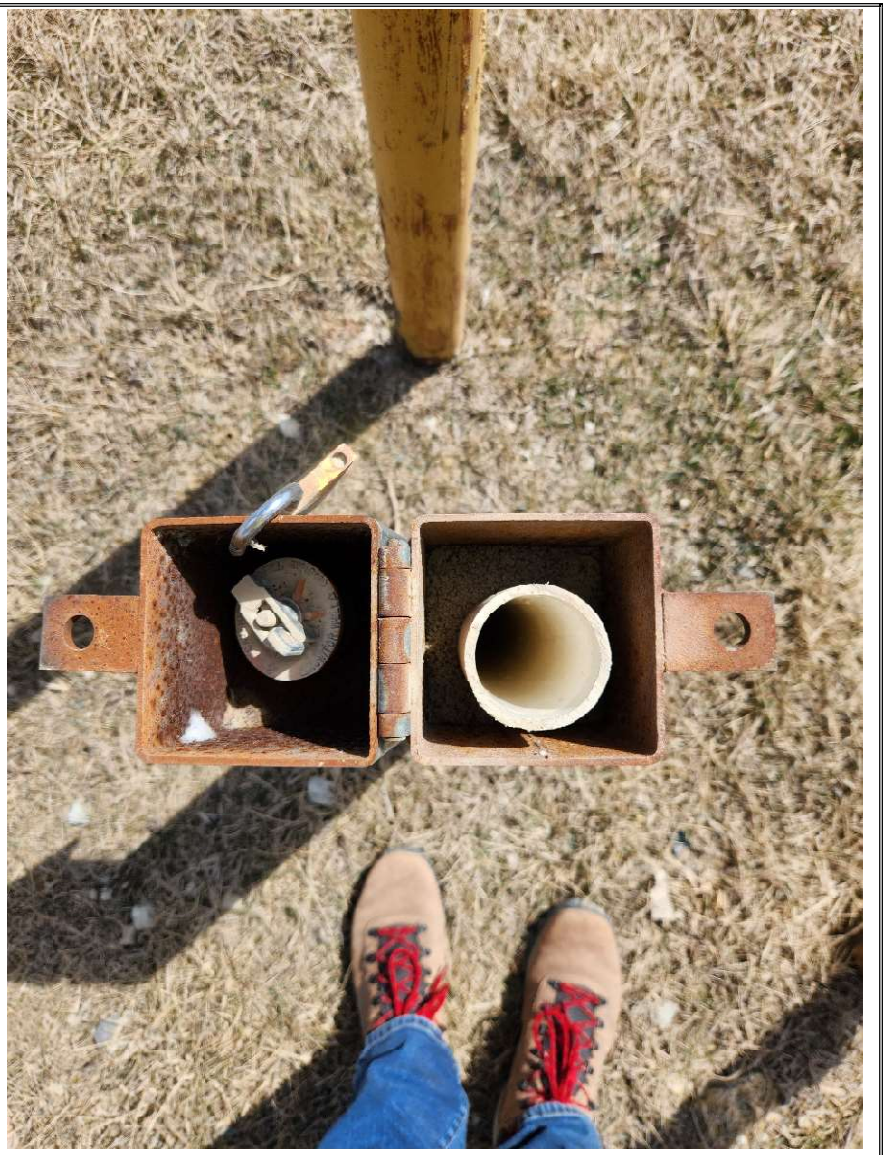


MW-35 Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-12A Side View



MW-12A Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-36 Side View



MW-36 Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-26A Side View



MW-26A Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



SG-1 Side View – No Flow

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-38A Side View

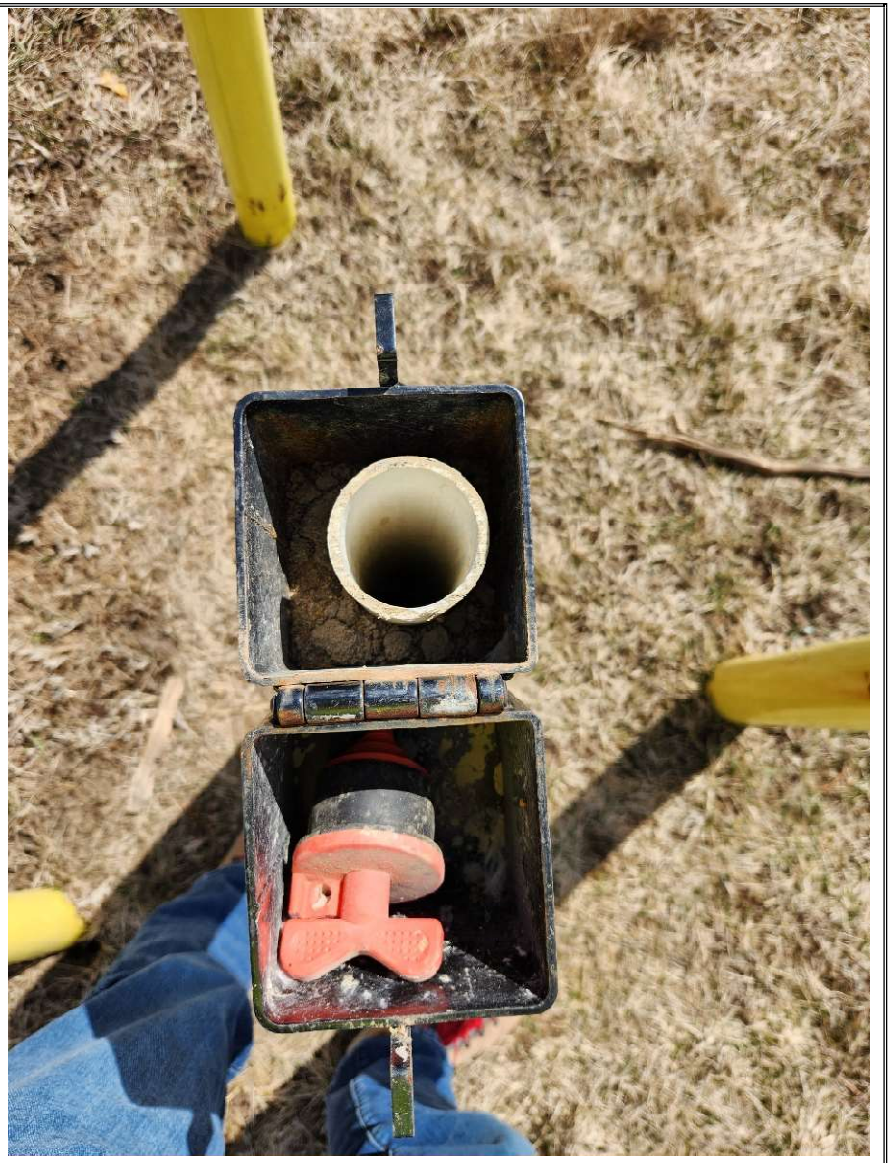


MW-38A Top View

Location: Winneshiek, IA
Date Photos Taken: 03/26/2025
Permit No.: 96-SDP-1-74P
Photographer: Nate Kilburg
Camera: Galaxy S22
Complier: Nate Kilburg



MW-39A Side View



MW-39A Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-40A Side View



MW-40A Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



SG-3 Side View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-42A Side View



MW-42A Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-43A Side View



MW-43A Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



SG-5 Side View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-44A Side View



MW-44A Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



SG-2 Side View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-11 Side View



MW-11 Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-31A Side View

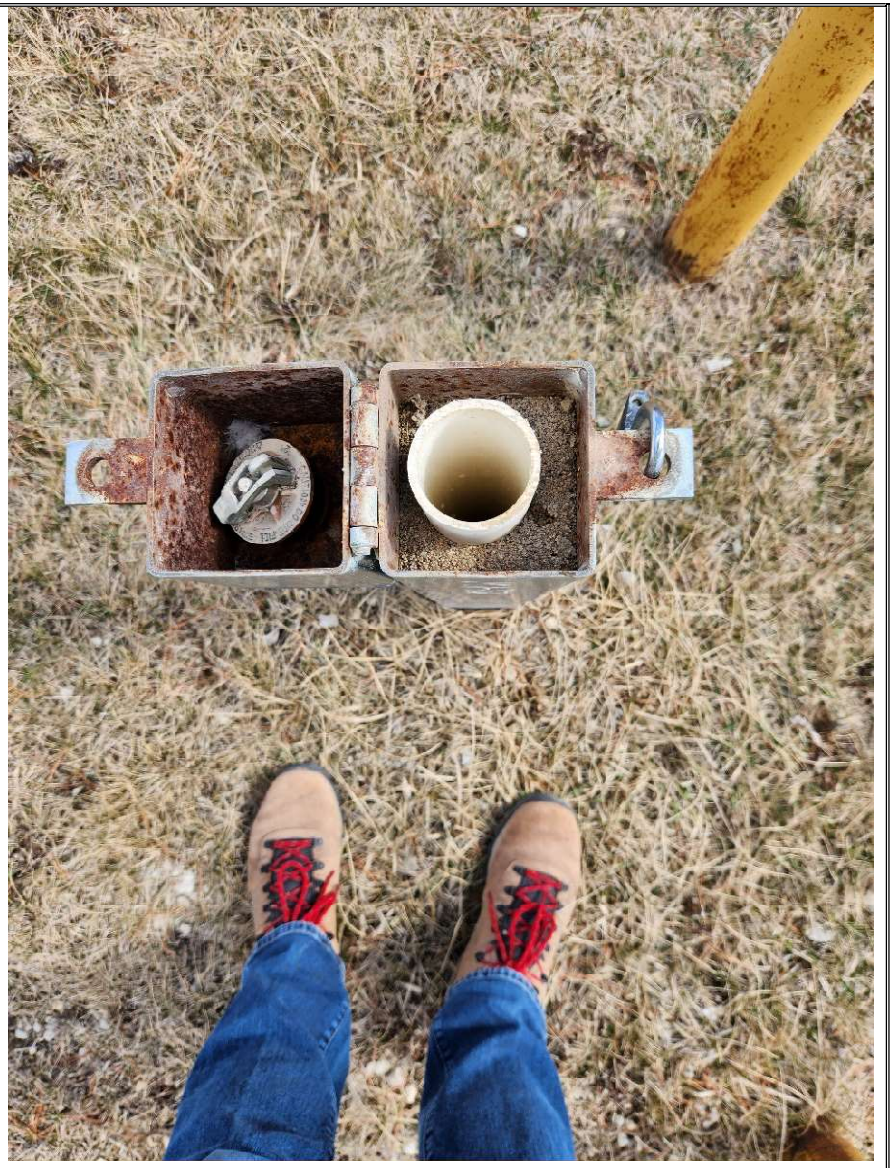


MW-31A Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-25A Side View

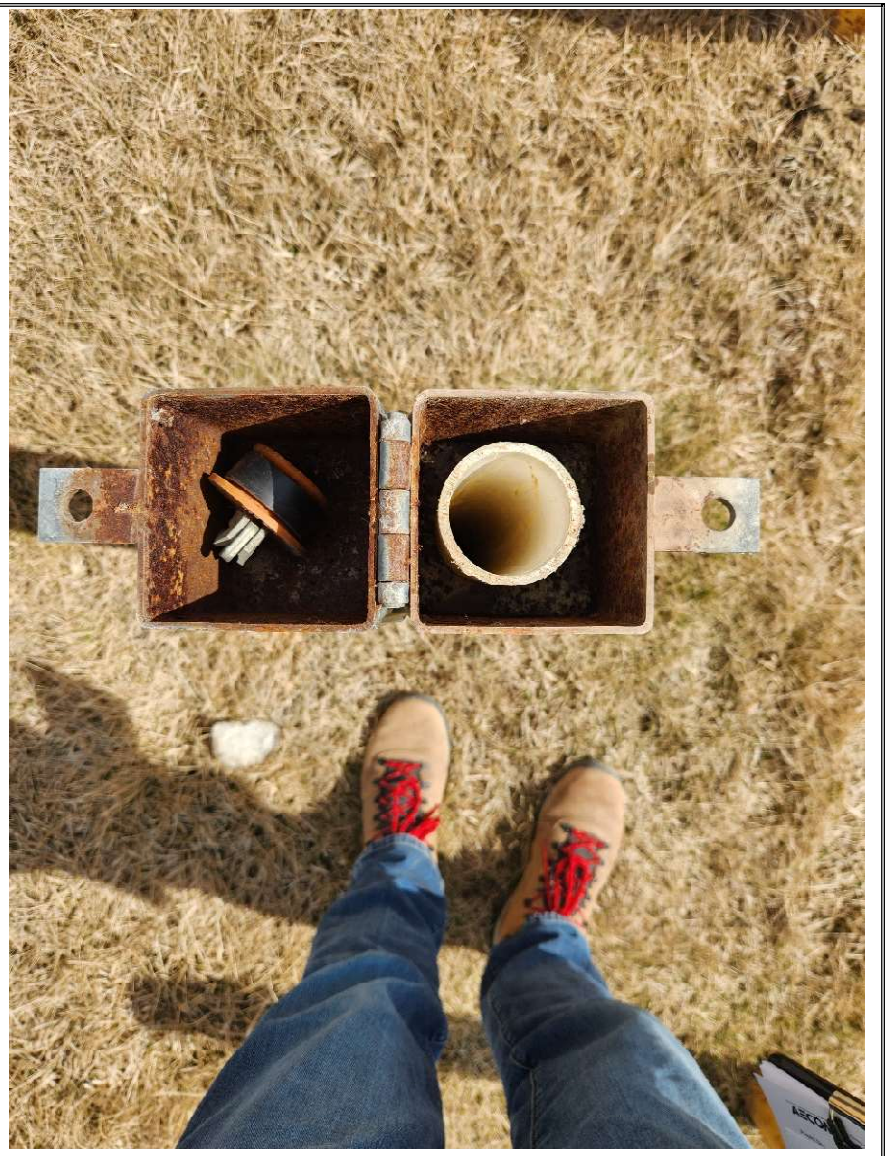


MW-25A Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-24A Side View

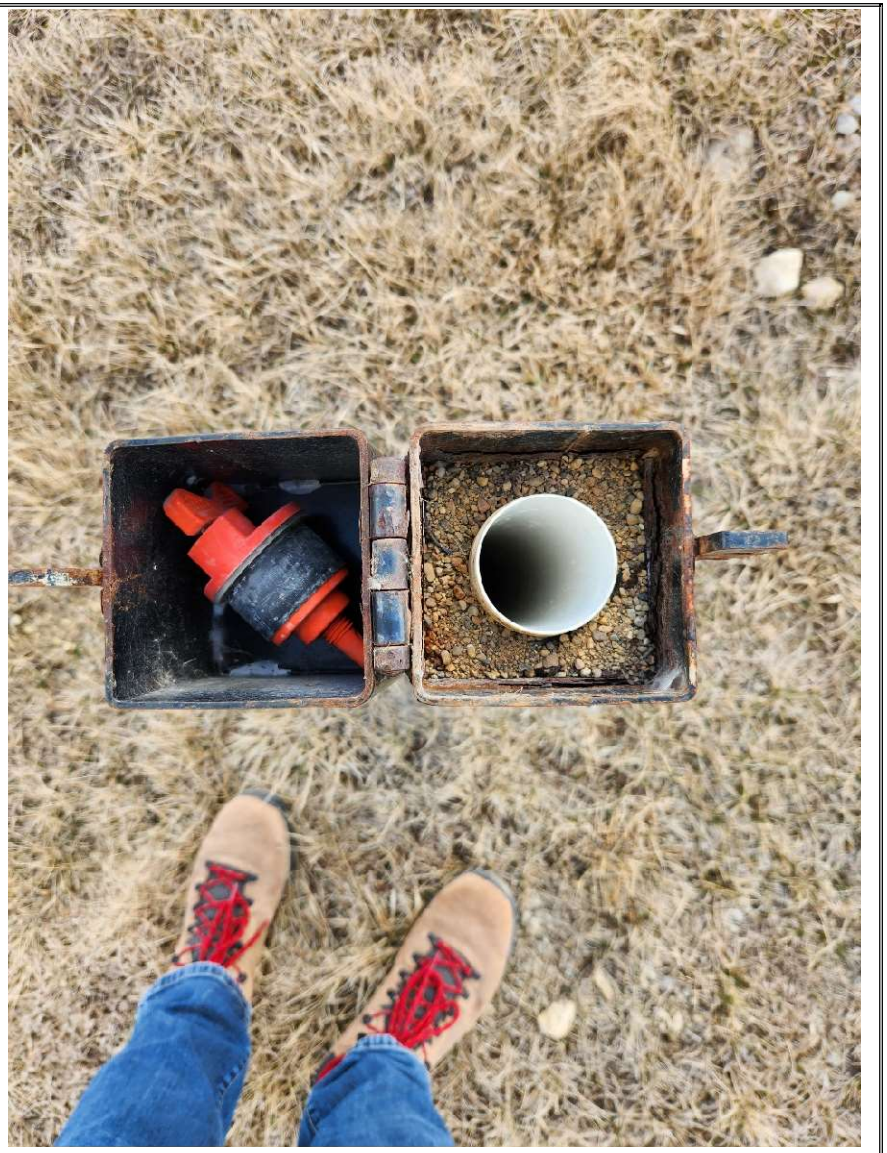


MW-24A Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-30 Side View



MW-30 Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-29A Side View



MW-29A Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-101 Side View

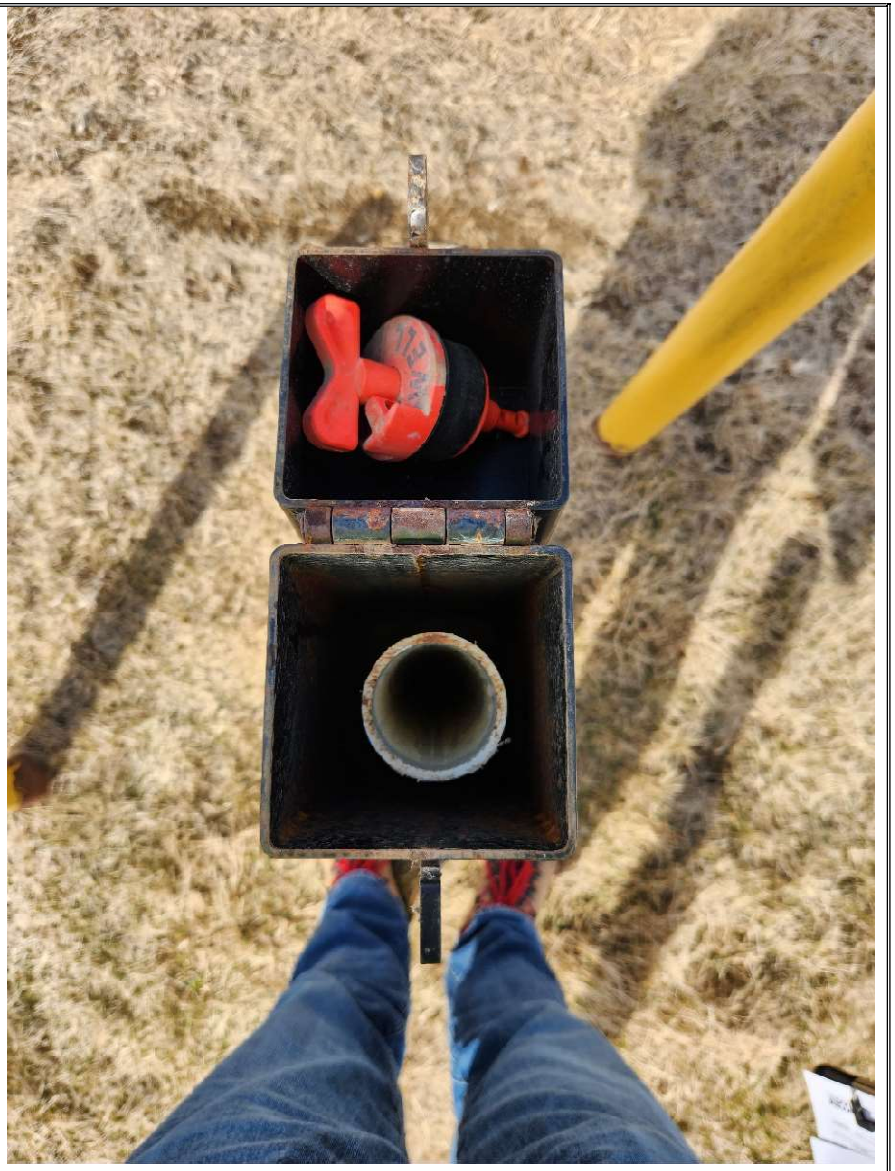


MW-101 Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-100 Side View



MW-100 Top View

Location: Winneshiek, IA
Date Photos Taken: 03/26/2025
Permit No.: 96-SDP-1-74P
Photographer: Nate Kilburg
Camera: Galaxy S22
Complier: Nate Kilburg



MW-22 Side View



MW-22 Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-7A Side View

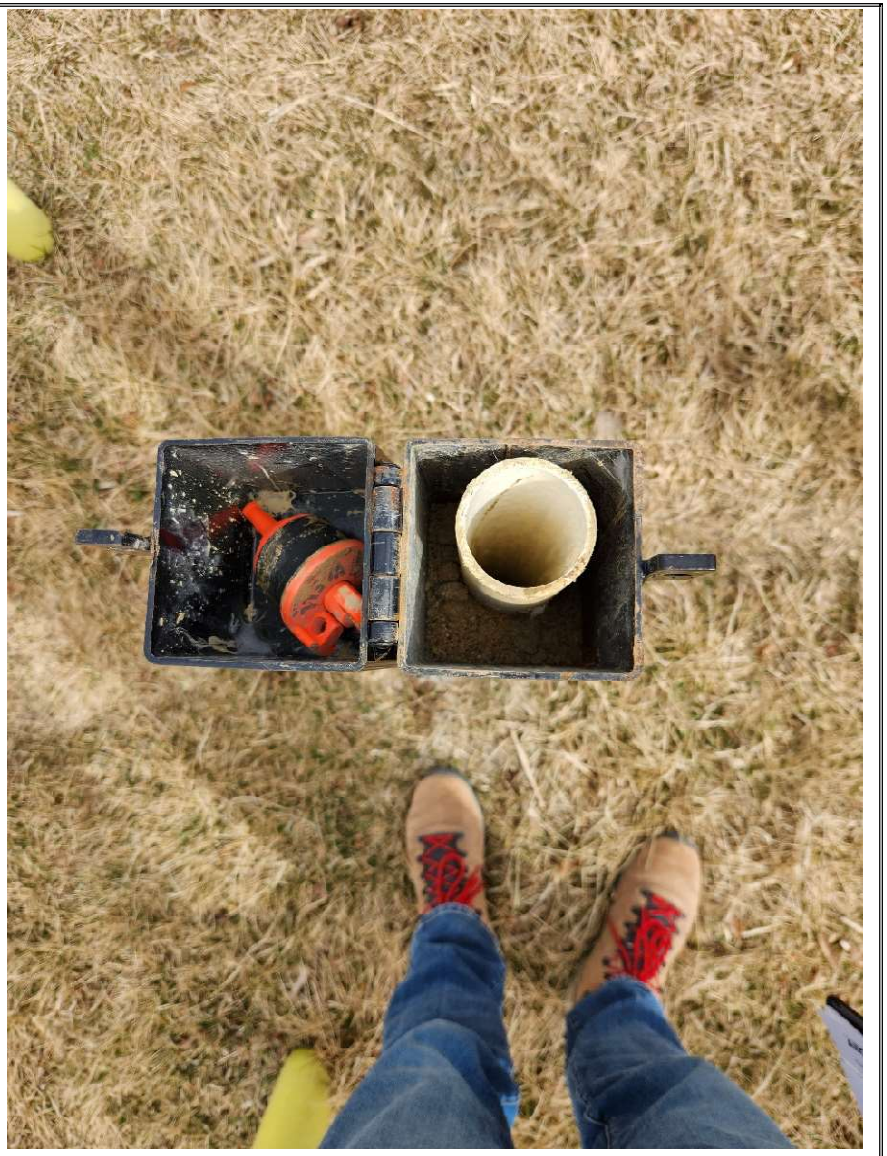


MW-7A Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-46A Side View

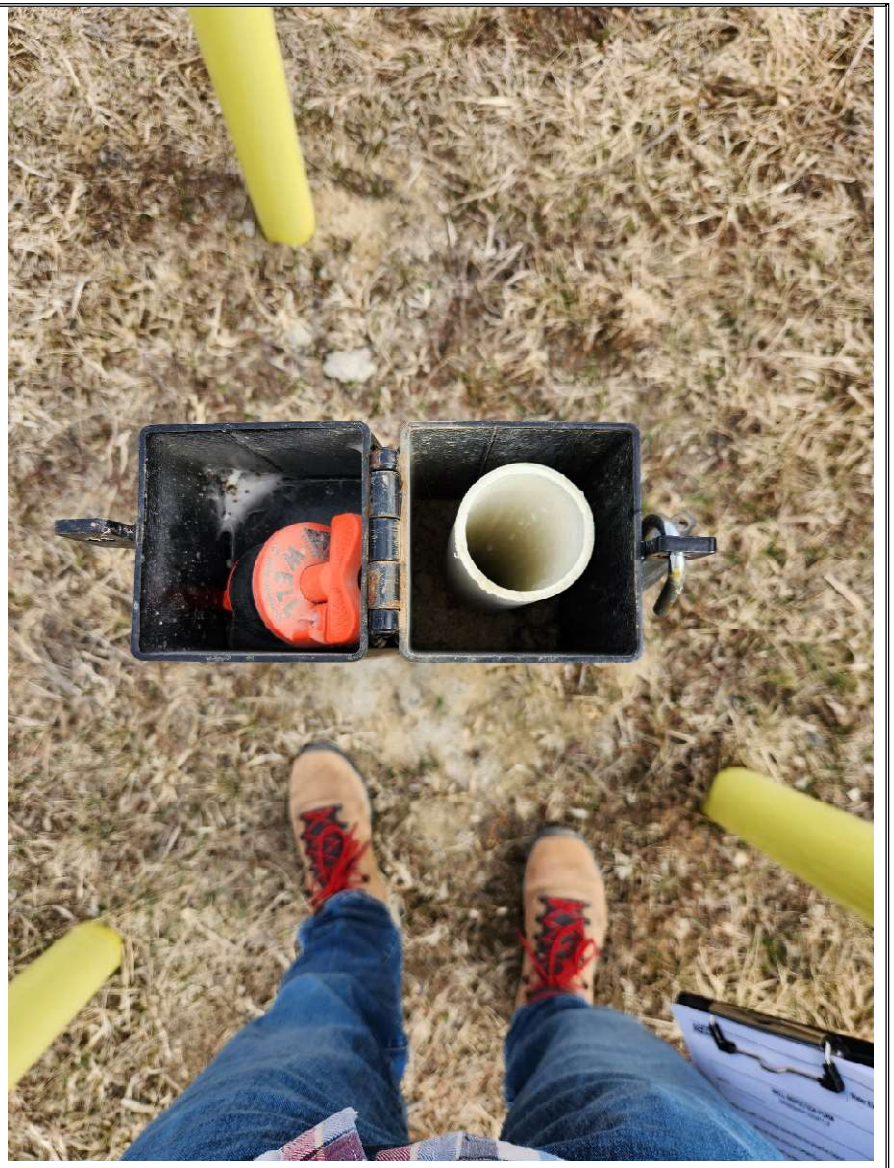


MW-46A Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-45A Side View

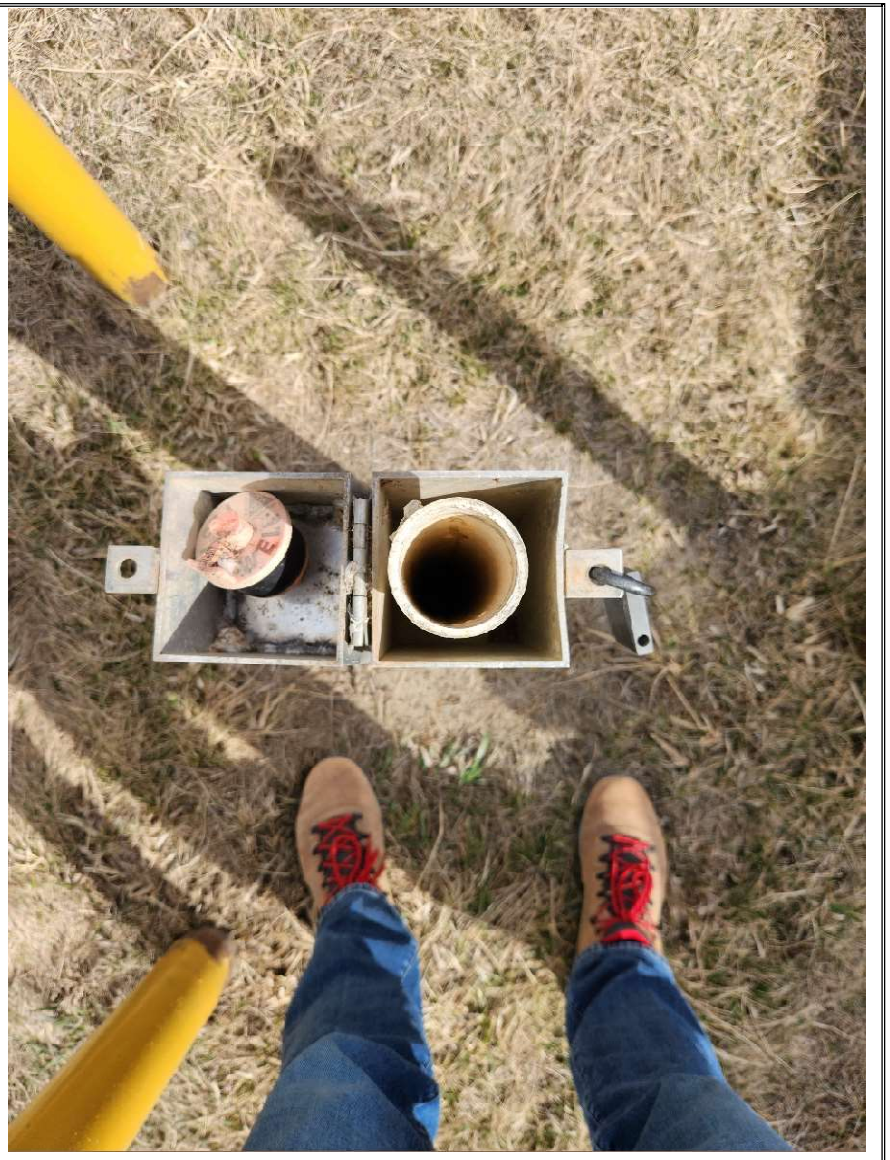


MW-45A Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MWII-2 Side View

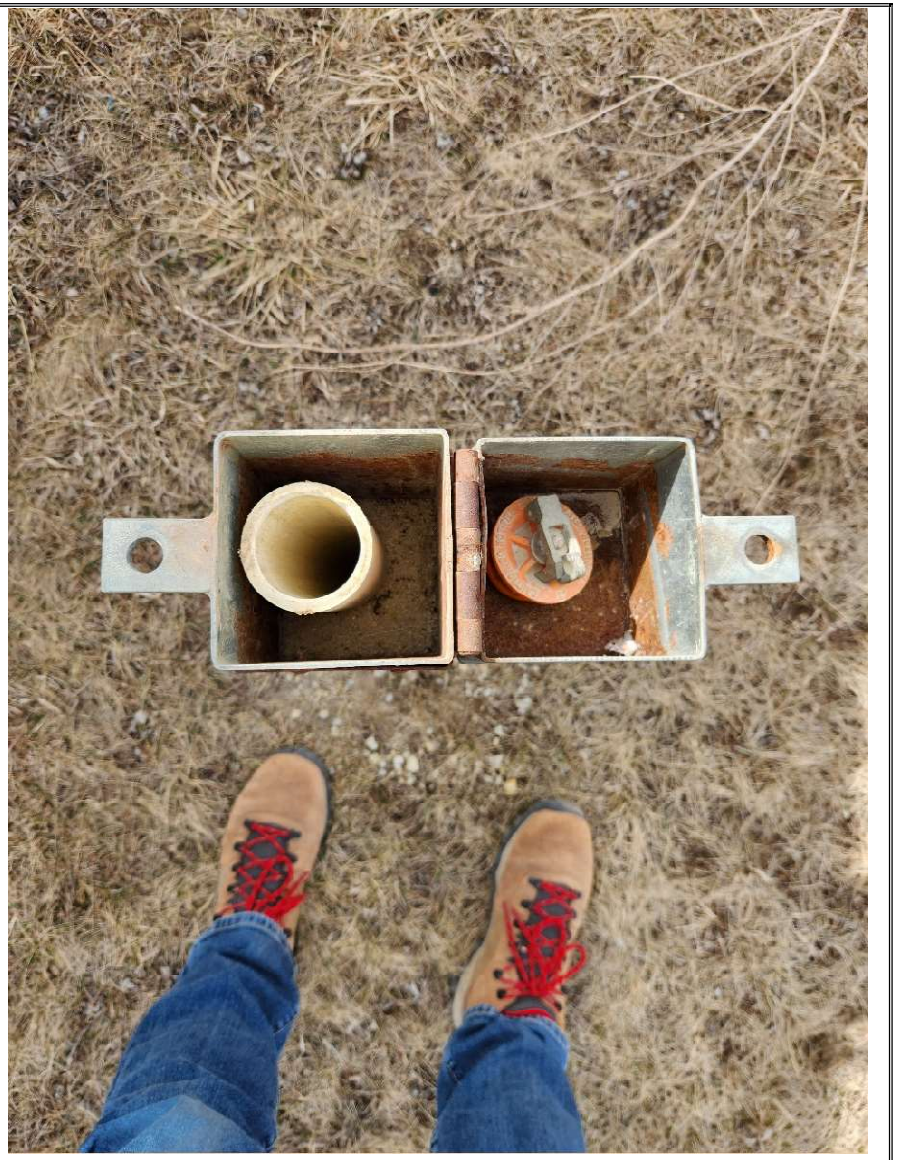


MWII-2 Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-4B Side View

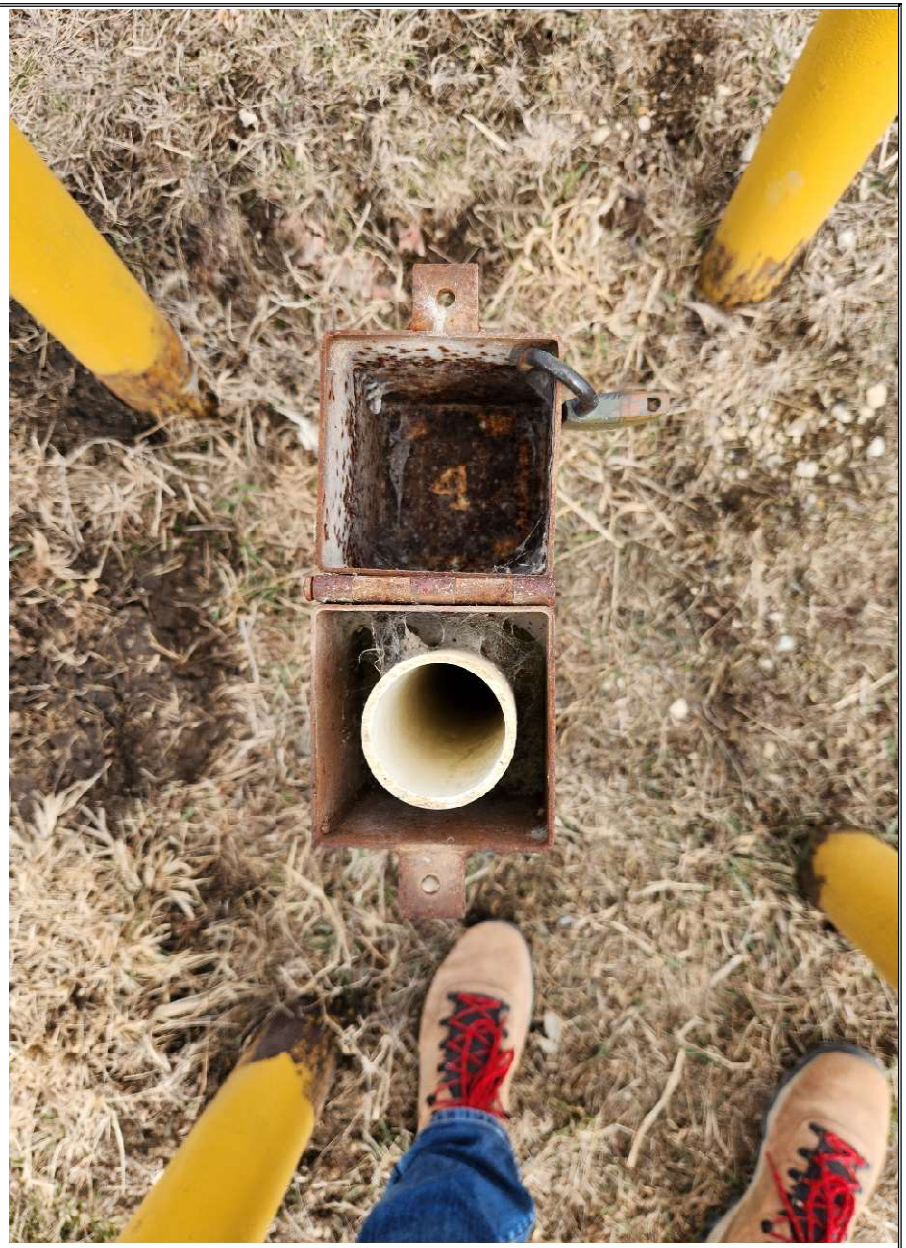


MW-4B Top View

Location: Winneshiek, IA
Permit No.: 96-SDP-1-74P
Camera: Galaxy S22
Date Photos Taken: 03/26/2025
Photographer: Nate Kilburg
Complier: Nate Kilburg



MW-4 Side View



MW-4 Top View

June 2025 Sampling Event

AECOM — ***Well Purging and Sampling Collection***

Site: Winneshiek Well ID: MW-2R Date: 6-2-25
Depth to Top of Screen: 18 feet (TOC) Depth to Bottom of screen: 28 feet (TOC)
Weather Conditions: Sunny 80° Project No.:

Sample Method (circle one): Pumped / Other: _____
Pump Type: (circle one) 0.675" dia. SS Bladder (15ml) / 0.850" dia. SS Bladder (29ml) / PVC Mega-Monsoon / 1.66" dia. SS Bladder (150ml) / Other: _____

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: 12.87 feet(TOC) Time: 1630
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: 13.05 feet (TOC) Time: 1710
From AquaTroll 500:
Total Purge Volume (actual): 1300 ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date:

Pre-Purge DTW: _____ feet (TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume: _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = .33 feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = 203.94 ml

h_t = Length of Tubing in Well = 23 feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + 15 ml = 269.89 ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = _____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** = 254.89 ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = 3 minutes

Depth to Bottom: 28.49 feet (TOC) Time: _____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1638	12.91	165	100	300	6.85	2563.6	24.83	3.93	5.70	213.5
		↓	↓							
1648	13.00	↓	↓	1000	6.85	2383.0	19.60	1.56	5.57	215.4
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1700
. Purge was clear
Sample was clear
5 bottles collected

Duplicate - Sample ID.: — Time: —
Field Blank - Sample ID.: — Time: —
(If no quality control samples were collected cross-out, initial, and date)

Signature: [signature] Date: 6-2-25

AECOM

Well Purging and Sampling Collection

Site: Winneshiek Well ID: MW-33A Date: 6-2-25
Depth to Top of Screen: 12 feet (TOC) Depth to Bottom of screen: 22 feet (TOC)
Weather Conditions: Sunny 80° Project No.:

Sample Method (circle one): Pumped / Other: _____
Pump Type: (circle one) 0.675" dia. SS Bladder (15ml) / 0.850" dia. SS Bladder (29ml) / PVC Mega-Monsoon 1.66" dia. SS Bladder (150ml) / Other: _____

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: 13.06 feet(TOC) Time: 1535
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: 13.48 feet (TOC) Time: 16.20
From AquaTroll 500:
Total Purge Volume (actual): 1300 ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date:

Pre-Purge DTW: _____ feet (TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume: _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = .33 feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = 209.94 ml

h_t = Length of Tubing in Well = 17 feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + 15 ml = 237.31 ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = _____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** = 222.31 ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = 3 **minutes**

Depth to Bottom: 22.18 feet (TOC) Time: _____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1548	13.21	165	190	300	6.55	2632.5	21.04	52.93	4.01	251.4
		↓	↓							
1558	13.36	↓	↓	1000	6.57	2479.3	19.28	51.33	2.15	234.9
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1610
Purge was clearish
Sample was clearish

5 bottles collected

Duplicate - Sample ID.: — Time: —
Field Blank - Sample ID.: — Time: —
(If no quality control samples were collected cross-out, initial, and date)

Signature: Date: 6-2-25

AECOM — ***Well Purging and Sampling Collection***

Site: Winneshiek Well ID: MW-37A Date: 6-2-25
Depth to Top of Screen: 16 feet (TOC) Depth to Bottom of screen: 26 feet (TOC)
Weather Conditions: Sunny 80° Project No.:

Sample Method (circle one): Pumped / Other: _____
Pump Type: (circle one) 0.675" dia. SS Bladder (15ml) / 0.850" dia. SS Bladder (29ml) / PVC Mega-Monsoon / 1.66" dia. SS Bladder (150ml) / Other: _____

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: 14.81 feet(TOC) Time: 1435
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: 15.29 feet (TOC) Time: 1320
From AquaTroll 500:
Total Purge Volume (actual): 1300 ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date:

Pre-Purge DTW: _____ feet (TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume: _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = .33 feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = 203.94 ml

h_t = Length of Tubing in Well = 21 feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + 15 ml = 259.03 ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = _____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** = 244.03 ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = 3 minutes

Depth to Bottom: 26.31 feet (TOC) Time: _____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1443	15.00	165	100	300	7.06	2871.6	26.99	14.97	6.08	235.4
		↓	↓							
1453	15.29	↓	↓	1000	6.75	2594.1	19.89	9.71	5.68	237.3
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1500
Purge was clear
Sample was clear
5 bottles collected

Duplicate - Sample ID.: — Time: —
Field Blank - Sample ID.: — Time: —
(If no quality control samples were collected cross-out, initial, and date)

Signature: _____ Date: 6-2-25

AECOM

Well Purging and Sampling Collection

Site: Winneshiek Well ID: MW-3 Date: 6-2-25
Depth to Top of Screen: 27 feet (TOC) Depth to Bottom of screen: 37 feet (TOC)
Weather Conditions: Sunny 80° Project No.:

Sample Method (circle one): Pumped / Other: _____
Pump Type: (circle one) 0.675" dia. SS Bladder (15ml) / 0.850" dia. SS Bladder (29ml) / PVC Mega-Monsoon 1.66" dia. SS Bladder (150ml) / Other: _____

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: 20.31 feet(TOC) Time: 1330
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: 20.40 feet (TOC) Time: 1420
From AquaTroll 500:
Total Purge Volume (actual): 1400 ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date:

Pre-Purge DTW: _____ feet (TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume: _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = .33 feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = 203.94 ml

h_t = Length of Tubing in Well = 32 feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + 15 ml = 318.76 ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = _____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** = 303.76 ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = 4 **minutes**

Depth to Bottom: 37.84 feet (TOC) Time: _____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1338	20.35	165	100	400	7.17	3270.6	31.64	110.86	5.52	234.9
		↓	↓							
1348	20.40	↓	↓	1000	6.85	2928.3	22.92	17.78	1.86	231.8
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1400
Purge was clearish
Sample was clear
5 bottles collected

Duplicate - Sample ID.: — Time: —
Field Blank - Sample ID.: — Time: —
(If no quality control samples were collected cross-out, initial, and date)

Signature: Date: 6-2-25

AECOM

Well Purging and Sampling Collection

Site: Winneshiek Well ID: MW-18 Date: 6-2-25
Depth to Top of Screen: 37 feet (TOC) Depth to Bottom of screen: 47 feet (TOC)
Weather Conditions: Sunny @ 78° Project No.:

Sample Method (circle one): Pumped / Other: _____
Pump Type: (circle one) 0.675" dia. SS Bladder (15ml) / 0.850" dia. SS Bladder (29ml) / PVC Mega-Monsoon / 1.66" dia. SS Bladder (150ml) / Other: _____

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: 20.26 feet(TOC) Time: 1225
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: 20.60 feet (TOC) Time: 1320
From AquaTroll 500:
Total Purge Volume (actual): 1400 ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date: _____

Pre-Purge DTW: _____ feet (TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume: _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = 1.33 feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = 203.94 ml

h_t = Length of Tubing in Well = 42 feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + 15 ml = 373.06 ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = _____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** = 358.06 ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = 4 **minutes**

Depth to Bottom: 47.38 feet (TOC) Time: _____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1230	20.30	165	100	400	7.29	2384.2	22.51	4.32	7.36	217.5
		↓	↓							
1240	20.59	↓	↓	1000	7.15	2280.8	20.54	3.45	7.30	219.9
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1300
Purge was clear
Sample was clear
Duplicate #1 taken
6 bottles collected

Duplicate - Sample ID.: #1 Time: 1310
Field Blank - Sample ID.: — Time: —
(If no quality control samples were collected cross-out, initial, and date)

Signature: _____ Date: 6-2-25

AECOM

Well Purging and Sampling Collection

Site: Winneshiek Well ID: MW-1 Date: 6-2-25
Depth to Top of Screen: 12 feet (TOC) Depth to Bottom of screen: 22 feet (TOC)
Weather Conditions: Sunny 78° Project No.:

Sample Method (circle one): Pumped / Other: _____
Pump Type: (circle one) 0.675" dia. SS Bladder (15ml) / 0.850" dia. SS Bladder (29ml) / PVC Mega-Monsoon / 1.66" dia. SS Bladder (150ml) / Other: _____

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: 10.00 feet(TOC) Time: 1125
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: 10.33 feet (TOC) Time: 1210
From AquaTroll 500:
Total Purge Volume (actual): 1300 ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date:

Pre-Purge DTW: _____ feet (TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume: _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = .33 feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = 203.94 ml

h_t = Length of Tubing in Well = 17 feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + 15 ml = 236.31 ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = _____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** = 222.31 ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = 3 minutes

Depth to Bottom: 22.02 feet (TOC) Time: _____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1133	10.05	165	100	300	7.07	2712.3	25.64	4.65	7.01	216.2
1143	10.23	↓	↓	1000	6.79	2522.0	21.65	1.59	9.02	230.9
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1200
Purge was clear
Sample was clear

5 bottles collected

Duplicate - Sample ID.: — Time: —
Field Blank - Sample ID.: — Time: —
(If no quality control samples were collected cross-out, initial, and date)

Signature: Date: 6-2-25

AECOM

Well Purging and Sampling Collection

Site: Winneshiek - Well ID: MW-19R Date: 6-2-25

Depth to Top of Screen: 60 feet (TOC) Depth to Bottom of screen: 70 feet (TOC)

Weather Conditions: Sunny 78° Project No.:

Sample Method (circle one): Pumped / Other:

Pump Type: (circle one) 0.675" dia. SS Bladder (15ml) / 0.850" dia. SS Bladder (29ml) / PVC Mega-Monsoon / 1.66" dia. SS Bladder (150ml) / Other:

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: 46.09 feet(TOC) Time: 1015
Pump Intake (ft. below DTW): feet (TOC)
Post-Purge DTW: 47.04 feet (TOC) Time: 1113
From AquaTroll 500:
Total Purge Volume (actual): 1500 ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date:

Pre-Purge DTW: feet (TOC) Time:
Pump Intake (ft. below DTW): feet (TOC)
Post-Purge DTW: feet (TOC) Time:
From AquaTroll 500:
Total Purge Volume: ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:

h_s = Stabilized/Max Drawdown Height = .33 feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = 203.94 ml

h_t = Length of Tubing in Well = 65 feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + 15 ml = 497.95 ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = ml

T = Total Tubing and Flow Cell Purge Volume = **P** = 482.95 ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = 5 minutes

Depth to Bottom: 70.79 feet (TOC) Time: (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1049	46.11	165	100	500	7.35	3134.8	25.61	40.94	6.36	184.8
		↓	↓							
1059	46.91	↓	↓	1000	7.13	2563.2	20.36	47.97	4.07	198.6
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1100
Purge was clearish
Sample was clearish

5 bottles collected

Duplicate - Sample ID.: — Time: —

Field Blank - Sample ID.: — Time: —

(If no quality control samples were collected cross-out, initial, and date)

Signature: Date: 6-2-25

AECOM — ***Well Purging and Sampling Collection***

Site: Winneshiek Well ID: MW-34A Date: 6-4-25
Depth to Top of Screen: 16 feet (TOC) Depth to Bottom of screen: 26 feet (TOC)
Weather Conditions: Sunny 69° Project No.:

Sample Method (circle one): Pumped / Other: ____
Pump Type (circle one): 0.675" dia. SS Bladder (15ml) / 0.850" dia. SS Bladder (29ml) / PVC Mega-Monsoon / 1.66" dia. SS Bladder (150ml) / Other: ____

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: 6.18 feet(TOC) Time: 945
Pump Intake (ft. below DTW): ____ feet (TOC)
Post-Purge DTW: 6.39 feet (TOC) Time: ____
From AquaTroll 500:
Total Purge Volume (actual): 1300 ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date: ____

Pre-Purge DTW: ____ feet (TOC) Time: ____
Pump Intake (ft. below DTW): ____ feet (TOC)
Post-Purge DTW: ____ feet (TOC) Time: ____
From AquaTroll 500:
Total Purge Volume: ____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = .33 feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = 203.94 ml

h_t = Length of Tubing in Well = 21 feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + 15 ml = 259.03 ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = ____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** = 244.03 ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = 3 minutes

Depth to Bottom: 26.65 feet (TOC) Time: ____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1005	6.21	165	100	300	7.62	3108	17.40	22.03	7.93	177.3
		↓	↓							
1015	6.28	↓	↓	1000	7.31	2891.3	15.74	24.76	6.97	187.2
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @1030
Purge was clear
Sample was clear
Duplicate #2 taken
5 bottles collected

Duplicate - Sample ID.: #2 Time: 1040
Field Blank - Sample ID.: — Time: —
(If no quality control samples were collected cross-out, initial, and date)

Signature: [signature] Date: 6-4-25

AECOM — ***Well Purging and Sampling Collection***

Site: Winneshiek Well ID: MW-41A Date: 6-4-25
Depth to Top of Screen: 13 feet (TOC) Depth to Bottom of screen: 23 feet (TOC)
Weather Conditions: Sunny 70° Project No.:

Sample Method (circle one): Pumped / Other: ____
Pump Type: (circle one) 0.675" dia. SS Bladder (15ml) / 0.850" dia. SS Bladder (29ml) / PVC Mega-Monsoon / 1.66" dia. SS Bladder (150ml) / Other: ____

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: 4.43. feet(TOC) Time: 1100
Pump Intake (ft. below DTW): ____ feet (TOC)
Post-Purge DTW: 5.43 feet (TOC) Time: 1145
From AquaTroll 500: 1300
Total Purge Volume (actual): ____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date:

Pre-Purge DTW: ____ feet (TOC) Time: ____
Pump Intake (ft. below DTW): ____ feet (TOC)
Post-Purge DTW: ____ feet (TOC) Time: ____
From AquaTroll 500:
Total Purge Volume: ____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = 1.33 feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = 203.94 ml

h_t = Length of Tubing in Well = 18 feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + 15 ml = 242.74 ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = ____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** = 227.74 ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = 3 minutes

Depth to Bottom: 23.78 feet (TOC) Time: ____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1107	4.81	165	100	300	7.00	3225.4	18.76	20.02	6.14	218.2
1117	5.24	⇩	⇩	1000	6.89	3147	22.43	10.17	2.47	210.7
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1130
Purge was clear
Sample was clear
5 bottles collected

Duplicate - Sample ID.: — Time: —
Field Blank - Sample ID.: — Time: —
(If no quality control samples were collected cross-out, initial, and date)

Signature: Date: 6-4-25

AECOM — ***Well Purging and Sampling Collection***

Site: Winneshiek Well ID: MW-35A Date: 6-4-25
Depth to Top of Screen: _____ feet (TOC) Depth to Bottom of screen: _____ feet (TOC)
Weather Conditions: Sunny 70° Project No.: _____

Sample Method (circle one): Pumped / Other: _____
Pump Type (circle one): 0.675" dia. SS Bladder (15ml) / 0.850" dia. SS Bladder (29ml) / PVC Mega-Monsoon / 1.66" dia. SS Bladder (150ml) / Other: _____

Day 1 (for wells with <0.33 drawdown)
Pre-Purge DTW: 47.21 feet(TOC) Time: 1210
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: 47.22 feet (TOC) Time: 1300
From AquaTroll 500:
Total Purge Volume (actual): 1500 ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date: _____
Pre-Purge DTW: _____ feet (TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume: _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = .33 feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = 203.94 ml

h_t = Length of Tubing in Well = 50 feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + 15 ml = 416.5 ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = _____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** = 401.5 ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = 5 minutes

Depth to Bottom: 55.55 feet (TOC) Time: _____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1221	47.22	165	100	500	6.79	3867.4	25.30	3.96	5.34	230.2
		↓	↓							
1231	47.22	↓	↓	1000	6.66	3531.4	20.17	2.26	2.12	226.9
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1245
Purge was clear
Sample was clear
5 bottles collected

Duplicate - Sample ID.: — Time: —
Field Blank - Sample ID.: — Time: —
(If no quality control samples were collected cross-out, initial, and date)

Signature: _____ Date: 6-4-25

AECOM — ***Well Purging and Sampling Collection***

Site: Winneshiek Well ID: MW-38A Date: 6-4-25
Depth to Top of Screen: 22 feet (TOC) Depth to Bottom of screen: 32 feet (TOC)
Weather Conditions: Sunny 70° Project No.:

Sample Method (circle one): ~~Pumped~~ Other: Pump Type: (circle one) ~~0.675" dia. SS Bladder (15ml)~~ 0.850" dia. SS Bladder (29ml) PVC Mega-Monsoon 1.66" dia. SS Bladder (150ml) Other:

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: 23.98 feet(TOC) Time: 1315
Pump Intake (ft. below DTW): feet (TOC)
Post-Purge DTW: 23.98 feet (TOC) Time: 1405
From AquaTroll 500:
Total Purge Volume (actual): 1300 ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date:

Pre-Purge DTW: feet (TOC) Time:
Pump Intake (ft. below DTW): feet (TOC)
Post-Purge DTW: feet (TOC) Time:
From AquaTroll 500:
Total Purge Volume: ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = .33 feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = 203.94 ml

h_t = Length of Tubing in Well = 27 feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + 15 ml = 291.61 ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = ml

T = Total Tubing and Flow Cell Purge Volume = **P** = 276.61 ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = 3 minutes

Depth to Bottom: 32.48 feet (TOC) Time: (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1325	23.98	165	100	300	6.97	3348.5	22.92	2.74	6.48	206.3
		↓	↓							
1335	23.98	↓	↓	1000	6.93	3135.5	18.85	7.35	6.08	207.9
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1400
Purge was clear
Sample was clear
5 bottles collected

Duplicate - Sample ID.: — Time: —
Field Blank - Sample ID.: — Time: —
(If no quality control samples were collected cross-out, initial, and date)

Signature: Date: 6-4-25

AECOM

Well Purging and Sampling Collection

Site: Winneshiek Well ID: MW-39A Date: 6-4-25
Depth to Top of Screen: 22 feet (TOC) Depth to Bottom of screen: 32 feet (TOC)

Weather Conditions: Sunny 70° Project No.:

Sample Method (circle one): Pumped / Other: _____

Pump Type: (circle one) 0.675" dia. SS Bladder (15ml) / 0.850" dia. SS Bladder (29ml) / PVC Mega-Monsoon / 1.66" dia. SS Bladder (150ml) / Other: _____

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: 23.59 feet(TOC) Time: 1415
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: 23.59 feet (TOC) Time: 1500
From AquaTroll 500:
Total Purge Volume (actual): 1300 ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date: _____

Pre-Purge DTW: _____ feet (TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume: _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = 1.33 feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = 203.94 ml

h_t = Length of Tubing in Well = 26 feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + 15 ml = 286.18 ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = _____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** = 271.18 ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = 3 **minutes**

Depth to Bottom: 32.37 feet (TOC) Time: _____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1426	23.59	165	100	300	7.05	3217.7	21.16	11.89	6.89	209.5
		↓	↓							
1436	23.59	↓	↓	1000	6.97	3071.4	17.15	36.91	6.39	211.4
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1445
Purge was clear
Sample was clear
5 bottles collected

Duplicate - Sample ID.: — Time: —
Field Blank - Sample ID.: — Time: —
(If no quality control samples were collected cross-out, initial, and date)

Signature: _____ Date: 6-4-25

AECOM

Well Purging and Sampling Collection

Site: Winneshiek Well ID: MW-40A Date: 6-4-25
Depth to Top of Screen: 31 feet (TOC) Depth to Bottom of screen: 41 feet (TOC)
Weather Conditions: Sunny 70° Project No.:

Sample Method (circle one): Pumped / Other: _____
Pump Type (circle one): 0.675" dia. SS Bladder (15ml) / 0.850" dia. SS Bladder (29ml) / PVC Mega-Monsoon / 1.66" dia. SS Bladder (150ml) / Other: _____

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: 28.36 feet(TOC) Time: 1510
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: 28.39 feet (TOC) Time: 1550
From AquaTroll 500:
Total Purge Volume (actual): 1400 ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date: _____

Pre-Purge DTW: _____ feet (TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume: _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = .33 feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = 203.94 ml

h_t = Length of Tubing in Well = 35 feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + 15 ml = 335.05 ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = _____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** = 320.05 ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = 4 **minutes**

Depth to Bottom: 41.68 feet (TOC) Time: _____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1522	28.37	165	100	400	6.83	3712.7	25.26	2.76	6.14	217.5
		↓	↓							
1532	28.39	↓	↓	1000	6.89	3371.9	18.56	6.00	4.05	213.5
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1545
Purge was clear
Sample was clear
5 bottles collected

Duplicate - Sample ID.: — Time: —
Field Blank - Sample ID.: — Time: —
(If no quality control samples were collected cross-out, initial, and date)

Signature: _____ Date: 6-4-25

AECOM

Well Purging and Sampling Collection

Site: Winne Shirk Well ID: SW-5 Date: 6-4-25
Depth to Top of Screen: _____feet (TOC) Depth to Bottom of screen: _____feet (TOC)
Weather Conditions: Sunny 70° Project No.:_____

Sample Method (circle one): Pumped Other: Grab
Pump Type: (circle one) 0.675" dia. SS Bladder (15ml) 0.850" dia. SS Bladder (29ml) PVC Mega-Monsoon 1.66" dia. SS Bladder (150ml) Other: _____

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: _____feet(TOC) Time: _____
Pump Intake (ft. below DTW): _____feet (TOC)
Post-Purge DTW: _____feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume (actual): _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date:_____

Pre-Purge DTW: _____feet (TOC) Time: _____
Pump Intake (ft. below DTW): _____feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time:_____
From AquaTroll 500:
Total Purge Volume: _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = _____feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = _____ ml

h_t = Length of Tubing in Well = _____feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + ____ ml = _____ ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = _____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** =_____ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = _____ minutes

Depth to Bottom: _____ feet (TOC) Time: _____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1645					7.18	1811.5	18.75	48.32	—	81
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1645
Staff guage - 0.1 ft
Duplicate #3 taken

Duplicate - Sample ID.: #3 Time: 1645
Field Blank - Sample ID.:_____ Time: _____
(If no quality control samples were collected cross-out, initial, and date)

Signature: [signature] Date: 6-4-25

AECOM

Well Purging and Sampling Collection

Site: Winneshiek Well ID: SW-1 Date: 6-4-25
Depth to Top of Screen: _____feet (TOC) Depth to Bottom of screen: _____feet (TOC)
Weather Conditions: Sunny 69° Project No.:_____

Sample Method (circle one): Pumped Other: Grab
Pump Type: (circle one) 0.675" dia. SS Bladder (15ml) 0.850" dia. SS Bladder (29ml) PVC Mega-Monsoon 1.66" dia. SS Bladder (150ml) Other: _____

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: _____feet(TOC) Time: _____
Pump Intake (ft. below DTW): _____feet (TOC)
Post-Purge DTW: _____feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume (actual): _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date:_____

Pre-Purge DTW: _____feet (TOC) Time: _____
Pump Intake (ft. below DTW): _____feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time:_____
From AquaTroll 500:
Total Purge Volume: _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = _____feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = _____ ml

h_t = Length of Tubing in Well = _____feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + ____ ml = _____ ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = _____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** =_____ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = _____ minutes

Depth to Bottom: _____ feet (TOC) Time: _____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1715					7.15	1643.1	16.43	14.83	—	68
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: ~~Sampled~~ Sampled @ 1715
Staff guage 0.1 Ft

Duplicate - Sample ID.:— Time: —
Field Blank - Sample ID.:— Time: —
(If no quality control samples were collected cross-out, initial, and date)

Signature: Date: 6-4-25

AECOM

Well Purging and Sampling Collection

Site: Winneshiek Well ID: SW-2 Date: 6-4-25
Depth to Top of Screen: _____feet (TOC) Depth to Bottom of screen: _____feet (TOC)
Weather Conditions: Sunny 70° Project No.:_____

Sample Method (circle one): Pumped Other: Grab
Pump Type: (circle one) 0.675" dia. SS Bladder (15ml) 0.850" dia. SS Bladder (29ml) PVC Mega-Monsoon 1.66" dia. SS Bladder (150ml) Other: _____

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: _____feet(TOC) Time: _____
Pump Intake (ft. below DTW): _____feet (TOC)
Post-Purge DTW: _____feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume (actual): _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date:_____

Pre-Purge DTW: _____feet (TOC) Time: _____
Pump Intake (ft. below DTW): _____feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time:_____
From AquaTroll 500:
Total Purge Volume: _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = _____feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = _____ ml

h_t = Length of Tubing in Well = _____feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + ____ ml = _____ ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = _____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** =_____ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = _____ minutes

Depth to Bottom: _____ feet (TOC) Time: _____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1630					7.13	1749.2	18.46	34.21	—	74
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1630
Field Staff gauge - 0.2 ft

Duplicate - Sample ID.:— Time: —
Field Blank - Sample ID.:— Time: —
(If no quality control samples were collected cross-out, initial, and date)

Signature: Date: 6-4-25

AECOM

Well Purging and Sampling Collection

Site: Winneshiek Well ID: MW-43A Date: 6-5-25
Depth to Top of Screen: 10 feet (TOC) Depth to Bottom of screen: 20 feet (TOC)
Weather Conditions: Sunny 76° Project No.:

Sample Method (circle one): Pumped / Other: _____
Pump Type (circle one): 0.675" dia. SS Bladder (15ml) / 0.850" dia. SS Bladder (29ml) / PVC Mega-Monsoon / 1.66" dia. SS Bladder (150ml) / Other: _____

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: 8.24 feet(TOC) Time: 1147
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: 8.39 feet (TOC) Time: 1300
From AquaTroll 500:
Total Purge Volume (actual): 1300 ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date:

Pre-Purge DTW: _____ feet (TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume: _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = .33 feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = 203.94 ml

h_t = Length of Tubing in Well = 15 feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + 15 ml = 226.45 ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = _____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** = 211.45 ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = 3 minutes

Depth to Bottom: 20.22 feet (TOC) Time: _____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1154	8.29	165	100	300	7.01	4566.7	21.33	5.05	5.49	225.4
		↓	↓							
1204	8.35	↓	↓	1000	6.89	3701.8	18.32	27.15	3.91	217.7
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1230
Purge was clear
Sample was clearish
21 bottles

Duplicate - Sample ID.: — Time: —
Field Blank - Sample ID.: — Time: —
(If no quality control samples were collected cross-out, initial, and date)

Signature: [signature] Date: 6-5-25

AECOM

Well Purging and Sampling Collection

Site: Winneshiek Well ID: MW-44A Date: 6-5-25
Depth to Top of Screen: 10 feet (TOC) Depth to Bottom of screen: 20 feet (TOC)
Weather Conditions: Sunny 77° Project No.:

Sample Method (circle one): Pumped / Other: _____
Pump Type: (circle one) 0.675" dia. SS Bladder (15ml) / 0.850" dia. SS Bladder (29ml) / PVC Mega-Monsoon / 1.66" dia. SS Bladder (150ml) / Other: _____

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: 9.22 feet(TOC) Time: 1305
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: 9.22 feet (TOC) Time: 1420
From AquaTroll 500:
Total Purge Volume (actual): 1300 ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date:

Pre-Purge DTW: _____ feet (TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume: _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = 1.33 feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = 203.94 ml

h_t = Length of Tubing in Well = 15 feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + 15 ml = 226.45 ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = _____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** = 211.45 ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = 3 minutes

Depth to Bottom: 20.25 feet (TOC) Time: _____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1310	9.22	165	100	300	6.72	5290.8	23.78	4.38	5.62	218.6
1320	9.22	↓	↓	1000	6.65	4093.3	19.29	3.04	3.92	203.9
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1330
Purge was clear
Sample was clear
21 bottles collected

Duplicate - Sample ID.: — Time: —
Field Blank - Sample ID.: — Time: —
(If no quality control samples were collected cross-out, initial, and date)

Signature: Date: 6-5-25

AECOM

Well Purging and Sampling Collection

Site: Winneshiek Well ID: MW-11 Date: 6-5-25
Depth to Top of Screen: _____ feet (TOC) Depth to Bottom of screen: _____ feet (TOC)
Weather Conditions: Sunny 76° Project No.: _____

Sample Method (circle one): Pumped / Other: _____
Pump Type: (circle one) 0.675" dia. SS Bladder (15ml) / 0.850" dia. SS Bladder (29ml) / PVC Mega-Monsoon / 1.66" dia. SS Bladder (150ml) / Other: _____

Day 1 (for wells with <0.33 drawdown)
Pre-Purge DTW: 40.38 [redacted] feet(TOC) Time: 1430
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume (actual): _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date: _____
Pre-Purge DTW: _____ feet (TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume: _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = _____ feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = _____ ml

h_t = Length of Tubing in Well = _____ feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + ____ ml = _____ ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = _____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** = _____ ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = _____ minutes

Depth to Bottom: 40.22 feet (TOC) Time: _____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: No sample taken - Not enough volume - well purged dry immediately

Duplicate - Sample ID.: _____ Time: _____
Field Blank - Sample ID.: _____ Time: _____
(If no quality control samples were collected cross-out, initial, and date)

Signature: Date:

AECOM

Well Purging and Sampling Collection

Site: Winneshiek Well ID: MW-31A Date: 6-5-25
Depth to Top of Screen: 12 feet (TOC) Depth to Bottom of screen: 22 feet (TOC)
Weather Conditions: Sunny 76° Project No.:

Sample Method (circle one): Pumped / Other: Pump Type: (circle one) 0.675" dia. SS Bladder (15ml) / 0.850" dia. SS Bladder (29ml) / PVC Mega-Monsoon / 1.66" dia. SS Bladder (150ml) / Other:

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: 16.65 feet(TOC) Time: 1440
Pump Intake (ft. below DTW): feet (TOC)
Post-Purge DTW: 17.44 feet (TOC) Time: 1530
From AquaTroll 500:
Total Purge Volume (actual): ~~1000~~ 1300 ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date:

Pre-Purge DTW: feet (TOC) Time:
Pump Intake (ft. below DTW): feet (TOC)
Post-Purge DTW: feet (TOC) Time:
From AquaTroll 500:
Total Purge Volume: ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = .79 feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = 203.94 ml

h_t = Length of Tubing in Well = 19 feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + ____ ml = 248.17 ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = ____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** = 233.17 ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = 3 minutes

Depth to Bottom: 22.70 feet (TOC) Time: (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1451	16.81	165	100	300	6.85	6226.3	26.49	6.22	4.38	193.3
		↓	↓							
1501	17.15	↓	↓	1000	6.79	4623.2	20.38	8.14	3.19	176.8
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1515
Purge was clear
Sample was clear

9 bottles

Duplicate - Sample ID.: — Time: —
Field Blank - Sample ID.: — Time: —
(If no quality control samples were collected cross-out, initial, and date)

Signature: Date: 6-5-25

AECOM

Well Purging and Sampling Collection

Site: Winneshiek Well ID: MW-25A Date: 6-5-25
Depth to Top of Screen: 11 feet (TOC) Depth to Bottom of screen: 21 feet (TOC)
Weather Conditions: Sunny 76° Project No.:

Sample Method (circle one): Pumped / Other: _____
Pump Type (circle one): 0.675" dia. SS Bladder (15ml) / 0.850" dia. SS Bladder (29ml) / PVC Mega-Monsoon / 1.66" dia. SS Bladder (150ml) / Other: _____

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: 17.81 feet(TOC) Time: 1545
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: 18.38 feet (TOC) Time: 1640
From AquaTroll 500:
Total Purge Volume (actual): ~~1000~~ 1300 ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date: _____

Pre-Purge DTW: _____ feet (TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume: _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = .33 feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = 203.94 ml

h_t = Length of Tubing in Well = 20 feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + 15 ml = 253.6 ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = _____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** = 238.6 ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = 3 minutes

Depth to Bottom: 21.72 feet (TOC) Time: _____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1600	17.94	165	100	300	6.73	3544.3	19.48	2.01	3.44	174.7
		↓	↓							
1610	18.21	▽	▽	1800	6.72	3443.7	19.10	1.56	3.35	174.0
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1630
Purge was clear
Sample was clear
5 bottles collected

Duplicate - Sample ID.: — Time: —
Field Blank - Sample ID.: — Time: —
(If no quality control samples were collected cross-out, initial, and date)

Signature: _____ Date: 6-5-25

AECOM

Well Purging and Sampling Collection

Site: Winneshiek Well ID: MW-42A Date: 6-5-25
Depth to Top of Screen: 13 feet (TOC) Depth to Bottom of screen: 23 feet (TOC)
Weather Conditions: Sunny 76° Project No.:

Sample Method (circle one): Pumped / Other: _____
Pump Type: (circle one) 0.675" dia. SS Bladder (15ml) / 0.850" dia. SS Bladder (29ml) / PVC Mega-Monsoon / 1.66" dia. SS Bladder (150ml) / Other: _____

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: 14.53 feet(TOC) Time: 1005
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: 15.31 feet (TOC) Time: 1140
From AquaTroll 500:
Total Purge Volume (actual): ~~1000~~ 1300 ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date:

Pre-Purge DTW: _____ feet (TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume: _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = 1.33 feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = 203.94 ml

h_t = Length of Tubing in Well = 17 feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + 15 ml = 237.31 ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = _____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** = 221.31 ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = 3 minutes

Depth to Bottom: 23.73 feet (TOC) Time: _____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1024	14.75	165	100	300	7.24	4031	20.24	5.53	6.82	206.7
1034	15.11	↓	↓	1000	7.05	3541.1	17.74	24.38	4.50	203.1
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1100
Purge was clear
Sample was clear
Equipment Blank #1 taken
21 samples collected

Duplicate - Sample ID.: _____ Time: _____
Field Blank - Sample ID.: #1 Time: 1130
(If no quality control samples were collected cross-out, initial, and date)

Signature: Date: 6-5-25

AECOM — ***Well Purging and Sampling Collection***

Site: Winneshiek Well ID: MW-29A Date: 6-6-25
Depth to Top of Screen: 17 feet (TOC) Depth to Bottom of screen: 27 feet (TOC)
Weather Conditions: Cloudy 64° Project No.:

Sample Method (circle one): Pumped / Other: _____
Pump Type (circle one): 0.675" dia. SS Bladder (15ml) / ~~0.850" dia. SS Bladder (29ml)~~ / PVC Mega-Monsoon / 1.66" dia. SS Bladder (150ml) / Other: _____

Day 1 (for wells with <0.33 drawdown)
Pre-Purge DTW: 23.11 feet(TOC) Time: 1105
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: 24.10 feet (TOC) Time: 1200
From AquaTroll 500:
Total Purge Volume (actual): ~~1000~~ 1300 ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date:
Pre-Purge DTW: _____ feet (TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume: _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = .33 feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = 203.94 ml

h_t = Length of Tubing in Well = 26 feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + 15 ml = 286.18 ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = _____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** = 271.18 ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = 3 minutes

Depth to Bottom: 27.19 feet (TOC) Time: _____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1113	23.23	165	100	300	6.54	3020.9	18.11	44.77	5.53	229.3
		↓	75							
1123	23.99	↓	65	1000	6.51	2930.3	16.86	12.60	2.77	225.1
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1130
Purge was clearish
Sample was clear
6 bottles collected

Duplicate - Sample ID.: — Time: —
Field Blank - Sample ID.: — Time: —
(If no quality control samples were collected cross-out, initial, and date)

Signature: Date: 6-6-25

AECOM

Well Purging and Sampling Collection

Site: Winneshiek Well ID: MW-22 Date: 6-6-25
Depth to Top of Screen: 32 feet (TOC) Depth to Bottom of screen: 42 feet (TOC)
Weather Conditions: Cloudy 64° Project No.:

Sample Method (circle one): ~~Pumped~~ Other: Pump Type: (circle one) 0.675" dia. SS Bladder (15ml) 0.850" dia. SS Bladder (29ml) Other: PVC Mega-Monsoon 1.66" dia. SS Bladder (150ml)

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: 38.22 feet(TOC) Time: 1220
Pump Intake (ft. below DTW): feet (TOC)
Post-Purge DTW: 40.12 feet (TOC) Time: 1320
From AquaTroll 500:
Total Purge Volume (actual): ~2700 ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date:

Pre-Purge DTW: feet (TOC) Time:
Pump Intake (ft. below DTW): feet (TOC)
Post-Purge DTW: feet (TOC) Time:
From AquaTroll 500:
Total Purge Volume: ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = 1.33 feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = 203.94 ml

h_t = Length of Tubing in Well = 41 feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + 29 ml = 381.63 ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = ml

T = Total Tubing and Flow Cell Purge Volume = **P** = 352.63 ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = 4 minutes

Depth to Bottom: 42.65 feet (TOC) Time: (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1229	38.51	165	160	600	7.26	2631.9	21.54	1.55	7.97	178.6
		↓	↓							
1239	39.26	↓	↓	2100	7.14	2432.7	21.53	1.52	8.83	182.2
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1300
Purge was clear
Sample was clear
Equipment blank #2 taken
5 bottles collected

Duplicate - Sample ID.: ~ Time: ~
Field Blank - Sample ID.: #2 Time: 1310
(If no quality control samples were collected cross-out, initial, and date)

Signature: Date: 6-6-25

AECOM

Well Purging and Sampling Collection

Site: Winneshiek Well ID: MW-7A Date: 6-6-25
Depth to Top of Screen: 10 feet (TOC) Depth to Bottom of screen: 20 feet (TOC)
Weather Conditions: Cloudy 64° Project No.:

Sample Method (circle one): Pumped / Other: _____
Pump Type (circle one): 0.675" dia. SS Bladder (15ml) / 0.850" dia. SS Bladder (29ml) / PVC Mega-Monsoon / 1.66" dia. SS Bladder (150ml) / Other: _____

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: 11.44 feet(TOC) Time: 1330
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: 12.64 feet (TOC) Time: 1485
From AquaTroll 500:
Total Purge Volume (actual): ~~2100~~ 2550 ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date:

Pre-Purge DTW: _____ feet (TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume: _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = 1.33 feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = 203.94 ml

h_t = Length of Tubing in Well = 15 feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + 29 ml = 240.45 ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = _____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** = 211.45 ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = 3 minutes

Depth to Bottom: 20.24 feet (TOC) Time: _____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1336	11.58	165	150	450	7.04	2550.6	14.43	1.60	14.22	229.5
		↓	↓							
1346	12.41	↓	↓	2100	6.95	2375.1	13.51	2.33	10.31	229.5
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1350
Purge was clear
Sample was clear

5 bottles collected

Duplicate - Sample ID.: — Time: —
Field Blank - Sample ID.: — Time: —
(If no quality control samples were collected cross-out, initial, and date)

Signature: [signature] Date: 6-6-25

AECOM

Well Purging and Sampling Collection

Site: Winneshiek Well ID: MW-46A Date: 6-6-25
Depth to Top of Screen: _____ feet (TOC) Depth to Bottom of screen: _____ feet (TOC)

Weather Conditions: Cloudy 64° Project No.: _____

Sample Method (circle one): Pumped / Other: _____

Pump Type (circle one): 0.675" dia. SS Bladder (15ml) / 0.850" dia. SS Bladder (29ml) / PVC Mega-Monsoon / 1.66" dia. SS Bladder (150ml) / Other: _____

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: 8.18 feet(TOC) Time: 1435
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: 8.28 feet (TOC) Time: 1520
From AquaTroll 500:
Total Purge Volume (actual): ~~2100~~ 2550 ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date: _____

Pre-Purge DTW: _____ feet (TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume: _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = .33 feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = 203.94 ml

h_t = Length of Tubing in Well = 13 feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + 29 ml = 229.59 ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = _____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** = 200.59 ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = 3 minutes

Depth to Bottom: 18.10 feet (TOC) Time: _____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1442	8.24	165	150	450	6.64	2777.6	12.48	3.38	6.47	238.4
		↓	↓							
1452	8.28	↓	↓	2100	6.64	2719.6	11.40	10.97	3.03	237.1
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1510
Purge was clear
Sample was clear
5 bottles collected

Duplicate - Sample ID.: — Time: —
Field Blank - Sample ID.: — Time: —
(If no quality control samples were collected cross-out, initial, and date)

Signature: [signature] Date: 6-6-25

AECOM

Well Purging and Sampling Collection

Site: Winneshiek Well ID: MW-45A Date: 6-6-25
Depth to Top of Screen: 9 feet (TOC) Depth to Bottom of screen: 19 feet (TOC)
Weather Conditions: Cloudy 64° Project No.:

Sample Method (circle one): Pumped / Other: _____
Pump Type (circle one): 0.675" dia. SS Bladder (15ml) / 0.850" dia. SS Bladder (29ml) / PVC Mega-Monsoon / 1.66" dia. SS Bladder (150ml) / Other: _____

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: 7.62 feet(TOC) Time: 1535
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: 10.69 feet (TOC) Time: 1930
From AquaTroll 500:
Total Purge Volume (actual): ~~2100~~ 2550 ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date: _____

Pre-Purge DTW: _____ feet (TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume: _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = .33 feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = 203.94 ml

h_t = Length of Tubing in Well = 14 feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + 29 ml = 235.02 ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = _____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** = 206.02 ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = 3 minutes

Depth to Bottom: 19.14 feet (TOC) Time: ~~3~~ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1640	7.99	165	150	~~450~~	7.03	2299.5	15.39	9.39	4.55	200.3
1650	10.14	↓	↓	2100	6.95	2205.0	15.53	2.98	2.81	197.4
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1615
Purge was clear
Sample was clear
Duplicate #4 taken
5 bottles collected

Duplicate - Sample ID.: #4 Time: 1625
Field Blank - Sample ID.: — Time: —
(If no quality control samples were collected cross-out, initial, and date)

Signature: Date: 6-6-25

AECOM

Well Purging and Sampling Collection

Site: Winneshiek Well ID: MW-101 Date: 6-6-25
Depth to Top of Screen: 30 feet (TOC) Depth to Bottom of screen: 40 feet (TOC)
Weather Conditions: Cloudy 64° Project No.:

Sample Method (circle one): Pumped / Other: _____
Pump Type (circle one): 0.675" dia. SS Bladder (15ml) / 0.850" dia. SS Bladder (29ml) / PVC Mega-Monsoon / 1.66" dia. SS Bladder (150ml) / Other: _____

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: 38.84 feet(TOC) Time: 0950
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: 39.62 feet (TOC) Time: 1100
From AquaTroll 500:
Total Purge Volume (actual): ~~1000~~ 1400 ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date:

Pre-Purge DTW: _____ feet (TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume: _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = 1.33 feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = 203.94 ml

h_t = Length of Tubing in Well = 40 feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + 15 ml = 362.2 ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = _____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** = 347.2 ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = 4 minutes

Depth to Bottom: 40.38 feet (TOC) Time: _____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1014	38.94	165	~~100~~ 70	400	7.23	3154.1	20.90	6.19	6.36	205.1
		↓	↓							
1024	39.11	↓	↓	1000	7.08	2771	21.59	2.17	5.00	198.2
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1030
Purge was clear
Sample was clear

5 bottles collected

Duplicate - Sample ID.: — Time: —
Field Blank - Sample ID.: — Time: —
(If no quality control samples were collected cross-out, initial, and date)

Signature: Date: 6-6-25

AECOM

Well Purging and Sampling Collection

Site: Winneshiek Well ID: MW-413 Date: 6-9-25
Depth to Top of Screen: 30 feet (TOC) Depth to Bottom of screen: 40 feet (TOC)
Weather Conditions: Cloudy 58° Project No.:

Sample Method (circle one): Pumped / Other: _____
Pump Type (circle one): 0.675" dia. SS Bladder (15ml) / 0.850" dia. SS Bladder (29ml) / PVC Mega-Monsoon / 1.66" dia. SS Bladder (150ml) / Other: _____

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: 32.89 feet(TOC) Time: 1020
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: 32.65 feet (TOC) Time: 1110
From AquaTroll 500:
Total Purge Volume (actual): 2400 ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date: _____

Pre-Purge DTW: _____ feet (TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume: _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = .33 feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = 203.94 ml

h_t = Length of Tubing in Well = 35 feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + 29 ml = 349.05 ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = _____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** = 320.05 ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = 4 minutes

Depth to Bottom: 40.20 feet (TOC) Time: _____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1030	32.62	165	150	300	7.69	3156.6	13.49	5.01	8.31	203.3
		↓	↓							
1040	32.65	↓	↓	2100	6.87	2913.7	11.40	1.10	7.94	218.2
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1050
Purge was clear
Sample was clear
5 bottles collected

Duplicate - Sample ID.: — Time: —
Field Blank - Sample ID.: — Time: —
(If no quality control samples were collected cross-out, initial, and date)

Signature: Date: 6-9-25

AECOM

Well Purging and Sampling Collection

Site: Winneshiek Well ID: MW4 Date: 6-9-25
Depth to Top of Screen: 34 feet (TOC) Depth to Bottom of screen: 44 feet (TOC)

Weather Conditions: Cloudy Project No.:

Sample Method (circle one): Pumped / Other: _____

Pump Type (circle one): 0.675" dia. SS Bladder (15ml) / 0.850" dia. SS Bladder (29ml) / PVC Mega-Monsoon / 1.66" dia. SS Bladder (150ml) / Other: _____

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: 33.21 feet(TOC) Time: 1120
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: 33.33 feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume (actual): 2750 ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date: _____

Pre-Purge DTW: _____ feet (TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume: _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = .33 feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = 203.94 ml

h_t = Length of Tubing in Well = 39 feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + 29 ml = 390.77 ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = _____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** = 341.77 ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = 4 minutes

Depth to Bottom: 44.88 feet (TOC) Time: _____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1130	33.24	165	150	600	6.64	3067.2	12.62	1.10	7.05	235.1
		↓	↓							
1140	33.30	↓	↓	2750	6.60	2993.7	12.22	0.63	5.15	235.1
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1145
Purge was clear
Sample was clear
5 bottles collected

Duplicate - Sample ID.: — Time: —
Field Blank - Sample ID.: — Time: —
(If no quality control samples were collected cross-out, initial, and date)

Signature: _____ Date: 6-9-25

AECOM

Well Purging and Sampling Collection

Site: Winneshiek Well ID: GU-1 Date: 6-9-25

Depth to Top of Screen: _____ feet (TOC) Depth to Bottom of screen: _____ feet (TOC)

Weather Conditions: Cloudy 56° Project No.: _____

Sample Method (circle one): Pumped / Other: Grab

Pump Type: (circle one) 0.675" dia. SS Bladder (15ml) / 0.850" dia. SS Bladder (29ml) / PVC Mega-Monsoon / 1.66" dia. SS Bladder (150ml) / Other: _____

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: _____ feet(TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume (actual): _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date: _____

Pre-Purge DTW: _____ feet (TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume: _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:

h_s = Stabilized/Max Drawdown Height = _____ feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = _____ ml

h_t = Length of Tubing in Well = _____ feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + ____ ml = _____ ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = _____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** = _____ ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = _____ minutes

Depth to Bottom: _____ feet (TOC) Time: _____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1230					6.89	2168.4	14.31	11.21	—	78
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1230
Sample was clear
5 bottles collected

Duplicate - Sample ID.: — Time: —
Field Blank - Sample ID.: — Time: —
(If no quality control samples were collected cross-out, initial, and date)

Signature: _____ Date: 6-9-25

AECOM

Well Purging and Sampling Collection

Site: Winneshiek Well ID: GU-2 Date: 6-9-25
Depth to Top of Screen: _____ feet (TOC) Depth to Bottom of screen: _____ feet (TOC)

Weather Conditions: Cloudy 56° Project No.: _____

Sample Method (circle one): Pumped / Other: Grab

Pump Type: (circle one) 0.675" dia. SS Bladder (15ml) / 0.850" dia. SS Bladder (29ml) / PVC Mega-Monsoon / 1.66" dia. SS Bladder (150ml) / Other: _____

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: _____ feet(TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume (actual): _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date: _____

Pre-Purge DTW: _____ feet (TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume: _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:
h_s = Stabilized/Max Drawdown Height = _____ feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = _____ ml

h_t = Length of Tubing in Well = _____ feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + ____ ml = _____ ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = _____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** = _____ ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = _____ minutes

Depth to Bottom: _____ feet (TOC) Time: _____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
1300					6.74	2541.3	16.24	15.29	—	91
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: Sampled @ 1300
Sample was clear

5 bottles collected

Duplicate - Sample ID.: — Time: —

Field Blank - Sample ID.: — Time: —

(If no quality control samples were collected cross-out, initial, and date)

Signature: _____ Date: 6-9-25

AECOM

Well Purging and Sampling Collection

Site: Winneshiek Well ID: MH-1AA Date: [redacted]-6-9-25
Depth to Top of Screen: _____ feet (TOC) Depth to Bottom of screen: _____ feet (TOC)

Weather Conditions: Cloudy Project No.: _____

Sample Method (circle one): Pumped / Other: _____

Pump Type (circle one): 0.675" dia. SS Bladder (15ml) / 0.850" dia. SS Bladder (29ml) / PVC Mega-Monsoon / 1.66" dia. SS Bladder (150ml) / Other: _____

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: _____ feet(TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume (actual): _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date: _____

Pre-Purge DTW: _____ feet (TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume: _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:

h_s = Stabilized/Max Drawdown Height = _____ feet
S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = _____ ml

h_t = Length of Tubing in Well = _____ feet
P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + ____ ml = _____ ml
Or
P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = _____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** = _____ ml
Time to purge tubing plus flow cell volume = T/ pump purge rate = _____ minutes

Depth to Bottom: _____ feet (TOC) Time: _____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: No sample taken not enough flow

Duplicate - Sample ID.: _____ Time: _____

Field Blank - Sample ID.: _____ Time: _____

(If no quality control samples were collected cross-out, initial, and date)

Signature: [signature] Date: 6-9-25

AECOM

Well Purging and Sampling Collection

Site: Winneshiek Well ID: MH-4-2 Date: 6-9-25

Depth to Top of Screen: _____ feet (TOC) Depth to Bottom of screen: _____ feet (TOC)

Weather Conditions: Cloudy Project No.: _____

Sample Method (circle one): Pumped Other: _____

Pump Type: (circle one) 0.675" dia. SS Bladder (15ml) 0.850" dia. SS Bladder (29ml) Other: _____ PVC Mega-Monsoon 1.66" dia. SS Bladder (150ml)

Day 1 (for wells with <0.33 drawdown)

Pre-Purge DTW: _____ feet(TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume (actual): _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed prior to recording)

Day 2 (for wells pumped/bailed dry) Date: _____

Pre-Purge DTW: _____ feet (TOC) Time: _____
Pump Intake (ft. below DTW): _____ feet (TOC)
Post-Purge DTW: _____ feet (TOC) Time: _____
From AquaTroll 500:
Total Purge Volume: _____ ml
(At least 1x the total tubing and flow thru cell volume calculated below needs to be removed)

Total Purge Volume Calculation:

h_s = Stabilized/Max Drawdown Height = _____ feet

S = Drawdown Volume (2" diameter well) = 618ml/ft x h_s = _____ ml

h_t = Length of Tubing in Well = _____ feet

P = Bladder Pump (3/16" diameter) Tubing + Flow Cell Volume (ml) + Bladder Pump Volume (ml) = 5.43 ml/ft x h_t + 130 ml + ____ ml = _____ ml

Or

P = SS Submersible Pump (3/8" diameter) Tubing + Flow Cell Volume (ml) = 21.72 ml/ft x h_t + 130 ml = _____ ml

T = Total Tubing and Flow Cell Purge Volume = **P** = _____ ml

Time to purge tubing plus flow cell volume = T/ pump purge rate = _____ minutes

Depth to Bottom: _____ feet (TOC) Time: _____ (measure after sample has been collected)

Field parameters will also be recorded by the low flow sampling system.

Time (24 HR)	DTW (ft)	Pump Dial[1]	Purge Rate (ml/min)	Cum. Volume Removed (ml.)	pH	Spec. Cond.[2] µS/cm	Temp. °C	Turbidity NTU	DO[3] Mg/L	ORP[4] mv
Stabilization Criteria:					+/- 0.1	3%	3%	10%	10%	+/- 10 mv

Comments: No sample taken not enough flow

Duplicate - Sample ID.: _____ Time: _____

Field Blank - Sample ID.: _____ Time: _____

(If no quality control samples were collected cross-out, initial, and date)

Signature: _____ Date: 6-9-25

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ANALYTICAL REPORT

PREPARED FOR

Attn: Nick Schrock
AECOM
501 Sycamore Street
Suite #222
Waterloo, Iowa 50703

Generated 6/16/2025 4:19:06 PM

JOB DESCRIPTION

Winneshiek Groundwater Monitoring
2025 Spring Groundwater

JOB NUMBER

310-307712-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

my EOL

Job Notes

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Authorization



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Authorized for release by
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Job ID: 310-307712-1 — Eurofins Cedar Falls

Job Narrative
310-307712-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 6/3/2025 10:20 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.7°C.

GC/MS VOA
Method 8260D: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following sample was received preserved with hydrochloric acid. Vial preservation was pH <2 rather than pH 4-5. : MW-19R (310-307712-1) and MW-1 (310-307712-2). The requested target analyte list includes Acrylonitrile.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B: The laboratory control sample (LCS) for preparation batch 310-456702 and analytical batch 310-457663 recovered outside control limits for the following analytes: silver. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Field Service / Mobile Lab
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: AECOM
Job ID: 310-307712-1
Project/Site: Winneshiek Groundwater Monitoring

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-307712-1	MW-19R	Ground Water	06/02/25 11:00	06/03/25 10:20
310-307712-2	MW-1	Ground Water	06/02/25 12:00	06/03/25 10:20
310-307712-3	MW-18	Water	06/02/25 13:00	06/03/25 10:20
310-307712-4	MW-18-FD	Water	06/02/25 13:10	06/03/25 10:20
310-307712-5	MW-3	Ground Water	06/02/25 14:00	06/03/25 10:20
310-307712-6	MW-37A	Ground Water	06/02/25 15:00	06/03/25 10:20
310-307712-7	MW-33A	Ground Water	06/02/25 16:10	06/03/25 10:20
310-307712-8	MW-2R	Ground Water	06/02/25 17:00	06/03/25 10:20
310-307712-9	Trip Blank	Water	06/02/25 09:00	06/03/25 10:20

Detection Summary

Client: AECOM
Job ID: 310-307712-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-19R — Lab Sample ID: 310-307712-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	75.8		2.00	0.660	ug/L	1		6020B	Total/NA
Cobalt	0.257	J	0.500	0.170	ug/L	1		6020B	Total/NA
Total Suspended Solids	52.0		1.88	1.31	mg/L	1		I-3765-85	Total/NA
Field Turbidity	47.97				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-1 — Lab Sample ID: 310-307712-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	100		2.00	0.660	ug/L	1		6020B	Total/NA
Selenium	1.43	J	5.00	1.40	ug/L	1		6020B	Total/NA
Total Suspended Solids	2.13		1.88	1.31	mg/L	1		I-3765-85	Total/NA
Field Turbidity	1.59				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-18 — Lab Sample ID: 310-307712-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	75.9		2.00	0.660	ug/L	1		6020B	Total/NA
Cobalt	0.231	J	0.500	0.170	ug/L	1		6020B	Total/NA
Total Suspended Solids	3.38		1.88	1.31	mg/L	1		I-3765-85	Total/NA
Field Turbidity	3.43				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-18-FD — Lab Sample ID: 310-307712-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	72.7		2.00	0.660	ug/L	1		6020B	Total/NA
Cobalt	0.221	J	0.500	0.170	ug/L	1		6020B	Total/NA
Total Suspended Solids	2.75		1.88	1.31	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-3 — Lab Sample ID: 310-307712-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.39	J	2.00	0.530	ug/L	1		6020B	Total/NA
Barium	205		2.00	0.660	ug/L	1		6020B	Total/NA
Total Suspended Solids	3.87		1.88	1.31	mg/L	1		I-3765-85	Total/NA
Field Turbidity	17.78				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-37A — Lab Sample ID: 310-307712-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.826	J	2.00	0.530	ug/L	1		6020B	Total/NA
Barium	156		2.00	0.660	ug/L	1		6020B	Total/NA
Total Suspended Solids	6.50		1.88	1.31	mg/L	1		I-3765-85	Total/NA
Field Turbidity	9.71				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-33A — Lab Sample ID: 310-307712-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	10.6		10.0	2.10	ug/L	1		8260D	Total/NA
Acetone	240		10.0	3.10	ug/L	1		8260D	Total/NA
Arsenic	9.86		2.00	0.530	ug/L	1		6020B	Total/NA
Barium	361		2.00	0.660	ug/L	1		6020B	Total/NA
Cadmium	0.107	J	0.200	0.100	ug/L	1		6020B	Total/NA
Cobalt	5.21		0.500	0.170	ug/L	1		6020B	Total/NA
Copper	8.96		5.00	3.20	ug/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: AECOM
Job ID: 310-307712-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-33A (Continued) — Lab Sample ID: 310-307712-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	3.29		0.500	0.330	ug/L	1		6020B	Total/NA
Nickel	5.53		5.00	2.30	ug/L	1		6020B	Total/NA
Selenium	3.17	J	5.00	1.40	ug/L	1		6020B	Total/NA
Vanadium	2.29	J	5.00	1.70	ug/L	1		6020B	Total/NA
Total Suspended Solids	53.0		15.0	10.5	mg/L	1		I-3765-85	Total/NA
Field Turbidity	51.33				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-2R — Lab Sample ID: 310-307712-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	110		2.00	0.660	ug/L	1		6020B	Total/NA
Selenium	2.89	J	5.00	1.40	ug/L	1		6020B	Total/NA
Field Turbidity	1.56				NTU	1		Field Sampling	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 310-307712-9

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-19R
Lab Sample ID: 310-307712-1
Date Collected: 06/02/25 11:00
Matrix: Ground Water
Date Received: 06/03/25 10:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/04/25 17:19	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/04/25 17:19	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/04/25 17:19	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/04/25 17:19	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/04/25 17:19	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/04/25 17:19	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/04/25 17:19	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/04/25 17:19	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/04/25 17:19	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/04/25 17:19	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/04/25 17:19	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/04/25 17:19	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/04/25 17:19	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/04/25 17:19	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/04/25 17:19	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/04/25 17:19	1
Acetone	<3.10		10.0	3.10	ug/L			06/04/25 17:19	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/04/25 17:19	1
Benzene	<0.220		0.500	0.220	ug/L			06/04/25 17:19	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/04/25 17:19	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/04/25 17:19	1
Bromoform	<0.780		5.00	0.780	ug/L			06/04/25 17:19	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/04/25 17:19	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/04/25 17:19	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/04/25 17:19	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/04/25 17:19	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/04/25 17:19	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/04/25 17:19	1
Chloroform	<1.30		3.00	1.30	ug/L			06/04/25 17:19	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/04/25 17:19	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/10/25 00:58	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/04/25 17:19	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/04/25 17:19	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/04/25 17:19	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/04/25 17:19	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/04/25 17:19	1
Styrene	<0.370		1.00	0.370	ug/L			06/04/25 17:19	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/04/25 17:19	1
Toluene	<0.430		1.00	0.430	ug/L			06/04/25 17:19	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/04/25 17:19	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/04/25 17:19	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/04/25 17:19	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/04/25 17:19	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/04/25 17:19	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/04/25 17:19	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/04/25 17:19	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/04/25 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*112*		*76 - 130*		*06/04/25 17:19*	*1*

Client: AECOM
Job ID: 310-307712-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-19R
Lab Sample ID: 310-307712-1
Date Collected: 06/02/25 11:00
Matrix: Ground Water
Date Received: 06/03/25 10:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*113*		*76 - 130*		*06/10/25 00:58*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*06/04/25 17:19*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*06/10/25 00:58*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*06/04/25 17:19*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*06/10/25 00:58*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/05/25 09:40	06/12/25 16:09	1
Arsenic	<0.530		2.00	0.530	ug/L		06/05/25 09:40	06/09/25 16:47	1
Barium	**75.8**		2.00	0.660	ug/L		06/05/25 09:40	06/09/25 16:47	1
Beryllium	<0.330		1.00	0.330	ug/L		06/05/25 09:40	06/10/25 19:07	1
Cadmium	<0.100		0.200	0.100	ug/L		06/05/25 09:40	06/10/25 19:07	1
Chromium	<1.80		5.00	1.80	ug/L		06/05/25 09:40	06/09/25 16:47	1
Cobalt	**0.257**	**J**	0.500	0.170	ug/L		06/05/25 09:40	06/09/25 16:47	1
Copper	<3.20		5.00	3.20	ug/L		06/05/25 09:40	06/09/25 16:47	1
Lead	<0.330		0.500	0.330	ug/L		06/05/25 09:40	06/09/25 16:47	1
Nickel	<2.30		5.00	2.30	ug/L		06/05/25 09:40	06/09/25 16:47	1
Selenium	<1.40		5.00	1.40	ug/L		06/05/25 09:40	06/09/25 16:47	1
Silver	<0.500		1.00	0.500	ug/L		06/05/25 09:40	06/09/25 16:47	1
Thallium	<0.570		1.00	0.570	ug/L		06/12/25 09:25	06/13/25 14:34	1
Vanadium	<1.70		5.00	1.70	ug/L		06/05/25 09:40	06/09/25 16:47	1
Zinc	<13.0		20.0	13.0	ug/L		06/05/25 09:40	06/09/25 16:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**52.0**		1.88	1.31	mg/L			06/03/25 11:06	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**47.97**				NTU			06/02/25 11:00	1

Client: AECOM
Project/Site: Winneshiek Groundwater Monitoring

Job ID: 310-307712-1

Client Sample ID: MW-1
Date Collected: 06/02/25 12:00
Date Received: 06/03/25 10:20

Lab Sample ID: 310-307712-2
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/04/25 17:41	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/04/25 17:41	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/04/25 17:41	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/04/25 17:41	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/04/25 17:41	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/04/25 17:41	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/04/25 17:41	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/04/25 17:41	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/04/25 17:41	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/04/25 17:41	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/04/25 17:41	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/04/25 17:41	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/04/25 17:41	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/04/25 17:41	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/04/25 17:41	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/04/25 17:41	1
Acetone	<3.10		10.0	3.10	ug/L			06/04/25 17:41	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/04/25 17:41	1
Benzene	<0.220		0.500	0.220	ug/L			06/04/25 17:41	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/04/25 17:41	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/04/25 17:41	1
Bromoform	<0.780		5.00	0.780	ug/L			06/04/25 17:41	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/04/25 17:41	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/04/25 17:41	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/04/25 17:41	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/04/25 17:41	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/04/25 17:41	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/04/25 17:41	1
Chloroform	<1.30		3.00	1.30	ug/L			06/04/25 17:41	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/04/25 17:41	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/04/25 17:41	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/04/25 17:41	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/04/25 17:41	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/04/25 17:41	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/04/25 17:41	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/04/25 17:41	1
Styrene	<0.370		1.00	0.370	ug/L			06/04/25 17:41	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/04/25 17:41	1
Toluene	<0.430		1.00	0.430	ug/L			06/04/25 17:41	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/04/25 17:41	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/04/25 17:41	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/04/25 17:41	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/04/25 17:41	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/04/25 17:41	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/04/25 17:41	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/04/25 17:41	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/04/25 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*112*		*76 - 130*		*06/04/25 17:41*	*1*

Client: AECOM
Job ID: 310-307712-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-1
Lab Sample ID: 310-307712-2
Date Collected: 06/02/25 12:00
Matrix: Ground Water
Date Received: 06/03/25 10:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*80 - 120*		*06/04/25 17:41*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*06/04/25 17:41*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/05/25 09:40	06/12/25 16:12	1
Arsenic	<0.530		2.00	0.530	ug/L		06/05/25 09:40	06/09/25 16:49	1
Barium	**100**		2.00	0.660	ug/L		06/05/25 09:40	06/09/25 16:49	1
Beryllium	<0.330		1.00	0.330	ug/L		06/05/25 09:40	06/10/25 19:09	1
Cadmium	<0.100		0.200	0.100	ug/L		06/05/25 09:40	06/10/25 19:09	1
Chromium	<1.80		5.00	1.80	ug/L		06/05/25 09:40	06/09/25 16:49	1
Cobalt	<0.170		0.500	0.170	ug/L		06/05/25 09:40	06/09/25 16:49	1
Copper	<3.20		5.00	3.20	ug/L		06/05/25 09:40	06/09/25 16:49	1
Lead	<0.330		0.500	0.330	ug/L		06/05/25 09:40	06/09/25 16:49	1
Nickel	<2.30		5.00	2.30	ug/L		06/05/25 09:40	06/09/25 16:49	1
Selenium	**1.43**	**J**	5.00	1.40	ug/L		06/05/25 09:40	06/09/25 16:49	1
Silver	<0.500		1.00	0.500	ug/L		06/05/25 09:40	06/09/25 16:49	1
Thallium	<0.570		1.00	0.570	ug/L		06/12/25 09:25	06/13/25 14:45	1
Vanadium	<1.70		5.00	1.70	ug/L		06/05/25 09:40	06/09/25 16:49	1
Zinc	<13.0		20.0	13.0	ug/L		06/05/25 09:40	06/09/25 16:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**2.13**		1.88	1.31	mg/L			06/03/25 11:06	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**1.59**				NTU			06/02/25 12:00	1

Client: AECOM
Job ID: 310-307712-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-18
Lab Sample ID: 310-307712-3
Date Collected: 06/02/25 13:00
Matrix: Water
Date Received: 06/03/25 10:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/05/25 01:34	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/05/25 01:34	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/05/25 01:34	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/05/25 01:34	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/05/25 01:34	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/05/25 01:34	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/05/25 01:34	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/05/25 01:34	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/05/25 01:34	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/05/25 01:34	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/05/25 01:34	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/05/25 01:34	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/05/25 01:34	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/05/25 01:34	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/05/25 01:34	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/05/25 01:34	1
Acetone	<3.10		10.0	3.10	ug/L			06/05/25 01:34	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/05/25 01:34	1
Benzene	<0.220		0.500	0.220	ug/L			06/05/25 01:34	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/05/25 01:34	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/05/25 01:34	1
Bromoform	<0.780		5.00	0.780	ug/L			06/05/25 01:34	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/05/25 01:34	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/05/25 01:34	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/05/25 01:34	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/05/25 01:34	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/05/25 01:34	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/05/25 01:34	1
Chloroform	<1.30		3.00	1.30	ug/L			06/05/25 01:34	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/05/25 01:34	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/05/25 01:34	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/05/25 01:34	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/05/25 01:34	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/05/25 01:34	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/05/25 01:34	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/05/25 01:34	1
Styrene	<0.370		1.00	0.370	ug/L			06/05/25 01:34	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/05/25 01:34	1
Toluene	<0.430		1.00	0.430	ug/L			06/05/25 01:34	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/05/25 01:34	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/05/25 01:34	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/05/25 01:34	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/05/25 01:34	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/05/25 01:34	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/05/25 01:34	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/05/25 01:34	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/05/25 01:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*112*		*76 - 130*		*06/05/25 01:34*	*1*

Client: AECOM
Job ID: 310-307712-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-18
Lab Sample ID: 310-307712-3
Date Collected: 06/02/25 13:00
Matrix: Water
Date Received: 06/03/25 10:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*80 - 120*		*06/05/25 01:34*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*06/05/25 01:34*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/05/25 09:40	06/12/25 16:15	1
Arsenic	<0.530		2.00	0.530	ug/L		06/05/25 09:40	06/09/25 16:52	1
Barium	**75.9**		2.00	0.660	ug/L		06/05/25 09:40	06/09/25 16:52	1
Beryllium	<0.330		1.00	0.330	ug/L		06/05/25 09:40	06/10/25 19:12	1
Cadmium	<0.100		0.200	0.100	ug/L		06/05/25 09:40	06/10/25 19:12	1
Chromium	<1.80		5.00	1.80	ug/L		06/05/25 09:40	06/09/25 16:52	1
Cobalt	**0.231**	**J**	0.500	0.170	ug/L		06/05/25 09:40	06/09/25 16:52	1
Copper	<3.20		5.00	3.20	ug/L		06/05/25 09:40	06/09/25 16:52	1
Lead	<0.330		0.500	0.330	ug/L		06/05/25 09:40	06/09/25 16:52	1
Nickel	<2.30		5.00	2.30	ug/L		06/05/25 09:40	06/09/25 16:52	1
Selenium	<1.40		5.00	1.40	ug/L		06/05/25 09:40	06/09/25 16:52	1
Silver	<0.500		1.00	0.500	ug/L		06/05/25 09:40	06/09/25 16:52	1
Thallium	<0.570		1.00	0.570	ug/L		06/12/25 09:25	06/13/25 14:48	1
Vanadium	<1.70		5.00	1.70	ug/L		06/05/25 09:40	06/09/25 16:52	1
Zinc	<13.0		20.0	13.0	ug/L		06/05/25 09:40	06/09/25 16:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**3.38**		1.88	1.31	mg/L			06/03/25 11:06	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**3.43**				NTU			06/02/25 13:00	1

Client: AECOM
Project/Site: Winneshiek Groundwater Monitoring

Job ID: 310-307712-1

Client Sample ID: MW-18-FD
Date Collected: 06/02/25 13:10
Date Received: 06/03/25 10:20

Lab Sample ID: 310-307712-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/05/25 01:57	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/05/25 01:57	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/05/25 01:57	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/05/25 01:57	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/05/25 01:57	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/05/25 01:57	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/05/25 01:57	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/05/25 01:57	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/05/25 01:57	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/05/25 01:57	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/05/25 01:57	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/05/25 01:57	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/05/25 01:57	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/05/25 01:57	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/05/25 01:57	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/05/25 01:57	1
Acetone	<3.10		10.0	3.10	ug/L			06/05/25 01:57	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/05/25 01:57	1
Benzene	<0.220		0.500	0.220	ug/L			06/05/25 01:57	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/05/25 01:57	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/05/25 01:57	1
Bromoform	<0.780		5.00	0.780	ug/L			06/05/25 01:57	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/05/25 01:57	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/05/25 01:57	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/05/25 01:57	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/05/25 01:57	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/05/25 01:57	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/05/25 01:57	1
Chloroform	<1.30		3.00	1.30	ug/L			06/05/25 01:57	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/05/25 01:57	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/05/25 01:57	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/05/25 01:57	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/05/25 01:57	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/05/25 01:57	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/05/25 01:57	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/05/25 01:57	1
Styrene	<0.370		1.00	0.370	ug/L			06/05/25 01:57	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/05/25 01:57	1
Toluene	<0.430		1.00	0.430	ug/L			06/05/25 01:57	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/05/25 01:57	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/05/25 01:57	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/05/25 01:57	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/05/25 01:57	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/05/25 01:57	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/05/25 01:57	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/05/25 01:57	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/05/25 01:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*111*		*76 - 130*		*06/05/25 01:57*	*1*

Client Sample ID: MW-18-FD
Lab Sample ID: 310-307712-4
Date Collected: 06/02/25 13:10
Matrix: Water
Date Received: 06/03/25 10:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*80 - 120*		*06/05/25 01:57*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*06/05/25 01:57*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/05/25 09:40	06/12/25 16:18	1
Arsenic	<0.530		2.00	0.530	ug/L		06/05/25 09:40	06/09/25 16:54	1
Barium	**72.7**		2.00	0.660	ug/L		06/05/25 09:40	06/09/25 16:54	1
Beryllium	<0.330		1.00	0.330	ug/L		06/05/25 09:40	06/10/25 19:14	1
Cadmium	<0.100		0.200	0.100	ug/L		06/05/25 09:40	06/10/25 19:14	1
Chromium	<1.80		5.00	1.80	ug/L		06/05/25 09:40	06/09/25 16:54	1
Cobalt	**0.221**	**J**	0.500	0.170	ug/L		06/05/25 09:40	06/09/25 16:54	1
Copper	<3.20		5.00	3.20	ug/L		06/05/25 09:40	06/09/25 16:54	1
Lead	<0.330		0.500	0.330	ug/L		06/05/25 09:40	06/09/25 16:54	1
Nickel	<2.30		5.00	2.30	ug/L		06/05/25 09:40	06/09/25 16:54	1
Selenium	<1.40		5.00	1.40	ug/L		06/05/25 09:40	06/09/25 16:54	1
Silver	<0.500		1.00	0.500	ug/L		06/05/25 09:40	06/09/25 16:54	1
Thallium	<0.570		1.00	0.570	ug/L		06/12/25 09:25	06/13/25 14:51	1
Vanadium	<1.70		5.00	1.70	ug/L		06/05/25 09:40	06/09/25 16:54	1
Zinc	<13.0		20.0	13.0	ug/L		06/05/25 09:40	06/09/25 16:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**2.75**		1.88	1.31	mg/L			06/03/25 11:06	1

Client: AECOM
Job ID: 310-307712-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-3
Lab Sample ID: 310-307712-5
Date Collected: 06/02/25 14:00
Matrix: Ground Water
Date Received: 06/03/25 10:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/05/25 02:19	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/05/25 02:19	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/05/25 02:19	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/05/25 02:19	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/05/25 02:19	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/05/25 02:19	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/05/25 02:19	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/05/25 02:19	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/05/25 02:19	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/05/25 02:19	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/05/25 02:19	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/05/25 02:19	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/05/25 02:19	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/05/25 02:19	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/05/25 02:19	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/05/25 02:19	1
Acetone	<3.10		10.0	3.10	ug/L			06/05/25 02:19	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/05/25 02:19	1
Benzene	<0.220		0.500	0.220	ug/L			06/05/25 02:19	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/05/25 02:19	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/05/25 02:19	1
Bromoform	<0.780		5.00	0.780	ug/L			06/05/25 02:19	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/05/25 02:19	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/05/25 02:19	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/05/25 02:19	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/05/25 02:19	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/05/25 02:19	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/05/25 02:19	1
Chloroform	<1.30		3.00	1.30	ug/L			06/05/25 02:19	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/05/25 02:19	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/05/25 02:19	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/05/25 02:19	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/05/25 02:19	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/05/25 02:19	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/05/25 02:19	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/05/25 02:19	1
Styrene	<0.370		1.00	0.370	ug/L			06/05/25 02:19	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/05/25 02:19	1
Toluene	<0.430		1.00	0.430	ug/L			06/05/25 02:19	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/05/25 02:19	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/05/25 02:19	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/05/25 02:19	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/05/25 02:19	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/05/25 02:19	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/05/25 02:19	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/05/25 02:19	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/05/25 02:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*111*		*76 - 130*		*06/05/25 02:19*	*1*

Client: AECOM
Job ID: 310-307712-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-3
Lab Sample ID: 310-307712-5
Date Collected: 06/02/25 14:00
Matrix: Ground Water
Date Received: 06/03/25 10:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*80 - 120*		*06/05/25 02:19*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*06/05/25 02:19*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/06/25 09:00	06/13/25 17:12	1
Arsenic	**1.39**	**J**	2.00	0.530	ug/L		06/06/25 09:00	06/13/25 17:12	1
Barium	**205**		2.00	0.660	ug/L		06/06/25 09:00	06/13/25 17:12	1
Beryllium	<0.330		1.00	0.330	ug/L		06/06/25 09:00	06/16/25 13:55	1
Cadmium	<0.100		0.200	0.100	ug/L		06/06/25 09:00	06/13/25 17:12	1
Chromium	<1.80		5.00	1.80	ug/L		06/06/25 09:00	06/13/25 17:12	1
Cobalt	<0.170		0.500	0.170	ug/L		06/06/25 09:00	06/13/25 17:12	1
Copper	<3.20		5.00	3.20	ug/L		06/06/25 09:00	06/13/25 17:12	1
Lead	<0.330		0.500	0.330	ug/L		06/06/25 09:00	06/13/25 17:12	1
Nickel	<2.30		5.00	2.30	ug/L		06/06/25 09:00	06/13/25 17:12	1
Selenium	<1.40		5.00	1.40	ug/L		06/06/25 09:00	06/13/25 17:12	1
Silver	<0.500	*+	1.00	0.500	ug/L		06/06/25 09:00	06/13/25 17:12	1
Thallium	<0.570		1.00	0.570	ug/L		06/06/25 09:00	06/13/25 17:12	1
Vanadium	<1.70		5.00	1.70	ug/L		06/06/25 09:00	06/13/25 17:12	1
Zinc	<13.0		20.0	13.0	ug/L		06/06/25 09:00	06/13/25 17:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**3.87**		1.88	1.31	mg/L			06/03/25 11:06	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**17.78**				NTU			06/02/25 14:00	1

Client Sample ID: MW-37A
Lab Sample ID: 310-307712-6
Date Collected: 06/02/25 15:00
Matrix: Ground Water
Date Received: 06/03/25 10:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/05/25 02:42	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/05/25 02:42	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/05/25 02:42	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/05/25 02:42	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/05/25 02:42	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/05/25 02:42	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/05/25 02:42	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/05/25 02:42	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/05/25 02:42	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/05/25 02:42	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/05/25 02:42	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/05/25 02:42	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/05/25 02:42	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/05/25 02:42	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/05/25 02:42	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/05/25 02:42	1
Acetone	<3.10		10.0	3.10	ug/L			06/05/25 02:42	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/05/25 02:42	1
Benzene	<0.220		0.500	0.220	ug/L			06/05/25 02:42	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/05/25 02:42	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/05/25 02:42	1
Bromoform	<0.780		5.00	0.780	ug/L			06/05/25 02:42	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/05/25 02:42	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/05/25 02:42	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/05/25 02:42	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/05/25 02:42	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/05/25 02:42	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/05/25 02:42	1
Chloroform	<1.30		3.00	1.30	ug/L			06/05/25 02:42	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/05/25 02:42	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/05/25 02:42	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/05/25 02:42	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/05/25 02:42	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/05/25 02:42	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/05/25 02:42	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/05/25 02:42	1
Styrene	<0.370		1.00	0.370	ug/L			06/05/25 02:42	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/05/25 02:42	1
Toluene	<0.430		1.00	0.430	ug/L			06/05/25 02:42	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/05/25 02:42	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/05/25 02:42	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/05/25 02:42	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/05/25 02:42	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/05/25 02:42	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/05/25 02:42	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/05/25 02:42	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/05/25 02:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*108*		*76 - 130*		*06/05/25 02:42*	*1*

Client Sample ID: MW-37A
Lab Sample ID: 310-307712-6
Date Collected: 06/02/25 15:00
Matrix: Ground Water
Date Received: 06/03/25 10:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*80 - 120*		*06/05/25 02:42*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*06/05/25 02:42*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/06/25 09:00	06/13/25 17:14	1
Arsenic	**0.826**	**J**	2.00	0.530	ug/L		06/06/25 09:00	06/13/25 17:14	1
Barium	**156**		2.00	0.660	ug/L		06/06/25 09:00	06/13/25 17:14	1
Beryllium	<0.330		1.00	0.330	ug/L		06/06/25 09:00	06/16/25 13:58	1
Cadmium	<0.100		0.200	0.100	ug/L		06/06/25 09:00	06/13/25 17:14	1
Chromium	<1.80		5.00	1.80	ug/L		06/06/25 09:00	06/13/25 17:14	1
Cobalt	<0.170		0.500	0.170	ug/L		06/06/25 09:00	06/13/25 17:14	1
Copper	<3.20		5.00	3.20	ug/L		06/06/25 09:00	06/13/25 17:14	1
Lead	<0.330		0.500	0.330	ug/L		06/06/25 09:00	06/13/25 17:14	1
Nickel	<2.30		5.00	2.30	ug/L		06/06/25 09:00	06/13/25 17:14	1
Selenium	<1.40		5.00	1.40	ug/L		06/06/25 09:00	06/13/25 17:14	1
Silver	<0.500	*+	1.00	0.500	ug/L		06/06/25 09:00	06/13/25 17:14	1
Thallium	<0.570		1.00	0.570	ug/L		06/06/25 09:00	06/13/25 17:14	1
Vanadium	<1.70		5.00	1.70	ug/L		06/06/25 09:00	06/13/25 17:14	1
Zinc	<13.0		20.0	13.0	ug/L		06/06/25 09:00	06/13/25 17:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**6.50**		1.88	1.31	mg/L			06/03/25 11:06	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**9.71**				NTU			06/02/25 15:00	1

Client: AECOM
Project/Site: Winneshiek Groundwater Monitoring

Job ID: 310-307712-1

Client Sample ID: MW-33A
Date Collected: 06/02/25 16:10
Date Received: 06/03/25 10:20

Lab Sample ID: 310-307712-7
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/05/25 03:05	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/05/25 03:05	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/05/25 03:05	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/05/25 03:05	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/05/25 03:05	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/05/25 03:05	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/05/25 03:05	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/05/25 03:05	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/05/25 03:05	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/05/25 03:05	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/05/25 03:05	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/05/25 03:05	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/05/25 03:05	1
2-Butanone (MEK)	**10.6**		10.0	2.10	ug/L			06/05/25 03:05	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/05/25 03:05	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/05/25 03:05	1
Acetone	**240**		10.0	3.10	ug/L			06/05/25 03:05	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/05/25 03:05	1
Benzene	<0.220		0.500	0.220	ug/L			06/05/25 03:05	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/05/25 03:05	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/05/25 03:05	1
Bromoform	<0.780		5.00	0.780	ug/L			06/05/25 03:05	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/05/25 03:05	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/05/25 03:05	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/05/25 03:05	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/05/25 03:05	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/05/25 03:05	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/05/25 03:05	1
Chloroform	<1.30		3.00	1.30	ug/L			06/05/25 03:05	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/05/25 03:05	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/05/25 03:05	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/05/25 03:05	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/05/25 03:05	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/05/25 03:05	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/05/25 03:05	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/05/25 03:05	1
Styrene	<0.370		1.00	0.370	ug/L			06/05/25 03:05	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/05/25 03:05	1
Toluene	<0.430		1.00	0.430	ug/L			06/05/25 03:05	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/05/25 03:05	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/05/25 03:05	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/05/25 03:05	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/05/25 03:05	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/05/25 03:05	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/05/25 03:05	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/05/25 03:05	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/05/25 03:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*120*		*76 - 130*		*06/05/25 03:05*	*1*

Client: AECOM
Job ID: 310-307712-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-33A
Lab Sample ID: 310-307712-7
Date Collected: 06/02/25 16:10
Matrix: Ground Water
Date Received: 06/03/25 10:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*80 - 120*		*06/05/25 03:05*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*06/05/25 03:05*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/06/25 09:00	06/13/25 17:26	1
Arsenic	**9.86**		2.00	0.530	ug/L		06/06/25 09:00	06/13/25 17:26	1
Barium	**361**		2.00	0.660	ug/L		06/06/25 09:00	06/13/25 17:26	1
Beryllium	<0.330		1.00	0.330	ug/L		06/06/25 09:00	06/16/25 14:04	1
Cadmium	**0.107**	**J**	0.200	0.100	ug/L		06/06/25 09:00	06/13/25 17:26	1
Chromium	<1.80		5.00	1.80	ug/L		06/06/25 09:00	06/13/25 17:26	1
Cobalt	**5.21**		0.500	0.170	ug/L		06/06/25 09:00	06/13/25 17:26	1
Copper	**8.96**		5.00	3.20	ug/L		06/06/25 09:00	06/13/25 17:26	1
Lead	**3.29**		0.500	0.330	ug/L		06/06/25 09:00	06/13/25 17:26	1
Nickel	**5.53**		5.00	2.30	ug/L		06/06/25 09:00	06/13/25 17:26	1
Selenium	**3.17**	**J**	5.00	1.40	ug/L		06/06/25 09:00	06/13/25 17:26	1
Silver	<0.500	*+	1.00	0.500	ug/L		06/06/25 09:00	06/13/25 17:26	1
Thallium	<0.570		1.00	0.570	ug/L		06/06/25 09:00	06/13/25 17:26	1
Vanadium	**2.29**	**J**	5.00	1.70	ug/L		06/06/25 09:00	06/13/25 17:26	1
Zinc	<13.0		20.0	13.0	ug/L		06/06/25 09:00	06/13/25 17:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**53.0**		15.0	10.5	mg/L			06/03/25 11:06	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**51.33**				NTU			06/02/25 16:10	1

Client: AECOM
Project/Site: Winneshiek Groundwater Monitoring

Job ID: 310-307712-1

Client Sample ID: MW-2R
Date Collected: 06/02/25 17:00
Date Received: 06/03/25 10:20

Lab Sample ID: 310-307712-8
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/05/25 03:27	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/05/25 03:27	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/05/25 03:27	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/05/25 03:27	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/05/25 03:27	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/05/25 03:27	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/05/25 03:27	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/05/25 03:27	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/05/25 03:27	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/05/25 03:27	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/05/25 03:27	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/05/25 03:27	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/05/25 03:27	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/05/25 03:27	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/05/25 03:27	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/05/25 03:27	1
Acetone	<3.10		10.0	3.10	ug/L			06/05/25 03:27	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/05/25 03:27	1
Benzene	<0.220		0.500	0.220	ug/L			06/05/25 03:27	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/05/25 03:27	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/05/25 03:27	1
Bromoform	<0.780		5.00	0.780	ug/L			06/05/25 03:27	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/05/25 03:27	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/05/25 03:27	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/05/25 03:27	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/05/25 03:27	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/05/25 03:27	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/05/25 03:27	1
Chloroform	<1.30		3.00	1.30	ug/L			06/05/25 03:27	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/05/25 03:27	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/05/25 03:27	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/05/25 03:27	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/05/25 03:27	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/05/25 03:27	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/05/25 03:27	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/05/25 03:27	1
Styrene	<0.370		1.00	0.370	ug/L			06/05/25 03:27	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/05/25 03:27	1
Toluene	<0.430		1.00	0.430	ug/L			06/05/25 03:27	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/05/25 03:27	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/05/25 03:27	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/05/25 03:27	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/05/25 03:27	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/05/25 03:27	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/05/25 03:27	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/05/25 03:27	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/05/25 03:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*114*		*76 - 130*		*06/05/25 03:27*	*1*

Client: AECOM
Job ID: 310-307712-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-2R
Lab Sample ID: 310-307712-8
Date Collected: 06/02/25 17:00
Matrix: Ground Water
Date Received: 06/03/25 10:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*80 - 120*		*06/05/25 03:27*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*06/05/25 03:27*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/06/25 09:00	06/13/25 17:29	1
Arsenic	<0.530		2.00	0.530	ug/L		06/06/25 09:00	06/13/25 17:29	1
Barium	**110**		2.00	0.660	ug/L		06/06/25 09:00	06/13/25 17:29	1
Beryllium	<0.330		1.00	0.330	ug/L		06/06/25 09:00	06/16/25 14:07	1
Cadmium	<0.100		0.200	0.100	ug/L		06/06/25 09:00	06/13/25 17:29	1
Chromium	<1.80		5.00	1.80	ug/L		06/06/25 09:00	06/13/25 17:29	1
Cobalt	<0.170		0.500	0.170	ug/L		06/06/25 09:00	06/13/25 17:29	1
Copper	<3.20		5.00	3.20	ug/L		06/06/25 09:00	06/13/25 17:29	1
Lead	<0.330		0.500	0.330	ug/L		06/06/25 09:00	06/13/25 17:29	1
Nickel	<2.30		5.00	2.30	ug/L		06/06/25 09:00	06/13/25 17:29	1
Selenium	**2.89**	**J**	5.00	1.40	ug/L		06/06/25 09:00	06/13/25 17:29	1
Silver	<0.500	*+	1.00	0.500	ug/L		06/06/25 09:00	06/13/25 17:29	1
Thallium	<0.570		1.00	0.570	ug/L		06/06/25 09:00	06/13/25 17:29	1
Vanadium	<1.70		5.00	1.70	ug/L		06/06/25 09:00	06/13/25 17:29	1
Zinc	<13.0		20.0	13.0	ug/L		06/06/25 09:00	06/13/25 17:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.31		1.88	1.31	mg/L			06/03/25 11:06	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**1.56**				NTU			06/02/25 17:00	1

Client Sample ID: Trip Blank
Lab Sample ID: 310-307712-9
Date Collected: 06/02/25 09:00
Matrix: Water
Date Received: 06/03/25 10:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/04/25 23:19	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/04/25 23:19	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/04/25 23:19	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/04/25 23:19	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/04/25 23:19	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/04/25 23:19	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/04/25 23:19	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/04/25 23:19	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/04/25 23:19	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/04/25 23:19	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/04/25 23:19	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/04/25 23:19	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/04/25 23:19	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/04/25 23:19	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/04/25 23:19	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/04/25 23:19	1
Acetone	<3.10		10.0	3.10	ug/L			06/04/25 23:19	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/04/25 23:19	1
Benzene	<0.220		0.500	0.220	ug/L			06/04/25 23:19	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/04/25 23:19	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/04/25 23:19	1
Bromoform	<0.780		5.00	0.780	ug/L			06/04/25 23:19	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/04/25 23:19	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/04/25 23:19	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/04/25 23:19	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/04/25 23:19	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/04/25 23:19	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/04/25 23:19	1
Chloroform	<1.30		3.00	1.30	ug/L			06/04/25 23:19	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/04/25 23:19	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/04/25 23:19	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/04/25 23:19	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/04/25 23:19	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/04/25 23:19	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/04/25 23:19	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/04/25 23:19	1
Styrene	<0.370		1.00	0.370	ug/L			06/04/25 23:19	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/04/25 23:19	1
Toluene	<0.430		1.00	0.430	ug/L			06/04/25 23:19	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/04/25 23:19	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/04/25 23:19	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/04/25 23:19	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/04/25 23:19	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/04/25 23:19	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/04/25 23:19	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/04/25 23:19	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/04/25 23:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*76 - 130*		*06/04/25 23:19*	*1*

Client Sample ID: Trip Blank
Lab Sample ID: 310-307712-9
Date Collected: 06/02/25 09:00
Matrix: Water
Date Received: 06/03/25 10:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		80 - 120		06/04/25 23:19	1
4-Bromofluorobenzene (Surr)	104		80 - 120		06/04/25 23:19	1

Definitions/Glossary

Client: AECOM
Job ID: 310-307712-1
Project/Site: Winneshiek Groundwater Monitoring

Qualifiers

Metals

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: AECOM
Job ID: 310-307712-1
Project/Site: Winneshiek Groundwater Monitoring

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Ground Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(76-130)	(80-120)	(80-120)
310-307712-1	MW-19R	112	94	105
310-307712-1	MW-19R	113	92	102
310-307712-2	MW-1	112	96	99
310-307712-5	MW-3	111	94	102
310-307712-6	MW-37A	108	94	99
310-307712-7	MW-33A	120	100	102
310-307712-8	MW-2R	114	94	101

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(76-130)	(80-120)	(80-120)
310-307712-3	MW-18	112	94	105
310-307712-4	MW-18-FD	111	95	103
310-307712-9	Trip Blank	110	96	104
LCS 310-456496/7	Lab Control Sample	101	102	100
LCS 310-456496/8	Lab Control Sample	108	96	102
LCS 310-456556/6	Lab Control Sample	98	102	98
LCS 310-456556/7	Lab Control Sample	109	94	101
LCS 310-456982/6	Lab Control Sample	100	100	101
LCS 310-456982/7	Lab Control Sample	110	92	106
MB 310-456496/6	Method Blank	110	93	105
MB 310-456556/5	Method Blank	107	95	99
MB 310-456982/5	Method Blank	110	94	101

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 310-456496/6
Matrix: Water
Analysis Batch: 456496

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/04/25 09:47	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/04/25 09:47	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/04/25 09:47	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/04/25 09:47	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/04/25 09:47	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/04/25 09:47	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/04/25 09:47	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/04/25 09:47	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/04/25 09:47	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/04/25 09:47	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/04/25 09:47	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/04/25 09:47	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/04/25 09:47	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/04/25 09:47	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/04/25 09:47	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/04/25 09:47	1
Acetone	<3.10		10.0	3.10	ug/L			06/04/25 09:47	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/04/25 09:47	1
Benzene	<0.220		0.500	0.220	ug/L			06/04/25 09:47	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/04/25 09:47	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/04/25 09:47	1
Bromoform	<0.780		5.00	0.780	ug/L			06/04/25 09:47	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/04/25 09:47	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/04/25 09:47	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/04/25 09:47	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/04/25 09:47	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/04/25 09:47	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/04/25 09:47	1
Chloroform	<1.30		3.00	1.30	ug/L			06/04/25 09:47	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/04/25 09:47	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/04/25 09:47	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/04/25 09:47	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/04/25 09:47	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/04/25 09:47	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/04/25 09:47	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/04/25 09:47	1
Styrene	<0.370		1.00	0.370	ug/L			06/04/25 09:47	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/04/25 09:47	1
Toluene	<0.430		1.00	0.430	ug/L			06/04/25 09:47	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/04/25 09:47	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/04/25 09:47	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/04/25 09:47	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/04/25 09:47	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/04/25 09:47	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/04/25 09:47	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/04/25 09:47	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/04/25 09:47	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-456496/6
Matrix: Water
Analysis Batch: 456496

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*110*		*76 - 130*		*06/04/25 09:47*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*06/04/25 09:47*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*06/04/25 09:47*	*1*

Lab Sample ID: LCS 310-456496/7
Matrix: Water
Analysis Batch: 456496

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	20.44		ug/L		102	70 - 121
1,1,1-Trichloroethane	20.0	22.61		ug/L		113	69 - 130
1,1,2,2-Tetrachloroethane	20.0	19.89		ug/L		99	70 - 122
1,1,2-Trichloroethane	20.0	21.92		ug/L		110	75 - 121
1,1-Dichloroethane	20.0	21.77		ug/L		109	69 - 127
1,1-Dichloroethene	20.0	21.66		ug/L		108	64 - 134
1,2,3-Trichloropropane	20.0	21.66		ug/L		108	70 - 122
1,2-Dibromo-3-Chloropropane	20.0	19.33		ug/L		97	62 - 132
1,2-Dibromoethane (EDB)	20.0	21.78		ug/L		109	74 - 122
1,2-Dichlorobenzene	20.0	20.76		ug/L		104	74 - 120
1,2-Dichloroethane	20.0	21.25		ug/L		106	68 - 125
1,2-Dichloropropane	20.0	22.99		ug/L		115	72 - 128
1,4-Dichlorobenzene	20.0	20.36		ug/L		102	72 - 120
2-Butanone (MEK)	40.0	41.15		ug/L		103	60 - 134
2-Hexanone	40.0	45.11		ug/L		113	62 - 139
4-Methyl-2-pentanone (MIBK)	40.0	44.63		ug/L		112	62 - 136
Acetone	40.0	48.55		ug/L		121	59 - 136
Acrylonitrile	200	224.6		ug/L		112	50 - 150
Benzene	20.0	21.76		ug/L		109	71 - 125
Bromochloromethane	20.0	22.13		ug/L		111	69 - 131
Bromodichloromethane	20.0	20.56		ug/L		103	70 - 122
Bromoform	20.0	18.19		ug/L		91	62 - 122
Carbon disulfide	20.0	21.67		ug/L		108	58 - 137
Carbon tetrachloride	20.0	22.29		ug/L		111	63 - 136
Chlorobenzene	20.0	20.95		ug/L		105	74 - 120
Chlorodibromomethane	20.0	18.02		ug/L		90	69 - 121
Chloroform	20.0	20.64		ug/L		103	72 - 122
cis-1,2-Dichloroethene	20.0	21.10		ug/L		106	72 - 123
cis-1,3-Dichloropropene	20.0	18.42		ug/L		92	72 - 123
Dibromomethane	20.0	20.95		ug/L		105	72 - 122
Ethylbenzene	20.0	22.05		ug/L		110	75 - 120
Iodomethane	20.0	17.69		ug/L		88	18 - 150
Methylene Chloride	20.0	23.60		ug/L		118	72 - 128
Styrene	20.0	22.18		ug/L		111	74 - 122
Tetrachloroethene	20.0	21.50		ug/L		108	70 - 128
Toluene	20.0	21.34		ug/L		107	74 - 120
trans-1,2-Dichloroethene	20.0	21.27		ug/L		106	67 - 127
trans-1,3-Dichloropropene	20.0	17.81		ug/L		89	67 - 123
trans-1,4-Dichloro-2-butene	20.0	20.33		ug/L		102	50 - 150

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-456496/7
Matrix: Water
Analysis Batch: 456496

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Trichloroethene	20.0	22.13		ug/L		111	70 - 128
Vinyl acetate	40.0	37.68		ug/L		94	50 - 150
Xylenes, Total	40.0	44.10		ug/L		110	74 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*101*		*76 - 130*
Toluene-d8 (Surr)	*102*		*80 - 120*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*

Lab Sample ID: LCS 310-456496/8
Matrix: Water
Analysis Batch: 456496

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	17.14		ug/L		86	33 - 138
Chloroethane	20.0	18.73		ug/L		94	59 - 139
Chloromethane	20.0	19.40		ug/L		97	52 - 146
Trichlorofluoromethane	20.0	19.19		ug/L		96	55 - 150
Vinyl chloride	20.0	18.57		ug/L		93	60 - 142

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*108*		*76 - 130*
Toluene-d8 (Surr)	*96*		*80 - 120*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*

Lab Sample ID: MB 310-456556/5
Matrix: Water
Analysis Batch: 456556

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/04/25 20:41	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/04/25 20:41	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/04/25 20:41	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/04/25 20:41	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/04/25 20:41	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/04/25 20:41	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/04/25 20:41	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/04/25 20:41	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/04/25 20:41	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/04/25 20:41	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/04/25 20:41	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/04/25 20:41	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/04/25 20:41	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/04/25 20:41	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/04/25 20:41	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/04/25 20:41	1
Acetone	<3.10		10.0	3.10	ug/L			06/04/25 20:41	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/04/25 20:41	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-456556/5
Matrix: Water
Analysis Batch: 456556

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.220		0.500	0.220	ug/L			06/04/25 20:41	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/04/25 20:41	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/04/25 20:41	1
Bromoform	<0.780		5.00	0.780	ug/L			06/04/25 20:41	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/04/25 20:41	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/04/25 20:41	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/04/25 20:41	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/04/25 20:41	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/04/25 20:41	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/04/25 20:41	1
Chloroform	<1.30		3.00	1.30	ug/L			06/04/25 20:41	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/04/25 20:41	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/04/25 20:41	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/04/25 20:41	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/04/25 20:41	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/04/25 20:41	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/04/25 20:41	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/04/25 20:41	1
Styrene	<0.370		1.00	0.370	ug/L			06/04/25 20:41	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/04/25 20:41	1
Toluene	<0.430		1.00	0.430	ug/L			06/04/25 20:41	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/04/25 20:41	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/04/25 20:41	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/04/25 20:41	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/04/25 20:41	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/04/25 20:41	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/04/25 20:41	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/04/25 20:41	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/04/25 20:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*107*		*76 - 130*		*06/04/25 20:41*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*06/04/25 20:41*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*06/04/25 20:41*	*1*

Lab Sample ID: LCS 310-456556/6
Matrix: Water
Analysis Batch: 456556

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	19.26		ug/L		96	70 - 121
1,1,1-Trichloroethane	20.0	19.42		ug/L		97	69 - 130
1,1,2,2-Tetrachloroethane	20.0	19.95		ug/L		100	70 - 122
1,1,2-Trichloroethane	20.0	20.31		ug/L		102	75 - 121
1,1-Dichloroethane	20.0	19.23		ug/L		96	69 - 127
1,1-Dichloroethene	20.0	19.72		ug/L		99	64 - 134
1,2,3-Trichloropropane	20.0	19.89		ug/L		99	70 - 122
1,2-Dibromo-3-Chloropropane	20.0	18.15		ug/L		91	62 - 132

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-456556/6
Matrix: Water
Analysis Batch: 456556

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	20.0	20.35		ug/L		102	74 - 122
1,2-Dichlorobenzene	20.0	19.81		ug/L		99	74 - 120
1,2-Dichloroethane	20.0	18.70		ug/L		94	68 - 125
1,2-Dichloropropane	20.0	20.48		ug/L		102	72 - 128
1,4-Dichlorobenzene	20.0	19.47		ug/L		97	72 - 120
2-Butanone (MEK)	40.0	41.83		ug/L		105	60 - 134
2-Hexanone	40.0	43.18		ug/L		108	62 - 139
4-Methyl-2-pentanone (MIBK)	40.0	41.45		ug/L		104	62 - 136
Acetone	40.0	39.19		ug/L		98	59 - 136
Acrylonitrile	200	197.0		ug/L		98	50 - 150
Benzene	20.0	19.40		ug/L		97	71 - 125
Bromochloromethane	20.0	19.69		ug/L		98	69 - 131
Bromodichloromethane	20.0	18.59		ug/L		93	70 - 122
Bromoform	20.0	17.39		ug/L		87	62 - 122
Carbon disulfide	20.0	19.64		ug/L		98	58 - 137
Carbon tetrachloride	20.0	19.36		ug/L		97	63 - 136
Chlorobenzene	20.0	19.72		ug/L		99	74 - 120
Chlorodibromomethane	20.0	16.97		ug/L		85	69 - 121
Chloroform	20.0	18.25		ug/L		91	72 - 122
cis-1,2-Dichloroethene	20.0	19.15		ug/L		96	72 - 123
cis-1,3-Dichloropropene	20.0	17.17		ug/L		86	72 - 123
Dibromomethane	20.0	18.00		ug/L		90	72 - 122
Ethylbenzene	20.0	20.84		ug/L		104	75 - 120
Iodomethane	20.0	14.07		ug/L		70	18 - 150
Methylene Chloride	20.0	20.93		ug/L		105	72 - 128
Styrene	20.0	21.38		ug/L		107	74 - 122
Tetrachloroethene	20.0	20.16		ug/L		101	70 - 128
Toluene	20.0	20.15		ug/L		101	74 - 120
trans-1,2-Dichloroethene	20.0	19.65		ug/L		98	67 - 127
trans-1,3-Dichloropropene	20.0	16.38		ug/L		82	67 - 123
trans-1,4-Dichloro-2-butene	20.0	18.19		ug/L		91	50 - 150
Trichloroethene	20.0	19.32		ug/L		97	70 - 128
Vinyl acetate	40.0	34.06		ug/L		85	50 - 150
Xylenes, Total	40.0	41.93		ug/L		105	74 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*98*		*76 - 130*
Toluene-d8 (Surr)	*102*		*80 - 120*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*

Lab Sample ID: LCS 310-456556/7
Matrix: Water
Analysis Batch: 456556

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	17.23		ug/L		86	33 - 138
Chloroethane	20.0	18.42		ug/L		92	59 - 139
Chloromethane	20.0	19.54		ug/L		98	52 - 146

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-456556/7
Matrix: Water
Analysis Batch: 456556

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Trichlorofluoromethane	20.0	18.87		ug/L		94	55 - 150
Vinyl chloride	20.0	19.06		ug/L		95	60 - 142

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*109*		*76 - 130*
Toluene-d8 (Surr)	*94*		*80 - 120*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*

Lab Sample ID: MB 310-456982/5
Matrix: Water
Analysis Batch: 456982

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/09/25 21:57	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/09/25 21:57	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/09/25 21:57	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/09/25 21:57	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/09/25 21:57	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/09/25 21:57	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/09/25 21:57	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/09/25 21:57	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/09/25 21:57	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/09/25 21:57	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/09/25 21:57	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/09/25 21:57	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/09/25 21:57	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/09/25 21:57	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/09/25 21:57	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/09/25 21:57	1
Acetone	<3.10		10.0	3.10	ug/L			06/09/25 21:57	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/09/25 21:57	1
Benzene	<0.220		0.500	0.220	ug/L			06/09/25 21:57	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/09/25 21:57	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/09/25 21:57	1
Bromoform	<0.780		5.00	0.780	ug/L			06/09/25 21:57	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/09/25 21:57	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/09/25 21:57	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/09/25 21:57	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/09/25 21:57	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/09/25 21:57	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/09/25 21:57	1
Chloroform	<1.30		3.00	1.30	ug/L			06/09/25 21:57	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/09/25 21:57	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/09/25 21:57	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/09/25 21:57	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/09/25 21:57	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/09/25 21:57	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/09/25 21:57	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-456982/5
Matrix: Water
Analysis Batch: 456982

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/09/25 21:57	1
Styrene	<0.370		1.00	0.370	ug/L			06/09/25 21:57	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/09/25 21:57	1
Toluene	<0.430		1.00	0.430	ug/L			06/09/25 21:57	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/09/25 21:57	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/09/25 21:57	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/09/25 21:57	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/09/25 21:57	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/09/25 21:57	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/09/25 21:57	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/09/25 21:57	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/09/25 21:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*76 - 130*		*06/09/25 21:57*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*06/09/25 21:57*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*06/09/25 21:57*	*1*

Lab Sample ID: LCS 310-456982/6
Matrix: Water
Analysis Batch: 456982

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	19.26		ug/L		96	70 - 121
1,1,1-Trichloroethane	20.0	21.18		ug/L		106	69 - 130
1,1,2,2-Tetrachloroethane	20.0	19.81		ug/L		99	70 - 122
1,1,2-Trichloroethane	20.0	20.86		ug/L		104	75 - 121
1,1-Dichloroethane	20.0	20.49		ug/L		102	69 - 127
1,1-Dichloroethene	20.0	21.26		ug/L		106	64 - 134
1,2,3-Trichloropropane	20.0	19.83		ug/L		99	70 - 122
1,2-Dibromo-3-Chloropropane	20.0	19.66		ug/L		98	62 - 132
1,2-Dibromoethane (EDB)	20.0	20.77		ug/L		104	74 - 122
1,2-Dichlorobenzene	20.0	19.89		ug/L		99	74 - 120
1,2-Dichloroethane	20.0	20.08		ug/L		100	68 - 125
1,2-Dichloropropane	20.0	22.14		ug/L		111	72 - 128
1,4-Dichlorobenzene	20.0	19.84		ug/L		99	72 - 120
2-Butanone (MEK)	40.0	45.33		ug/L		113	60 - 134
2-Hexanone	40.0	41.40		ug/L		103	62 - 139
4-Methyl-2-pentanone (MIBK)	40.0	41.56		ug/L		104	62 - 136
Acetone	40.0	46.65		ug/L		117	59 - 136
Acrylonitrile	200	220.7		ug/L		110	50 - 150
Benzene	20.0	21.23		ug/L		106	71 - 125
Bromochloromethane	20.0	21.12		ug/L		106	69 - 131
Bromodichloromethane	20.0	19.70		ug/L		99	70 - 122
Bromoform	20.0	17.89		ug/L		89	62 - 122
Carbon disulfide	20.0	21.65		ug/L		108	58 - 137
Carbon tetrachloride	20.0	20.59		ug/L		103	63 - 136
Chlorobenzene	20.0	19.59		ug/L		98	74 - 120

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-456982/6
Matrix: Water
Analysis Batch: 456982

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chlorodibromomethane	20.0	17.38		ug/L		87	69 - 121
Chloroform	20.0	19.33		ug/L		97	72 - 122
cis-1,2-Dichloroethene	20.0	20.86		ug/L		104	72 - 123
cis-1,3-Dichloropropene	20.0	17.45		ug/L		87	72 - 123
Dibromomethane	20.0	20.24		ug/L		101	72 - 122
Ethylbenzene	20.0	20.61		ug/L		103	75 - 120
Iodomethane	20.0	17.08		ug/L		85	18 - 150
Methylene Chloride	20.0	23.70		ug/L		118	72 - 128
Styrene	20.0	21.10		ug/L		105	74 - 122
Tetrachloroethene	20.0	21.04		ug/L		105	70 - 128
Toluene	20.0	20.56		ug/L		103	74 - 120
trans-1,2-Dichloroethene	20.0	21.69		ug/L		108	67 - 127
trans-1,3-Dichloropropene	20.0	16.41		ug/L		82	67 - 123
trans-1,4-Dichloro-2-butene	20.0	18.88		ug/L		94	50 - 150
Trichloroethene	20.0	20.80		ug/L		104	70 - 128
Vinyl acetate	40.0	36.88		ug/L		92	50 - 150
Xylenes, Total	40.0	41.52		ug/L		104	74 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*100*		*76 - 130*
Toluene-d8 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*

Lab Sample ID: LCS 310-456982/7
Matrix: Water
Analysis Batch: 456982

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	16.63		ug/L		83	33 - 138
Chloroethane	20.0	16.69		ug/L		83	59 - 139
Chloromethane	20.0	18.04		ug/L		90	52 - 146
Trichlorofluoromethane	20.0	17.28		ug/L		86	55 - 150
Vinyl chloride	20.0	17.32		ug/L		87	60 - 142

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*110*		*76 - 130*
Toluene-d8 (Surr)	*92*		*80 - 120*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-456650/1-A
Matrix: Water
Analysis Batch: 457064

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 456650

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.530		2.00	0.530	ug/L		06/05/25 09:40	06/09/25 15:47	1
Barium	<0.660		2.00	0.660	ug/L		06/05/25 09:40	06/09/25 15:47	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 310-456650/1-A
Matrix: Water
Analysis Batch: 457064

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 456650

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.330		1.00	0.330	ug/L		06/05/25 09:40	06/09/25 15:47	1
Chromium	<1.80		5.00	1.80	ug/L		06/05/25 09:40	06/09/25 15:47	1
Cobalt	<0.170		0.500	0.170	ug/L		06/05/25 09:40	06/09/25 15:47	1
Copper	<3.20		5.00	3.20	ug/L		06/05/25 09:40	06/09/25 15:47	1
Lead	<0.330		0.500	0.330	ug/L		06/05/25 09:40	06/09/25 15:47	1
Nickel	<2.30		5.00	2.30	ug/L		06/05/25 09:40	06/09/25 15:47	1
Selenium	<1.40		5.00	1.40	ug/L		06/05/25 09:40	06/09/25 15:47	1
Silver	<0.500		1.00	0.500	ug/L		06/05/25 09:40	06/09/25 15:47	1
Vanadium	<1.70		5.00	1.70	ug/L		06/05/25 09:40	06/09/25 15:47	1
Zinc	<13.0		20.0	13.0	ug/L		06/05/25 09:40	06/09/25 15:47	1

Lab Sample ID: MB 310-456650/1-A
Matrix: Water
Analysis Batch: 457202

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 456650

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.100		0.200	0.100	ug/L		06/05/25 09:40	06/10/25 18:14	1

Lab Sample ID: MB 310-456650/1-A
Matrix: Water
Analysis Batch: 457495

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 456650

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/05/25 09:40	06/12/25 15:37	1

Lab Sample ID: LCS 310-456650/2-A
Matrix: Water
Analysis Batch: 457064

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 456650

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	200	199.3		ug/L		100	80 - 120
Barium	100	96.32		ug/L		96	80 - 120
Beryllium	100	92.31		ug/L		92	80 - 120
Chromium	100	94.72		ug/L		95	80 - 120
Cobalt	100	96.31		ug/L		96	80 - 120
Copper	200	199.9		ug/L		100	80 - 120
Lead	200	195.1		ug/L		98	80 - 120
Nickel	200	194.0		ug/L		97	80 - 120
Selenium	400	363.6		ug/L		91	80 - 120
Silver	100	113.9		ug/L		114	80 - 120
Vanadium	100	93.14		ug/L		93	80 - 120
Zinc	200	187.2		ug/L		94	80 - 120

Lab Sample ID: LCS 310-456650/2-A
Matrix: Water
Analysis Batch: 457202

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 456650

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	100	93.60		ug/L		94	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 310-456650/2-A
Matrix: Water
Analysis Batch: 457495

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 456650

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	200	200.8		ug/L		100	80 - 120

Lab Sample ID: MB 310-456702/1-A
Matrix: Water
Analysis Batch: 457663

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 456702

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/06/25 09:00	06/13/25 15:55	1
Arsenic	<0.530		2.00	0.530	ug/L		06/06/25 09:00	06/13/25 15:55	1
Barium	<0.660		2.00	0.660	ug/L		06/06/25 09:00	06/13/25 15:55	1
Beryllium	<0.330		1.00	0.330	ug/L		06/06/25 09:00	06/13/25 15:55	1
Cadmium	<0.100		0.200	0.100	ug/L		06/06/25 09:00	06/13/25 15:55	1
Chromium	<1.80		5.00	1.80	ug/L		06/06/25 09:00	06/13/25 15:55	1
Cobalt	<0.170		0.500	0.170	ug/L		06/06/25 09:00	06/13/25 15:55	1
Copper	<3.20		5.00	3.20	ug/L		06/06/25 09:00	06/13/25 15:55	1
Lead	<0.330		0.500	0.330	ug/L		06/06/25 09:00	06/13/25 15:55	1
Nickel	<2.30		5.00	2.30	ug/L		06/06/25 09:00	06/13/25 15:55	1
Selenium	<1.40		5.00	1.40	ug/L		06/06/25 09:00	06/13/25 15:55	1
Silver	<0.500		1.00	0.500	ug/L		06/06/25 09:00	06/13/25 15:55	1
Thallium	<0.570		1.00	0.570	ug/L		06/06/25 09:00	06/13/25 15:55	1
Vanadium	<1.70		5.00	1.70	ug/L		06/06/25 09:00	06/13/25 15:55	1
Zinc	<13.0		20.0	13.0	ug/L		06/06/25 09:00	06/13/25 15:55	1

Lab Sample ID: LCS 310-456702/2-A
Matrix: Water
Analysis Batch: 457663

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 456702

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	200	205.5		ug/L		103	80 - 120
Arsenic	200	191.7		ug/L		96	80 - 120
Barium	100	99.85		ug/L		100	80 - 120
Beryllium	100	91.66		ug/L		92	80 - 120
Cadmium	100	95.61		ug/L		96	80 - 120
Chromium	100	102.0		ug/L		102	80 - 120
Cobalt	100	102.1		ug/L		102	80 - 120
Copper	200	208.2		ug/L		104	80 - 120
Lead	200	194.4		ug/L		97	80 - 120
Nickel	200	207.4		ug/L		104	80 - 120
Selenium	400	396.7		ug/L		99	80 - 120
Silver	100	130.9	*+	ug/L		131	80 - 120
Thallium	100	99.65		ug/L		100	80 - 120
Vanadium	100	100.6		ug/L		101	80 - 120
Zinc	200	181.9		ug/L		91	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 310-307712-6 DU
Matrix: Ground Water
Analysis Batch: 457663

Client Sample ID: MW-37A
Prep Type: Total/NA
Prep Batch: 456702

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<1.00		<1.00		ug/L		NC	20
Arsenic	0.826	J	0.6540	J F5	ug/L		23	20
Barium	156		163.0		ug/L		4	20
Cadmium	<0.100		<0.100		ug/L		NC	20
Chromium	<1.80		<1.80		ug/L		NC	20
Cobalt	<0.170		<0.170		ug/L		NC	20
Copper	<3.20		<3.20		ug/L		NC	20
Lead	<0.330		<0.330		ug/L		NC	20
Nickel	<2.30		<2.30		ug/L		NC	20
Selenium	<1.40		<1.40		ug/L		NC	20
Thallium	<0.570		<0.570		ug/L		NC	20
Vanadium	<1.70		<1.70		ug/L		NC	20
Zinc	<13.0		<13.0		ug/L		NC	20

Lab Sample ID: 310-307712-6 DU
Matrix: Ground Water
Analysis Batch: 457750

Client Sample ID: MW-37A
Prep Type: Total/NA
Prep Batch: 456702

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Beryllium	<0.330		<0.330		ug/L		NC	20

Lab Sample ID: MB 310-457309/1-A
Matrix: Water
Analysis Batch: 457663

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 457309

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/12/25 09:25	06/13/25 14:22	1
Arsenic	<0.530		2.00	0.530	ug/L		06/12/25 09:25	06/13/25 14:22	1
Barium	<0.660		2.00	0.660	ug/L		06/12/25 09:25	06/13/25 14:22	1
Beryllium	<0.330		1.00	0.330	ug/L		06/12/25 09:25	06/13/25 14:22	1
Cadmium	<0.100		0.200	0.100	ug/L		06/12/25 09:25	06/13/25 14:22	1
Chromium	<1.80		5.00	1.80	ug/L		06/12/25 09:25	06/13/25 14:22	1
Cobalt	<0.170		0.500	0.170	ug/L		06/12/25 09:25	06/13/25 14:22	1
Copper	<3.20		5.00	3.20	ug/L		06/12/25 09:25	06/13/25 14:22	1
Lead	<0.330		0.500	0.330	ug/L		06/12/25 09:25	06/13/25 14:22	1
Nickel	<2.30		5.00	2.30	ug/L		06/12/25 09:25	06/13/25 14:22	1
Selenium	<1.40		5.00	1.40	ug/L		06/12/25 09:25	06/13/25 14:22	1
Silver	<0.500		1.00	0.500	ug/L		06/12/25 09:25	06/13/25 14:22	1
Thallium	<0.570		1.00	0.570	ug/L		06/12/25 09:25	06/13/25 14:22	1
Vanadium	<1.70		5.00	1.70	ug/L		06/12/25 09:25	06/13/25 14:22	1
Zinc	<13.0		20.0	13.0	ug/L		06/12/25 09:25	06/13/25 14:22	1

Lab Sample ID: LCS 310-457309/2-A
Matrix: Water
Analysis Batch: 457663

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 457309

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	200	216.7		ug/L		108	80 - 120
Arsenic	200	204.9		ug/L		102	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 310-457309/2-A
Matrix: Water
Analysis Batch: 457663

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 457309

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	100	101.2		ug/L		101	80 - 120
Beryllium	100	102.6		ug/L		103	80 - 120
Cadmium	100	102.3		ug/L		102	80 - 120
Chromium	100	106.2		ug/L		106	80 - 120
Cobalt	100	106.3		ug/L		106	80 - 120
Copper	200	218.8		ug/L		109	80 - 120
Lead	200	203.4		ug/L		102	80 - 120
Nickel	200	215.4		ug/L		108	80 - 120
Selenium	400	396.6		ug/L		99	80 - 120
Silver	100	129.3	*+	ug/L		129	80 - 120
Thallium	100	91.13		ug/L		91	80 - 120
Vanadium	100	103.9		ug/L		104	80 - 120
Zinc	200	198.6		ug/L		99	80 - 120

Lab Sample ID: 310-307712-1 MS
Matrix: Ground Water
Analysis Batch: 457663

Client Sample ID: MW-19R
Prep Type: Total/NA
Prep Batch: 457309

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<1.00		200	221.0		ug/L		111	75 - 125
Arsenic	<0.530		200	211.1		ug/L		106	75 - 125
Barium	77.5		100	179.6		ug/L		102	75 - 125
Beryllium	<0.330		100	103.0		ug/L		103	75 - 125
Cadmium	<0.100		100	102.9		ug/L		103	75 - 125
Chromium	<1.80		100	103.1		ug/L		103	75 - 125
Cobalt	0.356	J	100	100.5		ug/L		100	75 - 125
Copper	<3.20		200	205.5		ug/L		103	75 - 125
Lead	<0.330		200	202.7		ug/L		101	75 - 125
Nickel	<2.30		200	205.8		ug/L		103	75 - 125
Selenium	<1.40		400	400.0		ug/L		100	75 - 125
Silver	<0.500	*+ F1	100	128.8	F1	ug/L		129	75 - 125
Thallium	<0.570		100	86.15		ug/L		86	75 - 125
Vanadium	<1.70		100	102.7		ug/L		103	75 - 125
Zinc	<13.0		200	199.3		ug/L		100	75 - 125

Lab Sample ID: 310-307712-1 MSD
Matrix: Ground Water
Analysis Batch: 457663

Client Sample ID: MW-19R
Prep Type: Total/NA
Prep Batch: 457309

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<1.00		200	222.1		ug/L		111	75 - 125	0	20
Arsenic	<0.530		200	212.8		ug/L		106	75 - 125	1	20
Barium	77.5		100	183.1		ug/L		106	75 - 125	2	20
Beryllium	<0.330		100	101.8		ug/L		102	75 - 125	1	20
Cadmium	<0.100		100	105.0		ug/L		105	75 - 125	2	20
Chromium	<1.80		100	104.2		ug/L		104	75 - 125	1	20
Cobalt	0.356	J	100	101.6		ug/L		101	75 - 125	1	20
Copper	<3.20		200	207.2		ug/L		104	75 - 125	1	20
Lead	<0.330		200	204.2		ug/L		102	75 - 125	1	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 310-307712-1 MSD
Matrix: Ground Water
Analysis Batch: 457663

Client Sample ID: MW-19R
Prep Type: Total/NA
Prep Batch: 457309

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nickel	<2.30		200	208.5		ug/L		104	75 - 125	1	20
Selenium	<1.40		400	407.5		ug/L		102	75 - 125	2	20
Silver	<0.500	*+ F1	100	129.1	F1	ug/L		129	75 - 125	0	20
Thallium	<0.570		100	86.57		ug/L		87	75 - 125	0	20
Vanadium	<1.70		100	103.3		ug/L		103	75 - 125	1	20
Zinc	<13.0		200	199.2		ug/L		100	75 - 125	0	20

Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: MB 310-456448/1
Matrix: Water
Analysis Batch: 456448

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<3.50		5.00	3.50	mg/L			06/03/25 11:06	1

Lab Sample ID: LCS 310-456448/2
Matrix: Water
Analysis Batch: 456448

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	105.0		mg/L		105	82 - 117

GC/MS VOA

Analysis Batch: 456496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307712-1	MW-19R	Total/NA	Ground Water	8260D	
310-307712-2	MW-1	Total/NA	Ground Water	8260D	
MB 310-456496/6	Method Blank	Total/NA	Water	8260D	
LCS 310-456496/7	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-456496/8	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 456556

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307712-3	MW-18	Total/NA	Water	8260D	
310-307712-4	MW-18-FD	Total/NA	Water	8260D	
310-307712-5	MW-3	Total/NA	Ground Water	8260D	
310-307712-6	MW-37A	Total/NA	Ground Water	8260D	
310-307712-7	MW-33A	Total/NA	Ground Water	8260D	
310-307712-8	MW-2R	Total/NA	Ground Water	8260D	
310-307712-9	Trip Blank	Total/NA	Water	8260D	
MB 310-456556/5	Method Blank	Total/NA	Water	8260D	
LCS 310-456556/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-456556/7	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 456982

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307712-1	MW-19R	Total/NA	Ground Water	8260D	
MB 310-456982/5	Method Blank	Total/NA	Water	8260D	
LCS 310-456982/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-456982/7	Lab Control Sample	Total/NA	Water	8260D	

Metals

Prep Batch: 456650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307712-1	MW-19R	Total/NA	Ground Water	3005A	
310-307712-2	MW-1	Total/NA	Ground Water	3005A	
310-307712-3	MW-18	Total/NA	Water	3005A	
310-307712-4	MW-18-FD	Total/NA	Water	3005A	
MB 310-456650/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-456650/2-A	Lab Control Sample	Total/NA	Water	3005A	

Prep Batch: 456702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307712-5	MW-3	Total/NA	Ground Water	3005A	
310-307712-6	MW-37A	Total/NA	Ground Water	3005A	
310-307712-7	MW-33A	Total/NA	Ground Water	3005A	
310-307712-8	MW-2R	Total/NA	Ground Water	3005A	
MB 310-456702/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-456702/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-307712-6 DU	MW-37A	Total/NA	Ground Water	3005A	

Analysis Batch: 457064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307712-1	MW-19R	Total/NA	Ground Water	6020B	456650
310-307712-2	MW-1	Total/NA	Ground Water	6020B	456650

Metals (Continued)

Analysis Batch: 457064 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307712-3	MW-18	Total/NA	Water	6020B	456650
310-307712-4	MW-18-FD	Total/NA	Water	6020B	456650
MB 310-456650/1-A	Method Blank	Total/NA	Water	6020B	456650
LCS 310-456650/2-A	Lab Control Sample	Total/NA	Water	6020B	456650

Analysis Batch: 457202

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307712-1	MW-19R	Total/NA	Ground Water	6020B	456650
310-307712-2	MW-1	Total/NA	Ground Water	6020B	456650
310-307712-3	MW-18	Total/NA	Water	6020B	456650
310-307712-4	MW-18-FD	Total/NA	Water	6020B	456650
MB 310-456650/1-A	Method Blank	Total/NA	Water	6020B	456650
LCS 310-456650/2-A	Lab Control Sample	Total/NA	Water	6020B	456650

Prep Batch: 457309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307712-1	MW-19R	Total/NA	Ground Water	3005A	
310-307712-2	MW-1	Total/NA	Ground Water	3005A	
310-307712-3	MW-18	Total/NA	Water	3005A	
310-307712-4	MW-18-FD	Total/NA	Water	3005A	
MB 310-457309/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-457309/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-307712-1 MS	MW-19R	Total/NA	Ground Water	3005A	
310-307712-1 MSD	MW-19R	Total/NA	Ground Water	3005A	

Analysis Batch: 457495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307712-1	MW-19R	Total/NA	Ground Water	6020B	456650
310-307712-2	MW-1	Total/NA	Ground Water	6020B	456650
310-307712-3	MW-18	Total/NA	Water	6020B	456650
310-307712-4	MW-18-FD	Total/NA	Water	6020B	456650
MB 310-456650/1-A	Method Blank	Total/NA	Water	6020B	456650
LCS 310-456650/2-A	Lab Control Sample	Total/NA	Water	6020B	456650

Analysis Batch: 457663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307712-1	MW-19R	Total/NA	Ground Water	6020B	457309
310-307712-2	MW-1	Total/NA	Ground Water	6020B	457309
310-307712-3	MW-18	Total/NA	Water	6020B	457309
310-307712-4	MW-18-FD	Total/NA	Water	6020B	457309
310-307712-5	MW-3	Total/NA	Ground Water	6020B	456702
310-307712-6	MW-37A	Total/NA	Ground Water	6020B	456702
310-307712-7	MW-33A	Total/NA	Ground Water	6020B	456702
310-307712-8	MW-2R	Total/NA	Ground Water	6020B	456702
MB 310-456702/1-A	Method Blank	Total/NA	Water	6020B	456702
MB 310-457309/1-A	Method Blank	Total/NA	Water	6020B	457309
LCS 310-456702/2-A	Lab Control Sample	Total/NA	Water	6020B	456702
LCS 310-457309/2-A	Lab Control Sample	Total/NA	Water	6020B	457309
310-307712-1 MS	MW-19R	Total/NA	Ground Water	6020B	457309
310-307712-1 MSD	MW-19R	Total/NA	Ground Water	6020B	457309
310-307712-6 DU	MW-37A	Total/NA	Ground Water	6020B	456702

QC Association Summary

Client: AECOM
Job ID: 310-307712-1
Project/Site: Winneshiek Groundwater Monitoring

Metals

Analysis Batch: 457750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307712-5	MW-3	Total/NA	Ground Water	6020B	456702
310-307712-6	MW-37A	Total/NA	Ground Water	6020B	456702
310-307712-7	MW-33A	Total/NA	Ground Water	6020B	456702
310-307712-8	MW-2R	Total/NA	Ground Water	6020B	456702
310-307712-6 DU	MW-37A	Total/NA	Ground Water	6020B	456702

General Chemistry

Analysis Batch: 456448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307712-1	MW-19R	Total/NA	Ground Water	I-3765-85	
310-307712-2	MW-1	Total/NA	Ground Water	I-3765-85	
310-307712-3	MW-18	Total/NA	Water	I-3765-85	
310-307712-4	MW-18-FD	Total/NA	Water	I-3765-85	
310-307712-5	MW-3	Total/NA	Ground Water	I-3765-85	
310-307712-6	MW-37A	Total/NA	Ground Water	I-3765-85	
310-307712-7	MW-33A	Total/NA	Ground Water	I-3765-85	
310-307712-8	MW-2R	Total/NA	Ground Water	I-3765-85	
MB 310-456448/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-456448/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Field Service / Mobile Lab

Analysis Batch: 456969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307712-1	MW-19R	Total/NA	Ground Water	Field Sampling	
310-307712-2	MW-1	Total/NA	Ground Water	Field Sampling	
310-307712-3	MW-18	Total/NA	Water	Field Sampling	
310-307712-5	MW-3	Total/NA	Ground Water	Field Sampling	
310-307712-6	MW-37A	Total/NA	Ground Water	Field Sampling	
310-307712-7	MW-33A	Total/NA	Ground Water	Field Sampling	
310-307712-8	MW-2R	Total/NA	Ground Water	Field Sampling	

Lab Chronicle

Client: AECOM
Job ID: 310-307712-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-19R
Lab Sample ID: 310-307712-1
Date Collected: 06/02/25 11:00
Matrix: Ground Water
Date Received: 06/03/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	456496	WSE8	EET CF	06/04/25 17:19
Total/NA	Analysis	8260D		1	456982	WSE8	EET CF	06/10/25 00:58
Total/NA	Prep	3005A			456650	QTZ5	EET CF	06/05/25 09:40
Total/NA	Analysis	6020B		1	457064	NFT2	EET CF	06/09/25 16:47
Total/NA	Prep	3005A			456650	QTZ5	EET CF	06/05/25 09:40
Total/NA	Analysis	6020B		1	457202	NFT2	EET CF	06/10/25 19:07
Total/NA	Prep	3005A			456650	QTZ5	EET CF	06/05/25 09:40
Total/NA	Analysis	6020B		1	457495	NFT2	EET CF	06/12/25 16:09
Total/NA	Prep	3005A			457309	QTZ5	EET CF	06/12/25 09:25
Total/NA	Analysis	6020B		1	457663	NFT2	EET CF	06/13/25 14:34
Total/NA	Analysis	I-3765-85		1	456448	E6KR	EET CF	06/03/25 11:06
Total/NA	Analysis	Field Sampling		1	456969	FQT6	EET CF	06/02/25 11:00

Client Sample ID: MW-1
Lab Sample ID: 310-307712-2
Date Collected: 06/02/25 12:00
Matrix: Ground Water
Date Received: 06/03/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	456496	WSE8	EET CF	06/04/25 17:41
Total/NA	Prep	3005A			456650	QTZ5	EET CF	06/05/25 09:40
Total/NA	Analysis	6020B		1	457064	NFT2	EET CF	06/09/25 16:49
Total/NA	Prep	3005A			456650	QTZ5	EET CF	06/05/25 09:40
Total/NA	Analysis	6020B		1	457202	NFT2	EET CF	06/10/25 19:09
Total/NA	Prep	3005A			456650	QTZ5	EET CF	06/05/25 09:40
Total/NA	Analysis	6020B		1	457495	NFT2	EET CF	06/12/25 16:12
Total/NA	Prep	3005A			457309	QTZ5	EET CF	06/12/25 09:25
Total/NA	Analysis	6020B		1	457663	NFT2	EET CF	06/13/25 14:45
Total/NA	Analysis	I-3765-85		1	456448	E6KR	EET CF	06/03/25 11:06
Total/NA	Analysis	Field Sampling		1	456969	FQT6	EET CF	06/02/25 12:00

Client Sample ID: MW-18
Lab Sample ID: 310-307712-3
Date Collected: 06/02/25 13:00
Matrix: Water
Date Received: 06/03/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	456556	WSE8	EET CF	06/05/25 01:34
Total/NA	Prep	3005A			456650	QTZ5	EET CF	06/05/25 09:40
Total/NA	Analysis	6020B		1	457064	NFT2	EET CF	06/09/25 16:52
Total/NA	Prep	3005A			456650	QTZ5	EET CF	06/05/25 09:40
Total/NA	Analysis	6020B		1	457202	NFT2	EET CF	06/10/25 19:12
Total/NA	Prep	3005A			456650	QTZ5	EET CF	06/05/25 09:40
Total/NA	Analysis	6020B		1	457495	NFT2	EET CF	06/12/25 16:15
Total/NA	Prep	3005A			457309	QTZ5	EET CF	06/12/25 09:25
Total/NA	Analysis	6020B		1	457663	NFT2	EET CF	06/13/25 14:48

Lab Chronicle

Client: AECOM
Job ID: 310-307712-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-18
Lab Sample ID: 310-307712-3
Date Collected: 06/02/25 13:00
Matrix: Water
Date Received: 06/03/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	I-3765-85		1	456448	E6KR	EET CF	06/03/25 11:06
Total/NA	Analysis	Field Sampling		1	456969	FQT6	EET CF	06/02/25 13:00

Client Sample ID: MW-18-FD
Lab Sample ID: 310-307712-4
Date Collected: 06/02/25 13:10
Matrix: Water
Date Received: 06/03/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	456556	WSE8	EET CF	06/05/25 01:57
Total/NA	Prep	3005A			456650	QTZ5	EET CF	06/05/25 09:40
Total/NA	Analysis	6020B		1	457064	NFT2	EET CF	06/09/25 16:54
Total/NA	Prep	3005A			456650	QTZ5	EET CF	06/05/25 09:40
Total/NA	Analysis	6020B		1	457202	NFT2	EET CF	06/10/25 19:14
Total/NA	Prep	3005A			456650	QTZ5	EET CF	06/05/25 09:40
Total/NA	Analysis	6020B		1	457495	NFT2	EET CF	06/12/25 16:18
Total/NA	Prep	3005A			457309	QTZ5	EET CF	06/12/25 09:25
Total/NA	Analysis	6020B		1	457663	NFT2	EET CF	06/13/25 14:51
Total/NA	Analysis	I-3765-85		1	456448	E6KR	EET CF	06/03/25 11:06

Client Sample ID: MW-3
Lab Sample ID: 310-307712-5
Date Collected: 06/02/25 14:00
Matrix: Ground Water
Date Received: 06/03/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	456556	WSE8	EET CF	06/05/25 02:19
Total/NA	Prep	3005A			456702	HE7K	EET CF	06/06/25 09:00
Total/NA	Analysis	6020B		1	457663	NFT2	EET CF	06/13/25 17:12
Total/NA	Prep	3005A			456702	HE7K	EET CF	06/06/25 09:00
Total/NA	Analysis	6020B		1	457750	NFT2	EET CF	06/16/25 13:55
Total/NA	Analysis	I-3765-85		1	456448	E6KR	EET CF	06/03/25 11:06
Total/NA	Analysis	Field Sampling		1	456969	FQT6	EET CF	06/02/25 14:00

Client Sample ID: MW-37A
Lab Sample ID: 310-307712-6
Date Collected: 06/02/25 15:00
Matrix: Ground Water
Date Received: 06/03/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	456556	WSE8	EET CF	06/05/25 02:42
Total/NA	Prep	3005A			456702	HE7K	EET CF	06/06/25 09:00
Total/NA	Analysis	6020B		1	457663	NFT2	EET CF	06/13/25 17:14
Total/NA	Prep	3005A			456702	HE7K	EET CF	06/06/25 09:00
Total/NA	Analysis	6020B		1	457750	NFT2	EET CF	06/16/25 13:58
Total/NA	Analysis	I-3765-85		1	456448	E6KR	EET CF	06/03/25 11:06
Total/NA	Analysis	Field Sampling		1	456969	FQT6	EET CF	06/02/25 15:00

Lab Chronicle

Client: AECOM
Job ID: 310-307712-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-33A
Lab Sample ID: 310-307712-7
Date Collected: 06/02/25 16:10
Matrix: Ground Water
Date Received: 06/03/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	456556	WSE8	EET CF	06/05/25 03:05
Total/NA	Prep	3005A			456702	HE7K	EET CF	06/06/25 09:00
Total/NA	Analysis	6020B		1	457663	NFT2	EET CF	06/13/25 17:26
Total/NA	Prep	3005A			456702	HE7K	EET CF	06/06/25 09:00
Total/NA	Analysis	6020B		1	457750	NFT2	EET CF	06/16/25 14:04
Total/NA	Analysis	I-3765-85		1	456448	E6KR	EET CF	06/03/25 11:06
Total/NA	Analysis	Field Sampling		1	456969	FQT6	EET CF	06/02/25 16:10

Client Sample ID: MW-2R
Lab Sample ID: 310-307712-8
Date Collected: 06/02/25 17:00
Matrix: Ground Water
Date Received: 06/03/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	456556	WSE8	EET CF	06/05/25 03:27
Total/NA	Prep	3005A			456702	HE7K	EET CF	06/06/25 09:00
Total/NA	Analysis	6020B		1	457663	NFT2	EET CF	06/13/25 17:29
Total/NA	Prep	3005A			456702	HE7K	EET CF	06/06/25 09:00
Total/NA	Analysis	6020B		1	457750	NFT2	EET CF	06/16/25 14:07
Total/NA	Analysis	I-3765-85		1	456448	E6KR	EET CF	06/03/25 11:06
Total/NA	Analysis	Field Sampling		1	456969	FQT6	EET CF	06/02/25 17:00

Client Sample ID: Trip Blank
Lab Sample ID: 310-307712-9
Date Collected: 06/02/25 09:00
Matrix: Water
Date Received: 06/03/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	456556	WSE8	EET CF	06/04/25 23:19

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Accreditation/Certification Summary

Client: AECOM
Job ID: 310-307712-1
Project/Site: Winneshiek Groundwater Monitoring

Laboratory: Eurofins Cedar Falls

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Field Sampling		Ground Water	Field Turbidity
Field Sampling		Water	Field Turbidity

Method Summary

Client: AECOM
Job ID: 310-307712-1
Project/Site: Winneshiek Groundwater Monitoring

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
6020B	Metals (ICP/MS)	SW846	EET CF
I-3765-85	Residue, Non-filterable (TSS)	USGS	EET CF
Field Sampling	Field Sampling	EPA	EET CF
3005A	Preparation, Total Metals	SW846	EET CF
5030B	Purge and Trap	SW846	EET CF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

USGS = "Methods For Analysis Of Water And Fluvial Sediments", USGS, 1989

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

eurofins | Environment Testing America

310-307712 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: AECOM

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 6·3·25 | TIME 1020 | Received By: CGC

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee
☐ Lab Courier ☐ Lab Field Services ☑ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers

Sample(s) received in Cooler? ☑ Yes ☐ No *If yes:* Cooler ID:

Multiple Coolers? ☐ Yes ☑ No *If yes:* Cooler # _____ of _____

Cooler Custody Seals Present? ☐ Yes ☑ No *If yes:* Cooler custody seals intact? ☐ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☑ No *If yes:* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☑ Yes ☐ No *If yes:* Which VOA samples are in cooler? ↓

All

Temperature Record

Coolant: ☑ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: AA | Correction Factor (°C): 0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C) 1.7 | Corrected Temp (°C): 1.7

• **Sample Container Temperature**

Container(s) used:	CONTAINER 1	CONTAINER 2
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e g , bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE. If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

Chain of Custody Record

Eurofins TestAmerica, Cedar Falls
704 Enterprise Drive

Cedar Falls, IA 50613
phone 319 277 2401 fax 319.277.2425

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: Iowa DNR

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nick Schrock	Site Contact:	Date: 6-3-25	COC No
AECOM	Email nick.schrock@aecom.com	Lab Contact:	Carrier:	1 of 1 COCs
501 Sycamore St., Suite 222	Tel/Fax: (319)874-6581/(217)273-0978			Sampler:
Waterloo, IA 50703	Analysis Turnaround Time			For Lab Use Only:
(319)232-6531 Phone	☑ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(319)232-0271 FAX	TAT if different from Below ____			Lab Sampling
Project Name: Winneshiek Groundwater Monitoring	☐ 2 weeks			Job / SDG No
Site: Winneshiek County Landfill	☐ 1 week			
P O #	☐ 2 days ☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TSS	Appendix I Metals and VOCs	Sample Specific Notes
MW-19R	6-2-25	1100	G	GW	5	N		X	X	Turbidity - 47.97 NTU
MW-1	6-2-25	1200	G	GW	5	N		X	X	Turbidity - 1.59 NTU
MW-18	6-2-25	1300	G	GW	5	N		X	X	Turbidity - 3.43 NTU
MW-18-FD	6-2-25	1310	G	GW	5	N		X	X	
MW-3	6-2-25	1400	G	GW	5	N		X	X	Turbidity - 17.78 NTU
MW-37A	6-2-25	1500	G	GW	5	N		X	X	Turbidity - 9.71 NTU
MW-33A	6-2-25	1610	G	GW	5	N		X	X	Turbidity - 51.33 NTU
MW-2R	6-2-25	1700	G	GW	5	N		X	X	Turbidity - 1.56 NTU
MW-34A			G	GW		N		X	X	
MW-34A- FD			G	GW		N		X	X	
Equipment Blank #1 Shallow			G	GW		N		X	X	
Trip Blank	6-2-25	0900	G	W	2	N			X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No	Cooler Temp (°C) Obs'd ____ Corr'd ____	Therm ID No ____

Relinquished by: Ben Porter	Company: Aecom	Date/Time: 6-3-25	Received by:	Company:	Date/Time
Relinquished by:	Company:	Date/Time	Received by:	Company:	Date/Time
Relinquished by:	Company:	Date/Time	Received in Laboratory by: CGC	Company: Eurofins	Date/Time: 6-3-25 1020

Login Sample Receipt Checklist

Client: AECOM

Job Number: 310-307712-1

Login Number: 307712

List Number: 1

Creator: Hirsch, Preston

List Source: Eurofins Cedar Falls

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Nick Schrock
AECOM
501 Sycamore Street
Suite #222
Waterloo, Iowa 50703

Generated 6/19/2025 11:44:20 AM

JOB DESCRIPTION

Winneshiek Groundwater Monitoring
2025 Spring Groundwater

JOB NUMBER

310-307931-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



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6/19/2025 11:44:20 AM

Authorized for release by
Zach Bindert, Senior Project Manager
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(319)595-2016

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Job Narrative
310-307931-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 6/5/2025 7:50 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.1°C.

GC/MS VOA
Method 8260D: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following sample was received preserved with hydrochloric acid. Vial preservation was pH <2 rather than pH 4-5. : SW-1 (310-307931-1), SW-5 (310-307931-2), SW-5-FD (310-307931-3), SW-2 (310-307931-4), MW-41A (310-307931-5), MW-35 (310-307931-6), MW-38A (310-307931-7), MW-39A (310-307931-8), MW-40A (310-307931-9), Trip Blank (310-307931-10), MW-34A (310-307931-11) and MW-34A-FD (310-307931-12). The requested target analyte list includes Acrylonitrile.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B: The laboratory control sample (LCS) for preparation batch 310-456874 and analytical batch 310-458075 recovered outside control limits for the following analytes: silver. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Field Service / Mobile Lab
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: AECOM
Job ID: 310-307931-1
Project/Site: Winneshiek Groundwater Monitoring

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-307931-1	SW-1	Ground Water	06/04/25 17:15	06/05/25 07:50
310-307931-2	SW-5	Ground Water	06/04/25 16:45	06/05/25 07:50
310-307931-3	SW-5-FD	Water	06/04/25 16:45	06/05/25 07:50
310-307931-4	SW-2	Ground Water	06/04/25 16:30	06/05/25 07:50
310-307931-5	MW-41A	Ground Water	06/04/25 11:30	06/05/25 07:50
310-307931-6	MW-35	Ground Water	06/04/25 12:45	06/05/25 07:50
310-307931-7	MW-38A	Ground Water	06/04/25 14:00	06/05/25 07:50
310-307931-8	MW-39A	Ground Water	06/04/25 14:45	06/05/25 07:50
310-307931-9	MW-40A	Ground Water	06/04/25 15:45	06/05/25 07:50
310-307931-10	Trip Blank	Water	06/04/25 08:00	06/05/25 07:50
310-307931-11	MW-34A	Ground Water	06/04/25 10:30	06/05/25 07:50
310-307931-12	MW-34A-FD	Ground Water	06/04/25 10:40	06/05/25 07:50

Detection Summary

Client: AECOM
Job ID: 310-307931-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: SW-1 — Lab Sample ID: 310-307931-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	111		2.00	0.660	ug/L	1		6020B	Total/NA
Total Suspended Solids	1.75	J	1.88	1.31	mg/L	1		I-3765-85	Total/NA
Field Turbidity	14.83				NTU	1		Field Sampling	Total/NA

Client Sample ID: SW-5 — Lab Sample ID: 310-307931-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.42	J	10.0	3.10	ug/L	1		8260D	Total/NA
Arsenic	1.31	J	2.00	0.530	ug/L	1		6020B	Total/NA
Barium	86.9		2.00	0.660	ug/L	1		6020B	Total/NA
Cobalt	0.938		0.500	0.170	ug/L	1		6020B	Total/NA
Lead	0.862		0.500	0.330	ug/L	1		6020B	Total/NA
Nickel	3.20	J	5.00	2.30	ug/L	1		6020B	Total/NA
Total Suspended Solids	59.0		15.0	10.5	mg/L	1		I-3765-85	Total/NA
Field Turbidity	48.32				NTU	1		Field Sampling	Total/NA

Client Sample ID: SW-5-FD — Lab Sample ID: 310-307931-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.07	J	10.0	3.10	ug/L	1		8260D	Total/NA
Arsenic	1.23	J	2.00	0.530	ug/L	1		6020B	Total/NA
Barium	82.0		2.00	0.660	ug/L	1		6020B	Total/NA
Cobalt	0.867		0.500	0.170	ug/L	1		6020B	Total/NA
Lead	0.852		0.500	0.330	ug/L	1		6020B	Total/NA
Nickel	2.91	J	5.00	2.30	ug/L	1		6020B	Total/NA
Total Suspended Solids	76.0		15.0	10.5	mg/L	1		I-3765-85	Total/NA

Client Sample ID: SW-2 — Lab Sample ID: 310-307931-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.772	J	2.00	0.530	ug/L	1		6020B	Total/NA
Barium	99.6		2.00	0.660	ug/L	1		6020B	Total/NA
Cobalt	0.389	J	0.500	0.170	ug/L	1		6020B	Total/NA
Lead	0.362	J	0.500	0.330	ug/L	1		6020B	Total/NA
Total Suspended Solids	26.1		1.88	1.31	mg/L	1		I-3765-85	Total/NA
Field Turbidity	34.21				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-41A — Lab Sample ID: 310-307931-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.20	J	2.00	0.530	ug/L	1		6020B	Total/NA
Barium	159		2.00	0.660	ug/L	1		6020B	Total/NA
Cobalt	0.220	J	0.500	0.170	ug/L	1		6020B	Total/NA
Total Suspended Solids	6.63		1.88	1.31	mg/L	1		I-3765-85	Total/NA
Field Turbidity	10.17				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-35 — Lab Sample ID: 310-307931-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.418	J	1.00	0.220	ug/L	1		8260D	Total/NA
Arsenic	0.786	J	2.00	0.530	ug/L	1		6020B	Total/NA
Barium	279		2.00	0.660	ug/L	1		6020B	Total/NA
Cobalt	4.82		0.500	0.170	ug/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-35 (Continued) — Lab Sample ID: 310-307931-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	18.0		5.00	2.30	ug/L	1		6020B	Total/NA
Total Suspended Solids	4.00		3.75	2.63	mg/L	1		I-3765-85	Total/NA
Field Turbidity	2.26				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-38A — Lab Sample ID: 310-307931-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	140		2.00	0.660	ug/L	1		6020B	Total/NA
Total Suspended Solids	6.25		1.88	1.31	mg/L	1		I-3765-85	Total/NA
Field Turbidity	7.35				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-39A — Lab Sample ID: 310-307931-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	146		2.00	0.660	ug/L	1		6020B	Total/NA
Cobalt	0.329	J	0.500	0.170	ug/L	1		6020B	Total/NA
Total Suspended Solids	27.5		3.75	2.63	mg/L	1		I-3765-85	Total/NA
Field Turbidity	36.91				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-40A — Lab Sample ID: 310-307931-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	202		2.00	0.660	ug/L	1		6020B	Total/NA
Cobalt	1.57		0.500	0.170	ug/L	1		6020B	Total/NA
Nickel	14.1		5.00	2.30	ug/L	1		6020B	Total/NA
Total Suspended Solids	9.63		1.88	1.31	mg/L	1		I-3765-85	Total/NA
Field Turbidity	6.00				NTU	1		Field Sampling	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 310-307931-10

No Detections.

Client Sample ID: MW-34A — Lab Sample ID: 310-307931-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	70.5		2.00	0.660	ug/L	1		6020B	Total/NA
Selenium	1.99	J	5.00	1.40	ug/L	1		6020B	Total/NA
Total Suspended Solids	11.6		1.88	1.31	mg/L	1		I-3765-85	Total/NA
Field Turbidity	24.16				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-34A-FD — Lab Sample ID: 310-307931-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	70.1		2.00	0.660	ug/L	1		6020B	Total/NA
Selenium	1.95	J	5.00	1.40	ug/L	1		6020B	Total/NA
Total Suspended Solids	17.8		1.88	1.31	mg/L	1		I-3765-85	Total/NA

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: Winneshiek Groundwater Monitoring

Job ID: 310-307931-1

Client Sample ID: SW-1
Date Collected: 06/04/25 17:15
Date Received: 06/05/25 07:50

Lab Sample ID: 310-307931-1
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/07/25 13:44	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/07/25 13:44	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/07/25 13:44	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/07/25 13:44	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/07/25 13:44	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/07/25 13:44	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/07/25 13:44	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/07/25 13:44	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/07/25 13:44	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/07/25 13:44	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/07/25 13:44	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/07/25 13:44	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/07/25 13:44	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/07/25 13:44	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/07/25 13:44	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/07/25 13:44	1
Acetone	<3.10		10.0	3.10	ug/L			06/07/25 13:44	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/07/25 13:44	1
Benzene	<0.220		0.500	0.220	ug/L			06/07/25 13:44	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/07/25 13:44	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/07/25 13:44	1
Bromoform	<0.780		5.00	0.780	ug/L			06/07/25 13:44	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/07/25 13:44	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/07/25 13:44	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/07/25 13:44	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/07/25 13:44	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/07/25 13:44	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/07/25 13:44	1
Chloroform	<1.30		3.00	1.30	ug/L			06/07/25 13:44	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/07/25 13:44	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/07/25 13:44	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/07/25 13:44	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/07/25 13:44	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/07/25 13:44	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/07/25 13:44	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/07/25 13:44	1
Styrene	<0.370		1.00	0.370	ug/L			06/07/25 13:44	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/07/25 13:44	1
Toluene	<0.430		1.00	0.430	ug/L			06/07/25 13:44	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/07/25 13:44	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/07/25 13:44	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/07/25 13:44	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/07/25 13:44	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/07/25 13:44	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/07/25 13:44	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/07/25 13:44	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/07/25 13:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*76 - 130*		*06/07/25 13:44*	*1*

Client: AECOM
Job ID: 310-307931-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: SW-1
Lab Sample ID: 310-307931-1
Date Collected: 06/04/25 17:15
Matrix: Ground Water
Date Received: 06/05/25 07:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*80 - 120*		*06/07/25 13:44*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*06/07/25 13:44*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/09/25 09:00	06/18/25 19:33	1
Arsenic	<0.530		2.00	0.530	ug/L		06/09/25 09:00	06/18/25 19:33	1
Barium	**111**		2.00	0.660	ug/L		06/09/25 09:00	06/18/25 19:33	1
Beryllium	<0.330		1.00	0.330	ug/L		06/09/25 09:00	06/18/25 19:33	1
Cadmium	<0.100		0.200	0.100	ug/L		06/09/25 09:00	06/18/25 19:33	1
Chromium	<1.80		5.00	1.80	ug/L		06/09/25 09:00	06/18/25 19:33	1
Cobalt	<0.170		0.500	0.170	ug/L		06/09/25 09:00	06/18/25 19:33	1
Copper	<3.20		5.00	3.20	ug/L		06/09/25 09:00	06/18/25 19:33	1
Lead	<0.330		0.500	0.330	ug/L		06/09/25 09:00	06/18/25 19:33	1
Nickel	<2.30		5.00	2.30	ug/L		06/09/25 09:00	06/18/25 19:33	1
Selenium	<1.40		5.00	1.40	ug/L		06/09/25 09:00	06/18/25 19:33	1
Silver	<0.500	*+	1.00	0.500	ug/L		06/09/25 09:00	06/18/25 19:33	1
Thallium	<0.570		1.00	0.570	ug/L		06/09/25 09:00	06/18/25 19:33	1
Vanadium	<1.70		5.00	1.70	ug/L		06/09/25 09:00	06/18/25 19:33	1
Zinc	<13.0		20.0	13.0	ug/L		06/09/25 09:00	06/18/25 19:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**1.75**	**J**	1.88	1.31	mg/L			06/06/25 16:37	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**14.83**				NTU			06/04/25 17:15	1

Client: AECOM
Job ID: 310-307931-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: SW-5
Lab Sample ID: 310-307931-2
Date Collected: 06/04/25 16:45
Matrix: Ground Water
Date Received: 06/05/25 07:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/07/25 14:07	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/07/25 14:07	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/07/25 14:07	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/07/25 14:07	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/07/25 14:07	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/07/25 14:07	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/07/25 14:07	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/07/25 14:07	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/07/25 14:07	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/07/25 14:07	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/07/25 14:07	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/07/25 14:07	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/07/25 14:07	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/07/25 14:07	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/07/25 14:07	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/07/25 14:07	1
Acetone	**3.42**	**J**	10.0	3.10	ug/L			06/07/25 14:07	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/07/25 14:07	1
Benzene	<0.220		0.500	0.220	ug/L			06/07/25 14:07	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/07/25 14:07	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/07/25 14:07	1
Bromoform	<0.780		5.00	0.780	ug/L			06/07/25 14:07	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/07/25 14:07	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/07/25 14:07	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/07/25 14:07	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/07/25 14:07	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/07/25 14:07	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/07/25 14:07	1
Chloroform	<1.30		3.00	1.30	ug/L			06/07/25 14:07	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/07/25 14:07	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/07/25 14:07	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/07/25 14:07	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/07/25 14:07	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/07/25 14:07	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/07/25 14:07	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/07/25 14:07	1
Styrene	<0.370		1.00	0.370	ug/L			06/07/25 14:07	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/07/25 14:07	1
Toluene	<0.430		1.00	0.430	ug/L			06/07/25 14:07	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/07/25 14:07	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/07/25 14:07	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/07/25 14:07	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/07/25 14:07	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/07/25 14:07	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/07/25 14:07	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/07/25 14:07	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/07/25 14:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*109*		*76 - 130*		*06/07/25 14:07*	*1*

Client: AECOM
Job ID: 310-307931-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: SW-5
Lab Sample ID: 310-307931-2
Date Collected: 06/04/25 16:45
Matrix: Ground Water
Date Received: 06/05/25 07:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*80 - 120*		*06/07/25 14:07*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*06/07/25 14:07*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/09/25 09:00	06/18/25 19:39	1
Arsenic	**1.31**	**J**	2.00	0.530	ug/L		06/09/25 09:00	06/18/25 19:39	1
Barium	**86.9**		2.00	0.660	ug/L		06/09/25 09:00	06/18/25 19:39	1
Beryllium	<0.330		1.00	0.330	ug/L		06/09/25 09:00	06/18/25 19:39	1
Cadmium	<0.100		0.200	0.100	ug/L		06/09/25 09:00	06/18/25 19:39	1
Chromium	<1.80		5.00	1.80	ug/L		06/09/25 09:00	06/18/25 19:39	1
Cobalt	**0.938**		0.500	0.170	ug/L		06/09/25 09:00	06/18/25 19:39	1
Copper	<3.20		5.00	3.20	ug/L		06/09/25 09:00	06/18/25 19:39	1
Lead	**0.862**		0.500	0.330	ug/L		06/09/25 09:00	06/18/25 19:39	1
Nickel	**3.20**	**J**	5.00	2.30	ug/L		06/09/25 09:00	06/18/25 19:39	1
Selenium	<1.40		5.00	1.40	ug/L		06/09/25 09:00	06/18/25 19:39	1
Silver	<0.500	*+	1.00	0.500	ug/L		06/09/25 09:00	06/18/25 19:39	1
Thallium	<0.570		1.00	0.570	ug/L		06/09/25 09:00	06/18/25 19:39	1
Vanadium	<1.70		5.00	1.70	ug/L		06/09/25 09:00	06/18/25 19:39	1
Zinc	<13.0		20.0	13.0	ug/L		06/09/25 09:00	06/18/25 19:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**59.0**		15.0	10.5	mg/L			06/06/25 16:37	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**48.32**				NTU			06/04/25 16:45	1

Client: AECOM
Project/Site: Winneshiek Groundwater Monitoring

Job ID: 310-307931-1

Client Sample ID: SW-5-FD

Date Collected: 06/04/25 16:45
Date Received: 06/05/25 07:50

Lab Sample ID: 310-307931-3

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/07/25 14:29	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/07/25 14:29	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/07/25 14:29	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/07/25 14:29	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/07/25 14:29	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/07/25 14:29	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/07/25 14:29	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/07/25 14:29	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/07/25 14:29	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/07/25 14:29	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/07/25 14:29	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/07/25 14:29	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/07/25 14:29	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/07/25 14:29	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/07/25 14:29	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/07/25 14:29	1
Acetone	**4.07**	**J**	10.0	3.10	ug/L			06/07/25 14:29	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/07/25 14:29	1
Benzene	<0.220		0.500	0.220	ug/L			06/07/25 14:29	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/07/25 14:29	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/07/25 14:29	1
Bromoform	<0.780		5.00	0.780	ug/L			06/07/25 14:29	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/07/25 14:29	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/07/25 14:29	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/07/25 14:29	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/07/25 14:29	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/07/25 14:29	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/07/25 14:29	1
Chloroform	<1.30		3.00	1.30	ug/L			06/07/25 14:29	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/07/25 14:29	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/07/25 14:29	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/07/25 14:29	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/07/25 14:29	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/07/25 14:29	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/07/25 14:29	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/07/25 14:29	1
Styrene	<0.370		1.00	0.370	ug/L			06/07/25 14:29	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/07/25 14:29	1
Toluene	<0.430		1.00	0.430	ug/L			06/07/25 14:29	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/07/25 14:29	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/07/25 14:29	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/07/25 14:29	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/07/25 14:29	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/07/25 14:29	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/07/25 14:29	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/07/25 14:29	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/07/25 14:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*111*		*76 - 130*		*06/07/25 14:29*	*1*

Client Sample ID: SW-5-FD
Lab Sample ID: 310-307931-3
Date Collected: 06/04/25 16:45
Matrix: Water
Date Received: 06/05/25 07:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*80 - 120*		*06/07/25 14:29*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*06/07/25 14:29*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/09/25 09:00	06/18/25 19:42	1
Arsenic	**1.23**	**J**	2.00	0.530	ug/L		06/09/25 09:00	06/18/25 19:42	1
Barium	**82.0**		2.00	0.660	ug/L		06/09/25 09:00	06/18/25 19:42	1
Beryllium	<0.330		1.00	0.330	ug/L		06/09/25 09:00	06/18/25 19:42	1
Cadmium	<0.100		0.200	0.100	ug/L		06/09/25 09:00	06/18/25 19:42	1
Chromium	<1.80		5.00	1.80	ug/L		06/09/25 09:00	06/18/25 19:42	1
Cobalt	**0.867**		0.500	0.170	ug/L		06/09/25 09:00	06/18/25 19:42	1
Copper	<3.20		5.00	3.20	ug/L		06/09/25 09:00	06/18/25 19:42	1
Lead	**0.852**		0.500	0.330	ug/L		06/09/25 09:00	06/18/25 19:42	1
Nickel	**2.91**	**J**	5.00	2.30	ug/L		06/09/25 09:00	06/18/25 19:42	1
Selenium	<1.40		5.00	1.40	ug/L		06/09/25 09:00	06/18/25 19:42	1
Silver	<0.500	*+	1.00	0.500	ug/L		06/09/25 09:00	06/18/25 19:42	1
Thallium	<0.570		1.00	0.570	ug/L		06/09/25 09:00	06/18/25 19:42	1
Vanadium	<1.70		5.00	1.70	ug/L		06/09/25 09:00	06/18/25 19:42	1
Zinc	<13.0		20.0	13.0	ug/L		06/09/25 09:00	06/18/25 19:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**76.0**		15.0	10.5	mg/L			06/06/25 15:58	1

Client: AECOM
Project/Site: Winneshiek Groundwater Monitoring

Job ID: 310-307931-1

Client Sample ID: SW-2
Date Collected: 06/04/25 16:30
Date Received: 06/05/25 07:50

Lab Sample ID: 310-307931-4
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/07/25 14:52	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/07/25 14:52	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/07/25 14:52	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/07/25 14:52	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/07/25 14:52	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/07/25 14:52	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/07/25 14:52	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/07/25 14:52	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/07/25 14:52	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/07/25 14:52	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/07/25 14:52	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/07/25 14:52	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/07/25 14:52	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/07/25 14:52	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/07/25 14:52	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/07/25 14:52	1
Acetone	<3.10		10.0	3.10	ug/L			06/07/25 14:52	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/07/25 14:52	1
Benzene	<0.220		0.500	0.220	ug/L			06/07/25 14:52	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/07/25 14:52	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/07/25 14:52	1
Bromoform	<0.780		5.00	0.780	ug/L			06/07/25 14:52	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/07/25 14:52	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/07/25 14:52	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/07/25 14:52	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/07/25 14:52	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/07/25 14:52	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/07/25 14:52	1
Chloroform	<1.30		3.00	1.30	ug/L			06/07/25 14:52	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/07/25 14:52	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/07/25 14:52	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/07/25 14:52	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/07/25 14:52	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/07/25 14:52	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/07/25 14:52	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/07/25 14:52	1
Styrene	<0.370		1.00	0.370	ug/L			06/07/25 14:52	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/07/25 14:52	1
Toluene	<0.430		1.00	0.430	ug/L			06/07/25 14:52	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/07/25 14:52	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/07/25 14:52	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/07/25 14:52	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/07/25 14:52	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/07/25 14:52	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/07/25 14:52	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/07/25 14:52	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/07/25 14:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*112*		*76 - 130*		*06/07/25 14:52*	*1*

Client Sample ID: SW-2
Lab Sample ID: 310-307931-4
Date Collected: 06/04/25 16:30
Matrix: Ground Water
Date Received: 06/05/25 07:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*80 - 120*		*06/07/25 14:52*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*06/07/25 14:52*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/09/25 09:00	06/18/25 19:45	1
Arsenic	**0.772**	**J**	2.00	0.530	ug/L		06/09/25 09:00	06/18/25 19:45	1
Barium	**99.6**		2.00	0.660	ug/L		06/09/25 09:00	06/18/25 19:45	1
Beryllium	<0.330		1.00	0.330	ug/L		06/09/25 09:00	06/18/25 19:45	1
Cadmium	<0.100		0.200	0.100	ug/L		06/09/25 09:00	06/18/25 19:45	1
Chromium	<1.80		5.00	1.80	ug/L		06/09/25 09:00	06/18/25 19:45	1
Cobalt	**0.389**	**J**	0.500	0.170	ug/L		06/09/25 09:00	06/18/25 19:45	1
Copper	<3.20		5.00	3.20	ug/L		06/09/25 09:00	06/18/25 19:45	1
Lead	**0.362**	**J**	0.500	0.330	ug/L		06/09/25 09:00	06/18/25 19:45	1
Nickel	<2.30		5.00	2.30	ug/L		06/09/25 09:00	06/18/25 19:45	1
Selenium	<1.40		5.00	1.40	ug/L		06/09/25 09:00	06/18/25 19:45	1
Silver	<0.500	*+	1.00	0.500	ug/L		06/09/25 09:00	06/18/25 19:45	1
Thallium	<0.570		1.00	0.570	ug/L		06/09/25 09:00	06/18/25 19:45	1
Vanadium	<1.70		5.00	1.70	ug/L		06/09/25 09:00	06/18/25 19:45	1
Zinc	<13.0		20.0	13.0	ug/L		06/09/25 09:00	06/18/25 19:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**26.1**		1.88	1.31	mg/L			06/06/25 15:58	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**34.21**				NTU			06/04/25 16:30	1

Client: AECOM
Project/Site: Winneshiek Groundwater Monitoring

Job ID: 310-307931-1

Client Sample ID: MW-41A
Date Collected: 06/04/25 11:30
Date Received: 06/05/25 07:50

Lab Sample ID: 310-307931-5
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/07/25 15:15	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/07/25 15:15	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/07/25 15:15	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/07/25 15:15	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/07/25 15:15	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/07/25 15:15	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/07/25 15:15	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/07/25 15:15	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/07/25 15:15	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/07/25 15:15	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/07/25 15:15	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/07/25 15:15	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/07/25 15:15	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/07/25 15:15	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/07/25 15:15	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/07/25 15:15	1
Acetone	<3.10		10.0	3.10	ug/L			06/07/25 15:15	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/07/25 15:15	1
Benzene	<0.220		0.500	0.220	ug/L			06/07/25 15:15	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/07/25 15:15	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/07/25 15:15	1
Bromoform	<0.780		5.00	0.780	ug/L			06/07/25 15:15	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/07/25 15:15	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/07/25 15:15	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/07/25 15:15	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/07/25 15:15	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/07/25 15:15	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/07/25 15:15	1
Chloroform	<1.30		3.00	1.30	ug/L			06/07/25 15:15	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/07/25 15:15	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/07/25 15:15	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/07/25 15:15	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/07/25 15:15	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/07/25 15:15	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/07/25 15:15	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/07/25 15:15	1
Styrene	<0.370		1.00	0.370	ug/L			06/07/25 15:15	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/07/25 15:15	1
Toluene	<0.430		1.00	0.430	ug/L			06/07/25 15:15	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/07/25 15:15	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/07/25 15:15	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/07/25 15:15	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/07/25 15:15	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/07/25 15:15	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/07/25 15:15	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/07/25 15:15	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/07/25 15:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*113*		*76 - 130*		*06/07/25 15:15*	*1*

Client: AECOM
Job ID: 310-307931-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-41A
Lab Sample ID: 310-307931-5

Date Collected: 06/04/25 11:30
Matrix: Ground Water
Date Received: 06/05/25 07:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*80 - 120*		*06/07/25 15:15*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*06/07/25 15:15*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/09/25 09:00	06/18/25 19:48	1
Arsenic	**1.20**	**J**	2.00	0.530	ug/L		06/09/25 09:00	06/18/25 19:48	1
Barium	**159**		2.00	0.660	ug/L		06/09/25 09:00	06/18/25 19:48	1
Beryllium	<0.330		1.00	0.330	ug/L		06/09/25 09:00	06/18/25 19:48	1
Cadmium	<0.100		0.200	0.100	ug/L		06/09/25 09:00	06/18/25 19:48	1
Chromium	<1.80		5.00	1.80	ug/L		06/09/25 09:00	06/18/25 19:48	1
Cobalt	**0.220**	**J**	0.500	0.170	ug/L		06/09/25 09:00	06/18/25 19:48	1
Copper	<3.20		5.00	3.20	ug/L		06/09/25 09:00	06/18/25 19:48	1
Lead	<0.330		0.500	0.330	ug/L		06/09/25 09:00	06/18/25 19:48	1
Nickel	<2.30		5.00	2.30	ug/L		06/09/25 09:00	06/18/25 19:48	1
Selenium	<1.40		5.00	1.40	ug/L		06/09/25 09:00	06/18/25 19:48	1
Silver	<0.500	*+	1.00	0.500	ug/L		06/09/25 09:00	06/18/25 19:48	1
Thallium	<0.570		1.00	0.570	ug/L		06/09/25 09:00	06/18/25 19:48	1
Vanadium	<1.70		5.00	1.70	ug/L		06/09/25 09:00	06/18/25 19:48	1
Zinc	<13.0		20.0	13.0	ug/L		06/09/25 09:00	06/18/25 19:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**6.63**		1.88	1.31	mg/L			06/06/25 15:58	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**10.17**				NTU			06/04/25 11:30	1

Client: AECOM
Project/Site: Winneshiek Groundwater Monitoring

Job ID: 310-307931-1

Client Sample ID: MW-35
Date Collected: 06/04/25 12:45
Date Received: 06/05/25 07:50

Lab Sample ID: 310-307931-6
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/07/25 15:38	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/07/25 15:38	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/07/25 15:38	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/07/25 15:38	1
1,1-Dichloroethane	**0.418**	**J**	1.00	0.220	ug/L			06/07/25 15:38	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/07/25 15:38	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/07/25 15:38	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/07/25 15:38	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/07/25 15:38	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/07/25 15:38	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/07/25 15:38	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/07/25 15:38	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/07/25 15:38	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/07/25 15:38	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/07/25 15:38	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/07/25 15:38	1
Acetone	<3.10		10.0	3.10	ug/L			06/07/25 15:38	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/07/25 15:38	1
Benzene	<0.220		0.500	0.220	ug/L			06/07/25 15:38	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/07/25 15:38	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/07/25 15:38	1
Bromoform	<0.780		5.00	0.780	ug/L			06/07/25 15:38	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/07/25 15:38	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/07/25 15:38	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/07/25 15:38	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/07/25 15:38	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/07/25 15:38	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/07/25 15:38	1
Chloroform	<1.30		3.00	1.30	ug/L			06/07/25 15:38	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/07/25 15:38	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/07/25 15:38	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/07/25 15:38	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/07/25 15:38	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/07/25 15:38	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/07/25 15:38	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/07/25 15:38	1
Styrene	<0.370		1.00	0.370	ug/L			06/07/25 15:38	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/07/25 15:38	1
Toluene	<0.430		1.00	0.430	ug/L			06/07/25 15:38	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/07/25 15:38	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/07/25 15:38	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/07/25 15:38	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/07/25 15:38	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/07/25 15:38	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/07/25 15:38	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/07/25 15:38	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/07/25 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*107*		*76 - 130*		*06/07/25 15:38*	*1*

Client: AECOM
Job ID: 310-307931-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-35
Lab Sample ID: 310-307931-6
Date Collected: 06/04/25 12:45
Matrix: Ground Water
Date Received: 06/05/25 07:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*80 - 120*		*06/07/25 15:38*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*06/07/25 15:38*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/09/25 09:00	06/18/25 19:57	1
Arsenic	**0.786**	**J**	2.00	0.530	ug/L		06/09/25 09:00	06/18/25 19:57	1
Barium	**279**		2.00	0.660	ug/L		06/09/25 09:00	06/18/25 19:57	1
Beryllium	<0.330		1.00	0.330	ug/L		06/09/25 09:00	06/18/25 19:57	1
Cadmium	<0.100		0.200	0.100	ug/L		06/09/25 09:00	06/18/25 19:57	1
Chromium	<1.80		5.00	1.80	ug/L		06/09/25 09:00	06/18/25 19:57	1
Cobalt	**4.82**		0.500	0.170	ug/L		06/09/25 09:00	06/18/25 19:57	1
Copper	<3.20		5.00	3.20	ug/L		06/09/25 09:00	06/18/25 19:57	1
Lead	<0.330		0.500	0.330	ug/L		06/09/25 09:00	06/18/25 19:57	1
Nickel	**18.0**		5.00	2.30	ug/L		06/09/25 09:00	06/18/25 19:57	1
Selenium	<1.40		5.00	1.40	ug/L		06/09/25 09:00	06/18/25 19:57	1
Silver	<0.500	*+	1.00	0.500	ug/L		06/09/25 09:00	06/18/25 19:57	1
Thallium	<0.570		1.00	0.570	ug/L		06/09/25 09:00	06/18/25 19:57	1
Vanadium	<1.70		5.00	1.70	ug/L		06/09/25 09:00	06/18/25 19:57	1
Zinc	<13.0		20.0	13.0	ug/L		06/09/25 09:00	06/18/25 19:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**4.00**		3.75	2.63	mg/L			06/06/25 15:58	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**2.26**				NTU			06/04/25 12:45	1

Client: AECOM
Project/Site: Winneshiek Groundwater Monitoring

Job ID: 310-307931-1

Client Sample ID: MW-38A
Date Collected: 06/04/25 14:00
Date Received: 06/05/25 07:50

Lab Sample ID: 310-307931-7
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/07/25 16:00	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/07/25 16:00	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/07/25 16:00	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/07/25 16:00	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/07/25 16:00	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/07/25 16:00	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/07/25 16:00	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/07/25 16:00	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/07/25 16:00	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/07/25 16:00	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/07/25 16:00	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/07/25 16:00	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/07/25 16:00	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/07/25 16:00	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/07/25 16:00	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/07/25 16:00	1
Acetone	<3.10		10.0	3.10	ug/L			06/07/25 16:00	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/07/25 16:00	1
Benzene	<0.220		0.500	0.220	ug/L			06/07/25 16:00	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/07/25 16:00	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/07/25 16:00	1
Bromoform	<0.780		5.00	0.780	ug/L			06/07/25 16:00	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/07/25 16:00	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/07/25 16:00	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/07/25 16:00	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/07/25 16:00	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/07/25 16:00	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/07/25 16:00	1
Chloroform	<1.30		3.00	1.30	ug/L			06/07/25 16:00	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/07/25 16:00	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/07/25 16:00	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/07/25 16:00	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/07/25 16:00	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/07/25 16:00	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/07/25 16:00	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/07/25 16:00	1
Styrene	<0.370		1.00	0.370	ug/L			06/07/25 16:00	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/07/25 16:00	1
Toluene	<0.430		1.00	0.430	ug/L			06/07/25 16:00	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/07/25 16:00	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/07/25 16:00	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/07/25 16:00	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/07/25 16:00	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/07/25 16:00	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/07/25 16:00	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/07/25 16:00	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/07/25 16:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*109*		*76 - 130*		*06/07/25 16:00*	*1*

Client: AECOM
Job ID: 310-307931-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-38A
Lab Sample ID: 310-307931-7
Date Collected: 06/04/25 14:00
Matrix: Ground Water
Date Received: 06/05/25 07:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*80 - 120*		*06/07/25 16:00*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*06/07/25 16:00*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/09/25 09:00	06/18/25 20:00	1
Arsenic	<0.530		2.00	0.530	ug/L		06/09/25 09:00	06/18/25 20:00	1
Barium	**140**		2.00	0.660	ug/L		06/09/25 09:00	06/18/25 20:00	1
Beryllium	<0.330		1.00	0.330	ug/L		06/09/25 09:00	06/18/25 20:00	1
Cadmium	<0.100		0.200	0.100	ug/L		06/09/25 09:00	06/18/25 20:00	1
Chromium	<1.80		5.00	1.80	ug/L		06/09/25 09:00	06/18/25 20:00	1
Cobalt	<0.170		0.500	0.170	ug/L		06/09/25 09:00	06/18/25 20:00	1
Copper	<3.20		5.00	3.20	ug/L		06/09/25 09:00	06/18/25 20:00	1
Lead	<0.330		0.500	0.330	ug/L		06/09/25 09:00	06/18/25 20:00	1
Nickel	<2.30		5.00	2.30	ug/L		06/09/25 09:00	06/18/25 20:00	1
Selenium	<1.40		5.00	1.40	ug/L		06/09/25 09:00	06/18/25 20:00	1
Silver	<0.500	*+	1.00	0.500	ug/L		06/09/25 09:00	06/18/25 20:00	1
Thallium	<0.570		1.00	0.570	ug/L		06/09/25 09:00	06/18/25 20:00	1
Vanadium	<1.70		5.00	1.70	ug/L		06/09/25 09:00	06/18/25 20:00	1
Zinc	<13.0		20.0	13.0	ug/L		06/09/25 09:00	06/18/25 20:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**6.25**		1.88	1.31	mg/L			06/06/25 16:37	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**7.35**				NTU			06/04/25 14:00	1

Client: AECOM
Project/Site: Winneshiek Groundwater Monitoring

Job ID: 310-307931-1

Client Sample ID: MW-39A
Date Collected: 06/04/25 14:45
Date Received: 06/05/25 07:50

Lab Sample ID: 310-307931-8
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/07/25 16:23	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/07/25 16:23	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/07/25 16:23	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/07/25 16:23	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/07/25 16:23	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/07/25 16:23	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/07/25 16:23	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/07/25 16:23	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/07/25 16:23	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/07/25 16:23	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/07/25 16:23	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/07/25 16:23	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/07/25 16:23	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/07/25 16:23	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/07/25 16:23	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/07/25 16:23	1
Acetone	<3.10		10.0	3.10	ug/L			06/07/25 16:23	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/07/25 16:23	1
Benzene	<0.220		0.500	0.220	ug/L			06/07/25 16:23	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/07/25 16:23	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/07/25 16:23	1
Bromoform	<0.780		5.00	0.780	ug/L			06/07/25 16:23	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/07/25 16:23	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/07/25 16:23	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/07/25 16:23	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/07/25 16:23	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/07/25 16:23	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/07/25 16:23	1
Chloroform	<1.30		3.00	1.30	ug/L			06/07/25 16:23	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/07/25 16:23	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/07/25 16:23	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/07/25 16:23	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/07/25 16:23	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/07/25 16:23	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/07/25 16:23	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/07/25 16:23	1
Styrene	<0.370		1.00	0.370	ug/L			06/07/25 16:23	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/07/25 16:23	1
Toluene	<0.430		1.00	0.430	ug/L			06/07/25 16:23	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/07/25 16:23	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/07/25 16:23	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/07/25 16:23	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/07/25 16:23	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/07/25 16:23	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/07/25 16:23	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/07/25 16:23	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/07/25 16:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*109*		*76 - 130*		*06/07/25 16:23*	*1*

Client: AECOM
Job ID: 310-307931-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-39A
Lab Sample ID: 310-307931-8

Date Collected: 06/04/25 14:45
Matrix: Ground Water
Date Received: 06/05/25 07:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*80 - 120*		*06/07/25 16:23*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*06/07/25 16:23*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/09/25 09:00	06/18/25 20:03	1
Arsenic	<0.530		2.00	0.530	ug/L		06/09/25 09:00	06/18/25 20:03	1
Barium	**146**		2.00	0.660	ug/L		06/09/25 09:00	06/18/25 20:03	1
Beryllium	<0.330		1.00	0.330	ug/L		06/09/25 09:00	06/18/25 20:03	1
Cadmium	<0.100		0.200	0.100	ug/L		06/09/25 09:00	06/18/25 20:03	1
Chromium	<1.80		5.00	1.80	ug/L		06/09/25 09:00	06/18/25 20:03	1
Cobalt	**0.329**	**J**	0.500	0.170	ug/L		06/09/25 09:00	06/18/25 20:03	1
Copper	<3.20		5.00	3.20	ug/L		06/09/25 09:00	06/18/25 20:03	1
Lead	<0.330		0.500	0.330	ug/L		06/09/25 09:00	06/18/25 20:03	1
Nickel	<2.30		5.00	2.30	ug/L		06/09/25 09:00	06/18/25 20:03	1
Selenium	<1.40		5.00	1.40	ug/L		06/09/25 09:00	06/18/25 20:03	1
Silver	<0.500	*+	1.00	0.500	ug/L		06/09/25 09:00	06/18/25 20:03	1
Thallium	<0.570		1.00	0.570	ug/L		06/09/25 09:00	06/18/25 20:03	1
Vanadium	<1.70		5.00	1.70	ug/L		06/09/25 09:00	06/18/25 20:03	1
Zinc	<13.0		20.0	13.0	ug/L		06/09/25 09:00	06/18/25 20:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**27.5**		3.75	2.63	mg/L			06/06/25 16:37	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**36.91**				NTU			06/04/25 14:45	1

Client: AECOM
Project/Site: Winneshiek Groundwater Monitoring

Job ID: 310-307931-1

Client Sample ID: MW-40A

Date Collected: 06/04/25 15:45
Date Received: 06/05/25 07:50

Lab Sample ID: 310-307931-9

Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/07/25 16:46	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/07/25 16:46	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/07/25 16:46	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/07/25 16:46	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/07/25 16:46	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/07/25 16:46	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/07/25 16:46	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/07/25 16:46	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/07/25 16:46	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/07/25 16:46	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/07/25 16:46	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/07/25 16:46	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/07/25 16:46	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/07/25 16:46	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/07/25 16:46	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/07/25 16:46	1
Acetone	<3.10		10.0	3.10	ug/L			06/07/25 16:46	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/07/25 16:46	1
Benzene	<0.220		0.500	0.220	ug/L			06/07/25 16:46	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/07/25 16:46	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/07/25 16:46	1
Bromoform	<0.780		5.00	0.780	ug/L			06/07/25 16:46	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/07/25 16:46	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/07/25 16:46	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/07/25 16:46	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/07/25 16:46	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/07/25 16:46	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/07/25 16:46	1
Chloroform	<1.30		3.00	1.30	ug/L			06/07/25 16:46	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/07/25 16:46	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/07/25 16:46	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/07/25 16:46	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/07/25 16:46	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/07/25 16:46	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/07/25 16:46	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/07/25 16:46	1
Styrene	<0.370		1.00	0.370	ug/L			06/07/25 16:46	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/07/25 16:46	1
Toluene	<0.430		1.00	0.430	ug/L			06/07/25 16:46	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/07/25 16:46	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/07/25 16:46	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/07/25 16:46	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/07/25 16:46	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/07/25 16:46	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/07/25 16:46	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/07/25 16:46	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/07/25 16:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*76 - 130*		*06/07/25 16:46*	*1*

Client Sample ID: MW-40A
Lab Sample ID: 310-307931-9
Date Collected: 06/04/25 15:45
Matrix: Ground Water
Date Received: 06/05/25 07:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*80 - 120*		*06/07/25 16:46*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*06/07/25 16:46*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/09/25 09:00	06/18/25 20:06	1
Arsenic	<0.530		2.00	0.530	ug/L		06/09/25 09:00	06/18/25 20:06	1
Barium	**202**		2.00	0.660	ug/L		06/09/25 09:00	06/18/25 20:06	1
Beryllium	<0.330		1.00	0.330	ug/L		06/09/25 09:00	06/18/25 20:06	1
Cadmium	<0.100		0.200	0.100	ug/L		06/09/25 09:00	06/18/25 20:06	1
Chromium	<1.80		5.00	1.80	ug/L		06/09/25 09:00	06/18/25 20:06	1
Cobalt	**1.57**		0.500	0.170	ug/L		06/09/25 09:00	06/18/25 20:06	1
Copper	<3.20		5.00	3.20	ug/L		06/09/25 09:00	06/18/25 20:06	1
Lead	<0.330		0.500	0.330	ug/L		06/09/25 09:00	06/18/25 20:06	1
Nickel	**14.1**		5.00	2.30	ug/L		06/09/25 09:00	06/18/25 20:06	1
Selenium	<1.40		5.00	1.40	ug/L		06/09/25 09:00	06/18/25 20:06	1
Silver	<0.500	*+	1.00	0.500	ug/L		06/09/25 09:00	06/18/25 20:06	1
Thallium	<0.570		1.00	0.570	ug/L		06/09/25 09:00	06/18/25 20:06	1
Vanadium	<1.70		5.00	1.70	ug/L		06/09/25 09:00	06/18/25 20:06	1
Zinc	<13.0		20.0	13.0	ug/L		06/09/25 09:00	06/18/25 20:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**9.63**		1.88	1.31	mg/L			06/06/25 16:37	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**6.00**				NTU			06/04/25 15:45	1

Client: AECOM
Project/Site: Winneshiek Groundwater Monitoring

Job ID: 310-307931-1

Client Sample ID: Trip Blank
Date Collected: 06/04/25 08:00
Date Received: 06/05/25 07:50

Lab Sample ID: 310-307931-10
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/07/25 13:21	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/07/25 13:21	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/07/25 13:21	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/07/25 13:21	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/07/25 13:21	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/07/25 13:21	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/07/25 13:21	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/07/25 13:21	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/07/25 13:21	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/07/25 13:21	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/07/25 13:21	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/07/25 13:21	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/07/25 13:21	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/07/25 13:21	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/07/25 13:21	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/07/25 13:21	1
Acetone	<3.10		10.0	3.10	ug/L			06/07/25 13:21	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/07/25 13:21	1
Benzene	<0.220		0.500	0.220	ug/L			06/07/25 13:21	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/07/25 13:21	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/07/25 13:21	1
Bromoform	<0.780		5.00	0.780	ug/L			06/07/25 13:21	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/07/25 13:21	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/07/25 13:21	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/07/25 13:21	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/07/25 13:21	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/07/25 13:21	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/07/25 13:21	1
Chloroform	<1.30		3.00	1.30	ug/L			06/07/25 13:21	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/07/25 13:21	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/07/25 13:21	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/07/25 13:21	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/07/25 13:21	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/07/25 13:21	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/07/25 13:21	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/07/25 13:21	1
Styrene	<0.370		1.00	0.370	ug/L			06/07/25 13:21	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/07/25 13:21	1
Toluene	<0.430		1.00	0.430	ug/L			06/07/25 13:21	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/07/25 13:21	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/07/25 13:21	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/07/25 13:21	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/07/25 13:21	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/07/25 13:21	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/07/25 13:21	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/07/25 13:21	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/07/25 13:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*76 - 130*		*06/07/25 13:21*	*1*

Client Sample ID: Trip Blank
Lab Sample ID: 310-307931-10
Date Collected: 06/04/25 08:00
Matrix: Water
Date Received: 06/05/25 07:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	94		80 - 120		06/07/25 13:21	1
4-Bromofluorobenzene (Surr)	104		80 - 120		06/07/25 13:21	1

Client: AECOM
Project/Site: Winneshiek Groundwater Monitoring

Job ID: 310-307931-1

Client Sample ID: MW-34A
Date Collected: 06/04/25 10:30
Date Received: 06/05/25 07:50

Lab Sample ID: 310-307931-11
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/07/25 17:08	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/07/25 17:08	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/07/25 17:08	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/07/25 17:08	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/07/25 17:08	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/07/25 17:08	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/07/25 17:08	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/07/25 17:08	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/07/25 17:08	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/07/25 17:08	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/07/25 17:08	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/07/25 17:08	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/07/25 17:08	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/07/25 17:08	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/07/25 17:08	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/07/25 17:08	1
Acetone	<3.10		10.0	3.10	ug/L			06/07/25 17:08	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/07/25 17:08	1
Benzene	<0.220		0.500	0.220	ug/L			06/07/25 17:08	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/07/25 17:08	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/07/25 17:08	1
Bromoform	<0.780		5.00	0.780	ug/L			06/07/25 17:08	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/07/25 17:08	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/07/25 17:08	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/07/25 17:08	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/07/25 17:08	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/07/25 17:08	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/07/25 17:08	1
Chloroform	<1.30		3.00	1.30	ug/L			06/07/25 17:08	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/07/25 17:08	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/07/25 17:08	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/07/25 17:08	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/07/25 17:08	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/07/25 17:08	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/07/25 17:08	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/07/25 17:08	1
Styrene	<0.370		1.00	0.370	ug/L			06/07/25 17:08	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/07/25 17:08	1
Toluene	<0.430		1.00	0.430	ug/L			06/07/25 17:08	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/07/25 17:08	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/07/25 17:08	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/07/25 17:08	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/07/25 17:08	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/07/25 17:08	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/07/25 17:08	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/07/25 17:08	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/07/25 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*107*		*76 - 130*		*06/07/25 17:08*	*1*

Client: AECOM
Job ID: 310-307931-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-34A
Lab Sample ID: 310-307931-11

Date Collected: 06/04/25 10:30
Matrix: Ground Water
Date Received: 06/05/25 07:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*80 - 120*		*06/07/25 17:08*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*06/07/25 17:08*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/10/25 09:00	06/18/25 12:48	1
Arsenic	<0.530		2.00	0.530	ug/L		06/10/25 09:00	06/18/25 12:48	1
Barium	**70.5**		2.00	0.660	ug/L		06/10/25 09:00	06/18/25 12:48	1
Beryllium	<0.330		1.00	0.330	ug/L		06/10/25 09:00	06/18/25 12:48	1
Cadmium	<0.100		0.200	0.100	ug/L		06/10/25 09:00	06/18/25 12:48	1
Chromium	<1.80		5.00	1.80	ug/L		06/10/25 09:00	06/18/25 12:48	1
Cobalt	<0.170		0.500	0.170	ug/L		06/10/25 09:00	06/18/25 12:48	1
Copper	<3.20		5.00	3.20	ug/L		06/10/25 09:00	06/18/25 12:48	1
Lead	<0.330		0.500	0.330	ug/L		06/10/25 09:00	06/18/25 12:48	1
Nickel	<2.30		5.00	2.30	ug/L		06/10/25 09:00	06/18/25 12:48	1
Selenium	**1.99**	**J**	5.00	1.40	ug/L		06/10/25 09:00	06/18/25 12:48	1
Silver	<0.500		1.00	0.500	ug/L		06/10/25 09:00	06/18/25 12:48	1
Thallium	<0.570		1.00	0.570	ug/L		06/10/25 09:00	06/18/25 12:48	1
Vanadium	<1.70		5.00	1.70	ug/L		06/10/25 09:00	06/18/25 12:48	1
Zinc	<13.0		20.0	13.0	ug/L		06/10/25 09:00	06/18/25 12:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**11.6**		1.88	1.31	mg/L			06/06/25 16:37	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**24.16**				NTU			06/04/25 10:30	1

Client: AECOM
Project/Site: Winneshiek Groundwater Monitoring

Job ID: 310-307931-1

Client Sample ID: MW-34A-FD
Date Collected: 06/04/25 10:40
Date Received: 06/05/25 07:50

Lab Sample ID: 310-307931-12
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/07/25 17:31	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/07/25 17:31	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/07/25 17:31	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/07/25 17:31	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/07/25 17:31	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/07/25 17:31	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/07/25 17:31	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/07/25 17:31	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/07/25 17:31	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/07/25 17:31	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/07/25 17:31	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/07/25 17:31	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/07/25 17:31	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/07/25 17:31	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/07/25 17:31	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/07/25 17:31	1
Acetone	<3.10		10.0	3.10	ug/L			06/07/25 17:31	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/07/25 17:31	1
Benzene	<0.220		0.500	0.220	ug/L			06/07/25 17:31	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/07/25 17:31	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/07/25 17:31	1
Bromoform	<0.780		5.00	0.780	ug/L			06/07/25 17:31	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/07/25 17:31	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/07/25 17:31	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/07/25 17:31	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/07/25 17:31	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/07/25 17:31	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/07/25 17:31	1
Chloroform	<1.30		3.00	1.30	ug/L			06/07/25 17:31	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/07/25 17:31	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/07/25 17:31	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/07/25 17:31	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/07/25 17:31	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/07/25 17:31	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/07/25 17:31	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/07/25 17:31	1
Styrene	<0.370		1.00	0.370	ug/L			06/07/25 17:31	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/07/25 17:31	1
Toluene	<0.430		1.00	0.430	ug/L			06/07/25 17:31	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/07/25 17:31	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/07/25 17:31	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/07/25 17:31	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/07/25 17:31	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/07/25 17:31	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/07/25 17:31	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/07/25 17:31	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/07/25 17:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*113*		*76 - 130*		*06/07/25 17:31*	*1*

Client: AECOM
Job ID: 310-307931-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-34A-FD
Lab Sample ID: 310-307931-12

Date Collected: 06/04/25 10:40
Matrix: Ground Water
Date Received: 06/05/25 07:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*80 - 120*		*06/07/25 17:31*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*06/07/25 17:31*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/10/25 09:00	06/18/25 13:00	1
Arsenic	<0.530		2.00	0.530	ug/L		06/10/25 09:00	06/18/25 13:00	1
Barium	**70.1**		2.00	0.660	ug/L		06/10/25 09:00	06/18/25 13:00	1
Beryllium	<0.330		1.00	0.330	ug/L		06/10/25 09:00	06/18/25 13:00	1
Cadmium	<0.100		0.200	0.100	ug/L		06/10/25 09:00	06/18/25 13:00	1
Chromium	<1.80		5.00	1.80	ug/L		06/10/25 09:00	06/18/25 13:00	1
Cobalt	<0.170		0.500	0.170	ug/L		06/10/25 09:00	06/18/25 13:00	1
Copper	<3.20		5.00	3.20	ug/L		06/10/25 09:00	06/18/25 13:00	1
Lead	<0.330		0.500	0.330	ug/L		06/10/25 09:00	06/18/25 13:00	1
Nickel	<2.30		5.00	2.30	ug/L		06/10/25 09:00	06/18/25 13:00	1
Selenium	**1.95**	**J**	5.00	1.40	ug/L		06/10/25 09:00	06/18/25 13:00	1
Silver	<0.500		1.00	0.500	ug/L		06/10/25 09:00	06/18/25 13:00	1
Thallium	<0.570		1.00	0.570	ug/L		06/10/25 09:00	06/18/25 13:00	1
Vanadium	<1.70		5.00	1.70	ug/L		06/10/25 09:00	06/18/25 13:00	1
Zinc	<13.0		20.0	13.0	ug/L		06/10/25 09:00	06/18/25 13:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**17.8**		1.88	1.31	mg/L			06/06/25 17:11	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: AECOM
Project/Site: Winneshiek Groundwater Monitoring

Job ID: 310-307931-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Ground Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(76-130)	(80-120)	(80-120)
310-307931-1	SW-1	110	95	104
310-307931-2	SW-5	109	93	101
310-307931-4	SW-2	112	93	103
310-307931-5	MW-41A	113	94	101
310-307931-6	MW-35	107	91	104
310-307931-7	MW-38A	109	94	102
310-307931-8	MW-39A	109	93	102
310-307931-9	MW-40A	110	93	104
310-307931-11	MW-34A	107	94	102
310-307931-12	MW-34A-FD	113	93	104

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(76-130)	(80-120)	(80-120)
310-307931-3	SW-5-FD	111	93	103
310-307931-10	Trip Blank	106	94	104
LCS 310-456822/6	Lab Control Sample	99	99	99
LCS 310-456822/7	Lab Control Sample	108	92	104
MB 310-456822/5	Method Blank	106	96	101

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 310-456822/5
Matrix: Water
Analysis Batch: 456822

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/07/25 12:13	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/07/25 12:13	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/07/25 12:13	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/07/25 12:13	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/07/25 12:13	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/07/25 12:13	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/07/25 12:13	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/07/25 12:13	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/07/25 12:13	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/07/25 12:13	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/07/25 12:13	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/07/25 12:13	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/07/25 12:13	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/07/25 12:13	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/07/25 12:13	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/07/25 12:13	1
Acetone	<3.10		10.0	3.10	ug/L			06/07/25 12:13	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/07/25 12:13	1
Benzene	<0.220		0.500	0.220	ug/L			06/07/25 12:13	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/07/25 12:13	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/07/25 12:13	1
Bromoform	<0.780		5.00	0.780	ug/L			06/07/25 12:13	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/07/25 12:13	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/07/25 12:13	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/07/25 12:13	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/07/25 12:13	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/07/25 12:13	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/07/25 12:13	1
Chloroform	<1.30		3.00	1.30	ug/L			06/07/25 12:13	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/07/25 12:13	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/07/25 12:13	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/07/25 12:13	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/07/25 12:13	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/07/25 12:13	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/07/25 12:13	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/07/25 12:13	1
Styrene	<0.370		1.00	0.370	ug/L			06/07/25 12:13	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/07/25 12:13	1
Toluene	<0.430		1.00	0.430	ug/L			06/07/25 12:13	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/07/25 12:13	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/07/25 12:13	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/07/25 12:13	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/07/25 12:13	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/07/25 12:13	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/07/25 12:13	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/07/25 12:13	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/07/25 12:13	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-456822/5
Matrix: Water
Analysis Batch: 456822

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*106*		*76 - 130*		*06/07/25 12:13*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*06/07/25 12:13*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*06/07/25 12:13*	*1*

Lab Sample ID: LCS 310-456822/6
Matrix: Water
Analysis Batch: 456822

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	19.45		ug/L		97	70 - 121
1,1,1-Trichloroethane	20.0	20.75		ug/L		104	69 - 130
1,1,2,2-Tetrachloroethane	20.0	20.40		ug/L		102	70 - 122
1,1,2-Trichloroethane	20.0	21.05		ug/L		105	75 - 121
1,1-Dichloroethane	20.0	20.13		ug/L		101	69 - 127
1,1-Dichloroethene	20.0	20.22		ug/L		101	64 - 134
1,2,3-Trichloropropane	20.0	20.46		ug/L		102	70 - 122
1,2-Dibromo-3-Chloropropane	20.0	20.19		ug/L		101	62 - 132
1,2-Dibromoethane (EDB)	20.0	21.20		ug/L		106	74 - 122
1,2-Dichlorobenzene	20.0	20.52		ug/L		103	74 - 120
1,2-Dichloroethane	20.0	19.84		ug/L		99	68 - 125
1,2-Dichloropropane	20.0	21.65		ug/L		108	72 - 128
1,4-Dichlorobenzene	20.0	19.61		ug/L		98	72 - 120
2-Butanone (MEK)	40.0	45.17		ug/L		113	60 - 134
2-Hexanone	40.0	44.08		ug/L		110	62 - 139
4-Methyl-2-pentanone (MIBK)	40.0	42.99		ug/L		107	62 - 136
Acetone	40.0	45.12		ug/L		113	59 - 136
Acrylonitrile	200	217.1		ug/L		109	50 - 150
Benzene	20.0	20.91		ug/L		105	71 - 125
Bromochloromethane	20.0	20.97		ug/L		105	69 - 131
Bromodichloromethane	20.0	19.49		ug/L		97	70 - 122
Bromoform	20.0	18.30		ug/L		92	62 - 122
Carbon disulfide	20.0	19.53		ug/L		98	58 - 137
Carbon tetrachloride	20.0	20.31		ug/L		102	63 - 136
Chlorobenzene	20.0	19.73		ug/L		99	74 - 120
Chlorodibromomethane	20.0	17.24		ug/L		86	69 - 121
Chloroform	20.0	19.16		ug/L		96	72 - 122
cis-1,2-Dichloroethene	20.0	20.45		ug/L		102	72 - 123
cis-1,3-Dichloropropene	20.0	17.11		ug/L		86	72 - 123
Dibromomethane	20.0	19.84		ug/L		99	72 - 122
Ethylbenzene	20.0	20.61		ug/L		103	75 - 120
Iodomethane	20.0	15.29		ug/L		76	18 - 150
Methylene Chloride	20.0	22.96		ug/L		115	72 - 128
Styrene	20.0	20.99		ug/L		105	74 - 122
Tetrachloroethene	20.0	20.22		ug/L		101	70 - 128
Toluene	20.0	20.50		ug/L		102	74 - 120
trans-1,2-Dichloroethene	20.0	20.33		ug/L		102	67 - 127
trans-1,3-Dichloropropene	20.0	16.23		ug/L		81	67 - 123
trans-1,4-Dichloro-2-butene	20.0	18.59		ug/L		93	50 - 150

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-456822/6
Matrix: Water
Analysis Batch: 456822

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Trichloroethene	20.0	21.01		ug/L		105	70 - 128
Vinyl acetate	40.0	37.22		ug/L		93	50 - 150
Xylenes, Total	40.0	41.45		ug/L		104	74 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*99*		*76 - 130*
Toluene-d8 (Surr)	*99*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*

Lab Sample ID: LCS 310-456822/7
Matrix: Water
Analysis Batch: 456822

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	15.97		ug/L		80	33 - 138
Chloroethane	20.0	18.02		ug/L		90	59 - 139
Chloromethane	20.0	18.81		ug/L		94	52 - 146
Trichlorofluoromethane	20.0	17.48		ug/L		87	55 - 150
Vinyl chloride	20.0	17.66		ug/L		88	60 - 142

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*108*		*76 - 130*
Toluene-d8 (Surr)	*92*		*80 - 120*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-456874/1-A
Matrix: Water
Analysis Batch: 458075

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 456874

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/09/25 09:00	06/18/25 18:37	1
Arsenic	<0.530		2.00	0.530	ug/L		06/09/25 09:00	06/18/25 18:37	1
Barium	<0.660		2.00	0.660	ug/L		06/09/25 09:00	06/18/25 18:37	1
Beryllium	<0.330		1.00	0.330	ug/L		06/09/25 09:00	06/18/25 18:37	1
Cadmium	<0.100		0.200	0.100	ug/L		06/09/25 09:00	06/18/25 18:37	1
Chromium	<1.80		5.00	1.80	ug/L		06/09/25 09:00	06/18/25 18:37	1
Cobalt	<0.170		0.500	0.170	ug/L		06/09/25 09:00	06/18/25 18:37	1
Copper	<3.20		5.00	3.20	ug/L		06/09/25 09:00	06/18/25 18:37	1
Lead	<0.330		0.500	0.330	ug/L		06/09/25 09:00	06/18/25 18:37	1
Nickel	<2.30		5.00	2.30	ug/L		06/09/25 09:00	06/18/25 18:37	1
Selenium	<1.40		5.00	1.40	ug/L		06/09/25 09:00	06/18/25 18:37	1
Silver	<0.500		1.00	0.500	ug/L		06/09/25 09:00	06/18/25 18:37	1
Thallium	<0.570		1.00	0.570	ug/L		06/09/25 09:00	06/18/25 18:37	1
Vanadium	<1.70		5.00	1.70	ug/L		06/09/25 09:00	06/18/25 18:37	1
Zinc	<13.0		20.0	13.0	ug/L		06/09/25 09:00	06/18/25 18:37	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 310-456874/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 458075
Prep Batch: 456874

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	200	209.7		ug/L		105	80 - 120
Arsenic	200	192.4		ug/L		96	80 - 120
Barium	100	101.3		ug/L		101	80 - 120
Beryllium	100	91.50		ug/L		91	80 - 120
Cadmium	100	97.47		ug/L		97	80 - 120
Chromium	100	97.67		ug/L		98	80 - 120
Cobalt	100	97.34		ug/L		97	80 - 120
Copper	200	199.2		ug/L		100	80 - 120
Lead	200	189.3		ug/L		95	80 - 120
Nickel	200	196.1		ug/L		98	80 - 120
Selenium	400	382.4		ug/L		96	80 - 120
Silver	100	123.1	*+	ug/L		123	80 - 120
Thallium	100	95.61		ug/L		96	80 - 120
Vanadium	100	96.57		ug/L		97	80 - 120
Zinc	200	184.7		ug/L		92	80 - 120

Lab Sample ID: 310-307931-1 DU
Client Sample ID: SW-1
Matrix: Ground Water
Prep Type: Total/NA
Analysis Batch: 458075
Prep Batch: 456874

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<1.00		<1.00		ug/L		NC	20
Arsenic	<0.530		<0.530		ug/L		NC	20
Barium	111		110.7		ug/L		0.06	20
Beryllium	<0.330		<0.330		ug/L		NC	20
Cadmium	<0.100		<0.100		ug/L		NC	20
Chromium	<1.80		<1.80		ug/L		NC	20
Cobalt	<0.170		<0.170		ug/L		NC	20
Copper	<3.20		<3.20		ug/L		NC	20
Lead	<0.330		<0.330		ug/L		NC	20
Nickel	<2.30		<2.30		ug/L		NC	20
Selenium	<1.40		<1.40		ug/L		NC	20
Thallium	<0.570		<0.570		ug/L		NC	20
Vanadium	<1.70		<1.70		ug/L		NC	20
Zinc	<13.0		<13.0		ug/L		NC	20

Lab Sample ID: MB 310-457031/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 458034
Prep Batch: 457031

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/10/25 09:00	06/18/25 12:42	1
Arsenic	<0.530		2.00	0.530	ug/L		06/10/25 09:00	06/18/25 12:42	1
Barium	<0.660		2.00	0.660	ug/L		06/10/25 09:00	06/18/25 12:42	1
Beryllium	<0.330		1.00	0.330	ug/L		06/10/25 09:00	06/18/25 12:42	1
Cadmium	<0.100		0.200	0.100	ug/L		06/10/25 09:00	06/18/25 12:42	1
Chromium	<1.80		5.00	1.80	ug/L		06/10/25 09:00	06/18/25 12:42	1
Cobalt	<0.170		0.500	0.170	ug/L		06/10/25 09:00	06/18/25 12:42	1
Copper	<3.20		5.00	3.20	ug/L		06/10/25 09:00	06/18/25 12:42	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 310-457031/1-A
Matrix: Water
Analysis Batch: 458034

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 457031

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.330		0.500	0.330	ug/L		06/10/25 09:00	06/18/25 12:42	1
Nickel	<2.30		5.00	2.30	ug/L		06/10/25 09:00	06/18/25 12:42	1
Selenium	<1.40		5.00	1.40	ug/L		06/10/25 09:00	06/18/25 12:42	1
Silver	<0.500		1.00	0.500	ug/L		06/10/25 09:00	06/18/25 12:42	1
Thallium	<0.570		1.00	0.570	ug/L		06/10/25 09:00	06/18/25 12:42	1
Vanadium	<1.70		5.00	1.70	ug/L		06/10/25 09:00	06/18/25 12:42	1
Zinc	<13.0		20.0	13.0	ug/L		06/10/25 09:00	06/18/25 12:42	1

Lab Sample ID: LCS 310-457031/2-A
Matrix: Water
Analysis Batch: 458034

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 457031

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	200	207.3		ug/L		104	80 - 120
Arsenic	200	197.8		ug/L		99	80 - 120
Barium	100	98.81		ug/L		99	80 - 120
Beryllium	100	96.57		ug/L		97	80 - 120
Cadmium	100	97.75		ug/L		98	80 - 120
Chromium	100	98.74		ug/L		99	80 - 120
Cobalt	100	98.25		ug/L		98	80 - 120
Copper	200	200.1		ug/L		100	80 - 120
Lead	200	192.6		ug/L		96	80 - 120
Nickel	200	198.6		ug/L		99	80 - 120
Selenium	400	381.0		ug/L		95	80 - 120
Silver	100	117.0		ug/L		117	80 - 120
Thallium	100	91.40		ug/L		91	80 - 120
Vanadium	100	96.87		ug/L		97	80 - 120
Zinc	200	189.9		ug/L		95	80 - 120

Lab Sample ID: 310-307931-11 MS
Matrix: Ground Water
Analysis Batch: 458034

Client Sample ID: MW-34A
Prep Type: Total/NA
Prep Batch: 457031

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<1.00		200	212.8		ug/L		106	75 - 125
Arsenic	<0.530		200	203.1		ug/L		102	75 - 125
Barium	70.5		100	171.8		ug/L		101	75 - 125
Beryllium	<0.330		100	99.77		ug/L		100	75 - 125
Cadmium	<0.100		100	98.38		ug/L		98	75 - 125
Chromium	<1.80		100	99.57		ug/L		100	75 - 125
Cobalt	<0.170		100	95.32		ug/L		95	75 - 125
Copper	<3.20		200	195.3		ug/L		98	75 - 125
Lead	<0.330		200	194.1		ug/L		97	75 - 125
Nickel	<2.30		200	194.4		ug/L		97	75 - 125
Selenium	1.99	J	400	392.2		ug/L		98	75 - 125
Silver	<0.500		100	118.0		ug/L		118	75 - 125
Thallium	<0.570		100	85.84		ug/L		86	75 - 125
Vanadium	<1.70		100	97.66		ug/L		98	75 - 125
Zinc	<13.0		200	194.5		ug/L		97	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 310-307931-11 MSD — **Client Sample ID: MW-34A**
Matrix: Ground Water — **Prep Type: Total/NA**
Analysis Batch: 458034 — **Prep Batch: 457031**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<1.00		200	210.7		ug/L		105	75 - 125	1	20
Arsenic	<0.530		200	202.5		ug/L		101	75 - 125	0	20
Barium	70.5		100	169.0		ug/L		99	75 - 125	2	20
Beryllium	<0.330		100	99.11		ug/L		99	75 - 125	1	20
Cadmium	<0.100		100	99.06		ug/L		99	75 - 125	1	20
Chromium	<1.80		100	98.31		ug/L		98	75 - 125	1	20
Cobalt	<0.170		100	94.12		ug/L		94	75 - 125	1	20
Copper	<3.20		200	190.9		ug/L		95	75 - 125	2	20
Lead	<0.330		200	191.4		ug/L		96	75 - 125	1	20
Nickel	<2.30		200	190.7		ug/L		95	75 - 125	2	20
Selenium	1.99	J	400	388.9		ug/L		97	75 - 125	1	20
Silver	<0.500		100	119.8		ug/L		120	75 - 125	2	20
Thallium	<0.570		100	85.51		ug/L		86	75 - 125	0	20
Vanadium	<1.70		100	96.02		ug/L		96	75 - 125	2	20
Zinc	<13.0		200	192.1		ug/L		96	75 - 125	1	20

Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: MB 310-456873/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 456873

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<3.50		5.00	3.50	mg/L			06/06/25 15:58	1

Lab Sample ID: LCS 310-456873/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 456873

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	100.0		mg/L		100	82 - 117

Lab Sample ID: MB 310-456876/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 456876

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<3.50		5.00	3.50	mg/L			06/06/25 16:37	1

Lab Sample ID: LCS 310-456876/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 456876

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	100.0		mg/L		100	82 - 117

Method: I-3765-85 - Residue, Non-filterable (TSS) (Continued)

Lab Sample ID: MB 310-456878/1
Matrix: Water
Analysis Batch: 456878

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<3.50		5.00	3.50	mg/L			06/06/25 17:11	1

Lab Sample ID: LCS 310-456878/2
Matrix: Water
Analysis Batch: 456878

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	102.0		mg/L		102	82 - 117

GC/MS VOA

Analysis Batch: 456822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307931-1	SW-1	Total/NA	Ground Water	8260D	
310-307931-2	SW-5	Total/NA	Ground Water	8260D	
310-307931-3	SW-5-FD	Total/NA	Water	8260D	
310-307931-4	SW-2	Total/NA	Ground Water	8260D	
310-307931-5	MW-41A	Total/NA	Ground Water	8260D	
310-307931-6	MW-35	Total/NA	Ground Water	8260D	
310-307931-7	MW-38A	Total/NA	Ground Water	8260D	
310-307931-8	MW-39A	Total/NA	Ground Water	8260D	
310-307931-9	MW-40A	Total/NA	Ground Water	8260D	
310-307931-10	Trip Blank	Total/NA	Water	8260D	
310-307931-11	MW-34A	Total/NA	Ground Water	8260D	
310-307931-12	MW-34A-FD	Total/NA	Ground Water	8260D	
MB 310-456822/5	Method Blank	Total/NA	Water	8260D	
LCS 310-456822/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-456822/7	Lab Control Sample	Total/NA	Water	8260D	

Metals

Prep Batch: 456874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307931-1	SW-1	Total/NA	Ground Water	3005A	
310-307931-2	SW-5	Total/NA	Ground Water	3005A	
310-307931-3	SW-5-FD	Total/NA	Water	3005A	
310-307931-4	SW-2	Total/NA	Ground Water	3005A	
310-307931-5	MW-41A	Total/NA	Ground Water	3005A	
310-307931-6	MW-35	Total/NA	Ground Water	3005A	
310-307931-7	MW-38A	Total/NA	Ground Water	3005A	
310-307931-8	MW-39A	Total/NA	Ground Water	3005A	
310-307931-9	MW-40A	Total/NA	Ground Water	3005A	
MB 310-456874/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-456874/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-307931-1 DU	SW-1	Total/NA	Ground Water	3005A	

Prep Batch: 457031

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307931-11	MW-34A	Total/NA	Ground Water	3005A	
310-307931-12	MW-34A-FD	Total/NA	Ground Water	3005A	
MB 310-457031/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-457031/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-307931-11 MS	MW-34A	Total/NA	Ground Water	3005A	
310-307931-11 MSD	MW-34A	Total/NA	Ground Water	3005A	

Analysis Batch: 458034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307931-11	MW-34A	Total/NA	Ground Water	6020B	457031
310-307931-12	MW-34A-FD	Total/NA	Ground Water	6020B	457031
MB 310-457031/1-A	Method Blank	Total/NA	Water	6020B	457031
LCS 310-457031/2-A	Lab Control Sample	Total/NA	Water	6020B	457031
310-307931-11 MS	MW-34A	Total/NA	Ground Water	6020B	457031
310-307931-11 MSD	MW-34A	Total/NA	Ground Water	6020B	457031

Metals

Analysis Batch: 458075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307931-1	SW-1	Total/NA	Ground Water	6020B	456874
310-307931-2	SW-5	Total/NA	Ground Water	6020B	456874
310-307931-3	SW-5-FD	Total/NA	Water	6020B	456874
310-307931-4	SW-2	Total/NA	Ground Water	6020B	456874
310-307931-5	MW-41A	Total/NA	Ground Water	6020B	456874
310-307931-6	MW-35	Total/NA	Ground Water	6020B	456874
310-307931-7	MW-38A	Total/NA	Ground Water	6020B	456874
310-307931-8	MW-39A	Total/NA	Ground Water	6020B	456874
310-307931-9	MW-40A	Total/NA	Ground Water	6020B	456874
MB 310-456874/1-A	Method Blank	Total/NA	Water	6020B	456874
LCS 310-456874/2-A	Lab Control Sample	Total/NA	Water	6020B	456874
310-307931-1 DU	SW-1	Total/NA	Ground Water	6020B	456874

General Chemistry

Analysis Batch: 456873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307931-3	SW-5-FD	Total/NA	Water	I-3765-85	
310-307931-4	SW-2	Total/NA	Ground Water	I-3765-85	
310-307931-5	MW-41A	Total/NA	Ground Water	I-3765-85	
310-307931-6	MW-35	Total/NA	Ground Water	I-3765-85	
MB 310-456873/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-456873/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Analysis Batch: 456876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307931-1	SW-1	Total/NA	Ground Water	I-3765-85	
310-307931-2	SW-5	Total/NA	Ground Water	I-3765-85	
310-307931-7	MW-38A	Total/NA	Ground Water	I-3765-85	
310-307931-8	MW-39A	Total/NA	Ground Water	I-3765-85	
310-307931-9	MW-40A	Total/NA	Ground Water	I-3765-85	
310-307931-11	MW-34A	Total/NA	Ground Water	I-3765-85	
MB 310-456876/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-456876/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Analysis Batch: 456878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307931-12	MW-34A-FD	Total/NA	Ground Water	I-3765-85	
MB 310-456878/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-456878/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Field Service / Mobile Lab

Analysis Batch: 456969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307931-1	SW-1	Total/NA	Ground Water	Field Sampling	
310-307931-2	SW-5	Total/NA	Ground Water	Field Sampling	
310-307931-4	SW-2	Total/NA	Ground Water	Field Sampling	
310-307931-5	MW-41A	Total/NA	Ground Water	Field Sampling	
310-307931-6	MW-35	Total/NA	Ground Water	Field Sampling	
310-307931-7	MW-38A	Total/NA	Ground Water	Field Sampling	
310-307931-8	MW-39A	Total/NA	Ground Water	Field Sampling	

Field Service / Mobile Lab (Continued)

Analysis Batch: 456969 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307931-9	MW-40A	Total/NA	Ground Water	Field Sampling	
310-307931-11	MW-34A	Total/NA	Ground Water	Field Sampling	

Lab Chronicle

Client: AECOM
Job ID: 310-307931-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: SW-1
Lab Sample ID: 310-307931-1
Date Collected: 06/04/25 17:15
Matrix: Ground Water
Date Received: 06/05/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	456822	WSE8	EET CF	06/07/25 13:44
Total/NA	Prep	3005A			456874	WK2X	EET CF	06/09/25 09:00
Total/NA	Analysis	6020B		1	458075	NFT2	EET CF	06/18/25 19:33
Total/NA	Analysis	I-3765-85		1	456876	E6KR	EET CF	06/06/25 16:37
Total/NA	Analysis	Field Sampling		1	456969	FQT6	EET CF	06/04/25 17:15

Client Sample ID: SW-5
Lab Sample ID: 310-307931-2
Date Collected: 06/04/25 16:45
Matrix: Ground Water
Date Received: 06/05/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	456822	WSE8	EET CF	06/07/25 14:07
Total/NA	Prep	3005A			456874	WK2X	EET CF	06/09/25 09:00
Total/NA	Analysis	6020B		1	458075	NFT2	EET CF	06/18/25 19:39
Total/NA	Analysis	I-3765-85		1	456876	E6KR	EET CF	06/06/25 16:37
Total/NA	Analysis	Field Sampling		1	456969	FQT6	EET CF	06/04/25 16:45

Client Sample ID: SW-5-FD
Lab Sample ID: 310-307931-3
Date Collected: 06/04/25 16:45
Matrix: Water
Date Received: 06/05/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	456822	WSE8	EET CF	06/07/25 14:29
Total/NA	Prep	3005A			456874	WK2X	EET CF	06/09/25 09:00
Total/NA	Analysis	6020B		1	458075	NFT2	EET CF	06/18/25 19:42
Total/NA	Analysis	I-3765-85		1	456873	E6KR	EET CF	06/06/25 15:58

Client Sample ID: SW-2
Lab Sample ID: 310-307931-4
Date Collected: 06/04/25 16:30
Matrix: Ground Water
Date Received: 06/05/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	456822	WSE8	EET CF	06/07/25 14:52
Total/NA	Prep	3005A			456874	WK2X	EET CF	06/09/25 09:00
Total/NA	Analysis	6020B		1	458075	NFT2	EET CF	06/18/25 19:45
Total/NA	Analysis	I-3765-85		1	456873	E6KR	EET CF	06/06/25 15:58
Total/NA	Analysis	Field Sampling		1	456969	FQT6	EET CF	06/04/25 16:30

Client Sample ID: MW-41A
Lab Sample ID: 310-307931-5
Date Collected: 06/04/25 11:30
Matrix: Ground Water
Date Received: 06/05/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	456822	WSE8	EET CF	06/07/25 15:15

Lab Chronicle

Client: AECOM
Job ID: 310-307931-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-41A
Lab Sample ID: 310-307931-5
Date Collected: 06/04/25 11:30
Matrix: Ground Water
Date Received: 06/05/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			456874	WK2X	EET CF	06/09/25 09:00
Total/NA	Analysis	6020B		1	458075	NFT2	EET CF	06/18/25 19:48
Total/NA	Analysis	I-3765-85		1	456873	E6KR	EET CF	06/06/25 15:58
Total/NA	Analysis	Field Sampling		1	456969	FQT6	EET CF	06/04/25 11:30

Client Sample ID: MW-35
Lab Sample ID: 310-307931-6
Date Collected: 06/04/25 12:45
Matrix: Ground Water
Date Received: 06/05/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	456822	WSE8	EET CF	06/07/25 15:38
Total/NA	Prep	3005A			456874	WK2X	EET CF	06/09/25 09:00
Total/NA	Analysis	6020B		1	458075	NFT2	EET CF	06/18/25 19:57
Total/NA	Analysis	I-3765-85		1	456873	E6KR	EET CF	06/06/25 15:58
Total/NA	Analysis	Field Sampling		1	456969	FQT6	EET CF	06/04/25 12:45

Client Sample ID: MW-38A
Lab Sample ID: 310-307931-7
Date Collected: 06/04/25 14:00
Matrix: Ground Water
Date Received: 06/05/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	456822	WSE8	EET CF	06/07/25 16:00
Total/NA	Prep	3005A			456874	WK2X	EET CF	06/09/25 09:00
Total/NA	Analysis	6020B		1	458075	NFT2	EET CF	06/18/25 20:00
Total/NA	Analysis	I-3765-85		1	456876	E6KR	EET CF	06/06/25 16:37
Total/NA	Analysis	Field Sampling		1	456969	FQT6	EET CF	06/04/25 14:00

Client Sample ID: MW-39A
Lab Sample ID: 310-307931-8
Date Collected: 06/04/25 14:45
Matrix: Ground Water
Date Received: 06/05/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	456822	WSE8	EET CF	06/07/25 16:23
Total/NA	Prep	3005A			456874	WK2X	EET CF	06/09/25 09:00
Total/NA	Analysis	6020B		1	458075	NFT2	EET CF	06/18/25 20:03
Total/NA	Analysis	I-3765-85		1	456876	E6KR	EET CF	06/06/25 16:37
Total/NA	Analysis	Field Sampling		1	456969	FQT6	EET CF	06/04/25 14:45

Client Sample ID: MW-40A
Lab Sample ID: 310-307931-9
Date Collected: 06/04/25 15:45
Matrix: Ground Water
Date Received: 06/05/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	456822	WSE8	EET CF	06/07/25 16:46

Lab Chronicle

Client: AECOM
Job ID: 310-307931-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-40A
Lab Sample ID: 310-307931-9
Date Collected: 06/04/25 15:45
Matrix: Ground Water
Date Received: 06/05/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			456874	WK2X	EET CF	06/09/25 09:00
Total/NA	Analysis	6020B		1	458075	NFT2	EET CF	06/18/25 20:06
Total/NA	Analysis	I-3765-85		1	456876	E6KR	EET CF	06/06/25 16:37
Total/NA	Analysis	Field Sampling		1	456969	FQT6	EET CF	06/04/25 15:45

Client Sample ID: Trip Blank
Lab Sample ID: 310-307931-10
Date Collected: 06/04/25 08:00
Matrix: Water
Date Received: 06/05/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	456822	WSE8	EET CF	06/07/25 13:21

Client Sample ID: MW-34A
Lab Sample ID: 310-307931-11
Date Collected: 06/04/25 10:30
Matrix: Ground Water
Date Received: 06/05/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	456822	WSE8	EET CF	06/07/25 17:08
Total/NA	Prep	3005A			457031	WK2X	EET CF	06/10/25 09:00
Total/NA	Analysis	6020B		1	458034	NFT2	EET CF	06/18/25 12:48
Total/NA	Analysis	I-3765-85		1	456876	E6KR	EET CF	06/06/25 16:37
Total/NA	Analysis	Field Sampling		1	456969	FQT6	EET CF	06/04/25 10:30

Client Sample ID: MW-34A-FD
Lab Sample ID: 310-307931-12
Date Collected: 06/04/25 10:40
Matrix: Ground Water
Date Received: 06/05/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	456822	WSE8	EET CF	06/07/25 17:31
Total/NA	Prep	3005A			457031	WK2X	EET CF	06/10/25 09:00
Total/NA	Analysis	6020B		1	458034	NFT2	EET CF	06/18/25 13:00
Total/NA	Analysis	I-3765-85		1	456878	E6KR	EET CF	06/06/25 17:11

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Accreditation/Certification Summary

Client: AECOM
Job ID: 310-307931-1
Project/Site: Winneshiek Groundwater Monitoring

Laboratory: Eurofins Cedar Falls

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Field Sampling		Ground Water	Field Turbidity
I-3765-85		Ground Water	Total Suspended Solids
I-3765-85		Water	Total Suspended Solids

Method Summary

Client: AECOM
Job ID: 310-307931-1
Project/Site: Winneshiek Groundwater Monitoring

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
6020B	Metals (ICP/MS)	SW846	EET CF
I-3765-85	Residue, Non-filterable (TSS)	USGS	EET CF
Field Sampling	Field Sampling	EPA	EET CF
3005A	Preparation, Total Metals	SW846	EET CF
5030B	Purge and Trap	SW846	EET CF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

USGS = "Methods For Analysis Of Water And Fluvial Sediments", USGS, 1989

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

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310-307931 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: AECOM

City/State: CITY Waterloo STATE IA Project:

Receipt Information

Date/Time Received: DATE 6.5.25 TIME 750 Received By: [signature]

Delivery Type. ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee
☐ Lab Courier ☐ Lab Field Services ☑ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers

Sample(s) received in Cooler?	☑ Yes ☐ No	*If yes:* Cooler ID:
Multiple Coolers?	☐ Yes ☑ No	*If yes:* Cooler # _____ of _____
Cooler Custody Seals Present?	☐ Yes ☑ No	*If yes* Cooler custody seals intact? ☐ Yes ☐ No
Sample Custody Seals Present?	☐ Yes ☑ No	*If yes* Sample custody seals intact? ☐ Yes ☐ No
Trip Blank Present?	☐ Yes ☑ No	*If yes:* Which VOA samples are in cooler? ↓

Temperature Record

Coolant. ☑ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: AA Correction Factor (°C): 0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C) 1.1 Corrected Temp (°C) 1.1

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C).		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e g , bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE If yes, contact PM before proceeding If no, proceed with login

Additional Comments

307931

Chain of Custody Record

Eurofins TestAmerica, Cedar Falls
704 Enterprise Drive

Cedar Falls, IA 50613
phone 319 277.2401 fax 319.277.2425

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: **Iowa DNR**

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nick Schrock	Site Contact:	Date: 6-5-25	COC No
AECOM	Email nick.schrock@aecom com	Lab Contact:	Carrier:	1 of 3 COCs
501 Sycamore St., Suite 222	Tel/Fax: (319)874-6581/(217)273-0978			Sampler:
Waterloo, IA 50703	Analysis Turnaround Time			For Lab Use Only:
(319)232-6531 Phone	☑ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(319)232-0271 FAX	TAT if different from Below			Lab Sampling
Project Name Winneshiek Groundwater Monitoring	☑ 2 weeks			
Site Winneshiek County Landfill	☐ 1 week			Job / SDG No
P O #	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TSS	Appendix I Metals and VOCs	Sample Specific Notes
SW-1	6-4-25	1715	G	GW	5	N		X	X	Turbidity - 14.83 NTU
SW-5	6-4-25	1645	G	GW	5	N		X	X	Turbidity - 48.32 NTU
SW-5-FD	6-4-25	1645	G	GW	5	N		X	X	
SW-2	6-4-25	1630	G	GW	5	N		X	X	Turbidity - 34.21 NTU
GU-1			G	GW		N		X	X	
GU-2			G	GW		N		X	X	
MH-1AA			G	GW		N		X	X	
MH-4-2			G	GW		N		X	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No		Cooler Temp (°C) Obs'd _____ Corr'd _____		Therm ID No _____
Relinquished by: Ben Porter	Company: Aecom	Date/Time: 6-5-25	Received by:	Company:	Date/Time
Relinquished by:	Company:	Date/Time	Received by:	Company:	Date/Time
Relinquished by:	Company:	Date/Time	Received in Laboratory by:	Company:	Date/Time: 6.5.25

Form No. CA-C-WI-002, Rev. 4.23, dated 4/16/2019

Chain of Custody Record

Eurofins TestAmerica, Cedar Falls
704 Enterprise Drive

Cedar Falls, IA 50613
phone 319 277.2401 fax 319.277.2425

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other Iowa DNR

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nick Schrock	Site Contact:	Date: 6-5-25	COC No
AECOM	Email nick.schrock@aecom com	Lab Contact:	Carrier:	2 of 3 COCs
501 Sycamore St., Suite 222	Tel/Fax: (319)874-6581/(217)273-0978			Sampler
Waterloo, IA 50703	Analysis Turnaround Time			For Lab Use Only:
(319)232-6531 Phone	☑ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(319)232-0271 FAX	TAT if different from Below			Lab Sampling
Project Name Winneshiek Groundwater Monitoring	☑ 2 weeks			
Site Winneshiek County Landfill	☐ 1 week			Job / SDG No
P O #	☐ 2 days ☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TSS	Appendix I Metals and VOCs	Appendix II	Sample Specific Notes
MW-41A	6-4-25	1130	G	GW	5	N		X	X		Turbidity - 10.17 NTU
MW-35	6-4-25	1245	G	GW	5	N		X	X		Turbidity - 2.26 NTU
MW-38A	6-4-25	1400	G	GW	5	N		X	X		Turbidity - 7.35
MW-39A	6-4-25	1445	G	GW	5	N		X	X		Turbidity - 36.91 NTU
MW-40A	6-4-25	1545	G	GW	5	N		X	X		Turbidity - 6.00 NTU
MW-42A			G	GW		N		X		X	
MW-43A			G	GW		N		X		X	
MW-44A			G	GW		N		X		X	
MW-11			G	GW		N		X	X		
Trip Blank	6-4-25	0800	G	W	2				X		

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No		Cooler Temp (°C) Obs'd _____ Corr'd _____		Therm ID No _____
Relinquished by: Ben Porter	Company: Aecom	Date/Time: 6-5-25	Received by:	Company:	Date/Time
Relinquished by:	Company:	Date/Time	Received by:	Company:	Date/Time
Relinquished by:	Company:	Date/Time	Received in Laboratory by:	Company:	Date/Time

Form No. CA-C-WI-002, Rev. 4.23, dated 4/16/2019

Chain of Custody Record

Eurofins TestAmerica, Cedar Falls
704 Enterprise Drive

Cedar Falls, IA 50613
phone 319.277.2401 fax 319.277.2425

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: **Iowa DNR**

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nick Schrock	Site Contact:	Date: 6-5-25	COC No
AECOM	Email nick.schrock@aecom.com	Lab Contact:	Carrier:	3 of 3 COCs
501 Sycamore St., Suite 222	Tel/Fax: (319)874-6581/(217)273-0978			Sampler:
Waterloo, IA 50703	Analysis Turnaround Time			For Lab Use Only:
(319)232-6531 Phone	☑ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(319)232-0271 FAX	TAT if different from Below _____			Lab Sampling
Project Name Winneshiek Groundwater Monitoring	☐ 2 weeks			
Site Winneshiek County Landfill	☐ 1 week			Job / SDG No
P O #	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TSS	Appendix I Metals and VOCs	Sample Specific Notes.
MW-19R			G	GW		N		X	X	
MW-1			G	GW		N		X	X	
MW-18			G	GW		N		X	X	
MW-18-FD			G	GW		N		X	X	
MW-3			G	GW		N		X	X	
MW-37A			G	GW		N		X	X	
MW-33A			G	GW		N		X	X	
MW-2R			G	GW		N		X	X	
MW-34A	6-4-25	1030	G	GW	5	N		X	X	Turbidity - 29.76 NTU
MW-34A- FD	6-4-25	1040	G	GW	5	N		X	X	
Equipment Blank #1 Shallow			G	GW		N		X	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No | Cooler Temp (°C) Obs'd _____ Corr'd _____ | Therm ID No _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Ben Porter	Aecom	6-5-25			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

6/19/2025

Login Sample Receipt Checklist

Client: AECOM

Job Number: 310-307931-1

Login Number: 307931

List Number: 1

Creator: Hirsch, Preston

List Source: Eurofins Cedar Falls

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

ANALYTICAL REPORT

PREPARED FOR

Attn: Nick Schrock
AECOM
501 Sycamore Street
Suite #222
Waterloo, Iowa 50703

Generated 6/19/2025 10:49:07 PM

JOB DESCRIPTION

Winneshiek Groundwater Monitoring
2025 Spring Groundwater

JOB NUMBER

310-308053-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



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6/19/2025 10:49:07 PM

Authorized for release by
Zach Bindert, Senior Project Manager
Zach.Bindert@et.eurofinsus.com
(319)595-2016

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Job Narrative
310-308053-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 6/6/2025 8:20 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were -1.1°C and 0.5°C.

GC/MS VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA
Method 8270E: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 310-457250. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

Method 8270E: The continuing calibration verification (CCV) associated with batch 310-457998 recovered above the upper control limit for 4-Nitrophenol (22.7 %D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is:(CCV 310-457998/2).

Method 8270E: The laboratory control sample (LCS) for preparation batch 310-457250 and analytical batch 310-457998 recovered outside acceptance limits for 3,3'-Dimethylbenzidine, Famphur and 1,4-phenylenediamine. There was insufficient sample to perform a re-extraction or re-analysis; therefore, the data have been reported.

Method 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 310-457250 and analytical batch 310-457998 recovered outside control limits for the following analytes: 3,3'-Dimethylbenzidine, Methapyrilene and 1-Naphthylamine.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Herbicides
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

PCBs
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Pesticides
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Field Service / Mobile Lab

Job ID: 310-308053-1 (Continued) Eurofins Cedar Falls

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: AECOM
Job ID: 310-308053-1
Project/Site: Winneshiek Groundwater Monitoring

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-308053-1	MW-31A	Ground Water	06/05/25 15:15	06/06/25 08:20
310-308053-2	MW-25A	Ground Water	06/05/25 16:30	06/06/25 08:20
310-308053-3	MW-42A	Ground Water	06/05/25 11:00	06/06/25 08:20
310-308053-4	MW-43A	Ground Water	06/05/25 12:30	06/06/25 08:20
310-308053-5	MW-44A	Ground Water	06/05/25 13:30	06/06/25 08:20
310-308053-6	Equipment Blank #1 Shallow	Ground Water	06/05/25 11:30	06/06/25 08:20
310-308053-7	Trip Blank	Water	06/05/25 08:00	06/06/25 08:20
310-308053-8	Trip Blank	Water	06/05/25 00:00	06/06/25 08:20

Detection Summary

Client: AECOM
Job ID: 310-308053-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-31A — Lab Sample ID: 310-308053-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	240		2.00	0.660	ug/L	1		6020B	Total/NA
Cadmium	0.186	J	0.200	0.100	ug/L	1		6020B	Total/NA
Cobalt	2.04		0.500	0.170	ug/L	1		6020B	Total/NA
Nickel	30.8		5.00	2.30	ug/L	1		6020B	Total/NA
Field Turbidity	8.14				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-25A — Lab Sample ID: 310-308053-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	191		2.00	0.660	ug/L	1		6020B	Total/NA
Selenium	2.40	J	5.00	1.40	ug/L	1		6020B	Total/NA
Field Turbidity	1.56				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-42A — Lab Sample ID: 310-308053-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	152		2.00	0.660	ug/L	1		6020B	Total/NA
Cobalt	1.37		0.500	0.170	ug/L	1		6020B	Total/NA
Nickel	26.1		5.00	2.30	ug/L	1		6020B	Total/NA
Total Suspended Solids	6.25		1.88	1.31	mg/L	1		I-3765-85	Total/NA
Field Turbidity	24.38				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-43A — Lab Sample ID: 310-308053-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.28		2.00	0.530	ug/L	1		6020B	Total/NA
Barium	186		2.00	0.660	ug/L	1		6020B	Total/NA
Cobalt	3.92		0.500	0.170	ug/L	1		6020B	Total/NA
Nickel	22.5		5.00	2.30	ug/L	1		6020B	Total/NA
Total Suspended Solids	21.0		15.0	10.5	mg/L	1		I-3765-85	Total/NA
Field Turbidity	27.15				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-44A — Lab Sample ID: 310-308053-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	173		2.00	0.660	ug/L	1		6020B	Total/NA
Cadmium	0.499		0.200	0.100	ug/L	1		6020B	Total/NA
Cobalt	0.256	J	0.500	0.170	ug/L	1		6020B	Total/NA
Nickel	39.1		5.00	2.30	ug/L	1		6020B	Total/NA
Zinc	26.5		20.0	13.0	ug/L	1		6020B	Total/NA
Field Turbidity	3.04				NTU	1		Field Sampling	Total/NA

Client Sample ID: Equipment Blank #1 Shallow — Lab Sample ID: 310-308053-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bromodichloromethane	1.14		1.00	0.390	ug/L	1		8260D	Total/NA
Barium	45.1		2.00	0.660	ug/L	1		6020B	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 310-308053-7

No Detections.

Client Sample ID: Trip Blank — Lab Sample ID: 310-308053-8

No Detections.

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: Winneshiek Groundwater Monitoring

Job ID: 310-308053-1

Client Sample ID: MW-31A
Date Collected: 06/05/25 15:15
Date Received: 06/06/25 08:20

Lab Sample ID: 310-308053-1
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/10/25 18:17	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/10/25 18:17	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/10/25 18:17	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/10/25 18:17	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/10/25 18:17	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/10/25 18:17	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/10/25 18:17	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/10/25 18:17	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/10/25 18:17	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/10/25 18:17	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/10/25 18:17	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/10/25 18:17	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/10/25 18:17	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/10/25 18:17	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/10/25 18:17	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/10/25 18:17	1
Acetone	<3.10		10.0	3.10	ug/L			06/10/25 18:17	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/10/25 18:17	1
Benzene	<0.220		0.500	0.220	ug/L			06/11/25 15:06	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/10/25 18:17	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/10/25 18:17	1
Bromoform	<0.780		5.00	0.780	ug/L			06/10/25 18:17	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/10/25 18:17	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/10/25 18:17	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/10/25 18:17	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/10/25 18:17	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/10/25 18:17	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/10/25 18:17	1
Chloroform	<1.30		3.00	1.30	ug/L			06/10/25 18:17	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/10/25 18:17	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/10/25 18:17	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/10/25 18:17	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/10/25 18:17	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/11/25 15:06	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/10/25 18:17	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/10/25 18:17	1
Styrene	<0.370		1.00	0.370	ug/L			06/10/25 18:17	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/10/25 18:17	1
Toluene	<0.430		1.00	0.430	ug/L			06/10/25 18:17	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/10/25 18:17	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/10/25 18:17	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/10/25 18:17	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/10/25 18:17	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/10/25 18:17	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/10/25 18:17	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/10/25 18:17	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/11/25 15:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*108*		*76 - 130*		*06/10/25 18:17*	*1*

Client Sample ID: MW-31A
Lab Sample ID: 310-308053-1

Date Collected: 06/05/25 15:15
Matrix: Ground Water

Date Received: 06/06/25 08:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*108*		*76 - 130*		*06/11/25 15:06*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*06/10/25 18:17*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*06/11/25 15:06*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*06/10/25 18:17*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*06/11/25 15:06*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan I	<0.0252		0.0900	0.0252	ug/L		06/11/25 12:22	06/12/25 14:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*93*		*10 - 150*	*06/11/25 12:22*	*06/12/25 14:27*	*1*
Tetrachloro-m-xylene	*84*		*17 - 150*	*06/11/25 12:22*	*06/12/25 14:27*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/10/25 09:00	06/18/25 13:03	1
Arsenic	<0.530		2.00	0.530	ug/L		06/10/25 09:00	06/18/25 13:03	1
Barium	**240**		2.00	0.660	ug/L		06/10/25 09:00	06/18/25 13:03	1
Beryllium	<0.330		1.00	0.330	ug/L		06/10/25 09:00	06/18/25 13:03	1
Cadmium	**0.186**	**J**	0.200	0.100	ug/L		06/10/25 09:00	06/18/25 13:03	1
Chromium	<1.80		5.00	1.80	ug/L		06/10/25 09:00	06/18/25 13:03	1
Cobalt	**2.04**		0.500	0.170	ug/L		06/10/25 09:00	06/18/25 13:03	1
Copper	<3.20		5.00	3.20	ug/L		06/10/25 09:00	06/18/25 13:03	1
Lead	<0.330		0.500	0.330	ug/L		06/10/25 09:00	06/18/25 13:03	1
Nickel	**30.8**		5.00	2.30	ug/L		06/10/25 09:00	06/18/25 13:03	1
Selenium	<1.40		5.00	1.40	ug/L		06/10/25 09:00	06/18/25 13:03	1
Silver	<0.500		1.00	0.500	ug/L		06/10/25 09:00	06/18/25 13:03	1
Thallium	<0.570		1.00	0.570	ug/L		06/10/25 09:00	06/18/25 13:03	1
Vanadium	<1.70		5.00	1.70	ug/L		06/10/25 09:00	06/18/25 13:03	1
Zinc	<13.0		20.0	13.0	ug/L		06/10/25 09:00	06/18/25 13:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.31		1.88	1.31	mg/L			06/06/25 17:11	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**8.14**				NTU			06/05/25 15:15	1

Client: AECOM
Project/Site: Winneshiek Groundwater Monitoring

Job ID: 310-308053-1

Client Sample ID: MW-25A
Date Collected: 06/05/25 16:30
Date Received: 06/06/25 08:20

Lab Sample ID: 310-308053-2
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/10/25 18:40	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/10/25 18:40	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/10/25 18:40	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/10/25 18:40	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/10/25 18:40	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/10/25 18:40	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/10/25 18:40	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/10/25 18:40	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/10/25 18:40	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/10/25 18:40	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/10/25 18:40	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/10/25 18:40	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/10/25 18:40	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/10/25 18:40	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/10/25 18:40	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/10/25 18:40	1
Acetone	<3.10		10.0	3.10	ug/L			06/10/25 18:40	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/10/25 18:40	1
Benzene	<0.220		0.500	0.220	ug/L			06/10/25 18:40	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/10/25 18:40	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/10/25 18:40	1
Bromoform	<0.780		5.00	0.780	ug/L			06/10/25 18:40	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/10/25 18:40	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/10/25 18:40	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/10/25 18:40	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/10/25 18:40	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/10/25 18:40	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/10/25 18:40	1
Chloroform	<1.30		3.00	1.30	ug/L			06/10/25 18:40	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/10/25 18:40	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/10/25 18:40	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/10/25 18:40	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/10/25 18:40	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/10/25 18:40	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/10/25 18:40	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/10/25 18:40	1
Styrene	<0.370		1.00	0.370	ug/L			06/10/25 18:40	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/10/25 18:40	1
Toluene	<0.430		1.00	0.430	ug/L			06/10/25 18:40	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/10/25 18:40	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/10/25 18:40	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/10/25 18:40	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/10/25 18:40	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/10/25 18:40	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/10/25 18:40	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/10/25 18:40	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/10/25 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*107*		*76 - 130*		*06/10/25 18:40*	*1*

Client Sample ID: MW-25A
Lab Sample ID: 310-308053-2
Date Collected: 06/05/25 16:30
Matrix: Ground Water
Date Received: 06/06/25 08:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*107*		*80 - 120*		*06/10/25 18:40*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*06/10/25 18:40*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/10/25 09:00	06/18/25 13:06	1
Arsenic	<0.530		2.00	0.530	ug/L		06/10/25 09:00	06/18/25 13:06	1
Barium	**191**		2.00	0.660	ug/L		06/10/25 09:00	06/18/25 13:06	1
Beryllium	<0.330		1.00	0.330	ug/L		06/10/25 09:00	06/18/25 13:06	1
Cadmium	<0.100		0.200	0.100	ug/L		06/10/25 09:00	06/18/25 13:06	1
Chromium	<1.80		5.00	1.80	ug/L		06/10/25 09:00	06/18/25 13:06	1
Cobalt	<0.170		0.500	0.170	ug/L		06/10/25 09:00	06/18/25 13:06	1
Copper	<3.20		5.00	3.20	ug/L		06/10/25 09:00	06/18/25 13:06	1
Lead	<0.330		0.500	0.330	ug/L		06/10/25 09:00	06/18/25 13:06	1
Nickel	<2.30		5.00	2.30	ug/L		06/10/25 09:00	06/18/25 13:06	1
Selenium	**2.40**	**J**	5.00	1.40	ug/L		06/10/25 09:00	06/18/25 13:06	1
Silver	<0.500		1.00	0.500	ug/L		06/10/25 09:00	06/18/25 13:06	1
Thallium	<0.570		1.00	0.570	ug/L		06/10/25 09:00	06/18/25 13:06	1
Vanadium	<1.70		5.00	1.70	ug/L		06/10/25 09:00	06/18/25 13:06	1
Zinc	<13.0		20.0	13.0	ug/L		06/10/25 09:00	06/18/25 13:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.31		1.88	1.31	mg/L			06/06/25 17:11	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**1.56**				NTU			06/05/25 16:30	1

Client: AECOM
Job ID: 310-308053-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-42A
Lab Sample ID: 310-308053-3
Date Collected: 06/05/25 11:00
Matrix: Ground Water
Date Received: 06/06/25 08:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<3.10		10.0	3.10	ug/L			06/10/25 13:01	1
Acrolein	<3.60		10.0	3.60	ug/L			06/10/25 13:01	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/10/25 13:01	1
Allyl chloride	<0.700		2.00	0.700	ug/L			06/10/25 13:01	1
Benzene	<0.220		0.500	0.220	ug/L			06/10/25 13:01	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/10/25 13:01	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/10/25 13:01	1
Bromoform	<0.780		5.00	0.780	ug/L			06/10/25 13:01	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/10/25 13:01	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/10/25 13:01	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/10/25 13:01	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/10/25 13:01	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/10/25 13:01	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/10/25 13:01	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/10/25 13:01	1
Chloroform	<1.30		3.00	1.30	ug/L			06/10/25 13:01	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/10/25 13:01	1
Chloroprene	<0.230		1.00	0.230	ug/L			06/10/25 13:01	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/10/25 13:01	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/10/25 13:01	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/10/25 13:01	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/10/25 13:01	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/10/25 13:01	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/10/25 13:01	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			06/10/25 13:01	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/10/25 13:01	1
Dichlorodifluoromethane	<0.250		3.00	0.250	ug/L			06/10/25 13:01	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/10/25 13:01	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/10/25 13:01	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/10/25 13:01	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/10/25 13:01	1
1,3-Dichloropropane	<0.400		1.00	0.400	ug/L			06/10/25 13:01	1
2,2-Dichloropropane	<0.690		4.00	0.690	ug/L			06/10/25 13:01	1
1,1-Dichloropropene	<0.430		1.00	0.430	ug/L			06/10/25 13:01	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/10/25 13:01	1
Ethyl methacrylate	<0.680		2.00	0.680	ug/L			06/10/25 13:01	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/10/25 13:01	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/10/25 13:01	1
Methacrylonitrile	<3.30		10.0	3.30	ug/L			06/10/25 13:01	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/10/25 13:01	1
Methyl methacrylate	<0.760		2.00	0.760	ug/L			06/10/25 13:01	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/10/25 13:01	1
m,p-Xylene	<0.380		2.00	0.380	ug/L			06/10/25 13:01	1
Naphthalene	<3.00		5.00	3.00	ug/L			06/10/25 13:01	1
o-Xylene	<0.400		1.00	0.400	ug/L			06/10/25 13:01	1
Propionitrile	<3.40		10.0	3.40	ug/L			06/10/25 13:01	1
Styrene	<0.370		1.00	0.370	ug/L			06/10/25 13:01	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/10/25 13:01	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/10/25 13:01	1

Client Sample ID: MW-42A
Lab Sample ID: 310-308053-3
Date Collected: 06/05/25 11:00
Matrix: Ground Water
Date Received: 06/06/25 08:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/10/25 13:01	1
Toluene	<0.430		1.00	0.430	ug/L			06/10/25 13:01	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/10/25 13:01	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/10/25 13:01	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/10/25 13:01	1
1,2,4-Trichlorobenzene	<0.750		5.00	0.750	ug/L			06/10/25 13:01	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/10/25 13:01	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/10/25 13:01	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/10/25 13:01	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/10/25 13:01	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/10/25 13:01	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/10/25 13:01	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/10/25 13:01	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/10/25 13:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*06/10/25 13:01*	*1*
Dibromofluoromethane (Surr)	*109*		*76 - 130*		*06/10/25 13:01*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*06/10/25 13:01*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.696		10.9	0.696	ug/L		06/11/25 12:12	06/18/25 15:19	1
Acenaphthylene	<0.783		10.9	0.783	ug/L		06/11/25 12:12	06/18/25 15:19	1
Acetophenone	<0.750		10.9	0.750	ug/L		06/11/25 12:12	06/18/25 15:19	1
2-Acetylaminofluorene	<2.93		10.9	2.93	ug/L		06/11/25 12:12	06/18/25 15:19	1
4-Aminobiphenyl	<2.39		10.9	2.39	ug/L		06/11/25 12:12	06/18/25 15:19	1
Anthracene	<0.946		10.9	0.946	ug/L		06/11/25 12:12	06/18/25 15:19	1
Benzo[a]anthracene	<0.924		10.9	0.924	ug/L		06/11/25 12:12	06/18/25 15:19	1
Benzo[a]pyrene	<8.80		10.9	8.80	ug/L		06/11/25 12:12	06/18/25 15:19	1
Benzo[b]fluoranthene	<5.33		10.9	5.33	ug/L		06/11/25 12:12	06/18/25 15:19	1
Benzo[g,h,i]perylene	<6.85		10.9	6.85	ug/L		06/11/25 12:12	06/18/25 15:19	1
Benzo[k]fluoranthene	<2.39		10.9	2.39	ug/L		06/11/25 12:12	06/18/25 15:19	1
Benzyl alcohol	<1.41		10.9	1.41	ug/L		06/11/25 12:12	06/18/25 15:19	1
Bis(2-chloroethoxy)methane	<0.826		10.9	0.826	ug/L		06/11/25 12:12	06/18/25 15:19	1
Bis(2-chloroethyl)ether	<0.891		10.9	0.891	ug/L		06/11/25 12:12	06/18/25 15:19	1
bis (2-chloroisopropyl) ether	<0.587		10.9	0.587	ug/L		06/11/25 12:12	06/18/25 15:19	1
Bis(2-ethylhexyl) phthalate	<5.98		10.9	5.98	ug/L		06/11/25 12:12	06/18/25 15:19	1
4-Bromophenyl phenyl ether	<0.761		10.9	0.761	ug/L		06/11/25 12:12	06/18/25 15:19	1
Butyl benzyl phthalate	<5.87		10.9	5.87	ug/L		06/11/25 12:12	06/18/25 15:19	1
4-Chloroaniline	<0.674		10.9	0.674	ug/L		06/11/25 12:12	06/18/25 15:19	1
Chlorobenzilate	<3.91		10.9	3.91	ug/L		06/11/25 12:12	06/18/25 15:19	1
4-Chloro-3-methylphenol	<0.913		10.9	0.913	ug/L		06/11/25 12:12	06/18/25 15:19	1
2-Chloronaphthalene	<0.696		10.9	0.696	ug/L		06/11/25 12:12	06/18/25 15:19	1
2-Chlorophenol	<0.587		10.9	0.587	ug/L		06/11/25 12:12	06/18/25 15:19	1
4-Chlorophenyl phenyl ether	<0.750		10.9	0.750	ug/L		06/11/25 12:12	06/18/25 15:19	1
Chrysene	<0.946		10.9	0.946	ug/L		06/11/25 12:12	06/18/25 15:19	1
Diallate	<4.35		10.9	4.35	ug/L		06/11/25 12:12	06/18/25 15:19	1
Dibenzo(a,h)anthracene	<4.24		10.9	4.24	ug/L		06/11/25 12:12	06/18/25 15:19	1
Dibenzofuran	<0.804		10.9	0.804	ug/L		06/11/25 12:12	06/18/25 15:19	1

Client: AECOM
Job ID: 310-308053-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-42A
Lab Sample ID: 310-308053-3
Date Collected: 06/05/25 11:00
Matrix: Ground Water
Date Received: 06/06/25 08:20

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3,3'-Dichlorobenzidine	<1.52		10.9	1.52	ug/L		06/11/25 12:12	06/18/25 15:19	1
2,4-Dichlorophenol	<0.924		10.9	0.924	ug/L		06/11/25 12:12	06/18/25 15:19	1
2,6-Dichlorophenol	<0.750		10.9	0.750	ug/L		06/11/25 12:12	06/18/25 15:19	1
Diethyl phthalate	<1.85		10.9	1.85	ug/L		06/11/25 12:12	06/18/25 15:19	1
Dimethoate	<3.91		10.9	3.91	ug/L		06/11/25 12:12	06/18/25 15:19	1
7,12-Dimethylbenz(a)anthracene	<2.07		10.9	2.07	ug/L		06/11/25 12:12	06/18/25 15:19	1
3,3'-Dimethylbenzidine	<1.63	*- *1	10.9	1.63	ug/L		06/11/25 12:12	06/18/25 15:19	1
2,4-Dimethylphenol	<0.630		10.9	0.630	ug/L		06/11/25 12:12	06/18/25 15:19	1
Dimethyl phthalate	<1.09		10.9	1.09	ug/L		06/11/25 12:12	06/18/25 15:19	1
Di-n-butyl phthalate	<6.09		10.9	6.09	ug/L		06/11/25 12:12	06/18/25 15:19	1
1,3-Dinitrobenzene	<3.48		10.9	3.48	ug/L		06/11/25 12:12	06/18/25 15:19	1
4,6-Dinitro-2-methylphenol	<7.50		10.9	7.50	ug/L		06/11/25 12:12	06/18/25 15:19	1
2,4-Dinitrophenol	<14.1		21.7	14.1	ug/L		06/11/25 12:12	06/18/25 15:19	1
2,4-Dinitrotoluene	<6.96		10.9	6.96	ug/L		06/11/25 12:12	06/18/25 15:19	1
2,6-Dinitrotoluene	<0.565		10.9	0.565	ug/L		06/11/25 12:12	06/18/25 15:19	1
Di-n-octyl phthalate	<7.61		21.7	7.61	ug/L		06/11/25 12:12	06/18/25 15:19	1
Dinoseb	<2.61		10.9	2.61	ug/L		06/11/25 12:12	06/18/25 15:19	1
Diphenylamine	<6.52		10.9	6.52	ug/L		06/11/25 12:12	06/18/25 15:19	1
Disulfoton	<2.61		10.9	2.61	ug/L		06/11/25 12:12	06/18/25 15:19	1
Ethyl methanesulfonate	<3.91		10.9	3.91	ug/L		06/11/25 12:12	06/18/25 15:19	1
Ethyl Parathion	<2.39		10.9	2.39	ug/L		06/11/25 12:12	06/18/25 15:19	1
Famphur	<4.13	*+	10.9	4.13	ug/L		06/11/25 12:12	06/18/25 15:19	1
Fluoranthene	<1.85		10.9	1.85	ug/L		06/11/25 12:12	06/18/25 15:19	1
Fluorene	<0.859		10.9	0.859	ug/L		06/11/25 12:12	06/18/25 15:19	1
Hexachlorobenzene	<0.761		10.9	0.761	ug/L		06/11/25 12:12	06/18/25 15:19	1
Hexachlorobutadiene	<0.935		10.9	0.935	ug/L		06/11/25 12:12	06/18/25 15:19	1
Hexachlorocyclopentadiene	<5.54		10.9	5.54	ug/L		06/11/25 12:12	06/18/25 15:19	1
Hexachloroethane	<1.05		10.9	1.05	ug/L		06/11/25 12:12	06/18/25 15:19	1
Hexachloropropene	<2.83		10.9	2.83	ug/L		06/11/25 12:12	06/18/25 15:19	1
Indeno[1,2,3-cd]pyrene	<4.57		10.9	4.57	ug/L		06/11/25 12:12	06/18/25 15:19	1
Isodrin	<5.11		10.9	5.11	ug/L		06/11/25 12:12	06/18/25 15:19	1
Isophorone	<1.01		10.9	1.01	ug/L		06/11/25 12:12	06/18/25 15:19	1
Isosafrole	<2.50		10.9	2.50	ug/L		06/11/25 12:12	06/18/25 15:19	1
Kepone	<1.09		10.9	1.09	ug/L		06/11/25 12:12	06/18/25 15:19	1
Methapyrilene	<0.826	*1	10.9	0.826	ug/L		06/11/25 12:12	06/18/25 15:19	1
3-Methylcholanthrene	<0.348		10.9	0.348	ug/L		06/11/25 12:12	06/18/25 15:19	1
Methyl methanesulfonate	<3.59		10.9	3.59	ug/L		06/11/25 12:12	06/18/25 15:19	1
2-Methylnaphthalene	<0.641		10.9	0.641	ug/L		06/11/25 12:12	06/18/25 15:19	1
Methyl parathion	<2.50		10.9	2.50	ug/L		06/11/25 12:12	06/18/25 15:19	1
2-Methylphenol	<0.707		10.9	0.707	ug/L		06/11/25 12:12	06/18/25 15:19	1
Methylphenol, 3 & 4	<0.761		10.9	0.761	ug/L		06/11/25 12:12	06/18/25 15:19	1
1,4-Naphthoquinone	<3.91		10.9	3.91	ug/L		06/11/25 12:12	06/18/25 15:19	1
1-Naphthylamine	<2.72	*1	10.9	2.72	ug/L		06/11/25 12:12	06/18/25 15:19	1
2-Naphthylamine	<2.28		10.9	2.28	ug/L		06/11/25 12:12	06/18/25 15:19	1
2-Nitroaniline	<6.41		10.9	6.41	ug/L		06/11/25 12:12	06/18/25 15:19	1
3-Nitroaniline	<2.93		10.9	2.93	ug/L		06/11/25 12:12	06/18/25 15:19	1
4-Nitroaniline	<1.41		10.9	1.41	ug/L		06/11/25 12:12	06/18/25 15:19	1
Nitrobenzene	<0.870		10.9	0.870	ug/L		06/11/25 12:12	06/18/25 15:19	1
5-Nitro-o-toluidine	<3.04		10.9	3.04	ug/L		06/11/25 12:12	06/18/25 15:19	1

Client Sample ID: MW-42A
Lab Sample ID: 310-308053-3
Date Collected: 06/05/25 11:00
Matrix: Ground Water
Date Received: 06/06/25 08:20

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	<7.39		10.9	7.39	ug/L		06/11/25 12:12	06/18/25 15:19	1
4-Nitrophenol	<8.26		10.9	8.26	ug/L		06/11/25 12:12	06/18/25 15:19	1
N-Nitrosodiethylamine	<3.70		10.9	3.70	ug/L		06/11/25 12:12	06/18/25 15:19	1
N-Nitrosodimethylamine	<0.783		10.9	0.783	ug/L		06/11/25 12:12	06/18/25 15:19	1
N-Nitrosodi-n-butylamine	<4.24		10.9	4.24	ug/L		06/11/25 12:12	06/18/25 15:19	1
N-Nitrosodi-n-propylamine	<1.00		10.9	1.00	ug/L		06/11/25 12:12	06/18/25 15:19	1
N-Nitrosodiphenylamine	<0.815		10.9	0.815	ug/L		06/11/25 12:12	06/18/25 15:19	1
N-Nitrosomethylethylamine	<5.33		10.9	5.33	ug/L		06/11/25 12:12	06/18/25 15:19	1
N-Nitrosopiperidine	<2.93		10.9	2.93	ug/L		06/11/25 12:12	06/18/25 15:19	1
N-Nitrosopyrrolidine	<3.91		10.9	3.91	ug/L		06/11/25 12:12	06/18/25 15:19	1
o,o',o''-Triethylphosphorothioate	<3.48		10.9	3.48	ug/L		06/11/25 12:12	06/18/25 15:19	1
o-Toluidine	<3.15		10.9	3.15	ug/L		06/11/25 12:12	06/18/25 15:19	1
p-Dimethylamino azobenzene	<2.39		10.9	2.39	ug/L		06/11/25 12:12	06/18/25 15:19	1
Pentachlorobenzene	<3.04		10.9	3.04	ug/L		06/11/25 12:12	06/18/25 15:19	1
Pentachloronitrobenzene	<6.30		10.9	6.30	ug/L		06/11/25 12:12	06/18/25 15:19	1
Pentachlorophenol	<10.4		10.9	10.4	ug/L		06/11/25 12:12	06/18/25 15:19	1
Phenacetin	<2.07		10.9	2.07	ug/L		06/11/25 12:12	06/18/25 15:19	1
Phenanthrene	<0.859		10.9	0.859	ug/L		06/11/25 12:12	06/18/25 15:19	1
Phenol	<1.20		10.9	1.20	ug/L		06/11/25 12:12	06/18/25 15:19	1
1,4-phenylenediamine	<2.07	*-	10.9	2.07	ug/L		06/11/25 12:12	06/18/25 15:19	1
Phorate	<3.48		10.9	3.48	ug/L		06/11/25 12:12	06/18/25 15:19	1
Pronamide	<2.93		10.9	2.93	ug/L		06/11/25 12:12	06/18/25 15:19	1
Pyrene	<0.859		10.9	0.859	ug/L		06/11/25 12:12	06/18/25 15:19	1
Safrole	<3.04		10.9	3.04	ug/L		06/11/25 12:12	06/18/25 15:19	1
1,2,4,5-Tetrachlorobenzene	<0.587		10.9	0.587	ug/L		06/11/25 12:12	06/18/25 15:19	1
2,3,4,6-Tetrachlorophenol	<5.76		10.9	5.76	ug/L		06/11/25 12:12	06/18/25 15:19	1
Thionazin	<3.80		10.9	3.80	ug/L		06/11/25 12:12	06/18/25 15:19	1
2,4,5-Trichlorophenol	<5.76		10.9	5.76	ug/L		06/11/25 12:12	06/18/25 15:19	1
2,4,6-Trichlorophenol	<5.43		10.9	5.43	ug/L		06/11/25 12:12	06/18/25 15:19	1
1,3,5-Trinitrobenzene	<2.50		10.9	2.50	ug/L		06/11/25 12:12	06/18/25 15:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*69*		*33 - 126*	*06/11/25 12:12*	*06/18/25 15:19*	*1*
2-Fluorophenol (Surr)	*63*		*21 - 110*	*06/11/25 12:12*	*06/18/25 15:19*	*1*
Nitrobenzene-d5 (Surr)	*80*		*39 - 140*	*06/11/25 12:12*	*06/18/25 15:19*	*1*
Phenol-d5 (Surr)	*59*		*21 - 110*	*06/11/25 12:12*	*06/18/25 15:19*	*1*
Terphenyl-d14 (Surr)	*90*		*13 - 150*	*06/11/25 12:12*	*06/18/25 15:19*	*1*
2,4,6-Tribromophenol (Surr)	*73*		*20 - 144*	*06/11/25 12:12*	*06/18/25 15:19*	*1*

Method: SW846 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	<2600		10000	2600	ug/L			06/11/25 16:20	1
Isobutanol	<2400		10000	2400	ug/L			06/11/25 16:20	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.0201		0.0911	0.0201	ug/L		06/11/25 12:22	06/12/25 14:40	1
alpha-BHC	<0.00911		0.0911	0.00911	ug/L		06/11/25 12:22	06/12/25 14:40	1
beta-BHC	<0.0383		0.0911	0.0383	ug/L		06/11/25 12:22	06/12/25 14:40	1
Chlordane (technical)	<0.355		1.82	0.355	ug/L		06/11/25 12:22	06/12/25 14:40	1

Client Sample ID: MW-42A
Lab Sample ID: 310-308053-3
Date Collected: 06/05/25 11:00
Matrix: Ground Water
Date Received: 06/06/25 08:20

Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.0228		0.0911	0.0228	ug/L		06/11/25 12:22	06/12/25 14:40	1
4,4'-DDE	<0.0273		0.0911	0.0273	ug/L		06/11/25 12:22	06/12/25 14:40	1
4,4'-DDT	<0.0182		0.0911	0.0182	ug/L		06/11/25 12:22	06/12/25 14:40	1
delta-BHC	<0.0292		0.0911	0.0292	ug/L		06/11/25 12:22	06/12/25 14:40	1
Dieldrin	<0.0191		0.0911	0.0191	ug/L		06/11/25 12:22	06/12/25 14:40	1
Endosulfan I	<0.0255		0.0911	0.0255	ug/L		06/11/25 12:22	06/12/25 14:40	1
Endosulfan II	<0.0237		0.0911	0.0237	ug/L		06/11/25 12:22	06/12/25 14:40	1
Endosulfan sulfate	<0.0164		0.0911	0.0164	ug/L		06/11/25 12:22	06/12/25 14:40	1
Endrin	<0.0255		0.0911	0.0255	ug/L		06/11/25 12:22	06/12/25 14:40	1
Endrin aldehyde	<0.0246		0.0911	0.0246	ug/L		06/11/25 12:22	06/12/25 14:40	1
gamma-BHC (Lindane)	<0.00911		0.0911	0.00911	ug/L		06/11/25 12:22	06/12/25 14:40	1
Heptachlor	<0.0210		0.0911	0.0210	ug/L		06/11/25 12:22	06/12/25 14:40	1
Heptachlor epoxide	<0.0292		0.0911	0.0292	ug/L		06/11/25 12:22	06/12/25 14:40	1
Methoxychlor	<0.0292		0.0911	0.0292	ug/L		06/11/25 12:22	06/12/25 14:40	1
Toxaphene	<0.911		1.82	0.911	ug/L		06/11/25 12:22	06/12/25 14:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*77*		*10 - 150*	*06/11/25 12:22*	*06/12/25 14:40*	*1*
Tetrachloro-m-xylene	*60*		*17 - 150*	*06/11/25 12:22*	*06/12/25 14:40*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.747		1.82	0.747	ug/L		06/11/25 12:22	06/12/25 14:40	1
PCB-1221	<0.747		1.82	0.747	ug/L		06/11/25 12:22	06/12/25 14:40	1
PCB-1232	<0.747		1.82	0.747	ug/L		06/11/25 12:22	06/12/25 14:40	1
PCB-1242	<0.747		1.82	0.747	ug/L		06/11/25 12:22	06/12/25 14:40	1
PCB-1248	<0.629		1.82	0.629	ug/L		06/11/25 12:22	06/12/25 14:40	1
PCB-1254	<0.629		1.82	0.629	ug/L		06/11/25 12:22	06/12/25 14:40	1
PCB-1260	<0.629		1.82	0.629	ug/L		06/11/25 12:22	06/12/25 14:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*77*		*10 - 150*	*06/11/25 12:22*	*06/12/25 14:40*	*1*
Tetrachloro-m-xylene	*60*		*17 - 150*	*06/11/25 12:22*	*06/12/25 14:40*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.268	*1	0.644	0.268	ug/L		06/12/25 15:00	06/13/25 09:04	1
Silvex (2,4,5-TP)	<0.0236		0.0537	0.0236	ug/L		06/12/25 15:00	06/13/25 09:04	1
2,4,5-T	<0.0698		0.161	0.0698	ug/L		06/12/25 15:00	06/13/25 09:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*80*		*34 - 142*	*06/12/25 15:00*	*06/13/25 09:04*	*1*
DCAA	*84*		*34 - 142*	*06/12/25 15:00*	*06/13/25 09:04*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/10/25 09:00	06/18/25 13:14	1
Arsenic	<0.530		2.00	0.530	ug/L		06/10/25 09:00	06/18/25 13:14	1
Barium	**152**		2.00	0.660	ug/L		06/10/25 09:00	06/18/25 13:14	1
Beryllium	<0.330		1.00	0.330	ug/L		06/10/25 09:00	06/18/25 13:14	1
Cadmium	<0.100		0.200	0.100	ug/L		06/10/25 09:00	06/18/25 13:14	1

Client: AECOM
Job ID: 310-308053-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-42A
Lab Sample ID: 310-308053-3

Date Collected: 06/05/25 11:00
Matrix: Ground Water

Date Received: 06/06/25 08:20

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<1.80		5.00	1.80	ug/L		06/10/25 09:00	06/18/25 13:14	1
Cobalt	**1.37**		0.500	0.170	ug/L		06/10/25 09:00	06/18/25 13:14	1
Copper	<3.20		5.00	3.20	ug/L		06/10/25 09:00	06/18/25 13:14	1
Lead	<0.330		0.500	0.330	ug/L		06/10/25 09:00	06/18/25 13:14	1
Nickel	**26.1**		5.00	2.30	ug/L		06/10/25 09:00	06/18/25 13:14	1
Selenium	<1.40		5.00	1.40	ug/L		06/10/25 09:00	06/18/25 13:14	1
Silver	<0.500		1.00	0.500	ug/L		06/10/25 09:00	06/18/25 13:14	1
Thallium	<0.570		1.00	0.570	ug/L		06/10/25 09:00	06/18/25 13:14	1
Vanadium	<1.70		5.00	1.70	ug/L		06/10/25 09:00	06/18/25 13:14	1
Zinc	<13.0		20.0	13.0	ug/L		06/10/25 09:00	06/18/25 13:14	1
Tin	<2.50		5.00	2.50	ug/L		06/10/25 09:00	06/18/25 13:14	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.110		0.200	0.110	ug/L		06/11/25 12:28	06/12/25 12:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<3.50		10.0	3.50	ug/L		06/06/25 11:01	06/06/25 21:46	1
Sulfide (SW846 9034)	<1410		3000	1410	ug/L		06/10/25 09:11	06/10/25 11:55	1
Total Suspended Solids (USGS I-3765-85)	**6.25**		1.88	1.31	mg/L			06/06/25 17:11	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**24.38**				NTU			06/05/25 11:00	1

Client: AECOM
Job ID: 310-308053-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-43A
Lab Sample ID: 310-308053-4
Date Collected: 06/05/25 12:30
Matrix: Ground Water
Date Received: 06/06/25 08:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<3.10		10.0	3.10	ug/L			06/10/25 13:27	1
Acrolein	<3.60		10.0	3.60	ug/L			06/10/25 13:27	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/10/25 13:27	1
Allyl chloride	<0.700		2.00	0.700	ug/L			06/10/25 13:27	1
Benzene	<0.220		0.500	0.220	ug/L			06/10/25 13:27	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/10/25 13:27	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/10/25 13:27	1
Bromoform	<0.780		5.00	0.780	ug/L			06/10/25 13:27	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/10/25 13:27	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/10/25 13:27	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/10/25 13:27	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/10/25 13:27	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/10/25 13:27	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/10/25 13:27	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/10/25 13:27	1
Chloroform	<1.30		3.00	1.30	ug/L			06/10/25 13:27	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/10/25 13:27	1
Chloroprene	<0.230		1.00	0.230	ug/L			06/10/25 13:27	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/10/25 13:27	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/10/25 13:27	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/10/25 13:27	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/10/25 13:27	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/10/25 13:27	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/10/25 13:27	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			06/10/25 13:27	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/10/25 13:27	1
Dichlorodifluoromethane	<0.250		3.00	0.250	ug/L			06/10/25 13:27	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/10/25 13:27	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/10/25 13:27	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/10/25 13:27	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/10/25 13:27	1
1,3-Dichloropropane	<0.400		1.00	0.400	ug/L			06/10/25 13:27	1
2,2-Dichloropropane	<0.690		4.00	0.690	ug/L			06/10/25 13:27	1
1,1-Dichloropropene	<0.430		1.00	0.430	ug/L			06/10/25 13:27	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/10/25 13:27	1
Ethyl methacrylate	<0.680		2.00	0.680	ug/L			06/10/25 13:27	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/10/25 13:27	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/10/25 13:27	1
Methacrylonitrile	<3.30		10.0	3.30	ug/L			06/10/25 13:27	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/10/25 13:27	1
Methyl methacrylate	<0.760		2.00	0.760	ug/L			06/10/25 13:27	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/10/25 13:27	1
m,p-Xylene	<0.380		2.00	0.380	ug/L			06/10/25 13:27	1
Naphthalene	<3.00		5.00	3.00	ug/L			06/10/25 13:27	1
o-Xylene	<0.400		1.00	0.400	ug/L			06/10/25 13:27	1
Propionitrile	<3.40		10.0	3.40	ug/L			06/10/25 13:27	1
Styrene	<0.370		1.00	0.370	ug/L			06/10/25 13:27	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/10/25 13:27	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/10/25 13:27	1

Client Sample ID: MW-43A
Lab Sample ID: 310-308053-4
Date Collected: 06/05/25 12:30
Matrix: Ground Water
Date Received: 06/06/25 08:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/10/25 13:27	1
Toluene	<0.430		1.00	0.430	ug/L			06/10/25 13:27	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/10/25 13:27	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/10/25 13:27	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/10/25 13:27	1
1,2,4-Trichlorobenzene	<0.750		5.00	0.750	ug/L			06/10/25 13:27	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/10/25 13:27	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/10/25 13:27	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/10/25 13:27	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/10/25 13:27	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/10/25 13:27	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/10/25 13:27	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/10/25 13:27	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/10/25 13:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*06/10/25 13:27*	*1*
Dibromofluoromethane (Surr)	*112*		*76 - 130*		*06/10/25 13:27*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*06/10/25 13:27*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.681		10.6	0.681	ug/L		06/11/25 12:12	06/18/25 15:46	1
Acenaphthylene	<0.766		10.6	0.766	ug/L		06/11/25 12:12	06/18/25 15:46	1
Acetophenone	<0.734		10.6	0.734	ug/L		06/11/25 12:12	06/18/25 15:46	1
2-Acetylaminofluorene	<2.87		10.6	2.87	ug/L		06/11/25 12:12	06/18/25 15:46	1
4-Aminobiphenyl	<2.34		10.6	2.34	ug/L		06/11/25 12:12	06/18/25 15:46	1
Anthracene	<0.926		10.6	0.926	ug/L		06/11/25 12:12	06/18/25 15:46	1
Benzo[a]anthracene	<0.904		10.6	0.904	ug/L		06/11/25 12:12	06/18/25 15:46	1
Benzo[a]pyrene	<8.62		10.6	8.62	ug/L		06/11/25 12:12	06/18/25 15:46	1
Benzo[b]fluoranthene	<5.21		10.6	5.21	ug/L		06/11/25 12:12	06/18/25 15:46	1
Benzo[g,h,i]perylene	<6.70		10.6	6.70	ug/L		06/11/25 12:12	06/18/25 15:46	1
Benzo[k]fluoranthene	<2.34		10.6	2.34	ug/L		06/11/25 12:12	06/18/25 15:46	1
Benzyl alcohol	<1.38		10.6	1.38	ug/L		06/11/25 12:12	06/18/25 15:46	1
Bis(2-chloroethoxy)methane	<0.809		10.6	0.809	ug/L		06/11/25 12:12	06/18/25 15:46	1
Bis(2-chloroethyl)ether	<0.872		10.6	0.872	ug/L		06/11/25 12:12	06/18/25 15:46	1
bis (2-chloroisopropyl) ether	<0.574		10.6	0.574	ug/L		06/11/25 12:12	06/18/25 15:46	1
Bis(2-ethylhexyl) phthalate	<5.85		10.6	5.85	ug/L		06/11/25 12:12	06/18/25 15:46	1
4-Bromophenyl phenyl ether	<0.745		10.6	0.745	ug/L		06/11/25 12:12	06/18/25 15:46	1
Butyl benzyl phthalate	<5.74		10.6	5.74	ug/L		06/11/25 12:12	06/18/25 15:46	1
4-Chloroaniline	<0.660		10.6	0.660	ug/L		06/11/25 12:12	06/18/25 15:46	1
Chlorobenzilate	<3.83		10.6	3.83	ug/L		06/11/25 12:12	06/18/25 15:46	1
4-Chloro-3-methylphenol	<0.894		10.6	0.894	ug/L		06/11/25 12:12	06/18/25 15:46	1
2-Chloronaphthalene	<0.681		10.6	0.681	ug/L		06/11/25 12:12	06/18/25 15:46	1
2-Chlorophenol	<0.574		10.6	0.574	ug/L		06/11/25 12:12	06/18/25 15:46	1
4-Chlorophenyl phenyl ether	<0.734		10.6	0.734	ug/L		06/11/25 12:12	06/18/25 15:46	1
Chrysene	<0.926		10.6	0.926	ug/L		06/11/25 12:12	06/18/25 15:46	1
Diallate	<4.26		10.6	4.26	ug/L		06/11/25 12:12	06/18/25 15:46	1
Dibenzo(a,h)anthracene	<4.15		10.6	4.15	ug/L		06/11/25 12:12	06/18/25 15:46	1
Dibenzofuran	<0.787		10.6	0.787	ug/L		06/11/25 12:12	06/18/25 15:46	1

Client Sample ID: MW-43A
Lab Sample ID: 310-308053-4
Date Collected: 06/05/25 12:30
Matrix: Ground Water
Date Received: 06/06/25 08:20

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3,3'-Dichlorobenzidine	<1.49		10.6	1.49	ug/L		06/11/25 12:12	06/18/25 15:46	1
2,4-Dichlorophenol	<0.904		10.6	0.904	ug/L		06/11/25 12:12	06/18/25 15:46	1
2,6-Dichlorophenol	<0.734		10.6	0.734	ug/L		06/11/25 12:12	06/18/25 15:46	1
Diethyl phthalate	<1.81		10.6	1.81	ug/L		06/11/25 12:12	06/18/25 15:46	1
Dimethoate	<3.83		10.6	3.83	ug/L		06/11/25 12:12	06/18/25 15:46	1
7,12-Dimethylbenz(a)anthracene	<2.02		10.6	2.02	ug/L		06/11/25 12:12	06/18/25 15:46	1
3,3'-Dimethylbenzidine	<1.60	*- *1	10.6	1.60	ug/L		06/11/25 12:12	06/18/25 15:46	1
2,4-Dimethylphenol	<0.617		10.6	0.617	ug/L		06/11/25 12:12	06/18/25 15:46	1
Dimethyl phthalate	<1.06		10.6	1.06	ug/L		06/11/25 12:12	06/18/25 15:46	1
Di-n-butyl phthalate	<5.96		10.6	5.96	ug/L		06/11/25 12:12	06/18/25 15:46	1
1,3-Dinitrobenzene	<3.40		10.6	3.40	ug/L		06/11/25 12:12	06/18/25 15:46	1
4,6-Dinitro-2-methylphenol	<7.34		10.6	7.34	ug/L		06/11/25 12:12	06/18/25 15:46	1
2,4-Dinitrophenol	<13.8		21.3	13.8	ug/L		06/11/25 12:12	06/18/25 15:46	1
2,4-Dinitrotoluene	<6.81		10.6	6.81	ug/L		06/11/25 12:12	06/18/25 15:46	1
2,6-Dinitrotoluene	<0.553		10.6	0.553	ug/L		06/11/25 12:12	06/18/25 15:46	1
Di-n-octyl phthalate	<7.45		21.3	7.45	ug/L		06/11/25 12:12	06/18/25 15:46	1
Dinoseb	<2.55		10.6	2.55	ug/L		06/11/25 12:12	06/18/25 15:46	1
Diphenylamine	<6.38		10.6	6.38	ug/L		06/11/25 12:12	06/18/25 15:46	1
Disulfoton	<2.55		10.6	2.55	ug/L		06/11/25 12:12	06/18/25 15:46	1
Ethyl methanesulfonate	<3.83		10.6	3.83	ug/L		06/11/25 12:12	06/18/25 15:46	1
Ethyl Parathion	<2.34		10.6	2.34	ug/L		06/11/25 12:12	06/18/25 15:46	1
Famphur	<4.04	*+	10.6	4.04	ug/L		06/11/25 12:12	06/18/25 15:46	1
Fluoranthene	<1.81		10.6	1.81	ug/L		06/11/25 12:12	06/18/25 15:46	1
Fluorene	<0.840		10.6	0.840	ug/L		06/11/25 12:12	06/18/25 15:46	1
Hexachlorobenzene	<0.745		10.6	0.745	ug/L		06/11/25 12:12	06/18/25 15:46	1
Hexachlorobutadiene	<0.915		10.6	0.915	ug/L		06/11/25 12:12	06/18/25 15:46	1
Hexachlorocyclopentadiene	<5.43		10.6	5.43	ug/L		06/11/25 12:12	06/18/25 15:46	1
Hexachloroethane	<1.03		10.6	1.03	ug/L		06/11/25 12:12	06/18/25 15:46	1
Hexachloropropene	<2.77		10.6	2.77	ug/L		06/11/25 12:12	06/18/25 15:46	1
Indeno[1,2,3-cd]pyrene	<4.47		10.6	4.47	ug/L		06/11/25 12:12	06/18/25 15:46	1
Isodrin	<5.00		10.6	5.00	ug/L		06/11/25 12:12	06/18/25 15:46	1
Isophorone	<0.989		10.6	0.989	ug/L		06/11/25 12:12	06/18/25 15:46	1
Isosafrole	<2.45		10.6	2.45	ug/L		06/11/25 12:12	06/18/25 15:46	1
Kepone	<1.06		10.6	1.06	ug/L		06/11/25 12:12	06/18/25 15:46	1
Methapyrilene	<0.809	*1	10.6	0.809	ug/L		06/11/25 12:12	06/18/25 15:46	1
3-Methylcholanthrene	<0.340		10.6	0.340	ug/L		06/11/25 12:12	06/18/25 15:46	1
Methyl methanesulfonate	<3.51		10.6	3.51	ug/L		06/11/25 12:12	06/18/25 15:46	1
2-Methylnaphthalene	<0.628		10.6	0.628	ug/L		06/11/25 12:12	06/18/25 15:46	1
Methyl parathion	<2.45		10.6	2.45	ug/L		06/11/25 12:12	06/18/25 15:46	1
2-Methylphenol	<0.691		10.6	0.691	ug/L		06/11/25 12:12	06/18/25 15:46	1
Methylphenol, 3 & 4	<0.745		10.6	0.745	ug/L		06/11/25 12:12	06/18/25 15:46	1
1,4-Naphthoquinone	<3.83		10.6	3.83	ug/L		06/11/25 12:12	06/18/25 15:46	1
1-Naphthylamine	<2.66	*1	10.6	2.66	ug/L		06/11/25 12:12	06/18/25 15:46	1
2-Naphthylamine	<2.23		10.6	2.23	ug/L		06/11/25 12:12	06/18/25 15:46	1
2-Nitroaniline	<6.28		10.6	6.28	ug/L		06/11/25 12:12	06/18/25 15:46	1
3-Nitroaniline	<2.87		10.6	2.87	ug/L		06/11/25 12:12	06/18/25 15:46	1
4-Nitroaniline	<1.38		10.6	1.38	ug/L		06/11/25 12:12	06/18/25 15:46	1
Nitrobenzene	<0.851		10.6	0.851	ug/L		06/11/25 12:12	06/18/25 15:46	1
5-Nitro-o-toluidine	<2.98		10.6	2.98	ug/L		06/11/25 12:12	06/18/25 15:46	1

Client Sample ID: MW-43A
Lab Sample ID: 310-308053-4
Date Collected: 06/05/25 12:30
Matrix: Ground Water
Date Received: 06/06/25 08:20

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	<7.23		10.6	7.23	ug/L		06/11/25 12:12	06/18/25 15:46	1
4-Nitrophenol	<8.09		10.6	8.09	ug/L		06/11/25 12:12	06/18/25 15:46	1
N-Nitrosodiethylamine	<3.62		10.6	3.62	ug/L		06/11/25 12:12	06/18/25 15:46	1
N-Nitrosodimethylamine	<0.766		10.6	0.766	ug/L		06/11/25 12:12	06/18/25 15:46	1
N-Nitrosodi-n-butylamine	<4.15		10.6	4.15	ug/L		06/11/25 12:12	06/18/25 15:46	1
N-Nitrosodi-n-propylamine	<0.979		10.6	0.979	ug/L		06/11/25 12:12	06/18/25 15:46	1
N-Nitrosodiphenylamine	<0.798		10.6	0.798	ug/L		06/11/25 12:12	06/18/25 15:46	1
N-Nitrosomethylethylamine	<5.21		10.6	5.21	ug/L		06/11/25 12:12	06/18/25 15:46	1
N-Nitrosopiperidine	<2.87		10.6	2.87	ug/L		06/11/25 12:12	06/18/25 15:46	1
N-Nitrosopyrrolidine	<3.83		10.6	3.83	ug/L		06/11/25 12:12	06/18/25 15:46	1
o,o',o''-Triethylphosphorothioate	<3.40		10.6	3.40	ug/L		06/11/25 12:12	06/18/25 15:46	1
o-Toluidine	<3.09		10.6	3.09	ug/L		06/11/25 12:12	06/18/25 15:46	1
p-Dimethylamino azobenzene	<2.34		10.6	2.34	ug/L		06/11/25 12:12	06/18/25 15:46	1
Pentachlorobenzene	<2.98		10.6	2.98	ug/L		06/11/25 12:12	06/18/25 15:46	1
Pentachloronitrobenzene	<6.17		10.6	6.17	ug/L		06/11/25 12:12	06/18/25 15:46	1
Pentachlorophenol	<10.2		10.6	10.2	ug/L		06/11/25 12:12	06/18/25 15:46	1
Phenacetin	<2.02		10.6	2.02	ug/L		06/11/25 12:12	06/18/25 15:46	1
Phenanthrene	<0.840		10.6	0.840	ug/L		06/11/25 12:12	06/18/25 15:46	1
Phenol	<1.17		10.6	1.17	ug/L		06/11/25 12:12	06/18/25 15:46	1
1,4-phenylenediamine	<2.02	*-	10.6	2.02	ug/L		06/11/25 12:12	06/18/25 15:46	1
Phorate	<3.40		10.6	3.40	ug/L		06/11/25 12:12	06/18/25 15:46	1
Pronamide	<2.87		10.6	2.87	ug/L		06/11/25 12:12	06/18/25 15:46	1
Pyrene	<0.840		10.6	0.840	ug/L		06/11/25 12:12	06/18/25 15:46	1
Safrole	<2.98		10.6	2.98	ug/L		06/11/25 12:12	06/18/25 15:46	1
1,2,4,5-Tetrachlorobenzene	<0.574		10.6	0.574	ug/L		06/11/25 12:12	06/18/25 15:46	1
2,3,4,6-Tetrachlorophenol	<5.64		10.6	5.64	ug/L		06/11/25 12:12	06/18/25 15:46	1
Thionazin	<3.72		10.6	3.72	ug/L		06/11/25 12:12	06/18/25 15:46	1
2,4,5-Trichlorophenol	<5.64		10.6	5.64	ug/L		06/11/25 12:12	06/18/25 15:46	1
2,4,6-Trichlorophenol	<5.32		10.6	5.32	ug/L		06/11/25 12:12	06/18/25 15:46	1
1,3,5-Trinitrobenzene	<2.45		10.6	2.45	ug/L		06/11/25 12:12	06/18/25 15:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*76*		*33 - 126*	*06/11/25 12:12*	*06/18/25 15:46*	*1*
2-Fluorophenol (Surr)	*56*		*21 - 110*	*06/11/25 12:12*	*06/18/25 15:46*	*1*
Nitrobenzene-d5 (Surr)	*81*		*39 - 140*	*06/11/25 12:12*	*06/18/25 15:46*	*1*
Phenol-d5 (Surr)	*51*		*21 - 110*	*06/11/25 12:12*	*06/18/25 15:46*	*1*
Terphenyl-d14 (Surr)	*96*		*13 - 150*	*06/11/25 12:12*	*06/18/25 15:46*	*1*
2,4,6-Tribromophenol (Surr)	*70*		*20 - 144*	*06/11/25 12:12*	*06/18/25 15:46*	*1*

Method: SW846 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	<2600		10000	2600	ug/L			06/11/25 16:40	1
Isobutanol	<2400		10000	2400	ug/L			06/11/25 16:40	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.0201		0.0911	0.0201	ug/L		06/11/25 12:22	06/12/25 14:53	1
alpha-BHC	<0.00911		0.0911	0.00911	ug/L		06/11/25 12:22	06/12/25 14:53	1
beta-BHC	<0.0383		0.0911	0.0383	ug/L		06/11/25 12:22	06/12/25 14:53	1
Chlordane (technical)	<0.355		1.82	0.355	ug/L		06/11/25 12:22	06/12/25 14:53	1

Client Sample ID: MW-43A
Lab Sample ID: 310-308053-4
Date Collected: 06/05/25 12:30
Matrix: Ground Water
Date Received: 06/06/25 08:20

Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.0228		0.0911	0.0228	ug/L		06/11/25 12:22	06/12/25 14:53	1
4,4'-DDE	<0.0273		0.0911	0.0273	ug/L		06/11/25 12:22	06/12/25 14:53	1
4,4'-DDT	<0.0182		0.0911	0.0182	ug/L		06/11/25 12:22	06/12/25 14:53	1
delta-BHC	<0.0292		0.0911	0.0292	ug/L		06/11/25 12:22	06/12/25 14:53	1
Dieldrin	<0.0191		0.0911	0.0191	ug/L		06/11/25 12:22	06/12/25 14:53	1
Endosulfan I	<0.0255		0.0911	0.0255	ug/L		06/11/25 12:22	06/12/25 14:53	1
Endosulfan II	<0.0237		0.0911	0.0237	ug/L		06/11/25 12:22	06/12/25 14:53	1
Endosulfan sulfate	<0.0164		0.0911	0.0164	ug/L		06/11/25 12:22	06/12/25 14:53	1
Endrin	<0.0255		0.0911	0.0255	ug/L		06/11/25 12:22	06/12/25 14:53	1
Endrin aldehyde	<0.0246		0.0911	0.0246	ug/L		06/11/25 12:22	06/12/25 14:53	1
gamma-BHC (Lindane)	<0.00911		0.0911	0.00911	ug/L		06/11/25 12:22	06/12/25 14:53	1
Heptachlor	<0.0210		0.0911	0.0210	ug/L		06/11/25 12:22	06/12/25 14:53	1
Heptachlor epoxide	<0.0292		0.0911	0.0292	ug/L		06/11/25 12:22	06/12/25 14:53	1
Methoxychlor	<0.0292		0.0911	0.0292	ug/L		06/11/25 12:22	06/12/25 14:53	1
Toxaphene	<0.911		1.82	0.911	ug/L		06/11/25 12:22	06/12/25 14:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*78*		*10 - 150*	*06/11/25 12:22*	*06/12/25 14:53*	*1*
Tetrachloro-m-xylene	*87*		*17 - 150*	*06/11/25 12:22*	*06/12/25 14:53*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.747		1.82	0.747	ug/L		06/11/25 12:22	06/12/25 14:53	1
PCB-1221	<0.747		1.82	0.747	ug/L		06/11/25 12:22	06/12/25 14:53	1
PCB-1232	<0.747		1.82	0.747	ug/L		06/11/25 12:22	06/12/25 14:53	1
PCB-1242	<0.747		1.82	0.747	ug/L		06/11/25 12:22	06/12/25 14:53	1
PCB-1248	<0.629		1.82	0.629	ug/L		06/11/25 12:22	06/12/25 14:53	1
PCB-1254	<0.629		1.82	0.629	ug/L		06/11/25 12:22	06/12/25 14:53	1
PCB-1260	<0.629		1.82	0.629	ug/L		06/11/25 12:22	06/12/25 14:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*78*		*10 - 150*	*06/11/25 12:22*	*06/12/25 14:53*	*1*
Tetrachloro-m-xylene	*87*		*17 - 150*	*06/11/25 12:22*	*06/12/25 14:53*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.262	*1	0.629	0.262	ug/L		06/12/25 15:00	06/13/25 09:32	1
Silvex (2,4,5-TP)	<0.0231		0.0524	0.0231	ug/L		06/12/25 15:00	06/13/25 09:32	1
2,4,5-T	<0.0681		0.157	0.0681	ug/L		06/12/25 15:00	06/13/25 09:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*62*		*34 - 142*	*06/12/25 15:00*	*06/13/25 09:32*	*1*
DCAA	*75*		*34 - 142*	*06/12/25 15:00*	*06/13/25 09:32*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/10/25 09:00	06/18/25 13:17	1
Arsenic	**7.28**		2.00	0.530	ug/L		06/10/25 09:00	06/18/25 13:17	1
Barium	**186**		2.00	0.660	ug/L		06/10/25 09:00	06/18/25 13:17	1
Beryllium	<0.330		1.00	0.330	ug/L		06/10/25 09:00	06/18/25 13:17	1
Cadmium	<0.100		0.200	0.100	ug/L		06/10/25 09:00	06/18/25 13:17	1

Client: AECOM
Job ID: 310-308053-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-43A
Lab Sample ID: 310-308053-4

Date Collected: 06/05/25 12:30
Matrix: Ground Water
Date Received: 06/06/25 08:20

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<1.80		5.00	1.80	ug/L		06/10/25 09:00	06/18/25 13:17	1
Cobalt	**3.92**		0.500	0.170	ug/L		06/10/25 09:00	06/18/25 13:17	1
Copper	<3.20		5.00	3.20	ug/L		06/10/25 09:00	06/18/25 13:17	1
Lead	<0.330		0.500	0.330	ug/L		06/10/25 09:00	06/18/25 13:17	1
Nickel	**22.5**		5.00	2.30	ug/L		06/10/25 09:00	06/18/25 13:17	1
Selenium	<1.40		5.00	1.40	ug/L		06/10/25 09:00	06/18/25 13:17	1
Silver	<0.500		1.00	0.500	ug/L		06/10/25 09:00	06/18/25 13:17	1
Thallium	<0.570		1.00	0.570	ug/L		06/10/25 09:00	06/18/25 13:17	1
Vanadium	<1.70		5.00	1.70	ug/L		06/10/25 09:00	06/18/25 13:17	1
Zinc	<13.0		20.0	13.0	ug/L		06/10/25 09:00	06/18/25 13:17	1
Tin	<2.50		5.00	2.50	ug/L		06/10/25 09:00	06/18/25 13:17	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.110		0.200	0.110	ug/L		06/11/25 12:28	06/12/25 12:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<3.50		10.0	3.50	ug/L		06/06/25 11:01	06/06/25 21:42	1
Sulfide (SW846 9034)	<1410		3000	1410	ug/L		06/10/25 09:11	06/10/25 11:55	1
Total Suspended Solids (USGS I-3765-85)	**21.0**		15.0	10.5	mg/L			06/06/25 16:37	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**27.15**				NTU			06/05/25 12:30	1

Client: AECOM
Job ID: 310-308053-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-44A
Lab Sample ID: 310-308053-5
Date Collected: 06/05/25 13:30
Matrix: Ground Water
Date Received: 06/06/25 08:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<3.10		10.0	3.10	ug/L			06/10/25 13:49	1
Acrolein	<3.60		10.0	3.60	ug/L			06/10/25 13:49	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/10/25 13:49	1
Allyl chloride	<0.700		2.00	0.700	ug/L			06/10/25 13:49	1
Benzene	<0.220		0.500	0.220	ug/L			06/10/25 13:49	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/10/25 13:49	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/10/25 13:49	1
Bromoform	<0.780		5.00	0.780	ug/L			06/10/25 13:49	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/10/25 13:49	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/10/25 13:49	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/10/25 13:49	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/10/25 13:49	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/10/25 13:49	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/10/25 13:49	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/10/25 13:49	1
Chloroform	<1.30		3.00	1.30	ug/L			06/10/25 13:49	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/10/25 13:49	1
Chloroprene	<0.230		1.00	0.230	ug/L			06/10/25 13:49	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/10/25 13:49	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/10/25 13:49	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/10/25 13:49	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/10/25 13:49	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/10/25 13:49	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/10/25 13:49	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			06/10/25 13:49	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/10/25 13:49	1
Dichlorodifluoromethane	<0.250		3.00	0.250	ug/L			06/10/25 13:49	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/10/25 13:49	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/10/25 13:49	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/10/25 13:49	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/10/25 13:49	1
1,3-Dichloropropane	<0.400		1.00	0.400	ug/L			06/10/25 13:49	1
2,2-Dichloropropane	<0.690		4.00	0.690	ug/L			06/10/25 13:49	1
1,1-Dichloropropene	<0.430		1.00	0.430	ug/L			06/10/25 13:49	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/10/25 13:49	1
Ethyl methacrylate	<0.680		2.00	0.680	ug/L			06/10/25 13:49	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/10/25 13:49	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/10/25 13:49	1
Methacrylonitrile	<3.30		10.0	3.30	ug/L			06/10/25 13:49	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/10/25 13:49	1
Methyl methacrylate	<0.760		2.00	0.760	ug/L			06/10/25 13:49	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/10/25 13:49	1
m,p-Xylene	<0.380		2.00	0.380	ug/L			06/10/25 13:49	1
Naphthalene	<3.00		5.00	3.00	ug/L			06/10/25 13:49	1
o-Xylene	<0.400		1.00	0.400	ug/L			06/10/25 13:49	1
Propionitrile	<3.40		10.0	3.40	ug/L			06/10/25 13:49	1
Styrene	<0.370		1.00	0.370	ug/L			06/10/25 13:49	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/10/25 13:49	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/10/25 13:49	1

Client Sample ID: MW-44A
Lab Sample ID: 310-308053-5
Date Collected: 06/05/25 13:30
Matrix: Ground Water
Date Received: 06/06/25 08:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/10/25 13:49	1
Toluene	<0.430		1.00	0.430	ug/L			06/10/25 13:49	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/10/25 13:49	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/10/25 13:49	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/10/25 13:49	1
1,2,4-Trichlorobenzene	<0.750		5.00	0.750	ug/L			06/10/25 13:49	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/10/25 13:49	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/10/25 13:49	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/10/25 13:49	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/10/25 13:49	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/10/25 13:49	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/10/25 13:49	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/10/25 13:49	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/10/25 13:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*06/10/25 13:49*	*1*
Dibromofluoromethane (Surr)	*110*		*76 - 130*		*06/10/25 13:49*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*06/10/25 13:49*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.667		10.4	0.667	ug/L		06/11/25 12:12	06/18/25 16:12	1
Acenaphthylene	<0.750		10.4	0.750	ug/L		06/11/25 12:12	06/18/25 16:12	1
Acetophenone	<0.719		10.4	0.719	ug/L		06/11/25 12:12	06/18/25 16:12	1
2-Acetylaminofluorene	<2.81		10.4	2.81	ug/L		06/11/25 12:12	06/18/25 16:12	1
4-Aminobiphenyl	<2.29		10.4	2.29	ug/L		06/11/25 12:12	06/18/25 16:12	1
Anthracene	<0.906		10.4	0.906	ug/L		06/11/25 12:12	06/18/25 16:12	1
Benzo[a]anthracene	<0.885		10.4	0.885	ug/L		06/11/25 12:12	06/18/25 16:12	1
Benzo[a]pyrene	<8.44		10.4	8.44	ug/L		06/11/25 12:12	06/18/25 16:12	1
Benzo[b]fluoranthene	<5.10		10.4	5.10	ug/L		06/11/25 12:12	06/18/25 16:12	1
Benzo[g,h,i]perylene	<6.56		10.4	6.56	ug/L		06/11/25 12:12	06/18/25 16:12	1
Benzo[k]fluoranthene	<2.29		10.4	2.29	ug/L		06/11/25 12:12	06/18/25 16:12	1
Benzyl alcohol	<1.35		10.4	1.35	ug/L		06/11/25 12:12	06/18/25 16:12	1
Bis(2-chloroethoxy)methane	<0.792		10.4	0.792	ug/L		06/11/25 12:12	06/18/25 16:12	1
Bis(2-chloroethyl)ether	<0.854		10.4	0.854	ug/L		06/11/25 12:12	06/18/25 16:12	1
bis (2-chloroisopropyl) ether	<0.563		10.4	0.563	ug/L		06/11/25 12:12	06/18/25 16:12	1
Bis(2-ethylhexyl) phthalate	<5.73		10.4	5.73	ug/L		06/11/25 12:12	06/18/25 16:12	1
4-Bromophenyl phenyl ether	<0.729		10.4	0.729	ug/L		06/11/25 12:12	06/18/25 16:12	1
Butyl benzyl phthalate	<5.63		10.4	5.63	ug/L		06/11/25 12:12	06/18/25 16:12	1
4-Chloroaniline	<0.646		10.4	0.646	ug/L		06/11/25 12:12	06/18/25 16:12	1
Chlorobenzilate	<3.75		10.4	3.75	ug/L		06/11/25 12:12	06/18/25 16:12	1
4-Chloro-3-methylphenol	<0.875		10.4	0.875	ug/L		06/11/25 12:12	06/18/25 16:12	1
2-Chloronaphthalene	<0.667		10.4	0.667	ug/L		06/11/25 12:12	06/18/25 16:12	1
2-Chlorophenol	<0.563		10.4	0.563	ug/L		06/11/25 12:12	06/18/25 16:12	1
4-Chlorophenyl phenyl ether	<0.719		10.4	0.719	ug/L		06/11/25 12:12	06/18/25 16:12	1
Chrysene	<0.906		10.4	0.906	ug/L		06/11/25 12:12	06/18/25 16:12	1
Diallate	<4.17		10.4	4.17	ug/L		06/11/25 12:12	06/18/25 16:12	1
Dibenzo(a,h)anthracene	<4.06		10.4	4.06	ug/L		06/11/25 12:12	06/18/25 16:12	1
Dibenzofuran	<0.771		10.4	0.771	ug/L		06/11/25 12:12	06/18/25 16:12	1

Client: AECOM
Job ID: 310-308053-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-44A
Lab Sample ID: 310-308053-5
Date Collected: 06/05/25 13:30
Matrix: Ground Water
Date Received: 06/06/25 08:20

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3,3'-Dichlorobenzidine	<1.46		10.4	1.46	ug/L		06/11/25 12:12	06/18/25 16:12	1
2,4-Dichlorophenol	<0.885		10.4	0.885	ug/L		06/11/25 12:12	06/18/25 16:12	1
2,6-Dichlorophenol	<0.719		10.4	0.719	ug/L		06/11/25 12:12	06/18/25 16:12	1
Diethyl phthalate	<1.77		10.4	1.77	ug/L		06/11/25 12:12	06/18/25 16:12	1
Dimethoate	<3.75		10.4	3.75	ug/L		06/11/25 12:12	06/18/25 16:12	1
7,12-Dimethylbenz(a)anthracene	<1.98		10.4	1.98	ug/L		06/11/25 12:12	06/18/25 16:12	1
3,3'-Dimethylbenzidine	<1.56	*- *1	10.4	1.56	ug/L		06/11/25 12:12	06/18/25 16:12	1
2,4-Dimethylphenol	<0.604		10.4	0.604	ug/L		06/11/25 12:12	06/18/25 16:12	1
Dimethyl phthalate	<1.04		10.4	1.04	ug/L		06/11/25 12:12	06/18/25 16:12	1
Di-n-butyl phthalate	<5.83		10.4	5.83	ug/L		06/11/25 12:12	06/18/25 16:12	1
1,3-Dinitrobenzene	<3.33		10.4	3.33	ug/L		06/11/25 12:12	06/18/25 16:12	1
4,6-Dinitro-2-methylphenol	<7.19		10.4	7.19	ug/L		06/11/25 12:12	06/18/25 16:12	1
2,4-Dinitrophenol	<13.5		20.8	13.5	ug/L		06/11/25 12:12	06/18/25 16:12	1
2,4-Dinitrotoluene	<6.67		10.4	6.67	ug/L		06/11/25 12:12	06/18/25 16:12	1
2,6-Dinitrotoluene	<0.542		10.4	0.542	ug/L		06/11/25 12:12	06/18/25 16:12	1
Di-n-octyl phthalate	<7.29		20.8	7.29	ug/L		06/11/25 12:12	06/18/25 16:12	1
Dinoseb	<2.50		10.4	2.50	ug/L		06/11/25 12:12	06/18/25 16:12	1
Diphenylamine	<6.25		10.4	6.25	ug/L		06/11/25 12:12	06/18/25 16:12	1
Disulfoton	<2.50		10.4	2.50	ug/L		06/11/25 12:12	06/18/25 16:12	1
Ethyl methanesulfonate	<3.75		10.4	3.75	ug/L		06/11/25 12:12	06/18/25 16:12	1
Ethyl Parathion	<2.29		10.4	2.29	ug/L		06/11/25 12:12	06/18/25 16:12	1
Famphur	<3.96	*+	10.4	3.96	ug/L		06/11/25 12:12	06/18/25 16:12	1
Fluoranthene	<1.77		10.4	1.77	ug/L		06/11/25 12:12	06/18/25 16:12	1
Fluorene	<0.823		10.4	0.823	ug/L		06/11/25 12:12	06/18/25 16:12	1
Hexachlorobenzene	<0.729		10.4	0.729	ug/L		06/11/25 12:12	06/18/25 16:12	1
Hexachlorobutadiene	<0.896		10.4	0.896	ug/L		06/11/25 12:12	06/18/25 16:12	1
Hexachlorocyclopentadiene	<5.31		10.4	5.31	ug/L		06/11/25 12:12	06/18/25 16:12	1
Hexachloroethane	<1.01		10.4	1.01	ug/L		06/11/25 12:12	06/18/25 16:12	1
Hexachloropropene	<2.71		10.4	2.71	ug/L		06/11/25 12:12	06/18/25 16:12	1
Indeno[1,2,3-cd]pyrene	<4.38		10.4	4.38	ug/L		06/11/25 12:12	06/18/25 16:12	1
Isodrin	<4.90		10.4	4.90	ug/L		06/11/25 12:12	06/18/25 16:12	1
Isophorone	<0.969		10.4	0.969	ug/L		06/11/25 12:12	06/18/25 16:12	1
Isosafrole	<2.40		10.4	2.40	ug/L		06/11/25 12:12	06/18/25 16:12	1
Kepone	<1.04		10.4	1.04	ug/L		06/11/25 12:12	06/18/25 16:12	1
Methapyrilene	<0.792	*1	10.4	0.792	ug/L		06/11/25 12:12	06/18/25 16:12	1
3-Methylcholanthrene	<0.333		10.4	0.333	ug/L		06/11/25 12:12	06/18/25 16:12	1
Methyl methanesulfonate	<3.44		10.4	3.44	ug/L		06/11/25 12:12	06/18/25 16:12	1
2-Methylnaphthalene	<0.615		10.4	0.615	ug/L		06/11/25 12:12	06/18/25 16:12	1
Methyl parathion	<2.40		10.4	2.40	ug/L		06/11/25 12:12	06/18/25 16:12	1
2-Methylphenol	<0.677		10.4	0.677	ug/L		06/11/25 12:12	06/18/25 16:12	1
Methylphenol, 3 & 4	<0.729		10.4	0.729	ug/L		06/11/25 12:12	06/18/25 16:12	1
1,4-Naphthoquinone	<3.75		10.4	3.75	ug/L		06/11/25 12:12	06/18/25 16:12	1
1-Naphthylamine	<2.60	*1	10.4	2.60	ug/L		06/11/25 12:12	06/18/25 16:12	1
2-Naphthylamine	<2.19		10.4	2.19	ug/L		06/11/25 12:12	06/18/25 16:12	1
2-Nitroaniline	<6.15		10.4	6.15	ug/L		06/11/25 12:12	06/18/25 16:12	1
3-Nitroaniline	<2.81		10.4	2.81	ug/L		06/11/25 12:12	06/18/25 16:12	1
4-Nitroaniline	<1.35		10.4	1.35	ug/L		06/11/25 12:12	06/18/25 16:12	1
Nitrobenzene	<0.833		10.4	0.833	ug/L		06/11/25 12:12	06/18/25 16:12	1
5-Nitro-o-toluidine	<2.92		10.4	2.92	ug/L		06/11/25 12:12	06/18/25 16:12	1

Client Sample ID: MW-44A
Lab Sample ID: 310-308053-5
Date Collected: 06/05/25 13:30
Matrix: Ground Water
Date Received: 06/06/25 08:20

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	<7.08		10.4	7.08	ug/L		06/11/25 12:12	06/18/25 16:12	1
4-Nitrophenol	<7.92		10.4	7.92	ug/L		06/11/25 12:12	06/18/25 16:12	1
N-Nitrosodiethylamine	<3.54		10.4	3.54	ug/L		06/11/25 12:12	06/18/25 16:12	1
N-Nitrosodimethylamine	<0.750		10.4	0.750	ug/L		06/11/25 12:12	06/18/25 16:12	1
N-Nitrosodi-n-butylamine	<4.06		10.4	4.06	ug/L		06/11/25 12:12	06/18/25 16:12	1
N-Nitrosodi-n-propylamine	<0.958		10.4	0.958	ug/L		06/11/25 12:12	06/18/25 16:12	1
N-Nitrosodiphenylamine	<0.781		10.4	0.781	ug/L		06/11/25 12:12	06/18/25 16:12	1
N-Nitrosomethylethylamine	<5.10		10.4	5.10	ug/L		06/11/25 12:12	06/18/25 16:12	1
N-Nitrosopiperidine	<2.81		10.4	2.81	ug/L		06/11/25 12:12	06/18/25 16:12	1
N-Nitrosopyrrolidine	<3.75		10.4	3.75	ug/L		06/11/25 12:12	06/18/25 16:12	1
o,o',o''-Triethylphosphorothioate	<3.33		10.4	3.33	ug/L		06/11/25 12:12	06/18/25 16:12	1
o-Toluidine	<3.02		10.4	3.02	ug/L		06/11/25 12:12	06/18/25 16:12	1
p-Dimethylamino azobenzene	<2.29		10.4	2.29	ug/L		06/11/25 12:12	06/18/25 16:12	1
Pentachlorobenzene	<2.92		10.4	2.92	ug/L		06/11/25 12:12	06/18/25 16:12	1
Pentachloronitrobenzene	<6.04		10.4	6.04	ug/L		06/11/25 12:12	06/18/25 16:12	1
Pentachlorophenol	<10.0		10.4	10.0	ug/L		06/11/25 12:12	06/18/25 16:12	1
Phenacetin	<1.98		10.4	1.98	ug/L		06/11/25 12:12	06/18/25 16:12	1
Phenanthrene	<0.823		10.4	0.823	ug/L		06/11/25 12:12	06/18/25 16:12	1
Phenol	<1.15		10.4	1.15	ug/L		06/11/25 12:12	06/18/25 16:12	1
1,4-phenylenediamine	<1.98	*-	10.4	1.98	ug/L		06/11/25 12:12	06/18/25 16:12	1
Phorate	<3.33		10.4	3.33	ug/L		06/11/25 12:12	06/18/25 16:12	1
Pronamide	<2.81		10.4	2.81	ug/L		06/11/25 12:12	06/18/25 16:12	1
Pyrene	<0.823		10.4	0.823	ug/L		06/11/25 12:12	06/18/25 16:12	1
Safrole	<2.92		10.4	2.92	ug/L		06/11/25 12:12	06/18/25 16:12	1
1,2,4,5-Tetrachlorobenzene	<0.563		10.4	0.563	ug/L		06/11/25 12:12	06/18/25 16:12	1
2,3,4,6-Tetrachlorophenol	<5.52		10.4	5.52	ug/L		06/11/25 12:12	06/18/25 16:12	1
Thionazin	<3.65		10.4	3.65	ug/L		06/11/25 12:12	06/18/25 16:12	1
2,4,5-Trichlorophenol	<5.52		10.4	5.52	ug/L		06/11/25 12:12	06/18/25 16:12	1
2,4,6-Trichlorophenol	<5.21		10.4	5.21	ug/L		06/11/25 12:12	06/18/25 16:12	1
1,3,5-Trinitrobenzene	<2.40		10.4	2.40	ug/L		06/11/25 12:12	06/18/25 16:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*69*		*33 - 126*	*06/11/25 12:12*	*06/18/25 16:12*	*1*
2-Fluorophenol (Surr)	*61*		*21 - 110*	*06/11/25 12:12*	*06/18/25 16:12*	*1*
Nitrobenzene-d5 (Surr)	*83*		*39 - 140*	*06/11/25 12:12*	*06/18/25 16:12*	*1*
Phenol-d5 (Surr)	*56*		*21 - 110*	*06/11/25 12:12*	*06/18/25 16:12*	*1*
Terphenyl-d14 (Surr)	*98*		*13 - 150*	*06/11/25 12:12*	*06/18/25 16:12*	*1*
2,4,6-Tribromophenol (Surr)	*69*		*20 - 144*	*06/11/25 12:12*	*06/18/25 16:12*	*1*

Method: SW846 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	<2600		10000	2600	ug/L			06/11/25 17:00	1
Isobutanol	<2400		10000	2400	ug/L			06/11/25 17:00	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.0199		0.0907	0.0199	ug/L		06/11/25 12:22	06/12/25 15:06	1
alpha-BHC	<0.00907		0.0907	0.00907	ug/L		06/11/25 12:22	06/12/25 15:06	1
beta-BHC	<0.0381		0.0907	0.0381	ug/L		06/11/25 12:22	06/12/25 15:06	1
Chlordane (technical)	<0.354		1.81	0.354	ug/L		06/11/25 12:22	06/12/25 15:06	1

Client Sample ID: MW-44A
Lab Sample ID: 310-308053-5
Date Collected: 06/05/25 13:30
Matrix: Ground Water
Date Received: 06/06/25 08:20

Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.0227		0.0907	0.0227	ug/L		06/11/25 12:22	06/12/25 15:06	1
4,4'-DDE	<0.0272		0.0907	0.0272	ug/L		06/11/25 12:22	06/12/25 15:06	1
4,4'-DDT	<0.0181		0.0907	0.0181	ug/L		06/11/25 12:22	06/12/25 15:06	1
delta-BHC	<0.0290		0.0907	0.0290	ug/L		06/11/25 12:22	06/12/25 15:06	1
Dieldrin	<0.0190		0.0907	0.0190	ug/L		06/11/25 12:22	06/12/25 15:06	1
Endosulfan I	<0.0254		0.0907	0.0254	ug/L		06/11/25 12:22	06/12/25 15:06	1
Endosulfan II	<0.0236		0.0907	0.0236	ug/L		06/11/25 12:22	06/12/25 15:06	1
Endosulfan sulfate	<0.0163		0.0907	0.0163	ug/L		06/11/25 12:22	06/12/25 15:06	1
Endrin	<0.0254		0.0907	0.0254	ug/L		06/11/25 12:22	06/12/25 15:06	1
Endrin aldehyde	<0.0245		0.0907	0.0245	ug/L		06/11/25 12:22	06/12/25 15:06	1
gamma-BHC (Lindane)	<0.00907		0.0907	0.00907	ug/L		06/11/25 12:22	06/12/25 15:06	1
Heptachlor	<0.0209		0.0907	0.0209	ug/L		06/11/25 12:22	06/12/25 15:06	1
Heptachlor epoxide	<0.0290		0.0907	0.0290	ug/L		06/11/25 12:22	06/12/25 15:06	1
Methoxychlor	<0.0290		0.0907	0.0290	ug/L		06/11/25 12:22	06/12/25 15:06	1
Toxaphene	<0.907		1.81	0.907	ug/L		06/11/25 12:22	06/12/25 15:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*84*		*10 - 150*	*06/11/25 12:22*	*06/12/25 15:06*	*1*
Tetrachloro-m-xylene	*76*		*17 - 150*	*06/11/25 12:22*	*06/12/25 15:06*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.744		1.81	0.744	ug/L		06/11/25 12:22	06/12/25 15:06	1
PCB-1221	<0.744		1.81	0.744	ug/L		06/11/25 12:22	06/12/25 15:06	1
PCB-1232	<0.744		1.81	0.744	ug/L		06/11/25 12:22	06/12/25 15:06	1
PCB-1242	<0.744		1.81	0.744	ug/L		06/11/25 12:22	06/12/25 15:06	1
PCB-1248	<0.626		1.81	0.626	ug/L		06/11/25 12:22	06/12/25 15:06	1
PCB-1254	<0.626		1.81	0.626	ug/L		06/11/25 12:22	06/12/25 15:06	1
PCB-1260	<0.626		1.81	0.626	ug/L		06/11/25 12:22	06/12/25 15:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*84*		*10 - 150*	*06/11/25 12:22*	*06/12/25 15:06*	*1*
Tetrachloro-m-xylene	*76*		*17 - 150*	*06/11/25 12:22*	*06/12/25 15:06*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.298	*1	0.716	0.298	ug/L		06/12/25 15:00	06/13/25 10:00	1
Silvex (2,4,5-TP)	<0.0263		0.0597	0.0263	ug/L		06/12/25 15:00	06/13/25 10:00	1
2,4,5-T	<0.0776		0.179	0.0776	ug/L		06/12/25 15:00	06/13/25 10:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*73*		*34 - 142*	*06/12/25 15:00*	*06/13/25 10:00*	*1*
DCAA	*92*		*34 - 142*	*06/12/25 15:00*	*06/13/25 10:00*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/10/25 09:00	06/18/25 13:20	1
Arsenic	<0.530		2.00	0.530	ug/L		06/10/25 09:00	06/18/25 13:20	1
Barium	**173**		2.00	0.660	ug/L		06/10/25 09:00	06/18/25 13:20	1
Beryllium	<0.330		1.00	0.330	ug/L		06/10/25 09:00	06/18/25 13:20	1
Cadmium	**0.499**		0.200	0.100	ug/L		06/10/25 09:00	06/18/25 13:20	1

Client: AECOM
Job ID: 310-308053-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-44A
Lab Sample ID: 310-308053-5
Date Collected: 06/05/25 13:30
Matrix: Ground Water
Date Received: 06/06/25 08:20

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<1.80		5.00	1.80	ug/L		06/10/25 09:00	06/18/25 13:20	1
Cobalt	**0.256**	**J**	0.500	0.170	ug/L		06/10/25 09:00	06/18/25 13:20	1
Copper	<3.20		5.00	3.20	ug/L		06/10/25 09:00	06/18/25 13:20	1
Lead	<0.330		0.500	0.330	ug/L		06/10/25 09:00	06/18/25 13:20	1
Nickel	**39.1**		5.00	2.30	ug/L		06/10/25 09:00	06/18/25 13:20	1
Selenium	<1.40		5.00	1.40	ug/L		06/10/25 09:00	06/18/25 13:20	1
Silver	<0.500		1.00	0.500	ug/L		06/10/25 09:00	06/18/25 13:20	1
Thallium	<0.570		1.00	0.570	ug/L		06/10/25 09:00	06/18/25 13:20	1
Vanadium	<1.70		5.00	1.70	ug/L		06/10/25 09:00	06/18/25 13:20	1
Zinc	**26.5**		20.0	13.0	ug/L		06/10/25 09:00	06/18/25 13:20	1
Tin	<2.50		5.00	2.50	ug/L		06/10/25 09:00	06/18/25 13:20	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.110		0.200	0.110	ug/L		06/11/25 12:28	06/12/25 12:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<3.50		10.0	3.50	ug/L		06/06/25 11:01	06/06/25 21:42	1
Sulfide (SW846 9034)	<1410		3000	1410	ug/L		06/10/25 09:11	06/10/25 11:55	1
Total Suspended Solids (USGS I-3765-85)	<1.31		1.88	1.31	mg/L			06/06/25 17:11	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**3.04**				NTU			06/05/25 13:30	1

Client: AECOM
Job ID: 310-308053-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: Equipment Blank #1 Shallow
Lab Sample ID: 310-308053-6
Date Collected: 06/05/25 11:30
Matrix: Ground Water
Date Received: 06/06/25 08:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/10/25 19:03	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/10/25 19:03	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/10/25 19:03	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/10/25 19:03	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/10/25 19:03	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/10/25 19:03	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/10/25 19:03	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/10/25 19:03	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/10/25 19:03	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/10/25 19:03	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/10/25 19:03	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/10/25 19:03	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/10/25 19:03	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/10/25 19:03	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/10/25 19:03	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/10/25 19:03	1
Acetone	<3.10		10.0	3.10	ug/L			06/10/25 19:03	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/10/25 19:03	1
Benzene	<0.220		0.500	0.220	ug/L			06/10/25 19:03	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/10/25 19:03	1
Bromodichloromethane	**1.14**		1.00	0.390	ug/L			06/10/25 19:03	1
Bromoform	<0.780		5.00	0.780	ug/L			06/10/25 19:03	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/10/25 19:03	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/10/25 19:03	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/10/25 19:03	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/10/25 19:03	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/10/25 19:03	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/10/25 19:03	1
Chloroform	<1.30		3.00	1.30	ug/L			06/10/25 19:03	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/10/25 19:03	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/10/25 19:03	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/10/25 19:03	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/10/25 19:03	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/10/25 19:03	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/10/25 19:03	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/10/25 19:03	1
Styrene	<0.370		1.00	0.370	ug/L			06/10/25 19:03	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/10/25 19:03	1
Toluene	<0.430		1.00	0.430	ug/L			06/10/25 19:03	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/10/25 19:03	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/10/25 19:03	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/10/25 19:03	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/10/25 19:03	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/10/25 19:03	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/10/25 19:03	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/10/25 19:03	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/10/25 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*104*		*76 - 130*		*06/10/25 19:03*	*1*

Client: AECOM
Job ID: 310-308053-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: Equipment Blank #1 Shallow
Lab Sample ID: 310-308053-6

Date Collected: 06/05/25 11:30
Matrix: Ground Water
Date Received: 06/06/25 08:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*107*		*80 - 120*		*06/10/25 19:03*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*06/10/25 19:03*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/10/25 09:00	06/18/25 13:23	1
Arsenic	<0.530		2.00	0.530	ug/L		06/10/25 09:00	06/18/25 13:23	1
Barium	**45.1**		2.00	0.660	ug/L		06/10/25 09:00	06/18/25 13:23	1
Beryllium	<0.330		1.00	0.330	ug/L		06/10/25 09:00	06/18/25 13:23	1
Cadmium	<0.100		0.200	0.100	ug/L		06/10/25 09:00	06/18/25 13:23	1
Chromium	<1.80		5.00	1.80	ug/L		06/10/25 09:00	06/18/25 13:23	1
Cobalt	<0.170		0.500	0.170	ug/L		06/10/25 09:00	06/18/25 13:23	1
Copper	<3.20		5.00	3.20	ug/L		06/10/25 09:00	06/18/25 13:23	1
Lead	<0.330		0.500	0.330	ug/L		06/10/25 09:00	06/18/25 13:23	1
Nickel	<2.30		5.00	2.30	ug/L		06/10/25 09:00	06/18/25 13:23	1
Selenium	<1.40		5.00	1.40	ug/L		06/10/25 09:00	06/18/25 13:23	1
Silver	<0.500		1.00	0.500	ug/L		06/10/25 09:00	06/18/25 13:23	1
Thallium	<0.570		1.00	0.570	ug/L		06/10/25 09:00	06/18/25 13:23	1
Vanadium	<1.70		5.00	1.70	ug/L		06/10/25 09:00	06/18/25 13:23	1
Zinc	<13.0		20.0	13.0	ug/L		06/10/25 09:00	06/18/25 13:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<3.50		5.00	3.50	mg/L			06/06/25 17:11	1

Client Sample ID: Trip Blank
Lab Sample ID: 310-308053-7
Date Collected: 06/05/25 08:00
Matrix: Water
Date Received: 06/06/25 08:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/10/25 13:20	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/10/25 13:20	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/10/25 13:20	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/10/25 13:20	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/10/25 13:20	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/10/25 13:20	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/10/25 13:20	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/10/25 13:20	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/10/25 13:20	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/10/25 13:20	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/10/25 13:20	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/10/25 13:20	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/10/25 13:20	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/10/25 13:20	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/10/25 13:20	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/10/25 13:20	1
Acetone	<3.10		10.0	3.10	ug/L			06/10/25 13:20	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/10/25 13:20	1
Benzene	<0.220		0.500	0.220	ug/L			06/10/25 13:20	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/10/25 13:20	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/10/25 13:20	1
Bromoform	<0.780		5.00	0.780	ug/L			06/10/25 13:20	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/10/25 13:20	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/10/25 13:20	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/10/25 13:20	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/10/25 13:20	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/10/25 13:20	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/10/25 13:20	1
Chloroform	<1.30		3.00	1.30	ug/L			06/10/25 13:20	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/10/25 13:20	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/10/25 13:20	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/10/25 13:20	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/10/25 13:20	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/10/25 13:20	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/10/25 13:20	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/10/25 13:20	1
Styrene	<0.370		1.00	0.370	ug/L			06/10/25 13:20	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/10/25 13:20	1
Toluene	<0.430		1.00	0.430	ug/L			06/10/25 13:20	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/10/25 13:20	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/10/25 13:20	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/10/25 13:20	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/10/25 13:20	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/10/25 13:20	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/10/25 13:20	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/10/25 13:20	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/10/25 13:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*76 - 130*		*06/10/25 13:20*	*1*

Client: AECOM
Job ID: 310-308053-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: Trip Blank
Lab Sample ID: 310-308053-7
Date Collected: 06/05/25 08:00
Matrix: Water
Date Received: 06/06/25 08:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	105		80 - 120		06/10/25 13:20	1
4-Bromofluorobenzene (Surr)	102		80 - 120		06/10/25 13:20	1

Client: AECOM
Project/Site: Winneshiek Groundwater Monitoring

Job ID: 310-308053-1

Client Sample ID: Trip Blank
Date Collected: 06/05/25 00:00
Date Received: 06/06/25 08:20

Lab Sample ID: 310-308053-8
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/10/25 13:43	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/10/25 13:43	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/10/25 13:43	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/10/25 13:43	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/10/25 13:43	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/10/25 13:43	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/10/25 13:43	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/10/25 13:43	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/10/25 13:43	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/10/25 13:43	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/10/25 13:43	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/10/25 13:43	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/10/25 13:43	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/10/25 13:43	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/10/25 13:43	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/10/25 13:43	1
Acetone	<3.10		10.0	3.10	ug/L			06/10/25 13:43	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/10/25 13:43	1
Benzene	<0.220		0.500	0.220	ug/L			06/10/25 13:43	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/10/25 13:43	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/10/25 13:43	1
Bromoform	<0.780		5.00	0.780	ug/L			06/10/25 13:43	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/10/25 13:43	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/10/25 13:43	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/10/25 13:43	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/10/25 13:43	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/10/25 13:43	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/10/25 13:43	1
Chloroform	<1.30		3.00	1.30	ug/L			06/10/25 13:43	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/10/25 13:43	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/10/25 13:43	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/10/25 13:43	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/10/25 13:43	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/10/25 13:43	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/10/25 13:43	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/10/25 13:43	1
Styrene	<0.370		1.00	0.370	ug/L			06/10/25 13:43	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/10/25 13:43	1
Toluene	<0.430		1.00	0.430	ug/L			06/10/25 13:43	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/10/25 13:43	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/10/25 13:43	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/10/25 13:43	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/10/25 13:43	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/10/25 13:43	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/10/25 13:43	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/10/25 13:43	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/10/25 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*108*		*76 - 130*		*06/10/25 13:43*	*1*

Client: AECOM
Job ID: 310-308053-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: Trip Blank
Lab Sample ID: 310-308053-8
Date Collected: 06/05/25 00:00
Matrix: Water
Date Received: 06/06/25 08:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*106*		*80 - 120*		*06/10/25 13:43*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*06/10/25 13:43*	*1*

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: AECOM
Job ID: 310-308053-1
Project/Site: Winneshiek Groundwater Monitoring

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Ground Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(76-130)	(80-120)	(80-120)
310-308053-1	MW-31A	108	107	101
310-308053-1	MW-31A	108	104	102
310-308053-1 MS	MW-31A	101	107	101
310-308053-1 MSD	MW-31A	100	109	102
310-308053-2	MW-25A	107	107	101
310-308053-3	MW-42A	109	92	104
310-308053-4	MW-43A	112	91	103
310-308053-4 MS	MW-43A	100	102	100
310-308053-4 MSD	MW-43A	98	100	101
310-308053-5	MW-44A	110	91	106
310-308053-6	Equipment Blank #1 Shallow	104	107	102

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(76-130)	(80-120)	(80-120)
310-308053-7	Trip Blank	106	105	102
310-308053-8	Trip Blank	108	106	102
LCS 310-456984/6	Lab Control Sample	101	101	101
LCS 310-456984/7	Lab Control Sample	114	92	101
LCS 310-457004/6	Lab Control Sample	99	107	102
LCS 310-457004/7	Lab Control Sample	105	107	103
LCS 310-457261/6	Lab Control Sample	99	109	101
LCS 310-457261/7	Lab Control Sample	105	106	102
MB 310-456984/5	Method Blank	111	92	104
MB 310-457004/5	Method Blank	105	106	102
MB 310-457261/5	Method Blank	106	107	102

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Matrix: Ground Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(33-126)	(21-110)	(39-140)	(21-110)	(13-150)	(20-144)
310-308053-3	MW-42A	69	63	80	59	90	73
310-308053-4	MW-43A	76	56	81	51	96	70
310-308053-5	MW-44A	69	61	83	56	98	69

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)

Surrogate Summary

Client: AECOM
Job ID: 310-308053-1
Project/Site: Winneshiek Groundwater Monitoring

2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(33-126)	(21-110)	(39-140)	(21-110)	(13-150)	(20-144)
LCS 310-457250/2-A	Lab Control Sample	80	65	88	57	103	89
LCSD 310-457250/3-A	Lab Control Sample Dup	74	62	84	56	97	86
MB 310-457250/1-A	Method Blank	75	62	86	56	92	80

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Ground Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB2	TCX2
Lab Sample ID	Client Sample ID	(10-150)	(17-150)
310-308053-1	MW-31A	93	84
310-308053-3	MW-42A	77	60
310-308053-4	MW-43A	78	87
310-308053-5	MW-44A	84	76

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Ground Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB2	TCX2
Lab Sample ID	Client Sample ID	(10-150)	(17-150)
310-308053-3	MW-42A	77	60
310-308053-3 MS	MW-42A	111	78
310-308053-3 MSD	MW-42A	47	65
310-308053-4	MW-43A	78	87
310-308053-5	MW-44A	84	76

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene

Surrogate Summary

Client: AECOM
Job ID: 310-308053-1
Project/Site: Winneshiek Groundwater Monitoring

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		DCB2	TCX2								
Lab Sample ID	Client Sample ID	(10-150)	(17-150)								
LCS 310-457253/28-A	Lab Control Sample	101	76								
MB 310-457253/1-A	Method Blank	63	87								

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene

Method: 8151A - Herbicides (GC)

Matrix: Ground Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		DCPAA1	DCPAA2								
Lab Sample ID	Client Sample ID	(34-142)	(34-142)								
310-308053-3	MW-42A	80	84								
310-308053-4	MW-43A	62	75								
310-308053-5	MW-44A	73	92								

Surrogate Legend

DCPAA = DCAA

Method: 8151A - Herbicides (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		DCPAA1	DCPAA2								
Lab Sample ID	Client Sample ID	(34-142)	(34-142)								
LCS 410-656849/2-A	Lab Control Sample	93	78								
LCS 410-656849/2-A - DL	Lab Control Sample	104	104								
LCSD 410-656849/3-A - DL	Lab Control Sample Dup	94	87								
LCSD 410-656849/3-A	Lab Control Sample Dup	66	57								
MB 410-656849/1-A	Method Blank	73	61								

Surrogate Legend

DCPAA = DCAA

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 310-456984/5
Matrix: Water
Analysis Batch: 456984

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	<3.60		10.0	3.60	ug/L			06/10/25 08:52	1
Allyl chloride	<0.700		2.00	0.700	ug/L			06/10/25 08:52	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/10/25 08:52	1
Acetone	<3.10		10.0	3.10	ug/L			06/10/25 08:52	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/10/25 08:52	1
Benzene	<0.220		0.500	0.220	ug/L			06/10/25 08:52	1
Chloroprene	<0.230		1.00	0.230	ug/L			06/10/25 08:52	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/10/25 08:52	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/10/25 08:52	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/10/25 08:52	1
Bromoform	<0.780		5.00	0.780	ug/L			06/10/25 08:52	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/10/25 08:52	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/10/25 08:52	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/10/25 08:52	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/10/25 08:52	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/10/25 08:52	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/10/25 08:52	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			06/10/25 08:52	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/10/25 08:52	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/10/25 08:52	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/10/25 08:52	1
Chloroform	<1.30		3.00	1.30	ug/L			06/10/25 08:52	1
Dichlorodifluoromethane	<0.250		3.00	0.250	ug/L			06/10/25 08:52	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/10/25 08:52	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/10/25 08:52	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/10/25 08:52	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/10/25 08:52	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/10/25 08:52	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/10/25 08:52	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/10/25 08:52	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/10/25 08:52	1
1,3-Dichloropropane	<0.400		1.00	0.400	ug/L			06/10/25 08:52	1
2,2-Dichloropropane	<0.690		4.00	0.690	ug/L			06/10/25 08:52	1
1,1-Dichloropropene	<0.430		1.00	0.430	ug/L			06/10/25 08:52	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/10/25 08:52	1
Ethyl methacrylate	<0.680		2.00	0.680	ug/L			06/10/25 08:52	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/10/25 08:52	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/10/25 08:52	1
Methacrylonitrile	<3.30		10.0	3.30	ug/L			06/10/25 08:52	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/10/25 08:52	1
Methyl methacrylate	<0.760		2.00	0.760	ug/L			06/10/25 08:52	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/10/25 08:52	1
m,p-Xylene	<0.380		2.00	0.380	ug/L			06/10/25 08:52	1
Naphthalene	<3.00		5.00	3.00	ug/L			06/10/25 08:52	1
o-Xylene	<0.400		1.00	0.400	ug/L			06/10/25 08:52	1
Propionitrile	<3.40		10.0	3.40	ug/L			06/10/25 08:52	1
Styrene	<0.370		1.00	0.370	ug/L			06/10/25 08:52	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/10/25 08:52	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-456984/5
Matrix: Water
Analysis Batch: 456984

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/10/25 08:52	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/10/25 08:52	1
Toluene	<0.430		1.00	0.430	ug/L			06/10/25 08:52	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/10/25 08:52	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/10/25 08:52	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/10/25 08:52	1
1,2,4-Trichlorobenzene	<0.750		5.00	0.750	ug/L			06/10/25 08:52	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/10/25 08:52	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/10/25 08:52	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/10/25 08:52	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/10/25 08:52	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/10/25 08:52	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/10/25 08:52	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/10/25 08:52	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/10/25 08:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*111*		*76 - 130*		*06/10/25 08:52*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*06/10/25 08:52*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*06/10/25 08:52*	*1*

Lab Sample ID: LCS 310-456984/6
Matrix: Water
Analysis Batch: 456984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acrolein	94.8	94.59		ug/L		100	50 - 150
Allyl chloride	20.0	18.44		ug/L		92	61 - 136
2-Butanone (MEK)	40.0	37.94		ug/L		95	60 - 134
Acetone	40.0	43.85		ug/L		110	59 - 136
Acrylonitrile	200	209.5		ug/L		105	50 - 150
Benzene	20.0	20.53		ug/L		103	71 - 125
Chloroprene	20.0	22.21		ug/L		111	67 - 136
Bromochloromethane	20.0	21.89		ug/L		109	69 - 131
Bromodichloromethane	20.0	19.30		ug/L		97	70 - 122
1,2-Dibromo-3-Chloropropane	20.0	18.19		ug/L		91	62 - 132
Bromoform	20.0	17.39		ug/L		87	62 - 122
1,2-Dibromoethane (EDB)	20.0	20.13		ug/L		101	74 - 122
Carbon disulfide	20.0	20.90		ug/L		104	58 - 137
Carbon tetrachloride	20.0	21.13		ug/L		106	63 - 136
1,2-Dichlorobenzene	20.0	19.61		ug/L		98	74 - 120
Chlorobenzene	20.0	19.74		ug/L		99	74 - 120
1,3-Dichlorobenzene	20.0	19.42		ug/L		97	71 - 120
Chlorodibromomethane	20.0	16.97		ug/L		85	69 - 121
1,4-Dichlorobenzene	20.0	18.64		ug/L		93	72 - 120
Chloroform	20.0	18.98		ug/L		95	72 - 122
1,1-Dichloroethane	20.0	20.07		ug/L		100	69 - 127
1,2-Dichloroethane	20.0	18.86		ug/L		94	68 - 125

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-456984/6
Matrix: Water
Analysis Batch: 456984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
cis-1,2-Dichloroethene	20.0	20.43		ug/L		102	72 - 123
1,1-Dichloroethene	20.0	21.65		ug/L		108	64 - 134
cis-1,3-Dichloropropene	20.0	16.69		ug/L		83	72 - 123
1,2-Dichloropropane	20.0	21.23		ug/L		106	72 - 128
Dibromomethane	20.0	19.79		ug/L		99	72 - 122
1,3-Dichloropropane	20.0	20.57		ug/L		103	72 - 125
2,2-Dichloropropane	20.0	17.40		ug/L		87	51 - 146
1,1-Dichloropropene	20.0	21.63		ug/L		108	70 - 133
Ethylbenzene	20.0	20.22		ug/L		101	75 - 120
Ethyl methacrylate	20.0	19.34		ug/L		97	68 - 128
2-Hexanone	40.0	38.62		ug/L		97	62 - 139
Iodomethane	20.0	17.38		ug/L		87	18 - 150
Methacrylonitrile	200	207.8		ug/L		104	67 - 128
Methylene Chloride	20.0	22.98		ug/L		115	72 - 128
Methyl methacrylate	40.0	40.77		ug/L		102	69 - 129
4-Methyl-2-pentanone (MIBK)	40.0	38.51		ug/L		96	62 - 136
Naphthalene	20.0	20.11		ug/L		101	69 - 126
Propionitrile	200	216.6		ug/L		108	68 - 131
Styrene	20.0	20.81		ug/L		104	74 - 122
1,1,1,2-Tetrachloroethane	20.0	18.84		ug/L		94	70 - 121
1,1,2,2-Tetrachloroethane	20.0	19.04		ug/L		95	70 - 122
Tetrachloroethene	20.0	20.85		ug/L		104	70 - 128
Toluene	20.0	20.43		ug/L		102	74 - 120
trans-1,4-Dichloro-2-butene	20.0	17.26		ug/L		86	50 - 150
trans-1,2-Dichloroethene	20.0	21.02		ug/L		105	67 - 127
trans-1,3-Dichloropropene	20.0	15.74		ug/L		79	67 - 123
1,2,4-Trichlorobenzene	20.0	20.09		ug/L		100	69 - 125
1,1,1-Trichloroethane	20.0	20.83		ug/L		104	69 - 130
1,1,2-Trichloroethane	20.0	19.70		ug/L		99	75 - 121
Trichloroethene	20.0	20.35		ug/L		102	70 - 128
1,2,3-Trichloropropane	20.0	19.15		ug/L		96	70 - 122
Vinyl acetate	40.0	33.54		ug/L		84	50 - 150
Xylenes, Total	40.0	40.84		ug/L		102	74 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*101*		*76 - 130*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: LCS 310-456984/7
Matrix: Water
Analysis Batch: 456984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	16.64		ug/L		83	33 - 138
Chloroethane	20.0	17.02		ug/L		85	59 - 139
Dichlorodifluoromethane	20.0	16.45		ug/L		82	45 - 150
Chloromethane	20.0	17.91		ug/L		90	52 - 146

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-456984/7
Matrix: Water
Analysis Batch: 456984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Trichlorofluoromethane			20.0	16.90		ug/L		84	55 - 150		
Vinyl chloride			20.0	17.52		ug/L		88	60 - 142		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*114*		*76 - 130*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Toluene-d8 (Surr)	*92*		*80 - 120*

Lab Sample ID: 310-308053-4 MS
Matrix: Ground Water
Analysis Batch: 456984

Client Sample ID: MW-43A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Acrolein	<3.60		119	100.8		ug/L		85	39 - 150		
Allyl chloride	<0.700		25.0	19.16		ug/L		77	47 - 136		
2-Butanone (MEK)	<2.10		50.0	48.94		ug/L		98	46 - 134		
Acetone	<3.10		50.0	49.98		ug/L		100	39 - 141		
Acrylonitrile	<2.20		250	233.8		ug/L		94	41 - 150		
Benzene	<0.220		25.0	23.42		ug/L		94	48 - 125		
Chloroprene	<0.230		25.0	24.06		ug/L		96	48 - 136		
Bromochloromethane	<0.540		25.0	24.34		ug/L		97	55 - 131		
Bromodichloromethane	<0.390		25.0	22.14		ug/L		89	53 - 122		
1,2-Dibromo-3-Chloropropane	<1.20		25.0	22.46		ug/L		90	44 - 138		
Bromoform	<0.780		25.0	21.12		ug/L		84	47 - 122		
1,2-Dibromoethane (EDB)	<0.340		25.0	24.36		ug/L		97	60 - 122		
Carbon disulfide	<0.450		25.0	24.21		ug/L		97	45 - 137		
Carbon tetrachloride	<0.650		25.0	22.02		ug/L		88	45 - 136		
1,2-Dichlorobenzene	<0.370		25.0	23.61		ug/L		94	60 - 120		
Chlorobenzene	<0.400		25.0	22.90		ug/L		92	59 - 120		
1,3-Dichlorobenzene	<0.300		25.0	23.62		ug/L		94	58 - 120		
Chlorodibromomethane	<0.750		25.0	20.47		ug/L		82	53 - 121		
1,4-Dichlorobenzene	<0.230		25.0	22.94		ug/L		92	58 - 120		
Chloroform	<1.30		25.0	21.59		ug/L		86	52 - 122		
1,1-Dichloroethane	<0.220		25.0	22.00		ug/L		88	53 - 127		
1,2-Dichloroethane	<0.390		25.0	21.80		ug/L		87	48 - 128		
cis-1,2-Dichloroethene	<0.210		25.0	23.34		ug/L		93	51 - 123		
1,1-Dichloroethene	<0.560		25.0	22.66		ug/L		91	51 - 134		
cis-1,3-Dichloropropene	<0.250		25.0	18.93		ug/L		76	55 - 123		
1,2-Dichloropropane	<0.270		25.0	24.53		ug/L		98	59 - 128		
Dibromomethane	<0.330		25.0	22.37		ug/L		89	57 - 122		
1,3-Dichloropropane	<0.400		25.0	24.92		ug/L		100	58 - 125		
2,2-Dichloropropane	<0.690		25.0	16.92		ug/L		68	34 - 146		
1,1-Dichloropropene	<0.430		25.0	23.51		ug/L		94	55 - 133		
Ethylbenzene	<0.310		25.0	23.07		ug/L		92	53 - 120		
Ethyl methacrylate	<0.680		25.0	23.26		ug/L		93	53 - 129		
2-Hexanone	<2.00		50.0	48.94		ug/L		98	46 - 141		
Iodomethane	<7.00		25.0	21.63		ug/L		87	18 - 150		
Methacrylonitrile	<3.30		250	243.5		ug/L		97	53 - 128		

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 310-308053-4 MS
Matrix: Ground Water
Analysis Batch: 456984

Client Sample ID: MW-43A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	<1.70		25.0	25.49		ug/L		102	59 - 128
Methyl methacrylate	<0.760		50.0	48.34		ug/L		97	48 - 137
4-Methyl-2-pentanone (MIBK)	<2.10		50.0	47.39		ug/L		95	49 - 138
Naphthalene	<3.00		25.0	25.58		ug/L		102	45 - 144
Propionitrile	<3.40		250	242.2		ug/L		97	56 - 131
Styrene	<0.370		25.0	24.27		ug/L		97	50 - 125
1,1,1,2-Tetrachloroethane	<0.380		25.0	23.53		ug/L		94	55 - 121
1,1,2,2-Tetrachloroethane	<0.470		25.0	24.75		ug/L		99	55 - 123
Tetrachloroethene	<0.480		25.0	23.66		ug/L		95	51 - 128
Toluene	<0.430		25.0	23.12		ug/L		92	52 - 120
trans-1,4-Dichloro-2-butene	<1.10		25.0	21.72		ug/L		87	28 - 150
trans-1,2-Dichloroethene	<0.270		25.0	23.70		ug/L		95	53 - 127
trans-1,3-Dichloropropene	<0.560		25.0	18.02		ug/L		72	50 - 123
1,2,4-Trichlorobenzene	<0.750		25.0	24.85		ug/L		99	55 - 126
1,1,1-Trichloroethane	<0.190		25.0	22.44		ug/L		90	53 - 130
1,1,2-Trichloroethane	<0.450		25.0	25.30		ug/L		101	60 - 121
Trichloroethene	<0.430		25.0	23.36		ug/L		93	50 - 128
1,2,3-Trichloropropane	<0.590		25.0	23.97		ug/L		96	56 - 122
Vinyl acetate	<2.50		50.0	37.00		ug/L		74	31 - 150
Xylenes, Total	<0.400		50.0	47.04		ug/L		94	50 - 122

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*100*		*76 - 130*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*102*		*80 - 120*

Lab Sample ID: 310-308053-4 MSD
Matrix: Ground Water
Analysis Batch: 456984

Client Sample ID: MW-43A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acrolein	<3.60		119	99.06		ug/L		84	39 - 150	2	33
Allyl chloride	<0.700		25.0	19.44		ug/L		78	47 - 136	1	33
2-Butanone (MEK)	<2.10		50.0	43.76		ug/L		88	46 - 134	11	23
Acetone	<3.10		50.0	48.48		ug/L		97	39 - 141	3	23
Acrylonitrile	<2.20		250	233.5		ug/L		93	41 - 150	0	20
Benzene	<0.220		25.0	22.78		ug/L		91	48 - 125	3	20
Chloroprene	<0.230		25.0	22.94		ug/L		92	48 - 136	5	20
Bromochloromethane	<0.540		25.0	23.06		ug/L		92	55 - 131	5	21
Bromodichloromethane	<0.390		25.0	21.68		ug/L		87	53 - 122	2	20
1,2-Dibromo-3-Chloropropane	<1.20		25.0	23.02		ug/L		92	44 - 138	2	24
Bromoform	<0.780		25.0	21.24		ug/L		85	47 - 122	1	20
1,2-Dibromoethane (EDB)	<0.340		25.0	23.45		ug/L		94	60 - 122	4	20
Carbon disulfide	<0.450		25.0	21.42		ug/L		86	45 - 137	12	24
Carbon tetrachloride	<0.650		25.0	21.57		ug/L		86	45 - 136	2	20
1,2-Dichlorobenzene	<0.370		25.0	23.46		ug/L		94	60 - 120	1	20
Chlorobenzene	<0.400		25.0	21.59		ug/L		86	59 - 120	6	20
1,3-Dichlorobenzene	<0.300		25.0	23.10		ug/L		92	58 - 120	2	20

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 310-308053-4 MSD
Matrix: Ground Water
Analysis Batch: 456984

Client Sample ID: MW-43A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chlorodibromomethane	<0.750		25.0	19.42		ug/L		78	53 - 121	5	20
1,4-Dichlorobenzene	<0.230		25.0	22.39		ug/L		90	58 - 120	2	20
Chloroform	<1.30		25.0	20.44		ug/L		82	52 - 122	5	20
1,1-Dichloroethane	<0.220		25.0	21.57		ug/L		86	53 - 127	2	20
1,2-Dichloroethane	<0.390		25.0	20.78		ug/L		83	48 - 128	5	20
cis-1,2-Dichloroethene	<0.210		25.0	22.40		ug/L		90	51 - 123	4	20
1,1-Dichloroethene	<0.560		25.0	21.21		ug/L		85	51 - 134	7	20
cis-1,3-Dichloropropene	<0.250		25.0	18.55		ug/L		74	55 - 123	2	20
1,2-Dichloropropane	<0.270		25.0	23.38		ug/L		94	59 - 128	5	20
Dibromomethane	<0.330		25.0	21.72		ug/L		87	57 - 122	3	20
1,3-Dichloropropane	<0.400		25.0	23.23		ug/L		93	58 - 125	7	20
2,2-Dichloropropane	<0.690		25.0	16.80		ug/L		67	34 - 146	1	20
1,1-Dichloropropene	<0.430		25.0	23.11		ug/L		92	55 - 133	2	20
Ethylbenzene	<0.310		25.0	21.90		ug/L		88	53 - 120	5	20
Ethyl methacrylate	<0.680		25.0	22.72		ug/L		91	53 - 129	2	20
2-Hexanone	<2.00		50.0	47.23		ug/L		94	46 - 141	4	20
Iodomethane	<7.00		25.0	24.27		ug/L		97	18 - 150	11	32
Methacrylonitrile	<3.30		250	236.2		ug/L		94	53 - 128	3	20
Methylene Chloride	<1.70		25.0	24.62		ug/L		98	59 - 128	3	20
Methyl methacrylate	<0.760		50.0	47.91		ug/L		96	48 - 137	1	20
4-Methyl-2-pentanone (MIBK)	<2.10		50.0	46.91		ug/L		94	49 - 138	1	20
Naphthalene	<3.00		25.0	26.00		ug/L		104	45 - 144	2	32
Propionitrile	<3.40		250	241.2		ug/L		96	56 - 131	0	20
Styrene	<0.370		25.0	22.92		ug/L		92	50 - 125	6	20
1,1,1,2-Tetrachloroethane	<0.380		25.0	22.25		ug/L		89	55 - 121	6	20
1,1,2,2-Tetrachloroethane	<0.470		25.0	22.87		ug/L		91	55 - 123	8	20
Tetrachloroethene	<0.480		25.0	22.79		ug/L		91	51 - 128	4	20
Toluene	<0.430		25.0	21.81		ug/L		87	52 - 120	6	20
trans-1,4-Dichloro-2-butene	<1.10		25.0	21.00		ug/L		84	28 - 150	3	24
trans-1,2-Dichloroethene	<0.270		25.0	22.60		ug/L		90	53 - 127	5	20
trans-1,3-Dichloropropene	<0.560		25.0	17.80		ug/L		71	50 - 123	1	20
1,2,4-Trichlorobenzene	<0.750		25.0	25.52		ug/L		102	55 - 126	3	20
1,1,1-Trichloroethane	<0.190		25.0	21.45		ug/L		86	53 - 130	4	20
1,1,2-Trichloroethane	<0.450		25.0	23.39		ug/L		94	60 - 121	8	20
Trichloroethene	<0.430		25.0	22.30		ug/L		89	50 - 128	5	20
1,2,3-Trichloropropane	<0.590		25.0	22.91		ug/L		92	56 - 122	4	21
Vinyl acetate	<2.50		50.0	37.25		ug/L		74	31 - 150	1	25
Xylenes, Total	<0.400		50.0	44.97		ug/L		90	50 - 122	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*98*		*76 - 130*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-457004/5
Matrix: Water
Analysis Batch: 457004

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/10/25 11:25	1
Acetone	<3.10		10.0	3.10	ug/L			06/10/25 11:25	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/10/25 11:25	1
Benzene	<0.220		0.500	0.220	ug/L			06/10/25 11:25	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/10/25 11:25	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/10/25 11:25	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/10/25 11:25	1
Bromoform	<0.780		5.00	0.780	ug/L			06/10/25 11:25	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/10/25 11:25	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/10/25 11:25	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/10/25 11:25	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/10/25 11:25	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/10/25 11:25	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/10/25 11:25	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/10/25 11:25	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/10/25 11:25	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/10/25 11:25	1
Chloroform	<1.30		3.00	1.30	ug/L			06/10/25 11:25	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/10/25 11:25	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/10/25 11:25	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/10/25 11:25	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/10/25 11:25	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/10/25 11:25	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/10/25 11:25	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/10/25 11:25	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/10/25 11:25	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/10/25 11:25	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/10/25 11:25	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/10/25 11:25	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/10/25 11:25	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/10/25 11:25	1
Styrene	<0.370		1.00	0.370	ug/L			06/10/25 11:25	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/10/25 11:25	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/10/25 11:25	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/10/25 11:25	1
Toluene	<0.430		1.00	0.430	ug/L			06/10/25 11:25	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/10/25 11:25	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/10/25 11:25	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/10/25 11:25	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/10/25 11:25	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/10/25 11:25	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/10/25 11:25	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/10/25 11:25	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/10/25 11:25	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/10/25 11:25	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/10/25 11:25	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/10/25 11:25	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-457004/5
Matrix: Water
Analysis Batch: 457004

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*105*		*76 - 130*		*06/10/25 11:25*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*06/10/25 11:25*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*06/10/25 11:25*	*1*

Lab Sample ID: LCS 310-457004/6
Matrix: Water
Analysis Batch: 457004

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Butanone (MEK)	40.0	33.07		ug/L		83	60 - 134
Acetone	40.0	35.01		ug/L		88	59 - 136
Acrylonitrile	200	185.1		ug/L		93	50 - 150
Benzene	20.0	18.38		ug/L		92	71 - 125
Bromochloromethane	20.0	20.17		ug/L		101	69 - 131
Bromodichloromethane	20.0	17.18		ug/L		86	70 - 122
1,2-Dibromo-3-Chloropropane	20.0	20.61		ug/L		103	62 - 132
Bromoform	20.0	19.72		ug/L		99	62 - 122
1,2-Dibromoethane (EDB)	20.0	20.36		ug/L		102	74 - 122
Carbon disulfide	20.0	18.85		ug/L		94	58 - 137
Carbon tetrachloride	20.0	19.10		ug/L		95	63 - 136
1,2-Dichlorobenzene	20.0	21.25		ug/L		106	74 - 120
Chlorobenzene	20.0	19.87		ug/L		99	74 - 120
Chlorodibromomethane	20.0	20.28		ug/L		101	69 - 121
1,4-Dichlorobenzene	20.0	21.12		ug/L		106	72 - 120
Chloroform	20.0	18.24		ug/L		91	72 - 122
1,1-Dichloroethane	20.0	18.66		ug/L		93	69 - 127
1,2-Dichloroethane	20.0	18.40		ug/L		92	68 - 125
cis-1,2-Dichloroethene	20.0	18.45		ug/L		92	72 - 123
1,1-Dichloroethene	20.0	20.16		ug/L		101	64 - 134
cis-1,3-Dichloropropene	20.0	19.54		ug/L		98	72 - 123
1,2-Dichloropropane	20.0	18.03		ug/L		90	72 - 128
Dibromomethane	20.0	18.27		ug/L		91	72 - 122
Ethylbenzene	20.0	20.28		ug/L		101	75 - 120
2-Hexanone	40.0	38.45		ug/L		96	62 - 139
Iodomethane	20.0	23.80		ug/L		119	18 - 150
Methylene Chloride	20.0	17.67		ug/L		88	72 - 128
4-Methyl-2-pentanone (MIBK)	40.0	39.24		ug/L		98	62 - 136
Styrene	20.0	20.55		ug/L		103	74 - 122
1,1,1,2-Tetrachloroethane	20.0	19.34		ug/L		97	70 - 121
1,1,2,2-Tetrachloroethane	20.0	20.62		ug/L		103	70 - 122
Tetrachloroethene	20.0	21.29		ug/L		106	70 - 128
Toluene	20.0	20.32		ug/L		102	74 - 120
trans-1,4-Dichloro-2-butene	20.0	17.23		ug/L		86	50 - 150
trans-1,2-Dichloroethene	20.0	19.28		ug/L		96	67 - 127
trans-1,3-Dichloropropene	20.0	16.85		ug/L		84	67 - 123
1,1,1-Trichloroethane	20.0	18.54		ug/L		93	69 - 130
1,1,2-Trichloroethane	20.0	19.51		ug/L		98	75 - 121
Trichloroethene	20.0	17.76		ug/L		89	70 - 128

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-457004/6
Matrix: Water
Analysis Batch: 457004

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	20.0	20.73		ug/L		104	70 - 122
Vinyl acetate	40.0	44.79		ug/L		112	50 - 150
Xylenes, Total	40.0	40.70		ug/L		102	74 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*99*		*76 - 130*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Toluene-d8 (Surr)	*107*		*80 - 120*

Lab Sample ID: LCS 310-457004/7
Matrix: Water
Analysis Batch: 457004

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	17.86		ug/L		89	33 - 138
Chloroethane	20.0	19.42		ug/L		97	59 - 139
Chloromethane	20.0	18.44		ug/L		92	52 - 146
Trichlorofluoromethane	20.0	18.27		ug/L		91	55 - 150
Vinyl chloride	20.0	18.53		ug/L		93	60 - 142

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*105*		*76 - 130*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*
Toluene-d8 (Surr)	*107*		*80 - 120*

Lab Sample ID: 310-308053-1 MS
Matrix: Ground Water
Analysis Batch: 457004

Client Sample ID: MW-31A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2-Butanone (MEK)	<2.10		40.0	31.49		ug/L		79	46 - 134
Acetone	<3.10		40.0	36.16		ug/L		90	39 - 141
Acrylonitrile	<2.20		200	178.6		ug/L		89	41 - 150
Benzene	0.298	J	20.0	17.11		ug/L		84	48 - 125
Bromochloromethane	<0.540		20.0	18.90		ug/L		95	55 - 131
Bromodichloromethane	<0.390		20.0	15.51		ug/L		78	53 - 122
1,2-Dibromo-3-Chloropropane	<1.20		20.0	19.22		ug/L		96	44 - 138
Bromoform	<0.780		20.0	17.97		ug/L		90	47 - 122
1,2-Dibromoethane (EDB)	<0.340		20.0	18.62		ug/L		93	60 - 122
Carbon disulfide	<0.450		20.0	17.22		ug/L		86	45 - 137
Carbon tetrachloride	<0.650		20.0	15.80		ug/L		79	45 - 136
1,2-Dichlorobenzene	<0.370		20.0	19.46		ug/L		97	60 - 120
Chlorobenzene	<0.400		20.0	18.28		ug/L		91	59 - 120
Chlorodibromomethane	<0.750		20.0	17.93		ug/L		90	53 - 121
1,4-Dichlorobenzene	<0.230		20.0	19.11		ug/L		96	58 - 120
Chloroform	<1.30		20.0	17.01		ug/L		85	52 - 122
1,1-Dichloroethane	<0.220		20.0	17.92		ug/L		90	53 - 127
1,2-Dichloroethane	<0.390		20.0	17.40		ug/L		87	48 - 128

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 310-308053-1 MS
Matrix: Ground Water
Analysis Batch: 457004

Client Sample ID: MW-31A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
cis-1,2-Dichloroethene	<0.210		20.0	17.24		ug/L		86	51 - 123
1,1-Dichloroethene	<0.560		20.0	17.72		ug/L		89	51 - 134
cis-1,3-Dichloropropene	<0.250		20.0	17.38		ug/L		87	55 - 123
1,2-Dichloropropane	<0.270		20.0	16.79		ug/L		84	59 - 128
Dibromomethane	<0.330		20.0	17.38		ug/L		87	57 - 122
Ethylbenzene	0.466	J	20.0	18.14		ug/L		88	53 - 120
2-Hexanone	<2.00		40.0	36.93		ug/L		92	46 - 141
Iodomethane	<7.00		20.0	20.73		ug/L		104	18 - 150
Methylene Chloride	<1.70		20.0	16.90		ug/L		85	59 - 128
4-Methyl-2-pentanone (MIBK)	<2.10		40.0	38.09		ug/L		95	49 - 138
Styrene	<0.370		20.0	18.96		ug/L		95	50 - 125
1,1,1,2-Tetrachloroethane	<0.380		20.0	17.38		ug/L		87	55 - 121
1,1,2,2-Tetrachloroethane	<0.470		20.0	19.49		ug/L		97	55 - 123
Tetrachloroethene	<0.480		20.0	18.05		ug/L		90	51 - 128
Toluene	<0.430		20.0	18.52		ug/L		93	52 - 120
trans-1,4-Dichloro-2-butene	<1.10		20.0	15.89		ug/L		79	28 - 150
trans-1,2-Dichloroethene	<0.270		20.0	17.82		ug/L		89	53 - 127
trans-1,3-Dichloropropene	<0.560		20.0	14.97		ug/L		75	50 - 123
1,1,1-Trichloroethane	<0.190		20.0	16.20		ug/L		81	53 - 130
1,1,2-Trichloroethane	<0.450		20.0	17.92		ug/L		90	60 - 121
Trichloroethene	<0.430		20.0	15.77		ug/L		79	50 - 128
1,2,3-Trichloropropane	<0.590		20.0	19.42		ug/L		97	56 - 122
Vinyl acetate	<2.50		40.0	38.10		ug/L		95	31 - 150
Xylenes, Total	2.03	J	40.0	36.70		ug/L		87	50 - 122

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*101*		*76 - 130*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Toluene-d8 (Surr)	*107*		*80 - 120*

Lab Sample ID: 310-308053-1 MSD
Matrix: Ground Water
Analysis Batch: 457004

Client Sample ID: MW-31A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Butanone (MEK)	<2.10		40.0	30.61		ug/L		77	46 - 134	3	23
Acetone	<3.10		40.0	36.02		ug/L		90	39 - 141	0	23
Acrylonitrile	<2.20		200	177.5		ug/L		89	41 - 150	1	20
Benzene	0.298	J	20.0	16.69		ug/L		82	48 - 125	3	20
Bromochloromethane	<0.540		20.0	18.87		ug/L		94	55 - 131	0	21
Bromodichloromethane	<0.390		20.0	15.54		ug/L		78	53 - 122	0	20
1,2-Dibromo-3-Chloropropane	<1.20		20.0	19.71		ug/L		99	44 - 138	3	24
Bromoform	<0.780		20.0	17.83		ug/L		89	47 - 122	1	20
1,2-Dibromoethane (EDB)	<0.340		20.0	18.69		ug/L		93	60 - 122	0	20
Carbon disulfide	<0.450		20.0	15.90		ug/L		79	45 - 137	8	24
Carbon tetrachloride	<0.650		20.0	15.58		ug/L		78	45 - 136	1	20
1,2-Dichlorobenzene	<0.370		20.0	20.08		ug/L		100	60 - 120	3	20
Chlorobenzene	<0.400		20.0	18.11		ug/L		91	59 - 120	1	20

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 310-308053-1 MSD
Matrix: Ground Water
Analysis Batch: 457004

Client Sample ID: MW-31A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chlorodibromomethane	<0.750		20.0	18.57		ug/L		93	53 - 121	4	20
1,4-Dichlorobenzene	<0.230		20.0	19.29		ug/L		96	58 - 120	1	20
Chloroform	<1.30		20.0	16.54		ug/L		83	52 - 122	3	20
1,1-Dichloroethane	<0.220		20.0	17.55		ug/L		88	53 - 127	2	20
1,2-Dichloroethane	<0.390		20.0	17.28		ug/L		86	48 - 128	1	20
cis-1,2-Dichloroethene	<0.210		20.0	16.85		ug/L		84	51 - 123	2	20
1,1-Dichloroethene	<0.560		20.0	16.99		ug/L		85	51 - 134	4	20
cis-1,3-Dichloropropene	<0.250		20.0	17.22		ug/L		86	55 - 123	1	20
1,2-Dichloropropane	<0.270		20.0	16.48		ug/L		82	59 - 128	2	20
Dibromomethane	<0.330		20.0	16.98		ug/L		85	57 - 122	2	20
Ethylbenzene	0.466	J	20.0	17.84		ug/L		87	53 - 120	2	20
2-Hexanone	<2.00		40.0	37.66		ug/L		94	46 - 141	2	20
Iodomethane	<7.00		20.0	21.81		ug/L		109	18 - 150	5	32
Methylene Chloride	<1.70		20.0	16.68		ug/L		83	59 - 128	1	20
4-Methyl-2-pentanone (MIBK)	<2.10		40.0	38.21		ug/L		96	49 - 138	0	20
Styrene	<0.370		20.0	18.86		ug/L		94	50 - 125	1	20
1,1,1,2-Tetrachloroethane	<0.380		20.0	17.50		ug/L		87	55 - 121	1	20
1,1,2,2-Tetrachloroethane	<0.470		20.0	19.45		ug/L		97	55 - 123	0	20
Tetrachloroethene	<0.480		20.0	17.64		ug/L		88	51 - 128	2	20
Toluene	<0.430		20.0	18.46		ug/L		92	52 - 120	0	20
trans-1,4-Dichloro-2-butene	<1.10		20.0	16.19		ug/L		81	28 - 150	2	24
trans-1,2-Dichloroethene	<0.270		20.0	17.32		ug/L		87	53 - 127	3	20
trans-1,3-Dichloropropene	<0.560		20.0	14.90		ug/L		75	50 - 123	0	20
1,1,1-Trichloroethane	<0.190		20.0	15.91		ug/L		80	53 - 130	2	20
1,1,2-Trichloroethane	<0.450		20.0	17.92		ug/L		90	60 - 121	0	20
Trichloroethene	<0.430		20.0	15.21		ug/L		76	50 - 128	4	20
1,2,3-Trichloropropane	<0.590		20.0	18.83		ug/L		94	56 - 122	3	21
Vinyl acetate	<2.50		40.0	39.18		ug/L		98	31 - 150	3	25
Xylenes, Total	2.03	J	40.0	36.41		ug/L		86	50 - 122	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*100*		*76 - 130*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Toluene-d8 (Surr)	*109*		*80 - 120*

Lab Sample ID: MB 310-457261/5
Matrix: Water
Analysis Batch: 457261

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/11/25 13:57	1
Acetone	<3.10		10.0	3.10	ug/L			06/11/25 13:57	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/11/25 13:57	1
Benzene	<0.220		0.500	0.220	ug/L			06/11/25 13:57	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/11/25 13:57	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/11/25 13:57	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/11/25 13:57	1
Bromoform	<0.780		5.00	0.780	ug/L			06/11/25 13:57	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-457261/5
Matrix: Water
Analysis Batch: 457261

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/11/25 13:57	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/11/25 13:57	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/11/25 13:57	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/11/25 13:57	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/11/25 13:57	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/11/25 13:57	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/11/25 13:57	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/11/25 13:57	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/11/25 13:57	1
Chloroform	<1.30		3.00	1.30	ug/L			06/11/25 13:57	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/11/25 13:57	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/11/25 13:57	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/11/25 13:57	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/11/25 13:57	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/11/25 13:57	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/11/25 13:57	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/11/25 13:57	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/11/25 13:57	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/11/25 13:57	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/11/25 13:57	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/11/25 13:57	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/11/25 13:57	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/11/25 13:57	1
Styrene	<0.370		1.00	0.370	ug/L			06/11/25 13:57	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/11/25 13:57	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/11/25 13:57	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/11/25 13:57	1
Toluene	<0.430		1.00	0.430	ug/L			06/11/25 13:57	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/11/25 13:57	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/11/25 13:57	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/11/25 13:57	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/11/25 13:57	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/11/25 13:57	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/11/25 13:57	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/11/25 13:57	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/11/25 13:57	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/11/25 13:57	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/11/25 13:57	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/11/25 13:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*76 - 130*		*06/11/25 13:57*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*06/11/25 13:57*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*06/11/25 13:57*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-457261/6
Matrix: Water
Analysis Batch: 457261

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Butanone (MEK)	40.0	34.69		ug/L		87	60 - 134
Acetone	40.0	33.99		ug/L		85	59 - 136
Acrylonitrile	200	194.8		ug/L		97	50 - 150
Benzene	20.0	19.80		ug/L		99	71 - 125
Bromochloromethane	20.0	20.81		ug/L		104	69 - 131
Bromodichloromethane	20.0	17.64		ug/L		88	70 - 122
1,2-Dibromo-3-Chloropropane	20.0	20.56		ug/L		103	62 - 132
Bromoform	20.0	20.69		ug/L		103	62 - 122
1,2-Dibromoethane (EDB)	20.0	21.91		ug/L		110	74 - 122
Carbon disulfide	20.0	20.89		ug/L		104	58 - 137
Carbon tetrachloride	20.0	20.92		ug/L		105	63 - 136
1,2-Dichlorobenzene	20.0	21.76		ug/L		109	74 - 120
Chlorobenzene	20.0	20.71		ug/L		104	74 - 120
Chlorodibromomethane	20.0	21.03		ug/L		105	69 - 121
1,4-Dichlorobenzene	20.0	21.74		ug/L		109	72 - 120
Chloroform	20.0	18.87		ug/L		94	72 - 122
1,1-Dichloroethane	20.0	19.93		ug/L		100	69 - 127
1,2-Dichloroethane	20.0	19.33		ug/L		97	68 - 125
cis-1,2-Dichloroethene	20.0	19.46		ug/L		97	72 - 123
1,1-Dichloroethene	20.0	21.95		ug/L		110	64 - 134
cis-1,3-Dichloropropene	20.0	21.61		ug/L		108	72 - 123
1,2-Dichloropropane	20.0	18.79		ug/L		94	72 - 128
Dibromomethane	20.0	19.11		ug/L		96	72 - 122
Ethylbenzene	20.0	21.13		ug/L		106	75 - 120
2-Hexanone	40.0	39.48		ug/L		99	62 - 139
Iodomethane	20.0	24.80		ug/L		124	18 - 150
Methylene Chloride	20.0	18.48		ug/L		92	72 - 128
4-Methyl-2-pentanone (MIBK)	40.0	41.18		ug/L		103	62 - 136
Styrene	20.0	21.40		ug/L		107	74 - 122
1,1,1,2-Tetrachloroethane	20.0	20.55		ug/L		103	70 - 121
1,1,2,2-Tetrachloroethane	20.0	21.30		ug/L		106	70 - 122
Tetrachloroethene	20.0	23.26		ug/L		116	70 - 128
Toluene	20.0	21.89		ug/L		109	74 - 120
trans-1,4-Dichloro-2-butene	20.0	20.78		ug/L		104	50 - 150
trans-1,2-Dichloroethene	20.0	20.88		ug/L		104	67 - 127
trans-1,3-Dichloropropene	20.0	18.45		ug/L		92	67 - 123
1,1,1-Trichloroethane	20.0	19.99		ug/L		100	69 - 130
1,1,2-Trichloroethane	20.0	20.72		ug/L		104	75 - 121
Trichloroethene	20.0	18.81		ug/L		94	70 - 128
1,2,3-Trichloropropane	20.0	22.19		ug/L		111	70 - 122
Vinyl acetate	40.0	51.48		ug/L		129	50 - 150
Xylenes, Total	40.0	41.95		ug/L		105	74 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*99*		*76 - 130*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Toluene-d8 (Surr)	*109*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-457261/7
Matrix: Water
Analysis Batch: 457261

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	17.83		ug/L		89	33 - 138
Chloroethane	20.0	19.17		ug/L		96	59 - 139
Chloromethane	20.0	18.87		ug/L		94	52 - 146
Trichlorofluoromethane	20.0	19.34		ug/L		97	55 - 150
Vinyl chloride	20.0	19.12		ug/L		96	60 - 142

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*105*		*76 - 130*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Toluene-d8 (Surr)	*106*		*80 - 120*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 310-457250/1-A
Matrix: Water
Analysis Batch: 457998

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 457250

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.640		10.0	0.640	ug/L		06/11/25 12:12	06/18/25 13:59	1
Acenaphthylene	<0.720		10.0	0.720	ug/L		06/11/25 12:12	06/18/25 13:59	1
Acetophenone	<0.690		10.0	0.690	ug/L		06/11/25 12:12	06/18/25 13:59	1
2-Acetylaminofluorene	<2.70		10.0	2.70	ug/L		06/11/25 12:12	06/18/25 13:59	1
4-Aminobiphenyl	<2.20		10.0	2.20	ug/L		06/11/25 12:12	06/18/25 13:59	1
Anthracene	<0.870		10.0	0.870	ug/L		06/11/25 12:12	06/18/25 13:59	1
Benzo[a]anthracene	<0.850		10.0	0.850	ug/L		06/11/25 12:12	06/18/25 13:59	1
Benzo[a]pyrene	<8.10		10.0	8.10	ug/L		06/11/25 12:12	06/18/25 13:59	1
Benzo[b]fluoranthene	<4.90		10.0	4.90	ug/L		06/11/25 12:12	06/18/25 13:59	1
Benzo[g,h,i]perylene	<6.30		10.0	6.30	ug/L		06/11/25 12:12	06/18/25 13:59	1
Benzo[k]fluoranthene	<2.20		10.0	2.20	ug/L		06/11/25 12:12	06/18/25 13:59	1
Benzyl alcohol	<1.30		10.0	1.30	ug/L		06/11/25 12:12	06/18/25 13:59	1
Bis(2-chloroethoxy)methane	<0.760		10.0	0.760	ug/L		06/11/25 12:12	06/18/25 13:59	1
Bis(2-chloroethyl)ether	<0.820		10.0	0.820	ug/L		06/11/25 12:12	06/18/25 13:59	1
bis (2-chloroisopropyl) ether	<0.540		10.0	0.540	ug/L		06/11/25 12:12	06/18/25 13:59	1
Bis(2-ethylhexyl) phthalate	<5.50		10.0	5.50	ug/L		06/11/25 12:12	06/18/25 13:59	1
4-Bromophenyl phenyl ether	<0.700		10.0	0.700	ug/L		06/11/25 12:12	06/18/25 13:59	1
Butyl benzyl phthalate	<5.40		10.0	5.40	ug/L		06/11/25 12:12	06/18/25 13:59	1
4-Chloroaniline	<0.620		10.0	0.620	ug/L		06/11/25 12:12	06/18/25 13:59	1
Chlorobenzilate	<3.60		10.0	3.60	ug/L		06/11/25 12:12	06/18/25 13:59	1
4-Chloro-3-methylphenol	<0.840		10.0	0.840	ug/L		06/11/25 12:12	06/18/25 13:59	1
2-Chloronaphthalene	<0.640		10.0	0.640	ug/L		06/11/25 12:12	06/18/25 13:59	1
2-Chlorophenol	<0.540		10.0	0.540	ug/L		06/11/25 12:12	06/18/25 13:59	1
4-Chlorophenyl phenyl ether	<0.690		10.0	0.690	ug/L		06/11/25 12:12	06/18/25 13:59	1
Chrysene	<0.870		10.0	0.870	ug/L		06/11/25 12:12	06/18/25 13:59	1
Diallate	<4.00		10.0	4.00	ug/L		06/11/25 12:12	06/18/25 13:59	1
Dibenzo(a,h)anthracene	<3.90		10.0	3.90	ug/L		06/11/25 12:12	06/18/25 13:59	1
Dibenzofuran	<0.740		10.0	0.740	ug/L		06/11/25 12:12	06/18/25 13:59	1
3,3'-Dichlorobenzidine	<1.40		10.0	1.40	ug/L		06/11/25 12:12	06/18/25 13:59	1
2,4-Dichlorophenol	<0.850		10.0	0.850	ug/L		06/11/25 12:12	06/18/25 13:59	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 310-457250/1-A
Matrix: Water
Analysis Batch: 457998

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 457250

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dichlorophenol	<0.690		10.0	0.690	ug/L		06/11/25 12:12	06/18/25 13:59	1
Diethyl phthalate	<1.70		10.0	1.70	ug/L		06/11/25 12:12	06/18/25 13:59	1
Dimethoate	<3.60		10.0	3.60	ug/L		06/11/25 12:12	06/18/25 13:59	1
7,12-Dimethylbenz(a)anthracene	<1.90		10.0	1.90	ug/L		06/11/25 12:12	06/18/25 13:59	1
3,3'-Dimethylbenzidine	<1.50		10.0	1.50	ug/L		06/11/25 12:12	06/18/25 13:59	1
2,4-Dimethylphenol	<0.580		10.0	0.580	ug/L		06/11/25 12:12	06/18/25 13:59	1
Dimethyl phthalate	<1.00		10.0	1.00	ug/L		06/11/25 12:12	06/18/25 13:59	1
Di-n-butyl phthalate	<5.60		10.0	5.60	ug/L		06/11/25 12:12	06/18/25 13:59	1
1,3-Dinitrobenzene	<3.20		10.0	3.20	ug/L		06/11/25 12:12	06/18/25 13:59	1
4,6-Dinitro-2-methylphenol	<6.90		10.0	6.90	ug/L		06/11/25 12:12	06/18/25 13:59	1
2,4-Dinitrophenol	<13.0		20.0	13.0	ug/L		06/11/25 12:12	06/18/25 13:59	1
2,4-Dinitrotoluene	<6.40		10.0	6.40	ug/L		06/11/25 12:12	06/18/25 13:59	1
2,6-Dinitrotoluene	<0.520		10.0	0.520	ug/L		06/11/25 12:12	06/18/25 13:59	1
Di-n-octyl phthalate	<7.00		20.0	7.00	ug/L		06/11/25 12:12	06/18/25 13:59	1
Dinoseb	<2.40		10.0	2.40	ug/L		06/11/25 12:12	06/18/25 13:59	1
Diphenylamine	<6.00		10.0	6.00	ug/L		06/11/25 12:12	06/18/25 13:59	1
Disulfoton	<2.40		10.0	2.40	ug/L		06/11/25 12:12	06/18/25 13:59	1
Ethyl methanesulfonate	<3.60		10.0	3.60	ug/L		06/11/25 12:12	06/18/25 13:59	1
Ethyl Parathion	<2.20		10.0	2.20	ug/L		06/11/25 12:12	06/18/25 13:59	1
Famphur	<3.80		10.0	3.80	ug/L		06/11/25 12:12	06/18/25 13:59	1
Fluoranthene	<1.70		10.0	1.70	ug/L		06/11/25 12:12	06/18/25 13:59	1
Fluorene	<0.790		10.0	0.790	ug/L		06/11/25 12:12	06/18/25 13:59	1
Hexachlorobenzene	<0.700		10.0	0.700	ug/L		06/11/25 12:12	06/18/25 13:59	1
Hexachlorobutadiene	<0.860		10.0	0.860	ug/L		06/11/25 12:12	06/18/25 13:59	1
Hexachlorocyclopentadiene	<5.10		10.0	5.10	ug/L		06/11/25 12:12	06/18/25 13:59	1
Hexachloroethane	<0.970		10.0	0.970	ug/L		06/11/25 12:12	06/18/25 13:59	1
Hexachloropropene	<2.60		10.0	2.60	ug/L		06/11/25 12:12	06/18/25 13:59	1
Indeno[1,2,3-cd]pyrene	<4.20		10.0	4.20	ug/L		06/11/25 12:12	06/18/25 13:59	1
Isodrin	<4.70		10.0	4.70	ug/L		06/11/25 12:12	06/18/25 13:59	1
Isophorone	<0.930		10.0	0.930	ug/L		06/11/25 12:12	06/18/25 13:59	1
Isosafrole	<2.30		10.0	2.30	ug/L		06/11/25 12:12	06/18/25 13:59	1
Kepone	<1.00		10.0	1.00	ug/L		06/11/25 12:12	06/18/25 13:59	1
Methapyrilene	<0.760		10.0	0.760	ug/L		06/11/25 12:12	06/18/25 13:59	1
3-Methylcholanthrene	<0.320		10.0	0.320	ug/L		06/11/25 12:12	06/18/25 13:59	1
Methyl methanesulfonate	<3.30		10.0	3.30	ug/L		06/11/25 12:12	06/18/25 13:59	1
2-Methylnaphthalene	<0.590		10.0	0.590	ug/L		06/11/25 12:12	06/18/25 13:59	1
Methyl parathion	<2.30		10.0	2.30	ug/L		06/11/25 12:12	06/18/25 13:59	1
2-Methylphenol	<0.650		10.0	0.650	ug/L		06/11/25 12:12	06/18/25 13:59	1
Methylphenol, 3 & 4	<0.700		10.0	0.700	ug/L		06/11/25 12:12	06/18/25 13:59	1
1,4-Naphthoquinone	<3.60		10.0	3.60	ug/L		06/11/25 12:12	06/18/25 13:59	1
1-Naphthylamine	<2.50		10.0	2.50	ug/L		06/11/25 12:12	06/18/25 13:59	1
2-Naphthylamine	<2.10		10.0	2.10	ug/L		06/11/25 12:12	06/18/25 13:59	1
2-Nitroaniline	<5.90		10.0	5.90	ug/L		06/11/25 12:12	06/18/25 13:59	1
3-Nitroaniline	<2.70		10.0	2.70	ug/L		06/11/25 12:12	06/18/25 13:59	1
4-Nitroaniline	<1.30		10.0	1.30	ug/L		06/11/25 12:12	06/18/25 13:59	1
Nitrobenzene	<0.800		10.0	0.800	ug/L		06/11/25 12:12	06/18/25 13:59	1
5-Nitro-o-toluidine	<2.80		10.0	2.80	ug/L		06/11/25 12:12	06/18/25 13:59	1
2-Nitrophenol	<6.80		10.0	6.80	ug/L		06/11/25 12:12	06/18/25 13:59	1
4-Nitrophenol	<7.60		10.0	7.60	ug/L		06/11/25 12:12	06/18/25 13:59	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 310-457250/1-A
Matrix: Water
Analysis Batch: 457998

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 457250

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiethylamine	<3.40		10.0	3.40	ug/L		06/11/25 12:12	06/18/25 13:59	1
N-Nitrosodimethylamine	<0.720		10.0	0.720	ug/L		06/11/25 12:12	06/18/25 13:59	1
N-Nitrosodi-n-butylamine	<3.90		10.0	3.90	ug/L		06/11/25 12:12	06/18/25 13:59	1
N-Nitrosodi-n-propylamine	<0.920		10.0	0.920	ug/L		06/11/25 12:12	06/18/25 13:59	1
N-Nitrosodiphenylamine	<0.750		10.0	0.750	ug/L		06/11/25 12:12	06/18/25 13:59	1
N-Nitrosomethylethylamine	<4.90		10.0	4.90	ug/L		06/11/25 12:12	06/18/25 13:59	1
N-Nitrosopiperidine	<2.70		10.0	2.70	ug/L		06/11/25 12:12	06/18/25 13:59	1
N-Nitrosopyrrolidine	<3.60		10.0	3.60	ug/L		06/11/25 12:12	06/18/25 13:59	1
o,o',o''-Triethylphosphorothioate	<3.20		10.0	3.20	ug/L		06/11/25 12:12	06/18/25 13:59	1
o-Toluidine	<2.90		10.0	2.90	ug/L		06/11/25 12:12	06/18/25 13:59	1
p-Dimethylamino azobenzene	<2.20		10.0	2.20	ug/L		06/11/25 12:12	06/18/25 13:59	1
Pentachlorobenzene	<2.80		10.0	2.80	ug/L		06/11/25 12:12	06/18/25 13:59	1
Pentachloronitrobenzene	<5.80		10.0	5.80	ug/L		06/11/25 12:12	06/18/25 13:59	1
Pentachlorophenol	<9.60		10.0	9.60	ug/L		06/11/25 12:12	06/18/25 13:59	1
Phenacetin	<1.90		10.0	1.90	ug/L		06/11/25 12:12	06/18/25 13:59	1
Phenanthrene	<0.790		10.0	0.790	ug/L		06/11/25 12:12	06/18/25 13:59	1
Phenol	<1.10		10.0	1.10	ug/L		06/11/25 12:12	06/18/25 13:59	1
1,4-phenylenediamine	<1.90		10.0	1.90	ug/L		06/11/25 12:12	06/18/25 13:59	1
Phorate	<3.20		10.0	3.20	ug/L		06/11/25 12:12	06/18/25 13:59	1
Pronamide	<2.70		10.0	2.70	ug/L		06/11/25 12:12	06/18/25 13:59	1
Pyrene	<0.790		10.0	0.790	ug/L		06/11/25 12:12	06/18/25 13:59	1
Safrole	<2.80		10.0	2.80	ug/L		06/11/25 12:12	06/18/25 13:59	1
1,2,4,5-Tetrachlorobenzene	<0.540		10.0	0.540	ug/L		06/11/25 12:12	06/18/25 13:59	1
2,3,4,6-Tetrachlorophenol	<5.30		10.0	5.30	ug/L		06/11/25 12:12	06/18/25 13:59	1
Thionazin	<3.50		10.0	3.50	ug/L		06/11/25 12:12	06/18/25 13:59	1
2,4,5-Trichlorophenol	<5.30		10.0	5.30	ug/L		06/11/25 12:12	06/18/25 13:59	1
2,4,6-Trichlorophenol	<5.00		10.0	5.00	ug/L		06/11/25 12:12	06/18/25 13:59	1
1,3,5-Trinitrobenzene	<2.30		10.0	2.30	ug/L		06/11/25 12:12	06/18/25 13:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*75*		*33 - 126*	*06/11/25 12:12*	*06/18/25 13:59*	*1*
2-Fluorophenol (Surr)	*62*		*21 - 110*	*06/11/25 12:12*	*06/18/25 13:59*	*1*
Nitrobenzene-d5 (Surr)	*86*		*39 - 140*	*06/11/25 12:12*	*06/18/25 13:59*	*1*
Phenol-d5 (Surr)	*56*		*21 - 110*	*06/11/25 12:12*	*06/18/25 13:59*	*1*
Terphenyl-d14 (Surr)	*92*		*13 - 150*	*06/11/25 12:12*	*06/18/25 13:59*	*1*
2,4,6-Tribromophenol (Surr)	*80*		*20 - 144*	*06/11/25 12:12*	*06/18/25 13:59*	*1*

Lab Sample ID: LCS 310-457250/2-A
Matrix: Water
Analysis Batch: 457998

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 457250

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	100	76.83		ug/L		77	38 - 118
Acenaphthylene	100	76.69		ug/L		77	39 - 115
Acetophenone	100	83.17		ug/L		83	47 - 118
2-Acetylaminofluorene	51.2	36.61		ug/L		72	37 - 149
4-Aminobiphenyl	51.2	34.07		ug/L		67	23 - 123
Anthracene	100	84.94		ug/L		85	49 - 127

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 310-457250/2-A
Matrix: Water
Analysis Batch: 457998

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 457250

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzo[a]anthracene	100	88.05		ug/L		88	49 - 126
Benzo[a]pyrene	100	92.50		ug/L		93	44 - 133
Benzo[b]fluoranthene	100	89.39		ug/L		89	44 - 136
Benzo[g,h,i]perylene	100	90.98		ug/L		91	42 - 135
Benzo[k]fluoranthene	100	93.12		ug/L		93	49 - 134
Benzyl alcohol	100	77.64		ug/L		78	46 - 123
Bis(2-chloroethoxy)methane	100	84.41		ug/L		84	44 - 126
Bis(2-chloroethyl)ether	100	75.89		ug/L		76	41 - 116
bis (2-chloroisopropyl) ether	100	74.32		ug/L		74	36 - 115
Bis(2-ethylhexyl) phthalate	100	98.30		ug/L		98	46 - 138
4-Bromophenyl phenyl ether	100	81.05		ug/L		81	41 - 131
Butyl benzyl phthalate	100	94.89		ug/L		95	47 - 133
4-Chloroaniline	100	93.46		ug/L		93	13 - 143
Chlorobenzilate	51.2	51.27		ug/L		100	39 - 145
4-Chloro-3-methylphenol	100	90.62		ug/L		91	51 - 132
2-Chloronaphthalene	100	66.50		ug/L		67	33 - 112
2-Chlorophenol	100	80.38		ug/L		80	43 - 119
4-Chlorophenyl phenyl ether	100	78.40		ug/L		78	44 - 118
Chrysene	100	87.76		ug/L		88	50 - 128
Diallate	44.8	50.90		ug/L		114	40 - 135
Dibenzo(a,h)anthracene	100	89.81		ug/L		90	36 - 146
Dibenzofuran	100	78.99		ug/L		79	44 - 114
2,4-Dichlorophenol	100	86.22		ug/L		86	44 - 131
2,6-Dichlorophenol	100	84.70		ug/L		85	41 - 131
Diethyl phthalate	100	90.88		ug/L		91	43 - 135
Dimethoate	44.8	63.99		ug/L		143	31 - 150
7,12-Dimethylbenz(a)anthracene	51.2	40.11		ug/L		78	47 - 129
3,3'-Dimethylbenzidine	51.2	<1.50	*-	ug/L		1	10 - 147
2,4-Dimethylphenol	100	84.44		ug/L		84	30 - 128
Dimethyl phthalate	100	86.55		ug/L		87	46 - 129
Di-n-butyl phthalate	100	93.27		ug/L		93	49 - 138
1,3-Dinitrobenzene	100	40.80		ug/L		41	36 - 147
4,6-Dinitro-2-methylphenol	200	172.5		ug/L		86	22 - 150
2,4-Dinitrophenol	200	108.0		ug/L		54	10 - 150
2,4-Dinitrotoluene	100	99.26		ug/L		99	48 - 136
2,6-Dinitrotoluene	100	90.99		ug/L		91	49 - 135
Di-n-octyl phthalate	100	73.76		ug/L		74	33 - 148
Dinoseb	51.2	44.14		ug/L		86	22 - 150
Diphenylamine	85.0	79.47		ug/L		93	43 - 132
Disulfoton	44.8	49.91		ug/L		111	27 - 138
Ethyl methanesulfonate	51.2	40.51		ug/L		79	44 - 110
Ethyl Parathion	44.8	53.55		ug/L		120	52 - 141
Famphur	44.8	70.27	E *+	ug/L		157	67 - 150
Fluoranthene	100	90.33		ug/L		90	49 - 132
Fluorene	100	85.58		ug/L		86	46 - 118
Hexachlorobenzene	100	81.80		ug/L		82	42 - 134
Hexachlorobutadiene	100	62.41		ug/L		62	29 - 110
Hexachlorocyclopentadiene	100	57.11		ug/L		57	10 - 110
Hexachloroethane	100	54.89		ug/L		55	25 - 110

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 310-457250/2-A
Matrix: Water
Analysis Batch: 457998

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 457250

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexachloropropene	51.2	26.91		ug/L		53	10 - 110
Indeno[1,2,3-cd]pyrene	100	90.92		ug/L		91	36 - 149
Isodrin	51.2	43.19		ug/L		84	50 - 122
Isophorone	100	85.24		ug/L		85	46 - 126
Isosafrole	51.2	26.76		ug/L		52	10 - 129
Kepone	44.8	46.71		ug/L		104	10 - 150
Methapyrilene	44.8	4.601	J	ug/L		10	10 - 110
3-Methylcholanthrene	51.2	39.63		ug/L		77	13 - 140
Methyl methanesulfonate	51.2	38.56		ug/L		75	16 - 110
2-Methylnaphthalene	100	70.40		ug/L		70	35 - 110
Methyl parathion	44.8	57.98		ug/L		129	49 - 150
2-Methylphenol	100	79.33		ug/L		79	47 - 114
Methylphenol, 3 & 4	100	78.01		ug/L		78	45 - 114
1,4-Naphthoquinone	51.2	59.14		ug/L		116	38 - 137
1-Naphthylamine	51.2	12.36		ug/L		24	10 - 110
2-Naphthylamine	51.2	40.76		ug/L		80	18 - 111
2-Nitroaniline	100	93.10		ug/L		93	48 - 135
3-Nitroaniline	100	92.74		ug/L		93	38 - 142
4-Nitroaniline	100	98.98		ug/L		99	33 - 141
Nitrobenzene	100	80.78		ug/L		81	42 - 123
5-Nitro-o-toluidine	51.2	52.59		ug/L		103	43 - 139
2-Nitrophenol	100	90.08		ug/L		90	36 - 144
4-Nitrophenol	200	130.4		ug/L		65	22 - 110
N-Nitrosodiethylamine	51.2	39.66		ug/L		77	51 - 116
N-Nitrosodimethylamine	100	68.90		ug/L		69	37 - 110
N-Nitrosodi-n-butylamine	51.2	48.51		ug/L		95	49 - 135
N-Nitrosodi-n-propylamine	100	85.62		ug/L		86	44 - 124
N-Nitrosodiphenylamine	100	94.28		ug/L		94	43 - 132
N-Nitrosomethylethylamine	51.2	41.93		ug/L		82	43 - 114
N-Nitrosopiperidine	51.2	46.40		ug/L		91	50 - 120
N-Nitrosopyrrolidine	51.2	45.38		ug/L		89	47 - 129
o,o',o''-Triethylphosphorothioate	44.8	43.69		ug/L		98	34 - 125
o-Toluidine	51.2	36.86		ug/L		72	19 - 128
p-Dimethylamino azobenzene	51.2	50.49		ug/L		99	45 - 133
Pentachlorobenzene	51.2	36.14		ug/L		71	27 - 112
Pentachloronitrobenzene	51.2	42.99		ug/L		84	45 - 132
Pentachlorophenol	200	157.3		ug/L		79	28 - 142
Phenacetin	51.2	52.70		ug/L		103	51 - 139
Phenanthrene	100	83.42		ug/L		83	48 - 126
Phenol	100	54.28		ug/L		54	29 - 110
1,4-phenylenediamine	51.2	<1.90	*-	ug/L		0	20 - 120
Phorate	44.8	49.49		ug/L		110	21 - 147
Pronamide	51.2	52.01		ug/L		102	52 - 135
Pyrene	100	88.98		ug/L		89	45 - 134
Safrole	44.8	40.98		ug/L		91	26 - 117
1,2,4,5-Tetrachlorobenzene	100	65.55		ug/L		66	35 - 110
2,3,4,6-Tetrachlorophenol	100	90.30		ug/L		90	32 - 142
Thionazin	44.8	55.47		ug/L		124	48 - 135
2,4,5-Trichlorophenol	100	81.97		ug/L		82	39 - 136

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 310-457250/2-A
Matrix: Water
Analysis Batch: 457998

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 457250

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4,6-Trichlorophenol			100	84.93		ug/L		85	35 - 141		
1,3,5-Trinitrobenzene			51.2	41.12		ug/L		80	26 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*80*		*33 - 126*
2-Fluorophenol (Surr)	*65*		*21 - 110*
Nitrobenzene-d5 (Surr)	*88*		*39 - 140*
Phenol-d5 (Surr)	*57*		*21 - 110*
Terphenyl-d14 (Surr)	*103*		*13 - 150*
2,4,6-Tribromophenol (Surr)	*89*		*20 - 144*

Lab Sample ID: LCSD 310-457250/3-A
Matrix: Water
Analysis Batch: 457998

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 457250

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			100	70.54		ug/L		71	38 - 118	9	35
Acenaphthylene			100	72.81		ug/L		73	39 - 115	5	35
Acetophenone			100	79.95		ug/L		80	47 - 118	4	35
2-Acetylaminofluorene			51.2	38.36		ug/L		75	37 - 149	5	26
4-Aminobiphenyl			51.2	45.37		ug/L		89	23 - 123	28	35
Anthracene			100	83.33		ug/L		83	49 - 127	2	35
Benzo[a]anthracene			100	83.79		ug/L		84	49 - 126	5	35
Benzo[a]pyrene			100	89.91		ug/L		90	44 - 133	3	35
Benzo[b]fluoranthene			100	90.26		ug/L		90	44 - 136	1	35
Benzo[g,h,i]perylene			100	88.63		ug/L		89	42 - 135	3	35
Benzo[k]fluoranthene			100	91.09		ug/L		91	49 - 134	2	35
Benzyl alcohol			100	73.80		ug/L		74	46 - 123	5	35
Bis(2-chloroethoxy)methane			100	82.32		ug/L		82	44 - 126	3	35
Bis(2-chloroethyl)ether			100	70.21		ug/L		70	41 - 116	8	35
bis (2-chloroisopropyl) ether			100	69.08		ug/L		69	36 - 115	7	35
Bis(2-ethylhexyl) phthalate			100	99.17		ug/L		99	46 - 138	1	35
4-Bromophenyl phenyl ether			100	73.99		ug/L		74	41 - 131	9	35
Butyl benzyl phthalate			100	93.01		ug/L		93	47 - 133	2	35
4-Chloroaniline			100	94.23		ug/L		94	13 - 143	1	35
Chlorobenzilate			51.2	48.61		ug/L		95	39 - 145	5	28
4-Chloro-3-methylphenol			100	90.28		ug/L		90	51 - 132	0	35
2-Chloronaphthalene			100	62.58		ug/L		63	33 - 112	6	35
2-Chlorophenol			100	80.54		ug/L		81	43 - 119	0	35
4-Chlorophenyl phenyl ether			100	75.54		ug/L		76	44 - 118	4	35
Chrysene			100	86.68		ug/L		87	50 - 128	1	35
Diallate			44.8	47.10		ug/L		105	40 - 135	8	29
Dibenzo(a,h)anthracene			100	87.99		ug/L		88	36 - 146	2	35
Dibenzofuran			100	74.12		ug/L		74	44 - 114	6	35
2,4-Dichlorophenol			100	83.01		ug/L		83	44 - 131	4	35
2,6-Dichlorophenol			100	81.85		ug/L		82	41 - 131	3	35
Diethyl phthalate			100	89.70		ug/L		90	43 - 135	1	35
Dimethoate			44.8	60.42		ug/L		135	31 - 150	6	35

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 310-457250/3-A
Matrix: Water
Analysis Batch: 457998

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 457250

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
7,12-Dimethylbenz(a)anthracene	51.2	41.26		ug/L		81	47 - 129	3	29
3,3'-Dimethylbenzidine	51.2	35.55	*1	ug/L		69	10 - 147	195	35
2,4-Dimethylphenol	100	84.52		ug/L		85	30 - 128	0	35
Dimethyl phthalate	100	83.73		ug/L		84	46 - 129	3	35
Di-n-butyl phthalate	100	90.90		ug/L		91	49 - 138	3	35
1,3-Dinitrobenzene	100	40.81		ug/L		41	36 - 147	0	35
4,6-Dinitro-2-methylphenol	200	182.1		ug/L		91	22 - 150	5	35
2,4-Dinitrophenol	200	118.7		ug/L		59	10 - 150	9	35
2,4-Dinitrotoluene	100	92.77		ug/L		93	48 - 136	7	35
2,6-Dinitrotoluene	100	87.63		ug/L		88	49 - 135	4	35
Di-n-octyl phthalate	100	73.13		ug/L		73	33 - 148	1	35
Dinoseb	51.2	44.94		ug/L		88	22 - 150	2	35
Diphenylamine	85.0	77.60		ug/L		91	43 - 132	2	35
Disulfoton	44.8	50.18		ug/L		112	27 - 138	1	32
Ethyl methanesulfonate	51.2	41.06		ug/L		80	44 - 110	1	30
Ethyl Parathion	44.8	53.37		ug/L		119	52 - 141	0	30
Famphur	44.8	69.41	*+ E	ug/L		155	67 - 150	1	28
Fluoranthene	100	88.75		ug/L		89	49 - 132	2	35
Fluorene	100	80.81		ug/L		81	46 - 118	6	35
Hexachlorobenzene	100	74.61		ug/L		75	42 - 134	9	35
Hexachlorobutadiene	100	55.24		ug/L		55	29 - 110	12	35
Hexachlorocyclopentadiene	100	47.22		ug/L		47	10 - 110	19	35
Hexachloroethane	100	48.55		ug/L		49	25 - 110	12	35
Hexachloropropene	51.2	30.70		ug/L		60	10 - 110	13	35
Indeno[1,2,3-cd]pyrene	100	85.63		ug/L		86	36 - 149	6	35
Isodrin	51.2	40.89		ug/L		80	50 - 122	5	28
Isophorone	100	80.12		ug/L		80	46 - 126	6	35
Isosafrole	51.2	25.14		ug/L		49	10 - 129	6	35
Kepone	44.8	53.09		ug/L		119	10 - 150	13	35
Methapyrilene	44.8	12.35	*1	ug/L		28	10 - 110	91	35
3-Methylcholanthrene	51.2	37.47		ug/L		73	13 - 140	6	35
Methyl methanesulfonate	51.2	39.17		ug/L		76	16 - 110	2	28
2-Methylnaphthalene	100	63.90		ug/L		64	35 - 110	10	35
Methyl parathion	44.8	61.86		ug/L		138	49 - 150	6	29
2-Methylphenol	100	77.59		ug/L		78	47 - 114	2	35
Methylphenol, 3 & 4	100	77.95		ug/L		78	45 - 114	0	35
1,4-Naphthoquinone	51.2	57.31		ug/L		112	38 - 137	3	27
1-Naphthylamine	51.2	36.48	*1	ug/L		71	10 - 110	99	35
2-Naphthylamine	51.2	48.80		ug/L		95	18 - 111	18	35
2-Nitroaniline	100	90.11		ug/L		90	48 - 135	3	35
3-Nitroaniline	100	91.44		ug/L		91	38 - 142	1	35
4-Nitroaniline	100	98.28		ug/L		98	33 - 141	1	35
Nitrobenzene	100	77.43		ug/L		77	42 - 123	4	35
5-Nitro-o-toluidine	51.2	55.49		ug/L		108	43 - 139	5	32
2-Nitrophenol	100	86.48		ug/L		86	36 - 144	4	35
4-Nitrophenol	200	139.2		ug/L		70	22 - 110	7	35
N-Nitrosodiethylamine	51.2	38.13		ug/L		74	51 - 116	4	27
N-Nitrosodimethylamine	100	69.25		ug/L		69	37 - 110	0	35
N-Nitrosodi-n-butylamine	51.2	47.57		ug/L		93	49 - 135	2	28

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 310-457250/3-A
Client Sample ID: Lab Control Sample Dup
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 457998
Prep Batch: 457250

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
N-Nitrosodi-n-propylamine	100	79.81		ug/L		80	44 - 124	7	35
N-Nitrosodiphenylamine	100	92.01		ug/L		92	43 - 132	2	35
N-Nitrosomethylethylamine	51.2	39.71		ug/L		78	43 - 114	5	29
N-Nitrosopiperidine	51.2	45.52		ug/L		89	50 - 120	2	26
N-Nitrosopyrrolidine	51.2	43.87		ug/L		86	47 - 129	3	31
o,o',o''-Triethylphosphorothioate	44.8	41.94		ug/L		94	34 - 125	4	33
o-Toluidine	51.2	38.31		ug/L		75	19 - 128	4	35
p-Dimethylamino azobenzene	51.2	50.68		ug/L		99	45 - 133	0	31
Pentachlorobenzene	51.2	36.11		ug/L		71	27 - 112	0	35
Pentachloronitrobenzene	51.2	38.48		ug/L		75	45 - 132	11	29
Pentachlorophenol	200	158.0		ug/L		79	28 - 142	0	35
Phenacetin	51.2	52.14		ug/L		102	51 - 139	1	29
Phenanthrene	100	80.12		ug/L		80	48 - 126	4	35
Phenol	100	57.92		ug/L		58	29 - 110	6	35
1,4-phenylenediamine	51.2	<1.90	*-	ug/L		0	20 - 120	NC	35
Phorate	44.8	48.39		ug/L		108	21 - 147	2	35
Pronamide	51.2	51.91		ug/L		101	52 - 135	0	28
Pyrene	100	85.88		ug/L		86	45 - 134	4	35
Safrole	44.8	41.06		ug/L		92	26 - 117	0	35
1,2,4,5-Tetrachlorobenzene	100	58.60		ug/L		59	35 - 110	11	35
2,3,4,6-Tetrachlorophenol	100	85.47		ug/L		85	32 - 142	5	35
Thionazin	44.8	53.41		ug/L		119	48 - 135	4	30
2,4,5-Trichlorophenol	100	79.35		ug/L		79	39 - 136	3	35
2,4,6-Trichlorophenol	100	83.81		ug/L		84	35 - 141	1	35
1,3,5-Trinitrobenzene	51.2	41.03		ug/L		80	26 - 150	0	29

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*74*		*33 - 126*
2-Fluorophenol (Surr)	*62*		*21 - 110*
Nitrobenzene-d5 (Surr)	*84*		*39 - 140*
Phenol-d5 (Surr)	*56*		*21 - 110*
Terphenyl-d14 (Surr)	*97*		*13 - 150*
2,4,6-Tribromophenol (Surr)	*86*		*20 - 144*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Lab Sample ID: MB 310-457223/4
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 457223

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	<2600		10000	2600	ug/L			06/11/25 11:17	1
Isobutanol	<2400		10000	2400	ug/L			06/11/25 11:17	1

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection) (Continued)

Lab Sample ID: LCS 310-457223/5
Matrix: Water
Analysis Batch: 457223

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetonitrile	99100	102300		ug/L		103	67 - 131
Isobutanol	95500	103800		ug/L		109	80 - 120

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 310-457253/1-A
Matrix: Water
Analysis Batch: 457298

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 457253

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.806		1.97	0.806	ug/L		06/11/25 12:17	06/11/25 18:06	1
PCB-1221	<0.806		1.97	0.806	ug/L		06/11/25 12:17	06/11/25 18:06	1
PCB-1232	<0.806		1.97	0.806	ug/L		06/11/25 12:17	06/11/25 18:06	1
PCB-1242	<0.806		1.97	0.806	ug/L		06/11/25 12:17	06/11/25 18:06	1
PCB-1248	<0.678		1.97	0.678	ug/L		06/11/25 12:17	06/11/25 18:06	1
PCB-1254	<0.678		1.97	0.678	ug/L		06/11/25 12:17	06/11/25 18:06	1
PCB-1260	<0.678		1.97	0.678	ug/L		06/11/25 12:17	06/11/25 18:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*63*		*10 - 150*	*06/11/25 12:17*	*06/11/25 18:06*	*1*
Tetrachloro-m-xylene	*87*		*17 - 150*	*06/11/25 12:17*	*06/11/25 18:06*	*1*

Lab Sample ID: LCS 310-457253/28-A
Matrix: Water
Analysis Batch: 457358

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 457253

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	27.7	23.97		ug/L		87	25 - 150
PCB-1260	27.7	27.83		ug/L		100	14 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*101*		*10 - 150*
Tetrachloro-m-xylene	*76*		*17 - 150*

Lab Sample ID: 310-308053-3 MS
Matrix: Ground Water
Analysis Batch: 457358

Client Sample ID: MW-42A
Prep Type: Total/NA
Prep Batch: 457253

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	<0.747		26.0	20.32		ug/L		78	25 - 150
PCB-1260	<0.629		26.0	25.59		ug/L		98	10 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*111*		*10 - 150*
Tetrachloro-m-xylene	*78*		*17 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 310-308053-3 MSD
Matrix: Ground Water
Analysis Batch: 457358

Client Sample ID: MW-42A
Prep Type: Total/NA
Prep Batch: 457253

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	<0.747		26.0	21.36		ug/L		82	25 - 150	5	35
PCB-1260	<0.629		26.0	23.69		ug/L		91	10 - 150	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*47*		*10 - 150*
Tetrachloro-m-xylene	*65*		*17 - 150*

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 410-656849/1-A
Matrix: Water
Analysis Batch: 657085

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 656849

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.250		0.600	0.250	ug/L		06/12/25 15:00	06/13/25 06:42	1
Silvex (2,4,5-TP)	<0.0220		0.0500	0.0220	ug/L		06/12/25 15:00	06/13/25 06:42	1
2,4,5-T	<0.0650		0.150	0.0650	ug/L		06/12/25 15:00	06/13/25 06:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*73*		*34 - 142*	*06/12/25 15:00*	*06/13/25 06:42*	*1*
DCAA	*61*		*34 - 142*	*06/12/25 15:00*	*06/13/25 06:42*	*1*

Lab Sample ID: LCS 410-656849/2-A
Matrix: Water
Analysis Batch: 657085

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 656849

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4-D			2.00	1.775		ug/L		89	53 - 159		
2,4,5-T			0.400	0.3553		ug/L		89	57 - 171		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCAA	*93*		*34 - 142*
DCAA	*78*		*34 - 142*

Lab Sample ID: LCSD 410-656849/3-A
Matrix: Water
Analysis Batch: 657085

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 656849

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-D			2.00	1.284	*1	ug/L		64	53 - 159	32	30
2,4,5-T			0.400	0.2755		ug/L		69	57 - 171	25	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCAA	*66*		*34 - 142*
DCAA	*57*		*34 - 142*

Method: 8151A - Herbicides (GC) - DL

Lab Sample ID: LCS 410-656849/2-A
Matrix: Water
Analysis Batch: 657085

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 656849

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Silvex (2,4,5-TP) - DL			4.01	3.319		ug/L		83	62 - 170		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCAA - DL	*104*		*34 - 142*
DCAA - DL	*104*		*34 - 142*

Lab Sample ID: LCSD 410-656849/3-A
Matrix: Water
Analysis Batch: 657085

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 656849

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silvex (2,4,5-TP) - DL			4.01	3.006		ug/L		75	62 - 170	10	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCAA - DL	*94*		*34 - 142*
DCAA - DL	*87*		*34 - 142*

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-457031/1-A
Matrix: Water
Analysis Batch: 458034

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 457031

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/10/25 09:00	06/18/25 12:42	1
Arsenic	<0.530		2.00	0.530	ug/L		06/10/25 09:00	06/18/25 12:42	1
Barium	<0.660		2.00	0.660	ug/L		06/10/25 09:00	06/18/25 12:42	1
Beryllium	<0.330		1.00	0.330	ug/L		06/10/25 09:00	06/18/25 12:42	1
Cadmium	<0.100		0.200	0.100	ug/L		06/10/25 09:00	06/18/25 12:42	1
Chromium	<1.80		5.00	1.80	ug/L		06/10/25 09:00	06/18/25 12:42	1
Cobalt	<0.170		0.500	0.170	ug/L		06/10/25 09:00	06/18/25 12:42	1
Copper	<3.20		5.00	3.20	ug/L		06/10/25 09:00	06/18/25 12:42	1
Lead	<0.330		0.500	0.330	ug/L		06/10/25 09:00	06/18/25 12:42	1
Nickel	<2.30		5.00	2.30	ug/L		06/10/25 09:00	06/18/25 12:42	1
Selenium	<1.40		5.00	1.40	ug/L		06/10/25 09:00	06/18/25 12:42	1
Silver	<0.500		1.00	0.500	ug/L		06/10/25 09:00	06/18/25 12:42	1
Thallium	<0.570		1.00	0.570	ug/L		06/10/25 09:00	06/18/25 12:42	1
Vanadium	<1.70		5.00	1.70	ug/L		06/10/25 09:00	06/18/25 12:42	1
Zinc	<13.0		20.0	13.0	ug/L		06/10/25 09:00	06/18/25 12:42	1
Tin	<2.50		5.00	2.50	ug/L		06/10/25 09:00	06/18/25 12:42	1

Lab Sample ID: LCS 310-457031/2-A
Matrix: Water
Analysis Batch: 458034

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 457031

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			200	207.3		ug/L		104	80 - 120		
Arsenic			200	197.8		ug/L		99	80 - 120		

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 310-457031/2-A
Matrix: Water
Analysis Batch: 458034

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 457031

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	100	98.81		ug/L		99	80 - 120
Beryllium	100	96.57		ug/L		97	80 - 120
Cadmium	100	97.75		ug/L		98	80 - 120
Chromium	100	98.74		ug/L		99	80 - 120
Cobalt	100	98.25		ug/L		98	80 - 120
Copper	200	200.1		ug/L		100	80 - 120
Lead	200	192.6		ug/L		96	80 - 120
Nickel	200	198.6		ug/L		99	80 - 120
Selenium	400	381.0		ug/L		95	80 - 120
Silver	100	117.0		ug/L		117	80 - 120
Thallium	100	91.40		ug/L		91	80 - 120
Vanadium	100	96.87		ug/L		97	80 - 120
Zinc	200	189.9		ug/L		95	80 - 120
Tin	200	187.1		ug/L		94	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-457150/1-A
Matrix: Water
Analysis Batch: 457429

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 457150

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.110		0.200	0.110	ug/L		06/11/25 12:28	06/12/25 11:33	1

Lab Sample ID: LCS 310-457150/2-A
Matrix: Water
Analysis Batch: 457429

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 457150

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.67	1.714		ug/L		103	80 - 120

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 310-456818/1-A
Matrix: Water
Analysis Batch: 456889

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 456818

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<3.50		10.0	3.50	ug/L		06/06/25 11:01	06/06/25 21:29	1

Lab Sample ID: LCS 310-456818/2-A
Matrix: Water
Analysis Batch: 456889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 456818

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	200	191.9		ug/L		96	90 - 110

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 240-659192/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 659249
Prep Batch: 659192

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<1410		3000	1410	ug/L		06/10/25 09:11	06/10/25 11:55	1

Lab Sample ID: LCS 240-659192/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 659249
Prep Batch: 659192

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	8130	6667		ug/L		82	70 - 120

Lab Sample ID: 310-308053-3 MS
Client Sample ID: MW-42A
Matrix: Ground Water
Prep Type: Total/NA
Analysis Batch: 659249
Prep Batch: 659192

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	<1410		8130	6267		ug/L		77	32 - 130

Lab Sample ID: 310-308053-3 MSD
Client Sample ID: MW-42A
Matrix: Ground Water
Prep Type: Total/NA
Analysis Batch: 659249
Prep Batch: 659192

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	<1410		8130	6667		ug/L		82	32 - 130	6	30

Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: MB 310-456876/1
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 456876

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<3.50		5.00	3.50	mg/L			06/06/25 16:37	1

Lab Sample ID: LCS 310-456876/2
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 456876

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	100.0		mg/L		100	82 - 117

Lab Sample ID: 310-308053-4 DU
Client Sample ID: MW-43A
Matrix: Ground Water
Prep Type: Total/NA
Analysis Batch: 456876

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	21.0		22.00		mg/L		5	35

Method: I-3765-85 - Residue, Non-filterable (TSS) (Continued)

Lab Sample ID: MB 310-456878/1
Matrix: Water
Analysis Batch: 456878

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<3.50		5.00	3.50	mg/L			06/06/25 17:11	1

Lab Sample ID: LCS 310-456878/2
Matrix: Water
Analysis Batch: 456878

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	102.0		mg/L		102	82 - 117

GC/MS VOA

Analysis Batch: 456984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308053-3	MW-42A	Total/NA	Ground Water	8260D	
310-308053-4	MW-43A	Total/NA	Ground Water	8260D	
310-308053-5	MW-44A	Total/NA	Ground Water	8260D	
MB 310-456984/5	Method Blank	Total/NA	Water	8260D	
LCS 310-456984/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-456984/7	Lab Control Sample	Total/NA	Water	8260D	
310-308053-4 MS	MW-43A	Total/NA	Ground Water	8260D	
310-308053-4 MSD	MW-43A	Total/NA	Ground Water	8260D	

Analysis Batch: 457004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308053-1	MW-31A	Total/NA	Ground Water	8260D	
310-308053-2	MW-25A	Total/NA	Ground Water	8260D	
310-308053-6	Equipment Blank #1 Shallow	Total/NA	Ground Water	8260D	
310-308053-7	Trip Blank	Total/NA	Water	8260D	
310-308053-8	Trip Blank	Total/NA	Water	8260D	
MB 310-457004/5	Method Blank	Total/NA	Water	8260D	
LCS 310-457004/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-457004/7	Lab Control Sample	Total/NA	Water	8260D	
310-308053-1 MS	MW-31A	Total/NA	Ground Water	8260D	
310-308053-1 MSD	MW-31A	Total/NA	Ground Water	8260D	

Analysis Batch: 457261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308053-1	MW-31A	Total/NA	Ground Water	8260D	
MB 310-457261/5	Method Blank	Total/NA	Water	8260D	
LCS 310-457261/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-457261/7	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 457250

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308053-3	MW-42A	Total/NA	Ground Water	3510C	
310-308053-4	MW-43A	Total/NA	Ground Water	3510C	
310-308053-5	MW-44A	Total/NA	Ground Water	3510C	
MB 310-457250/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-457250/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-457250/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 457998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308053-3	MW-42A	Total/NA	Ground Water	8270E	457250
310-308053-4	MW-43A	Total/NA	Ground Water	8270E	457250
310-308053-5	MW-44A	Total/NA	Ground Water	8270E	457250
MB 310-457250/1-A	Method Blank	Total/NA	Water	8270E	457250
LCS 310-457250/2-A	Lab Control Sample	Total/NA	Water	8270E	457250
LCSD 310-457250/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	457250

GC Semi VOA

Analysis Batch: 457223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308053-3	MW-42A	Total/NA	Ground Water	8015C	
310-308053-4	MW-43A	Total/NA	Ground Water	8015C	
310-308053-5	MW-44A	Total/NA	Ground Water	8015C	
MB 310-457223/4	Method Blank	Total/NA	Water	8015C	
LCS 310-457223/5	Lab Control Sample	Total/NA	Water	8015C	

Prep Batch: 457253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308053-1	MW-31A	Total/NA	Ground Water	3511	
310-308053-3	MW-42A	Total/NA	Ground Water	3511	
310-308053-4	MW-43A	Total/NA	Ground Water	3511	
310-308053-5	MW-44A	Total/NA	Ground Water	3511	
MB 310-457253/1-A	Method Blank	Total/NA	Water	3511	
LCS 310-457253/28-A	Lab Control Sample	Total/NA	Water	3511	
310-308053-3 MS	MW-42A	Total/NA	Ground Water	3511	
310-308053-3 MSD	MW-42A	Total/NA	Ground Water	3511	

Analysis Batch: 457298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-457253/1-A	Method Blank	Total/NA	Water	8082A	457253

Analysis Batch: 457358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308053-3	MW-42A	Total/NA	Ground Water	8082A	457253
310-308053-4	MW-43A	Total/NA	Ground Water	8082A	457253
310-308053-5	MW-44A	Total/NA	Ground Water	8082A	457253
LCS 310-457253/28-A	Lab Control Sample	Total/NA	Water	8082A	457253
310-308053-3 MS	MW-42A	Total/NA	Ground Water	8082A	457253
310-308053-3 MSD	MW-42A	Total/NA	Ground Water	8082A	457253

Analysis Batch: 457360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308053-1	MW-31A	Total/NA	Ground Water	8081B	457253
310-308053-3	MW-42A	Total/NA	Ground Water	8081B	457253
310-308053-4	MW-43A	Total/NA	Ground Water	8081B	457253
310-308053-5	MW-44A	Total/NA	Ground Water	8081B	457253

Prep Batch: 656849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308053-3	MW-42A	Total/NA	Ground Water	8151A	
310-308053-4	MW-43A	Total/NA	Ground Water	8151A	
310-308053-5	MW-44A	Total/NA	Ground Water	8151A	
MB 410-656849/1-A	Method Blank	Total/NA	Water	8151A	
LCS 410-656849/2-A - DL	Lab Control Sample	Total/NA	Water	8151A	
LCS 410-656849/2-A	Lab Control Sample	Total/NA	Water	8151A	
LCSD 410-656849/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	
LCSD 410-656849/3-A - DL	Lab Control Sample Dup	Total/NA	Water	8151A	

Analysis Batch: 657085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308053-3	MW-42A	Total/NA	Ground Water	8151A	656849

GC Semi VOA (Continued)

Analysis Batch: 657085 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308053-4	MW-43A	Total/NA	Ground Water	8151A	656849
310-308053-5	MW-44A	Total/NA	Ground Water	8151A	656849
MB 410-656849/1-A	Method Blank	Total/NA	Water	8151A	656849
LCS 410-656849/2-A	Lab Control Sample	Total/NA	Water	8151A	656849
LCS 410-656849/2-A - DL	Lab Control Sample	Total/NA	Water	8151A	656849
LCSD 410-656849/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	656849
LCSD 410-656849/3-A - DL	Lab Control Sample Dup	Total/NA	Water	8151A	656849

Metals

Prep Batch: 457031

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308053-1	MW-31A	Total/NA	Ground Water	3005A	
310-308053-2	MW-25A	Total/NA	Ground Water	3005A	
310-308053-3	MW-42A	Total/NA	Ground Water	3005A	
310-308053-4	MW-43A	Total/NA	Ground Water	3005A	
310-308053-5	MW-44A	Total/NA	Ground Water	3005A	
310-308053-6	Equipment Blank #1 Shallow	Total/NA	Ground Water	3005A	
MB 310-457031/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-457031/2-A	Lab Control Sample	Total/NA	Water	3005A	

Prep Batch: 457150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308053-3	MW-42A	Total/NA	Ground Water	7470A	
310-308053-4	MW-43A	Total/NA	Ground Water	7470A	
310-308053-5	MW-44A	Total/NA	Ground Water	7470A	
MB 310-457150/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-457150/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 457429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308053-3	MW-42A	Total/NA	Ground Water	7470A	457150
310-308053-4	MW-43A	Total/NA	Ground Water	7470A	457150
310-308053-5	MW-44A	Total/NA	Ground Water	7470A	457150
MB 310-457150/1-A	Method Blank	Total/NA	Water	7470A	457150
LCS 310-457150/2-A	Lab Control Sample	Total/NA	Water	7470A	457150

Analysis Batch: 458034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308053-1	MW-31A	Total/NA	Ground Water	6020B	457031
310-308053-2	MW-25A	Total/NA	Ground Water	6020B	457031
310-308053-3	MW-42A	Total/NA	Ground Water	6020B	457031
310-308053-4	MW-43A	Total/NA	Ground Water	6020B	457031
310-308053-5	MW-44A	Total/NA	Ground Water	6020B	457031
310-308053-6	Equipment Blank #1 Shallow	Total/NA	Ground Water	6020B	457031
MB 310-457031/1-A	Method Blank	Total/NA	Water	6020B	457031
LCS 310-457031/2-A	Lab Control Sample	Total/NA	Water	6020B	457031

General Chemistry

Prep Batch: 456818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308053-3	MW-42A	Total/NA	Ground Water	9012B	
310-308053-4	MW-43A	Total/NA	Ground Water	9012B	
310-308053-5	MW-44A	Total/NA	Ground Water	9012B	
MB 310-456818/1-A	Method Blank	Total/NA	Water	9012B	
LCS 310-456818/2-A	Lab Control Sample	Total/NA	Water	9012B	

Analysis Batch: 456876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308053-4	MW-43A	Total/NA	Ground Water	I-3765-85	
MB 310-456876/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-456876/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-308053-4 DU	MW-43A	Total/NA	Ground Water	I-3765-85	

Analysis Batch: 456878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308053-1	MW-31A	Total/NA	Ground Water	I-3765-85	
310-308053-2	MW-25A	Total/NA	Ground Water	I-3765-85	
310-308053-3	MW-42A	Total/NA	Ground Water	I-3765-85	
310-308053-5	MW-44A	Total/NA	Ground Water	I-3765-85	
310-308053-6	Equipment Blank #1 Shallow	Total/NA	Ground Water	I-3765-85	
MB 310-456878/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-456878/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Analysis Batch: 456889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308053-3	MW-42A	Total/NA	Ground Water	9012B	456818
310-308053-4	MW-43A	Total/NA	Ground Water	9012B	456818
310-308053-5	MW-44A	Total/NA	Ground Water	9012B	456818
MB 310-456818/1-A	Method Blank	Total/NA	Water	9012B	456818
LCS 310-456818/2-A	Lab Control Sample	Total/NA	Water	9012B	456818

Prep Batch: 659192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308053-3	MW-42A	Total/NA	Ground Water	9030B	
310-308053-4	MW-43A	Total/NA	Ground Water	9030B	
310-308053-5	MW-44A	Total/NA	Ground Water	9030B	
MB 240-659192/1-A	Method Blank	Total/NA	Water	9030B	
LCS 240-659192/2-A	Lab Control Sample	Total/NA	Water	9030B	
310-308053-3 MS	MW-42A	Total/NA	Ground Water	9030B	
310-308053-3 MSD	MW-42A	Total/NA	Ground Water	9030B	

Analysis Batch: 659249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308053-3	MW-42A	Total/NA	Ground Water	9034	659192
310-308053-4	MW-43A	Total/NA	Ground Water	9034	659192
310-308053-5	MW-44A	Total/NA	Ground Water	9034	659192
MB 240-659192/1-A	Method Blank	Total/NA	Water	9034	659192
LCS 240-659192/2-A	Lab Control Sample	Total/NA	Water	9034	659192
310-308053-3 MS	MW-42A	Total/NA	Ground Water	9034	659192
310-308053-3 MSD	MW-42A	Total/NA	Ground Water	9034	659192

Client: AECOM
Job ID: 310-308053-1
Project/Site: Winneshiek Groundwater Monitoring

Field Service / Mobile Lab

Analysis Batch: 456969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308053-1	MW-31A	Total/NA	Ground Water	Field Sampling	
310-308053-2	MW-25A	Total/NA	Ground Water	Field Sampling	
310-308053-3	MW-42A	Total/NA	Ground Water	Field Sampling	
310-308053-4	MW-43A	Total/NA	Ground Water	Field Sampling	
310-308053-5	MW-44A	Total/NA	Ground Water	Field Sampling	

Lab Chronicle

Client: AECOM
Job ID: 310-308053-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-31A
Lab Sample ID: 310-308053-1
Date Collected: 06/05/25 15:15
Matrix: Ground Water
Date Received: 06/06/25 08:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	457004	FE5V	EET CF	06/10/25 18:17
Total/NA	Analysis	8260D		1	457261	FE5V	EET CF	06/11/25 15:06
Total/NA	Prep	3511			457253	BW2O	EET CF	06/11/25 12:22
Total/NA	Analysis	8081B		1	457360	BW2O	EET CF	06/12/25 14:27
Total/NA	Prep	3005A			457031	WK2X	EET CF	06/10/25 09:00
Total/NA	Analysis	6020B		1	458034	NFT2	EET CF	06/18/25 13:03
Total/NA	Analysis	I-3765-85		1	456878	E6KR	EET CF	06/06/25 17:11
Total/NA	Analysis	Field Sampling		1	456969	FQT6	EET CF	06/05/25 15:15

Client Sample ID: MW-25A
Lab Sample ID: 310-308053-2
Date Collected: 06/05/25 16:30
Matrix: Ground Water
Date Received: 06/06/25 08:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	457004	FE5V	EET CF	06/10/25 18:40
Total/NA	Prep	3005A			457031	WK2X	EET CF	06/10/25 09:00
Total/NA	Analysis	6020B		1	458034	NFT2	EET CF	06/18/25 13:06
Total/NA	Analysis	I-3765-85		1	456878	E6KR	EET CF	06/06/25 17:11
Total/NA	Analysis	Field Sampling		1	456969	FQT6	EET CF	06/05/25 16:30

Client Sample ID: MW-42A
Lab Sample ID: 310-308053-3
Date Collected: 06/05/25 11:00
Matrix: Ground Water
Date Received: 06/06/25 08:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	456984	WSE8	EET CF	06/10/25 13:01
Total/NA	Prep	3510C			457250	J5BR	EET CF	06/11/25 12:12
Total/NA	Analysis	8270E		1	457998	D2YP	EET CF	06/18/25 15:19
Total/NA	Analysis	8015C		1	457223	BW2O	EET CF	06/11/25 16:20
Total/NA	Prep	3511			457253	BW2O	EET CF	06/11/25 12:22
Total/NA	Analysis	8081B		1	457360	BW2O	EET CF	06/12/25 14:40
Total/NA	Prep	3511			457253	BW2O	EET CF	06/11/25 12:22
Total/NA	Analysis	8082A		1	457358	BW2O	EET CF	06/12/25 14:40
Total/NA	Prep	8151A			656849	QJZ6	ELLE	06/12/25 15:00
Total/NA	Analysis	8151A		1	657085	UAMZ	ELLE	06/13/25 09:04
Total/NA	Prep	3005A			457031	WK2X	EET CF	06/10/25 09:00
Total/NA	Analysis	6020B		1	458034	NFT2	EET CF	06/18/25 13:14
Total/NA	Prep	7470A			457150	F5MW	EET CF	06/11/25 12:28
Total/NA	Analysis	7470A		1	457429	F5MW	EET CF	06/12/25 12:18
Total/NA	Prep	9012B			456818	ENB7	EET CF	06/06/25 11:01
Total/NA	Analysis	9012B		1	456889	ZJX4	EET CF	06/06/25 21:46
Total/NA	Prep	9030B			659192	C5SV	EET CLE	06/10/25 09:11
Total/NA	Analysis	9034		1	659249	C5SV	EET CLE	06/10/25 11:55
Total/NA	Analysis	I-3765-85		1	456878	E6KR	EET CF	06/06/25 17:11

Client Sample ID: MW-42A
Lab Sample ID: 310-308053-3

Date Collected: 06/05/25 11:00
Matrix: Ground Water
Date Received: 06/06/25 08:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Field Sampling		1	456969	FQT6	EET CF	06/05/25 11:00

Client Sample ID: MW-43A
Lab Sample ID: 310-308053-4

Date Collected: 06/05/25 12:30
Matrix: Ground Water
Date Received: 06/06/25 08:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	456984	WSE8	EET CF	06/10/25 13:27
Total/NA	Prep	3510C			457250	J5BR	EET CF	06/11/25 12:12
Total/NA	Analysis	8270E		1	457998	D2YP	EET CF	06/18/25 15:46
Total/NA	Analysis	8015C		1	457223	BW2O	EET CF	06/11/25 16:40
Total/NA	Prep	3511			457253	BW2O	EET CF	06/11/25 12:22
Total/NA	Analysis	8081B		1	457360	BW2O	EET CF	06/12/25 14:53
Total/NA	Prep	3511			457253	BW2O	EET CF	06/11/25 12:22
Total/NA	Analysis	8082A		1	457358	BW2O	EET CF	06/12/25 14:53
Total/NA	Prep	8151A			656849	QJZ6	ELLE	06/12/25 15:00
Total/NA	Analysis	8151A		1	657085	UAMZ	ELLE	06/13/25 09:32
Total/NA	Prep	3005A			457031	WK2X	EET CF	06/10/25 09:00
Total/NA	Analysis	6020B		1	458034	NFT2	EET CF	06/18/25 13:17
Total/NA	Prep	7470A			457150	F5MW	EET CF	06/11/25 12:28
Total/NA	Analysis	7470A		1	457429	F5MW	EET CF	06/12/25 12:20
Total/NA	Prep	9012B			456818	ENB7	EET CF	06/06/25 11:01
Total/NA	Analysis	9012B		1	456889	ZJX4	EET CF	06/06/25 21:42
Total/NA	Prep	9030B			659192	C5SV	EET CLE	06/10/25 09:11
Total/NA	Analysis	9034		1	659249	C5SV	EET CLE	06/10/25 11:55
Total/NA	Analysis	I-3765-85		1	456876	E6KR	EET CF	06/06/25 16:37
Total/NA	Analysis	Field Sampling		1	456969	FQT6	EET CF	06/05/25 12:30

Client Sample ID: MW-44A
Lab Sample ID: 310-308053-5

Date Collected: 06/05/25 13:30
Matrix: Ground Water
Date Received: 06/06/25 08:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	456984	WSE8	EET CF	06/10/25 13:49
Total/NA	Prep	3510C			457250	J5BR	EET CF	06/11/25 12:12
Total/NA	Analysis	8270E		1	457998	D2YP	EET CF	06/18/25 16:12
Total/NA	Analysis	8015C		1	457223	BW2O	EET CF	06/11/25 17:00
Total/NA	Prep	3511			457253	BW2O	EET CF	06/11/25 12:22
Total/NA	Analysis	8081B		1	457360	BW2O	EET CF	06/12/25 15:06
Total/NA	Prep	3511			457253	BW2O	EET CF	06/11/25 12:22
Total/NA	Analysis	8082A		1	457358	BW2O	EET CF	06/12/25 15:06
Total/NA	Prep	8151A			656849	QJZ6	ELLE	06/12/25 15:00
Total/NA	Analysis	8151A		1	657085	UAMZ	ELLE	06/13/25 10:00

Lab Chronicle

Client: AECOM
Job ID: 310-308053-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-44A
Lab Sample ID: 310-308053-5
Date Collected: 06/05/25 13:30
Matrix: Ground Water
Date Received: 06/06/25 08:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			457031	WK2X	EET CF	06/10/25 09:00
Total/NA	Analysis	6020B		1	458034	NFT2	EET CF	06/18/25 13:20
Total/NA	Prep	7470A			457150	F5MW	EET CF	06/11/25 12:28
Total/NA	Analysis	7470A		1	457429	F5MW	EET CF	06/12/25 12:22
Total/NA	Prep	9012B			456818	ENB7	EET CF	06/06/25 11:01
Total/NA	Analysis	9012B		1	456889	ZJX4	EET CF	06/06/25 21:42
Total/NA	Prep	9030B			659192	C5SV	EET CLE	06/10/25 09:11
Total/NA	Analysis	9034		1	659249	C5SV	EET CLE	06/10/25 11:55
Total/NA	Analysis	I-3765-85		1	456878	E6KR	EET CF	06/06/25 17:11
Total/NA	Analysis	Field Sampling		1	456969	FQT6	EET CF	06/05/25 13:30

Client Sample ID: Equipment Blank #1 Shallow
Lab Sample ID: 310-308053-6
Date Collected: 06/05/25 11:30
Matrix: Ground Water
Date Received: 06/06/25 08:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	457004	FE5V	EET CF	06/10/25 19:03
Total/NA	Prep	3005A			457031	WK2X	EET CF	06/10/25 09:00
Total/NA	Analysis	6020B		1	458034	NFT2	EET CF	06/18/25 13:23
Total/NA	Analysis	I-3765-85		1	456878	E6KR	EET CF	06/06/25 17:11

Client Sample ID: Trip Blank
Lab Sample ID: 310-308053-7
Date Collected: 06/05/25 08:00
Matrix: Water
Date Received: 06/06/25 08:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	457004	FE5V	EET CF	06/10/25 13:20

Client Sample ID: Trip Blank
Lab Sample ID: 310-308053-8
Date Collected: 06/05/25 00:00
Matrix: Water
Date Received: 06/06/25 08:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	457004	FE5V	EET CF	06/10/25 13:43

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: AECOM
Job ID: 310-308053-1
Project/Site: Winneshiek Groundwater Monitoring

Laboratory: Eurofins Cedar Falls

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260D		Ground Water	1,2,4-Trichlorobenzene
8260D		Ground Water	Allyl chloride
8260D		Ground Water	Ethyl methacrylate
8260D		Ground Water	m,p-Xylene
8260D		Ground Water	o-Xylene
Field Sampling		Ground Water	Field Turbidity

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25 *
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-25

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-26
A2LA	Dept. of Energy	0001.01	11-30-26
A2LA	ISO/IEC 17025	0001.01	11-30-26
Alabama	State	43200	01-31-26
Alaska	State	PA00009	06-30-25
Alaska (UST)	State	17-027	12-30-26
Arizona	State	AZ0780	03-12-26
Arkansas DEQ	State	88-00660	08-09-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: AECOM
Job ID: 310-308053-1
Project/Site: Winneshiek Groundwater Monitoring

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2792	01-31-26
Colorado	State	PA00009	06-30-25
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-26
Delaware (DW)	State	N/A	01-31-26
Florida	NELAP	E87997	06-30-25
Georgia (DW)	State	C048	01-31-26
Illinois	NELAP	200027	01-31-26
Iowa	State	361	03-01-26
Kansas	NELAP	E-10151	10-31-25
Kentucky (DW)	State	KY90088	12-31-25
Kentucky (UST)	State	0001.01	11-30-26
Kentucky (WW)	State	KY90088	12-31-25
Louisiana (All)	NELAP	02055	06-30-25
Maine	State	2019012	03-12-27
Maryland	State	100	06-30-25
Massachusetts	State	M-PA009	06-30-26
Michigan	State	9930	01-31-26
Minnesota	NELAP	042-999-487	12-31-25
Mississippi	State	023	01-31-26
Missouri	State	450	01-31-28
Montana (DW)	State	0098	01-01-26
Nebraska	State	NE-OS-32-17	01-31-26
New Hampshire	NELAP	2730	01-10-26
New Jersey	NELAP	PA011	06-30-25
New York	NELAP	10670	04-01-26
North Carolina (DW)	State	42705	07-31-25
North Carolina (WW/SW)	State	521	12-31-25
North Dakota	State	R-205	01-31-24 *
Oklahoma	NELAP	9804	08-31-25
Oregon	NELAP	PA200001	09-11-25
Pennsylvania	NELAP	36-00037	01-31-26
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-29
Rhode Island	State	LAO00338	12-30-25
South Carolina	State	89002	01-31-26
Tennessee	State	02838	01-31-26
Texas	NELAP	T104704194-23-46	08-31-25
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-25
Virginia	NELAP	460182	06-14-26
Washington	State	C457	04-11-26
West Virginia (DW)	State	9906 C	03-31-26
West Virginia DEP	State	055	06-15-25
Wyoming	State	8TMS-L	01-31-26
Wyoming (UST)	A2LA	0001.01	11-30-26

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: AECOM
Job ID: 310-308053-1
Project/Site: Winneshiek Groundwater Monitoring

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET CF
8015C	Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)	SW846	EET CF
8081B	Organochlorine Pesticides (GC)	SW846	EET CF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CF
8151A	Herbicides (GC)	SW846	ELLE
6020B	Metals (ICP/MS)	SW846	EET CF
7470A	Mercury (CVAA)	SW846	EET CF
9012B	Cyanide, Total andor Amenable	SW846	EET CF
9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	EET CLE
I-3765-85	Residue, Non-filterable (TSS)	USGS	EET CF
Field Sampling	Field Sampling	EPA	EET CF
3005A	Preparation, Total Metals	SW846	EET CF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CF
3511	Microextraction of Organic Compounds	SW846	EET CF
5030B	Purge and Trap	SW846	EET CF
7470A	Preparation, Mercury	SW846	EET CF
8151A	Extraction (Herbicides)	SW846	ELLE
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	EET CF
9030B	Sulfide, Distillation (Acid Soluble and Insoluble)	SW846	EET CLE

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

USGS = "Methods For Analysis Of Water And Fluvial Sediments", USGS, 1989

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

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310-308053 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: AECOM

City/State: CITY Waterloo STATE IA Project:

Receipt Information

Date/Time Received. DATE 6-6-25 TIME 820 Received By: PH

Delivery Type. ☑ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee
☐ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers

Sample(s) received in Cooler? ☑ Yes ☐ No *If yes:* Cooler ID.

~~Multiple Coolers?~~ ☑ Yes ☐ No *If yes:* Cooler # 1 of 2

Cooler Custody Seals Present? ☐ Yes ☑ No *If yes:* Cooler custody seals intact? ☐ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☑ No *If yes:* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☑ Yes ☐ No *If yes:* Which VOA samples are in cooler? ↓

MW-31A, H2A, Eq blank #1 shallow, MW-25A

Temperature Record

Coolant. ☑ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other._____ ☐ NONE

Thermometer ID: AA Correction Factor (°C): 0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): -1.1 Corrected Temp (°C): -1.1

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e g , bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☑ No

NOTE. If yes, contact PM before proceeding If no, proceed with login

Additional Comments

eurofins | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: AECOM

City/State: CITY Waterloo STATE IA Project:

Receipt Information

Date/Time Received: DATE 6-6-25 TIME 820 Received By PH

Delivery Type: ☒ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☐ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers

Sample(s) received in Cooler? ☒ Yes ☐ No *If yes:* Cooler ID.

Multiple Coolers? ☒ Yes ☐ No *If yes:* Cooler # 2 of 2

Cooler Custody Seals Present? ☐ Yes ☒ No *If yes:* Cooler custody seals intact? ☐ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☒ No *If yes:* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☒ Yes ☐ No *If yes:* Which VOA samples are in cooler? ↓

MW-47A, 44A,

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: AA Correction Factor (°C): 0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 0.5 Corrected Temp (°C): 0.5

• **Sample Container Temperature**

Container(s) used:	CONTAINER 1	CONTAINER 2
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e g , bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding If no, proceed with login

Additional Comments

Eurofins TestAmerica, Cedar Falls
704 Enterprise Drive

Cedar Falls, IA 50613
phone 319 277.2401 fax 319 277.2425

Chain of Custody Record

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: **Iowa DNR**

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nick Schrock	Site Contact:	Date: 6-5-25	COC No
AECOM	Email nick.schrock@aecom com	Lab Contact:	Carrier:	1 of 2 COCs
501 Sycamore St., Suite 222	Tel/Fax: (319)874-6581/(217)273-0978			Sampler
Waterloo, IA 50703	Analysis Turnaround Time			For Lab Use Only:
(319)232-6531 Phone	☑ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(319)232-0271 FAX	TAT if different from Below			Lab Sampling
Project Name Winneshiek Groundwater Monitoring	☑ 2 weeks			
Site Winneshiek County Landfill	☐ 1 week			Job / SDG No
P O #	☑ 2 days ☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TSS	Appendix I Metals and VOCs	Endosulfan I	Sulfide	Sample Specific Notes
MW-31A	6-5-25	1515	G	GW	9	N		X	X	X		Turbidity - 8.14 NTU
MW-25A	6-5-25	1630	G	GW	5	N		X	X			Turbidity - 1.56 NTU
MW-101			G	GW		N		X	X			
MW-29A			G	GW		N		X	X		X	
MW-22			G	GW		N		X	X			
MW-7A			G	GW		N		X	X			
MW-46A			G	GW		N		X	X			
MW-45A			G	GW		N		X	X			
MW-45A-FD			G	GW		N		X	X			
MW-4B			G	GW		N		X	X			
MW-4			G	GW		N		X	X			
Equipment Blank #2 Deep			G	GW		N		X	X			

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No		Cooler Temp (°C) Obs'd _____ Corr'd _____		Therm ID No _____
Relinquished by: Ben Porter	Company: Aecom	Date/Time: 6-5-25	Received by: Nate Kilburg	Company: AECOM	Date/Time: 6/5/2025
Relinquished by: Nate Kilburg	Company: AECOM	Date/Time: 6/6/25 9:09	Received by:	Company:	Date/Time: 6/6/25 / 9:09

6/19/2025

Chain of Custody Record

Eurofins TestAmerica, Cedar Falls
704 Enterprise Drive

Cedar Falls, IA 50613
phone 319 277.2401 fax 319.277 2425

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: **Iowa DNR**

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nick Schrock	Site Contact:	Date: 6-5-25	COC No
AECOM	Email nick.schrock@aecom com	Lab Contact:	Carrier:	2 of 2 COCs
501 Sycamore St., Suite 222	Tel/Fax: (319)874-6581/(217)273-0978			Sampler:
Waterloo, IA 50703	Analysis Turnaround Time			For Lab Use Only:
(319)232-6531 Phone	☑ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(319)232-0271 FAX	TAT if different from Below _____			Lab Sampling
Project Name Winneshiek Groundwater Monitoring	☑ 2 weeks			Job / SDG No
Site Winneshiek County Landfill	☐ 1 week			
P O #	☐ 2 days ☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TSS	Appendix I Metals and VOCs	Appendix II	Sample Specific Notes
MW-41A			G	GW		N		X	X		
MW-35			G	GW		N		X	X		
MW-38A			G	GW		N		X	X		
MW-39A			G	GW		N		X	X		
MW-40A			G	GW		N		X	X		
MW-42A	6-5-25	1100	G	GW	21	N		X		X	Turbidity - 24.38 NTU
MW-43A	6-5-25	1230	G	GW	21	N		X		X	Turbidity - 27.15 NTU
MW-44A	6-5-25	1330	G	GW	21	N		X		X	Turbidity - 3.04 NTU
MW-11	~~6-5-25~~		G	GW		N		X	X		
Equipment Blank #1	6-5-25	1130	G	W	5	N		X	X		
Trip Blank	6-5-25	0800	G	W	2	N			X		

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No | Cooler Temp (°C) Obs'd _____ Corr'd _____ Therm ID No _____

Relinquished by: Ben Porter	Company: Aecom	Date/Time: 6-5-25	Received by: Nate Kilburg	Company: AECOM	Date/Time: 6/5/2025
Relinquished by: Nate Kilburg	Company: AECOM	Date/Time: 6/6/25 9:08	Received by:	Company:	Date/Time: 6/6/25 9:07
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

6/19/2025

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Phone: 319-277-2401 Fax: 319-277-2425

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Bindert, Zach T	Carrier Tracking No(s): N/A	COC No: 310-83723.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Zach.Bindert@et.eurofinsus.com	State of Origin: Iowa	Page: Page 1 of 1
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): State Program - Iowa		Job #: 310-308053-1
Address: 180 S. Van Buren Avenue,	Due Date Requested: 6/19/2025			
City: Barberton	TAT Requested (days): N/A			
State, Zip: OH, 44203				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Winneshiek County Landfill - Groundwater	Project #: 31017151			
Site: 310 - AECOM - Winneshiek County	SSOW#: N/A			

Analysis Requested

Preservation Codes:
-

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc/9030B Sulfide	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-42A (310-308053-3)	6/5/25	11:00 Central	G	Water			X	1	
MW-43A (310-308053-4)	6/5/25	12:30 Central	G	Water			X	1	
MW-44A (310-308053-5)	6/5/25	13:30 Central	G	Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		6/6/25 1535		MÄLISSÄ LOAR	6-7-25 9:36	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins – Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client Eve Cedar Falls Site Name _____ Cooler unpacked by MALISSA LOAR

Cooler Received on 6-7-25 Opened on 6-9-25

FedEx. 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

Receipt After-hours Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # Eve Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # 17 (CF) +0.2 °C) Observed Cooler Temp 4.2 °C Corrected Cooler Temp. 4.4 °C

2.	Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity _____	Yes No
	-Were the seals on the outside of the cooler(s) signed & dated?	Yes No NA
	-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes No
	-Were tamper/custody seals intact and uncompromised?	Yes No NA
3	Shippers' packing slip attached to the cooler(s)?	Yes No
4	Did custody papers accompany the sample(s)?	Yes No
5	Were the custody papers relinquished & signed in the appropriate place?	Yes No
6	Was/were the person(s) who collected the samples clearly identified on the COC?	Yes No
7	Did all bottles arrive in good condition (Unbroken)?	Yes No
8	Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes No
9	For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?	
10	Were correct bottle(s) used for the test(s) indicated?	Yes No
11	Sufficient quantity received to perform indicated analyses?	Yes No
12	Are these work share samples and all listed on the COC?	Yes No
	If yes, Questions 13-17 have been checked at the originating laboratory	
13	Were all preserved sample(s) at the correct pH upon receipt?	Yes No NA pH Strip Lot# HC463162
14	Were VOAs on the COC?	Yes No
15	Were air bubbles >6 mm in any VOA vials? ● ← Larger than this	Yes No NA
16	Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes No
17	Was a LL Hg or Me Hg trip blank present? _____	Yes No

Tests that are not checked for pH by Receiving

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:

Labels Verified by:

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved. _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation - Date/Time VOAs Frozen _____



Part # 159469-434 RRDB2 EXP 02/26

ORIGIN ID ALOA (319) 277-2401
SAMPLE RECEIVING
EUROFINS TESTAMERICA
3019 VENTURE WAY

CEDAR FALLS, IA 50613
UNITED STATES US

SHIP DATE 06JUN25
ACTWGT 24 25 LB
CAD 0070970/CAFE3855

BILL SENDER

TO SHIPPING/RECEIVING
EUROFINS ENVIRONMENT TESTING NORTH
180 S. VAN BUREN AVENUE

BARBERTON OH 44203
(330) 497-9396
REF: S310-107387

599C5/8E74/FE2D

FedEx Express

J243824670481UV

TRK# 0201 4085 8619 7030

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO CAKA

44203
OH-US CLE

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Phone: 319-277-2401 Fax: 319-277-2425

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Bindert, Zach T	Carrier Tracking No(s): N/A	COC No: 310-83721.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Zach.Bindert@et.eurofinsus.com	State of Origin: Iowa	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): State Program - Iowa		Job #: 310-308053-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 6/19/2025			Preservation Codes: -
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Winneshiek County Landfill - Groundwater	Project #: 31017151			
Site: 310 - AECOM - Winneshiek County	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8151A/8151A_AP Default List	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-42A (310-308053-3)	6/5/25	11:00 Central	G	Water			X	2	
MW-43A (310-308053-4)	6/5/25	12:30 Central	G	Water			X	2	
MW-44A (310-308053-5)	6/5/25	13:30 Central	G	Water			X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 6/6/25 15:15	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 6/7/25 10:35	Company ECLEP

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.5 - C2.4

MB

Login Sample Receipt Checklist

Client: AECOM

Job Number: 310-308053-1

Login Number: 308053

List Number: 1

Creator: Homolar, Dana J

List Source: Eurofins Cedar Falls

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	False	No ambers for sample 1 for endosulfan I
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: AECOM

Job Number: 310-308053-1

Login Number: 308053
List Number: 3
Creator: Loar, Malissa

List Source: Eurofins Cleveland
List Creation: 06/09/25 10:18 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time (excluding tests with immediate HTs)		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Login Sample Receipt Checklist

Client: AECOM

Job Number: 310-308053-1

Login Number: 308053
List Number: 2
Creator: Ballard, Megan

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 06/07/25 02:22 PM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

ANALYTICAL REPORT

PREPARED FOR

Attn: Nick Schrock
AECOM
501 Sycamore Street
Suite #222
Waterloo, Iowa 50703

Generated 6/24/2025 11:19:35 AM

JOB DESCRIPTION

Winneshiek Groundwater Monitoring
2025 Spring Groundwater

JOB NUMBER

310-308221-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
6/24/2025 11:19:35 AM

Authorized for release by
Zach Bindert, Senior Project Manager
Zach.Bindert@et.eurofinsus.com
(319)595-2016

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Job Narrative
310-308221-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 6/7/2025 7:50 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.3°C.

GC/MS VOA
Method 8260D: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following sample(s) was received preserved with hydrochloric acid. Vial preservation was pH <2 rather than pH 4-5. : MW-101 (310-308221-1) and MW-29A (310-308221-2). The requested target analyte list includes Acrylonitrile.

Method 8260D: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following sample was received preserved with hydrochloric acid. Vial preservation was pH <2 rather than pH 4-5. : MW-22 (310-308221-3), MW-7A (310-308221-4), MW-46A (310-308221-5), MW-45A (310-308221-6) and MW-45A-FD (310-308221-7). The requested target analyte list includes Acrylonitrile.

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-457140 recovered outside of the control limits for trans-1,3-Dichloropropene (-20.7%D). The LCS associated with this CCV passed CCV criteria for the affected analyte; therefore, the data have been reported. The associated sample is:(CCV 310-457140/3).

Method 8260D: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following sample was received preserved with hydrochloric acid. Vial preservation was pH <2 rather than pH 4-5. : Equipment Blank #2 Deep (310-308221-8) and Trip Blank (310-308221-9). The requested target analyte list includes Acrylonitrile.

Method 8260D: The method requirement for no headspace was not met. The following volatile sample was analyzed with headspace in the sample container: Trip Blank (310-308221-9).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B: The continuing calibration verification (CCV) associated with batch 310-458381 recovered above the upper control limit for Silver, Cadmium. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 6020B: The continuing calibration verification (CCV) associated with batch 310-458381 recovered above the upper control limit for Silver. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Field Service / Mobile Lab
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: AECOM
Job ID: 310-308221-1
Project/Site: Winneshiek Groundwater Monitoring

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-308221-1	MW-101	Ground Water	06/06/25 10:30	06/07/25 07:50
310-308221-2	MW-29A	Ground Water	06/06/25 11:30	06/07/25 07:50
310-308221-3	MW-22	Ground Water	06/06/25 13:00	06/07/25 07:50
310-308221-4	MW-7A	Ground Water	06/06/25 13:50	06/07/25 07:50
310-308221-5	MW-46A	Ground Water	06/06/25 15:10	06/07/25 07:50
310-308221-6	MW-45A	Ground Water	06/06/25 16:15	06/07/25 07:50
310-308221-7	MW-45A-FD	Groundwater	06/06/25 16:25	06/07/25 07:50
310-308221-8	Equipment Blank #2 Deep	Ground Water	06/06/25 13:10	06/07/25 07:50
310-308221-9	Trip Blank	Water	06/06/25 08:00	06/07/25 07:50

Detection Summary

Client: AECOM
Job ID: 310-308221-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-101 — Lab Sample ID: 310-308221-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	171		2.00	0.660	ug/L	1		6020B	Total/NA
Nickel	7.93		5.00	2.30	ug/L	1		6020B	Total/NA
Total Suspended Solids	1.63	J	1.88	1.31	mg/L	1		I-3765-85	Total/NA
Field Turbidity	2.17				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-29A — Lab Sample ID: 310-308221-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.91	J	2.00	0.530	ug/L	1		6020B	Total/NA
Barium	130		2.00	0.660	ug/L	1		6020B	Total/NA
Cobalt	3.47		0.500	0.170	ug/L	1		6020B	Total/NA
Nickel	54.0		5.00	2.30	ug/L	1		6020B	Total/NA
Total Suspended Solids	2.25		1.88	1.31	mg/L	1		I-3765-85	Total/NA
Field Turbidity	12.60				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-22 — Lab Sample ID: 310-308221-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.660	J	2.00	0.530	ug/L	1		6020B	Total/NA
Barium	155		2.00	0.660	ug/L	1		6020B	Total/NA
Nickel	5.24		5.00	2.30	ug/L	1		6020B	Total/NA
Field Turbidity	1.52				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-7A — Lab Sample ID: 310-308221-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	176		2.00	0.660	ug/L	1		6020B	Total/NA
Chromium	3.29	J	5.00	1.80	ug/L	1		6020B	Total/NA
Total Suspended Solids	2.00		1.88	1.31	mg/L	1		I-3765-85	Total/NA
Field Turbidity	2.33				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-46A — Lab Sample ID: 310-308221-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.640	J	2.00	0.530	ug/L	1		6020B	Total/NA
Barium	245		2.00	0.660	ug/L	1		6020B	Total/NA
Cobalt	0.178	J	0.500	0.170	ug/L	1		6020B	Total/NA
Nickel	24.0		5.00	2.30	ug/L	1		6020B	Total/NA
Total Suspended Solids	25.5		1.88	1.31	mg/L	1		I-3765-85	Total/NA
Field Turbidity	10.97				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-45A — Lab Sample ID: 310-308221-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	136		2.00	0.660	ug/L	1		6020B	Total/NA
Cobalt	0.329	J	0.500	0.170	ug/L	1		6020B	Total/NA
Total Suspended Solids	1.88		1.88	1.31	mg/L	1		I-3765-85	Total/NA
Field Turbidity	2.98				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-45A-FD — Lab Sample ID: 310-308221-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	137		2.00	0.660	ug/L	1		6020B	Total/NA
Cobalt	0.322	J	0.500	0.170	ug/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-45A-FD (Continued)
Lab Sample ID: 310-308221-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	3.87		1.88	1.31	mg/L	1		I-3765-85	Total/NA

Client Sample ID: Equipment Blank #2 Deep
Lab Sample ID: 310-308221-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bromodichloromethane	1.36		1.00	0.390	ug/L	1		8260D	Total/NA
Bromoform	2.99	J	5.00	0.780	ug/L	1		8260D	Total/NA
Chlorodibromomethane	3.94	J	5.00	0.750	ug/L	1		8260D	Total/NA
Chloroform	1.36	J	3.00	1.30	ug/L	1		8260D	Total/NA
Barium	74.3		2.00	0.660	ug/L	1		6020B	Total/NA

Client Sample ID: Trip Blank
Lab Sample ID: 310-308221-9

No Detections.

Client: AECOM
Project/Site: Winneshiek Groundwater Monitoring

Job ID: 310-308221-1

Client Sample ID: MW-101
Date Collected: 06/06/25 10:30
Date Received: 06/07/25 07:50

Lab Sample ID: 310-308221-1
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/10/25 16:50	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/10/25 16:50	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/10/25 16:50	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/10/25 16:50	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/10/25 16:50	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/10/25 16:50	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/10/25 16:50	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/10/25 16:50	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/10/25 16:50	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/10/25 16:50	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/10/25 16:50	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/10/25 16:50	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/10/25 16:50	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/10/25 16:50	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/10/25 16:50	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/10/25 16:50	1
Acetone	<3.10		10.0	3.10	ug/L			06/10/25 16:50	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/10/25 16:50	1
Benzene	<0.220		0.500	0.220	ug/L			06/10/25 16:50	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/10/25 16:50	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/10/25 16:50	1
Bromoform	<0.780		5.00	0.780	ug/L			06/10/25 16:50	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/10/25 16:50	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/10/25 16:50	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/10/25 16:50	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/10/25 16:50	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/10/25 16:50	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/10/25 16:50	1
Chloroform	<1.30		3.00	1.30	ug/L			06/10/25 16:50	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/10/25 16:50	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/10/25 16:50	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/10/25 16:50	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/10/25 16:50	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/10/25 16:50	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/10/25 16:50	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/10/25 16:50	1
Styrene	<0.370		1.00	0.370	ug/L			06/10/25 16:50	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/10/25 16:50	1
Toluene	<0.430		1.00	0.430	ug/L			06/10/25 16:50	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/10/25 16:50	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/10/25 16:50	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/10/25 16:50	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/10/25 16:50	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/10/25 16:50	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/10/25 16:50	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/10/25 16:50	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/10/25 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*111*		*76 - 130*		*06/10/25 16:50*	*1*

Client: AECOM
Job ID: 310-308221-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-101
Lab Sample ID: 310-308221-1
Date Collected: 06/06/25 10:30
Matrix: Ground Water
Date Received: 06/07/25 07:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*80 - 120*		*06/10/25 16:50*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*06/10/25 16:50*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/13/25 09:00	06/21/25 17:47	1
Arsenic	<0.530		2.00	0.530	ug/L		06/13/25 09:00	06/21/25 17:47	1
Barium	**171**		2.00	0.660	ug/L		06/13/25 09:00	06/21/25 17:47	1
Beryllium	<0.330		1.00	0.330	ug/L		06/13/25 09:00	06/21/25 17:47	1
Cadmium	<0.100	^+	0.200	0.100	ug/L		06/13/25 09:00	06/21/25 17:47	1
Chromium	<1.80		5.00	1.80	ug/L		06/13/25 09:00	06/21/25 17:47	1
Cobalt	<0.170		0.500	0.170	ug/L		06/13/25 09:00	06/21/25 17:47	1
Copper	<3.20		5.00	3.20	ug/L		06/13/25 09:00	06/21/25 17:47	1
Lead	<0.330		0.500	0.330	ug/L		06/13/25 09:00	06/21/25 17:47	1
Nickel	**7.93**		5.00	2.30	ug/L		06/13/25 09:00	06/21/25 17:47	1
Selenium	<1.40		5.00	1.40	ug/L		06/13/25 09:00	06/21/25 17:47	1
Silver	<0.500	^+	1.00	0.500	ug/L		06/13/25 09:00	06/21/25 17:47	1
Thallium	<0.570		1.00	0.570	ug/L		06/13/25 09:00	06/21/25 17:47	1
Vanadium	<1.70		5.00	1.70	ug/L		06/13/25 09:00	06/21/25 17:47	1
Zinc	<13.0		20.0	13.0	ug/L		06/13/25 09:00	06/21/25 17:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**1.63**	**J**	1.88	1.31	mg/L			06/10/25 15:36	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**2.17**				NTU			06/06/25 10:30	1

Client: AECOM
Project/Site: Winneshiek Groundwater Monitoring

Job ID: 310-308221-1

Client Sample ID: MW-29A
Date Collected: 06/06/25 11:30
Date Received: 06/07/25 07:50

Lab Sample ID: 310-308221-2
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/10/25 17:13	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/10/25 17:13	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/10/25 17:13	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/10/25 17:13	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/10/25 17:13	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/10/25 17:13	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/10/25 17:13	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/10/25 17:13	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/10/25 17:13	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/10/25 17:13	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/10/25 17:13	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/10/25 17:13	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/10/25 17:13	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/10/25 17:13	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/10/25 17:13	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/10/25 17:13	1
Acetone	<3.10		10.0	3.10	ug/L			06/10/25 17:13	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/10/25 17:13	1
Benzene	<0.220		0.500	0.220	ug/L			06/10/25 17:13	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/10/25 17:13	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/10/25 17:13	1
Bromoform	<0.780		5.00	0.780	ug/L			06/10/25 17:13	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/10/25 17:13	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/10/25 17:13	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/10/25 17:13	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/10/25 17:13	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/10/25 17:13	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/10/25 17:13	1
Chloroform	<1.30		3.00	1.30	ug/L			06/10/25 17:13	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/10/25 17:13	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/10/25 17:13	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/10/25 17:13	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/10/25 17:13	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/10/25 17:13	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/10/25 17:13	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/10/25 17:13	1
Styrene	<0.370		1.00	0.370	ug/L			06/10/25 17:13	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/10/25 17:13	1
Toluene	<0.430		1.00	0.430	ug/L			06/10/25 17:13	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/10/25 17:13	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/10/25 17:13	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/10/25 17:13	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/10/25 17:13	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/10/25 17:13	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/10/25 17:13	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/10/25 17:13	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/10/25 17:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*109*		*76 - 130*		*06/10/25 17:13*	*1*

Client: AECOM
Job ID: 310-308221-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-29A
Lab Sample ID: 310-308221-2
Date Collected: 06/06/25 11:30
Matrix: Ground Water
Date Received: 06/07/25 07:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*90*		*80 - 120*		*06/10/25 17:13*	*1*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*06/10/25 17:13*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/13/25 09:00	06/21/25 17:49	1
Arsenic	**1.91**	**J**	2.00	0.530	ug/L		06/13/25 09:00	06/21/25 17:49	1
Barium	**130**		2.00	0.660	ug/L		06/13/25 09:00	06/21/25 17:49	1
Beryllium	<0.330		1.00	0.330	ug/L		06/13/25 09:00	06/21/25 17:49	1
Cadmium	<0.100	^+	0.200	0.100	ug/L		06/13/25 09:00	06/21/25 17:49	1
Chromium	<1.80		5.00	1.80	ug/L		06/13/25 09:00	06/21/25 17:49	1
Cobalt	**3.47**		0.500	0.170	ug/L		06/13/25 09:00	06/21/25 17:49	1
Copper	<3.20		5.00	3.20	ug/L		06/13/25 09:00	06/21/25 17:49	1
Lead	<0.330		0.500	0.330	ug/L		06/13/25 09:00	06/21/25 17:49	1
Nickel	**54.0**		5.00	2.30	ug/L		06/13/25 09:00	06/21/25 17:49	1
Selenium	<1.40		5.00	1.40	ug/L		06/13/25 09:00	06/21/25 17:49	1
Silver	<0.500	^+	1.00	0.500	ug/L		06/13/25 09:00	06/21/25 17:49	1
Thallium	<0.570		1.00	0.570	ug/L		06/13/25 09:00	06/21/25 17:49	1
Vanadium	<1.70		5.00	1.70	ug/L		06/13/25 09:00	06/21/25 17:49	1
Zinc	<13.0		20.0	13.0	ug/L		06/13/25 09:00	06/21/25 17:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide (SW846 9034)	<1410		3000	1410	ug/L		06/12/25 07:36	06/12/25 08:48	1
Total Suspended Solids (USGS I-3765-85)	**2.25**		1.88	1.31	mg/L			06/11/25 12:06	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**12.60**				NTU			06/06/25 11:30	1

Client: AECOM
Job ID: 310-308221-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-22
Lab Sample ID: 310-308221-3
Date Collected: 06/06/25 13:00
Matrix: Ground Water
Date Received: 06/07/25 07:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/11/25 02:35	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/11/25 02:35	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/11/25 02:35	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/11/25 02:35	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/11/25 02:35	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/11/25 02:35	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/11/25 02:35	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/11/25 02:35	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/11/25 02:35	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/11/25 02:35	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/11/25 02:35	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/11/25 02:35	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/11/25 02:35	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/11/25 02:35	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/11/25 02:35	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/11/25 02:35	1
Acetone	<3.10		10.0	3.10	ug/L			06/11/25 02:35	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/11/25 02:35	1
Benzene	<0.220		0.500	0.220	ug/L			06/11/25 02:35	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/11/25 02:35	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/11/25 02:35	1
Bromoform	<0.780		5.00	0.780	ug/L			06/11/25 02:35	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/11/25 02:35	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/11/25 02:35	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/11/25 02:35	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/11/25 02:35	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/11/25 02:35	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/11/25 02:35	1
Chloroform	<1.30		3.00	1.30	ug/L			06/11/25 02:35	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/11/25 02:35	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/11/25 02:35	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/11/25 02:35	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/11/25 02:35	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/11/25 02:35	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/11/25 02:35	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/11/25 02:35	1
Styrene	<0.370		1.00	0.370	ug/L			06/11/25 02:35	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/11/25 02:35	1
Toluene	<0.430		1.00	0.430	ug/L			06/11/25 02:35	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/11/25 02:35	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/11/25 02:35	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/11/25 02:35	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/11/25 02:35	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/11/25 02:35	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/11/25 02:35	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/11/25 02:35	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/11/25 02:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*107*		*76 - 130*		*06/11/25 02:35*	*1*

Client Sample ID: MW-22
Lab Sample ID: 310-308221-3
Date Collected: 06/06/25 13:00
Matrix: Ground Water
Date Received: 06/07/25 07:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*80 - 120*		*06/11/25 02:35*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*06/11/25 02:35*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/13/25 09:00	06/21/25 17:58	1
Arsenic	**0.660**	**J**	2.00	0.530	ug/L		06/13/25 09:00	06/21/25 17:58	1
Barium	**155**		2.00	0.660	ug/L		06/13/25 09:00	06/21/25 17:58	1
Beryllium	<0.330		1.00	0.330	ug/L		06/13/25 09:00	06/21/25 17:58	1
Cadmium	<0.100	^+	0.200	0.100	ug/L		06/13/25 09:00	06/21/25 17:58	1
Chromium	<1.80		5.00	1.80	ug/L		06/13/25 09:00	06/21/25 17:58	1
Cobalt	<0.170		0.500	0.170	ug/L		06/13/25 09:00	06/21/25 17:58	1
Copper	<3.20		5.00	3.20	ug/L		06/13/25 09:00	06/21/25 17:58	1
Lead	<0.330		0.500	0.330	ug/L		06/13/25 09:00	06/21/25 17:58	1
Nickel	**5.24**		5.00	2.30	ug/L		06/13/25 09:00	06/23/25 16:14	1
Selenium	<1.40		5.00	1.40	ug/L		06/13/25 09:00	06/21/25 17:58	1
Silver	<0.500	^+	1.00	0.500	ug/L		06/13/25 09:00	06/21/25 17:58	1
Thallium	<0.570		1.00	0.570	ug/L		06/13/25 09:00	06/21/25 17:58	1
Vanadium	<1.70		5.00	1.70	ug/L		06/13/25 09:00	06/21/25 17:58	1
Zinc	<13.0		20.0	13.0	ug/L		06/13/25 09:00	06/21/25 17:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.31		1.88	1.31	mg/L			06/11/25 12:06	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**1.52**				NTU			06/06/25 13:00	1

Client Sample ID: MW-7A
Lab Sample ID: 310-308221-4
Date Collected: 06/06/25 13:50
Matrix: Ground Water
Date Received: 06/07/25 07:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/11/25 02:58	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/11/25 02:58	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/11/25 02:58	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/11/25 02:58	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/11/25 02:58	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/11/25 02:58	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/11/25 02:58	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/11/25 02:58	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/11/25 02:58	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/11/25 02:58	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/11/25 02:58	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/11/25 02:58	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/11/25 02:58	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/11/25 02:58	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/11/25 02:58	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/11/25 02:58	1
Acetone	<3.10		10.0	3.10	ug/L			06/11/25 02:58	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/11/25 02:58	1
Benzene	<0.220		0.500	0.220	ug/L			06/11/25 02:58	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/11/25 02:58	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/11/25 02:58	1
Bromoform	<0.780		5.00	0.780	ug/L			06/11/25 02:58	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/11/25 02:58	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/11/25 02:58	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/11/25 02:58	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/11/25 02:58	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/11/25 02:58	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/11/25 02:58	1
Chloroform	<1.30		3.00	1.30	ug/L			06/11/25 02:58	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/11/25 02:58	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/11/25 02:58	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/11/25 02:58	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/11/25 02:58	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/11/25 02:58	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/11/25 02:58	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/11/25 02:58	1
Styrene	<0.370		1.00	0.370	ug/L			06/11/25 02:58	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/11/25 02:58	1
Toluene	<0.430		1.00	0.430	ug/L			06/11/25 02:58	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/11/25 02:58	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/11/25 02:58	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/11/25 02:58	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/11/25 02:58	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/11/25 02:58	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/11/25 02:58	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/11/25 02:58	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/11/25 02:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*115*		*76 - 130*		*06/11/25 02:58*	*1*

Client: AECOM
Job ID: 310-308221-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-7A
Lab Sample ID: 310-308221-4

Date Collected: 06/06/25 13:50
Matrix: Ground Water
Date Received: 06/07/25 07:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*80 - 120*		*06/11/25 02:58*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*06/11/25 02:58*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/13/25 09:00	06/21/25 18:01	1
Arsenic	<0.530		2.00	0.530	ug/L		06/13/25 09:00	06/21/25 18:01	1
Barium	**176**		2.00	0.660	ug/L		06/13/25 09:00	06/21/25 18:01	1
Beryllium	<0.330		1.00	0.330	ug/L		06/13/25 09:00	06/21/25 18:01	1
Cadmium	<0.100	^+	0.200	0.100	ug/L		06/13/25 09:00	06/21/25 18:01	1
Chromium	**3.29**	**J**	5.00	1.80	ug/L		06/13/25 09:00	06/21/25 18:01	1
Cobalt	<0.170		0.500	0.170	ug/L		06/13/25 09:00	06/21/25 18:01	1
Copper	<3.20		5.00	3.20	ug/L		06/13/25 09:00	06/21/25 18:01	1
Lead	<0.330		0.500	0.330	ug/L		06/13/25 09:00	06/21/25 18:01	1
Nickel	<2.30		5.00	2.30	ug/L		06/13/25 09:00	06/23/25 16:17	1
Selenium	<1.40		5.00	1.40	ug/L		06/13/25 09:00	06/21/25 18:01	1
Silver	<0.500	^+	1.00	0.500	ug/L		06/13/25 09:00	06/21/25 18:01	1
Thallium	<0.570		1.00	0.570	ug/L		06/13/25 09:00	06/21/25 18:01	1
Vanadium	<1.70		5.00	1.70	ug/L		06/13/25 09:00	06/21/25 18:01	1
Zinc	<13.0		20.0	13.0	ug/L		06/13/25 09:00	06/21/25 18:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**2.00**		1.88	1.31	mg/L			06/11/25 12:06	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**2.33**				NTU			06/06/25 13:50	1

Client: AECOM
Project/Site: Winneshiek Groundwater Monitoring

Job ID: 310-308221-1

Client Sample ID: MW-46A
Date Collected: 06/06/25 15:10
Date Received: 06/07/25 07:50

Lab Sample ID: 310-308221-5
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/11/25 03:20	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/11/25 03:20	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/11/25 03:20	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/11/25 03:20	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/11/25 03:20	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/11/25 03:20	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/11/25 03:20	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/11/25 03:20	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/11/25 03:20	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/11/25 03:20	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/11/25 03:20	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/11/25 03:20	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/11/25 03:20	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/11/25 03:20	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/11/25 03:20	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/11/25 03:20	1
Acetone	<3.10		10.0	3.10	ug/L			06/11/25 03:20	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/11/25 03:20	1
Benzene	<0.220		0.500	0.220	ug/L			06/11/25 03:20	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/11/25 03:20	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/11/25 03:20	1
Bromoform	<0.780		5.00	0.780	ug/L			06/11/25 03:20	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/11/25 03:20	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/11/25 03:20	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/11/25 03:20	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/11/25 03:20	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/11/25 03:20	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/11/25 03:20	1
Chloroform	<1.30		3.00	1.30	ug/L			06/11/25 03:20	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/11/25 03:20	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/11/25 03:20	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/11/25 03:20	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/11/25 03:20	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/11/25 03:20	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/11/25 03:20	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/11/25 03:20	1
Styrene	<0.370		1.00	0.370	ug/L			06/11/25 03:20	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/11/25 03:20	1
Toluene	<0.430		1.00	0.430	ug/L			06/11/25 03:20	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/11/25 03:20	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/11/25 03:20	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/11/25 03:20	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/11/25 03:20	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/11/25 03:20	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/11/25 03:20	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/11/25 03:20	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/11/25 03:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*111*		*76 - 130*		*06/11/25 03:20*	*1*

Client: AECOM
Job ID: 310-308221-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-46A
Lab Sample ID: 310-308221-5

Date Collected: 06/06/25 15:10
Matrix: Ground Water
Date Received: 06/07/25 07:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*90*		*80 - 120*		*06/11/25 03:20*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*06/11/25 03:20*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/13/25 09:00	06/21/25 18:04	1
Arsenic	**0.640**	**J**	2.00	0.530	ug/L		06/13/25 09:00	06/21/25 18:04	1
Barium	**245**		2.00	0.660	ug/L		06/13/25 09:00	06/21/25 18:04	1
Beryllium	<0.330		1.00	0.330	ug/L		06/13/25 09:00	06/21/25 18:04	1
Cadmium	<0.100	^+	0.200	0.100	ug/L		06/13/25 09:00	06/21/25 18:04	1
Chromium	<1.80		5.00	1.80	ug/L		06/13/25 09:00	06/21/25 18:04	1
Cobalt	**0.178**	**J**	0.500	0.170	ug/L		06/13/25 09:00	06/21/25 18:04	1
Copper	<3.20		5.00	3.20	ug/L		06/13/25 09:00	06/21/25 18:04	1
Lead	<0.330		0.500	0.330	ug/L		06/13/25 09:00	06/21/25 18:04	1
Nickel	**24.0**		5.00	2.30	ug/L		06/13/25 09:00	06/23/25 16:20	1
Selenium	<1.40		5.00	1.40	ug/L		06/13/25 09:00	06/21/25 18:04	1
Silver	<0.500	^+	1.00	0.500	ug/L		06/13/25 09:00	06/21/25 18:04	1
Thallium	<0.570		1.00	0.570	ug/L		06/13/25 09:00	06/21/25 18:04	1
Vanadium	<1.70		5.00	1.70	ug/L		06/13/25 09:00	06/21/25 18:04	1
Zinc	<13.0		20.0	13.0	ug/L		06/13/25 09:00	06/21/25 18:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**25.5**		1.88	1.31	mg/L			06/10/25 15:36	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**10.97**				NTU			06/06/25 15:10	1

Client: AECOM
Project/Site: Winneshiek Groundwater Monitoring

Job ID: 310-308221-1

Client Sample ID: MW-45A
Date Collected: 06/06/25 16:15
Date Received: 06/07/25 07:50

Lab Sample ID: 310-308221-6
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/11/25 03:43	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/11/25 03:43	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/11/25 03:43	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/11/25 03:43	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/11/25 03:43	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/11/25 03:43	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/11/25 03:43	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/11/25 03:43	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/11/25 03:43	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/11/25 03:43	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/11/25 03:43	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/11/25 03:43	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/11/25 03:43	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/11/25 03:43	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/11/25 03:43	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/11/25 03:43	1
Acetone	<3.10		10.0	3.10	ug/L			06/11/25 03:43	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/11/25 03:43	1
Benzene	<0.220		0.500	0.220	ug/L			06/11/25 03:43	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/11/25 03:43	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/11/25 03:43	1
Bromoform	<0.780		5.00	0.780	ug/L			06/11/25 03:43	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/11/25 03:43	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/11/25 03:43	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/11/25 03:43	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/11/25 03:43	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/11/25 03:43	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/11/25 03:43	1
Chloroform	<1.30		3.00	1.30	ug/L			06/11/25 03:43	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/11/25 03:43	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/11/25 03:43	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/11/25 03:43	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/11/25 03:43	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/11/25 03:43	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/11/25 03:43	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/11/25 03:43	1
Styrene	<0.370		1.00	0.370	ug/L			06/11/25 03:43	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/11/25 03:43	1
Toluene	<0.430		1.00	0.430	ug/L			06/11/25 03:43	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/11/25 03:43	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/11/25 03:43	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/11/25 03:43	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/11/25 03:43	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/11/25 03:43	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/11/25 03:43	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/11/25 03:43	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/11/25 03:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*113*		*76 - 130*		*06/11/25 03:43*	*1*

Client: AECOM
Job ID: 310-308221-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-45A
Lab Sample ID: 310-308221-6

Date Collected: 06/06/25 16:15
Matrix: Ground Water
Date Received: 06/07/25 07:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*80 - 120*		*06/11/25 03:43*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*06/11/25 03:43*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/13/25 09:00	06/21/25 18:07	1
Arsenic	<0.530		2.00	0.530	ug/L		06/13/25 09:00	06/21/25 18:07	1
Barium	**136**		2.00	0.660	ug/L		06/13/25 09:00	06/21/25 18:07	1
Beryllium	<0.330		1.00	0.330	ug/L		06/13/25 09:00	06/21/25 18:07	1
Cadmium	<0.100		0.200	0.100	ug/L		06/13/25 09:00	06/22/25 17:55	1
Chromium	<1.80		5.00	1.80	ug/L		06/13/25 09:00	06/21/25 18:07	1
Cobalt	**0.329**	**J**	0.500	0.170	ug/L		06/13/25 09:00	06/21/25 18:07	1
Copper	<3.20		5.00	3.20	ug/L		06/13/25 09:00	06/21/25 18:07	1
Lead	<0.330		0.500	0.330	ug/L		06/13/25 09:00	06/21/25 18:07	1
Nickel	<2.30		5.00	2.30	ug/L		06/13/25 09:00	06/23/25 16:23	1
Selenium	<1.40		5.00	1.40	ug/L		06/13/25 09:00	06/21/25 18:07	1
Silver	<0.500	^+	1.00	0.500	ug/L		06/13/25 09:00	06/21/25 18:07	1
Thallium	<0.570		1.00	0.570	ug/L		06/13/25 09:00	06/21/25 18:07	1
Vanadium	<1.70		5.00	1.70	ug/L		06/13/25 09:00	06/21/25 18:07	1
Zinc	<13.0		20.0	13.0	ug/L		06/13/25 09:00	06/21/25 18:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**1.88**		1.88	1.31	mg/L			06/11/25 12:06	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**2.98**				NTU			06/06/25 16:15	1

Client Sample ID: MW-45A-FD
Lab Sample ID: 310-308221-7
Date Collected: 06/06/25 16:25
Matrix: Groundwater
Date Received: 06/07/25 07:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/11/25 04:06	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/11/25 04:06	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/11/25 04:06	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/11/25 04:06	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/11/25 04:06	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/11/25 04:06	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/11/25 04:06	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/11/25 04:06	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/11/25 04:06	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/11/25 04:06	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/11/25 04:06	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/11/25 04:06	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/11/25 04:06	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/11/25 04:06	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/11/25 04:06	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/11/25 04:06	1
Acetone	<3.10		10.0	3.10	ug/L			06/11/25 04:06	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/11/25 04:06	1
Benzene	<0.220		0.500	0.220	ug/L			06/11/25 04:06	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/11/25 04:06	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/11/25 04:06	1
Bromoform	<0.780		5.00	0.780	ug/L			06/11/25 04:06	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/11/25 04:06	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/11/25 04:06	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/11/25 04:06	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/11/25 04:06	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/11/25 04:06	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/11/25 04:06	1
Chloroform	<1.30		3.00	1.30	ug/L			06/11/25 04:06	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/11/25 04:06	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/11/25 04:06	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/11/25 04:06	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/11/25 04:06	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/11/25 04:06	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/11/25 04:06	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/11/25 04:06	1
Styrene	<0.370		1.00	0.370	ug/L			06/11/25 04:06	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/11/25 04:06	1
Toluene	<0.430		1.00	0.430	ug/L			06/11/25 04:06	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/11/25 04:06	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/11/25 04:06	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/11/25 04:06	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/11/25 04:06	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/11/25 04:06	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/11/25 04:06	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/11/25 04:06	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/11/25 04:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*114*		*76 - 130*		*06/11/25 04:06*	*1*

Client: AECOM
Job ID: 310-308221-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-45A-FD
Lab Sample ID: 310-308221-7
Date Collected: 06/06/25 16:25
Matrix: Groundwater
Date Received: 06/07/25 07:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*80 - 120*		*06/11/25 04:06*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*06/11/25 04:06*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/13/25 09:00	06/21/25 18:09	1
Arsenic	<0.530		2.00	0.530	ug/L		06/13/25 09:00	06/21/25 18:09	1
Barium	**137**		2.00	0.660	ug/L		06/13/25 09:00	06/21/25 18:09	1
Beryllium	<0.330		1.00	0.330	ug/L		06/13/25 09:00	06/23/25 16:26	1
Cadmium	<0.100	^+	0.200	0.100	ug/L		06/13/25 09:00	06/21/25 18:09	1
Chromium	<1.80		5.00	1.80	ug/L		06/13/25 09:00	06/22/25 17:58	1
Cobalt	**0.322**	**J**	0.500	0.170	ug/L		06/13/25 09:00	06/22/25 17:58	1
Copper	<3.20		5.00	3.20	ug/L		06/13/25 09:00	06/22/25 17:58	1
Lead	<0.330		0.500	0.330	ug/L		06/13/25 09:00	06/21/25 18:09	1
Nickel	<2.30		5.00	2.30	ug/L		06/13/25 09:00	06/23/25 16:26	1
Selenium	<1.40		5.00	1.40	ug/L		06/13/25 09:00	06/21/25 18:09	1
Silver	<0.500	^+	1.00	0.500	ug/L		06/13/25 09:00	06/21/25 18:09	1
Thallium	<0.570		1.00	0.570	ug/L		06/13/25 09:00	06/21/25 18:09	1
Vanadium	<1.70		5.00	1.70	ug/L		06/13/25 09:00	06/22/25 17:58	1
Zinc	<13.0		20.0	13.0	ug/L		06/13/25 09:00	06/21/25 18:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**3.87**		1.88	1.31	mg/L			06/11/25 12:06	1

Client: AECOM
Job ID: 310-308221-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: Equipment Blank #2 Deep

Lab Sample ID: 310-308221-8

Date Collected: 06/06/25 13:10
Matrix: Ground Water
Date Received: 06/07/25 07:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/11/25 08:35	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/11/25 08:35	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/11/25 08:35	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/11/25 08:35	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/11/25 08:35	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/11/25 08:35	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/11/25 08:35	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/11/25 08:35	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/11/25 08:35	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/11/25 08:35	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/11/25 08:35	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/11/25 08:35	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/11/25 08:35	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/11/25 08:35	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/11/25 08:35	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/11/25 08:35	1
Acetone	<3.10		10.0	3.10	ug/L			06/11/25 08:35	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/11/25 08:35	1
Benzene	<0.220		0.500	0.220	ug/L			06/11/25 08:35	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/11/25 08:35	1
Bromodichloromethane	**1.36**		1.00	0.390	ug/L			06/11/25 08:35	1
Bromoform	**2.99**	**J**	5.00	0.780	ug/L			06/11/25 08:35	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/11/25 08:35	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/11/25 08:35	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/11/25 08:35	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/11/25 08:35	1
Chlorodibromomethane	**3.94**	**J**	5.00	0.750	ug/L			06/11/25 08:35	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/11/25 08:35	1
Chloroform	**1.36**	**J**	3.00	1.30	ug/L			06/11/25 08:35	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/11/25 08:35	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/11/25 08:35	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/11/25 08:35	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/11/25 08:35	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/11/25 08:35	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/11/25 08:35	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/11/25 08:35	1
Styrene	<0.370		1.00	0.370	ug/L			06/11/25 08:35	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/11/25 08:35	1
Toluene	<0.430		1.00	0.430	ug/L			06/11/25 08:35	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/11/25 08:35	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/11/25 08:35	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/11/25 08:35	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/11/25 08:35	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/11/25 08:35	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/11/25 08:35	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/11/25 08:35	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/11/25 08:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*76 - 130*		*06/11/25 08:35*	*1*

Client: AECOM
Job ID: 310-308221-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: Equipment Blank #2 Deep
Lab Sample ID: 310-308221-8

Date Collected: 06/06/25 13:10
Matrix: Ground Water
Date Received: 06/07/25 07:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*80 - 120*		*06/11/25 08:35*	*1*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*06/11/25 08:35*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/13/25 09:00	06/21/25 18:15	1
Arsenic	<0.530		2.00	0.530	ug/L		06/13/25 09:00	06/21/25 18:15	1
Barium	**74.3**		2.00	0.660	ug/L		06/13/25 09:00	06/21/25 18:15	1
Beryllium	<0.330		1.00	0.330	ug/L		06/13/25 09:00	06/23/25 16:32	1
Cadmium	<0.100	^+	0.200	0.100	ug/L		06/13/25 09:00	06/21/25 18:15	1
Chromium	<1.80		5.00	1.80	ug/L		06/13/25 09:00	06/22/25 18:04	1
Cobalt	<0.170		0.500	0.170	ug/L		06/13/25 09:00	06/22/25 18:04	1
Copper	<3.20		5.00	3.20	ug/L		06/13/25 09:00	06/22/25 18:04	1
Lead	<0.330		0.500	0.330	ug/L		06/13/25 09:00	06/21/25 18:15	1
Nickel	<2.30		5.00	2.30	ug/L		06/13/25 09:00	06/23/25 16:32	1
Selenium	<1.40		5.00	1.40	ug/L		06/13/25 09:00	06/21/25 18:15	1
Silver	<0.500	^+	1.00	0.500	ug/L		06/13/25 09:00	06/21/25 18:15	1
Thallium	<0.570		1.00	0.570	ug/L		06/13/25 09:00	06/21/25 18:15	1
Vanadium	<1.70		5.00	1.70	ug/L		06/13/25 09:00	06/22/25 18:04	1
Zinc	<13.0		20.0	13.0	ug/L		06/13/25 09:00	06/21/25 18:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<3.50		5.00	3.50	mg/L			06/10/25 15:37	1

Client: AECOM
Project/Site: Winneshiek Groundwater Monitoring

Job ID: 310-308221-1

Client Sample ID: Trip Blank
Date Collected: 06/06/25 08:00
Date Received: 06/07/25 07:50

Lab Sample ID: 310-308221-9
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/11/25 08:13	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/11/25 08:13	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/11/25 08:13	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/11/25 08:13	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/11/25 08:13	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/11/25 08:13	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/11/25 08:13	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/11/25 08:13	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/11/25 08:13	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/11/25 08:13	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/11/25 08:13	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/11/25 08:13	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/11/25 08:13	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/11/25 08:13	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/11/25 08:13	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/11/25 08:13	1
Acetone	<3.10		10.0	3.10	ug/L			06/11/25 08:13	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/11/25 08:13	1
Benzene	<0.220		0.500	0.220	ug/L			06/11/25 08:13	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/11/25 08:13	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/11/25 08:13	1
Bromoform	<0.780		5.00	0.780	ug/L			06/11/25 08:13	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/11/25 08:13	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/11/25 08:13	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/11/25 08:13	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/11/25 08:13	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/11/25 08:13	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/11/25 08:13	1
Chloroform	<1.30		3.00	1.30	ug/L			06/11/25 08:13	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/11/25 08:13	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/11/25 08:13	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/11/25 08:13	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/11/25 08:13	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/11/25 08:13	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/11/25 08:13	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/11/25 08:13	1
Styrene	<0.370		1.00	0.370	ug/L			06/11/25 08:13	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/11/25 08:13	1
Toluene	<0.430		1.00	0.430	ug/L			06/11/25 08:13	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/11/25 08:13	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/11/25 08:13	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/11/25 08:13	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/11/25 08:13	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/11/25 08:13	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/11/25 08:13	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/11/25 08:13	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/11/25 08:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*112*		*76 - 130*		*06/11/25 08:13*	*1*

Client: AECOM
Job ID: 310-308221-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: Trip Blank
Lab Sample ID: 310-308221-9
Date Collected: 06/06/25 08:00
Matrix: Water
Date Received: 06/07/25 07:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	92		80 - 120		06/11/25 08:13	1
4-Bromofluorobenzene (Surr)	102		80 - 120		06/11/25 08:13	1

Definitions/Glossary

Client: AECOM
Job ID: 310-308221-1
Project/Site: Winneshiek Groundwater Monitoring

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: AECOM
Project/Site: Winneshiek Groundwater Monitoring

Job ID: 310-308221-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Ground Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(76-130)	(80-120)	(80-120)
310-308221-1	MW-101	111	91	103
310-308221-2	MW-29A	109	90	106
310-308221-3	MW-22	107	91	104
310-308221-4	MW-7A	115	91	102
310-308221-5	MW-46A	111	90	103
310-308221-6	MW-45A	113	91	103
310-308221-8	Equipment Blank #2 Deep	110	93	106

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Groundwater — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(76-130)	(80-120)	(80-120)
310-308221-7	MW-45A-FD	114	91	101

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(76-130)	(80-120)	(80-120)
310-308221-9	Trip Blank	112	92	102
LCS 310-456984/6	Lab Control Sample	101	101	101
LCS 310-456984/7	Lab Control Sample	114	92	101
LCS 310-457138/6	Lab Control Sample	98	102	100
LCS 310-457138/7	Lab Control Sample	109	92	103
LCS 310-457140/6	Lab Control Sample	95	99	102
LCS 310-457140/7	Lab Control Sample	112	91	101
MB 310-456984/5	Method Blank	111	92	104
MB 310-457138/5	Method Blank	109	91	106
MB 310-457140/5	Method Blank	109	89	106

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 310-456984/5
Matrix: Water
Analysis Batch: 456984

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/10/25 08:52	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/10/25 08:52	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/10/25 08:52	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/10/25 08:52	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/10/25 08:52	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/10/25 08:52	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/10/25 08:52	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/10/25 08:52	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/10/25 08:52	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/10/25 08:52	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/10/25 08:52	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/10/25 08:52	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/10/25 08:52	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/10/25 08:52	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/10/25 08:52	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/10/25 08:52	1
Acetone	<3.10		10.0	3.10	ug/L			06/10/25 08:52	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/10/25 08:52	1
Benzene	<0.220		0.500	0.220	ug/L			06/10/25 08:52	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/10/25 08:52	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/10/25 08:52	1
Bromoform	<0.780		5.00	0.780	ug/L			06/10/25 08:52	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/10/25 08:52	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/10/25 08:52	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/10/25 08:52	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/10/25 08:52	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/10/25 08:52	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/10/25 08:52	1
Chloroform	<1.30		3.00	1.30	ug/L			06/10/25 08:52	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/10/25 08:52	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/10/25 08:52	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/10/25 08:52	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/10/25 08:52	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/10/25 08:52	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/10/25 08:52	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/10/25 08:52	1
Styrene	<0.370		1.00	0.370	ug/L			06/10/25 08:52	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/10/25 08:52	1
Toluene	<0.430		1.00	0.430	ug/L			06/10/25 08:52	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/10/25 08:52	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/10/25 08:52	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/10/25 08:52	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/10/25 08:52	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/10/25 08:52	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/10/25 08:52	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/10/25 08:52	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/10/25 08:52	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-456984/5
Matrix: Water
Analysis Batch: 456984

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*111*		*76 - 130*		*06/10/25 08:52*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*06/10/25 08:52*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*06/10/25 08:52*	*1*

Lab Sample ID: LCS 310-456984/6
Matrix: Water
Analysis Batch: 456984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	18.84		ug/L		94	70 - 121
1,1,1-Trichloroethane	20.0	20.83		ug/L		104	69 - 130
1,1,2,2-Tetrachloroethane	20.0	19.04		ug/L		95	70 - 122
1,1,2-Trichloroethane	20.0	19.70		ug/L		99	75 - 121
1,1-Dichloroethane	20.0	20.07		ug/L		100	69 - 127
1,1-Dichloroethene	20.0	21.65		ug/L		108	64 - 134
1,2,3-Trichloropropane	20.0	19.15		ug/L		96	70 - 122
1,2-Dibromo-3-Chloropropane	20.0	18.19		ug/L		91	62 - 132
1,2-Dibromoethane (EDB)	20.0	20.13		ug/L		101	74 - 122
1,2-Dichlorobenzene	20.0	19.61		ug/L		98	74 - 120
1,2-Dichloroethane	20.0	18.86		ug/L		94	68 - 125
1,2-Dichloropropane	20.0	21.23		ug/L		106	72 - 128
1,4-Dichlorobenzene	20.0	18.64		ug/L		93	72 - 120
2-Butanone (MEK)	40.0	37.94		ug/L		95	60 - 134
2-Hexanone	40.0	38.62		ug/L		97	62 - 139
4-Methyl-2-pentanone (MIBK)	40.0	38.51		ug/L		96	62 - 136
Acetone	40.0	43.85		ug/L		110	59 - 136
Acrylonitrile	200	209.5		ug/L		105	50 - 150
Benzene	20.0	20.53		ug/L		103	71 - 125
Bromochloromethane	20.0	21.89		ug/L		109	69 - 131
Bromodichloromethane	20.0	19.30		ug/L		97	70 - 122
Bromoform	20.0	17.39		ug/L		87	62 - 122
Carbon disulfide	20.0	20.90		ug/L		104	58 - 137
Carbon tetrachloride	20.0	21.13		ug/L		106	63 - 136
Chlorobenzene	20.0	19.74		ug/L		99	74 - 120
Chlorodibromomethane	20.0	16.97		ug/L		85	69 - 121
Chloroform	20.0	18.98		ug/L		95	72 - 122
cis-1,2-Dichloroethene	20.0	20.43		ug/L		102	72 - 123
cis-1,3-Dichloropropene	20.0	16.69		ug/L		83	72 - 123
Dibromomethane	20.0	19.79		ug/L		99	72 - 122
Ethylbenzene	20.0	20.22		ug/L		101	75 - 120
Iodomethane	20.0	17.38		ug/L		87	18 - 150
Methylene Chloride	20.0	22.98		ug/L		115	72 - 128
Styrene	20.0	20.81		ug/L		104	74 - 122
Tetrachloroethene	20.0	20.85		ug/L		104	70 - 128
Toluene	20.0	20.43		ug/L		102	74 - 120
trans-1,2-Dichloroethene	20.0	21.02		ug/L		105	67 - 127
trans-1,3-Dichloropropene	20.0	15.74		ug/L		79	67 - 123
trans-1,4-Dichloro-2-butene	20.0	17.26		ug/L		86	50 - 150

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-456984/6
Matrix: Water
Analysis Batch: 456984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Trichloroethene	20.0	20.35		ug/L		102	70 - 128
Vinyl acetate	40.0	33.54		ug/L		84	50 - 150
Xylenes, Total	40.0	40.84		ug/L		102	74 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*101*		*76 - 130*
Toluene-d8 (Surr)	*101*		*80 - 120*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*

Lab Sample ID: LCS 310-456984/7
Matrix: Water
Analysis Batch: 456984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	16.64		ug/L		83	33 - 138
Chloroethane	20.0	17.02		ug/L		85	59 - 139
Chloromethane	20.0	17.91		ug/L		90	52 - 146
Trichlorofluoromethane	20.0	16.90		ug/L		84	55 - 150
Vinyl chloride	20.0	17.52		ug/L		88	60 - 142

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*114*		*76 - 130*
Toluene-d8 (Surr)	*92*		*80 - 120*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*

Lab Sample ID: MB 310-457138/5
Matrix: Water
Analysis Batch: 457138

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/10/25 19:49	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/10/25 19:49	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/10/25 19:49	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/10/25 19:49	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/10/25 19:49	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/10/25 19:49	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/10/25 19:49	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/10/25 19:49	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/10/25 19:49	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/10/25 19:49	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/10/25 19:49	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/10/25 19:49	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/10/25 19:49	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/10/25 19:49	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/10/25 19:49	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/10/25 19:49	1
Acetone	<3.10		10.0	3.10	ug/L			06/10/25 19:49	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/10/25 19:49	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-457138/5
Matrix: Water
Analysis Batch: 457138

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.220		0.500	0.220	ug/L			06/10/25 19:49	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/10/25 19:49	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/10/25 19:49	1
Bromoform	<0.780		5.00	0.780	ug/L			06/10/25 19:49	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/10/25 19:49	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/10/25 19:49	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/10/25 19:49	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/10/25 19:49	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/10/25 19:49	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/10/25 19:49	1
Chloroform	<1.30		3.00	1.30	ug/L			06/10/25 19:49	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/10/25 19:49	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/10/25 19:49	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/10/25 19:49	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/10/25 19:49	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/10/25 19:49	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/10/25 19:49	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/10/25 19:49	1
Styrene	<0.370		1.00	0.370	ug/L			06/10/25 19:49	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/10/25 19:49	1
Toluene	<0.430		1.00	0.430	ug/L			06/10/25 19:49	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/10/25 19:49	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/10/25 19:49	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/10/25 19:49	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/10/25 19:49	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/10/25 19:49	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/10/25 19:49	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/10/25 19:49	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/10/25 19:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*109*		*76 - 130*		*06/10/25 19:49*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*06/10/25 19:49*	*1*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*06/10/25 19:49*	*1*

Lab Sample ID: LCS 310-457138/6
Matrix: Water
Analysis Batch: 457138

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	20.07		ug/L		100	70 - 121
1,1,1-Trichloroethane	20.0	21.15		ug/L		106	69 - 130
1,1,2,2-Tetrachloroethane	20.0	19.45		ug/L		97	70 - 122
1,1,2-Trichloroethane	20.0	20.65		ug/L		103	75 - 121
1,1-Dichloroethane	20.0	20.33		ug/L		102	69 - 127
1,1-Dichloroethene	20.0	22.07		ug/L		110	64 - 134
1,2,3-Trichloropropane	20.0	19.51		ug/L		98	70 - 122
1,2-Dibromo-3-Chloropropane	20.0	17.50		ug/L		87	62 - 132

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-457138/6
Matrix: Water
Analysis Batch: 457138

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	20.0	20.94		ug/L		105	74 - 122
1,2-Dichlorobenzene	20.0	20.01		ug/L		100	74 - 120
1,2-Dichloroethane	20.0	19.59		ug/L		98	68 - 125
1,2-Dichloropropane	20.0	21.77		ug/L		109	72 - 128
1,4-Dichlorobenzene	20.0	19.41		ug/L		97	72 - 120
2-Butanone (MEK)	40.0	39.17		ug/L		98	60 - 134
2-Hexanone	40.0	37.10		ug/L		93	62 - 139
4-Methyl-2-pentanone (MIBK)	40.0	37.73		ug/L		94	62 - 136
Acetone	40.0	41.84		ug/L		105	59 - 136
Acrylonitrile	200	206.9		ug/L		103	50 - 150
Benzene	20.0	21.03		ug/L		105	71 - 125
Bromochloromethane	20.0	22.28		ug/L		111	69 - 131
Bromodichloromethane	20.0	19.80		ug/L		99	70 - 122
Bromoform	20.0	17.19		ug/L		86	62 - 122
Carbon disulfide	20.0	21.66		ug/L		108	58 - 137
Carbon tetrachloride	20.0	21.36		ug/L		107	63 - 136
Chlorobenzene	20.0	20.79		ug/L		104	74 - 120
Chlorodibromomethane	20.0	17.54		ug/L		88	69 - 121
Chloroform	20.0	19.64		ug/L		98	72 - 122
cis-1,2-Dichloroethene	20.0	21.19		ug/L		106	72 - 123
cis-1,3-Dichloropropene	20.0	17.46		ug/L		87	72 - 123
Dibromomethane	20.0	19.78		ug/L		99	72 - 122
Ethylbenzene	20.0	20.92		ug/L		105	75 - 120
Iodomethane	20.0	17.91		ug/L		90	18 - 150
Methylene Chloride	20.0	23.42		ug/L		117	72 - 128
Styrene	20.0	21.66		ug/L		108	74 - 122
Tetrachloroethene	20.0	22.15		ug/L		111	70 - 128
Toluene	20.0	20.83		ug/L		104	74 - 120
trans-1,2-Dichloroethene	20.0	21.80		ug/L		109	67 - 127
trans-1,3-Dichloropropene	20.0	16.31		ug/L		82	67 - 123
trans-1,4-Dichloro-2-butene	20.0	17.90		ug/L		90	50 - 150
Trichloroethene	20.0	21.41		ug/L		107	70 - 128
Vinyl acetate	40.0	36.62		ug/L		92	50 - 150
Xylenes, Total	40.0	43.07		ug/L		108	74 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*98*		*76 - 130*
Toluene-d8 (Surr)	*102*		*80 - 120*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*

Lab Sample ID: LCS 310-457138/7
Matrix: Water
Analysis Batch: 457138

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	16.71		ug/L		84	33 - 138
Chloroethane	20.0	16.88		ug/L		84	59 - 139
Chloromethane	20.0	18.07		ug/L		90	52 - 146

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-457138/7
Matrix: Water
Analysis Batch: 457138

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Trichlorofluoromethane	20.0	17.23		ug/L		86	55 - 150
Vinyl chloride	20.0	17.33		ug/L		87	60 - 142

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*109*		*76 - 130*
Toluene-d8 (Surr)	*92*		*80 - 120*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*

Lab Sample ID: MB 310-457140/5
Matrix: Water
Analysis Batch: 457140

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/11/25 06:42	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/11/25 06:42	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/11/25 06:42	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/11/25 06:42	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/11/25 06:42	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/11/25 06:42	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/11/25 06:42	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/11/25 06:42	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/11/25 06:42	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/11/25 06:42	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/11/25 06:42	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/11/25 06:42	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/11/25 06:42	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/11/25 06:42	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/11/25 06:42	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/11/25 06:42	1
Acetone	<3.10		10.0	3.10	ug/L			06/11/25 06:42	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/11/25 06:42	1
Benzene	<0.220		0.500	0.220	ug/L			06/11/25 06:42	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/11/25 06:42	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/11/25 06:42	1
Bromoform	<0.780		5.00	0.780	ug/L			06/11/25 06:42	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/11/25 06:42	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/11/25 06:42	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/11/25 06:42	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/11/25 06:42	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/11/25 06:42	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/11/25 06:42	1
Chloroform	<1.30		3.00	1.30	ug/L			06/11/25 06:42	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/11/25 06:42	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/11/25 06:42	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/11/25 06:42	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/11/25 06:42	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/11/25 06:42	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/11/25 06:42	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-457140/5
Matrix: Water
Analysis Batch: 457140

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/11/25 06:42	1
Styrene	<0.370		1.00	0.370	ug/L			06/11/25 06:42	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/11/25 06:42	1
Toluene	<0.430		1.00	0.430	ug/L			06/11/25 06:42	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/11/25 06:42	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/11/25 06:42	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/11/25 06:42	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/11/25 06:42	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/11/25 06:42	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/11/25 06:42	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/11/25 06:42	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/11/25 06:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*109*		*76 - 130*		*06/11/25 06:42*	*1*
Toluene-d8 (Surr)	*89*		*80 - 120*		*06/11/25 06:42*	*1*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*06/11/25 06:42*	*1*

Lab Sample ID: LCS 310-457140/6
Matrix: Water
Analysis Batch: 457140

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	19.89		ug/L		99	70 - 121
1,1,1-Trichloroethane	20.0	21.09		ug/L		105	69 - 130
1,1,2,2-Tetrachloroethane	20.0	20.18		ug/L		101	70 - 122
1,1,2-Trichloroethane	20.0	20.92		ug/L		105	75 - 121
1,1-Dichloroethane	20.0	20.11		ug/L		101	69 - 127
1,1-Dichloroethene	20.0	20.95		ug/L		105	64 - 134
1,2,3-Trichloropropane	20.0	19.96		ug/L		100	70 - 122
1,2-Dibromo-3-Chloropropane	20.0	18.12		ug/L		91	62 - 132
1,2-Dibromoethane (EDB)	20.0	21.09		ug/L		105	74 - 122
1,2-Dichlorobenzene	20.0	19.75		ug/L		99	74 - 120
1,2-Dichloroethane	20.0	18.93		ug/L		95	68 - 125
1,2-Dichloropropane	20.0	21.59		ug/L		108	72 - 128
1,4-Dichlorobenzene	20.0	18.87		ug/L		94	72 - 120
2-Butanone (MEK)	40.0	43.48		ug/L		109	60 - 134
2-Hexanone	40.0	40.93		ug/L		102	62 - 139
4-Methyl-2-pentanone (MIBK)	40.0	40.58		ug/L		101	62 - 136
Acetone	40.0	41.28		ug/L		103	59 - 136
Acrylonitrile	200	214.3		ug/L		107	50 - 150
Benzene	20.0	21.04		ug/L		105	71 - 125
Bromochloromethane	20.0	21.50		ug/L		108	69 - 131
Bromodichloromethane	20.0	19.39		ug/L		97	70 - 122
Bromoform	20.0	18.31		ug/L		92	62 - 122
Carbon disulfide	20.0	20.81		ug/L		104	58 - 137
Carbon tetrachloride	20.0	21.15		ug/L		106	63 - 136
Chlorobenzene	20.0	20.11		ug/L		101	74 - 120

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-457140/6
Matrix: Water
Analysis Batch: 457140

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chlorodibromomethane	20.0	17.74		ug/L		89	69 - 121
Chloroform	20.0	19.24		ug/L		96	72 - 122
cis-1,2-Dichloroethene	20.0	20.69		ug/L		103	72 - 123
cis-1,3-Dichloropropene	20.0	17.12		ug/L		86	72 - 123
Dibromomethane	20.0	19.97		ug/L		100	72 - 122
Ethylbenzene	20.0	20.45		ug/L		102	75 - 120
Iodomethane	20.0	16.79		ug/L		84	18 - 150
Methylene Chloride	20.0	22.65		ug/L		113	72 - 128
Styrene	20.0	21.23		ug/L		106	74 - 122
Tetrachloroethene	20.0	21.33		ug/L		107	70 - 128
Toluene	20.0	20.75		ug/L		104	74 - 120
trans-1,2-Dichloroethene	20.0	21.21		ug/L		106	67 - 127
trans-1,3-Dichloropropene	20.0	16.30		ug/L		81	67 - 123
trans-1,4-Dichloro-2-butene	20.0	17.38		ug/L		87	50 - 150
Trichloroethene	20.0	20.73		ug/L		104	70 - 128
Vinyl acetate	40.0	35.77		ug/L		89	50 - 150
Xylenes, Total	40.0	41.55		ug/L		104	74 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*95*		*76 - 130*
Toluene-d8 (Surr)	*99*		*80 - 120*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*

Lab Sample ID: LCS 310-457140/7
Matrix: Water
Analysis Batch: 457140

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	16.49		ug/L		82	33 - 138
Chloroethane	20.0	17.03		ug/L		85	59 - 139
Chloromethane	20.0	18.23		ug/L		91	52 - 146
Trichlorofluoromethane	20.0	17.13		ug/L		86	55 - 150
Vinyl chloride	20.0	16.63		ug/L		83	60 - 142

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*112*		*76 - 130*
Toluene-d8 (Surr)	*91*		*80 - 120*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-457446/1-A
Matrix: Water
Analysis Batch: 458381

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 457446

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/13/25 09:00	06/21/25 17:24	1
Arsenic	<0.530		2.00	0.530	ug/L		06/13/25 09:00	06/21/25 17:24	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 310-457446/1-A
Matrix: Water
Analysis Batch: 458381

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 457446

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.660		2.00	0.660	ug/L		06/13/25 09:00	06/21/25 17:24	1
Beryllium	<0.330		1.00	0.330	ug/L		06/13/25 09:00	06/21/25 17:24	1
Cadmium	<0.100	^+	0.200	0.100	ug/L		06/13/25 09:00	06/21/25 17:24	1
Chromium	<1.80		5.00	1.80	ug/L		06/13/25 09:00	06/21/25 17:24	1
Cobalt	<0.170		0.500	0.170	ug/L		06/13/25 09:00	06/21/25 17:24	1
Copper	<3.20		5.00	3.20	ug/L		06/13/25 09:00	06/21/25 17:24	1
Lead	<0.330		0.500	0.330	ug/L		06/13/25 09:00	06/21/25 17:24	1
Nickel	<2.30		5.00	2.30	ug/L		06/13/25 09:00	06/21/25 17:24	1
Selenium	<1.40		5.00	1.40	ug/L		06/13/25 09:00	06/21/25 17:24	1
Silver	<0.500	^+	1.00	0.500	ug/L		06/13/25 09:00	06/21/25 17:24	1
Thallium	<0.570		1.00	0.570	ug/L		06/13/25 09:00	06/21/25 17:24	1
Vanadium	<1.70		5.00	1.70	ug/L		06/13/25 09:00	06/21/25 17:24	1
Zinc	<13.0		20.0	13.0	ug/L		06/13/25 09:00	06/21/25 17:24	1

Lab Sample ID: LCS 310-457446/2-A
Matrix: Water
Analysis Batch: 458381

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 457446

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	200	210.8		ug/L		105	80 - 120
Arsenic	200	182.4		ug/L		91	80 - 120
Barium	100	101.8		ug/L		102	80 - 120
Beryllium	100	104.8		ug/L		105	80 - 120
Cadmium	100	108.0	^+	ug/L		108	80 - 120
Chromium	100	103.9		ug/L		104	80 - 120
Cobalt	100	102.7		ug/L		103	80 - 120
Copper	200	216.0		ug/L		108	80 - 120
Lead	200	218.7		ug/L		109	80 - 120
Nickel	200	183.7		ug/L		92	80 - 120
Selenium	400	396.2		ug/L		99	80 - 120
Silver	100	113.4	^+	ug/L		113	80 - 120
Thallium	100	99.82		ug/L		100	80 - 120
Vanadium	100	104.0		ug/L		104	80 - 120
Zinc	200	177.7		ug/L		89	80 - 120

Lab Sample ID: 310-308221-7 DU
Matrix: Groundwater
Analysis Batch: 458381

Client Sample ID: MW-45A-FD
Prep Type: Total/NA
Prep Batch: 457446

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<1.00		<1.00		ug/L		NC	20
Antimony	<1.00		<1.00		ug/L		NC	20
Arsenic	<0.530		<0.530		ug/L		NC	20
Arsenic	<0.530		<0.530		ug/L		NC	20
Barium	137		132.6		ug/L		3	20
Barium	137		132.6		ug/L		3	20
Cadmium	<0.100	^+	<0.100	^+	ug/L		NC	20
Cadmium	<0.100	^+	<0.100	^+	ug/L		NC	20
Lead	<0.330		<0.330		ug/L		NC	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 310-308221-7 DU
Matrix: Groundwater
Analysis Batch: 458381

Client Sample ID: MW-45A-FD
Prep Type: Total/NA
Prep Batch: 457446

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Lead	<0.330		<0.330		ug/L		NC	20
Selenium	<1.40		<1.40		ug/L		NC	20
Selenium	<1.40		<1.40		ug/L		NC	20
Silver	<0.500	^+	<0.500	^+	ug/L		NC	20
Silver	<0.500	^+	<0.500	^+	ug/L		NC	20
Thallium	<0.570		<0.570		ug/L		NC	20
Thallium	<0.570		<0.570		ug/L		NC	20
Zinc	<13.0		<13.0		ug/L		NC	20
Zinc	<13.0		<13.0		ug/L		NC	20

Lab Sample ID: 310-308221-7 DU
Matrix: Groundwater
Analysis Batch: 458405

Client Sample ID: MW-45A-FD
Prep Type: Total/NA
Prep Batch: 457446

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chromium	<1.80		<1.80		ug/L		NC	20
Chromium	<1.80		<1.80		ug/L		NC	20
Cobalt	0.322	J	0.3200	J	ug/L		0.6	20
Cobalt	0.322	J	0.3200	J	ug/L		0.6	20
Copper	<3.20		<3.20		ug/L		NC	20
Copper	<3.20		<3.20		ug/L		NC	20
Vanadium	<1.70		<1.70		ug/L		NC	20
Vanadium	<1.70		<1.70		ug/L		NC	20

Lab Sample ID: 310-308221-7 DU
Matrix: Groundwater
Analysis Batch: 458536

Client Sample ID: MW-45A-FD
Prep Type: Total/NA
Prep Batch: 457446

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Beryllium	<0.330		<0.330		ug/L		NC	20
Beryllium	<0.330		<0.330		ug/L		NC	20
Nickel	<2.30		<2.30		ug/L		NC	20
Nickel	<2.30		<2.30		ug/L		NC	20

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 240-659527/1-A
Matrix: Water
Analysis Batch: 659546

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 659527

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<1410		3000	1410	ug/L		06/12/25 07:36	06/12/25 08:48	1

Lab Sample ID: LCS 240-659527/2-A
Matrix: Water
Analysis Batch: 659546

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 659527

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	8670	8267		ug/L		95	70 - 120

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric) (Continued)

Lab Sample ID: 310-308221-2 MS
Matrix: Ground Water
Analysis Batch: 659546

Client Sample ID: MW-29A
Prep Type: Total/NA
Prep Batch: 659527

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	<1410		8670	7867		ug/L		91	32 - 130

Lab Sample ID: 310-308221-2 MSD
Matrix: Ground Water
Analysis Batch: 659546

Client Sample ID: MW-29A
Prep Type: Total/NA
Prep Batch: 659527

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	<1410		8670	6667		ug/L		77	32 - 130	17	30

Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: MB 310-457166/1
Matrix: Water
Analysis Batch: 457166

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<3.50		5.00	3.50	mg/L			06/10/25 15:36	1

Lab Sample ID: LCS 310-457166/2
Matrix: Water
Analysis Batch: 457166

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	99.00		mg/L		99	82 - 117

Lab Sample ID: MB 310-457249/1
Matrix: Water
Analysis Batch: 457249

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<3.50		5.00	3.50	mg/L			06/11/25 12:06	1

Lab Sample ID: LCS 310-457249/2
Matrix: Water
Analysis Batch: 457249

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	99.00		mg/L		99	82 - 117

GC/MS VOA

Analysis Batch: 456984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308221-1	MW-101	Total/NA	Ground Water	8260D	
310-308221-2	MW-29A	Total/NA	Ground Water	8260D	
MB 310-456984/5	Method Blank	Total/NA	Water	8260D	
LCS 310-456984/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-456984/7	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 457138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308221-3	MW-22	Total/NA	Ground Water	8260D	
310-308221-4	MW-7A	Total/NA	Ground Water	8260D	
310-308221-5	MW-46A	Total/NA	Ground Water	8260D	
310-308221-6	MW-45A	Total/NA	Ground Water	8260D	
310-308221-7	MW-45A-FD	Total/NA	Groundwater	8260D	
MB 310-457138/5	Method Blank	Total/NA	Water	8260D	
LCS 310-457138/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-457138/7	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 457140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308221-8	Equipment Blank #2 Deep	Total/NA	Ground Water	8260D	
310-308221-9	Trip Blank	Total/NA	Water	8260D	
MB 310-457140/5	Method Blank	Total/NA	Water	8260D	
LCS 310-457140/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-457140/7	Lab Control Sample	Total/NA	Water	8260D	

Metals

Prep Batch: 457446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308221-1	MW-101	Total/NA	Ground Water	3005A	
310-308221-2	MW-29A	Total/NA	Ground Water	3005A	
310-308221-3	MW-22	Total/NA	Ground Water	3005A	
310-308221-4	MW-7A	Total/NA	Ground Water	3005A	
310-308221-5	MW-46A	Total/NA	Ground Water	3005A	
310-308221-6	MW-45A	Total/NA	Ground Water	3005A	
310-308221-7	MW-45A-FD	Total/NA	Groundwater	3005A	
310-308221-8	Equipment Blank #2 Deep	Total/NA	Ground Water	3005A	
MB 310-457446/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-457446/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-308221-7 DU	MW-45A-FD	Total/NA	Groundwater	3005A	

Analysis Batch: 458381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308221-1	MW-101	Total/NA	Ground Water	6020B	457446
310-308221-2	MW-29A	Total/NA	Ground Water	6020B	457446
310-308221-3	MW-22	Total/NA	Ground Water	6020B	457446
310-308221-4	MW-7A	Total/NA	Ground Water	6020B	457446
310-308221-5	MW-46A	Total/NA	Ground Water	6020B	457446
310-308221-6	MW-45A	Total/NA	Ground Water	6020B	457446
310-308221-7	MW-45A-FD	Total/NA	Groundwater	6020B	457446
310-308221-8	Equipment Blank #2 Deep	Total/NA	Ground Water	6020B	457446

Metals (Continued)

Analysis Batch: 458381 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-457446/1-A	Method Blank	Total/NA	Water	6020B	457446
LCS 310-457446/2-A	Lab Control Sample	Total/NA	Water	6020B	457446
310-308221-7 DU	MW-45A-FD	Total/NA	Groundwater	6020B	457446

Analysis Batch: 458405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308221-6	MW-45A	Total/NA	Ground Water	6020B	457446
310-308221-7	MW-45A-FD	Total/NA	Groundwater	6020B	457446
310-308221-8	Equipment Blank #2 Deep	Total/NA	Ground Water	6020B	457446
310-308221-7 DU	MW-45A-FD	Total/NA	Groundwater	6020B	457446

Analysis Batch: 458536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308221-3	MW-22	Total/NA	Ground Water	6020B	457446
310-308221-4	MW-7A	Total/NA	Ground Water	6020B	457446
310-308221-5	MW-46A	Total/NA	Ground Water	6020B	457446
310-308221-6	MW-45A	Total/NA	Ground Water	6020B	457446
310-308221-7	MW-45A-FD	Total/NA	Groundwater	6020B	457446
310-308221-8	Equipment Blank #2 Deep	Total/NA	Ground Water	6020B	457446
310-308221-7 DU	MW-45A-FD	Total/NA	Groundwater	6020B	457446

General Chemistry

Analysis Batch: 457166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308221-1	MW-101	Total/NA	Ground Water	I-3765-85	
310-308221-5	MW-46A	Total/NA	Ground Water	I-3765-85	
310-308221-8	Equipment Blank #2 Deep	Total/NA	Ground Water	I-3765-85	
MB 310-457166/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-457166/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Analysis Batch: 457249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308221-2	MW-29A	Total/NA	Ground Water	I-3765-85	
310-308221-3	MW-22	Total/NA	Ground Water	I-3765-85	
310-308221-4	MW-7A	Total/NA	Ground Water	I-3765-85	
310-308221-6	MW-45A	Total/NA	Ground Water	I-3765-85	
310-308221-7	MW-45A-FD	Total/NA	Groundwater	I-3765-85	
MB 310-457249/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-457249/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Prep Batch: 659527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308221-2	MW-29A	Total/NA	Ground Water	9030B	
MB 240-659527/1-A	Method Blank	Total/NA	Water	9030B	
LCS 240-659527/2-A	Lab Control Sample	Total/NA	Water	9030B	
310-308221-2 MS	MW-29A	Total/NA	Ground Water	9030B	
310-308221-2 MSD	MW-29A	Total/NA	Ground Water	9030B	

QC Association Summary

Client: AECOM
Job ID: 310-308221-1
Project/Site: Winneshiek Groundwater Monitoring

General Chemistry

Analysis Batch: 659546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308221-2	MW-29A	Total/NA	Ground Water	9034	659527
MB 240-659527/1-A	Method Blank	Total/NA	Water	9034	659527
LCS 240-659527/2-A	Lab Control Sample	Total/NA	Water	9034	659527
310-308221-2 MS	MW-29A	Total/NA	Ground Water	9034	659527
310-308221-2 MSD	MW-29A	Total/NA	Ground Water	9034	659527

Field Service / Mobile Lab

Analysis Batch: 457676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308221-1	MW-101	Total/NA	Ground Water	Field Sampling	
310-308221-2	MW-29A	Total/NA	Ground Water	Field Sampling	
310-308221-3	MW-22	Total/NA	Ground Water	Field Sampling	
310-308221-4	MW-7A	Total/NA	Ground Water	Field Sampling	
310-308221-5	MW-46A	Total/NA	Ground Water	Field Sampling	
310-308221-6	MW-45A	Total/NA	Ground Water	Field Sampling	

Lab Chronicle

Client: AECOM
Job ID: 310-308221-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-101
Lab Sample ID: 310-308221-1
Date Collected: 06/06/25 10:30
Matrix: Ground Water
Date Received: 06/07/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	456984	WSE8	EET CF	06/10/25 16:50
Total/NA	Prep	3005A			457446	F5MW	EET CF	06/13/25 09:00
Total/NA	Analysis	6020B		1	458381	ZRI4	EET CF	06/21/25 17:47
Total/NA	Analysis	I-3765-85		1	457166	E6KR	EET CF	06/10/25 15:36
Total/NA	Analysis	Field Sampling		1	457676	FQT6	EET CF	06/06/25 10:30

Client Sample ID: MW-29A
Lab Sample ID: 310-308221-2
Date Collected: 06/06/25 11:30
Matrix: Ground Water
Date Received: 06/07/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	456984	WSE8	EET CF	06/10/25 17:13
Total/NA	Prep	3005A			457446	F5MW	EET CF	06/13/25 09:00
Total/NA	Analysis	6020B		1	458381	ZRI4	EET CF	06/21/25 17:49
Total/NA	Prep	9030B			659527	BLW	EET CLE	06/12/25 07:36
Total/NA	Analysis	9034		1	659546	BLW	EET CLE	06/12/25 08:48
Total/NA	Analysis	I-3765-85		1	457249	E6KR	EET CF	06/11/25 12:06
Total/NA	Analysis	Field Sampling		1	457676	FQT6	EET CF	06/06/25 11:30

Client Sample ID: MW-22
Lab Sample ID: 310-308221-3
Date Collected: 06/06/25 13:00
Matrix: Ground Water
Date Received: 06/07/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	457138	WSE8	EET CF	06/11/25 02:35
Total/NA	Prep	3005A			457446	F5MW	EET CF	06/13/25 09:00
Total/NA	Analysis	6020B		1	458381	ZRI4	EET CF	06/21/25 17:58
Total/NA	Prep	3005A			457446	F5MW	EET CF	06/13/25 09:00
Total/NA	Analysis	6020B		1	458536	NFT2	EET CF	06/23/25 16:14
Total/NA	Analysis	I-3765-85		1	457249	E6KR	EET CF	06/11/25 12:06
Total/NA	Analysis	Field Sampling		1	457676	FQT6	EET CF	06/06/25 13:00

Client Sample ID: MW-7A
Lab Sample ID: 310-308221-4
Date Collected: 06/06/25 13:50
Matrix: Ground Water
Date Received: 06/07/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	457138	WSE8	EET CF	06/11/25 02:58
Total/NA	Prep	3005A			457446	F5MW	EET CF	06/13/25 09:00
Total/NA	Analysis	6020B		1	458381	ZRI4	EET CF	06/21/25 18:01
Total/NA	Prep	3005A			457446	F5MW	EET CF	06/13/25 09:00
Total/NA	Analysis	6020B		1	458536	NFT2	EET CF	06/23/25 16:17
Total/NA	Analysis	I-3765-85		1	457249	E6KR	EET CF	06/11/25 12:06
Total/NA	Analysis	Field Sampling		1	457676	FQT6	EET CF	06/06/25 13:50

Lab Chronicle

Client: AECOM
Job ID: 310-308221-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-46A
Lab Sample ID: 310-308221-5
Date Collected: 06/06/25 15:10
Matrix: Ground Water
Date Received: 06/07/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	457138	WSE8	EET CF	06/11/25 03:20
Total/NA	Prep	3005A			457446	F5MW	EET CF	06/13/25 09:00
Total/NA	Analysis	6020B		1	458381	ZRI4	EET CF	06/21/25 18:04
Total/NA	Prep	3005A			457446	F5MW	EET CF	06/13/25 09:00
Total/NA	Analysis	6020B		1	458536	NFT2	EET CF	06/23/25 16:20
Total/NA	Analysis	I-3765-85		1	457166	E6KR	EET CF	06/10/25 15:36
Total/NA	Analysis	Field Sampling		1	457676	FQT6	EET CF	06/06/25 15:10

Client Sample ID: MW-45A
Lab Sample ID: 310-308221-6
Date Collected: 06/06/25 16:15
Matrix: Ground Water
Date Received: 06/07/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	457138	WSE8	EET CF	06/11/25 03:43
Total/NA	Prep	3005A			457446	F5MW	EET CF	06/13/25 09:00
Total/NA	Analysis	6020B		1	458381	ZRI4	EET CF	06/21/25 18:07
Total/NA	Prep	3005A			457446	F5MW	EET CF	06/13/25 09:00
Total/NA	Analysis	6020B		1	458405	NFT2	EET CF	06/22/25 17:55
Total/NA	Prep	3005A			457446	F5MW	EET CF	06/13/25 09:00
Total/NA	Analysis	6020B		1	458536	NFT2	EET CF	06/23/25 16:23
Total/NA	Analysis	I-3765-85		1	457249	E6KR	EET CF	06/11/25 12:06
Total/NA	Analysis	Field Sampling		1	457676	FQT6	EET CF	06/06/25 16:15

Client Sample ID: MW-45A-FD
Lab Sample ID: 310-308221-7
Date Collected: 06/06/25 16:25
Matrix: Groundwater
Date Received: 06/07/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	457138	WSE8	EET CF	06/11/25 04:06
Total/NA	Prep	3005A			457446	F5MW	EET CF	06/13/25 09:00
Total/NA	Analysis	6020B		1	458381	ZRI4	EET CF	06/21/25 18:09
Total/NA	Prep	3005A			457446	F5MW	EET CF	06/13/25 09:00
Total/NA	Analysis	6020B		1	458405	NFT2	EET CF	06/22/25 17:58
Total/NA	Prep	3005A			457446	F5MW	EET CF	06/13/25 09:00
Total/NA	Analysis	6020B		1	458536	NFT2	EET CF	06/23/25 16:26
Total/NA	Analysis	I-3765-85		1	457249	E6KR	EET CF	06/11/25 12:06

Client Sample ID: Equipment Blank #2 Deep
Lab Sample ID: 310-308221-8
Date Collected: 06/06/25 13:10
Matrix: Ground Water
Date Received: 06/07/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	457140	WSE8	EET CF	06/11/25 08:35

Lab Chronicle

Client: AECOM
Job ID: 310-308221-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: Equipment Blank #2 Deep
Lab Sample ID: 310-308221-8

Date Collected: 06/06/25 13:10
Matrix: Ground Water
Date Received: 06/07/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			457446	F5MW	EET CF	06/13/25 09:00
Total/NA	Analysis	6020B		1	458381	ZRI4	EET CF	06/21/25 18:15
Total/NA	Prep	3005A			457446	F5MW	EET CF	06/13/25 09:00
Total/NA	Analysis	6020B		1	458405	NFT2	EET CF	06/22/25 18:04
Total/NA	Prep	3005A			457446	F5MW	EET CF	06/13/25 09:00
Total/NA	Analysis	6020B		1	458536	NFT2	EET CF	06/23/25 16:32
Total/NA	Analysis	I-3765-85		1	457166	E6KR	EET CF	06/10/25 15:37

Client Sample ID: Trip Blank
Lab Sample ID: 310-308221-9

Date Collected: 06/06/25 08:00
Matrix: Water
Date Received: 06/07/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	457140	WSE8	EET CF	06/11/25 08:13

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: AECOM
Job ID: 310-308221-1
Project/Site: Winneshiek Groundwater Monitoring

Laboratory: Eurofins Cedar Falls

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Field Sampling		Ground Water	Field Turbidity

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-27
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	06-15-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-25

Method Summary

Client: AECOM
Job ID: 310-308221-1
Project/Site: Winneshiek Groundwater Monitoring

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
6020B	Metals (ICP/MS)	SW846	EET CF
9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	EET CLE
I-3765-85	Residue, Non-filterable (TSS)	USGS	EET CF
Field Sampling	Field Sampling	EPA	EET CF
3005A	Preparation, Total Metals	SW846	EET CF
5030B	Purge and Trap	SW846	EET CF
9030B	Sulfide, Distillation (Acid Soluble and Insoluble)	SW846	EET CLE

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

USGS = "Methods For Analysis Of Water And Fluvial Sediments", USGS, 1989

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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310-308221 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: AECOM

City/State: CITY Waterloo | STATE IA | Project:

Receipt Information

Date/Time Received: DATE 6/7/25 | TIME 0750 | Received By: N

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☐ Lab Courier ☐ Lab Field Services ☒ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers

Sample(s) received in Cooler? ☒ Yes ☐ No *If yes:* Cooler ID:

Multiple Coolers? ☐ Yes ☒ No *If yes:* Cooler #_____ of_____

Cooler Custody Seals Present? ☐ Yes ☒ No *If yes:* Cooler custody seals intact? ☐ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☒ No *If yes:* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☒ Yes ☐ No *If yes:* Which VOA samples are in cooler? ↓

All

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: 2 | Correction Factor (°C): +0.2

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 2.3 | Corrected Temp (°C): 2.3

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
~~Uncorrected Temp~~ (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e g , bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

Eurofins TestAmerica, Cedar Falls
704 Enterprise Drive

Cedar Falls, IA 50613
phone 319.277 2401 fax 319.277.2425

Chain of Custody Record

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: **Iowa DNR**

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nick Schrock	Site Contact:	Date: 6-6-25	COC No
AECOM	Email nick.schrock@aecom.com	Lab Contact:	Carrier:	1 of 1 COCs
501 Sycamore St., Suite 222	Tel/Fax: (319)874-6581/(217)273-0978			Sampler:
Waterloo, IA 50703	Analysis Turnaround Time			For Lab Use Only:
(319)232-6531 Phone	☑ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(319)232-0271 FAX	TAT if different from Below			Lab Sampling
Project Name Winneshiek Groundwater Monitoring	☑ 2 weeks			
Site Winneshiek County Landfill	☐ 1 week			Job / SDG No
P O #	☑ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TSS	Appendix I Metals and VOCs	Endosulfan I	Sulfide	Sample Specific Notes.
MW-31A			G	GW		N		X	X	X		
MW-25A			G	GW		N		X	X			
MW-101	6-6-25	1030	G	GW	5	N		X	X			Turbidity - 2.17 NTU
MW-29A	6-6-25	1130	G	GW	6	N		X	X		X	Turbidity - 12.60 NTU
MW-22	6-6-25	1300	G	GW	5	N		X	X			Turbidity - 1.52 NTU
MW-7A	6-6-25	1350	G	GW	5	N		X	X			Turbidity - 2.33 NTU
MW-46A	6-6-25	1510	G	GW	5	N		X	X			Turbidity - 10.97 NTU
MW-45A	6-6-25	1615	G	GW	5	N		X	X			Turbidity - 2.98 NTU
MW-45A-FD	6-6-25	1625	G	GW	5	N		X	X			
MW-4B			G	GW		N		X	X			
MW-4			G	GW		N		X	X			
Equipment Blank #2 Deep	6-6-25	1310	G	GW	5	N		X	X			
Trip Blank	6-6-25	0800	G	W	2	N			X			

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No		Cooler Temp (°C) Obs'd _____ Corr'd _____		Therm ID No _____
Relinquished by: Ben Porter	Company: Aecom	Date/Time 6-6-25	Received by: Nate Kilburg	Company: AECOM	Date/Time 6/6/25 5:00 pm
Relinquished by: Nate Kilburg	Company: AECOM	Date/Time 6/7/25 7:50 am	Received by:	Company:	Date/Time 6/7/25 0750

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Phone: 319-277-2401 Fax: 319-277-2425

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Bindert, Zach T	Carrier Tracking No(s): N/A	COC No: 310-83763.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Zach.Bindert@et.eurofinsus.com	State of Origin: Iowa	Page: Page 1 of 1
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): State Program - Iowa		Job #: 310-308221-1
Address: 180 S. Van Buren Avenue,	Due Date Requested: 6/23/2025			Preservation Codes: -
City: Barberton	TAT Requested (days): N/A			
State, Zip: OH, 44203				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Winneshiek Groundwater Monitoring	Project #: 31017151			
Site: 310 - AECOM - Winneshiek County	SSOW#: N/A			Other: N/A

946

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc/9030B Sulfide	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-29A (310-308221-2)	6/6/25	11:30 Central	G	Water			X	1	

Analysis Requested

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 6/9/25 1155	Company	Received by: JAYDEN COLLINS	Date/Time: 6/10/25 1000	Company EUW
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Cooler Temperature(s) °C and Other Remarks:

Eurofins - Cleveland Sample Receipt Form/Narrative — Login #
Barberton Facility

Client Eurofins Cedar Falls Site Name — Cooler unpacked by: JAYDEN COLLINS

Cooler Received on 6-10-25 Opened on 6-10-25

FedEx 1st Grd (Exp) UPS FAS Waypoint Client Drop Off Eurofins Courier Other

Receipt After-hours Drop-off Date/Time Storage Location

Eurofins Cooler # PC Foam Box Client Cooler Box Other

Packing material used (Bubble Wrap) Foam Plastic Bag None Other

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # 17 (CF 0.2 °C) Observed Cooler Temp 4.8 °C Corrected Cooler Temp 5.0 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity	(Yes) No	
-Were the seals on the outside of the cooler(s) signed & dated?	(Yes) No	NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	(Yes) No	
-Were tamper/custody seals intact and uncompromised?	(Yes) No	NA
3 Shippers' packing slip attached to the cooler(s)?	(Yes) No	
4. Did custody papers accompany the sample(s)?	(Yes) No	
5 Were the custody papers relinquished & signed in the appropriate place?	(Yes) No	
6 Was/were the person(s) who collected the samples clearly identified on the COC?	(Yes) No	
7 Did all bottles arrive in good condition (Unbroken)?	(Yes) No	
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	(Yes) No	
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	(Yes) No	
11 Sufficient quantity received to perform indicated analyses?	(Yes) No	
12 Are these work share samples and all listed on the COC?	(Yes) No	
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes No	NA pH Strip Lot# HC463162
14 Were VOAs on the COC?	Yes No	
15 Were air bubbles >6 mm in any VOA vials? ● ← Larger than this	Yes No	NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #	Yes No	
17 Was a LL Hg or Me Hg trip blank present?	Yes No	

5/16/25

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM ____ Date ____ by ____ via Verbal Voice Mail Other

Concerning ____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:

Labels Verified by

19 SAMPLE CONDITION

Sample(s) ____ were received after the recommended holding time had expired.

Sample(s) ____ were received in a broken container

Sample(s) ____ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) ____ were further preserved in the laboratory

Time preserved. ____ Preservative(s) added/Lot number(s) ____

VOA Sample Preservation Date/Time VOAs Frozen ____

Login Sample Receipt Checklist

Client: AECOM

Job Number: 310-308221-1

Login Number: 308221

List Number: 1

Creator: Hirsch, Preston

List Source: Eurofins Cedar Falls

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

ANALYTICAL REPORT

PREPARED FOR

Attn: Nick Schrock
AECOM
501 Sycamore Street
Suite #222
Waterloo, Iowa 50703

Generated 6/24/2025 4:15:18 PM

JOB DESCRIPTION

Winneshiek Groundwater Monitoring
2025 Spring Groundwater

JOB NUMBER

310-308310-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



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6/24/2025 4:15:18 PM

Authorized for release by
Zach Bindert, Senior Project Manager
Zach.Bindert@et.eurofinsus.com
(319)595-2016

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Job Narrative
310-308310-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 6/10/2025 8:15 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.5°C.

GC/MS VOA
Method 8260D: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following sample(s) was received preserved with hydrochloric acid. Vial preservation was pH <2 rather than pH 4-5. : MW-4B (310-308310-2), MW-4 (310-308310-3), Trip Blank (310-308310-4), GU-1 (310-308310-5) and GU-2 (310-308310-6). The requested target analyte list includes Acrylonitrile.

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-457385 recovered outside of the control limits for trans-1,3-Dichloropropene (-20.3%D). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The associated sample is impacted: (CCV 310-457385/3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Field Service / Mobile Lab
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: AECOM
Job ID: 310-308310-1
Project/Site: Winneshiek Groundwater Monitoring

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-308310-2	MW-4B	Ground Water	06/09/25 10:50	06/10/25 08:15
310-308310-3	MW-4	Ground Water	06/09/25 11:45	06/10/25 08:15
310-308310-4	Trip Blank	Water	06/09/25 08:00	06/10/25 08:15
310-308310-5	GU-1	Ground Water	06/09/25 12:30	06/10/25 08:15
310-308310-6	GU-2	Ground Water	06/09/25 13:00	06/10/25 08:15

Detection Summary

Client: AECOM
Job ID: 310-308310-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: MW-4B — Lab Sample ID: 310-308310-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	199		2.00	0.660	ug/L	1		6020B	Total/NA
Total Suspended Solids	1.38	J	1.88	1.31	mg/L	1		I-3765-85	Total/NA
Field Turbidity	1.10				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-4 — Lab Sample ID: 310-308310-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	0.366	J	1.00	0.230	ug/L	1		8260D	Total/NA
Benzene	0.266	J	0.500	0.220	ug/L	1		8260D	Total/NA
Arsenic	0.759	J	2.00	0.530	ug/L	1		6020B	Total/NA
Barium	505		2.00	0.660	ug/L	1		6020B	Total/NA
Cobalt	2.25		0.500	0.170	ug/L	1		6020B	Total/NA
Nickel	8.82		5.00	2.30	ug/L	1		6020B	Total/NA
Total Suspended Solids	2.50		1.88	1.31	mg/L	1		I-3765-85	Total/NA
Field Turbidity	0.63				NTU	1		Field Sampling	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 310-308310-4

No Detections.

Client Sample ID: GU-1 — Lab Sample ID: 310-308310-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	238		2.00	0.660	ug/L	1		6020B	Total/NA
Cobalt	0.546		0.500	0.170	ug/L	1		6020B	Total/NA
Nickel	17.2		5.00	2.30	ug/L	1		6020B	Total/NA
Total Suspended Solids	5.33		5.00	3.50	mg/L	1		I-3765-85	Total/NA
Field Turbidity	11.21				NTU	1		Field Sampling	Total/NA

Client Sample ID: GU-2 — Lab Sample ID: 310-308310-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.707	J	2.00	0.530	ug/L	1		6020B	Total/NA
Barium	161		2.00	0.660	ug/L	1		6020B	Total/NA
Cobalt	0.400	J	0.500	0.170	ug/L	1		6020B	Total/NA
Nickel	2.96	J	5.00	2.30	ug/L	1		6020B	Total/NA
Total Suspended Solids	4.33	J	5.00	3.50	mg/L	1		I-3765-85	Total/NA
Field Turbidity	15.29				NTU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: Winneshiek Groundwater Monitoring

Job ID: 310-308310-1

Client Sample ID: MW-4B
Date Collected: 06/09/25 10:50
Date Received: 06/10/25 08:15

Lab Sample ID: 310-308310-2
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/13/25 06:41	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/13/25 06:41	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/13/25 06:41	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/13/25 06:41	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/13/25 06:41	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/13/25 06:41	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/13/25 06:41	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/13/25 06:41	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/13/25 06:41	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/13/25 06:41	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/13/25 06:41	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/13/25 06:41	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/13/25 06:41	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/13/25 06:41	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/13/25 06:41	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/13/25 06:41	1
Acetone	<3.10		10.0	3.10	ug/L			06/13/25 06:41	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/13/25 06:41	1
Benzene	<0.220		0.500	0.220	ug/L			06/13/25 06:41	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/13/25 06:41	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/13/25 06:41	1
Bromoform	<0.780		5.00	0.780	ug/L			06/13/25 06:41	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/13/25 06:41	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/13/25 06:41	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/13/25 06:41	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/13/25 06:41	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/13/25 06:41	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/13/25 06:41	1
Chloroform	<1.30		3.00	1.30	ug/L			06/13/25 06:41	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/13/25 06:41	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/13/25 06:41	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/13/25 06:41	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/13/25 06:41	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/13/25 06:41	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/13/25 06:41	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/13/25 06:41	1
Styrene	<0.370		1.00	0.370	ug/L			06/13/25 06:41	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/13/25 06:41	1
Toluene	<0.430		1.00	0.430	ug/L			06/13/25 06:41	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/13/25 06:41	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/13/25 06:41	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/13/25 06:41	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/13/25 06:41	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/13/25 06:41	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/13/25 06:41	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/13/25 06:41	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/13/25 06:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*76 - 130*		*06/13/25 06:41*	*1*

Client Sample ID: MW-4B
Lab Sample ID: 310-308310-2
Date Collected: 06/09/25 10:50
Matrix: Ground Water
Date Received: 06/10/25 08:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*80 - 120*		*06/13/25 06:41*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*06/13/25 06:41*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/13/25 09:00	06/24/25 15:08	1
Arsenic	<0.530		2.00	0.530	ug/L		06/13/25 09:00	06/24/25 15:08	1
Barium	**199**		2.00	0.660	ug/L		06/13/25 09:00	06/24/25 15:08	1
Beryllium	<0.330		1.00	0.330	ug/L		06/13/25 09:00	06/24/25 15:08	1
Cadmium	<0.100		0.200	0.100	ug/L		06/13/25 09:00	06/24/25 15:08	1
Chromium	<1.80		5.00	1.80	ug/L		06/13/25 09:00	06/24/25 15:08	1
Cobalt	<0.170		0.500	0.170	ug/L		06/13/25 09:00	06/24/25 15:08	1
Copper	<3.20		5.00	3.20	ug/L		06/13/25 09:00	06/24/25 15:08	1
Lead	<0.330		0.500	0.330	ug/L		06/13/25 09:00	06/24/25 15:08	1
Nickel	<2.30		5.00	2.30	ug/L		06/13/25 09:00	06/24/25 15:08	1
Selenium	<1.40		5.00	1.40	ug/L		06/13/25 09:00	06/24/25 15:08	1
Silver	<0.500		1.00	0.500	ug/L		06/13/25 09:00	06/24/25 15:08	1
Thallium	<0.570		1.00	0.570	ug/L		06/13/25 09:00	06/24/25 15:08	1
Vanadium	<1.70		5.00	1.70	ug/L		06/13/25 09:00	06/24/25 15:08	1
Zinc	<13.0		20.0	13.0	ug/L		06/13/25 09:00	06/24/25 15:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**1.38**	**J**	1.88	1.31	mg/L			06/11/25 14:12	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**1.10**				NTU			06/09/25 10:50	1

Client Sample ID: MW-4
Lab Sample ID: 310-308310-3

Date Collected: 06/09/25 11:45
Matrix: Ground Water

Date Received: 06/10/25 08:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/13/25 07:04	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/13/25 07:04	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/13/25 07:04	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/13/25 07:04	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/13/25 07:04	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/13/25 07:04	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/13/25 07:04	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/13/25 07:04	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/13/25 07:04	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/13/25 07:04	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/13/25 07:04	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/13/25 07:04	1
1,4-Dichlorobenzene	**0.366**	**J**	1.00	0.230	ug/L			06/13/25 07:04	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/13/25 07:04	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/13/25 07:04	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/13/25 07:04	1
Acetone	<3.10		10.0	3.10	ug/L			06/13/25 07:04	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/13/25 07:04	1
Benzene	**0.266**	**J**	0.500	0.220	ug/L			06/13/25 07:04	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/13/25 07:04	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/13/25 07:04	1
Bromoform	<0.780		5.00	0.780	ug/L			06/13/25 07:04	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/13/25 07:04	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/13/25 07:04	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/13/25 07:04	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/13/25 07:04	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/13/25 07:04	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/13/25 07:04	1
Chloroform	<1.30		3.00	1.30	ug/L			06/13/25 07:04	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/13/25 07:04	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/13/25 07:04	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/13/25 07:04	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/13/25 07:04	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/13/25 07:04	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/13/25 07:04	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/13/25 07:04	1
Styrene	<0.370		1.00	0.370	ug/L			06/13/25 07:04	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/13/25 07:04	1
Toluene	<0.430		1.00	0.430	ug/L			06/13/25 07:04	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/13/25 07:04	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/13/25 07:04	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/13/25 07:04	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/13/25 07:04	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/13/25 07:04	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/13/25 07:04	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/13/25 07:04	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/13/25 07:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*76 - 130*		*06/13/25 07:04*	*1*

Client Sample ID: MW-4
Lab Sample ID: 310-308310-3
Date Collected: 06/09/25 11:45
Matrix: Ground Water
Date Received: 06/10/25 08:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*80 - 120*		*06/13/25 07:04*	*1*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*06/13/25 07:04*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/13/25 09:00	06/24/25 15:11	1
Arsenic	**0.759**	**J**	2.00	0.530	ug/L		06/13/25 09:00	06/24/25 15:11	1
Barium	**505**		2.00	0.660	ug/L		06/13/25 09:00	06/24/25 15:11	1
Beryllium	<0.330		1.00	0.330	ug/L		06/13/25 09:00	06/24/25 15:11	1
Cadmium	<0.100		0.200	0.100	ug/L		06/13/25 09:00	06/24/25 15:11	1
Chromium	<1.80		5.00	1.80	ug/L		06/13/25 09:00	06/24/25 15:11	1
Cobalt	**2.25**		0.500	0.170	ug/L		06/13/25 09:00	06/24/25 15:11	1
Copper	<3.20		5.00	3.20	ug/L		06/13/25 09:00	06/24/25 15:11	1
Lead	<0.330		0.500	0.330	ug/L		06/13/25 09:00	06/24/25 15:11	1
Nickel	**8.82**		5.00	2.30	ug/L		06/13/25 09:00	06/24/25 15:11	1
Selenium	<1.40		5.00	1.40	ug/L		06/13/25 09:00	06/24/25 15:11	1
Silver	<0.500		1.00	0.500	ug/L		06/13/25 09:00	06/24/25 15:11	1
Thallium	<0.570		1.00	0.570	ug/L		06/13/25 09:00	06/24/25 15:11	1
Vanadium	<1.70		5.00	1.70	ug/L		06/13/25 09:00	06/24/25 15:11	1
Zinc	<13.0		20.0	13.0	ug/L		06/13/25 09:00	06/24/25 15:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**2.50**		1.88	1.31	mg/L			06/11/25 14:12	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**0.63**				NTU			06/09/25 11:45	1

Client: AECOM
Job ID: 310-308310-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: Trip Blank
Lab Sample ID: 310-308310-4
Date Collected: 06/09/25 08:00
Matrix: Water
Date Received: 06/10/25 08:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/13/25 05:56	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/13/25 05:56	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/13/25 05:56	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/13/25 05:56	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/13/25 05:56	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/13/25 05:56	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/13/25 05:56	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/13/25 05:56	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/13/25 05:56	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/13/25 05:56	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/13/25 05:56	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/13/25 05:56	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/13/25 05:56	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/13/25 05:56	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/13/25 05:56	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/13/25 05:56	1
Acetone	<3.10		10.0	3.10	ug/L			06/13/25 05:56	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/13/25 05:56	1
Benzene	<0.220		0.500	0.220	ug/L			06/13/25 05:56	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/13/25 05:56	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/13/25 05:56	1
Bromoform	<0.780		5.00	0.780	ug/L			06/13/25 05:56	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/13/25 05:56	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/13/25 05:56	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/13/25 05:56	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/13/25 05:56	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/13/25 05:56	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/13/25 05:56	1
Chloroform	<1.30		3.00	1.30	ug/L			06/13/25 05:56	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/13/25 05:56	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/13/25 05:56	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/13/25 05:56	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/13/25 05:56	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/13/25 05:56	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/13/25 05:56	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/13/25 05:56	1
Styrene	<0.370		1.00	0.370	ug/L			06/13/25 05:56	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/13/25 05:56	1
Toluene	<0.430		1.00	0.430	ug/L			06/13/25 05:56	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/13/25 05:56	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/13/25 05:56	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/13/25 05:56	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/13/25 05:56	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/13/25 05:56	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/13/25 05:56	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/13/25 05:56	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/13/25 05:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*76 - 130*		*06/13/25 05:56*	*1*

Client Sample ID: Trip Blank
Lab Sample ID: 310-308310-4
Date Collected: 06/09/25 08:00
Matrix: Water
Date Received: 06/10/25 08:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*91*		*80 - 120*		*06/13/25 05:56*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*06/13/25 05:56*	*1*

Client: AECOM
Job ID: 310-308310-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: GU-1
Lab Sample ID: 310-308310-5
Date Collected: 06/09/25 12:30
Matrix: Ground Water
Date Received: 06/10/25 08:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/13/25 07:26	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/13/25 07:26	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/13/25 07:26	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/13/25 07:26	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/13/25 07:26	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/13/25 07:26	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/13/25 07:26	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/13/25 07:26	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/13/25 07:26	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/13/25 07:26	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/13/25 07:26	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/13/25 07:26	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/13/25 07:26	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/13/25 07:26	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/13/25 07:26	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/13/25 07:26	1
Acetone	<3.10		10.0	3.10	ug/L			06/13/25 07:26	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/13/25 07:26	1
Benzene	<0.220		0.500	0.220	ug/L			06/13/25 07:26	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/13/25 07:26	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/13/25 07:26	1
Bromoform	<0.780		5.00	0.780	ug/L			06/13/25 07:26	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/13/25 07:26	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/13/25 07:26	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/13/25 07:26	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/13/25 07:26	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/13/25 07:26	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/13/25 07:26	1
Chloroform	<1.30		3.00	1.30	ug/L			06/13/25 07:26	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/13/25 07:26	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/13/25 07:26	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/13/25 07:26	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/13/25 07:26	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/13/25 07:26	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/13/25 07:26	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/13/25 07:26	1
Styrene	<0.370		1.00	0.370	ug/L			06/13/25 07:26	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/13/25 07:26	1
Toluene	<0.430		1.00	0.430	ug/L			06/13/25 07:26	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/13/25 07:26	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/13/25 07:26	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/13/25 07:26	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/13/25 07:26	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/13/25 07:26	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/13/25 07:26	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/13/25 07:26	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/13/25 07:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*111*		*76 - 130*		*06/13/25 07:26*	*1*

Client Sample ID: GU-1
Lab Sample ID: 310-308310-5
Date Collected: 06/09/25 12:30
Matrix: Ground Water
Date Received: 06/10/25 08:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*80 - 120*		*06/13/25 07:26*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*06/13/25 07:26*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/13/25 09:00	06/24/25 15:14	1
Arsenic	<0.530		2.00	0.530	ug/L		06/13/25 09:00	06/24/25 15:14	1
Barium	**238**		2.00	0.660	ug/L		06/13/25 09:00	06/24/25 15:14	1
Beryllium	<0.330		1.00	0.330	ug/L		06/13/25 09:00	06/24/25 15:14	1
Cadmium	<0.100		0.200	0.100	ug/L		06/13/25 09:00	06/24/25 15:14	1
Chromium	<1.80		5.00	1.80	ug/L		06/13/25 09:00	06/24/25 15:14	1
Cobalt	**0.546**		0.500	0.170	ug/L		06/13/25 09:00	06/24/25 15:14	1
Copper	<3.20		5.00	3.20	ug/L		06/13/25 09:00	06/24/25 15:14	1
Lead	<0.330		0.500	0.330	ug/L		06/13/25 09:00	06/24/25 15:14	1
Nickel	**17.2**		5.00	2.30	ug/L		06/13/25 09:00	06/24/25 15:14	1
Selenium	<1.40		5.00	1.40	ug/L		06/13/25 09:00	06/24/25 15:14	1
Silver	<0.500		1.00	0.500	ug/L		06/13/25 09:00	06/24/25 15:14	1
Thallium	<0.570		1.00	0.570	ug/L		06/13/25 09:00	06/24/25 15:14	1
Vanadium	<1.70		5.00	1.70	ug/L		06/13/25 09:00	06/24/25 15:14	1
Zinc	<13.0		20.0	13.0	ug/L		06/13/25 09:00	06/24/25 15:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**5.33**		5.00	3.50	mg/L			06/11/25 14:12	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**11.21**				NTU			06/09/25 12:30	1

Client: AECOM
Project/Site: Winneshiek Groundwater Monitoring

Job ID: 310-308310-1

Client Sample ID: GU-2
Date Collected: 06/09/25 13:00
Date Received: 06/10/25 08:15

Lab Sample ID: 310-308310-6
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/13/25 07:49	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/13/25 07:49	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/13/25 07:49	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/13/25 07:49	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/13/25 07:49	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/13/25 07:49	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/13/25 07:49	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/13/25 07:49	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/13/25 07:49	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/13/25 07:49	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/13/25 07:49	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/13/25 07:49	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/13/25 07:49	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/13/25 07:49	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/13/25 07:49	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/13/25 07:49	1
Acetone	<3.10		10.0	3.10	ug/L			06/13/25 07:49	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/13/25 07:49	1
Benzene	<0.220		0.500	0.220	ug/L			06/13/25 07:49	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/13/25 07:49	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/13/25 07:49	1
Bromoform	<0.780		5.00	0.780	ug/L			06/13/25 07:49	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/13/25 07:49	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/13/25 07:49	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/13/25 07:49	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/13/25 07:49	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/13/25 07:49	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/13/25 07:49	1
Chloroform	<1.30		3.00	1.30	ug/L			06/13/25 07:49	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/13/25 07:49	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/13/25 07:49	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/13/25 07:49	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/13/25 07:49	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/13/25 07:49	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/13/25 07:49	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/13/25 07:49	1
Styrene	<0.370		1.00	0.370	ug/L			06/13/25 07:49	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/13/25 07:49	1
Toluene	<0.430		1.00	0.430	ug/L			06/13/25 07:49	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/13/25 07:49	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/13/25 07:49	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/13/25 07:49	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/13/25 07:49	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/13/25 07:49	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/13/25 07:49	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/13/25 07:49	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/13/25 07:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*109*		*76 - 130*		*06/13/25 07:49*	*1*

Client: AECOM
Job ID: 310-308310-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: GU-2
Lab Sample ID: 310-308310-6
Date Collected: 06/09/25 13:00
Matrix: Ground Water
Date Received: 06/10/25 08:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*80 - 120*		*06/13/25 07:49*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*06/13/25 07:49*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/13/25 09:00	06/24/25 15:17	1
Arsenic	**0.707**	**J**	2.00	0.530	ug/L		06/13/25 09:00	06/24/25 15:17	1
Barium	**161**		2.00	0.660	ug/L		06/13/25 09:00	06/24/25 15:17	1
Beryllium	<0.330		1.00	0.330	ug/L		06/13/25 09:00	06/24/25 15:17	1
Cadmium	<0.100		0.200	0.100	ug/L		06/13/25 09:00	06/24/25 15:17	1
Chromium	<1.80		5.00	1.80	ug/L		06/13/25 09:00	06/24/25 15:17	1
Cobalt	**0.400**	**J**	0.500	0.170	ug/L		06/13/25 09:00	06/24/25 15:17	1
Copper	<3.20		5.00	3.20	ug/L		06/13/25 09:00	06/24/25 15:17	1
Lead	<0.330		0.500	0.330	ug/L		06/13/25 09:00	06/24/25 15:17	1
Nickel	**2.96**	**J**	5.00	2.30	ug/L		06/13/25 09:00	06/24/25 15:17	1
Selenium	<1.40		5.00	1.40	ug/L		06/13/25 09:00	06/24/25 15:17	1
Silver	<0.500		1.00	0.500	ug/L		06/13/25 09:00	06/24/25 15:17	1
Thallium	<0.570		1.00	0.570	ug/L		06/13/25 09:00	06/24/25 15:17	1
Vanadium	<1.70		5.00	1.70	ug/L		06/13/25 09:00	06/24/25 15:17	1
Zinc	<13.0		20.0	13.0	ug/L		06/13/25 09:00	06/24/25 15:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**4.33**	**J**	5.00	3.50	mg/L			06/11/25 12:06	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Turbidity	**15.29**				NTU			06/09/25 13:00	1

Definitions/Glossary

Client: AECOM
Job ID: 310-308310-1
Project/Site: Winneshiek Groundwater Monitoring

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: AECOM
Project/Site: Winneshiek Groundwater Monitoring

Job ID: 310-308310-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Ground Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(76-130)	(80-120)	(80-120)
310-308310-2	MW-4B	110	92	103
310-308310-3	MW-4	106	92	106
310-308310-5	GU-1	111	92	103
310-308310-6	GU-2	109	91	102

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(76-130)	(80-120)	(80-120)
310-308310-4	Trip Blank	110	91	105
LCS 310-457385/6	Lab Control Sample	99	96	103
LCS 310-457385/7	Lab Control Sample	104	91	102
MB 310-457385/5	Method Blank	110	90	104

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 310-457385/5
Matrix: Water
Analysis Batch: 457385

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			06/13/25 04:25	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			06/13/25 04:25	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			06/13/25 04:25	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			06/13/25 04:25	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			06/13/25 04:25	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			06/13/25 04:25	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			06/13/25 04:25	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			06/13/25 04:25	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			06/13/25 04:25	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			06/13/25 04:25	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			06/13/25 04:25	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			06/13/25 04:25	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			06/13/25 04:25	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			06/13/25 04:25	1
2-Hexanone	<2.00		10.0	2.00	ug/L			06/13/25 04:25	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			06/13/25 04:25	1
Acetone	<3.10		10.0	3.10	ug/L			06/13/25 04:25	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			06/13/25 04:25	1
Benzene	<0.220		0.500	0.220	ug/L			06/13/25 04:25	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			06/13/25 04:25	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			06/13/25 04:25	1
Bromoform	<0.780		5.00	0.780	ug/L			06/13/25 04:25	1
Bromomethane	<1.10		4.00	1.10	ug/L			06/13/25 04:25	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			06/13/25 04:25	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			06/13/25 04:25	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			06/13/25 04:25	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			06/13/25 04:25	1
Chloroethane	<0.790		4.00	0.790	ug/L			06/13/25 04:25	1
Chloroform	<1.30		3.00	1.30	ug/L			06/13/25 04:25	1
Chloromethane	<0.610		3.00	0.610	ug/L			06/13/25 04:25	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			06/13/25 04:25	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			06/13/25 04:25	1
Dibromomethane	<0.330		1.00	0.330	ug/L			06/13/25 04:25	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			06/13/25 04:25	1
Iodomethane	<7.00		10.0	7.00	ug/L			06/13/25 04:25	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			06/13/25 04:25	1
Styrene	<0.370		1.00	0.370	ug/L			06/13/25 04:25	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			06/13/25 04:25	1
Toluene	<0.430		1.00	0.430	ug/L			06/13/25 04:25	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			06/13/25 04:25	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			06/13/25 04:25	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			06/13/25 04:25	1
Trichloroethene	<0.430		1.00	0.430	ug/L			06/13/25 04:25	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			06/13/25 04:25	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			06/13/25 04:25	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			06/13/25 04:25	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			06/13/25 04:25	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-457385/5
Matrix: Water
Analysis Batch: 457385

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*110*		*76 - 130*		*06/13/25 04:25*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*06/13/25 04:25*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*06/13/25 04:25*	*1*

Lab Sample ID: LCS 310-457385/6
Matrix: Water
Analysis Batch: 457385

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	18.12		ug/L		91	70 - 121
1,1,1-Trichloroethane	20.0	19.44		ug/L		97	69 - 130
1,1,2,2-Tetrachloroethane	20.0	18.83		ug/L		94	70 - 122
1,1,2-Trichloroethane	20.0	18.88		ug/L		94	75 - 121
1,1-Dichloroethane	20.0	19.13		ug/L		96	69 - 127
1,1-Dichloroethene	20.0	20.22		ug/L		101	64 - 134
1,2,3-Trichloropropane	20.0	18.38		ug/L		92	70 - 122
1,2-Dibromo-3-Chloropropane	20.0	18.34		ug/L		92	62 - 132
1,2-Dibromoethane (EDB)	20.0	20.06		ug/L		100	74 - 122
1,2-Dichlorobenzene	20.0	18.91		ug/L		95	74 - 120
1,2-Dichloroethane	20.0	17.85		ug/L		89	68 - 125
1,2-Dichloropropane	20.0	20.90		ug/L		105	72 - 128
1,4-Dichlorobenzene	20.0	18.27		ug/L		91	72 - 120
2-Butanone (MEK)	40.0	39.14		ug/L		98	60 - 134
2-Hexanone	40.0	38.62		ug/L		97	62 - 139
4-Methyl-2-pentanone (MIBK)	40.0	37.95		ug/L		95	62 - 136
Acetone	40.0	39.78		ug/L		99	59 - 136
Acrylonitrile	200	209.4		ug/L		105	50 - 150
Benzene	20.0	19.88		ug/L		99	71 - 125
Bromochloromethane	20.0	21.03		ug/L		105	69 - 131
Bromodichloromethane	20.0	18.39		ug/L		92	70 - 122
Bromoform	20.0	17.03		ug/L		85	62 - 122
Carbon disulfide	20.0	19.91		ug/L		100	58 - 137
Carbon tetrachloride	20.0	19.29		ug/L		96	63 - 136
Chlorobenzene	20.0	18.51		ug/L		93	74 - 120
Chlorodibromomethane	20.0	16.12		ug/L		81	69 - 121
Chloroform	20.0	18.24		ug/L		91	72 - 122
cis-1,2-Dichloroethene	20.0	19.74		ug/L		99	72 - 123
cis-1,3-Dichloropropene	20.0	15.86		ug/L		79	72 - 123
Dibromomethane	20.0	19.39		ug/L		97	72 - 122
Ethylbenzene	20.0	19.04		ug/L		95	75 - 120
Iodomethane	20.0	16.12		ug/L		81	18 - 150
Methylene Chloride	20.0	22.35		ug/L		112	72 - 128
Styrene	20.0	19.60		ug/L		98	74 - 122
Tetrachloroethene	20.0	20.12		ug/L		101	70 - 128
Toluene	20.0	19.15		ug/L		96	74 - 120
trans-1,2-Dichloroethene	20.0	19.83		ug/L		99	67 - 127
trans-1,3-Dichloropropene	20.0	15.29		ug/L		76	67 - 123
trans-1,4-Dichloro-2-butene	20.0	16.44		ug/L		82	50 - 150

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-457385/6
Matrix: Water
Analysis Batch: 457385

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Trichloroethene	20.0	19.31		ug/L		97	70 - 128
Vinyl acetate	40.0	34.25		ug/L		86	50 - 150
Xylenes, Total	40.0	39.02		ug/L		98	74 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*99*		*76 - 130*
Toluene-d8 (Surr)	*96*		*80 - 120*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*

Lab Sample ID: LCS 310-457385/7
Matrix: Water
Analysis Batch: 457385

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	16.51		ug/L		83	33 - 138
Chloroethane	20.0	17.03		ug/L		85	59 - 139
Chloromethane	20.0	18.53		ug/L		93	52 - 146
Trichlorofluoromethane	20.0	17.79		ug/L		89	55 - 150
Vinyl chloride	20.0	17.68		ug/L		88	60 - 142

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*104*		*76 - 130*
Toluene-d8 (Surr)	*91*		*80 - 120*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-457447/1-A
Matrix: Water
Analysis Batch: 458637

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 457447

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		06/13/25 09:00	06/24/25 14:04	1
Arsenic	<0.530		2.00	0.530	ug/L		06/13/25 09:00	06/24/25 14:04	1
Barium	<0.660		2.00	0.660	ug/L		06/13/25 09:00	06/24/25 14:04	1
Beryllium	<0.330		1.00	0.330	ug/L		06/13/25 09:00	06/24/25 14:04	1
Cadmium	<0.100		0.200	0.100	ug/L		06/13/25 09:00	06/24/25 14:04	1
Chromium	<1.80		5.00	1.80	ug/L		06/13/25 09:00	06/24/25 14:04	1
Cobalt	<0.170		0.500	0.170	ug/L		06/13/25 09:00	06/24/25 14:04	1
Copper	<3.20		5.00	3.20	ug/L		06/13/25 09:00	06/24/25 14:04	1
Lead	<0.330		0.500	0.330	ug/L		06/13/25 09:00	06/24/25 14:04	1
Nickel	<2.30		5.00	2.30	ug/L		06/13/25 09:00	06/24/25 14:04	1
Selenium	<1.40		5.00	1.40	ug/L		06/13/25 09:00	06/24/25 14:04	1
Silver	<0.500		1.00	0.500	ug/L		06/13/25 09:00	06/24/25 14:04	1
Thallium	<0.570		1.00	0.570	ug/L		06/13/25 09:00	06/24/25 14:04	1
Vanadium	<1.70		5.00	1.70	ug/L		06/13/25 09:00	06/24/25 14:04	1
Zinc	<13.0		20.0	13.0	ug/L		06/13/25 09:00	06/24/25 14:04	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 310-457447/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 458637
Prep Batch: 457447

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	200	205.2		ug/L		103	80 - 120
Arsenic	200	190.5		ug/L		95	80 - 120
Barium	100	97.16		ug/L		97	80 - 120
Beryllium	100	98.03		ug/L		98	80 - 120
Cadmium	100	98.73		ug/L		99	80 - 120
Chromium	100	100.6		ug/L		101	80 - 120
Cobalt	100	100.6		ug/L		101	80 - 120
Copper	200	207.0		ug/L		103	80 - 120
Lead	200	196.3		ug/L		98	80 - 120
Nickel	200	190.4		ug/L		95	80 - 120
Selenium	400	390.0		ug/L		97	80 - 120
Silver	100	108.5		ug/L		109	80 - 120
Thallium	100	91.19		ug/L		91	80 - 120
Vanadium	100	98.57		ug/L		99	80 - 120
Zinc	200	185.4		ug/L		93	80 - 120

Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: MB 310-457249/1
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 457249

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<3.50		5.00	3.50	mg/L			06/11/25 12:06	1

Lab Sample ID: LCS 310-457249/2
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 457249

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	99.00		mg/L		99	82 - 117

Lab Sample ID: MB 310-457286/1
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 457286

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<3.50		5.00	3.50	mg/L			06/11/25 14:12	1

Lab Sample ID: LCS 310-457286/2
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 457286

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	109.0		mg/L		109	82 - 117

GC/MS VOA

Analysis Batch: 457385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308310-2	MW-4B	Total/NA	Ground Water	8260D	
310-308310-3	MW-4	Total/NA	Ground Water	8260D	
310-308310-4	Trip Blank	Total/NA	Water	8260D	
310-308310-5	GU-1	Total/NA	Ground Water	8260D	
310-308310-6	GU-2	Total/NA	Ground Water	8260D	
MB 310-457385/5	Method Blank	Total/NA	Water	8260D	
LCS 310-457385/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-457385/7	Lab Control Sample	Total/NA	Water	8260D	

Metals

Prep Batch: 457447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308310-2	MW-4B	Total/NA	Ground Water	3005A	
310-308310-3	MW-4	Total/NA	Ground Water	3005A	
310-308310-5	GU-1	Total/NA	Ground Water	3005A	
310-308310-6	GU-2	Total/NA	Ground Water	3005A	
MB 310-457447/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-457447/2-A	Lab Control Sample	Total/NA	Water	3005A	

Analysis Batch: 458637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308310-2	MW-4B	Total/NA	Ground Water	6020B	457447
310-308310-3	MW-4	Total/NA	Ground Water	6020B	457447
310-308310-5	GU-1	Total/NA	Ground Water	6020B	457447
310-308310-6	GU-2	Total/NA	Ground Water	6020B	457447
MB 310-457447/1-A	Method Blank	Total/NA	Water	6020B	457447
LCS 310-457447/2-A	Lab Control Sample	Total/NA	Water	6020B	457447

General Chemistry

Analysis Batch: 457249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308310-6	GU-2	Total/NA	Ground Water	I-3765-85	
MB 310-457249/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-457249/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Analysis Batch: 457286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308310-2	MW-4B	Total/NA	Ground Water	I-3765-85	
310-308310-3	MW-4	Total/NA	Ground Water	I-3765-85	
310-308310-5	GU-1	Total/NA	Ground Water	I-3765-85	
MB 310-457286/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-457286/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Field Service / Mobile Lab

Analysis Batch: 457676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308310-2	MW-4B	Total/NA	Ground Water	Field Sampling	
310-308310-3	MW-4	Total/NA	Ground Water	Field Sampling	
310-308310-5	GU-1	Total/NA	Ground Water	Field Sampling	

Field Service / Mobile Lab (Continued)

Analysis Batch: 457676 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-308310-6	GU-2	Total/NA	Ground Water	Field Sampling	

Client Sample ID: MW-4B
Lab Sample ID: 310-308310-2

Date Collected: 06/09/25 10:50
Matrix: Ground Water
Date Received: 06/10/25 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	457385	WSE8	EET CF	06/13/25 06:41
Total/NA	Prep	3005A			457447	F5MW	EET CF	06/13/25 09:00
Total/NA	Analysis	6020B		1	458637	NFT2	EET CF	06/24/25 15:08
Total/NA	Analysis	I-3765-85		1	457286	E6KR	EET CF	06/11/25 14:12
Total/NA	Analysis	Field Sampling		1	457676	FQT6	EET CF	06/09/25 10:50

Client Sample ID: MW-4
Lab Sample ID: 310-308310-3

Date Collected: 06/09/25 11:45
Matrix: Ground Water
Date Received: 06/10/25 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	457385	WSE8	EET CF	06/13/25 07:04
Total/NA	Prep	3005A			457447	F5MW	EET CF	06/13/25 09:00
Total/NA	Analysis	6020B		1	458637	NFT2	EET CF	06/24/25 15:11
Total/NA	Analysis	I-3765-85		1	457286	E6KR	EET CF	06/11/25 14:12
Total/NA	Analysis	Field Sampling		1	457676	FQT6	EET CF	06/09/25 11:45

Client Sample ID: Trip Blank
Lab Sample ID: 310-308310-4

Date Collected: 06/09/25 08:00
Matrix: Water
Date Received: 06/10/25 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	457385	WSE8	EET CF	06/13/25 05:56

Client Sample ID: GU-1
Lab Sample ID: 310-308310-5

Date Collected: 06/09/25 12:30
Matrix: Ground Water
Date Received: 06/10/25 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	457385	WSE8	EET CF	06/13/25 07:26
Total/NA	Prep	3005A			457447	F5MW	EET CF	06/13/25 09:00
Total/NA	Analysis	6020B		1	458637	NFT2	EET CF	06/24/25 15:14
Total/NA	Analysis	I-3765-85		1	457286	E6KR	EET CF	06/11/25 14:12
Total/NA	Analysis	Field Sampling		1	457676	FQT6	EET CF	06/09/25 12:30

Client Sample ID: GU-2
Lab Sample ID: 310-308310-6

Date Collected: 06/09/25 13:00
Matrix: Ground Water
Date Received: 06/10/25 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	457385	WSE8	EET CF	06/13/25 07:49
Total/NA	Prep	3005A			457447	F5MW	EET CF	06/13/25 09:00
Total/NA	Analysis	6020B		1	458637	NFT2	EET CF	06/24/25 15:17
Total/NA	Analysis	I-3765-85		1	457249	E6KR	EET CF	06/11/25 12:06

Lab Chronicle

Client: AECOM
Job ID: 310-308310-1
Project/Site: Winneshiek Groundwater Monitoring

Client Sample ID: GU-2
Lab Sample ID: 310-308310-6
Date Collected: 06/09/25 13:00
Matrix: Ground Water
Date Received: 06/10/25 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Field Sampling		1	457676	FQT6	EET CF	06/09/25 13:00

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Accreditation/Certification Summary

Client: AECOM
Job ID: 310-308310-1
Project/Site: Winneshiek Groundwater Monitoring

Laboratory: Eurofins Cedar Falls

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Field Sampling		Ground Water	Field Turbidity
I-3765-85		Ground Water	Total Suspended Solids

Method Summary

Client: AECOM
Job ID: 310-308310-1
Project/Site: Winneshiek Groundwater Monitoring

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
6020B	Metals (ICP/MS)	SW846	EET CF
I-3765-85	Residue, Non-filterable (TSS)	USGS	EET CF
Field Sampling	Field Sampling	EPA	EET CF
3005A	Preparation, Total Metals	SW846	EET CF
5030B	Purge and Trap	SW846	EET CF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

USGS = "Methods For Analysis Of Water And Fluvial Sediments", USGS, 1989

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

eurofins | Environment Testing America

310-308310 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: AECOM

City/State: CITY Waterloo STATE IA Project:

Receipt Information

Date/Time Received: DATE 6/10/25 TIME 0815 Received By R

Delivery Type. ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee
☐ Lab Courier ☐ Lab Field Services ☒ Client Drop-off ☐ Other._____

Condition of Cooler/Containers

Sample(s) received in Cooler? ☒ Yes ☐ No *If yes:* Cooler ID.

Multiple Coolers? ☐ Yes ☒ No *If yes:* Cooler # _____ of _____

Cooler Custody Seals Present? ☐ Yes ☒ No *If yes.* Cooler custody seals intact? ☐ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☒ No *If yes:* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☐ Yes ☐ No *If yes.* Which VOA samples are in cooler? ↓

Temperature Record

Coolant. ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other._____ ☐ NONE

Thermometer ID: R Correction Factor (°C): +0.0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C). 1.5 Corrected Temp (°C) 1.5

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C)		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e g , bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE If yes, contact PM before proceeding If no, proceed with login

Additional Comments

Vials are for 46A not 4B

Chain of Custody Record

Eurofins TestAmerica, Cedar Falls
704 Enterprise Drive

Cedar Falls, IA 50613
phone 319 277.2401 fax 319.277.2425

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: **Iowa DNR**

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nick Schrock	Site Contact:	Date: 6-10-25	COC No
AECOM	Email nick.schrock@aecom.com	Lab Contact:	Carrier:	1 of 2 COCs
501 Sycamore St., Suite 222	Tel/Fax: (319)874-6581/(217)273-0978			Sampler:
Waterloo, IA 50703	Analysis Turnaround Time			For Lab Use Only:
(319)232-6531 Phone	☑ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(319)232-0271 FAX	TAT if different from Below			Lab Sampling
Project Name Winneshiek Groundwater Monitoring	☑ 2 weeks			
Site Winneshiek County Landfill	☐ 1 week			Job / SDG No
P O #	☑ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TSS	Appendix I Metals and VOCs	Endosulfan I	Sulfide	Sample Specific Notes
MW-31A			G	GW		N		X	X	X		
MW-25A			G	GW		N		X	X			
MW-101			G	GW		N		X	X			
MW-29A			G	GW		N		X	X		X	
MW-22			G	GW		N		X	X			
MW-7A			G	GW		N		X	X			
MW-46A			G	GW		N		X	X			
MW-45A			G	GW		N		X	X			
MW-45A-FD			G	GW		N		X	X			
MW-4B	6-9-25	1050	G	GW	5	N		X	X			Turbidity - 1.10 NTU
MW-4	6-9-25	1145	G	GW	5	N		X	X			Turbidity - 0.63 NTU
Equipment Blank #2 Deep			G	GW		N		X	X			
Trip Blank	6-9-25	0800	G	W	2	N			X			

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No		Cooler Temp (°C) Obs'd _____ Corr'd _____ Therm ID No _____		
Relinquished by: Ben Porter	Company: Aecom	Date/Time 6-10-25	Received by:	Company:	Date/Time
Relinquished by:	Company:	Date/Time	Received by:	Company:	Date/Time 6/10/25 0815

6/24/2025

Eurofins TestAmerica, Cedar Falls
704 Enterprise Drive

Cedar Falls, IA 50613
phone 319.277 2401 fax 319 277.2425

Chain of Custody Record

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: **Iowa DNR**

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Nick Schrock	Site Contact:	Date: 6-10-25	COC No
AECOM	Email nick.schrock@aecom.com	Lab Contact:	Carrier:	2 of 2 COCs
501 Sycamore St., Suite 222	Tel/Fax: (319)874-6581/(217)273-0978			Sampler:
Waterloo, IA 50703	Analysis Turnaround Time			For Lab Use Only:
(319)232-6531 Phone	☑ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(319)232-0271 FAX	TAT if different from Below ____			Lab Sampling
Project Name Winneshiek Groundwater Monitoring	☑ 2 weeks			Job / SDG No
Site Winneshiek County Landfill	☐ 1 week			
P O #	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TSS	Appendix I Metals and VOCs	Sample Specific Notes
SW-1			G	GW		N		X	X	
SW-5			G	GW		N		X	X	
SW-5-FD			G	GW		N		X	X	
SW-2			G	GW		N		X	X	
GU-1	6-9-25	1230	G	GW	5	N		X	X	Turbidity- 11.21 NTU
GU-2	6-9-25	1300	G	GW	5	N		X	X	Turbidity- 15.29 NTU
MH-1AA			G	GW		N		X	X	
MH-4-2			G	GW		N		X	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No		Cooler Temp (°C) Obs'd ____ Corr'd ____		Therm ID No ____
Relinquished by: Ben Porter	Company: Aecom	Date/Time 6-10-25	Received by:	Company:	Date/Time
Relinquished by:	Company:	Date/Time.	Received by:	Company:	Date/Time
Relinquished by:	Company:	Date/Time	Received in Laboratory by:	Company:	Date/Time 6/10/25 0825

Form No. CA-C-WI-002, Rev. 4.23, dated 4/16/2019

Login Sample Receipt Checklist

Client: AECOM

Job Number: 310-308310-1
SDG Number:

Login Number: 308310
List Number: 1
Creator: Homolar, Dana J

List Source: Eurofins Cedar Falls

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

October 2025 Sampling Event

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	GU-1	Weather:	Cloudy, 47°F, NW winds 15-25 mph, 30.0"Hg
Date:	10/21/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Location Details

Description of Sample Location: GU-1 is the compliance point for the Cell 5 groundwater underdrain.

Conditions commentary:

Sampling Details

Sampling Method: ____ Pump (low flow) ____ No-purge (specify sample interval): ____
____ Bailer ____ Other (specify): ____

Equipment type: ____ Submersible pump ____ Peristaltic pump ____ Bladder pump
____ Inertial lift pump ____ Bailer ____ No-purge (specify): ____
____ Other (specify): ____

Equipment name/description: Not Applicable Dedicated? (Y/N): N/A Disposable? (Y/N): N/A
Decontamination method: Not Applicable

Equipment depth (ft. MSL:) N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): N/A
Well dry? (Y/N): Yes | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
*No sample collected			

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: * No flow was observed at GU-1; therefore, no sample was collected.

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	GU-2	Weather:	Cloudy, 47°F, NW winds 15-25 mph, 30.0"Hg
Date:	10/21/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Location Details

Description of Sample Location: GU-2 is the compliance point for the Cell 5 Expansion groundwater underdrain.

Conditions commentary:

Sampling Details

Sampling Method: ____ Pump (low flow) ____ No-purge (specify sample interval): ____
____ Bailer ____ Other (specify): ____

Equipment type: ____ Submersible pump ____ Peristaltic pump ____ Bladder pump
____ Inertial lift pump ____ Bailer ____ No-purge (specify): ____
____ Other (specify): ____

Equipment name/description: Not Applicable Dedicated? (Y/N): N/A Disposable? (Y/N): N/A
Decontamination method: Not Applicable

Equipment depth (ft. MSL:) N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): N/A
Well dry? (Y/N): Yes | Odor? (Y/N): N/A | Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
*No sample collected			

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: * No flow was observed at GU-2; therefore, no sample was collected.

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	SW-1	Weather:	Cloudy, 48°F, NNW winds 15-30 mph, 29.9"Hg
Date:	10/22/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Location Details

Description of Sample Location: SW-1 is the upstream surface water sample point on the tributary southeast of the landfill, flowing north to Trout River.

Conditions commentary:

Sampling Details

Sampling Method: ____ Pump (low flow) ____ No-purge (specify sample interval): ____
____ Bailer ____ Other (specify): ____

Equipment type: ____ Submersible pump ____ Peristaltic pump ____ Bladder pump
____ Inertial lift pump ____ Bailer ____ No-purge (specify): ____
____ Other (specify): ____

Equipment name/description: Not Applicable Dedicated? (Y/N): N/A Disposable? (Y/N): N/A
Decontamination method: Not Applicable

Equipment depth (ft. MSL:) N/A Flow Rate (mL/min): N/A Volume removed (gal): N/A Volume sampled (L): N/A
Well dry? (Y/N): N/A Odor? (Y/N): N/A Color? (Y/N): N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
*No sample collected			

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: * No flow was observed at SW-1; therefore, no sample was collected.

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	SW-2	Weather:	Cloudy, 48°F, NNW winds 15-30 mph, 29.9"Hg
Date:	10/22/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Location Details

Description of Sample Location: SW-2 is the downstream surface water sample point on Trout River northeast of the landfill.

Conditions commentary:

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer X Other (specify): Grab sample from stream

Equipment type: ___ Submersible pump ___ Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
X Other (specify): None

Equipment name/description: Not Applicable Dedicated? (Y/N): N/A Disposable? (Y/N): N/A
Decontamination method: Not Applicable

Equipment depth (ft. MSL:) N/A Flow Rate (mL/min): N/A Volume removed (gal): N/A Volume sampled (L): 2.74
Well dry? (Y/N): No Odor? (Y/N): No Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
SW-2_25_10	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
		(3) VOA Vial 40 mL - Unpreserved	No
	SM 2320B - Alkalinity	(1) Plastic 500 mL - Unpreserved	No
	SM 5220D - COD	(1) Plastic 250 mL - H_2SO_4	No
	USEPA 353.2 - Nitrate as N		
	D516 - Sulfate	(2) Plastic 250 mL - Unpreserved	No
	SM 4500_F_C - Fluoride		
	SM 4500_Cl_E - Chloride		
	USEPA 6020B - Appendix I Total Metals & Calcium, Magnesium, Sodium	(1) Plastic 250 mL - HNO_3	No
	SM 5210B - BOD	(1) Plastic 1 Liter - Unpreserved	No
	SM 1030E - Cation/Anion Balance		
	SM 2540C - TDS		
	USGS I-3765-85 - TSS		

Field Analysis

	Final Reading
Time	12:05
Temp (°C)	8.62
Sp. Cond (umhos/cm)	729.2
pH	8.56
DO (mg/l)	11.30
ORP (mV)	224.2
Turbidity (NTU)	0.11

Groundwater Sampling Field Sheet

Site Name:	Winneshiek County Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	SW-2	Weather:	Cloudy, 48°F, NNW winds 15-30 mph, 29.9"Hg
Date:	10/22/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Comments:

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	SW-5	Weather:	Cloudy, 48°F, NNW winds 15-30 mph, 29.9"Hg
Date:	10/22/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Location Details

Description of Sample Location: SW-5 is the downstream surface water sample point on the tributary east of the landfil landfill, flowing north to Trout River.

Conditions commentary:

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer X Other (specify): Grab sample from stream

Equipment type: ___ Submersible pump ___ Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
X Other (specify): None

Equipment name/description: Not Applicable Dedicated? (Y/N): N/A Disposable? (Y/N): N/A
Decontamination method: Not Applicable

Equipment depth (ft. MSL:) N/A | Flow Rate (mL/min): N/A | Volume removed (gal): N/A | Volume sampled (L): 2.74
Well dry? (Y/N): No | Odor? (Y/N): No | Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
SW-5_25_10	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
		(3) VOA Vial 40 mL - Unpreserved	No
	SM 2320B - Alkalinity	(1) Plastic 500 mL - Unpreserved	No
	SM 5220D - COD	(1) Plastic 250 mL - H_2SO_4	No
	USEPA 353.2 - Nitrate as N		
	D516 - Sulfate	(2) Plastic 250 mL - Unpreserved	No
	SM 4500_F_C - Fluoride		
	SM 4500_Cl_E - Chloride		
	USEPA 6020B - Appendix I Total Metals & Calcium, Magnesium, Sodium	(1) Plastic 250 mL - HNO_3	No
	SM 5210B - BOD	(1) Plastic 1 Liter - Unpreserved	No
	SM 1030E - Cation/Anion Balance		
	SM 2540C - TDS		
	USGS I-3765-85 - TSS		

Field Analysis

	Final Reading
Time	11:40
Temp (°C)	9.08
Sp. Cond (umhos/cm)	697.4
pH	8.60
DO (mg/l)	10.61
ORP (mV)	231.3
Turbidity (NTU)	17.55

Groundwater Sampling Field Sheet

Site Name:	Winneshiek County Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	SW-5	Weather:	Cloudy, 48°F, NNW winds 15-30 mph, 29.9"Hg
Date:	10/22/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Comments:

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-1	Weather:	Cloudy, 66°F, SSW winds 10-20 mph, 29.6"Hg
Date:	10/20/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Monitoring Well Details

Borehole diameter (in): 8 Casing Diameter (in): 2 Ground surface elevation (ft. MSL): 1198.32

Top of screen (ft. MSL): 1186.30 Materials: PVC Top of Casing elevation (ft. MSL): 1200.92

Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	17.85	17.85	18.10
Water elevation (ft. MSL)	1183.07	1183.07	1182.82

3 Well Volumes (gal): 2.0 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	22.02	22.10	0.08

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ____ No-purge (specify sample interval): ____

____ Bailer ____ Other (specify): ____

Equipment type: ____ Submersible pump X Peristaltic pump ____ Bladder pump

____ Inertial lift pump ____ Bailer ____ No-purge (specify): ____

____ Other (specify): ____

Equipment name/description: GeoTech Peristaltic disposable tubing Dedicated? (Y/N): No Disposable? (Y/N): No

Equipment depth (ft. MSL:) 1179.92 Flow Rate (mL/min): 100 Volume removed (gal): 0.6 Volume sampled (L): 3.40

Well dry? (Y/N): No Odor? (Y/N): No Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-1_25_10	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
		(3) VOA Vial 40 mL - Unpreserved	No
	SM 2320B - Alkalinity	(1) Plastic 500 mL - Unpreserved	No
	SM 5220D - COD	(1) Plastic 250 mL - H_2SO_4	No
	USEPA 353.2 - Nitrate as N		
	D516 - Sulfate	(2) Plastic 250 mL - Unpreserved	No
	SM 4500_F_C - Fluoride		
	SM 4500_Cl_E - Chloride		
	USEPA 6020B - Appendix I Total Metals & Calcium, Magnesium, Sodium	(1) Plastic 250 mL - HNO_3	No
	USEPA 8081B - Endosulfan I	(4) VOA Vial 40 mL - Unpreserved	
	USEPA 9034 - Sulfide	(1) Plastic 500 mL - $ZnC_4H_6O_4$ + NaOH	
	SM 5210B - BOD	(1) Plastic 1 Liter - Unpreserved	No
	SM 1030E - Cation/Anion Balance		
	SM 2540C - TDS		
	USGS I-3765-85 - TSS		

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-1	Weather:	Cloudy, 66°F, SSW winds 10-20 mph, 29.6"Hg
Date:	10/20/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Field Analysis

			Final Reading
Time	15:45	15:47	15:49
Temp (°C)	15.71	15.60	15.45
Sp. Cond (umhos/cm)	1103.0	1079.0	1075.0
pH	7.05	7.06	7.06
DO (mg/l)	2.97	3.14	3.06
ORP (mV)	63.8	65.9	67.5
Turbidity (NTU)	1.42	0.86	1.51

Comments:

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-2R	Weather:	Cloudy, 47°F, NW winds 15-25 mph, 30.0"Hg
Date:	10/22/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	1173.20
Top of screen (ft. MSL):	1157.20	Materials:	PVC	Top of Casing elevation (ft. MSL):	1175.56
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	15.27	15.34	15.57
Water elevation (ft. MSL)	1160.29	1160.22	1159.99

3 Well Volumes (gal): 6.5 Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	28.50	28.55	0.05

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ____ No-purge (specify sample interval): ____
____ Bailer ____ Other (specify): ____

Equipment type: ____ Submersible pump X Peristaltic pump ____ Bladder pump
____ Inertial lift pump ____ Bailer ____ No-purge (specify): ____
____ Other (specify): ____

Equipment name/description: GeoTech Peristaltic disposable tubing Dedicated? (Y/N): No Disposable? (Y/N): No

Equipment depth (ft. MSL:)	1152.56	Flow Rate (mL/min):	150	Volume removed (gal):	0.5
Well dry? (Y/N):	No	Odor? (Y/N):	No	Volume sampled (L):	2.74
				Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-2R_25_10	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
		(3) VOA Vial 40 mL - Unpreserved	No
	SM 2320B - Alkalinity	(1) Plastic 500 mL - Unpreserved	No
	SM 5220D - COD	(1) Plastic 250 mL - H_2SO_4	No
	USEPA 353.2 - Nitrate as N		
	D516 - Sulfate	(2) Plastic 250 mL - Unpreserved	No
	SM 4500_F_C - Fluoride		
	SM 4500_Cl_E - Chloride		
	USEPA 6020B - Appendix I Total Metals & Calcium, Magnesium, Sodium	(1) Plastic 250 mL - HNO_3	No
	SM 5210B - BOD	(1) Plastic 1 Liter - Unpreserved	No
	SM 1030E - Cation/Anion Balance		
	SM 2540C - TDS		
	USGS I-3765-85 - TSS		

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-2R	Weather:	Cloudy, 47°F, NW winds 15-25 mph, 30.0"Hg
Date:	10/22/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Field Analysis

			Final Reading
Time	15:06	15:08	15:10
Temp (°C)	10.92	10.93	10.80
Sp. Cond (umhos/cm)	906.3	906.3	908.2
pH	7.11	7.12	7.13
DO (mg/l)	0.63	0.55	0.47
ORP (mV)	115.3	113.9	112.6
Turbidity (NTU)	0.00	0.00	0.00

Comments:

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-3	Weather:	Cloudy, 47°F, NW winds 15-25 mph, 30.0"Hg
Date:	10/21/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Monitoring Well Details

Borehole diameter (in): 8 Casing Diameter (in): 2 Ground surface elevation (ft. MSL): 1160.62

Top of screen (ft. MSL): 1133.72 Materials: PVC Top of Casing elevation (ft. MSL): 1162.81

Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	20.86	20.80	20.81
Water elevation (ft. MSL)	1141.95	1142.01	1142.00

3 Well Volumes (gal): 7.8 Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	36.90	37.90	1.00

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ____ No-purge (specify sample interval): ____

____ Bailer ____ Other (specify): ____

Equipment type: ____ Submersible pump ____ Peristaltic pump X Bladder pump

____ Inertial lift pump ____ Bailer ____ No-purge (specify): ____

____ Other (specify): ____

Equipment name/description: QED Sample Pro Bladder Pump Dedicated? (Y/N): No Disposable? (Y/N): No

disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:) 1130.81 Flow Rate (mL/min): 150 Volume removed (gal): 1.8 Volume sampled (L): 2.74

Well dry? (Y/N): No Odor? (Y/N): No Color? (Y/N): Yes*

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-3_25_10	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
		(3) VOA Vial 40 mL - Unpreserved	No
	SM 2320B - Alkalinity	(1) Plastic 500 mL - Unpreserved	No
	SM 5220D - COD	(1) Plastic 250 mL - H_2SO_4	No
	USEPA 353.2 - Nitrate as N		
	D516 - Sulfate	(2) Plastic 250 mL - Unpreserved	No
	SM 4500_F_C - Fluoride		
	SM 4500_Cl_E - Chloride		
	USEPA 6020B - Appendix I Total Metals & Calcium, Magnesium, Sodium	(1) Plastic 250 mL - HNO_3	No
	SM 5210B - BOD	(1) Plastic 1 Liter - Unpreserved	No
	SM 1030E - Cation/Anion Balance		
	SM 2540C - TDS		
	USGS I-3765-85 - TSS		

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-3	Weather:	Cloudy, 47°F, NW winds 15-25 mph, 30.0"Hg
Date:	10/21/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Field Analysis

			Final Reading
Time	10:53	10:56	10:58
Temp (°C)	9.86	9.84	9.70
Sp. Cond (umhos/cm)	861.7	855.7	841.8
pH	7.44	7.45	7.44
DO (mg/l)	0.21	0.20	0.23
ORP (mV)	43.3	43.8	44.4
Turbidity (NTU)	12.83	12.78	12.66

Comments: *Red/orange sediment at the start of purging.

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-4	Weather:	Cloudy, 47°F, NW winds 15-25 mph, 30.0"Hg
Date:	10/22/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	1177.74
Top of screen (ft. MSL):	1143.04	Materials:	PVC	Top of Casing elevation (ft. MSL):	1180.35
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	34.52	34.67	34.70
Water elevation (ft. MSL)	1145.83	1145.68	1145.65

3 Well Volumes (gal): 5.0 Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	44.80	44.95	0.15

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump ___ Peristaltic pump X Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump Dedicated? (Y/N): No Disposable? (Y/N): No
disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:)	1140.35	Flow Rate (mL/min):	150	Volume removed (gal):	0.8
Well dry? (Y/N):	No	Odor? (Y/N):	No	Volume sampled (L):	2.74
				Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-4_25_10	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
		(3) VOA Vial 40 mL - Unpreserved	No
	SM 2320B - Alkalinity	(1) Plastic 500 mL - Unpreserved	No
	SM 5220D - COD	(1) Plastic 250 mL - H_2SO_4	No
	USEPA 353.2 - Nitrate as N		
	D516 - Sulfate	(2) Plastic 250 mL - Unpreserved	No
	SM 4500_F_C - Fluoride		
	SM 4500_Cl_E - Chloride		
	USEPA 6020B - Appendix I Total Metals & Calcium, Magnesium, Sodium	(1) Plastic 250 mL - HNO_3	No
	SM 5210B - BOD	(1) Plastic 1 Liter - Unpreserved	No
	SM 1030E - Cation/Anion Balance		
	SM 2540C - TDS		
	USGS I-3765-85 - TSS		

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-4	Weather:	Cloudy, 47°F, NW winds 15-25 mph, 30.0"Hg
Date:	10/22/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Field Analysis

			Final Reading
Time	9:20	9:23	9:25
Temp (°C)	9.37	9.37	9.50
Sp. Cond (umhos/cm)	1348.0	1345.3	1344.3
pH	6.92	6.93	6.93
DO (mg/l)	0.41	0.40	0.40
ORP (mV)	128.6	121.5	119.7
Turbidity (NTU)	0.00	0.00	0.00

Comments:

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-4B	Weather:	Cloudy, 42°F, NW winds 15-25 mph, 30.0"Hg
Date:	10/20/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	1178.39
Top of screen (ft. MSL):	1150.59	Materials:	PVC	Top of Casing elevation (ft. MSL):	1180.15
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	33.89	33.86	33.86
Water elevation (ft. MSL)	1146.26	1146.29	1146.29

3 Well Volumes (gal): 3.1 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	40.20	40.20	0.00

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___
X Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump ___ Peristaltic pump ___ Bladder pump
___ Inertial lift pump X Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: Bailer Dedicated? (Y/N): No Disposable? (Y/N): Yes
N/A - disposable bailer and string; not used previously.

Equipment depth (ft. MSL:)	1140.15	Flow Rate (mL/min):	N/A	Volume removed (gal):	N/A
Well dry? (Y/N):	No	Odor? (Y/N):	No	Volume sampled (L):	2.74
				Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-4B_25_10	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
		(3) VOA Vial 40 mL - Unpreserved	No
	SM 2320B - Alkalinity	(1) Plastic 500 mL - Unpreserved	No
	SM 5220D - COD	(1) Plastic 250 mL - H_2SO_4	No
	USEPA 353.2 - Nitrate as N		
	D516 - Sulfate	(2) Plastic 250 mL - Unpreserved	No
	SM 4500_F_C - Fluoride		
	SM 4500_Cl_E - Chloride		
	USEPA 6020B - Appendix I Total Metals & Calcium, Magnesium, Sodium	(1) Plastic 250 mL - HNO_3	No
	SM 5210B - BOD	(1) Plastic 1 Liter - Unpreserved	No
	SM 1030E - Cation/Anion Balance		
	SM 2540C - TDS		
	USGS I-3765-85 - TSS		

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-4B	Weather:	Cloudy, 42°F, NW winds 15-25 mph, 30.0"Hg
Date:	10/20/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Field Analysis

	Final Reading
Time	15:49
Temp (°C)	14.61
Sp. Cond (umhos/cm)	664.2
pH	7.29
DO (mg/l)	7.11
ORP (mV)	291.1
Turbidity (NTU)	39.68

Comments:

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-7A	Weather:	Cloudy, 42°F, NW winds 15-25 mph, 30.0"Hg
Date:	10/22/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	1133.21
Top of screen (ft. MSL):	1126.19	Materials:	PVC	Top of Casing elevation (ft. MSL):	1136.05
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	14.73	14.87	16.00
Water elevation (ft. MSL)	1121.32	1121.18	1120.05

3 Well Volumes (gal): 2.7 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	20.30	20.25	0.05

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ____ No-purge (specify sample interval): ____
____ Bailer ____ Other (specify): ____

Equipment type: ____ Submersible pump X Peristaltic pump ____ Bladder pump
____ Inertial lift pump ____ Bailer ____ No-purge (specify): ____
____ Other (specify): ____

Equipment name/description: GeoTech Peristaltic disposable tubing Dedicated? (Y/N): No Disposable? (Y/N): No

Equipment depth (ft. MSL:)	1117.55	Flow Rate (mL/min):	100	Volume removed (gal):	1.0
Well dry? (Y/N):	No	Odor? (Y/N):	No	Volume sampled (L):	6.18
				Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-7A_25_10	USEPA 8260D - Appendix II VOCs	(3) VOA Vial 40 mL - HCl	No
		(3) VOA Vial 40 mL - Unpreserved	No
	USEPA 8015C - Acetonitrile & Isobutanol	(3) VOA Vial 40 mL - Unpreserved	No
	USEPA 8270E - Appendix II SVOCs	(2) Amber Glass 250 mL - Unpreserved	No
	USEPA 8081B - Appendix II Pesticides	(4) VOA Vial 40 mL - Unpreserved	No
	USEPA 8151A - Appendix II Herbicides	(2) Amber Glass 1 Liter - Unpreserved	No
	USEPA 8082A - Appendix II PCBs	(4) VOA Vial 40 mL - Unpreserved	No
	SM 2320B - Alkalinity	(1) Plastic 500 mL - Unpreserved	No
	SM 5220D - COD	(1) Plastic 250 mL - H_2SO_4	No
	USEPA 353.2 - Nitrate as N		
	D516 - Sulfate	(2) Plastic 250 mL - Unpreserved	No
	SM 4500_F_C - Fluoride		
	SM 4500_Cl_E - Chloride		
	USEPA 6020B - Appendix II Total Metals & Calcium, Magnesium, Sodium	(1) Plastic 250 mL - HNO_3	No
	USEPA 7470A - Mercury		
	USEPA 9012B - Total Cyanide	(1) Plastic 250 mL - NaOH	No
	USEPA 9034 - Sulfide	(1) Plastic 500 mL - $ZnC_4H_6O_4$ + NaOH	No

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-7A	Weather:	Cloudy, 42°F, NW winds 15-25 mph, 30.0"Hg
Date:	10/22/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-7A_25_10	SM 5210B - BOD	(1) Plastic 1 Liter - Unpreserved	No
	SM 1030E - Cation/Anion Balance		
	SM 2540C - TDS		
	USGS I-3765-85 - TSS		

Field Analysis

			Final Reading
Time	14:01	14:04	14:06
Temp (°C)	12.53	12.73	12.65
Sp. Cond (umhos/cm)	1172.9	1173.8	1173.0
pH	7.23	7.22	7.22
DO (mg/l)	1.46	1.34	1.26
ORP (mV)	232.5	232.0	232.1
Turbidity (NTU)	0.00	0.18	0.00

Comments: Collected field duplicate (FD-1_25_10) at MW-7A.

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-11	Weather:	Cloudy, 66°F, SSW winds 10-20 mph, 29.6"Hg
Date:	10/20/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	1136.50
Top of screen (ft. MSL):	1106.50	Materials:	PVC	Top of Casing elevation (ft. MSL):	1138.92
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	39.19	39.19	N/A
Water elevation (ft. MSL)	1099.73	1099.73	N/A

3 Well Volumes (gal): 1.6 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	42.42	42.40	0.02

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump ___ Peristaltic pump X Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump Dedicated? (Y/N): No Disposable? (Y/N): No
disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:)	1097.42	Flow Rate (mL/min):	150	Volume removed (gal):	1.6
Volume sampled (L):	N/A				
Well dry? (Y/N):	No	Odor? (Y/N):	No	Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
No sample collected*			

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *Well became dry during purging and did not recover while the field staff was onsite.

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-18	Weather:	Cloudy, 48°F, NW winds 10-20 mph, 30.0"Hg
Date:	10/22/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	1161.46
Top of screen (ft. MSL):	1122.79	Materials:	PVC	Top of Casing elevation (ft. MSL):	1163.02
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	20.73	20.74	21.25
Water elevation (ft. MSL)	1142.29	1142.28	1141.77

3 Well Volumes (gal): 13.0 Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	47.38	48.00	0.62

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump X Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: GeoTech Peristaltic disposable tubing Dedicated? (Y/N): No Disposable? (Y/N): No

Equipment depth (ft. MSL:)	1120.02	Flow Rate (mL/min):	150	Volume removed (gal):	1.4
Volume sampled (L):	2.74				
Well dry? (Y/N):	No	Odor? (Y/N):	No	Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-18_25_10	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
		(3) VOA Vial 40 mL - Unpreserved	No
	SM 2320B - Alkalinity	(1) Plastic 500 mL - Unpreserved	No
	SM 5220D - COD	(1) Plastic 250 mL - H_2SO_4	No
	USEPA 353.2 - Nitrate as N		
	D516 - Sulfate	(2) Plastic 250 mL - Unpreserved	No
	SM 4500_F_C - Fluoride		
	SM 4500_Cl_E - Chloride		
	USEPA 6020B - Appendix I Total Metals & Calcium, Magnesium, Sodium	(1) Plastic 250 mL - HNO_3	No
	SM 5210B - BOD	(1) Plastic 1 Liter - Unpreserved	No
	SM 1030E - Cation/Anion Balance		
	SM 2540C - TDS		
	USGS I-3765-85 - TSS		

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-18	Weather:	Cloudy, 48°F, NW winds 10-20 mph, 30.0"Hg
Date:	10/22/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Field Analysis

			Final Reading
Time	16:46	16:48	16:50
Temp (°C)	9.89	9.90	9.88
Sp. Cond (umhos/cm)	561.8	561.4	560.4
pH	7.49	7.51	7.52
DO (mg/l)	1.82	1.97	1.79
ORP (mV)	58.2	52.9	48.2
Turbidity (NTU)	0.88	0.81	1.28

Comments:

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-19R	Weather:	Cloudy, 47°F, NW winds 15-25 mph, 30.0"Hg
Date:	10/21/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Monitoring Well Details

Borehole diameter (in): 8 Casing Diameter (in): 2 Ground surface elevation (ft. MSL): 1201.45

Top of screen (ft. MSL): 1153.45 Materials: PVC Top of Casing elevation (ft. MSL): 1204.20

Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	47.36	47.30	49.11
Water elevation (ft. MSL)	1156.84	1156.90	1155.09

3 Well Volumes (gal): 11.6 Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	71.00	70.00	1.00

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ____ No-purge (specify sample interval): ____

____ Bailer ____ Other (specify): ____

Equipment type: ____ Submersible pump ____ Peristaltic pump X Bladder pump

____ Inertial lift pump ____ Bailer ____ No-purge (specify): ____

____ Other (specify): ____

Equipment name/description: QED Sample Pro Bladder Pump Dedicated? (Y/N): No Disposable? (Y/N): No

disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:) 1139.20 Flow Rate (mL/min): 100 Volume removed (gal): 1.7 Volume sampled (L): 3.40

Well dry? (Y/N): No Odor? (Y/N): No Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-19R_25_10	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
		(3) VOA Vial 40 mL - Unpreserved	No
	SM 2320B - Alkalinity	(1) Plastic 500 mL - Unpreserved	No
	SM 5220D - COD	(1) Plastic 250 mL - H_2SO_4	No
	USEPA 353.2 - Nitrate as N		
	D516 - Sulfate	(2) Plastic 250 mL - Unpreserved	No
	SM 4500_F_C - Fluoride		
	SM 4500_Cl_E - Chloride		
	USEPA 6020B - Appendix I Total Metals & Calcium, Magnesium, Sodium	(1) Plastic 250 mL - HNO_3	No
	USEPA 8081B - Endosulfan I	(4) VOA Vial 40 mL - Unpreserved	
	USEPA 9034 - Sulfide	(1) Plastic 500 mL - $ZnC_4H_6O_4$ + NaOH	
	SM 5210B - BOD	(1) Plastic 1 Liter - Unpreserved	No
	SM 1030E - Cation/Anion Balance		
	SM 2540C - TDS		
	USGS I-3765-85 - TSS		

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-19R	Weather:	Cloudy, 47°F, NW winds 15-25 mph, 30.0"Hg
Date:	10/21/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Field Analysis

			Final Reading
Time	12:43	12:48	12:54
Temp (°C)	9.59	9.74	9.80
Sp. Cond (umhos/cm)	639.1	638.4	637.1
pH	7.64	7.66	7.66
DO (mg/l)	0.34	0.29	0.29
ORP (mV)	53.2	53.2	54.5
Turbidity (NTU)	364.41	361.75	344.38

Comments:

Groundwater Sampling Field Sheet

Site Name:	Winneshiek County Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-22	Weather:	Cloudy, 42°F, NW winds 15-25 mph, 30.0"Hg
Date:	10/20/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	1133.05
Top of screen (ft. MSL):	1103.05	Materials:	PVC	Top of Casing elevation (ft. MSL):	1135.52
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	39.08	39.08	N/A
Water elevation (ft. MSL)	1096.44	1096.44	N/A

3 Well Volumes (gal): 1.8 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	42.77	42.77	0.00

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump ___ Peristaltic pump X Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump Dedicated? (Y/N): No Disposable? (Y/N): No
disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:)	1093.52	Flow Rate (mL/min):	100	Volume removed (gal):	0.6
Well dry? (Y/N):	No	Odor? (Y/N):	No	Volume sampled (L):	N/A
				Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
No sample collected*			

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: *Well became dry during purging and did not recover while the field staff was onsite.

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-24A	Weather:	Cloudy, 66°F, NW winds 15-25 mph, 30.0"Hg
Date:	10/20/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	1130.69
Top of screen (ft. MSL):	1120.69	Materials:	PVC	Top of Casing elevation (ft. MSL):	1132.98
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	22.48	22.48	N/A
Water elevation (ft. MSL)	1110.50	1110.50	N/A

3 Well Volumes (gal): -0.1 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	22.29	22.55	0.26

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump ___ Peristaltic pump ___ Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: N/A Dedicated? (Y/N): ___ Disposable? (Y/N): ___

Equipment depth (ft. MSL:)	N/A	Flow Rate (mL/min):	N/A	Volume removed (gal):	N/A
Volume sampled (L):	N/A				
Well dry? (Y/N):	No	Odor? (Y/N):	N/A	Color? (Y/N):	N/A

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
No sample collected*			

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Comments: * Less than one foot of water column was measured; therefore, a sample could not be collected.

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-25A	Weather:	Cloudy, 66°F, NW winds 15-25 mph, 30.0"Hg
Date:	10/20/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	1135.71
Top of screen (ft. MSL):	1126.71	Materials:	PVC	Top of Casing elevation (ft. MSL):	1137.98
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	19.30	19.26	19.59
Water elevation (ft. MSL)	1118.68	1118.72	1118.39

3 Well Volumes (gal): 1.0 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	21.27	21.75	0.48

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ____ No-purge (specify sample interval): ____
____ Bailer ____ Other (specify): ____

Equipment type: ____ Submersible pump X Peristaltic pump ____ Bladder pump
____ Inertial lift pump ____ Bailer ____ No-purge (specify): ____
____ Other (specify): ____

Equipment name/description: GeoTech Peristaltic disposable tubing Dedicated? (Y/N): No Disposable? (Y/N): No

Equipment depth (ft. MSL:)	1117.48	Flow Rate (mL/min):	100	Volume removed (gal):	0.3
Well dry? (Y/N):	No	Odor? (Y/N):	No	Volume sampled (L):	2.74
				Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-25A_25_10	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
		(3) VOA Vial 40 mL - Unpreserved	No
	SM 2320B - Alkalinity	(1) Plastic 500 mL - Unpreserved	No
	SM 5220D - COD	(1) Plastic 250 mL - H_2SO_4	No
	USEPA 353.2 - Nitrate as N		
	D516 - Sulfate	(2) Plastic 250 mL - Unpreserved	No
	SM 4500_F_C - Fluoride		
	SM 4500_Cl_E - Chloride		
	USEPA 6020B - Appendix I Total Metals & Calcium, Magnesium, Sodium	(1) Plastic 250 mL - HNO_3	No
	SM 5210B - BOD	(1) Plastic 1 Liter - Unpreserved	No
	SM 1030E - Cation/Anion Balance		
	SM 2540C - TDS		
	USGS I-3765-85 - TSS		

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-25A	Weather:	Cloudy, 66°F, NW winds 15-25 mph, 30.0"Hg
Date:	10/20/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Field Analysis

			Final Reading
Time	16:49	16:51	16:54
Temp (°C)	14.04	13.79	13.54
Sp. Cond (umhos/cm)	1169.7	1167.3	1167.7
pH	7.18	7.18	7.18
DO (mg/l)	1.31	1.32	1.30
ORP (mV)	234.5	241.0	244.5
Turbidity (NTU)	2.88	1.43	0.19

Comments:

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-29A	Weather:	Cloudy, 43°F, NW winds 15-25 mph, 30.0"Hg
Date:	10/22/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	1131.55
Top of screen (ft. MSL):	1116.55	Materials:	PVC	Top of Casing elevation (ft. MSL):	1133.85
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	24.29	24.33	25.25
Water elevation (ft. MSL)	1109.56	1109.52	1108.60

3 Well Volumes (gal): 1.5 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	27.27	27.25	0.02

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ____ No-purge (specify sample interval): ____
____ Bailer ____ Other (specify): ____

Equipment type: ____ Submersible pump X Peristaltic pump ____ Bladder pump
____ Inertial lift pump ____ Bailer ____ No-purge (specify): ____
____ Other (specify): ____

Equipment name/description: GeoTech Peristaltic disposable tubing Dedicated? (Y/N): No Disposable? (Y/N): No

Equipment depth (ft. MSL:)	1107.35	Flow Rate (mL/min):	100	Volume removed (gal):	1.1
Well dry? (Y/N):	No	Odor? (Y/N):	No	Volume sampled (L):	3.24
				Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-29A_25_10	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
		(3) VOA Vial 40 mL - Unpreserved	No
	SM 2320B - Alkalinity	(1) Plastic 500 mL - Unpreserved	No
	SM 5220D - COD	(1) Plastic 250 mL - H_2SO_4	No
	USEPA 353.2 - Nitrate as N		
	D516 - Sulfate	(2) Plastic 250 mL - Unpreserved	No
	SM 4500_F_C - Fluoride		
	SM 4500_Cl_E - Chloride		
	USEPA 6020B - Appendix I Total Metals & Calcium, Magnesium, Sodium	(1) Plastic 250 mL - HNO_3	No
	USEPA 9034 - Sulfide	(1) Plastic 500 mL - $ZnC_4H_6O_4$ + NaOH	No
	SM 5210B - BOD	(1) Plastic 1 Liter - Unpreserved	No
	SM 1030E - Cation/Anion Balance		
	SM 2540C - TDS		
	USGS I-3765-85 - TSS		

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-29A	Weather:	Cloudy, 43°F, NW winds 15-25 mph, 30.0"Hg
Date:	10/22/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Field Analysis

			Final Reading
Time	11:52	11:54	11:56
Temp (°C)	9.22	9.32	9.36
Sp. Cond (umhos/cm)	1955.0	1950.0	1943.0
pH	6.76	6.76	6.76
DO (mg/l)	0.31	0.29	0.30
ORP (mV)	61.9	63.5	63.7
Turbidity (NTU)	0.39	0.44	0.48

Comments:

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-31A	Weather:	Cloudy, 44°F, NW winds 10-20 mph, 29.7"Hg
Date:	10/21/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	1136.17
Top of screen (ft. MSL):	1126.17	Materials:	PVC	Top of Casing elevation (ft. MSL):	1138.77
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	17.04	17.04	17.59
Water elevation (ft. MSL)	1121.73	1121.73	1121.18

3 Well Volumes (gal): 2.8 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	22.81	22.75	0.06

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ____ No-purge (specify sample interval): ____
____ Bailer ____ Other (specify): ____

Equipment type: ____ Submersible pump X Peristaltic pump ____ Bladder pump
____ Inertial lift pump ____ Bailer ____ No-purge (specify): ____
____ Other (specify): ____

Equipment name/description: GeoTech Peristaltic disposable tubing Dedicated? (Y/N): No Disposable? (Y/N): No

Equipment depth (ft. MSL:)	1119.77	Flow Rate (mL/min):	150	Volume removed (gal):	0.5
Well dry? (Y/N):	No	Odor? (Y/N):	No	Volume sampled (L):	2.90
				Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-31A_25_10	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
		(3) VOA Vial 40 mL - Unpreserved	No
	USEPA 8081B - Endosulfan I	(4) VOA Vial 40 mL - Unpreserved	No
	SM 2320B - Alkalinity	(1) Plastic 500 mL - Unpreserved	No
	SM 5220D - COD	(1) Plastic 250 mL - H_2SO_4	No
	USEPA 353.2 - Nitrate as N		
	D516 - Sulfate	(2) Plastic 250 mL - Unpreserved	No
	SM 4500_F_C - Fluoride		
	SM 4500_Cl_E - Chloride		
	USEPA 6020B - Appendix I Total Metals & Calcium, Magnesium, Sodium	(1) Plastic 250 mL - HNO_3	No
	SM 5210B - BOD	(1) Plastic 1 Liter - Unpreserved	No
	SM 1030E - Cation/Anion Balance		
	SM 2540C - TDS		
	USGS I-3765-85 - TSS		

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-31A	Weather:	Cloudy, 44°F, NW winds 10-20 mph, 29.7"Hg
Date:	10/21/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Field Analysis

			Final Reading
Time	11:18	11:20	11:22
Temp (°C)	10.16	10.23	10.14
Sp. Cond (umhos/cm)	1813.0	1786.0	1781.0
pH	6.92	6.92	6.92
DO (mg/l)	0.65	0.48	0.47
ORP (mV)	200.4	199.5	198.9
Turbidity (NTU)	0.00	2.18	0.47

Comments: Collected field duplicate (FD-2_25_10) at MW-31A.

Collected equipment blank (EB-1_25_10) at 11:15.

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-33A	Weather:	Clear, 63°F, S winds 15-30 mph, 29.7"Hg
Date:	10/20/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	1203.33
Top of screen (ft. MSL):	1193.83	Materials:	PVC	Top of Casing elevation (ft. MSL):	1205.88
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	19.98	19.98	21.16
Water elevation (ft. MSL)	1185.90	1185.90	1184.72

3 Well Volumes (gal): 1.2 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	22.45	22.40	0.05

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ____ No-purge (specify sample interval): ____
____ Bailer ____ Other (specify): ____

Equipment type: ____ Submersible pump X Peristaltic pump ____ Bladder pump
____ Inertial lift pump ____ Bailer ____ No-purge (specify): ____
____ Other (specify): ____

Equipment name/description: GeoTech Peristaltic disposable tubing Dedicated? (Y/N): No Disposable? (Y/N): No

Equipment depth (ft. MSL:)	1184.88	Flow Rate (mL/min):	100	Volume removed (gal):	1.4
Well dry? (Y/N):	No	Odor? (Y/N):	No	Volume sampled (L):	2.74
				Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-33A_25_10	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
		(3) VOA Vial 40 mL - Unpreserved	No
	SM 2320B - Alkalinity	(1) Plastic 500 mL - Unpreserved	No
	SM 5220D - COD	(1) Plastic 250 mL - H_2SO_4	No
	USEPA 353.2 - Nitrate as N		
	D516 - Sulfate	(2) Plastic 250 mL - Unpreserved	No
	SM 4500_F_C - Fluoride		
	SM 4500_Cl_E - Chloride		
	USEPA 6020B - Appendix I Total Metals & Calcium, Magnesium, Sodium	(1) Plastic 250 mL - HNO_3	No
	SM 5210B - BOD	(1) Plastic 1 Liter - Unpreserved	No
	SM 1030E - Cation/Anion Balance		
	SM 2540C - TDS		
	USGS I-3765-85 - TSS		

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-33A	Weather:	Clear, 63°F, S winds 15-30 mph, 29.7"Hg
Date:	10/20/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Field Analysis

			Final Reading
Time	13:10	13:12	13:14
Temp (°C)	13.93	13.87	13.79
Sp. Cond (umhos/cm)	1021.0	1021.0	1020.0
pH	6.93	6.94	6.94
DO (mg/l)	0.17	0.17	0.17
ORP (mV)	-81.5	-82.0	-82.7
Turbidity (NTU)	5.25	5.53	5.68

Comments:

Groundwater Sampling Field Sheet

Site Name:	Winneshiek County Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-34A	Weather:	Clear, 43°F, W winds 15-25 mph, 29.7"Hg
Date:	10/20/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	1164.20
Top of screen (ft. MSL):	1150.20	Materials:	PVC	Top of Casing elevation (ft. MSL):	1166.70
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	7.75	7.78	8.12
Water elevation (ft. MSL)	1158.95	1158.92	1158.58

3 Well Volumes (gal): 9.3 Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	26.81	26.75	0.06

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ____ No-purge (specify sample interval): ____
____ Bailer ____ Other (specify): ____

Equipment type: ____ Submersible pump X Peristaltic pump ____ Bladder pump
____ Inertial lift pump ____ Bailer ____ No-purge (specify): ____
____ Other (specify): ____

Equipment name/description: GeoTech Peristaltic disposable tubing Dedicated? (Y/N): No Disposable? (Y/N): No

Equipment depth (ft. MSL:)	1145.70	Flow Rate (mL/min):	150	Volume removed (gal):	0.5
Volume sampled (L):	2.74				
Well dry? (Y/N):	No	Odor? (Y/N):	No	Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-34A_25_10	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
		(3) VOA Vial 40 mL - Unpreserved	No
	SM 2320B - Alkalinity	(1) Plastic 500 mL - Unpreserved	No
	SM 5220D - COD	(1) Plastic 250 mL - H_2SO_4	No
	USEPA 353.2 - Nitrate as N		
	D516 - Sulfate	(2) Plastic 250 mL - Unpreserved	No
	SM 4500_F_C - Fluoride		
	SM 4500_Cl_E - Chloride		
	USEPA 6020B - Appendix I Total Metals & Calcium, Magnesium, Sodium	(1) Plastic 250 mL - HNO_3	No
	SM 5210B - BOD	(1) Plastic 1 Liter - Unpreserved	No
	SM 1030E - Cation/Anion Balance		
	SM 2540C - TDS		
	USGS I-3765-85 - TSS		

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-34A	Weather:	Clear, 43°F, W winds 15-25 mph, 29.7"Hg
Date:	10/20/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Field Analysis

			Final Reading
Time	9:15	9:17	9:19
Temp (°C)	10.98	10.87	10.62
Sp. Cond (umhos/cm)	537.6	534.3	532.2
pH	7.43	7.39	7.39
DO (mg/l)	6.72	6.68	6.65
ORP (mV)	240.2	238.9	235.4
Turbidity (NTU)	0.01	0.54	0.84

Comments:

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-35	Weather:	Cloudy, 47°F, NW winds 15-25 mph, 30.0"Hg
Date:	10/21/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	1168.10
Top of screen (ft. MSL):	1125.10	Materials:	PVC	Top of Casing elevation (ft. MSL)*:	1170.60
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	47.40	47.46	47.49
Water elevation (ft. MSL)	1123.20	1123.14	1123.11

3 Well Volumes (gal): 4.0 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	55.50	55.60	0.1

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ___ No-purge (specify sample interval): ___
___ Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump ___ Peristaltic pump X Bladder pump
___ Inertial lift pump ___ Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: QED Sample Pro Bladder Pump Dedicated? (Y/N): No Disposable? (Y/N): No
disposable tubing/bladder; Alconox/DI rinse on pump

Equipment depth (ft. MSL:)	1118.60	Flow Rate (mL/min):	120	Volume removed (gal):	0.5
Well dry? (Y/N):	No	Odor? (Y/N):	No	Volume sampled (L):	2.74
				Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-35_25_10	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
		(3) VOA Vial 40 mL - Unpreserved	No
	SM 2320B - Alkalinity	(1) Plastic 500 mL - Unpreserved	No
	SM 5220D - COD	(1) Plastic 250 mL - H_2SO_4	No
	USEPA 353.2 - Nitrate as N		
	D516 - Sulfate	(2) Plastic 250 mL - Unpreserved	No
	SM 4500_F_C - Fluoride		
	SM 4500_Cl_E - Chloride		
	USEPA 6020B - Appendix I Total Metals & Calcium, Magnesium, Sodium	(1) Plastic 250 mL - HNO_3	No
	SM 5210B - BOD	(1) Plastic 1 Liter - Unpreserved	No
	SM 1030E - Cation/Anion Balance		
	SM 2540C - TDS		
	USGS I-3765-85 - TSS		

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-35	Weather:	Cloudy, 47°F, NW winds 15-25 mph, 30.0"Hg
Date:	10/21/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Field Analysis

			Final Reading
Time	16:30	16:34	16:37
Temp (°C)	9.29	9.43	9.48
Sp. Cond (umhos/cm)	1357.9	1361.4	1360.0
pH	7.19	7.19	7.19
DO (mg/l)	0.32	0.27	0.23
ORP (mV)	69.8	66.9	64.5
Turbidity (NTU)	0.00	0.00	0.00

Comments:

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-37A	Weather:	Partly cloudy, 66°F, S winds 15-25 mph, 29.6"Hg
Date:	10/21/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Monitoring Well Details

Borehole diameter (in): 8 Casing Diameter (in): 2 Ground surface elevation (ft. MSL): 1207.50

Top of screen (ft. MSL): 1198.50 Materials: PVC Top of Casing elevation (ft. MSL): 1210.30

Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	22.44	22.44	22.80
Water elevation (ft. MSL)	1187.86	1187.86	1187.50

3 Well Volumes (gal): 2.0 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	26.48	26.35	0.13

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ____ No-purge (specify sample interval): ____

____ Bailer ____ Other (specify): ____

Equipment type: ____ Submersible pump X Peristaltic pump ____ Bladder pump

____ Inertial lift pump ____ Bailer ____ No-purge (specify): ____

____ Other (specify): ____

Equipment name/description: GeoTech Peristaltic disposable tubing Dedicated? (Y/N): No Disposable? (Y/N): No

Equipment depth (ft. MSL:) 1185.80 Flow Rate (mL/min): 100 Volume removed (gal): 0.4 Volume sampled (L): 3.40

Well dry? (Y/N): No Odor? (Y/N): No Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-37A_25_10	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
		(3) VOA Vial 40 mL - Unpreserved	No
	SM 2320B - Alkalinity	(1) Plastic 500 mL - Unpreserved	No
	SM 5220D - COD	(1) Plastic 250 mL - H_2SO_4	No
	USEPA 353.2 - Nitrate as N		
	D516 - Sulfate	(2) Plastic 250 mL - Unpreserved	No
	SM 4500_F_C - Fluoride		
	SM 4500_Cl_E - Chloride		
	USEPA 6020B - Appendix I Total Metals & Calcium, Magnesium, Sodium	(1) Plastic 250 mL - HNO_3	No
	USEPA 8081B - Endosulfan I	(4) VOA Vial 40 mL - Unpreserved	
	USEPA 9034 - Sulfide	(1) Plastic 500 mL - $ZnC_4H_6O_4$ + NaOH	
	SM 5210B - BOD	(1) Plastic 1 Liter - Unpreserved	No
	SM 1030E - Cation/Anion Balance		
	SM 2540C - TDS		
	USGS I-3765-85 - TSS		

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-37A	Weather:	Partly cloudy, 66°F, S winds 15-25 mph, 29.6"Hg
Date:	10/21/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Field Analysis

			Final Reading
Time	14:22	14:24	14:26
Temp (°C)	15.52	15.24	15.18
Sp. Cond (umhos/cm)	825.8	827.0	828.5
pH	6.93	6.91	6.92
DO (mg/l)	0.80	0.93	0.85
ORP (mV)	-7.2	-0.1	1.8
Turbidity (NTU)	3.17	2.47	2.23

Comments:

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-38A	Weather:	Cloudy, 44°F, W winds 15-20 mph, 29.7"Hg
Date:	10/21/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	1145.47
Top of screen (ft. MSL):	1130.47	Materials:	PVC	Top of Casing elevation (ft. MSL):	1148.37
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	24.85	24.85	24.86
Water elevation (ft. MSL)	1123.52	1123.52	1123.51

3 Well Volumes (gal): 3.8 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	32.62	32.55	0.07

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ____ No-purge (specify sample interval): ____
____ Bailer ____ Other (specify): ____

Equipment type: ____ Submersible pump X Peristaltic pump ____ Bladder pump
____ Inertial lift pump ____ Bailer ____ No-purge (specify): ____
____ Other (specify): ____

Equipment name/description: GeoTech Peristaltic disposable tubing Dedicated? (Y/N): No Disposable? (Y/N): No

Equipment depth (ft. MSL:)	1120.37	Flow Rate (mL/min):	150	Volume removed (gal):	0.4
Well dry? (Y/N):	No	Odor? (Y/N):	No	Volume sampled (L):	2.74
				Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-38A_25_10	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
		(3) VOA Vial 40 mL - Unpreserved	No
	SM 2320B - Alkalinity	(1) Plastic 500 mL - Unpreserved	No
	SM 5220D - COD	(1) Plastic 250 mL - H_2SO_4	No
	USEPA 353.2 - Nitrate as N		
	D516 - Sulfate	(2) Plastic 250 mL - Unpreserved	No
	SM 4500_F_C - Fluoride		
	SM 4500_Cl_E - Chloride		
	USEPA 6020B - Appendix I Total Metals & Calcium, Magnesium, Sodium	(1) Plastic 250 mL - HNO_3	No
	SM 5210B - BOD	(1) Plastic 1 Liter - Unpreserved	No
	SM 1030E - Cation/Anion Balance		
	SM 2540C - TDS		
	USGS I-3765-85 - TSS		

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-38A	Weather:	Cloudy, 44°F, W winds 15-20 mph, 29.7"Hg
Date:	10/21/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Field Analysis

			Final Reading
Time	10:19	10:21	10:23
Temp (°C)	9.52	9.55	9.48
Sp. Cond (umhos/cm)	862.8	863.0	861.1
pH	7.32	7.32	7.32
DO (mg/l)	3.97	3.62	3.68
ORP (mV)	211.3	212.0	211.1
Turbidity (NTU)	0.00	0.00	0.00

Comments:

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-39A	Weather:	Cloudy, 41°F, NNW winds 15-30 mph, 29.9"Hg
Date:	10/22/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Monitoring Well Details

Borehole diameter (in):	7	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	1143.99
Top of screen (ft. MSL):	1128.99	Materials:	PVC	Top of Casing elevation (ft. MSL):	1146.90
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	23.65	23.73	23.74
Water elevation (ft. MSL)	1123.25	1123.17	1123.16

3 Well Volumes (gal): 4.3 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	32.47	32.43	0.04

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ____ No-purge (specify sample interval): ____
____ Bailer ____ Other (specify): ____

Equipment type: ____ Submersible pump X Peristaltic pump ____ Bladder pump
____ Inertial lift pump ____ Bailer ____ No-purge (specify): ____
____ Other (specify): ____

Equipment name/description: GeoTech Peristaltic disposable tubing Dedicated? (Y/N): No Disposable? (Y/N): No

Equipment depth (ft. MSL:)	1119.40	Flow Rate (mL/min):	150	Volume removed (gal):	1.3
Well dry? (Y/N):	No	Odor? (Y/N):	No	Volume sampled (L):	2.74
				Color? (Y/N):	Yes. Slight

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-39A_25_10	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
		(3) VOA Vial 40 mL - Unpreserved	No
	SM 2320B - Alkalinity	(1) Plastic 500 mL - Unpreserved	No
	SM 5220D - COD	(1) Plastic 250 mL - H_2SO_4	No
	USEPA 353.2 - Nitrate as N		
	D516 - Sulfate	(2) Plastic 250 mL - Unpreserved	No
	SM 4500_F_C - Fluoride		
	SM 4500_Cl_E - Chloride		
	USEPA 6020B - Appendix I Total Metals & Calcium, Magnesium, Sodium	(1) Plastic 250 mL - HNO_3	No
	SM 5210B - BOD	(1) Plastic 1 Liter - Unpreserved	No
	SM 1030E - Cation/Anion Balance		
	SM 2540C - TDS		
	USGS I-3765-85 - TSS		

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-39A	Weather:	Cloudy, 41°F, NNW winds 15-30 mph, 29.9"Hg
Date:	10/22/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Field Analysis

			Final Reading
Time	9:39	9:41	9:43
Temp (°C)	9.63	9.55	9.6
Sp. Cond (umhos/cm)	873.1	872.2	873.4
pH	7.32	7.32	7.33
DO (mg/l)	3.31	3.26	3.36
ORP (mV)	236.2	235.3	234.4
Turbidity (NTU)	12.8	13.2	13.9

Comments: Field duplicate (FD-3_25_10) collected at MW-39A.

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-40A	Weather:	Cloudy, 44°F, W winds 15-20 mph, 29.7"Hg
Date:	10/21/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	1148.32
Top of screen (ft. MSL):	1123.82	Materials:	PVC	Top of Casing elevation (ft. MSL):	1151.17
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	28.23	28.24	28.84
Water elevation (ft. MSL)	1122.94	1122.93	1122.33

3 Well Volumes (gal): 6.6 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	41.81	41.75	0.06

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ____ No-purge (specify sample interval): ____
____ Bailer ____ Other (specify): ____

Equipment type: ____ Submersible pump X Peristaltic pump ____ Bladder pump
____ Inertial lift pump ____ Bailer ____ No-purge (specify): ____
____ Other (specify): ____

Equipment name/description: GeoTech Peristaltic disposable tubing Dedicated? (Y/N): No Disposable? (Y/N): No

Equipment depth (ft. MSL:)	1114.17	Flow Rate (mL/min):	100	Volume removed (gal):	0.9
Well dry? (Y/N):	No	Odor? (Y/N):	No	Volume sampled (L):	2.74
				Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-40A_25_10	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
		(3) VOA Vial 40 mL - Unpreserved	No
	SM 2320B - Alkalinity	(1) Plastic 500 mL - Unpreserved	No
	SM 5220D - COD	(1) Plastic 250 mL - H_2SO_4	No
	USEPA 353.2 - Nitrate as N		
	D516 - Sulfate	(2) Plastic 250 mL - Unpreserved	No
	SM 4500_F_C - Fluoride		
	SM 4500_Cl_E - Chloride		
	USEPA 6020B - Appendix I Total Metals & Calcium, Magnesium, Sodium	(1) Plastic 250 mL - HNO_3	No
	SM 5210B - BOD	(1) Plastic 1 Liter - Unpreserved	No
	SM 1030E - Cation/Anion Balance		
	SM 2540C - TDS		
	USGS I-3765-85 - TSS		

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-40A	Weather:	Cloudy, 44°F, W winds 15-20 mph, 29.7"Hg
Date:	10/21/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Field Analysis

			Final Reading
Time	15:06	15:10	15:14
Temp (°C)	9.35	9.29	9.30
Sp. Cond (umhos/cm)	1339.8	1338.8	1338.1
pH	7.28	7.28	7.27
DO (mg/l)	0.38	0.40	0.41
ORP (mV)	194.6	195.2	196.7
Turbidity (NTU)	71.31	74.14	69.48

Comments:

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-41A	Weather:	Cloudy, 45°F, W winds 15-25 mph, 29.7"Hg
Date:	10/21/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	1146.63
Top of screen (ft. MSL):	1136.63	Materials:	PVC	Top of Casing elevation (ft. MSL):	1149.75
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	5.24	5.28	6.45
Water elevation (ft. MSL)	1144.51	1144.47	1143.30

3 Well Volumes (gal): 9.1 Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	23.78	23.80	0.02

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ____ No-purge (specify sample interval): ____
____ Bailer ____ Other (specify): ____

Equipment type: ____ Submersible pump X Peristaltic pump ____ Bladder pump
____ Inertial lift pump ____ Bailer ____ No-purge (specify): ____
____ Other (specify): ____

Equipment name/description: GeoTech Peristaltic disposable tubing Dedicated? (Y/N): No Disposable? (Y/N): No

Equipment depth (ft. MSL:)	1134.75	Flow Rate (mL/min):	120	Volume removed (gal):	0.4
Well dry? (Y/N):	No	Odor? (Y/N):	No	Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-41A_25_10	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
		(3) VOA Vial 40 mL - Unpreserved	No
	SM 2320B - Alkalinity	(1) Plastic 500 mL - Unpreserved	No
	SM 5220D - COD	(1) Plastic 250 mL - H_2SO_4	No
	USEPA 353.2 - Nitrate as N		
	D516 - Sulfate	(2) Plastic 250 mL - Unpreserved	No
	SM 4500_F_C - Fluoride		
	SM 4500_Cl_E - Chloride		
	USEPA 6020B - Appendix I Total Metals & Calcium, Magnesium, Sodium	(1) Plastic 250 mL - HNO_3	No
	SM 5210B - BOD	(1) Plastic 1 Liter - Unpreserved	No
	SM 1030E - Cation/Anion Balance		
	SM 2540C - TDS		
	USGS I-3765-85 - TSS		

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-41A	Weather:	Cloudy, 45°F, W winds 15-25 mph, 29.7"Hg
Date:	10/21/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Field Analysis

			Final Reading
Time	12:55	12:57	12:59
Temp (°C)	9.95	9.84	9.97
Sp. Cond (umhos/cm)	736.5	732.7	733.8
pH	7.30	7.28	7.26
DO (mg/l)	0.98	0.91	0.91
ORP (mV)	168.4	170.0	170.9
Turbidity (NTU)	0.07	1.18	0.08

Comments:

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-42A	Weather:	Cloudy, 45°F, W winds 20-30 mph, 29.7"Hg
Date:	10/21/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	1131.86
Top of screen (ft. MSL):	1121.86	Materials:	PVC	Top of Casing elevation (ft. MSL):	1135.43
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	14.83	14.82	15.29
Water elevation (ft. MSL)	1120.60	1120.61	1120.14

3 Well Volumes (gal): 4.1 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	23.22	23.80	0.58

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ____ No-purge (specify sample interval): ____
____ Bailer ____ Other (specify): ____

Equipment type: ____ Submersible pump X Peristaltic pump ____ Bladder pump
____ Inertial lift pump ____ Bailer ____ No-purge (specify): ____
____ Other (specify): ____

Equipment name/description: GeoTech Peristaltic disposable tubing Dedicated? (Y/N): No Disposable? (Y/N): No

Equipment depth (ft. MSL:)	1117.43	Flow Rate (mL/min):	150	Volume removed (gal):	0.5
Volume sampled (L):	2.74				
Well dry? (Y/N):	No	Odor? (Y/N):	No	Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-42A_25_10	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
		(3) VOA Vial 40 mL - Unpreserved	No
	SM 2320B - Alkalinity	(1) Plastic 500 mL - Unpreserved	No
	SM 5220D - COD	(1) Plastic 250 mL - H_2SO_4	No
	USEPA 353.2 - Nitrate as N		
	D516 - Sulfate	(2) Plastic 250 mL - Unpreserved	No
	SM 4500_F_C - Fluoride		
	SM 4500_Cl_E - Chloride		
	USEPA 6020B - Appendix I Total Metals & Calcium, Magnesium, Sodium	(1) Plastic 250 mL - HNO_3	No
	SM 5210B - BOD	(1) Plastic 1 Liter - Unpreserved	No
	SM 1030E - Cation/Anion Balance		
	SM 2540C - TDS		
	USGS I-3765-85 - TSS		

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-42A	Weather:	Cloudy, 45°F, W winds 20-30 mph, 29.7"Hg
Date:	10/21/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Field Analysis

			Final Reading
Time	14:31	14:33	14:35
Temp (°C)	9.78	9.88	9.75
Sp. Cond (umhos/cm)	1502.0	1503.0	1501.0
pH	7.14	7.15	7.15
DO (mg/l)	0.53	0.42	0.36
ORP (mV)	168.4	167.5	167.1
Turbidity (NTU)	0.00	0.45	0.11

Comments:

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-43A	Weather:	Cloudy, 45°F, W winds 20-30 mph, 29.7"Hg
Date:	10/21/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	1116.31
Top of screen (ft. MSL):	1109.31	Materials:	PVC	Top of Casing elevation (ft. MSL):	1119.21
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	9.08	9.09	9.31
Water elevation (ft. MSL)	1110.13	1110.12	1109.90

3 Well Volumes (gal): 5.5 Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	20.25	20.30	0.05

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ____ No-purge (specify sample interval): ____
____ Bailer ____ Other (specify): ____

Equipment type: ____ Submersible pump X Peristaltic pump ____ Bladder pump
____ Inertial lift pump ____ Bailer ____ No-purge (specify): ____
____ Other (specify): ____

Equipment name/description: GeoTech Peristaltic disposable tubing Dedicated? (Y/N): No Disposable? (Y/N): No

Equipment depth (ft. MSL:)	1104.21	Flow Rate (mL/min):	150	Volume removed (gal):	0.5
Volume sampled (L):	2.74				
Well dry? (Y/N):	No	Odor? (Y/N):	No	Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-43A_25_10	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
		(3) VOA Vial 40 mL - Unpreserved	No
	SM 2320B - Alkalinity	(1) Plastic 500 mL - Unpreserved	No
	SM 5220D - COD	(1) Plastic 250 mL - H_2SO_4	No
	USEPA 353.2 - Nitrate as N		
	D516 - Sulfate	(2) Plastic 250 mL - Unpreserved	No
	SM 4500_F_C - Fluoride		
	SM 4500_Cl_E - Chloride		
	USEPA 6020B - Appendix I Total Metals & Calcium, Magnesium, Sodium	(1) Plastic 250 mL - HNO_3	No
	SM 5210B - BOD	(1) Plastic 1 Liter - Unpreserved	No
	SM 1030E - Cation/Anion Balance		
	SM 2540C - TDS		
	USGS I-3765-85 - TSS		

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-43A	Weather:	Cloudy, 45°F, W winds 20-30 mph, 29.7"Hg
Date:	10/21/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Field Analysis

			Final Reading
Time	15:30	15:32	15:34
Temp (°C)	10.95	11.00	11.17
Sp. Cond (umhos/cm)	1422.0	1416.0	1408.0
pH	7.03	7.02	7.02
DO (mg/l)	0.39	0.32	0.28
ORP (mV)	0.2	-4.6	-8.7
Turbidity (NTU)	0.00	0.00	0.00

Comments:

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-44A	Weather:	Cloudy, 46°F, WNW winds 20-30 mph, 29.8"Hg
Date:	10/21/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	1114.67
Top of screen (ft. MSL):	1107.67	Materials:	PVC	Top of Casing elevation (ft. MSL):	1117.88
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	9.90	9.90	9.95
Water elevation (ft. MSL)	1107.98	1107.98	1107.93

3 Well Volumes (gal): 5.1 Screen submerged? (Y/N): Yes

	Constructed	Measured	Difference
Well Depth (ft. TOC)	20.27	20.30	0.03

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ____ No-purge (specify sample interval): ____
____ Bailer ____ Other (specify): ____

Equipment type: ____ Submersible pump X Peristaltic pump ____ Bladder pump
____ Inertial lift pump ____ Bailer ____ No-purge (specify): ____
____ Other (specify): ____

Equipment name/description: GeoTech Peristaltic disposable tubing Dedicated? (Y/N): No Disposable? (Y/N): No

Equipment depth (ft. MSL:)	1102.88	Flow Rate (mL/min):	150	Volume removed (gal):	0.6
Well dry? (Y/N):	No	Odor? (Y/N):	No	Volume sampled (L):	2.74
				Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-44A_25_10	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
		(3) VOA Vial 40 mL - Unpreserved	No
	SM 2320B - Alkalinity	(1) Plastic 500 mL - Unpreserved	No
	SM 5220D - COD	(1) Plastic 250 mL - H_2SO_4	No
	USEPA 353.2 - Nitrate as N		
	D516 - Sulfate	(2) Plastic 250 mL - Unpreserved	No
	SM 4500_F_C - Fluoride		
	SM 4500_Cl_E - Chloride		
	USEPA 6020B - Appendix I Total Metals & Calcium, Magnesium, Sodium	(1) Plastic 250 mL - HNO_3	No
	SM 5210B - BOD	(1) Plastic 1 Liter - Unpreserved	No
	SM 1030E - Cation/Anion Balance		
	SM 2540C - TDS		
	USGS I-3765-85 - TSS		

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-44A	Weather:	Cloudy, 46°F, WNW winds 20-30 mph, 29.8"Hg
Date:	10/21/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Field Analysis

			Final Reading
Time	16:25	16:27	16:29
Temp (°C)	11.20	11.21	11.22
Sp. Cond (umhos/cm)	1818.0	1814.0	1812.0
pH	6.77	6.77	6.76
DO (mg/l)	0.37	0.29	0.27
ORP (mV)	50.0	53.7	56.9
Turbidity (NTU)	0.00	0.00	0.00

Comments:

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-45A	Weather:	Cloudy, 45°F, WNW winds 15-20 mph, 30.0"Hg
Date:	10/22/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Monitoring Well Details

Borehole diameter (in): 8 Casing Diameter (in): 2 Ground surface elevation (ft. MSL): 1145.13

Top of screen (ft. MSL): 1139.13 Materials: PVC Top of Casing elevation (ft. MSL): 1147.69

Locked (Y/N): Yes

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	8.97	9.01	9.68
Water elevation (ft. MSL)	1138.72	1138.68	1138.01

3 Well Volumes (gal): 5.0 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	19.13	19.18	0.05

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ____ No-purge (specify sample interval): ____

____ Bailer ____ Other (specify): ____

Equipment type: ____ Submersible pump X Peristaltic pump ____ Bladder pump

____ Inertial lift pump ____ Bailer ____ No-purge (specify): ____

____ Other (specify): ____

Equipment name/description: GeoTech Peristaltic disposable tubing Dedicated? (Y/N): No Disposable? (Y/N): No

Equipment depth (ft. MSL:) 1132.69 Flow Rate (mL/min): 150 Volume removed (gal): 0.5 Volume sampled (L): 2.74

Well dry? (Y/N): No Odor? (Y/N): No Color? (Y/N): No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-45A_25_10	USEPA 8260D - Appendix I VOCs	(3) VOA Vial 40 mL - HCl	No
		(3) VOA Vial 40 mL - Unpreserved	No
	SM 2320B - Alkalinity	(1) Plastic 500 mL - Unpreserved	No
	SM 5220D - COD	(1) Plastic 250 mL - H_2SO_4	No
	USEPA 353.2 - Nitrate as N		
	D516 - Sulfate	(2) Plastic 250 mL - Unpreserved	No
	SM 4500_F_C - Fluoride		
	SM 4500_Cl_E - Chloride		
	USEPA 6020B - Appendix I Total Metals & Calcium, Magnesium, Sodium	(1) Plastic 250 mL - HNO_3	No
	SM 5210B - BOD	(1) Plastic 1 Liter - Unpreserved	No
	SM 1030E - Cation/Anion Balance		
	SM 2540C - TDS		
	USGS I-3765-85 - TSS		

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-45A	Weather:	Cloudy, 45°F, WNW winds 15-20 mph, 30.0"Hg
Date:	10/22/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Field Analysis

			Final Reading
Time	13:31	13:33	13:35
Temp (°C)	11.39	11.32	11.49
Sp. Cond (umhos/cm)	699.7	698.6	697.3
pH	7.27	7.25	7.24
DO (mg/l)	0.62	0.54	0.48
ORP (mV)	54.2	56.6	57.9
Turbidity (NTU)	0.00	0.00	0.00

Comments:

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-46A	Weather:	Cloudy, 48°F, NNW winds 15-30 mph, 29.9"Hg
Date:	10/22/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	1128.04
Top of screen (ft. MSL):	1123.04	Materials:	PVC	Top of Casing elevation (ft. MSL):	1130.82
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	10.19	10.27	10.48
Water elevation (ft. MSL)	1120.63	1120.55	1120.34

3 Well Volumes (gal): 3.9 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	18.18	18.15	0.03

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: X Pump (low flow) ____ No-purge (specify sample interval): ____
____ Bailer ____ Other (specify): ____

Equipment type: ____ Submersible pump X Peristaltic pump ____ Bladder pump
____ Inertial lift pump ____ Bailer ____ No-purge (specify): ____
____ Other (specify): ____

Equipment name/description: GeoTech Peristaltic disposable tubing Dedicated? (Y/N): No Disposable? (Y/N): No

Equipment depth (ft. MSL:)	1115.82	Flow Rate (mL/min):	150	Volume removed (gal):	0.8
Well dry? (Y/N):	No	Odor? (Y/N):	No	Volume sampled (L):	6.18
				Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-46A_25_10	USEPA 8260D - Appendix II VOCs	(3) VOA Vial 40 mL - HCl	No
		(3) VOA Vial 40 mL - Unpreserved	No
	USEPA 8015C - Acetonitrile & Isobutanol	(3) VOA Vial 40 mL - Unpreserved	No
	USEPA 8270E - Appendix II SVOCs	(2) Amber Glass 250 mL - Unpreserved	No
	USEPA 8081B - Appendix II Pesticides	(4) VOA Vial 40 mL - Unpreserved	No
	USEPA 8151A - Appendix II Herbicides	(2) Amber Glass 1 Liter - Unpreserved	No
	USEPA 8082A - Appendix II PCBs	(4) VOA Vial 40 mL - Unpreserved	No
	SM 2320B - Alkalinity	(1) Plastic 500 mL - Unpreserved	No
	SM 5220D - COD	(1) Plastic 250 mL - H_2SO_4	No
	USEPA 353.2 - Nitrate as N		
	D516 - Sulfate	(2) Plastic 250 mL - Unpreserved	No
	SM 4500_F_C - Fluoride		
	SM 4500_Cl_E - Chloride		
	USEPA 6020B - Appendix II Total Metals & Calcium, Magnesium, Sodium	(1) Plastic 250 mL - HNO_3	No
	USEPA 7470A - Mercury		
	USEPA 9012B - Total Cyanide	(1) Plastic 250 mL - NaOH	No
	USEPA 9034 - Sulfide	(1) Plastic 500 mL - $ZnC_4H_6O_4$ + NaOH	No

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-46A	Weather:	Cloudy, 48°F, NNW winds 15-30 mph, 29.9"Hg
Date:	10/22/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
MW-46A_25_10	SM 5210B - BOD	(1) Plastic 1 Liter - Unpreserved	No
	SM 1030E - Cation/Anion Balance		
	SM 2540C - TDS		
	USGS I-3765-85 - TSS		

Field Analysis

			Final Reading
Time	16:39	16:41	16:43
Temp (°C)	12.01	11.84	11.89
Sp. Cond (umhos/cm)	2166.6	2169.4	2172.1
pH	7.05	7.05	7.05
DO (mg/l)	0.37	0.37	0.35
ORP (mV)	222.7	224.3	226.1
Turbidity (NTU)	8.84	9.17	8.59

Comments: Collected equipment blank (EB-2_25_10) at 17:40.

Groundwater Sampling Field Sheet

	Winneshiek County		
Site Name:	Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-101	Weather:	Clear, 63°F, S winds 15-30 mph, 29.7"Hg
Date:	10/20/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Monitoring Well Details

Borehole diameter (in):	8	Casing Diameter (in):	2	Ground surface elevation (ft. MSL):	1132.10
Top of screen (ft. MSL):	1104.10	Materials:	PVC	Top of Casing elevation (ft. MSL):	1134.55
Locked (Y/N):	Yes				

	Static WL	Before purging	Before sampling
Water Level (ft. TOC):	38.79	38.79	N/A
Water elevation (ft. MSL)	1095.76	1095.76	N/A

3 Well Volumes (gal): 0.8 Screen submerged? (Y/N): No

	Constructed	Measured	Difference
Well Depth (ft. TOC)	40.40	40.40	0

Well conditions commentary: See Well Maintenance Evaluation Form for details.

Sampling Details

Sampling Method: ___ Pump (low flow) ___ No-purge (specify sample interval): ___
X Bailer ___ Other (specify): ___

Equipment type: ___ Submersible pump ___ Peristaltic pump ___ Bladder pump
___ Inertial lift pump X Bailer ___ No-purge (specify): ___
___ Other (specify): ___

Equipment name/description: Bailer Dedicated? (Y/N): No Disposable? (Y/N): Yes
N/A - disposable bailer and string; not used previously.

Equipment depth (ft. MSL:)	N/A	Flow Rate (mL/min):	N/A	Volume removed (gal):	0.5
Well dry? (Y/N):	No	Odor? (Y/N):	No	Color? (Y/N):	No

Sample Name(s)	Method(s)	Container(s)	Filtered? (if yes, filter size)
No sample collected*			

Field Analysis

	Final Reading
Time	N/A
Temp (°C)	N/A
Sp. Cond (umhos/cm)	N/A
pH	N/A
DO (mg/l)	N/A
ORP (mV)	N/A
Turbidity (NTU)	N/A

Groundwater Sampling Field Sheet

Site Name:	Winneshiek County Sanitary Landfill	Permit No.:	96-SDP-1-74P
Well/Piezometer:	MW-101	Weather:	Clear, 63°F, S winds 15-30 mph, 29.7"Hg
Date:	10/20/2025	Personnel:	O.A. Technical Services: Tyler Merritt and Curtis Schwartz

Comments: *Well became dry during purging and did not recover while the field staff was onsite.

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ANALYTICAL REPORT

PREPARED FOR

Attn: TJ Schissel
Winneshiek Co Solid Waste
2000 140th Avenue
Decorah, Iowa 52101

Generated 11/6/2025 11:30:24 AM

JOB DESCRIPTION

Winneshiek County Sanitary Landfill
25W024.00

JOB NUMBER

310-318534-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

my EOL

Job Notes

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Job ID: 310-318534-1 — Eurofins Cedar Falls

Job Narrative
310-318534-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 10/21/2025 6:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.0°C, 0.4°C, 0.6°C and 1.0°C.

GC/MS VOA
Method 8260D: Surrogate recovery for the following samples were outside the upper control limit: MW_1_25_10 (310-318534-1) and MW-31A_25_10 (310-318534-6). This sample did not contain any target analytes; therefore, re-analysis was not performed.

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-471134 recovered outside of the control limits for Vinyl chloride (-33%D), Dichlorodifluoromethane (-24%D), and Chloromethane (-30%D). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 310-471134/4).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA
Method 8270E: The continuing calibration verification (CCV) analyzed in batch 310-471377 was outside the method criteria for the following analyte(s): Famphur. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 310-470953 and analytical batch 310-471377 recovered outside control limits for the following analytes: 3,3'-Dimethylbenzidine and Methapyrilene.

Method 8270E: The surrogate recovery for the blank associated with preparation batch 310-470953 and analytical batch 310-471377 was outside the upper control limits.

Method 8270E: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 310-470953 and analytical batch 310-471537 recovered outside control limits for the following analyte(s): 1,4-phenylenediamine. 1,4-phenylenediamine have been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Herbicides
Method 8151A: Surrogate recovery for the following sample was outside the upper control limit: EB-1_25_10 (310-318534-14). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Job ID: 310-318534-1 (Continued) Eurofins Cedar Falls

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

PCBs
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Pesticides
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B: The initial calibration verification (ICV) result for batch 310-471990 was above the upper control limit. The affected analytes are: antimony. Sample results were non-detects, and have been reported as qualified data.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method SM5210B_Calc: The USB dilution water D.O. depletion was greater than 0.2 mg/L. The associated sample results in batch 310-470893 are qualified and reported. The USB depletion was 0.91 mg/L.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318534-1
SDG: 25W024.00

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
310-318534-1	MW_1_25_10	Water	10/20/25 15:50	10/21/25 18:00	Iowa
310-318534-2	MW-3_25_10	Water	10/21/25 11:00	10/21/25 18:00	Iowa
310-318534-3	MW-4B_25_10	Water	10/20/25 15:50	10/21/25 18:00	Iowa
310-318534-4	MW-19R_25_10	Water	10/21/25 12:55	10/21/25 18:00	Iowa
310-318534-5	MW-25A_25_10	Water	10/20/25 16:55	10/21/25 18:00	Iowa
310-318534-6	MW-31A_25_10	Water	10/21/25 11:25	10/21/25 18:00	Iowa
310-318534-7	MW-33A_25_10	Water	10/20/25 13:15	10/21/25 18:00	Iowa
310-318534-8	MW-34A_25_10	Water	10/21/25 09:20	10/21/25 18:00	Iowa
310-318534-9	MW-37A_25_10	Water	10/20/25 14:30	10/21/25 18:00	Iowa
310-318534-10	MW-38A_25_10	Water	10/21/25 10:25	10/21/25 18:00	Iowa
310-318534-11	MW-40A_25_10	Water	10/21/25 15:15	10/21/25 18:00	Iowa
310-318534-12	MW-41A_25_10	Water	10/21/25 13:00	10/21/25 18:00	Iowa
310-318534-13	MW-42A_25_10	Water	10/21/25 14:40	10/21/25 18:00	Iowa
310-318534-14	EB-1_25_10	Water	10/21/25 11:15	10/21/25 18:00	Iowa
310-318534-15	FD-2_25_10	Water	10/21/25 00:00	10/21/25 18:00	Iowa

Detection Summary

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318534-1
SDG: 25W024.00

Client Sample ID: MW_1_25_10 — Lab Sample ID: 310-318534-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	0.278	J	1.00	0.230	ug/L	1		8260D	Total/NA
Chlorobenzene	0.927	J	1.00	0.400	ug/L	1		8260D	Total/NA
Arsenic	0.651	J	2.00	0.530	ug/L	1		6020B	Total/NA
Barium	184		2.00	0.660	ug/L	1		6020B	Total/NA
Chromium	2.66	J	5.00	1.80	ug/L	1		6020B	Total/NA
Cobalt	0.251	J	0.500	0.170	ug/L	1		6020B	Total/NA
Nickel	9.27		5.00	2.30	ug/L	1		6020B	Total/NA
Sodium	47000		1000	650	ug/L	1		6020B	Total/NA
Potassium	376	J	500	170	ug/L	1		6020B	Total/NA
Calcium	133000		500	190	ug/L	1		6020B	Total/NA
Magnesium	53600		500	150	ug/L	1		6020B	Total/NA
Nitrate as N	0.143		0.100	0.0800	mg/L	1		353.2	Total/NA
Fluoride	0.104		0.100	0.0490	mg/L	1		4500 F C-2011	Total/NA
Sulfate	14.3		5.00	1.80	mg/L	1		D516-16	Total/NA
Total Suspended Solids	3.38		1.88	1.31	mg/L	1		I-3765-85	Total/NA
Anion/Cation Balance	-0.530				%	1		SM 1030E	Total/NA
Total Alkalinity	526		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	526		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	612		50.0	36.0	mg/L	1		SM 2540C	Total/NA
Chloride	85.7		2.00	1.40	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-3_25_10 — Lab Sample ID: 310-318534-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.42	J	2.00	0.530	ug/L	1		6020B	Total/NA
Barium	178		2.00	0.660	ug/L	1		6020B	Total/NA
Chromium	3.09	J	5.00	1.80	ug/L	1		6020B	Total/NA
Sodium	6600		1000	650	ug/L	1		6020B	Total/NA
Potassium	567		500	170	ug/L	1		6020B	Total/NA
Calcium	114000		500	190	ug/L	1		6020B	Total/NA
Magnesium	47000		500	150	ug/L	1		6020B	Total/NA
Fluoride	0.193		0.100	0.0490	mg/L	1		4500 F C-2011	Total/NA
Sulfate	22.5		5.00	1.80	mg/L	1		D516-16	Total/NA
Total Suspended Solids	5.17		2.50	1.75	mg/L	1		I-3765-85	Total/NA
Anion/Cation Balance	5.08				%	1		SM 1030E	Total/NA
Total Alkalinity	404		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	404		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	390		50.0	36.0	mg/L	1		SM 2540C	Total/NA
Chloride	12.5		2.00	1.40	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-4B_25_10 — Lab Sample ID: 310-318534-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	189		2.00	0.660	ug/L	1		6020B	Total/NA
Sodium	10800		1000	650	ug/L	1		6020B	Total/NA
Potassium	367	J	500	170	ug/L	1		6020B	Total/NA
Calcium	80500		500	190	ug/L	1		6020B	Total/NA
Magnesium	30400		500	150	ug/L	1		6020B	Total/NA
Nitrate as N	0.520		0.100	0.0800	mg/L	1		353.2	Total/NA
Fluoride	0.0848	J	0.100	0.0490	mg/L	1		4500 F C-2011	Total/NA
Sulfate	9.59		5.00	1.80	mg/L	1		D516-16	Total/NA
Total Suspended Solids	16.6		1.94	1.35	mg/L	1		I-3765-85	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-4B_25_10 (Continued) — Lab Sample ID: 310-318534-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anion/Cation Balance	-5.94				%	1		SM 1030E	Total/NA
Total Alkalinity	365		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	365		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	370		50.0	36.0	mg/L	1		SM 2540C	Total/NA
Chloride	12.3		2.00	1.40	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-19R_25_10 — Lab Sample ID: 310-318534-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.561	J	2.00	0.530	ug/L	1		6020B	Total/NA
Barium	92.1		2.00	0.660	ug/L	1		6020B	Total/NA
Cobalt	0.848		0.500	0.170	ug/L	1		6020B	Total/NA
Lead	0.679		0.500	0.330	ug/L	1		6020B	Total/NA
Sodium	5020		1000	650	ug/L	1		6020B	Total/NA
Potassium	4780		500	170	ug/L	1		6020B	Total/NA
Calcium	92800		500	190	ug/L	1		6020B	Total/NA
Magnesium	37000		500	150	ug/L	1		6020B	Total/NA
Nitrate as N	0.0989	J	0.100	0.0800	mg/L	1		353.2	Total/NA
Fluoride	0.902		0.100	0.0490	mg/L	1		4500 F C-2011	Total/NA
Sulfate	9.85		5.00	1.80	mg/L	1		D516-16	Total/NA
Total Suspended Solids	151		5.00	3.50	mg/L	1		I-3765-85	Total/NA
Anion/Cation Balance	7.70				%	1		SM 1030E	Total/NA
Total Alkalinity	298		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	298		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	320		50.0	36.0	mg/L	1		SM 2540C	Total/NA
Chloride	23.2		2.00	1.40	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-25A_25_10 — Lab Sample ID: 310-318534-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	203		2.00	0.660	ug/L	1		6020B	Total/NA
Nickel	2.47	J	5.00	2.30	ug/L	1		6020B	Total/NA
Sodium	9650		1000	650	ug/L	1		6020B	Total/NA
Potassium	576		500	170	ug/L	1		6020B	Total/NA
Calcium	169000		500	190	ug/L	1		6020B	Total/NA
Magnesium	63700		500	150	ug/L	1		6020B	Total/NA
Nitrate as N	0.117		0.100	0.0800	mg/L	1		353.2	Total/NA
Fluoride	0.114		0.100	0.0490	mg/L	1		4500 F C-2011	Total/NA
Sulfate	104		25.0	9.00	mg/L	5		D516-16	Total/NA
Total Suspended Solids	1.88		1.88	1.31	mg/L	1		I-3765-85	Total/NA
Anion/Cation Balance	0.819				%	1		SM 1030E	Total/NA
Total Alkalinity	573		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	573		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	670		50.0	36.0	mg/L	1		SM 2540C	Total/NA
Chloride	8.90		2.00	1.40	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-31A_25_10 — Lab Sample ID: 310-318534-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.916	J	1.00	0.220	ug/L	1		8260D	Total/NA
Arsenic	0.751	J	2.00	0.530	ug/L	1		6020B	Total/NA
Barium	206		2.00	0.660	ug/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-31A_25_10 (Continued)

Lab Sample ID: 310-318534-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.161	J	0.200	0.100	ug/L	1		6020B	Total/NA
Cobalt	2.63		0.500	0.170	ug/L	1		6020B	Total/NA
Nickel	28.7		5.00	2.30	ug/L	1		6020B	Total/NA
Sodium	71700		1000	650	ug/L	1		6020B	Total/NA
Potassium	3630		500	170	ug/L	1		6020B	Total/NA
Calcium	223000		500	190	ug/L	1		6020B	Total/NA
Magnesium	61800		500	150	ug/L	1		6020B	Total/NA
Nitrate as N	22.6		1.00	0.800	mg/L	1		353.2	Total/NA
Fluoride	0.0878	J	0.100	0.0490	mg/L	1		4500 F C-2011	Total/NA
Sulfate	57.7		25.0	9.00	mg/L	5		D516-16	Total/NA
Total Suspended Solids	3.25		1.88	1.31	mg/L	1		I-3765-85	Total/NA
Anion/Cation Balance	0.0619				%	1		SM 1030E	Total/NA
Total Alkalinity	559		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	559		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	946		50.0	36.0	mg/L	1		SM 2540C	Total/NA
Chloride	206		20.0	14.0	mg/L	10		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-33A_25_10

Lab Sample ID: 310-318534-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	88.5		2.00	0.530	ug/L	1		6020B	Total/NA
Barium	209		2.00	0.660	ug/L	1		6020B	Total/NA
Chromium	2.63	J	5.00	1.80	ug/L	1		6020B	Total/NA
Cobalt	1.60		0.500	0.170	ug/L	1		6020B	Total/NA
Sodium	9670		1000	650	ug/L	1		6020B	Total/NA
Potassium	282	J	500	170	ug/L	1		6020B	Total/NA
Calcium	135000		500	190	ug/L	1		6020B	Total/NA
Magnesium	50300		500	150	ug/L	1		6020B	Total/NA
Nitrate as N	0.122		0.100	0.0800	mg/L	1		353.2	Total/NA
Fluoride	0.131		0.100	0.0490	mg/L	1		4500 F C-2011	Total/NA
Sulfate	21.8		5.00	1.80	mg/L	1		D516-16	Total/NA
Total Suspended Solids	62.0		15.0	10.5	mg/L	1		I-3765-85	Total/NA
Anion/Cation Balance	1.48				%	1		SM 1030E	Total/NA
Total Alkalinity	516		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	516		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	540		50.0	36.0	mg/L	1		SM 2540C	Total/NA
Chloride	6.81		2.00	1.40	mg/L	1		SM 4500 Cl- E	Total/NA
Biochemical Oxygen Demand	9.72	b	3.00	3.00	mg/L	1		SM 5210B	Total/NA

Client Sample ID: MW-34A_25_10

Lab Sample ID: 310-318534-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	66.7		2.00	0.660	ug/L	1		6020B	Total/NA
Chromium	3.34	J	5.00	1.80	ug/L	1		6020B	Total/NA
Selenium	1.76	J	5.00	1.40	ug/L	1		6020B	Total/NA
Sodium	6160		1000	650	ug/L	1		6020B	Total/NA
Potassium	347	J	500	170	ug/L	1		6020B	Total/NA
Calcium	64400		500	190	ug/L	1		6020B	Total/NA
Magnesium	23500		500	150	ug/L	1		6020B	Total/NA
Nitrate as N	9.11		0.100	0.0800	mg/L	1		353.2	Total/NA
Fluoride	0.203		0.100	0.0490	mg/L	1		4500 F C-2011	Total/NA
Sulfate	4.18	J	5.00	1.80	mg/L	1		D516-16	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-34A_25_10 (Continued) — Lab Sample ID: 310-318534-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	3.13		1.88	1.31	mg/L	1		I-3765-85	Total/NA
Anion/Cation Balance	-0.0135				%	1		SM 1030E	Total/NA
Total Alkalinity	218		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	218		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	270		50.0	36.0	mg/L	1		SM 2540C	Total/NA
Chloride	11.4		2.00	1.40	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-37A_25_10 — Lab Sample ID: 310-318534-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	220		2.00	0.530	ug/L	1		6020B	Total/NA
Barium	630		2.00	0.660	ug/L	1		6020B	Total/NA
Chromium	4.26	J	5.00	1.80	ug/L	1		6020B	Total/NA
Cobalt	2.72		0.500	0.170	ug/L	1		6020B	Total/NA
Nickel	3.98	J	5.00	2.30	ug/L	1		6020B	Total/NA
Sodium	6810		1000	650	ug/L	1		6020B	Total/NA
Potassium	382	J	500	170	ug/L	1		6020B	Total/NA
Calcium	114000		500	190	ug/L	1		6020B	Total/NA
Magnesium	39800		500	150	ug/L	1		6020B	Total/NA
Nitrate as N	0.143		0.100	0.0800	mg/L	1		353.2	Total/NA
Fluoride	0.104		0.100	0.0490	mg/L	1		4500 F C-2011	Total/NA
Sulfate	9.31		5.00	1.80	mg/L	1		D516-16	Total/NA
Total Suspended Solids	11.3		5.00	3.50	mg/L	1		I-3765-85	Total/NA
Anion/Cation Balance	1.74				%	1		SM 1030E	Total/NA
Total Alkalinity	426		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	426		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	398		50.0	36.0	mg/L	1		SM 2540C	Total/NA
Chloride	8.15		2.00	1.40	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-38A_25_10 — Lab Sample ID: 310-318534-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	142		2.00	0.660	ug/L	1		6020B	Total/NA
Chromium	3.13	J	5.00	1.80	ug/L	1		6020B	Total/NA
Nickel	2.99	J	5.00	2.30	ug/L	1		6020B	Total/NA
Sodium	10200		1000	650	ug/L	1		6020B	Total/NA
Potassium	1260		500	170	ug/L	1		6020B	Total/NA
Calcium	105000		500	190	ug/L	1		6020B	Total/NA
Magnesium	41600		500	150	ug/L	1		6020B	Total/NA
Nitrate as N	15.5		1.00	0.800	mg/L	1		353.2	Total/NA
Fluoride	0.150		0.100	0.0490	mg/L	1		4500 F C-2011	Total/NA
Sulfate	28.6		5.00	1.80	mg/L	1		D516-16	Total/NA
Anion/Cation Balance	0.493				%	1		SM 1030E	Total/NA
Total Alkalinity	320		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	320		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	438		50.0	36.0	mg/L	1		SM 2540C	Total/NA
Chloride	33.5		2.00	1.40	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-40A_25_10 — Lab Sample ID: 310-318534-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.640	J	2.00	0.530	ug/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318534-1
SDG: 25W024.00

Client Sample ID: MW-40A_25_10 (Continued) — Lab Sample ID: 310-318534-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	229		2.00	0.660	ug/L	1		6020B	Total/NA
Chromium	2.81	J	5.00	1.80	ug/L	1		6020B	Total/NA
Cobalt	2.57		0.500	0.170	ug/L	1		6020B	Total/NA
Lead	0.482	J	0.500	0.330	ug/L	1		6020B	Total/NA
Nickel	26.0		5.00	2.30	ug/L	1		6020B	Total/NA
Sodium	32900		1000	650	ug/L	1		6020B	Total/NA
Potassium	4580		500	170	ug/L	1		6020B	Total/NA
Calcium	168000		500	190	ug/L	1		6020B	Total/NA
Magnesium	65400		500	150	ug/L	1		6020B	Total/NA
Nitrate as N	0.0882	J	0.100	0.0800	mg/L	1		353.2	Total/NA
Fluoride	0.247		0.100	0.0490	mg/L	1		4500 F C-2011	Total/NA
Sulfate	58.4		25.0	9.00	mg/L	5		D516-16	Total/NA
Total Suspended Solids	68.5		3.75	2.63	mg/L	1		I-3765-85	Total/NA
Anion/Cation Balance	3.54				%	1		SM 1030E	Total/NA
Total Alkalinity	487		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	487		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	724		50.0	36.0	mg/L	1		SM 2540C	Total/NA
Chloride	117		20.0	14.0	mg/L	10		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-41A_25_10 — Lab Sample ID: 310-318534-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.665	J	2.00	0.530	ug/L	1		6020B	Total/NA
Barium	157		2.00	0.660	ug/L	1		6020B	Total/NA
Sodium	8690		1000	650	ug/L	1		6020B	Total/NA
Potassium	578		500	170	ug/L	1		6020B	Total/NA
Calcium	94800		500	190	ug/L	1		6020B	Total/NA
Magnesium	36700		500	150	ug/L	1		6020B	Total/NA
Nitrate as N	0.835		0.100	0.0800	mg/L	1		353.2	Total/NA
Fluoride	0.124		0.100	0.0490	mg/L	1		4500 F C-2011	Total/NA
Sulfate	26.3		5.00	1.80	mg/L	1		D516-16	Total/NA
Anion/Cation Balance	2.26				%	1		SM 1030E	Total/NA
Total Alkalinity	340		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	340		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	366		50.0	36.0	mg/L	1		SM 2540C	Total/NA
Chloride	13.3		2.00	1.40	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-42A_25_10 — Lab Sample ID: 310-318534-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.588	J	2.00	0.530	ug/L	1		6020B	Total/NA
Barium	150		2.00	0.660	ug/L	1		6020B	Total/NA
Cobalt	0.991		0.500	0.170	ug/L	1		6020B	Total/NA
Nickel	26.3		5.00	2.30	ug/L	1		6020B	Total/NA
Sodium	47300		1000	650	ug/L	1		6020B	Total/NA
Potassium	4490		500	170	ug/L	1		6020B	Total/NA
Calcium	175000		500	190	ug/L	1		6020B	Total/NA
Magnesium	63800		500	150	ug/L	1		6020B	Total/NA
Nitrate as N	0.889		0.100	0.0800	mg/L	1		353.2	Total/NA
Fluoride	0.236		0.100	0.0490	mg/L	1		4500 F C-2011	Total/NA
Sulfate	89.4		25.0	9.00	mg/L	5		D516-16	Total/NA
Anion/Cation Balance	6.31				%	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-42A_25_10 (Continued) — Lab Sample ID: 310-318534-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity	449		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	449		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	728		50.0	36.0	mg/L	1		SM 2540C	Total/NA
Chloride	118		20.0	14.0	mg/L	10		SM 4500 Cl- E	Total/NA

Client Sample ID: EB-1_25_10 — Lab Sample ID: 310-318534-14

No Detections.

Client Sample ID: FD-2_25_10 — Lab Sample ID: 310-318534-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.931	J	1.00	0.220	ug/L	1		8260D	Total/NA
Antimony	1.51	J	2.00	1.00	ug/L	1		6020B	Total/NA
Arsenic	0.729	J	2.00	0.530	ug/L	1		6020B	Total/NA
Barium	208		2.00	0.660	ug/L	1		6020B	Total/NA
Cadmium	0.138	J	0.200	0.100	ug/L	1		6020B	Total/NA
Cobalt	2.62		0.500	0.170	ug/L	1		6020B	Total/NA
Nickel	27.5		5.00	2.30	ug/L	1		6020B	Total/NA
Sodium	72400		1000	650	ug/L	1		6020B	Total/NA
Potassium	3340		500	170	ug/L	1		6020B	Total/NA
Calcium	223000		500	190	ug/L	1		6020B	Total/NA
Magnesium	58700		500	150	ug/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW_1_25_10

Date Collected: 10/20/25 15:50
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-1

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/24/25 05:57	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/24/25 05:57	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/24/25 05:57	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/24/25 05:57	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/24/25 05:57	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/24/25 05:57	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/24/25 05:57	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/24/25 05:57	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/24/25 05:57	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/24/25 05:57	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/24/25 05:57	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/24/25 05:57	1
1,4-Dichlorobenzene	**0.278**	**J**	1.00	0.230	ug/L			10/23/25 02:31	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/24/25 05:57	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/23/25 02:31	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/24/25 05:57	1
Acetone	<3.10		10.0	3.10	ug/L			10/23/25 02:31	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/24/25 05:57	1
Benzene	<0.220		0.500	0.220	ug/L			10/24/25 05:57	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/24/25 05:57	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/24/25 05:57	1
Bromoform	<0.780		5.00	0.780	ug/L			10/24/25 05:57	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/24/25 05:57	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/24/25 05:57	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/24/25 05:57	1
Chlorobenzene	**0.927**	**J**	1.00	0.400	ug/L			10/23/25 02:31	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/24/25 05:57	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/24/25 05:57	1
Chloroform	<1.30		3.00	1.30	ug/L			10/24/25 05:57	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/24/25 05:57	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/24/25 05:57	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/24/25 05:57	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/24/25 05:57	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/24/25 05:57	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/24/25 05:57	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/24/25 05:57	1
Styrene	<0.370		1.00	0.370	ug/L			10/24/25 05:57	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/24/25 05:57	1
Toluene	<0.430		1.00	0.430	ug/L			10/24/25 05:57	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/24/25 05:57	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/24/25 05:57	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/24/25 05:57	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/24/25 05:57	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/24/25 05:57	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/24/25 05:57	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/24/25 05:57	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/24/25 05:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*105*		*76 - 130*		*10/23/25 02:31*	*1*

Client Sample ID: MW_1_25_10

Date Collected: 10/20/25 15:50
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-1

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*108*		*76 - 130*		*10/24/25 05:57*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*10/23/25 02:31*	*1*
Toluene-d8 (Surr)	*127*	*S1+*	*80 - 120*		*10/24/25 05:57*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*10/23/25 02:31*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*10/24/25 05:57*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan I	<0.0258		0.0921	0.0258	ug/L		10/23/25 09:48	10/28/25 15:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	*84*		*10 - 150*	*10/23/25 09:48*	*10/28/25 15:11*	*1*
Tetrachloro-m-xylene	*90*		*17 - 150*	*10/23/25 09:48*	*10/28/25 15:11*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00	^1+	2.00	1.00	ug/L		10/27/25 08:30	10/30/25 16:57	1
Arsenic	**0.651**	**J**	2.00	0.530	ug/L		10/27/25 08:30	10/30/25 16:57	1
Barium	**184**		2.00	0.660	ug/L		10/27/25 08:30	10/30/25 16:57	1
Beryllium	<0.330		1.00	0.330	ug/L		10/27/25 08:30	10/30/25 16:57	1
Cadmium	<0.100		0.200	0.100	ug/L		10/27/25 08:30	10/30/25 16:57	1
Chromium	**2.66**	**J**	5.00	1.80	ug/L		10/27/25 08:30	10/30/25 16:57	1
Cobalt	**0.251**	**J**	0.500	0.170	ug/L		10/27/25 08:30	10/30/25 16:57	1
Copper	<3.20		5.00	3.20	ug/L		10/27/25 08:30	10/30/25 16:57	1
Lead	<0.330		0.500	0.330	ug/L		10/27/25 08:30	10/30/25 16:57	1
Nickel	**9.27**		5.00	2.30	ug/L		10/27/25 08:30	10/30/25 16:57	1
Selenium	<1.40		5.00	1.40	ug/L		10/27/25 08:30	10/30/25 16:57	1
Silver	<0.500		1.00	0.500	ug/L		10/27/25 08:30	10/30/25 16:57	1
Thallium	<0.570		1.00	0.570	ug/L		10/27/25 08:30	10/31/25 15:40	1
Vanadium	<1.70		5.00	1.70	ug/L		10/27/25 08:30	10/30/25 16:57	1
Zinc	<13.0		20.0	13.0	ug/L		10/27/25 08:30	10/30/25 16:57	1
Sodium	**47000**		1000	650	ug/L		10/27/25 08:30	10/30/25 16:57	1
Potassium	**376**	**J**	500	170	ug/L		10/27/25 08:30	10/30/25 16:57	1
Calcium	**133000**		500	190	ug/L		10/27/25 08:30	10/30/25 16:57	1
Magnesium	**53600**		500	150	ug/L		10/27/25 08:30	10/30/25 16:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 353.2)	**0.143**		0.100	0.0800	mg/L			10/29/25 11:24	1
Fluoride (SM 4500 F C-2011)	**0.104**		0.100	0.0490	mg/L			10/25/25 17:10	1
Sulfide (SW846 9034)	<1410		3000	1410	ug/L		10/27/25 07:26	10/27/25 09:23	1
Sulfate (ASTM D516-16)	**14.3**		5.00	1.80	mg/L			10/24/25 14:52	1
Total Suspended Solids (USGS I-3765-85)	**3.38**		1.88	1.31	mg/L			10/22/25 13:18	1
Anion/Cation Balance (SM 1030E)	**-0.530**				%			10/27/25 10:47	1
Total Alkalinity (SM 2320B)	**526**		5.00	2.50	mg/L			10/27/25 13:16	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**526**		5.00	2.50	mg/L			10/27/25 13:16	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 13:16	1

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318534-1
SDG: 25W024.00

Client Sample ID: MW_1_25_10
Date Collected: 10/20/25 15:50
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-1
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hydroxide Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 13:16	1
Phenolphthalein Alkalinity as CaCO3 to pH 8.3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 13:16	1
Total Dissolved Solids (SM 2540C)	**612**		50.0	36.0	mg/L			10/23/25 13:12	1
Chloride (SM 4500 Cl- E)	**85.7**		2.00	1.40	mg/L			10/25/25 10:58	1
Biochemical Oxygen Demand (SM 5210B)	<3.00		3.00	3.00	mg/L			10/22/25 07:48	1
Chemical Oxygen Demand (SM 5220D)	<23.0		25.0	23.0	mg/L			10/30/25 13:52	5

Client Sample ID: MW-3_25_10

Date Collected: 10/21/25 11:00
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-2

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/24/25 06:19	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/24/25 06:19	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/24/25 06:19	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/24/25 06:19	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/24/25 06:19	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/24/25 06:19	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/24/25 06:19	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/24/25 06:19	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/24/25 06:19	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/24/25 06:19	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/24/25 06:19	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/24/25 06:19	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/24/25 06:19	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/24/25 06:19	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/23/25 02:53	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/24/25 06:19	1
Acetone	<3.10		10.0	3.10	ug/L			10/23/25 02:53	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/24/25 06:19	1
Benzene	<0.220		0.500	0.220	ug/L			10/24/25 06:19	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/24/25 06:19	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/24/25 06:19	1
Bromoform	<0.780		5.00	0.780	ug/L			10/24/25 06:19	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/24/25 06:19	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/24/25 06:19	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/24/25 06:19	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/24/25 06:19	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/24/25 06:19	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/24/25 06:19	1
Chloroform	<1.30		3.00	1.30	ug/L			10/24/25 06:19	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/24/25 06:19	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/24/25 06:19	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/24/25 06:19	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/24/25 06:19	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/24/25 06:19	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/24/25 06:19	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/24/25 06:19	1
Styrene	<0.370		1.00	0.370	ug/L			10/24/25 06:19	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/24/25 06:19	1
Toluene	<0.430		1.00	0.430	ug/L			10/24/25 06:19	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/24/25 06:19	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/24/25 06:19	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/24/25 06:19	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/24/25 06:19	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/24/25 06:19	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/24/25 06:19	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/24/25 06:19	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/24/25 06:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*108*		*76 - 130*		*10/23/25 02:53*	*1*

Client Sample ID: MW-3_25_10

Date Collected: 10/21/25 11:00
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-2

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*107*		*76 - 130*		*10/24/25 06:19*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*10/23/25 02:53*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*10/24/25 06:19*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*10/23/25 02:53*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*10/24/25 06:19*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00	^1+	2.00	1.00	ug/L		10/27/25 08:30	10/30/25 17:00	1
Arsenic	**1.42**	**J**	2.00	0.530	ug/L		10/27/25 08:30	10/30/25 17:00	1
Barium	**178**		2.00	0.660	ug/L		10/27/25 08:30	10/30/25 17:00	1
Beryllium	<0.330		1.00	0.330	ug/L		10/27/25 08:30	10/30/25 17:00	1
Cadmium	<0.100		0.200	0.100	ug/L		10/27/25 08:30	10/30/25 17:00	1
Chromium	**3.09**	**J**	5.00	1.80	ug/L		10/27/25 08:30	10/30/25 17:00	1
Cobalt	<0.170		0.500	0.170	ug/L		10/27/25 08:30	10/30/25 17:00	1
Copper	<3.20		5.00	3.20	ug/L		10/27/25 08:30	10/30/25 17:00	1
Lead	<0.330		0.500	0.330	ug/L		10/27/25 08:30	10/30/25 17:00	1
Nickel	<2.30		5.00	2.30	ug/L		10/27/25 08:30	10/30/25 17:00	1
Selenium	<1.40		5.00	1.40	ug/L		10/27/25 08:30	10/30/25 17:00	1
Silver	<0.500		1.00	0.500	ug/L		10/27/25 08:30	10/30/25 17:00	1
Thallium	<0.570		1.00	0.570	ug/L		10/27/25 08:30	10/31/25 15:43	1
Vanadium	<1.70		5.00	1.70	ug/L		10/27/25 08:30	10/30/25 17:00	1
Zinc	<13.0		20.0	13.0	ug/L		10/27/25 08:30	10/30/25 17:00	1
Sodium	**6600**		1000	650	ug/L		10/27/25 08:30	10/30/25 17:00	1
Potassium	**567**		500	170	ug/L		10/27/25 08:30	10/30/25 17:00	1
Calcium	**114000**		500	190	ug/L		10/27/25 08:30	10/30/25 17:00	1
Magnesium	**47000**		500	150	ug/L		10/27/25 08:30	10/30/25 17:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 353.2)	<0.0800		0.100	0.0800	mg/L			10/29/25 11:26	1
Fluoride (SM 4500 F C-2011)	**0.193**		0.100	0.0490	mg/L			10/25/25 17:13	1
Sulfate (ASTM D516-16)	**22.5**		5.00	1.80	mg/L			10/24/25 14:52	1
Total Suspended Solids (USGS I-3765-85)	**5.17**		2.50	1.75	mg/L			10/24/25 12:31	1
Anion/Cation Balance (SM 1030E)	**5.08**				%			10/27/25 10:47	1
Total Alkalinity (SM 2320B)	**404**		5.00	2.50	mg/L			10/27/25 13:29	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**404**		5.00	2.50	mg/L			10/27/25 13:29	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 13:29	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 13:29	1
Phenolphthalein Alkalinity as CaCO3 to pH 8.3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 13:29	1
Total Dissolved Solids (SM 2540C)	**390**		50.0	36.0	mg/L			10/23/25 14:36	1
Chloride (SM 4500 Cl- E)	**12.5**		2.00	1.40	mg/L			10/25/25 10:59	1
Biochemical Oxygen Demand (SM 5210B)	<3.00		3.00	3.00	mg/L			10/22/25 07:52	1
Chemical Oxygen Demand (SM 5220D)	<23.0		25.0	23.0	mg/L			10/22/25 09:22	5

Client Sample ID: MW-4B_25_10

Date Collected: 10/20/25 15:50
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-3

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/24/25 06:42	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/24/25 06:42	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/24/25 06:42	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/24/25 06:42	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/24/25 06:42	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/24/25 06:42	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/24/25 06:42	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/24/25 06:42	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/24/25 06:42	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/24/25 06:42	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/24/25 06:42	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/24/25 06:42	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/24/25 06:42	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/24/25 06:42	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/23/25 03:15	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/24/25 06:42	1
Acetone	<3.10		10.0	3.10	ug/L			10/23/25 03:15	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/24/25 06:42	1
Benzene	<0.220		0.500	0.220	ug/L			10/24/25 06:42	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/24/25 06:42	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/24/25 06:42	1
Bromoform	<0.780		5.00	0.780	ug/L			10/24/25 06:42	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/24/25 06:42	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/24/25 06:42	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/24/25 06:42	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/24/25 06:42	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/24/25 06:42	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/24/25 06:42	1
Chloroform	<1.30		3.00	1.30	ug/L			10/24/25 06:42	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/24/25 06:42	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/24/25 06:42	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/24/25 06:42	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/24/25 06:42	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/24/25 06:42	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/24/25 06:42	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/24/25 06:42	1
Styrene	<0.370		1.00	0.370	ug/L			10/24/25 06:42	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/24/25 06:42	1
Toluene	<0.430		1.00	0.430	ug/L			10/24/25 06:42	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/24/25 06:42	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/24/25 06:42	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/24/25 06:42	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/24/25 06:42	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/24/25 06:42	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/24/25 06:42	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/24/25 06:42	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/24/25 06:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*108*		*76 - 130*		*10/23/25 03:15*	*1*

Client Sample ID: MW-4B_25_10

Date Collected: 10/20/25 15:50
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-3

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*76 - 130*		*10/24/25 06:42*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*10/23/25 03:15*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*10/24/25 06:42*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*10/23/25 03:15*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*10/24/25 06:42*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00	^1+	2.00	1.00	ug/L		10/27/25 08:30	10/30/25 17:02	1
Arsenic	<0.530		2.00	0.530	ug/L		10/27/25 08:30	10/30/25 17:02	1
Barium	**189**		2.00	0.660	ug/L		10/27/25 08:30	10/30/25 17:02	1
Beryllium	<0.330		1.00	0.330	ug/L		10/27/25 08:30	10/30/25 17:02	1
Cadmium	<0.100		0.200	0.100	ug/L		10/27/25 08:30	10/30/25 17:02	1
Chromium	<1.80		5.00	1.80	ug/L		10/27/25 08:30	10/30/25 17:02	1
Cobalt	<0.170		0.500	0.170	ug/L		10/27/25 08:30	10/30/25 17:02	1
Copper	<3.20		5.00	3.20	ug/L		10/27/25 08:30	10/30/25 17:02	1
Lead	<0.330		0.500	0.330	ug/L		10/27/25 08:30	10/30/25 17:02	1
Nickel	<2.30		5.00	2.30	ug/L		10/27/25 08:30	10/30/25 17:02	1
Selenium	<1.40		5.00	1.40	ug/L		10/27/25 08:30	10/30/25 17:02	1
Silver	<0.500		1.00	0.500	ug/L		10/27/25 08:30	10/30/25 17:02	1
Thallium	<0.570		1.00	0.570	ug/L		10/27/25 08:30	10/31/25 15:46	1
Vanadium	<1.70		5.00	1.70	ug/L		10/27/25 08:30	10/30/25 17:02	1
Zinc	<13.0		20.0	13.0	ug/L		10/27/25 08:30	10/30/25 17:02	1
Sodium	**10800**		1000	650	ug/L		10/27/25 08:30	10/30/25 17:02	1
Potassium	**367**	**J**	500	170	ug/L		10/27/25 08:30	10/30/25 17:02	1
Calcium	**80500**		500	190	ug/L		10/27/25 08:30	10/30/25 17:02	1
Magnesium	**30400**		500	150	ug/L		10/27/25 08:30	10/30/25 17:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 353.2)	**0.520**		0.100	0.0800	mg/L			10/28/25 13:22	1
Fluoride (SM 4500 F C-2011)	**0.0848**	**J**	0.100	0.0490	mg/L			10/25/25 17:16	1
Sulfate (ASTM D516-16)	**9.59**		5.00	1.80	mg/L			10/24/25 14:54	1
Total Suspended Solids (USGS I-3765-85)	**16.6**		1.94	1.35	mg/L			10/22/25 13:18	1
Anion/Cation Balance (SM 1030E)	**-5.94**				%			10/27/25 10:47	1
Total Alkalinity (SM 2320B)	**365**		5.00	2.50	mg/L			10/27/25 13:46	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**365**		5.00	2.50	mg/L			10/27/25 13:46	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 13:46	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 13:46	1
Phenolphthalein Alkalinity as CaCO3 to pH 8.3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 13:46	1
Total Dissolved Solids (SM 2540C)	**370**		50.0	36.0	mg/L			10/23/25 13:12	1
Chloride (SM 4500 Cl- E)	**12.3**		2.00	1.40	mg/L			10/25/25 11:20	1
Biochemical Oxygen Demand (SM 5210B)	<3.00		3.00	3.00	mg/L			10/22/25 07:55	1
Chemical Oxygen Demand (SM 5220D)	<23.0		25.0	23.0	mg/L			10/22/25 09:22	5

Client Sample ID: MW-19R_25_10

Date Collected: 10/21/25 12:55
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-4

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/24/25 07:04	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/24/25 07:04	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/24/25 07:04	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/24/25 07:04	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/24/25 07:04	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/24/25 07:04	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/24/25 07:04	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/24/25 07:04	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/24/25 07:04	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/24/25 07:04	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/24/25 07:04	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/24/25 07:04	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/24/25 07:04	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/24/25 07:04	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/23/25 03:37	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/24/25 07:04	1
Acetone	<3.10		10.0	3.10	ug/L			10/23/25 03:37	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/24/25 07:04	1
Benzene	<0.220		0.500	0.220	ug/L			10/24/25 07:04	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/24/25 07:04	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/24/25 07:04	1
Bromoform	<0.780		5.00	0.780	ug/L			10/24/25 07:04	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/24/25 07:04	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/24/25 07:04	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/24/25 07:04	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/24/25 07:04	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/24/25 07:04	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/24/25 07:04	1
Chloroform	<1.30		3.00	1.30	ug/L			10/24/25 07:04	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/24/25 07:04	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/24/25 07:04	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/24/25 07:04	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/24/25 07:04	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/24/25 07:04	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/24/25 07:04	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/24/25 07:04	1
Styrene	<0.370		1.00	0.370	ug/L			10/24/25 07:04	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/24/25 07:04	1
Toluene	<0.430		1.00	0.430	ug/L			10/24/25 07:04	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/24/25 07:04	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/24/25 07:04	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/24/25 07:04	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/24/25 07:04	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/24/25 07:04	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/24/25 07:04	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/24/25 07:04	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/24/25 07:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*107*		*76 - 130*		*10/23/25 03:37*	*1*

Client Sample ID: MW-19R_25_10

Date Collected: 10/21/25 12:55
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-4

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*76 - 130*		*10/24/25 07:04*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*10/23/25 03:37*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*10/24/25 07:04*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*10/23/25 03:37*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*10/24/25 07:04*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan I	<0.0250		0.0893	0.0250	ug/L		10/23/25 09:48	10/28/25 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*88*		*10 - 150*	*10/23/25 09:48*	*10/28/25 15:25*	*1*
Tetrachloro-m-xylene	*86*		*17 - 150*	*10/23/25 09:48*	*10/28/25 15:25*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00	^1+	2.00	1.00	ug/L		10/27/25 08:30	10/30/25 17:05	1
Arsenic	**0.561**	**J**	2.00	0.530	ug/L		10/27/25 08:30	10/30/25 17:05	1
Barium	**92.1**		2.00	0.660	ug/L		10/27/25 08:30	10/30/25 17:05	1
Beryllium	<0.330		1.00	0.330	ug/L		10/27/25 08:30	10/30/25 17:05	1
Cadmium	<0.100		0.200	0.100	ug/L		10/27/25 08:30	10/30/25 17:05	1
Chromium	<1.80		5.00	1.80	ug/L		10/27/25 08:30	10/30/25 17:05	1
Cobalt	**0.848**		0.500	0.170	ug/L		10/27/25 08:30	10/30/25 17:05	1
Copper	<3.20		5.00	3.20	ug/L		10/27/25 08:30	10/30/25 17:05	1
Lead	**0.679**		0.500	0.330	ug/L		10/27/25 08:30	10/30/25 17:05	1
Nickel	<2.30		5.00	2.30	ug/L		10/27/25 08:30	10/30/25 17:05	1
Selenium	<1.40		5.00	1.40	ug/L		10/27/25 08:30	10/30/25 17:05	1
Silver	<0.500		1.00	0.500	ug/L		10/27/25 08:30	10/30/25 17:05	1
Thallium	<0.570		1.00	0.570	ug/L		10/27/25 08:30	10/31/25 15:57	1
Vanadium	<1.70		5.00	1.70	ug/L		10/27/25 08:30	10/30/25 17:05	1
Zinc	<13.0		20.0	13.0	ug/L		10/27/25 08:30	10/30/25 17:05	1
Sodium	**5020**		1000	650	ug/L		10/27/25 08:30	10/30/25 17:05	1
Potassium	**4780**		500	170	ug/L		10/27/25 08:30	10/30/25 17:05	1
Calcium	**92800**		500	190	ug/L		10/27/25 08:30	10/30/25 17:05	1
Magnesium	**37000**		500	150	ug/L		10/27/25 08:30	10/30/25 17:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 353.2)	**0.0989**	**J**	0.100	0.0800	mg/L			10/28/25 13:24	1
Fluoride (SM 4500 F C-2011)	**0.902**		0.100	0.0490	mg/L			10/25/25 17:19	1
Sulfide (SW846 9034)	<1410		3000	1410	ug/L		10/28/25 12:38	10/28/25 14:07	1
Sulfate (ASTM D516-16)	**9.85**		5.00	1.80	mg/L			10/24/25 14:41	1
Total Suspended Solids (USGS I-3765-85)	**151**		5.00	3.50	mg/L			10/24/25 06:30	1
Anion/Cation Balance (SM 1030E)	**7.70**				%			10/27/25 10:47	1
Total Alkalinity (SM 2320B)	**298**		5.00	2.50	mg/L			10/27/25 17:18	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**298**		5.00	2.50	mg/L			10/27/25 17:18	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 17:18	1

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318534-1
SDG: 25W024.00

Client Sample ID: MW-19R_25_10
Date Collected: 10/21/25 12:55
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-4
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hydroxide Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 17:18	1
Phenolphthalein Alkalinity as CaCO3 to pH 8.3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 17:18	1
Total Dissolved Solids (SM 2540C)	**320**		50.0	36.0	mg/L			10/23/25 14:36	1
Chloride (SM 4500 Cl- E)	**23.2**		2.00	1.40	mg/L			10/25/25 11:20	1
Biochemical Oxygen Demand (SM 5210B)	<3.00		3.00	3.00	mg/L			10/22/25 07:59	1
Chemical Oxygen Demand (SM 5220D)	<23.0		25.0	23.0	mg/L			10/22/25 09:22	5

Client Sample ID: MW-25A_25_10

Date Collected: 10/20/25 16:55
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-5

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/24/25 07:27	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/24/25 07:27	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/24/25 07:27	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/24/25 07:27	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/24/25 07:27	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/24/25 07:27	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/24/25 07:27	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/24/25 07:27	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/24/25 07:27	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/24/25 07:27	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/24/25 07:27	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/24/25 07:27	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/24/25 07:27	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/24/25 07:27	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/23/25 03:59	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/24/25 07:27	1
Acetone	<3.10		10.0	3.10	ug/L			10/23/25 03:59	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/24/25 07:27	1
Benzene	<0.220		0.500	0.220	ug/L			10/24/25 07:27	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/24/25 07:27	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/24/25 07:27	1
Bromoform	<0.780		5.00	0.780	ug/L			10/24/25 07:27	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/24/25 07:27	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/24/25 07:27	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/24/25 07:27	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/24/25 07:27	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/24/25 07:27	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/24/25 07:27	1
Chloroform	<1.30		3.00	1.30	ug/L			10/24/25 07:27	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/24/25 07:27	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/24/25 07:27	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/24/25 07:27	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/24/25 07:27	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/24/25 07:27	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/24/25 07:27	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/24/25 07:27	1
Styrene	<0.370		1.00	0.370	ug/L			10/24/25 07:27	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/24/25 07:27	1
Toluene	<0.430		1.00	0.430	ug/L			10/24/25 07:27	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/24/25 07:27	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/24/25 07:27	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/24/25 07:27	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/24/25 07:27	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/24/25 07:27	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/24/25 07:27	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/24/25 07:27	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/24/25 07:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*109*		*76 - 130*		*10/23/25 03:59*	*1*

Client Sample ID: MW-25A_25_10

Date Collected: 10/20/25 16:55
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-5

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*108*		*76 - 130*		*10/24/25 07:27*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*10/23/25 03:59*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*10/24/25 07:27*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*10/23/25 03:59*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*10/24/25 07:27*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00	^1+	2.00	1.00	ug/L		10/27/25 08:30	10/30/25 17:08	1
Arsenic	<0.530		2.00	0.530	ug/L		10/27/25 08:30	10/30/25 17:08	1
Barium	**203**		2.00	0.660	ug/L		10/27/25 08:30	10/30/25 17:08	1
Beryllium	<0.330		1.00	0.330	ug/L		10/27/25 08:30	10/30/25 17:08	1
Cadmium	<0.100		0.200	0.100	ug/L		10/27/25 08:30	10/30/25 17:08	1
Chromium	<1.80		5.00	1.80	ug/L		10/27/25 08:30	10/30/25 17:08	1
Cobalt	<0.170		0.500	0.170	ug/L		10/27/25 08:30	10/30/25 17:08	1
Copper	<3.20		5.00	3.20	ug/L		10/27/25 08:30	10/30/25 17:08	1
Lead	<0.330		0.500	0.330	ug/L		10/27/25 08:30	10/30/25 17:08	1
Nickel	**2.47**	**J**	5.00	2.30	ug/L		10/27/25 08:30	10/30/25 17:08	1
Selenium	<1.40		5.00	1.40	ug/L		10/27/25 08:30	10/30/25 17:08	1
Silver	<0.500		1.00	0.500	ug/L		10/27/25 08:30	10/30/25 17:08	1
Thallium	<0.570		1.00	0.570	ug/L		10/27/25 08:30	10/31/25 16:00	1
Vanadium	<1.70		5.00	1.70	ug/L		10/27/25 08:30	10/30/25 17:08	1
Zinc	<13.0		20.0	13.0	ug/L		10/27/25 08:30	10/30/25 17:08	1
Sodium	**9650**		1000	650	ug/L		10/27/25 08:30	10/30/25 17:08	1
Potassium	**576**		500	170	ug/L		10/27/25 08:30	10/30/25 17:08	1
Calcium	**169000**		500	190	ug/L		10/27/25 08:30	10/30/25 17:08	1
Magnesium	**63700**		500	150	ug/L		10/27/25 08:30	10/30/25 17:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 353.2)	**0.117**		0.100	0.0800	mg/L			10/28/25 13:25	1
Fluoride (SM 4500 F C-2011)	**0.114**		0.100	0.0490	mg/L			10/25/25 17:23	1
Sulfate (ASTM D516-16)	**104**		25.0	9.00	mg/L			10/24/25 14:43	5
Total Suspended Solids (USGS I-3765-85)	**1.88**		1.88	1.31	mg/L			10/22/25 13:18	1
Anion/Cation Balance (SM 1030E)	**0.819**				%			10/27/25 10:47	1
Total Alkalinity (SM 2320B)	**573**		5.00	2.50	mg/L			10/27/25 17:36	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**573**		5.00	2.50	mg/L			10/27/25 17:36	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 17:36	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 17:36	1
Phenolphthalein Alkalinity as CaCO3 to pH 8.3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 17:36	1
Total Dissolved Solids (SM 2540C)	**670**		50.0	36.0	mg/L			10/23/25 13:12	1
Chloride (SM 4500 Cl- E)	**8.90**		2.00	1.40	mg/L			10/25/25 11:21	1
Biochemical Oxygen Demand (SM 5210B)	<3.00		3.00	3.00	mg/L			10/22/25 08:01	1
Chemical Oxygen Demand (SM 5220D)	<23.0		25.0	23.0	mg/L			10/22/25 09:22	5

Client Sample ID: MW-31A_25_10

Date Collected: 10/21/25 11:25
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-6

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/24/25 07:50	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/24/25 07:50	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/24/25 07:50	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/24/25 07:50	1
1,1-Dichloroethane	**0.916**	**J**	1.00	0.220	ug/L			10/23/25 04:21	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/24/25 07:50	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/24/25 07:50	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/24/25 07:50	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/24/25 07:50	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/24/25 07:50	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/24/25 07:50	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/24/25 07:50	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/24/25 07:50	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/24/25 07:50	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/23/25 04:21	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/24/25 07:50	1
Acetone	<3.10		10.0	3.10	ug/L			10/23/25 04:21	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/24/25 07:50	1
Benzene	<0.220		0.500	0.220	ug/L			10/24/25 07:50	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/24/25 07:50	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/24/25 07:50	1
Bromoform	<0.780		5.00	0.780	ug/L			10/24/25 07:50	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/24/25 07:50	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/24/25 07:50	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/24/25 07:50	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/24/25 07:50	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/24/25 07:50	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/24/25 07:50	1
Chloroform	<1.30		3.00	1.30	ug/L			10/24/25 07:50	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/24/25 07:50	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/24/25 07:50	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/24/25 07:50	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/24/25 07:50	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/24/25 07:50	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/24/25 07:50	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/24/25 07:50	1
Styrene	<0.370		1.00	0.370	ug/L			10/24/25 07:50	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/24/25 07:50	1
Toluene	<0.430		1.00	0.430	ug/L			10/24/25 07:50	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/24/25 07:50	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/24/25 07:50	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/24/25 07:50	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/24/25 07:50	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/24/25 07:50	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/24/25 07:50	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/24/25 07:50	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/24/25 07:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*109*		*76 - 130*		*10/23/25 04:21*	*1*

Client Sample ID: MW-31A_25_10

Date Collected: 10/21/25 11:25
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-6

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*109*		*76 - 130*		*10/24/25 07:50*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*10/23/25 04:21*	*1*
Toluene-d8 (Surr)	*121*	*S1+*	*80 - 120*		*10/24/25 07:50*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*10/23/25 04:21*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*10/24/25 07:50*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan I	<0.0257		0.0916	0.0257	ug/L		10/23/25 09:48	10/28/25 15:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*89*		*10 - 150*	*10/23/25 09:48*	*10/28/25 15:39*	*1*
Tetrachloro-m-xylene	*87*		*17 - 150*	*10/23/25 09:48*	*10/28/25 15:39*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		10/27/25 08:30	10/31/25 16:06	1
Arsenic	**0.751**	**J**	2.00	0.530	ug/L		10/27/25 08:30	10/30/25 17:18	1
Barium	**206**		2.00	0.660	ug/L		10/27/25 08:30	10/30/25 17:18	1
Beryllium	<0.330		1.00	0.330	ug/L		10/27/25 08:30	10/30/25 17:18	1
Cadmium	**0.161**	**J**	0.200	0.100	ug/L		10/27/25 08:30	10/30/25 17:18	1
Chromium	<1.80		5.00	1.80	ug/L		10/27/25 08:30	10/30/25 17:18	1
Cobalt	**2.63**		0.500	0.170	ug/L		10/27/25 08:30	10/30/25 17:18	1
Copper	<3.20		5.00	3.20	ug/L		10/27/25 08:30	10/30/25 17:18	1
Lead	<0.330		0.500	0.330	ug/L		10/27/25 08:30	10/30/25 17:18	1
Nickel	**28.7**		5.00	2.30	ug/L		10/27/25 08:30	10/30/25 17:18	1
Selenium	<1.40		5.00	1.40	ug/L		10/27/25 08:30	10/30/25 17:18	1
Silver	<0.500		1.00	0.500	ug/L		10/27/25 08:30	10/30/25 17:18	1
Thallium	<0.570		1.00	0.570	ug/L		10/27/25 08:30	10/31/25 16:06	1
Vanadium	<1.70		5.00	1.70	ug/L		10/27/25 08:30	10/30/25 17:18	1
Zinc	<13.0		20.0	13.0	ug/L		10/27/25 08:30	10/30/25 17:18	1
Sodium	**71700**		1000	650	ug/L		10/27/25 08:30	10/30/25 17:18	1
Potassium	**3630**		500	170	ug/L		10/27/25 08:30	10/30/25 17:18	1
Calcium	**223000**		500	190	ug/L		10/27/25 08:30	10/30/25 17:18	1
Magnesium	**61800**		500	150	ug/L		10/27/25 08:30	10/30/25 17:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 353.2)	**22.6**		1.00	0.800	mg/L			10/28/25 15:39	1
Fluoride (SM 4500 F C-2011)	**0.0878**	**J**	0.100	0.0490	mg/L			10/25/25 17:26	1
Sulfate (ASTM D516-16)	**57.7**		25.0	9.00	mg/L			10/24/25 14:43	5
Total Suspended Solids (USGS I-3765-85)	**3.25**		1.88	1.31	mg/L			10/23/25 10:58	1
Anion/Cation Balance (SM 1030E)	**0.0619**				%			10/27/25 10:47	1
Total Alkalinity (SM 2320B)	**559**		5.00	2.50	mg/L			10/27/25 17:48	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**559**		5.00	2.50	mg/L			10/27/25 17:48	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 17:48	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 17:48	1

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318534-1
SDG: 25W024.00

Client Sample ID: MW-31A_25_10
Date Collected: 10/21/25 11:25
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-6
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolphthalein Alkalinity as CaCO3 to pH 8.3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 17:48	1
Total Dissolved Solids (SM 2540C)	**946**		50.0	36.0	mg/L			10/23/25 14:36	1
Chloride (SM 4500 Cl- E)	**206**		20.0	14.0	mg/L			10/25/25 11:21	10
Biochemical Oxygen Demand (SM 5210B)	<3.00		3.00	3.00	mg/L			10/22/25 08:30	1
Chemical Oxygen Demand (SM 5220D)	<23.0		25.0	23.0	mg/L			10/22/25 09:22	5

Client Sample ID: MW-33A_25_10

Date Collected: 10/20/25 13:15
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-7

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/24/25 08:12	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/24/25 08:12	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/24/25 08:12	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/24/25 08:12	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/24/25 08:12	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/24/25 08:12	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/24/25 08:12	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/24/25 08:12	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/24/25 08:12	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/24/25 08:12	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/24/25 08:12	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/24/25 08:12	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/24/25 08:12	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/24/25 08:12	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/23/25 04:43	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/24/25 08:12	1
Acetone	<3.10		10.0	3.10	ug/L			10/23/25 04:43	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/24/25 08:12	1
Benzene	<0.220		0.500	0.220	ug/L			10/24/25 08:12	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/24/25 08:12	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/24/25 08:12	1
Bromoform	<0.780		5.00	0.780	ug/L			10/24/25 08:12	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/24/25 08:12	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/24/25 08:12	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/24/25 08:12	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/24/25 08:12	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/24/25 08:12	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/24/25 08:12	1
Chloroform	<1.30		3.00	1.30	ug/L			10/24/25 08:12	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/24/25 08:12	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/24/25 08:12	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/24/25 08:12	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/24/25 08:12	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/24/25 08:12	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/24/25 08:12	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/24/25 08:12	1
Styrene	<0.370		1.00	0.370	ug/L			10/24/25 08:12	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/24/25 08:12	1
Toluene	<0.430		1.00	0.430	ug/L			10/24/25 08:12	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/24/25 08:12	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/24/25 08:12	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/24/25 08:12	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/24/25 08:12	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/24/25 08:12	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/24/25 08:12	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/24/25 08:12	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/24/25 08:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*109*		*76 - 130*		*10/23/25 04:43*	*1*

Client Sample ID: MW-33A_25_10

Date Collected: 10/20/25 13:15
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-7

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*76 - 130*		*10/24/25 08:12*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/23/25 04:43*	*1*
Toluene-d8 (Surr)	*118*		*80 - 120*		*10/24/25 08:12*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*10/23/25 04:43*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*10/24/25 08:12*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00	^1+	2.00	1.00	ug/L		10/27/25 08:30	10/30/25 17:20	1
Arsenic	**88.5**		2.00	0.530	ug/L		10/27/25 08:30	10/30/25 17:20	1
Barium	**209**		2.00	0.660	ug/L		10/27/25 08:30	10/30/25 17:20	1
Beryllium	<0.330		1.00	0.330	ug/L		10/27/25 08:30	10/30/25 17:20	1
Cadmium	<0.100		0.200	0.100	ug/L		10/27/25 08:30	10/30/25 17:20	1
Chromium	**2.63**	**J**	5.00	1.80	ug/L		10/27/25 08:30	10/30/25 17:20	1
Cobalt	**1.60**		0.500	0.170	ug/L		10/27/25 08:30	10/30/25 17:20	1
Copper	<3.20		5.00	3.20	ug/L		10/27/25 08:30	10/30/25 17:20	1
Lead	<0.330		0.500	0.330	ug/L		10/27/25 08:30	10/30/25 17:20	1
Nickel	<2.30		5.00	2.30	ug/L		10/27/25 08:30	10/30/25 17:20	1
Selenium	<1.40		5.00	1.40	ug/L		10/27/25 08:30	10/30/25 17:20	1
Silver	<0.500		1.00	0.500	ug/L		10/27/25 08:30	10/30/25 17:20	1
Thallium	<0.570		1.00	0.570	ug/L		10/27/25 08:30	10/31/25 16:09	1
Vanadium	<1.70		5.00	1.70	ug/L		10/27/25 08:30	10/30/25 17:20	1
Zinc	<13.0		20.0	13.0	ug/L		10/27/25 08:30	10/30/25 17:20	1
Sodium	**9670**		1000	650	ug/L		10/27/25 08:30	10/30/25 17:20	1
Potassium	**282**	**J**	500	170	ug/L		10/27/25 08:30	10/30/25 17:20	1
Calcium	**135000**		500	190	ug/L		10/27/25 08:30	10/30/25 17:20	1
Magnesium	**50300**		500	150	ug/L		10/27/25 08:30	10/30/25 17:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 353.2)	**0.122**		0.100	0.0800	mg/L			10/28/25 13:29	1
Fluoride (SM 4500 F C-2011)	**0.131**		0.100	0.0490	mg/L			10/25/25 17:29	1
Sulfate (ASTM D516-16)	**21.8**		5.00	1.80	mg/L			10/24/25 14:54	1
Total Suspended Solids (USGS I-3765-85)	**62.0**		15.0	10.5	mg/L			10/22/25 13:18	1
Anion/Cation Balance (SM 1030E)	**1.48**				%			10/27/25 10:47	1
Total Alkalinity (SM 2320B)	**516**		5.00	2.50	mg/L			10/27/25 17:59	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**516**		5.00	2.50	mg/L			10/27/25 17:59	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 17:59	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 17:59	1
Phenolphthalein Alkalinity as CaCO3 to pH 8.3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 17:59	1
Total Dissolved Solids (SM 2540C)	**540**		50.0	36.0	mg/L			10/23/25 13:12	1
Chloride (SM 4500 Cl- E)	**6.81**		2.00	1.40	mg/L			10/25/25 11:01	1
Biochemical Oxygen Demand (SM 5210B)	**9.72**	**b**	3.00	3.00	mg/L			10/22/25 08:03	1
Chemical Oxygen Demand (SM 5220D)	<23.0		25.0	23.0	mg/L			10/22/25 09:22	5

Client Sample ID: MW-34A_25_10

Date Collected: 10/21/25 09:20
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-8

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/24/25 08:35	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/24/25 08:35	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/24/25 08:35	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/24/25 08:35	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/24/25 08:35	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/24/25 08:35	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/24/25 08:35	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/24/25 08:35	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/24/25 08:35	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/24/25 08:35	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/24/25 08:35	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/24/25 08:35	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/24/25 08:35	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/24/25 08:35	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/23/25 05:05	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/24/25 08:35	1
Acetone	<3.10		10.0	3.10	ug/L			10/23/25 05:05	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/24/25 08:35	1
Benzene	<0.220		0.500	0.220	ug/L			10/24/25 08:35	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/24/25 08:35	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/24/25 08:35	1
Bromoform	<0.780		5.00	0.780	ug/L			10/24/25 08:35	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/24/25 08:35	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/24/25 08:35	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/24/25 08:35	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/24/25 08:35	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/24/25 08:35	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/24/25 08:35	1
Chloroform	<1.30		3.00	1.30	ug/L			10/24/25 08:35	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/24/25 08:35	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/24/25 08:35	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/24/25 08:35	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/24/25 08:35	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/24/25 08:35	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/24/25 08:35	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/24/25 08:35	1
Styrene	<0.370		1.00	0.370	ug/L			10/24/25 08:35	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/24/25 08:35	1
Toluene	<0.430		1.00	0.430	ug/L			10/24/25 08:35	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/24/25 08:35	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/24/25 08:35	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/24/25 08:35	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/24/25 08:35	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/24/25 08:35	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/24/25 08:35	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/24/25 08:35	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/24/25 08:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*76 - 130*		*10/23/25 05:05*	*1*

Client Sample ID: MW-34A_25_10

Date Collected: 10/21/25 09:20
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-8

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*76 - 130*		*10/24/25 08:35*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*10/23/25 05:05*	*1*
Toluene-d8 (Surr)	*89*		*80 - 120*		*10/24/25 08:35*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*10/23/25 05:05*	*1*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*		*10/24/25 08:35*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00	^1+	2.00	1.00	ug/L		10/27/25 08:30	10/30/25 17:23	1
Arsenic	<0.530		2.00	0.530	ug/L		10/27/25 08:30	10/30/25 17:23	1
Barium	**66.7**		2.00	0.660	ug/L		10/27/25 08:30	10/30/25 17:23	1
Beryllium	<0.330		1.00	0.330	ug/L		10/27/25 08:30	10/30/25 17:23	1
Cadmium	<0.100		0.200	0.100	ug/L		10/27/25 08:30	10/30/25 17:23	1
Chromium	**3.34**	**J**	5.00	1.80	ug/L		10/27/25 08:30	10/30/25 17:23	1
Cobalt	<0.170		0.500	0.170	ug/L		10/27/25 08:30	10/30/25 17:23	1
Copper	<3.20		5.00	3.20	ug/L		10/27/25 08:30	10/30/25 17:23	1
Lead	<0.330		0.500	0.330	ug/L		10/27/25 08:30	10/30/25 17:23	1
Nickel	<2.30		5.00	2.30	ug/L		10/27/25 08:30	10/30/25 17:23	1
Selenium	**1.76**	**J**	5.00	1.40	ug/L		10/27/25 08:30	10/30/25 17:23	1
Silver	<0.500		1.00	0.500	ug/L		10/27/25 08:30	10/30/25 17:23	1
Thallium	<0.570		1.00	0.570	ug/L		10/27/25 08:30	10/31/25 16:11	1
Vanadium	<1.70		5.00	1.70	ug/L		10/27/25 08:30	10/30/25 17:23	1
Zinc	<13.0		20.0	13.0	ug/L		10/27/25 08:30	10/30/25 17:23	1
Sodium	**6160**		1000	650	ug/L		10/27/25 08:30	10/30/25 17:23	1
Potassium	**347**	**J**	500	170	ug/L		10/27/25 08:30	10/30/25 17:23	1
Calcium	**64400**		500	190	ug/L		10/27/25 08:30	10/30/25 17:23	1
Magnesium	**23500**		500	150	ug/L		10/27/25 08:30	10/30/25 17:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 353.2)	**9.11**		0.100	0.0800	mg/L			10/28/25 13:31	1
Fluoride (SM 4500 F C-2011)	**0.203**		0.100	0.0490	mg/L			10/25/25 17:38	1
Sulfate (ASTM D516-16)	**4.18**	**J**	5.00	1.80	mg/L			10/24/25 14:54	1
Total Suspended Solids (USGS I-3765-85)	**3.13**		1.88	1.31	mg/L			10/23/25 10:58	1
Anion/Cation Balance (SM 1030E)	**-0.0135**				%			10/27/25 10:47	1
Total Alkalinity (SM 2320B)	**218**		5.00	2.50	mg/L			10/27/25 18:19	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**218**		5.00	2.50	mg/L			10/27/25 18:19	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 18:19	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 18:19	1
Phenolphthalein Alkalinity as CaCO3 to pH 8.3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 18:19	1
Total Dissolved Solids (SM 2540C)	**270**		50.0	36.0	mg/L			10/23/25 14:36	1
Chloride (SM 4500 Cl- E)	**11.4**		2.00	1.40	mg/L			10/25/25 11:01	1
Biochemical Oxygen Demand (SM 5210B)	<3.00		3.00	3.00	mg/L			10/22/25 08:06	1
Chemical Oxygen Demand (SM 5220D)	<23.0		25.0	23.0	mg/L			10/22/25 09:22	5

Client Sample ID: MW-37A_25_10

Date Collected: 10/20/25 14:30
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-9

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/24/25 08:57	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/24/25 08:57	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/24/25 08:57	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/24/25 08:57	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/24/25 08:57	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/24/25 08:57	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/24/25 08:57	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/24/25 08:57	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/24/25 08:57	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/24/25 08:57	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/24/25 08:57	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/24/25 08:57	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/24/25 08:57	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/24/25 08:57	1
2-Hexanone	<2.00	F2	10.0	2.00	ug/L			10/31/25 01:41	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/24/25 08:57	1
Acetone	<3.10	F2	10.0	3.10	ug/L			10/31/25 01:41	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/24/25 08:57	1
Benzene	<0.220		0.500	0.220	ug/L			10/24/25 08:57	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/24/25 08:57	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/24/25 08:57	1
Bromoform	<0.780		5.00	0.780	ug/L			10/24/25 08:57	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/24/25 08:57	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/24/25 08:57	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/24/25 08:57	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/24/25 08:57	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/24/25 08:57	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/24/25 08:57	1
Chloroform	<1.30		3.00	1.30	ug/L			10/24/25 08:57	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/24/25 08:57	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/24/25 08:57	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/24/25 08:57	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/24/25 08:57	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/24/25 08:57	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/24/25 08:57	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/24/25 08:57	1
Styrene	<0.370		1.00	0.370	ug/L			10/24/25 08:57	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/24/25 08:57	1
Toluene	<0.430		1.00	0.430	ug/L			10/24/25 08:57	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/24/25 08:57	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/24/25 08:57	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/24/25 08:57	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/24/25 08:57	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/24/25 08:57	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/24/25 08:57	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/24/25 08:57	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/24/25 08:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*115*		*76 - 130*		*10/31/25 01:41*	*1*

Client Sample ID: MW-37A_25_10

Date Collected: 10/20/25 14:30
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-9

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*121*		*76 - 130*		*10/24/25 08:57*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/31/25 01:41*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*10/31/25 01:41*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*10/24/25 08:57*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*10/24/25 08:57*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan I	<0.0252		0.0900	0.0252	ug/L		10/23/25 09:48	10/28/25 15:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	*78*		*10 - 150*	*10/23/25 09:48*	*10/28/25 15:53*	*1*
Tetrachloro-m-xylene	*66*		*17 - 150*	*10/23/25 09:48*	*10/28/25 15:53*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00	^1+	2.00	1.00	ug/L		10/27/25 08:30	10/30/25 17:26	1
Arsenic	**220**		2.00	0.530	ug/L		10/27/25 08:30	10/30/25 17:26	1
Barium	**630**		2.00	0.660	ug/L		10/27/25 08:30	10/30/25 17:26	1
Beryllium	<0.330		1.00	0.330	ug/L		10/27/25 08:30	10/30/25 17:26	1
Cadmium	<0.100		0.200	0.100	ug/L		10/27/25 08:30	10/30/25 17:26	1
Chromium	**4.26**	**J**	5.00	1.80	ug/L		10/27/25 08:30	10/30/25 17:26	1
Cobalt	**2.72**		0.500	0.170	ug/L		10/27/25 08:30	10/30/25 17:26	1
Copper	<3.20		5.00	3.20	ug/L		10/27/25 08:30	10/30/25 17:26	1
Lead	<0.330		0.500	0.330	ug/L		10/27/25 08:30	10/30/25 17:26	1
Nickel	**3.98**	**J**	5.00	2.30	ug/L		10/27/25 08:30	10/30/25 17:26	1
Selenium	<1.40		5.00	1.40	ug/L		10/27/25 08:30	10/30/25 17:26	1
Silver	<0.500		1.00	0.500	ug/L		10/27/25 08:30	10/30/25 17:26	1
Thallium	<0.570		1.00	0.570	ug/L		10/27/25 08:30	10/31/25 16:14	1
Vanadium	<1.70		5.00	1.70	ug/L		10/27/25 08:30	10/30/25 17:26	1
Zinc	<13.0		20.0	13.0	ug/L		10/27/25 08:30	10/30/25 17:26	1
Sodium	**6810**		1000	650	ug/L		10/27/25 08:30	10/30/25 17:26	1
Potassium	**382**	**J**	500	170	ug/L		10/27/25 08:30	10/30/25 17:26	1
Calcium	**114000**		500	190	ug/L		10/27/25 08:30	10/30/25 17:26	1
Magnesium	**39800**		500	150	ug/L		10/27/25 08:30	10/30/25 17:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 353.2)	**0.143**		0.100	0.0800	mg/L			10/28/25 13:33	1
Fluoride (SM 4500 F C-2011)	**0.104**		0.100	0.0490	mg/L			10/25/25 17:41	1
Sulfide (SW846 9034)	<1410		3000	1410	ug/L		10/27/25 07:26	10/27/25 09:23	1
Sulfate (ASTM D516-16)	**9.31**		5.00	1.80	mg/L			10/24/25 14:55	1
Total Suspended Solids (USGS I-3765-85)	**11.3**		5.00	3.50	mg/L			10/22/25 13:18	1
Anion/Cation Balance (SM 1030E)	**1.74**				%			10/27/25 10:47	1
Total Alkalinity (SM 2320B)	**426**		5.00	2.50	mg/L			10/27/25 18:27	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**426**		5.00	2.50	mg/L			10/27/25 18:27	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 18:27	1

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318534-1
SDG: 25W024.00

Client Sample ID: MW-37A_25_10
Date Collected: 10/20/25 14:30
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-9
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hydroxide Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 18:27	1
Phenolphthalein Alkalinity as CaCO3 to pH 8.3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 18:27	1
Total Dissolved Solids (SM 2540C)	**398**		50.0	36.0	mg/L			10/23/25 13:12	1
Chloride (SM 4500 Cl- E)	**8.15**		2.00	1.40	mg/L			10/25/25 11:01	1
Biochemical Oxygen Demand (SM 5210B)	<3.00		3.00	3.00	mg/L			10/22/25 08:09	1
Chemical Oxygen Demand (SM 5220D)	<23.0		25.0	23.0	mg/L			10/22/25 09:22	5

Client Sample ID: MW-38A_25_10

Date Collected: 10/21/25 10:25
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-10

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/24/25 09:43	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/24/25 09:43	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/24/25 09:43	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/24/25 09:43	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/24/25 09:43	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/24/25 09:43	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/24/25 09:43	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/24/25 09:43	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/24/25 09:43	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/24/25 09:43	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/24/25 09:43	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/24/25 09:43	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/24/25 09:43	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/24/25 09:43	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/23/25 05:49	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/24/25 09:43	1
Acetone	<3.10		10.0	3.10	ug/L			10/23/25 05:49	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/24/25 09:43	1
Benzene	<0.220		0.500	0.220	ug/L			10/24/25 09:43	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/24/25 09:43	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/24/25 09:43	1
Bromoform	<0.780		5.00	0.780	ug/L			10/24/25 09:43	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/24/25 09:43	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/24/25 09:43	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/24/25 09:43	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/24/25 09:43	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/24/25 09:43	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/24/25 09:43	1
Chloroform	<1.30		3.00	1.30	ug/L			10/24/25 09:43	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/24/25 09:43	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/24/25 09:43	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/24/25 09:43	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/24/25 09:43	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/24/25 09:43	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/24/25 09:43	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/24/25 09:43	1
Styrene	<0.370		1.00	0.370	ug/L			10/24/25 09:43	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/24/25 09:43	1
Toluene	<0.430		1.00	0.430	ug/L			10/24/25 09:43	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/24/25 09:43	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/24/25 09:43	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/24/25 09:43	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/24/25 09:43	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/24/25 09:43	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/24/25 09:43	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/24/25 09:43	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/24/25 09:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*115*		*76 - 130*		*10/23/25 05:49*	*1*

Client Sample ID: MW-38A_25_10

Date Collected: 10/21/25 10:25
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-10

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*117*		*76 - 130*		*10/24/25 09:43*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*10/23/25 05:49*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*10/24/25 09:43*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*10/23/25 05:49*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*10/24/25 09:43*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00	^1+	2.00	1.00	ug/L		10/27/25 08:30	10/30/25 17:28	1
Arsenic	<0.530		2.00	0.530	ug/L		10/27/25 08:30	10/30/25 17:28	1
Barium	**142**		2.00	0.660	ug/L		10/27/25 08:30	10/30/25 17:28	1
Beryllium	<0.330		1.00	0.330	ug/L		10/27/25 08:30	10/30/25 17:28	1
Cadmium	<0.100		0.200	0.100	ug/L		10/27/25 08:30	10/30/25 17:28	1
Chromium	**3.13**	**J**	5.00	1.80	ug/L		10/27/25 08:30	10/30/25 17:28	1
Cobalt	<0.170		0.500	0.170	ug/L		10/27/25 08:30	10/30/25 17:28	1
Copper	<3.20		5.00	3.20	ug/L		10/27/25 08:30	10/30/25 17:28	1
Lead	<0.330		0.500	0.330	ug/L		10/27/25 08:30	10/30/25 17:28	1
Nickel	**2.99**	**J**	5.00	2.30	ug/L		10/27/25 08:30	10/30/25 17:28	1
Selenium	<1.40		5.00	1.40	ug/L		10/27/25 08:30	10/30/25 17:28	1
Silver	<0.500		1.00	0.500	ug/L		10/27/25 08:30	10/30/25 17:28	1
Thallium	<0.570		1.00	0.570	ug/L		10/27/25 08:30	10/31/25 16:17	1
Vanadium	<1.70		5.00	1.70	ug/L		10/27/25 08:30	10/30/25 17:28	1
Zinc	<13.0		20.0	13.0	ug/L		10/27/25 08:30	10/30/25 17:28	1
Sodium	**10200**		1000	650	ug/L		10/27/25 08:30	10/30/25 17:28	1
Potassium	**1260**		500	170	ug/L		10/27/25 08:30	10/30/25 17:28	1
Calcium	**105000**		500	190	ug/L		10/27/25 08:30	10/30/25 17:28	1
Magnesium	**41600**		500	150	ug/L		10/27/25 08:30	10/30/25 17:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 353.2)	**15.5**		1.00	0.800	mg/L			10/28/25 15:41	1
Fluoride (SM 4500 F C-2011)	**0.150**		0.100	0.0490	mg/L			10/25/25 17:44	1
Sulfate (ASTM D516-16)	**28.6**		5.00	1.80	mg/L			10/24/25 14:55	1
Total Suspended Solids (USGS I-3765-85)	<1.31		1.88	1.31	mg/L			10/24/25 12:31	1
Anion/Cation Balance (SM 1030E)	**0.493**				%			10/27/25 10:47	1
Total Alkalinity (SM 2320B)	**320**		5.00	2.50	mg/L			10/27/25 18:38	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**320**		5.00	2.50	mg/L			10/27/25 18:38	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 18:38	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 18:38	1
Phenolphthalein Alkalinity as CaCO3 to pH 8.3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 18:38	1
Total Dissolved Solids (SM 2540C)	**438**		50.0	36.0	mg/L			10/24/25 14:09	1
Chloride (SM 4500 Cl- E)	**33.5**		2.00	1.40	mg/L			10/25/25 11:02	1
Biochemical Oxygen Demand (SM 5210B)	<3.00		3.00	3.00	mg/L			10/22/25 08:12	1
Chemical Oxygen Demand (SM 5220D)	<23.0		25.0	23.0	mg/L			10/22/25 09:22	5

Client Sample ID: MW-40A_25_10

Date Collected: 10/21/25 15:15
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-11

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/24/25 10:05	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/24/25 10:05	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/24/25 10:05	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/24/25 10:05	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/24/25 10:05	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/24/25 10:05	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/24/25 10:05	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/24/25 10:05	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/24/25 10:05	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/24/25 10:05	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/24/25 10:05	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/24/25 10:05	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/24/25 10:05	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/24/25 10:05	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/23/25 06:11	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/24/25 10:05	1
Acetone	<3.10		10.0	3.10	ug/L			10/23/25 06:11	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/24/25 10:05	1
Benzene	<0.220		0.500	0.220	ug/L			10/24/25 10:05	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/24/25 10:05	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/24/25 10:05	1
Bromoform	<0.780		5.00	0.780	ug/L			10/24/25 10:05	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/24/25 10:05	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/24/25 10:05	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/24/25 10:05	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/24/25 10:05	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/24/25 10:05	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/24/25 10:05	1
Chloroform	<1.30		3.00	1.30	ug/L			10/24/25 10:05	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/24/25 10:05	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/24/25 10:05	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/24/25 10:05	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/24/25 10:05	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/24/25 10:05	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/24/25 10:05	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/24/25 10:05	1
Styrene	<0.370		1.00	0.370	ug/L			10/24/25 10:05	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/24/25 10:05	1
Toluene	<0.430		1.00	0.430	ug/L			10/24/25 10:05	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/24/25 10:05	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/24/25 10:05	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/24/25 10:05	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/24/25 10:05	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/24/25 10:05	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/24/25 10:05	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/24/25 10:05	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/24/25 10:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*116*		*76 - 130*		*10/23/25 06:11*	*1*

Client Sample ID: MW-40A_25_10

Date Collected: 10/21/25 15:15
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-11

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*114*		*76 - 130*		*10/24/25 10:05*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/23/25 06:11*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*10/24/25 10:05*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*10/23/25 06:11*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*10/24/25 10:05*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00	^1+	2.00	1.00	ug/L		10/27/25 08:30	10/30/25 17:31	1
Arsenic	**0.640**	**J**	2.00	0.530	ug/L		10/27/25 08:30	10/30/25 17:31	1
Barium	**229**		2.00	0.660	ug/L		10/27/25 08:30	10/30/25 17:31	1
Beryllium	<0.330		1.00	0.330	ug/L		10/27/25 08:30	10/30/25 17:31	1
Cadmium	<0.100		0.200	0.100	ug/L		10/27/25 08:30	10/30/25 17:31	1
Chromium	**2.81**	**J**	5.00	1.80	ug/L		10/27/25 08:30	10/30/25 17:31	1
Cobalt	**2.57**		0.500	0.170	ug/L		10/27/25 08:30	10/30/25 17:31	1
Copper	<3.20		5.00	3.20	ug/L		10/27/25 08:30	10/30/25 17:31	1
Lead	**0.482**	**J**	0.500	0.330	ug/L		10/27/25 08:30	10/30/25 17:31	1
Nickel	**26.0**		5.00	2.30	ug/L		10/27/25 08:30	10/30/25 17:31	1
Selenium	<1.40		5.00	1.40	ug/L		10/27/25 08:30	10/30/25 17:31	1
Silver	<0.500		1.00	0.500	ug/L		10/27/25 08:30	10/30/25 17:31	1
Thallium	<0.570		1.00	0.570	ug/L		10/27/25 08:30	10/31/25 16:20	1
Vanadium	<1.70		5.00	1.70	ug/L		10/27/25 08:30	10/30/25 17:31	1
Zinc	<13.0		20.0	13.0	ug/L		10/27/25 08:30	10/30/25 17:31	1
Sodium	**32900**		1000	650	ug/L		10/27/25 08:30	10/30/25 17:31	1
Potassium	**4580**		500	170	ug/L		10/27/25 08:30	10/30/25 17:31	1
Calcium	**168000**		500	190	ug/L		10/27/25 08:30	10/30/25 17:31	1
Magnesium	**65400**		500	150	ug/L		10/27/25 08:30	10/30/25 17:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 353.2)	**0.0882**	**J**	0.100	0.0800	mg/L			10/29/25 11:27	1
Fluoride (SM 4500 F C-2011)	**0.247**		0.100	0.0490	mg/L			10/25/25 17:47	1
Sulfate (ASTM D516-16)	**58.4**		25.0	9.00	mg/L			10/24/25 14:44	5
Total Suspended Solids (USGS I-3765-85)	**68.5**		3.75	2.63	mg/L			10/24/25 12:31	1
Anion/Cation Balance (SM 1030E)	**3.54**				%			10/27/25 10:47	1
Total Alkalinity (SM 2320B)	**487**		5.00	2.50	mg/L			10/27/25 13:56	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**487**		5.00	2.50	mg/L			10/27/25 13:56	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 13:56	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 13:56	1
Phenolphthalein Alkalinity as CaCO3 to pH 8.3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 13:56	1
Total Dissolved Solids (SM 2540C)	**724**		50.0	36.0	mg/L			10/24/25 12:46	1
Chloride (SM 4500 Cl- E)	**117**		20.0	14.0	mg/L			10/25/25 11:21	10
Biochemical Oxygen Demand (SM 5210B)	<3.00		3.00	3.00	mg/L			10/22/25 08:15	1
Chemical Oxygen Demand (SM 5220D)	<23.0		25.0	23.0	mg/L			10/22/25 09:22	5

Client Sample ID: MW-41A_25_10

Date Collected: 10/21/25 13:00
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-12

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/24/25 10:28	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/24/25 10:28	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/24/25 10:28	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/24/25 10:28	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/24/25 10:28	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/24/25 10:28	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/24/25 10:28	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/24/25 10:28	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/24/25 10:28	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/24/25 10:28	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/24/25 10:28	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/24/25 10:28	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/24/25 10:28	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/24/25 10:28	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/23/25 06:33	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/24/25 10:28	1
Acetone	<3.10		10.0	3.10	ug/L			10/23/25 06:33	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/24/25 10:28	1
Benzene	<0.220		0.500	0.220	ug/L			10/24/25 10:28	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/24/25 10:28	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/24/25 10:28	1
Bromoform	<0.780		5.00	0.780	ug/L			10/24/25 10:28	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/24/25 10:28	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/24/25 10:28	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/24/25 10:28	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/24/25 10:28	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/24/25 10:28	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/24/25 10:28	1
Chloroform	<1.30		3.00	1.30	ug/L			10/24/25 10:28	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/24/25 10:28	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/24/25 10:28	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/24/25 10:28	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/24/25 10:28	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/24/25 10:28	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/24/25 10:28	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/24/25 10:28	1
Styrene	<0.370		1.00	0.370	ug/L			10/24/25 10:28	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/24/25 10:28	1
Toluene	<0.430		1.00	0.430	ug/L			10/24/25 10:28	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/24/25 10:28	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/24/25 10:28	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/24/25 10:28	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/24/25 10:28	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/24/25 10:28	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/24/25 10:28	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/24/25 10:28	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/24/25 10:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*113*		*76 - 130*		*10/23/25 06:33*	*1*

Client Sample ID: MW-41A_25_10

Date Collected: 10/21/25 13:00
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-12

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*114*		*76 - 130*		*10/24/25 10:28*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/23/25 06:33*	*1*
Toluene-d8 (Surr)	*109*		*80 - 120*		*10/24/25 10:28*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*10/23/25 06:33*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*10/24/25 10:28*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00	^1+	2.00	1.00	ug/L		10/27/25 08:30	10/30/25 17:33	1
Arsenic	**0.665**	**J**	2.00	0.530	ug/L		10/27/25 08:30	10/30/25 17:33	1
Barium	**157**		2.00	0.660	ug/L		10/27/25 08:30	10/30/25 17:33	1
Beryllium	<0.330		1.00	0.330	ug/L		10/27/25 08:30	10/30/25 17:33	1
Cadmium	<0.100		0.200	0.100	ug/L		10/27/25 08:30	10/30/25 17:33	1
Chromium	<1.80		5.00	1.80	ug/L		10/27/25 08:30	10/30/25 17:33	1
Cobalt	<0.170		0.500	0.170	ug/L		10/27/25 08:30	10/30/25 17:33	1
Copper	<3.20		5.00	3.20	ug/L		10/27/25 08:30	10/30/25 17:33	1
Lead	<0.330		0.500	0.330	ug/L		10/27/25 08:30	10/30/25 17:33	1
Nickel	<2.30		5.00	2.30	ug/L		10/27/25 08:30	10/30/25 17:33	1
Selenium	<1.40		5.00	1.40	ug/L		10/27/25 08:30	10/30/25 17:33	1
Silver	<0.500		1.00	0.500	ug/L		10/27/25 08:30	10/30/25 17:33	1
Thallium	<0.570		1.00	0.570	ug/L		10/27/25 08:30	10/31/25 16:23	1
Vanadium	<1.70		5.00	1.70	ug/L		10/27/25 08:30	10/30/25 17:33	1
Zinc	<13.0		20.0	13.0	ug/L		10/27/25 08:30	10/30/25 17:33	1
Sodium	**8690**		1000	650	ug/L		10/27/25 08:30	10/30/25 17:33	1
Potassium	**578**		500	170	ug/L		10/27/25 08:30	10/30/25 17:33	1
Calcium	**94800**		500	190	ug/L		10/27/25 08:30	10/30/25 17:33	1
Magnesium	**36700**		500	150	ug/L		10/27/25 08:30	10/30/25 17:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 353.2)	**0.835**		0.100	0.0800	mg/L			10/29/25 11:29	1
Fluoride (SM 4500 F C-2011)	**0.124**		0.100	0.0490	mg/L			10/25/25 17:50	1
Sulfate (ASTM D516-16)	**26.3**		5.00	1.80	mg/L			10/24/25 14:44	1
Total Suspended Solids (USGS I-3765-85)	<1.31		1.88	1.31	mg/L			10/24/25 06:30	1
Anion/Cation Balance (SM 1030E)	**2.26**				%			10/27/25 10:47	1
Total Alkalinity (SM 2320B)	**340**		5.00	2.50	mg/L			10/27/25 14:07	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**340**		5.00	2.50	mg/L			10/27/25 14:07	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 14:07	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 14:07	1
Phenolphthalein Alkalinity as CaCO3 to pH 8.3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 14:07	1
Total Dissolved Solids (SM 2540C)	**366**		50.0	36.0	mg/L			10/24/25 12:46	1
Chloride (SM 4500 Cl- E)	**13.3**		2.00	1.40	mg/L			10/25/25 11:22	1
Biochemical Oxygen Demand (SM 5210B)	<3.00		3.00	3.00	mg/L			10/22/25 08:19	1
Chemical Oxygen Demand (SM 5220D)	<23.0		25.0	23.0	mg/L			10/22/25 09:22	5

Client Sample ID: MW-42A_25_10

Date Collected: 10/21/25 14:40
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-13

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/24/25 10:51	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/24/25 10:51	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/24/25 10:51	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/24/25 10:51	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/24/25 10:51	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/24/25 10:51	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/24/25 10:51	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/24/25 10:51	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/24/25 10:51	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/24/25 10:51	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/24/25 10:51	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/24/25 10:51	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/24/25 10:51	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/24/25 10:51	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/23/25 06:54	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/24/25 10:51	1
Acetone	<3.10		10.0	3.10	ug/L			10/23/25 06:54	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/24/25 10:51	1
Benzene	<0.220		0.500	0.220	ug/L			10/24/25 10:51	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/24/25 10:51	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/24/25 10:51	1
Bromoform	<0.780		5.00	0.780	ug/L			10/24/25 10:51	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/24/25 10:51	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/24/25 10:51	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/24/25 10:51	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/24/25 10:51	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/24/25 10:51	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/24/25 10:51	1
Chloroform	<1.30		3.00	1.30	ug/L			10/24/25 10:51	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/24/25 10:51	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/24/25 10:51	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/24/25 10:51	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/24/25 10:51	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/24/25 10:51	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/24/25 10:51	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/24/25 10:51	1
Styrene	<0.370		1.00	0.370	ug/L			10/24/25 10:51	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/24/25 10:51	1
Toluene	<0.430		1.00	0.430	ug/L			10/24/25 10:51	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/24/25 10:51	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/24/25 10:51	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/24/25 10:51	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/24/25 10:51	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/24/25 10:51	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/24/25 10:51	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/24/25 10:51	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/24/25 10:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*111*		*76 - 130*		*10/23/25 06:54*	*1*

Client Sample ID: MW-42A_25_10

Date Collected: 10/21/25 14:40
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-13

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*114*		*76 - 130*		*10/24/25 10:51*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/23/25 06:54*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*10/24/25 10:51*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*10/23/25 06:54*	*1*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*		*10/24/25 10:51*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00	^1+	2.00	1.00	ug/L		10/27/25 08:30	10/30/25 17:36	1
Arsenic	**0.588**	**J**	2.00	0.530	ug/L		10/27/25 08:30	10/30/25 17:36	1
Barium	**150**		2.00	0.660	ug/L		10/27/25 08:30	10/30/25 17:36	1
Beryllium	<0.330		1.00	0.330	ug/L		10/27/25 08:30	10/30/25 17:36	1
Cadmium	<0.100		0.200	0.100	ug/L		10/27/25 08:30	10/30/25 17:36	1
Chromium	<1.80		5.00	1.80	ug/L		10/27/25 08:30	10/30/25 17:36	1
Cobalt	**0.991**		0.500	0.170	ug/L		10/27/25 08:30	10/30/25 17:36	1
Copper	<3.20		5.00	3.20	ug/L		10/27/25 08:30	10/30/25 17:36	1
Lead	<0.330		0.500	0.330	ug/L		10/27/25 08:30	10/30/25 17:36	1
Nickel	**26.3**		5.00	2.30	ug/L		10/27/25 08:30	10/30/25 17:36	1
Selenium	<1.40		5.00	1.40	ug/L		10/27/25 08:30	10/30/25 17:36	1
Silver	<0.500		1.00	0.500	ug/L		10/27/25 08:30	10/30/25 17:36	1
Thallium	<0.570		1.00	0.570	ug/L		10/27/25 08:30	10/31/25 16:31	1
Vanadium	<1.70		5.00	1.70	ug/L		10/27/25 08:30	10/30/25 17:36	1
Zinc	<13.0		20.0	13.0	ug/L		10/27/25 08:30	10/30/25 17:36	1
Sodium	**47300**		1000	650	ug/L		10/27/25 08:30	10/30/25 17:36	1
Potassium	**4490**		500	170	ug/L		10/27/25 08:30	10/30/25 17:36	1
Calcium	**175000**		500	190	ug/L		10/27/25 08:30	10/30/25 17:36	1
Magnesium	**63800**		500	150	ug/L		10/27/25 08:30	10/30/25 17:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 353.2)	**0.889**		0.100	0.0800	mg/L			10/29/25 11:35	1
Fluoride (SM 4500 F C-2011)	**0.236**		0.100	0.0490	mg/L			10/25/25 17:54	1
Sulfate (ASTM D516-16)	**89.4**		25.0	9.00	mg/L			10/24/25 14:44	5
Total Suspended Solids (USGS I-3765-85)	<1.62		2.31	1.62	mg/L			10/23/25 10:58	1
Anion/Cation Balance (SM 1030E)	**6.31**				%			10/27/25 10:47	1
Total Alkalinity (SM 2320B)	**449**		5.00	2.50	mg/L			10/27/25 18:47	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**449**		5.00	2.50	mg/L			10/27/25 18:47	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 18:47	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 18:47	1
Phenolphthalein Alkalinity as CaCO3 to pH 8.3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/27/25 18:47	1
Total Dissolved Solids (SM 2540C)	**728**		50.0	36.0	mg/L			10/24/25 12:46	1
Chloride (SM 4500 Cl- E)	**118**		20.0	14.0	mg/L			10/25/25 10:50	10
Biochemical Oxygen Demand (SM 5210B)	<3.00		3.00	3.00	mg/L			10/22/25 08:22	1
Chemical Oxygen Demand (SM 5220D)	<23.0		25.0	23.0	mg/L			10/22/25 09:22	5

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318534-1
SDG: 25W024.00

Client Sample ID: EB-1_25_10
Date Collected: 10/21/25 11:15
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-14
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<3.10		10.0	3.10	ug/L			10/31/25 02:03	1
Acrolein	<3.60		10.0	3.60	ug/L			10/24/25 04:26	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/24/25 04:26	1
Allyl chloride	<0.700		2.00	0.700	ug/L			10/24/25 04:26	1
Benzene	<0.220		0.500	0.220	ug/L			10/24/25 04:26	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/24/25 04:26	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/24/25 04:26	1
Bromoform	<0.780		5.00	0.780	ug/L			10/24/25 04:26	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/24/25 04:26	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/24/25 04:26	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/24/25 04:26	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/24/25 04:26	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/24/25 04:26	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/24/25 04:26	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/24/25 04:26	1
Chloroform	<1.30		3.00	1.30	ug/L			10/24/25 04:26	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/24/25 04:26	1
Chloroprene	<0.230		1.00	0.230	ug/L			10/24/25 04:26	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/24/25 04:26	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/24/25 04:26	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/24/25 04:26	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/24/25 04:26	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/24/25 04:26	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/24/25 04:26	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			10/24/25 04:26	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/24/25 04:26	1
Dichlorodifluoromethane	<0.250		3.00	0.250	ug/L			10/24/25 04:26	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/24/25 04:26	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/24/25 04:26	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/24/25 04:26	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/24/25 04:26	1
1,3-Dichloropropane	<0.400		1.00	0.400	ug/L			10/24/25 04:26	1
2,2-Dichloropropane	<0.690		4.00	0.690	ug/L			10/24/25 04:26	1
1,1-Dichloropropene	<0.430		1.00	0.430	ug/L			10/24/25 04:26	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/24/25 04:26	1
Ethyl methacrylate	<0.680		2.00	0.680	ug/L			10/24/25 04:26	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/31/25 02:03	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/24/25 04:26	1
Methacrylonitrile	<3.30		10.0	3.30	ug/L			10/24/25 04:26	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/24/25 04:26	1
Methyl methacrylate	<0.760		2.00	0.760	ug/L			10/24/25 04:26	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/24/25 04:26	1
m,p-Xylene	<0.380		2.00	0.380	ug/L			10/24/25 04:26	1
Naphthalene	<3.00		5.00	3.00	ug/L			10/24/25 04:26	1
o-Xylene	<0.400		1.00	0.400	ug/L			10/24/25 04:26	1
Propionitrile	<3.40		10.0	3.40	ug/L			10/24/25 04:26	1
Styrene	<0.370		1.00	0.370	ug/L			10/24/25 04:26	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/24/25 04:26	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/24/25 04:26	1

Client Sample ID: EB-1_25_10

Date Collected: 10/21/25 11:15
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-14

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/24/25 04:26	1
Toluene	<0.430		1.00	0.430	ug/L			10/24/25 04:26	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/24/25 04:26	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/24/25 04:26	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/24/25 04:26	1
1,2,4-Trichlorobenzene	<0.750		5.00	0.750	ug/L			10/24/25 04:26	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/24/25 04:26	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/24/25 04:26	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/24/25 04:26	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/24/25 04:26	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/24/25 04:26	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/24/25 04:26	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/24/25 04:26	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/24/25 04:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*10/24/25 04:26*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*10/31/25 02:03*	*1*
Dibromofluoromethane (Surr)	*109*		*76 - 130*		*10/24/25 04:26*	*1*
Dibromofluoromethane (Surr)	*117*		*76 - 130*		*10/31/25 02:03*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*10/24/25 04:26*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*10/31/25 02:03*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.627		9.80	0.627	ug/L		10/22/25 10:36	10/27/25 22:12	1
Acenaphthylene	<0.706		9.80	0.706	ug/L		10/22/25 10:36	10/27/25 22:12	1
Acetophenone	<0.676		9.80	0.676	ug/L		10/22/25 10:36	10/27/25 22:12	1
2-Acetylaminofluorene	<2.65		9.80	2.65	ug/L		10/22/25 10:36	10/27/25 22:12	1
4-Aminobiphenyl	<2.16		9.80	2.16	ug/L		10/22/25 10:36	10/27/25 22:12	1
Anthracene	<0.853		9.80	0.853	ug/L		10/22/25 10:36	10/27/25 22:12	1
Benzo[a]anthracene	<0.833		9.80	0.833	ug/L		10/22/25 10:36	10/27/25 22:12	1
Benzo[a]pyrene	<7.94		9.80	7.94	ug/L		10/22/25 10:36	10/27/25 22:12	1
Benzo[b]fluoranthene	<4.80		9.80	4.80	ug/L		10/22/25 10:36	10/27/25 22:12	1
Benzo[g,h,i]perylene	<6.18		9.80	6.18	ug/L		10/22/25 10:36	10/27/25 22:12	1
Benzo[k]fluoranthene	<2.16		9.80	2.16	ug/L		10/22/25 10:36	10/27/25 22:12	1
Benzyl alcohol	<1.27		9.80	1.27	ug/L		10/22/25 10:36	10/27/25 22:12	1
Bis(2-chloroethoxy)methane	<0.745		9.80	0.745	ug/L		10/22/25 10:36	10/27/25 22:12	1
Bis(2-chloroethyl)ether	<0.804		9.80	0.804	ug/L		10/22/25 10:36	10/27/25 22:12	1
bis (2-chloroisopropyl) ether	<0.529		9.80	0.529	ug/L		10/22/25 10:36	10/27/25 22:12	1
Bis(2-ethylhexyl) phthalate	<5.39		9.80	5.39	ug/L		10/22/25 10:36	10/27/25 22:12	1
4-Bromophenyl phenyl ether	<0.686		9.80	0.686	ug/L		10/22/25 10:36	10/27/25 22:12	1
Butyl benzyl phthalate	<5.29		9.80	5.29	ug/L		10/22/25 10:36	10/27/25 22:12	1
4-Chloroaniline	<0.608		9.80	0.608	ug/L		10/22/25 10:36	10/27/25 22:12	1
Chlorobenzilate	<3.53		9.80	3.53	ug/L		10/22/25 10:36	10/27/25 22:12	1
4-Chloro-3-methylphenol	<0.824		9.80	0.824	ug/L		10/22/25 10:36	10/27/25 22:12	1
2-Chloronaphthalene	<0.627		9.80	0.627	ug/L		10/22/25 10:36	10/27/25 22:12	1
2-Chlorophenol	<0.529		9.80	0.529	ug/L		10/22/25 10:36	10/27/25 22:12	1
4-Chlorophenyl phenyl ether	<0.676		9.80	0.676	ug/L		10/22/25 10:36	10/27/25 22:12	1
Chrysene	<0.853		9.80	0.853	ug/L		10/22/25 10:36	10/27/25 22:12	1

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318534-1
SDG: 25W024.00

Client Sample ID: EB-1_25_10
Date Collected: 10/21/25 11:15
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-14
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diallate	<3.92		9.80	3.92	ug/L		10/22/25 10:36	10/27/25 22:12	1
Dibenzo(a,h)anthracene	<3.82		9.80	3.82	ug/L		10/22/25 10:36	10/27/25 22:12	1
Dibenzofuran	<0.725		9.80	0.725	ug/L		10/22/25 10:36	10/27/25 22:12	1
3,3'-Dichlorobenzidine	<1.37		9.80	1.37	ug/L		10/22/25 10:36	10/27/25 22:12	1
2,4-Dichlorophenol	<0.833		9.80	0.833	ug/L		10/22/25 10:36	10/27/25 22:12	1
2,6-Dichlorophenol	<0.676		9.80	0.676	ug/L		10/22/25 10:36	10/27/25 22:12	1
Diethyl phthalate	<1.67		9.80	1.67	ug/L		10/22/25 10:36	10/27/25 22:12	1
Dimethoate	<3.53		9.80	3.53	ug/L		10/22/25 10:36	10/27/25 22:12	1
7,12-Dimethylbenz(a)anthracene	<1.86		9.80	1.86	ug/L		10/22/25 10:36	10/27/25 22:12	1
3,3'-Dimethylbenzidine	<1.47	*1	9.80	1.47	ug/L		10/22/25 10:36	10/27/25 22:12	1
2,4-Dimethylphenol	<0.569		9.80	0.569	ug/L		10/22/25 10:36	10/27/25 22:12	1
Dimethyl phthalate	<0.980		9.80	0.980	ug/L		10/22/25 10:36	10/27/25 22:12	1
Di-n-butyl phthalate	<5.49		9.80	5.49	ug/L		10/22/25 10:36	10/27/25 22:12	1
1,3-Dinitrobenzene	<3.14		9.80	3.14	ug/L		10/22/25 10:36	10/27/25 22:12	1
4,6-Dinitro-2-methylphenol	<6.76		9.80	6.76	ug/L		10/22/25 10:36	10/27/25 22:12	1
2,4-Dinitrophenol	<12.7		19.6	12.7	ug/L		10/22/25 10:36	10/27/25 22:12	1
2,4-Dinitrotoluene	<6.27		9.80	6.27	ug/L		10/22/25 10:36	10/27/25 22:12	1
2,6-Dinitrotoluene	<0.510		9.80	0.510	ug/L		10/22/25 10:36	10/27/25 22:12	1
Di-n-octyl phthalate	<6.86		19.6	6.86	ug/L		10/22/25 10:36	10/29/25 18:18	1
Dinoseb	<2.35		9.80	2.35	ug/L		10/22/25 10:36	10/27/25 22:12	1
Diphenylamine	<5.88		9.80	5.88	ug/L		10/22/25 10:36	10/27/25 22:12	1
Disulfoton	<2.35		9.80	2.35	ug/L		10/22/25 10:36	10/27/25 22:12	1
Ethyl methanesulfonate	<3.53		9.80	3.53	ug/L		10/22/25 10:36	10/27/25 22:12	1
Ethyl Parathion	<2.16		9.80	2.16	ug/L		10/22/25 10:36	10/27/25 22:12	1
Famphur	<3.73		9.80	3.73	ug/L		10/22/25 10:36	10/27/25 22:12	1
Fluoranthene	<1.67		9.80	1.67	ug/L		10/22/25 10:36	10/27/25 22:12	1
Fluorene	<0.775		9.80	0.775	ug/L		10/22/25 10:36	10/27/25 22:12	1
Hexachlorobenzene	<0.686		9.80	0.686	ug/L		10/22/25 10:36	10/27/25 22:12	1
Hexachlorobutadiene	<0.843		9.80	0.843	ug/L		10/22/25 10:36	10/27/25 22:12	1
Hexachlorocyclopentadiene	<5.00		9.80	5.00	ug/L		10/22/25 10:36	10/27/25 22:12	1
Hexachloroethane	<0.951		9.80	0.951	ug/L		10/22/25 10:36	10/27/25 22:12	1
Hexachloropropene	<2.55		9.80	2.55	ug/L		10/22/25 10:36	10/27/25 22:12	1
Indeno[1,2,3-cd]pyrene	<4.12		9.80	4.12	ug/L		10/22/25 10:36	10/27/25 22:12	1
Isodrin	<4.61		9.80	4.61	ug/L		10/22/25 10:36	10/27/25 22:12	1
Isophorone	<0.912		9.80	0.912	ug/L		10/22/25 10:36	10/27/25 22:12	1
Isosafrole	<2.25		9.80	2.25	ug/L		10/22/25 10:36	10/27/25 22:12	1
Kepone	<0.980		9.80	0.980	ug/L		10/22/25 10:36	10/27/25 22:12	1
Methapyrilene	<0.745	*1	9.80	0.745	ug/L		10/22/25 10:36	10/27/25 22:12	1
3-Methylcholanthrene	<0.314		9.80	0.314	ug/L		10/22/25 10:36	10/27/25 22:12	1
Methyl methanesulfonate	<3.24		9.80	3.24	ug/L		10/22/25 10:36	10/27/25 22:12	1
2-Methylnaphthalene	<0.578		9.80	0.578	ug/L		10/22/25 10:36	10/27/25 22:12	1
Methyl parathion	<2.25		9.80	2.25	ug/L		10/22/25 10:36	10/27/25 22:12	1
2-Methylphenol	<0.637		9.80	0.637	ug/L		10/22/25 10:36	10/27/25 22:12	1
Methylphenol, 3 & 4	<0.686		9.80	0.686	ug/L		10/22/25 10:36	10/27/25 22:12	1
1,4-Naphthoquinone	<3.53		9.80	3.53	ug/L		10/22/25 10:36	10/27/25 22:12	1
1-Naphthylamine	<2.45		9.80	2.45	ug/L		10/22/25 10:36	10/27/25 22:12	1
2-Naphthylamine	<2.06		9.80	2.06	ug/L		10/22/25 10:36	10/27/25 22:12	1
2-Nitroaniline	<5.78		9.80	5.78	ug/L		10/22/25 10:36	10/27/25 22:12	1
3-Nitroaniline	<2.65		9.80	2.65	ug/L		10/22/25 10:36	10/27/25 22:12	1

Client Sample ID: EB-1_25_10

Date Collected: 10/21/25 11:15
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-14

Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitroaniline	<1.27		9.80	1.27	ug/L		10/22/25 10:36	10/27/25 22:12	1
Nitrobenzene	<0.784		9.80	0.784	ug/L		10/22/25 10:36	10/27/25 22:12	1
5-Nitro-o-toluidine	<2.75		9.80	2.75	ug/L		10/22/25 10:36	10/27/25 22:12	1
2-Nitrophenol	<6.67		9.80	6.67	ug/L		10/22/25 10:36	10/27/25 22:12	1
4-Nitrophenol	<7.45		9.80	7.45	ug/L		10/22/25 10:36	10/27/25 22:12	1
N-Nitrosodiethylamine	<3.33		9.80	3.33	ug/L		10/22/25 10:36	10/27/25 22:12	1
N-Nitrosodimethylamine	<0.706		9.80	0.706	ug/L		10/22/25 10:36	10/27/25 22:12	1
N-Nitrosodi-n-butylamine	<3.82		9.80	3.82	ug/L		10/22/25 10:36	10/27/25 22:12	1
N-Nitrosodi-n-propylamine	<0.902		9.80	0.902	ug/L		10/22/25 10:36	10/27/25 22:12	1
N-Nitrosodiphenylamine	<0.735		9.80	0.735	ug/L		10/22/25 10:36	10/27/25 22:12	1
N-Nitrosomethylethylamine	<4.80		9.80	4.80	ug/L		10/22/25 10:36	10/27/25 22:12	1
N-Nitrosopiperidine	<2.65		9.80	2.65	ug/L		10/22/25 10:36	10/27/25 22:12	1
N-Nitrosopyrrolidine	<3.53		9.80	3.53	ug/L		10/22/25 10:36	10/27/25 22:12	1
o,o',o''-Triethylphosphorothioate	<3.14		9.80	3.14	ug/L		10/22/25 10:36	10/27/25 22:12	1
o-Toluidine	<2.84		9.80	2.84	ug/L		10/22/25 10:36	10/27/25 22:12	1
p-Dimethylamino azobenzene	<2.16		9.80	2.16	ug/L		10/22/25 10:36	10/27/25 22:12	1
Pentachlorobenzene	<2.75		9.80	2.75	ug/L		10/22/25 10:36	10/27/25 22:12	1
Pentachloronitrobenzene	<5.69		9.80	5.69	ug/L		10/22/25 10:36	10/27/25 22:12	1
Pentachlorophenol	<9.41		9.80	9.41	ug/L		10/22/25 10:36	10/27/25 22:12	1
Phenacetin	<1.86		9.80	1.86	ug/L		10/22/25 10:36	10/27/25 22:12	1
Phenanthrene	<0.775		9.80	0.775	ug/L		10/22/25 10:36	10/27/25 22:12	1
Phenol	<1.08		9.80	1.08	ug/L		10/22/25 10:36	10/27/25 22:12	1
1,4-phenylenediamine	<1.86	*-	9.80	1.86	ug/L		10/22/25 10:36	10/28/25 14:38	1
Phorate	<3.14		9.80	3.14	ug/L		10/22/25 10:36	10/27/25 22:12	1
Pronamide	<2.65		9.80	2.65	ug/L		10/22/25 10:36	10/27/25 22:12	1
Pyrene	<0.775		9.80	0.775	ug/L		10/22/25 10:36	10/27/25 22:12	1
Safrole	<2.75		9.80	2.75	ug/L		10/22/25 10:36	10/27/25 22:12	1
1,2,4,5-Tetrachlorobenzene	<0.529		9.80	0.529	ug/L		10/22/25 10:36	10/27/25 22:12	1
2,3,4,6-Tetrachlorophenol	<5.20		9.80	5.20	ug/L		10/22/25 10:36	10/27/25 22:12	1
Thionazin	<3.43		9.80	3.43	ug/L		10/22/25 10:36	10/27/25 22:12	1
2,4,5-Trichlorophenol	<5.20		9.80	5.20	ug/L		10/22/25 10:36	10/27/25 22:12	1
2,4,6-Trichlorophenol	<4.90		9.80	4.90	ug/L		10/22/25 10:36	10/27/25 22:12	1
1,3,5-Trinitrobenzene	<2.25		9.80	2.25	ug/L		10/22/25 10:36	10/27/25 22:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*98*		*33 - 126*	*10/22/25 10:36*	*10/27/25 22:12*	*1*
2-Fluorophenol (Surr)	*74*		*21 - 110*	*10/22/25 10:36*	*10/27/25 22:12*	*1*
Nitrobenzene-d5 (Surr)	*103*		*39 - 140*	*10/22/25 10:36*	*10/27/25 22:12*	*1*
Phenol-d5 (Surr)	*59*		*21 - 110*	*10/22/25 10:36*	*10/27/25 22:12*	*1*
Terphenyl-d14 (Surr)	*129*		*13 - 150*	*10/22/25 10:36*	*10/27/25 22:12*	*1*
2,4,6-Tribromophenol (Surr)	*103*		*20 - 144*	*10/22/25 10:36*	*10/27/25 22:12*	*1*

Method: SW846 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	<2600		10000	2600	ug/L			10/22/25 19:11	1
Isobutanol	<2400		10000	2400	ug/L			10/22/25 19:11	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.0198		0.0902	0.0198	ug/L		10/23/25 09:55	11/04/25 11:03	1

Client Sample ID: EB-1_25_10

Date Collected: 10/21/25 11:15
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-14

Matrix: Water

Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	<0.00902		0.0902	0.00902	ug/L		10/23/25 09:55	11/04/25 11:03	1
beta-BHC	<0.0379		0.0902	0.0379	ug/L		10/23/25 09:55	11/04/25 11:03	1
Chlordane (technical)	<0.352		1.80	0.352	ug/L		10/23/25 09:55	11/04/25 11:03	1
4,4'-DDD	<0.0226		0.0902	0.0226	ug/L		10/23/25 09:55	11/04/25 11:03	1
4,4'-DDE	<0.0271		0.0902	0.0271	ug/L		10/23/25 09:55	11/04/25 11:03	1
4,4'-DDT	<0.0180		0.0902	0.0180	ug/L		10/23/25 09:55	11/04/25 11:03	1
delta-BHC	<0.0289		0.0902	0.0289	ug/L		10/23/25 09:55	11/04/25 11:03	1
Dieldrin	<0.0189		0.0902	0.0189	ug/L		10/23/25 09:55	11/04/25 11:03	1
Endosulfan I	<0.0253		0.0902	0.0253	ug/L		10/23/25 09:55	11/04/25 11:03	1
Endosulfan II	<0.0235		0.0902	0.0235	ug/L		10/23/25 09:55	11/04/25 11:03	1
Endosulfan sulfate	<0.0162		0.0902	0.0162	ug/L		10/23/25 09:55	11/04/25 11:03	1
Endrin	<0.0253		0.0902	0.0253	ug/L		10/23/25 09:55	11/04/25 11:03	1
Endrin aldehyde	<0.0244		0.0902	0.0244	ug/L		10/23/25 09:55	11/04/25 11:03	1
gamma-BHC (Lindane)	<0.00902		0.0902	0.00902	ug/L		10/23/25 09:55	11/04/25 11:03	1
Heptachlor	<0.0207		0.0902	0.0207	ug/L		10/23/25 09:55	11/04/25 11:03	1
Heptachlor epoxide	<0.0289		0.0902	0.0289	ug/L		10/23/25 09:55	11/04/25 11:03	1
Methoxychlor	<0.0289		0.0902	0.0289	ug/L		10/23/25 09:55	11/04/25 11:03	1
Toxaphene	<0.902		1.80	0.902	ug/L		10/23/25 09:55	11/04/25 11:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*50*		*10 - 150*	*10/23/25 09:55*	*11/04/25 11:03*	*1*
Tetrachloro-m-xylene	*107*		*17 - 150*	*10/23/25 09:55*	*11/04/25 11:03*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.740		1.80	0.740	ug/L		10/23/25 09:55	11/04/25 11:03	1
PCB-1221	<0.740		1.80	0.740	ug/L		10/23/25 09:55	11/04/25 11:03	1
PCB-1232	<0.740		1.80	0.740	ug/L		10/23/25 09:55	11/04/25 11:03	1
PCB-1242	<0.740		1.80	0.740	ug/L		10/23/25 09:55	11/04/25 11:03	1
PCB-1248	<0.622		1.80	0.622	ug/L		10/23/25 09:55	11/04/25 11:03	1
PCB-1254	<0.622		1.80	0.622	ug/L		10/23/25 09:55	11/04/25 11:03	1
PCB-1260	<0.622		1.80	0.622	ug/L		10/23/25 09:55	11/04/25 11:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*50*		*10 - 150*	*10/23/25 09:55*	*11/04/25 11:03*	*1*
Tetrachloro-m-xylene	*107*		*17 - 150*	*10/23/25 09:55*	*11/04/25 11:03*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.240		0.575	0.240	ug/L		10/26/25 20:35	10/27/25 08:03	1
Silvex (2,4,5-TP)	<0.0211		0.0479	0.0211	ug/L		10/26/25 20:35	10/27/25 08:03	1
2,4,5-T	<0.0623		0.144	0.0623	ug/L		10/26/25 20:35	10/27/25 08:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*205*	*S1+*	*34 - 142*	*10/26/25 20:35*	*10/27/25 08:03*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		10/27/25 08:30	10/31/25 16:43	1
Arsenic	<0.530		2.00	0.530	ug/L		10/27/25 08:30	10/29/25 18:04	1
Barium	<0.660		2.00	0.660	ug/L		10/27/25 08:30	10/29/25 18:04	1

Client Sample ID: EB-1_25_10

Date Collected: 10/21/25 11:15
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-14

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.330		1.00	0.330	ug/L		10/27/25 08:30	10/29/25 18:04	1
Cadmium	<0.100		0.200	0.100	ug/L		10/27/25 08:30	10/29/25 18:04	1
Chromium	<1.80		5.00	1.80	ug/L		10/27/25 08:30	10/29/25 18:04	1
Cobalt	<0.170		0.500	0.170	ug/L		10/27/25 08:30	10/31/25 16:43	1
Copper	<3.20		5.00	3.20	ug/L		10/27/25 08:30	10/29/25 18:04	1
Lead	<0.330		0.500	0.330	ug/L		10/27/25 08:30	10/29/25 18:04	1
Nickel	<2.30		5.00	2.30	ug/L		10/27/25 08:30	10/29/25 18:04	1
Selenium	<1.40		5.00	1.40	ug/L		10/27/25 08:30	10/29/25 18:04	1
Silver	<0.500		1.00	0.500	ug/L		10/27/25 08:30	10/29/25 18:04	1
Thallium	<0.570		1.00	0.570	ug/L		10/27/25 08:30	10/31/25 16:43	1
Vanadium	<1.70		5.00	1.70	ug/L		10/27/25 08:30	10/29/25 18:04	1
Zinc	<13.0		20.0	13.0	ug/L		10/27/25 08:30	10/29/25 18:04	1
Tin	<2.50		5.00	2.50	ug/L		10/27/25 08:30	10/29/25 18:04	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.110		0.200	0.110	ug/L		10/29/25 13:30	10/30/25 11:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<3.50		10.0	3.50	ug/L		10/24/25 08:50	10/24/25 20:42	1
Sulfide (SW846 9034)	<1410		3000	1410	ug/L		10/28/25 12:38	10/28/25 14:07	1
Total Suspended Solids (USGS I-3765-85)	<1.31		1.88	1.31	mg/L			10/24/25 06:30	1

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318534-1
SDG: 25W024.00

Client Sample ID: FD-2_25_10
Date Collected: 10/21/25 00:00
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-15
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/24/25 11:13	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/24/25 11:13	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/24/25 11:13	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/24/25 11:13	1
1,1-Dichloroethane	**0.931**	**J**	1.00	0.220	ug/L			10/24/25 11:13	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/24/25 11:13	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/24/25 11:13	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/24/25 11:13	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/24/25 11:13	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/24/25 11:13	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/24/25 11:13	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/24/25 11:13	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/24/25 11:13	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/24/25 11:13	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/23/25 07:16	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/24/25 11:13	1
Acetone	<3.10		10.0	3.10	ug/L			10/23/25 07:16	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/24/25 11:13	1
Benzene	<0.220		0.500	0.220	ug/L			10/24/25 11:13	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/24/25 11:13	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/24/25 11:13	1
Bromoform	<0.780		5.00	0.780	ug/L			10/24/25 11:13	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/24/25 11:13	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/24/25 11:13	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/24/25 11:13	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/24/25 11:13	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/24/25 11:13	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/24/25 11:13	1
Chloroform	<1.30		3.00	1.30	ug/L			10/24/25 11:13	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/24/25 11:13	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/24/25 11:13	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/24/25 11:13	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/24/25 11:13	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/24/25 11:13	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/24/25 11:13	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/24/25 11:13	1
Styrene	<0.370		1.00	0.370	ug/L			10/24/25 11:13	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/24/25 11:13	1
Toluene	<0.430		1.00	0.430	ug/L			10/24/25 11:13	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/24/25 11:13	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/24/25 11:13	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/24/25 11:13	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/24/25 11:13	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/24/25 11:13	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/24/25 11:13	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/24/25 11:13	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/24/25 11:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*116*		*76 - 130*		*10/23/25 07:16*	*1*

Client Sample ID: FD-2_25_10

Date Collected: 10/21/25 00:00
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-15

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*117*		*76 - 130*		*10/24/25 11:13*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/23/25 07:16*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*10/24/25 11:13*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*10/23/25 07:16*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*10/24/25 11:13*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.51**	**J**	2.00	1.00	ug/L		10/27/25 08:30	10/31/25 16:52	1
Arsenic	**0.729**	**J**	2.00	0.530	ug/L		10/27/25 08:30	10/29/25 18:14	1
Barium	**208**		2.00	0.660	ug/L		10/27/25 08:30	10/29/25 18:14	1
Beryllium	<0.330		1.00	0.330	ug/L		10/27/25 08:30	10/29/25 18:14	1
Cadmium	**0.138**	**J**	0.200	0.100	ug/L		10/27/25 08:30	10/29/25 18:14	1
Chromium	<1.80		5.00	1.80	ug/L		10/27/25 08:30	10/29/25 18:14	1
Cobalt	**2.62**		0.500	0.170	ug/L		10/27/25 08:30	10/31/25 16:52	1
Copper	<3.20		5.00	3.20	ug/L		10/27/25 08:30	10/29/25 18:14	1
Lead	<0.330		0.500	0.330	ug/L		10/27/25 08:30	10/29/25 18:14	1
Nickel	**27.5**		5.00	2.30	ug/L		10/27/25 08:30	10/29/25 18:14	1
Selenium	<1.40		5.00	1.40	ug/L		10/27/25 08:30	10/29/25 18:14	1
Silver	<0.500		1.00	0.500	ug/L		10/27/25 08:30	10/29/25 18:14	1
Thallium	<0.570		1.00	0.570	ug/L		10/27/25 08:30	10/31/25 16:52	1
Vanadium	<1.70		5.00	1.70	ug/L		10/27/25 08:30	10/29/25 18:14	1
Zinc	<13.0		20.0	13.0	ug/L		10/27/25 08:30	10/29/25 18:14	1
Sodium	**72400**		1000	650	ug/L		10/27/25 08:30	10/31/25 16:52	1
Potassium	**3340**		500	170	ug/L		10/27/25 08:30	10/31/25 16:52	1
Calcium	**223000**		500	190	ug/L		10/27/25 08:30	10/31/25 16:52	1
Magnesium	**58700**		500	150	ug/L		10/27/25 08:30	10/31/25 16:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.31		1.88	1.31	mg/L			10/24/25 06:30	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
S1+	Surrogate recovery exceeds control limits, high biased.

Metals

Qualifier	Qualifier Description
^1+	Initial Calibration Verification (ICV) is outside acceptance limits, high biased.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
b	Result Detected in the Unseeded Control blank (USB).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318534-1
SDG: 25W024.00

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(76-130)	(80-120)	(80-120)
310-318534-1	MW_1_25_10	105	101	98
310-318534-1	MW_1_25_10	108	127 S1+	98
310-318534-1 MS	MW_1_25_10	94	104	95
310-318534-1 MSD	MW_1_25_10	98	101	96
310-318534-2	MW-3_25_10	108	99	96
310-318534-2	MW-3_25_10	107	91	104
310-318534-3	MW-4B_25_10	108	99	99
310-318534-3	MW-4B_25_10	110	94	103
310-318534-4	MW-19R_25_10	107	99	94
310-318534-4	MW-19R_25_10	110	91	101
310-318534-5	MW-25A_25_10	109	99	97
310-318534-5	MW-25A_25_10	108	94	105
310-318534-6	MW-31A_25_10	109	101	98
310-318534-6	MW-31A_25_10	109	121 S1+	100
310-318534-7	MW-33A_25_10	109	97	96
310-318534-7	MW-33A_25_10	110	118	101
310-318534-8	MW-34A_25_10	110	99	99
310-318534-8	MW-34A_25_10	110	89	107
310-318534-9	MW-37A_25_10	121	92	97
310-318534-9	MW-37A_25_10	115	95	102
310-318534-9 MS	MW-37A_25_10	104	95	95
310-318534-9 MSD	MW-37A_25_10	102	99	96
310-318534-10	MW-38A_25_10	115	100	93
310-318534-10	MW-38A_25_10	117	92	105
310-318534-11	MW-40A_25_10	116	98	96
310-318534-11	MW-40A_25_10	114	92	93
310-318534-12	MW-41A_25_10	113	96	98
310-318534-12	MW-41A_25_10	114	109	98
310-318534-13	MW-42A_25_10	111	96	99
310-318534-13	MW-42A_25_10	114	92	108
310-318534-14	EB-1_25_10	109	94	105
310-318534-14	EB-1_25_10	117	94	102
310-318534-15	FD-2_25_10	116	96	98
310-318534-15	FD-2_25_10	117	92	92
LCS 310-471023/6	Lab Control Sample	97	103	100
LCS 310-471134/6	Lab Control Sample	102	97	103
LCS 310-471134/7	Lab Control Sample	105	101	102
LCS 310-471853/6	Lab Control Sample	98	99	100
LCS 310-471853/7	Lab Control Sample	111	97	103
MB 310-471023/5	Method Blank	106	104	97
MB 310-471134/5	Method Blank	106	92	96
MB 310-471853/5	Method Blank	110	96	99

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Surrogate Summary

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318534-1
SDG: 25W024.00

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(33-126)	(21-110)	(39-140)	(21-110)	(13-150)	(20-144)
310-318534-14	EB-1_25_10	98	74	103	59	129	103
LCS 310-470953/2-A	Lab Control Sample	113	85	129	72	145	131
LCSD 310-470953/3-A	Lab Control Sample Dup	105	84	120	71	137	130
MB 310-470953/1-A	Method Blank	101	89	119	74	154 S1+	120

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB2	TCX2
Lab Sample ID	Client Sample ID	(10-150)	(17-150)
310-318534-1	MW_1_25_10	84	90
310-318534-4	MW-19R_25_10	88	86
310-318534-6	MW-31A_25_10	89	87
310-318534-9	MW-37A_25_10	78	66

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB1	TCX1
Lab Sample ID	Client Sample ID	(10-150)	(17-150)
310-318534-14	EB-1_25_10	50	107
LCS 310-471080/2-A	Lab Control Sample	125	123 p
MB 310-471080/1-A	Method Blank	133	127 p

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB1	TCX1
Lab Sample ID	Client Sample ID	(10-150)	(17-150)
310-318534-14	EB-1_25_10	50	107
LCS 310-471080/27-A	Lab Control Sample	71	88 p
MB 310-471080/1-A	Method Blank	133	127 p

Surrogate Legend

Surrogate Summary

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318534-1
SDG: 25W024.00

DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene

Method: 8151A - Herbicides (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	DCPAA1 (34-142)								
310-318534-14	EB-1_25_10	205 S1+								
LCS 410-719980/2-A	Lab Control Sample	96								

Surrogate Legend
DCPAA = DCAA

Method: 8151A - Herbicides (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	DCPAA2 (34-142)								
MB 410-719980/1-A	Method Blank	97								

Surrogate Legend
DCPAA = DCAA

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 310-471023/5
Matrix: Water
Analysis Batch: 471023

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<3.10		10.0	3.10	ug/L			10/22/25 23:57	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/22/25 23:57	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/22/25 23:57	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/22/25 23:57	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/22/25 23:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*76 - 130*		*10/22/25 23:57*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*10/22/25 23:57*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*10/22/25 23:57*	*1*

Lab Sample ID: LCS 310-471023/6
Matrix: Water
Analysis Batch: 471023

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	40.0	37.85		ug/L		95	59 - 136
Chlorobenzene	20.0	17.87		ug/L		89	74 - 120
1,4-Dichlorobenzene	20.0	18.71		ug/L		94	72 - 120
1,1-Dichloroethane	20.0	18.21		ug/L		91	69 - 127
2-Hexanone	40.0	38.78		ug/L		97	62 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*97*		*76 - 130*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*

Lab Sample ID: 310-318534-1 MS
Matrix: Water
Analysis Batch: 471023

Client Sample ID: MW_1_25_10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	<3.10		50.0	40.57		ug/L		81	39 - 141
Chlorobenzene	0.927	J	25.0	21.61		ug/L		83	59 - 120
1,4-Dichlorobenzene	0.278	J	25.0	22.11		ug/L		87	58 - 120
1,1-Dichloroethane	<0.220		25.0	20.78		ug/L		83	53 - 127
2-Hexanone	<2.00		50.0	38.07		ug/L		76	46 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*94*		*76 - 130*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 310-318534-1 MSD
Matrix: Water
Analysis Batch: 471023

Client Sample ID: MW_1_25_10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	<3.10		50.0	36.99		ug/L		74	39 - 141	9	23
Chlorobenzene	0.927	J	25.0	18.27		ug/L		69	59 - 120	17	20
1,4-Dichlorobenzene	0.278	J	25.0	19.57		ug/L		77	58 - 120	12	20
1,1-Dichloroethane	<0.220		25.0	18.23		ug/L		73	53 - 127	13	20
2-Hexanone	<2.00		50.0	33.73		ug/L		67	46 - 141	12	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*98*		*76 - 130*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: MB 310-471134/5
Matrix: Water
Analysis Batch: 471134

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	<3.60		10.0	3.60	ug/L			10/24/25 03:19	1
Allyl chloride	<0.700		2.00	0.700	ug/L			10/24/25 03:19	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/24/25 03:19	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/24/25 03:19	1
Benzene	<0.220		0.500	0.220	ug/L			10/24/25 03:19	1
Chloroprene	<0.230		1.00	0.230	ug/L			10/24/25 03:19	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/24/25 03:19	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/24/25 03:19	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/24/25 03:19	1
Bromoform	<0.780		5.00	0.780	ug/L			10/24/25 03:19	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/24/25 03:19	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/24/25 03:19	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/24/25 03:19	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/24/25 03:19	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/24/25 03:19	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/24/25 03:19	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			10/24/25 03:19	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/24/25 03:19	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/24/25 03:19	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/24/25 03:19	1
Chloroform	<1.30		3.00	1.30	ug/L			10/24/25 03:19	1
Dichlorodifluoromethane	<0.250		3.00	0.250	ug/L			10/24/25 03:19	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/24/25 03:19	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/24/25 03:19	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/24/25 03:19	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/24/25 03:19	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/24/25 03:19	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/24/25 03:19	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/24/25 03:19	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/24/25 03:19	1
1,3-Dichloropropane	<0.400		1.00	0.400	ug/L			10/24/25 03:19	1
2,2-Dichloropropane	<0.690		4.00	0.690	ug/L			10/24/25 03:19	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-471134/5
Matrix: Water
Analysis Batch: 471134

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	<0.430		1.00	0.430	ug/L			10/24/25 03:19	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/24/25 03:19	1
Ethyl methacrylate	<0.680		2.00	0.680	ug/L			10/24/25 03:19	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/24/25 03:19	1
Methacrylonitrile	<3.30		10.0	3.30	ug/L			10/24/25 03:19	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/24/25 03:19	1
Methyl methacrylate	<0.760		2.00	0.760	ug/L			10/24/25 03:19	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/24/25 03:19	1
m,p-Xylene	<0.380		2.00	0.380	ug/L			10/24/25 03:19	1
Naphthalene	<3.00		5.00	3.00	ug/L			10/24/25 03:19	1
o-Xylene	<0.400		1.00	0.400	ug/L			10/24/25 03:19	1
Propionitrile	<3.40		10.0	3.40	ug/L			10/24/25 03:19	1
Styrene	<0.370		1.00	0.370	ug/L			10/24/25 03:19	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/24/25 03:19	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/24/25 03:19	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/24/25 03:19	1
Toluene	<0.430		1.00	0.430	ug/L			10/24/25 03:19	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/24/25 03:19	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/24/25 03:19	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/24/25 03:19	1
1,2,4-Trichlorobenzene	<0.750		5.00	0.750	ug/L			10/24/25 03:19	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/24/25 03:19	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/24/25 03:19	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/24/25 03:19	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/24/25 03:19	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/24/25 03:19	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/24/25 03:19	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/24/25 03:19	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/24/25 03:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*76 - 130*		*10/24/25 03:19*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*10/24/25 03:19*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*10/24/25 03:19*	*1*

Lab Sample ID: LCS 310-471134/6
Matrix: Water
Analysis Batch: 471134

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acrolein	94.8	83.49		ug/L		88	50 - 150
Allyl chloride	20.0	19.24		ug/L		96	61 - 136
2-Butanone (MEK)	40.0	29.77		ug/L		74	60 - 134
Acrylonitrile	200	168.1		ug/L		84	50 - 150
Benzene	20.0	17.47		ug/L		87	71 - 125
Chloroprene	20.0	16.38		ug/L		82	67 - 136
Bromochloromethane	20.0	21.19		ug/L		106	69 - 131
Bromodichloromethane	20.0	17.02		ug/L		85	70 - 122

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-471134/6
Matrix: Water
Analysis Batch: 471134

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane	20.0	16.38		ug/L		82	62 - 132
Bromoform	20.0	16.49		ug/L		82	62 - 122
1,2-Dibromoethane (EDB)	20.0	15.95		ug/L		80	74 - 122
Carbon disulfide	20.0	20.58		ug/L		103	58 - 137
Carbon tetrachloride	20.0	17.21		ug/L		86	63 - 136
1,2-Dichlorobenzene	20.0	17.04		ug/L		85	74 - 120
Chlorobenzene	20.0	16.31		ug/L		82	74 - 120
1,3-Dichlorobenzene	20.0	18.32		ug/L		92	71 - 120
Chlorodibromomethane	20.0	14.20		ug/L		71	69 - 121
1,4-Dichlorobenzene	20.0	16.92		ug/L		85	72 - 120
Chloroform	20.0	19.51		ug/L		98	72 - 122
1,1-Dichloroethane	20.0	18.50		ug/L		93	69 - 127
1,2-Dichloroethane	20.0	17.00		ug/L		85	68 - 125
cis-1,2-Dichloroethene	20.0	18.02		ug/L		90	72 - 123
1,1-Dichloroethene	20.0	20.64		ug/L		103	64 - 134
cis-1,3-Dichloropropene	20.0	14.66		ug/L		73	72 - 123
1,2-Dichloropropane	20.0	15.39		ug/L		77	72 - 128
Dibromomethane	20.0	18.57		ug/L		93	72 - 122
1,3-Dichloropropane	20.0	15.65		ug/L		78	72 - 125
2,2-Dichloropropane	20.0	17.83		ug/L		89	51 - 146
1,1-Dichloropropene	20.0	15.89		ug/L		79	70 - 133
Ethylbenzene	20.0	17.12		ug/L		86	75 - 120
Ethyl methacrylate	20.0	16.43		ug/L		82	68 - 128
Iodomethane	20.0	14.63		ug/L		73	18 - 150
Methacrylonitrile	200	152.0		ug/L		76	67 - 128
Methylene Chloride	20.0	20.92		ug/L		105	72 - 128
Methyl methacrylate	40.0	34.76		ug/L		87	69 - 129
4-Methyl-2-pentanone (MIBK)	40.0	29.81		ug/L		75	62 - 136
Naphthalene	20.0	16.49		ug/L		82	69 - 126
Propionitrile	200	181.4		ug/L		91	68 - 131
Styrene	20.0	18.13		ug/L		91	74 - 122
1,1,1,2-Tetrachloroethane	20.0	16.20		ug/L		81	70 - 121
1,1,2,2-Tetrachloroethane	20.0	15.42		ug/L		77	70 - 122
Tetrachloroethene	20.0	17.21		ug/L		86	70 - 128
Toluene	20.0	16.91		ug/L		85	74 - 120
trans-1,4-Dichloro-2-butene	20.0	15.48		ug/L		77	50 - 150
trans-1,2-Dichloroethene	20.0	19.82		ug/L		99	67 - 127
trans-1,3-Dichloropropene	20.0	14.92		ug/L		75	67 - 123
1,2,4-Trichlorobenzene	20.0	17.98		ug/L		90	69 - 125
1,1,1-Trichloroethane	20.0	17.87		ug/L		89	69 - 130
1,1,2-Trichloroethane	20.0	15.82		ug/L		79	75 - 121
Trichloroethene	20.0	16.42		ug/L		82	70 - 128
1,2,3-Trichloropropane	20.0	16.10		ug/L		80	70 - 122
Vinyl acetate	40.0	32.00		ug/L		80	50 - 150
Xylenes, Total	40.0	35.86		ug/L		90	74 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*102*		*76 - 130*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-471134/6
Matrix: Water
Analysis Batch: 471134

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: LCS 310-471134/7
Matrix: Water
Analysis Batch: 471134

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	14.42		ug/L		72	33 - 138
Chloroethane	20.0	13.52		ug/L		68	59 - 139
Dichlorodifluoromethane	20.0	16.30		ug/L		81	45 - 150
Chloromethane	20.0	15.97		ug/L		80	52 - 146
Trichlorofluoromethane	20.0	16.65		ug/L		83	55 - 150
Vinyl chloride	20.0	13.39		ug/L		67	60 - 142

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*105*		*76 - 130*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: MB 310-471853/5
Matrix: Water
Analysis Batch: 471853

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<3.10		10.0	3.10	ug/L			10/30/25 23:07	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/30/25 23:07	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/30/25 23:07	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/30/25 23:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*76 - 130*		*10/30/25 23:07*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*10/30/25 23:07*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/30/25 23:07*	*1*

Lab Sample ID: LCS 310-471853/6
Matrix: Water
Analysis Batch: 471853

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	40.0	37.81		ug/L		95	59 - 136
1,1-Dichloroethane	20.0	18.96		ug/L		95	69 - 127
cis-1,2-Dichloroethene	20.0	18.03		ug/L		90	72 - 123
2-Hexanone	40.0	35.35		ug/L		88	62 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*98*		*76 - 130*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-471853/6
Matrix: Water
Analysis Batch: 471853

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: LCS 310-471853/7
Matrix: Water
Analysis Batch: 471853

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Bromomethane			20.0	15.93		ug/L		80	33 - 138		
Chloroethane			20.0	17.77		ug/L		89	59 - 139		
Dichlorodifluoromethane			20.0	20.10		ug/L		100	45 - 150		
Chloromethane			20.0	19.01		ug/L		95	52 - 146		
Trichlorofluoromethane			20.0	19.79		ug/L		99	55 - 150		
Vinyl chloride			20.0	18.41		ug/L		92	60 - 142		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	*111*		*76 - 130*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: 310-318534-9 MS
Matrix: Water
Analysis Batch: 471853

Client Sample ID: MW-37A_25_10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Acetone	<3.10	F2	50.0	49.20		ug/L		98	39 - 141		
1,1-Dichloroethane	<0.220	F2	25.0	22.69		ug/L		91	53 - 127		
cis-1,2-Dichloroethene	<0.210	F2	25.0	22.33		ug/L		89	51 - 123		
2-Hexanone	<2.00	F2	50.0	45.56		ug/L		91	46 - 141		

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	*104*		*76 - 130*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*
Toluene-d8 (Surr)	*95*		*80 - 120*

Lab Sample ID: 310-318534-9 MSD
Matrix: Water
Analysis Batch: 471853

Client Sample ID: MW-37A_25_10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	<3.10	F2	50.0	38.54	F2	ug/L		77	39 - 141	24	23
1,1-Dichloroethane	<0.220	F2	25.0	18.14	F2	ug/L		73	53 - 127	22	20
cis-1,2-Dichloroethene	<0.210	F2	25.0	17.48	F2	ug/L		70	51 - 123	24	20
2-Hexanone	<2.00	F2	50.0	36.92	F2	ug/L		74	46 - 141	21	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Dibromofluoromethane (Surr)	*102*		*76 - 130*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 310-318534-9 MSD
Matrix: Water
Analysis Batch: 471853

Client Sample ID: MW-37A_25_10
Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		80 - 120
Toluene-d8 (Surr)	99		80 - 120

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 310-470953/1-A
Matrix: Water
Analysis Batch: 471377

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 470953

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.640		10.0	0.640	ug/L		10/22/25 10:36	10/27/25 18:41	1
Acenaphthylene	<0.720		10.0	0.720	ug/L		10/22/25 10:36	10/27/25 18:41	1
Acetophenone	<0.690		10.0	0.690	ug/L		10/22/25 10:36	10/27/25 18:41	1
2-Acetylaminofluorene	<2.70		10.0	2.70	ug/L		10/22/25 10:36	10/27/25 18:41	1
4-Aminobiphenyl	<2.20		10.0	2.20	ug/L		10/22/25 10:36	10/27/25 18:41	1
Anthracene	<0.870		10.0	0.870	ug/L		10/22/25 10:36	10/27/25 18:41	1
Benzo[a]anthracene	<0.850		10.0	0.850	ug/L		10/22/25 10:36	10/27/25 18:41	1
Benzo[a]pyrene	<8.10		10.0	8.10	ug/L		10/22/25 10:36	10/27/25 18:41	1
Benzo[b]fluoranthene	<4.90		10.0	4.90	ug/L		10/22/25 10:36	10/27/25 18:41	1
Benzo[g,h,i]perylene	<6.30		10.0	6.30	ug/L		10/22/25 10:36	10/27/25 18:41	1
Benzo[k]fluoranthene	<2.20		10.0	2.20	ug/L		10/22/25 10:36	10/27/25 18:41	1
Benzyl alcohol	<1.30		10.0	1.30	ug/L		10/22/25 10:36	10/27/25 18:41	1
Bis(2-chloroethoxy)methane	<0.760		10.0	0.760	ug/L		10/22/25 10:36	10/27/25 18:41	1
Bis(2-chloroethyl)ether	<0.820		10.0	0.820	ug/L		10/22/25 10:36	10/27/25 18:41	1
bis (2-chloroisopropyl) ether	<0.540		10.0	0.540	ug/L		10/22/25 10:36	10/27/25 18:41	1
Bis(2-ethylhexyl) phthalate	<5.50		10.0	5.50	ug/L		10/22/25 10:36	10/27/25 18:41	1
4-Bromophenyl phenyl ether	<0.700		10.0	0.700	ug/L		10/22/25 10:36	10/27/25 18:41	1
Butyl benzyl phthalate	<5.40		10.0	5.40	ug/L		10/22/25 10:36	10/27/25 18:41	1
4-Chloroaniline	<0.620		10.0	0.620	ug/L		10/22/25 10:36	10/27/25 18:41	1
Chlorobenzilate	<3.60		10.0	3.60	ug/L		10/22/25 10:36	10/27/25 18:41	1
4-Chloro-3-methylphenol	<0.840		10.0	0.840	ug/L		10/22/25 10:36	10/27/25 18:41	1
2-Chloronaphthalene	<0.640		10.0	0.640	ug/L		10/22/25 10:36	10/27/25 18:41	1
2-Chlorophenol	<0.540		10.0	0.540	ug/L		10/22/25 10:36	10/27/25 18:41	1
4-Chlorophenyl phenyl ether	<0.690		10.0	0.690	ug/L		10/22/25 10:36	10/27/25 18:41	1
Chrysene	<0.870		10.0	0.870	ug/L		10/22/25 10:36	10/27/25 18:41	1
Diallate	<4.00		10.0	4.00	ug/L		10/22/25 10:36	10/27/25 18:41	1
Dibenzo(a,h)anthracene	<3.90		10.0	3.90	ug/L		10/22/25 10:36	10/27/25 18:41	1
Dibenzofuran	<0.740		10.0	0.740	ug/L		10/22/25 10:36	10/27/25 18:41	1
3,3'-Dichlorobenzidine	<1.40		10.0	1.40	ug/L		10/22/25 10:36	10/27/25 18:41	1
2,4-Dichlorophenol	<0.850		10.0	0.850	ug/L		10/22/25 10:36	10/27/25 18:41	1
2,6-Dichlorophenol	<0.690		10.0	0.690	ug/L		10/22/25 10:36	10/27/25 18:41	1
Diethyl phthalate	<1.70		10.0	1.70	ug/L		10/22/25 10:36	10/27/25 18:41	1
Dimethoate	<3.60		10.0	3.60	ug/L		10/22/25 10:36	10/27/25 18:41	1
7,12-Dimethylbenz(a)anthracene	<1.90		10.0	1.90	ug/L		10/22/25 10:36	10/27/25 18:41	1
3,3'-Dimethylbenzidine	<1.50		10.0	1.50	ug/L		10/22/25 10:36	10/27/25 18:41	1
2,4-Dimethylphenol	<0.580		10.0	0.580	ug/L		10/22/25 10:36	10/27/25 18:41	1
Dimethyl phthalate	<1.00		10.0	1.00	ug/L		10/22/25 10:36	10/27/25 18:41	1
Di-n-butyl phthalate	<5.60		10.0	5.60	ug/L		10/22/25 10:36	10/27/25 18:41	1
1,3-Dinitrobenzene	<3.20		10.0	3.20	ug/L		10/22/25 10:36	10/27/25 18:41	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 310-470953/1-A
Matrix: Water
Analysis Batch: 471377

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 470953

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	<6.90		10.0	6.90	ug/L		10/22/25 10:36	10/27/25 18:41	1
2,4-Dinitrophenol	<13.0		20.0	13.0	ug/L		10/22/25 10:36	10/27/25 18:41	1
2,4-Dinitrotoluene	<6.40		10.0	6.40	ug/L		10/22/25 10:36	10/27/25 18:41	1
2,6-Dinitrotoluene	<0.520		10.0	0.520	ug/L		10/22/25 10:36	10/27/25 18:41	1
Di-n-octyl phthalate	<7.00		20.0	7.00	ug/L		10/22/25 10:36	10/27/25 18:41	1
Dinoseb	<2.40		10.0	2.40	ug/L		10/22/25 10:36	10/27/25 18:41	1
Diphenylamine	<6.00		10.0	6.00	ug/L		10/22/25 10:36	10/27/25 18:41	1
Disulfoton	<2.40		10.0	2.40	ug/L		10/22/25 10:36	10/27/25 18:41	1
Ethyl methanesulfonate	<3.60		10.0	3.60	ug/L		10/22/25 10:36	10/27/25 18:41	1
Ethyl Parathion	<2.20		10.0	2.20	ug/L		10/22/25 10:36	10/27/25 18:41	1
Famphur	<3.80		10.0	3.80	ug/L		10/22/25 10:36	10/27/25 18:41	1
Fluoranthene	<1.70		10.0	1.70	ug/L		10/22/25 10:36	10/27/25 18:41	1
Fluorene	<0.790		10.0	0.790	ug/L		10/22/25 10:36	10/27/25 18:41	1
Hexachlorobenzene	<0.700		10.0	0.700	ug/L		10/22/25 10:36	10/27/25 18:41	1
Hexachlorobutadiene	<0.860		10.0	0.860	ug/L		10/22/25 10:36	10/27/25 18:41	1
Hexachlorocyclopentadiene	<5.10		10.0	5.10	ug/L		10/22/25 10:36	10/27/25 18:41	1
Hexachloroethane	<0.970		10.0	0.970	ug/L		10/22/25 10:36	10/27/25 18:41	1
Hexachloropropene	<2.60		10.0	2.60	ug/L		10/22/25 10:36	10/27/25 18:41	1
Indeno[1,2,3-cd]pyrene	<4.20		10.0	4.20	ug/L		10/22/25 10:36	10/27/25 18:41	1
Isodrin	<4.70		10.0	4.70	ug/L		10/22/25 10:36	10/27/25 18:41	1
Isophorone	<0.930		10.0	0.930	ug/L		10/22/25 10:36	10/27/25 18:41	1
Isosafrole	<2.30		10.0	2.30	ug/L		10/22/25 10:36	10/27/25 18:41	1
Kepone	<1.00		10.0	1.00	ug/L		10/22/25 10:36	10/27/25 18:41	1
Methapyrilene	<0.760		10.0	0.760	ug/L		10/22/25 10:36	10/27/25 18:41	1
3-Methylcholanthrene	<0.320		10.0	0.320	ug/L		10/22/25 10:36	10/27/25 18:41	1
Methyl methanesulfonate	<3.30		10.0	3.30	ug/L		10/22/25 10:36	10/27/25 18:41	1
2-Methylnaphthalene	<0.590		10.0	0.590	ug/L		10/22/25 10:36	10/27/25 18:41	1
Methyl parathion	<2.30		10.0	2.30	ug/L		10/22/25 10:36	10/27/25 18:41	1
2-Methylphenol	<0.650		10.0	0.650	ug/L		10/22/25 10:36	10/27/25 18:41	1
Methylphenol, 3 & 4	<0.700		10.0	0.700	ug/L		10/22/25 10:36	10/27/25 18:41	1
1,4-Naphthoquinone	<3.60		10.0	3.60	ug/L		10/22/25 10:36	10/27/25 18:41	1
1-Naphthylamine	<2.50		10.0	2.50	ug/L		10/22/25 10:36	10/27/25 18:41	1
2-Naphthylamine	<2.10		10.0	2.10	ug/L		10/22/25 10:36	10/27/25 18:41	1
2-Nitroaniline	<5.90		10.0	5.90	ug/L		10/22/25 10:36	10/27/25 18:41	1
3-Nitroaniline	<2.70		10.0	2.70	ug/L		10/22/25 10:36	10/27/25 18:41	1
4-Nitroaniline	<1.30		10.0	1.30	ug/L		10/22/25 10:36	10/27/25 18:41	1
Nitrobenzene	<0.800		10.0	0.800	ug/L		10/22/25 10:36	10/27/25 18:41	1
5-Nitro-o-toluidine	<2.80		10.0	2.80	ug/L		10/22/25 10:36	10/27/25 18:41	1
2-Nitrophenol	<6.80		10.0	6.80	ug/L		10/22/25 10:36	10/27/25 18:41	1
4-Nitrophenol	<7.60		10.0	7.60	ug/L		10/22/25 10:36	10/27/25 18:41	1
N-Nitrosodiethylamine	<3.40		10.0	3.40	ug/L		10/22/25 10:36	10/27/25 18:41	1
N-Nitrosodimethylamine	<0.720		10.0	0.720	ug/L		10/22/25 10:36	10/27/25 18:41	1
N-Nitrosodi-n-butylamine	<3.90		10.0	3.90	ug/L		10/22/25 10:36	10/27/25 18:41	1
N-Nitrosodi-n-propylamine	<0.920		10.0	0.920	ug/L		10/22/25 10:36	10/27/25 18:41	1
N-Nitrosodiphenylamine	<0.750		10.0	0.750	ug/L		10/22/25 10:36	10/27/25 18:41	1
N-Nitrosomethylethylamine	<4.90		10.0	4.90	ug/L		10/22/25 10:36	10/27/25 18:41	1
N-Nitrosopiperidine	<2.70		10.0	2.70	ug/L		10/22/25 10:36	10/27/25 18:41	1
N-Nitrosopyrrolidine	<3.60		10.0	3.60	ug/L		10/22/25 10:36	10/27/25 18:41	1
o,o',o''-Triethylphosphorothioate	<3.20		10.0	3.20	ug/L		10/22/25 10:36	10/27/25 18:41	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 310-470953/1-A
Matrix: Water
Analysis Batch: 471377

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 470953

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Toluidine	<2.90		10.0	2.90	ug/L		10/22/25 10:36	10/27/25 18:41	1
p-Dimethylamino azobenzene	<2.20		10.0	2.20	ug/L		10/22/25 10:36	10/27/25 18:41	1
Pentachlorobenzene	<2.80		10.0	2.80	ug/L		10/22/25 10:36	10/27/25 18:41	1
Pentachloronitrobenzene	<5.80		10.0	5.80	ug/L		10/22/25 10:36	10/27/25 18:41	1
Pentachlorophenol	<9.60		10.0	9.60	ug/L		10/22/25 10:36	10/27/25 18:41	1
Phenacetin	<1.90		10.0	1.90	ug/L		10/22/25 10:36	10/27/25 18:41	1
Phenanthrene	<0.790		10.0	0.790	ug/L		10/22/25 10:36	10/27/25 18:41	1
Phenol	<1.10		10.0	1.10	ug/L		10/22/25 10:36	10/27/25 18:41	1
1,4-phenylenediamine	<1.90		10.0	1.90	ug/L		10/22/25 10:36	10/27/25 18:41	1
Phorate	<3.20		10.0	3.20	ug/L		10/22/25 10:36	10/27/25 18:41	1
Pronamide	<2.70		10.0	2.70	ug/L		10/22/25 10:36	10/27/25 18:41	1
Pyrene	<0.790		10.0	0.790	ug/L		10/22/25 10:36	10/27/25 18:41	1
Safrole	<2.80		10.0	2.80	ug/L		10/22/25 10:36	10/27/25 18:41	1
1,2,4,5-Tetrachlorobenzene	<0.540		10.0	0.540	ug/L		10/22/25 10:36	10/27/25 18:41	1
2,3,4,6-Tetrachlorophenol	<5.30		10.0	5.30	ug/L		10/22/25 10:36	10/27/25 18:41	1
Thionazin	<3.50		10.0	3.50	ug/L		10/22/25 10:36	10/27/25 18:41	1
2,4,5-Trichlorophenol	<5.30		10.0	5.30	ug/L		10/22/25 10:36	10/27/25 18:41	1
2,4,6-Trichlorophenol	<5.00		10.0	5.00	ug/L		10/22/25 10:36	10/27/25 18:41	1
1,3,5-Trinitrobenzene	<2.30		10.0	2.30	ug/L		10/22/25 10:36	10/27/25 18:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*101*		*33 - 126*	*10/22/25 10:36*	*10/27/25 18:41*	*1*
2-Fluorophenol (Surr)	*89*		*21 - 110*	*10/22/25 10:36*	*10/27/25 18:41*	*1*
Nitrobenzene-d5 (Surr)	*119*		*39 - 140*	*10/22/25 10:36*	*10/27/25 18:41*	*1*
Phenol-d5 (Surr)	*74*		*21 - 110*	*10/22/25 10:36*	*10/27/25 18:41*	*1*
Terphenyl-d14 (Surr)	*154*	*S1+*	*13 - 150*	*10/22/25 10:36*	*10/27/25 18:41*	*1*
2,4,6-Tribromophenol (Surr)	*120*		*20 - 144*	*10/22/25 10:36*	*10/27/25 18:41*	*1*

Lab Sample ID: MB 310-470953/1-A
Matrix: Water
Analysis Batch: 471537

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 470953

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-phenylenediamine	<1.90		10.0	1.90	ug/L		10/22/25 10:36	10/28/25 13:18	1

Lab Sample ID: LCS 310-470953/2-A
Matrix: Water
Analysis Batch: 471377

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 470953

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	100	91.88		ug/L		92	38 - 118
Acenaphthylene	100	90.36		ug/L		90	39 - 115
Acetophenone	100	100.2		ug/L		100	47 - 118
2-Acetylaminofluorene	51.2	27.49		ug/L		54	37 - 149
4-Aminobiphenyl	51.2	35.74		ug/L		70	23 - 123
Anthracene	100	100.4		ug/L		100	49 - 127
Benzo[a]anthracene	100	90.75		ug/L		91	49 - 126
Benzo[a]pyrene	100	89.86		ug/L		90	44 - 133
Benzo[b]fluoranthene	100	92.01		ug/L		92	44 - 136

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 310-470953/2-A
Matrix: Water
Analysis Batch: 471377

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 470953

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzo[g,h,i]perylene	100	81.07		ug/L		81	42 - 135
Benzo[k]fluoranthene	100	104.5		ug/L		104	49 - 134
Benzyl alcohol	100	94.38		ug/L		94	46 - 123
Bis(2-chloroethoxy)methane	100	103.1		ug/L		103	44 - 126
Bis(2-chloroethyl)ether	100	88.31		ug/L		88	41 - 116
bis (2-chloroisopropyl) ether	100	87.40		ug/L		87	36 - 115
Bis(2-ethylhexyl) phthalate	100	85.36		ug/L		85	46 - 138
4-Bromophenyl phenyl ether	100	98.74		ug/L		99	41 - 131
Butyl benzyl phthalate	100	99.77		ug/L		100	47 - 133
4-Chloroaniline	100	93.06		ug/L		93	13 - 143
Chlorobenzilate	51.2	54.20		ug/L		106	39 - 145
4-Chloro-3-methylphenol	100	108.8		ug/L		109	51 - 132
2-Chloronaphthalene	100	83.72		ug/L		84	33 - 112
2-Chlorophenol	100	87.93		ug/L		88	43 - 119
4-Chlorophenyl phenyl ether	100	97.25		ug/L		97	44 - 118
Chrysene	100	103.3		ug/L		103	50 - 128
Diallate	44.8	46.74		ug/L		104	40 - 135
Dibenzo(a,h)anthracene	100	71.51		ug/L		72	36 - 146
Dibenzofuran	100	93.26		ug/L		93	44 - 114
2,4-Dichlorophenol	100	98.97		ug/L		99	44 - 131
2,6-Dichlorophenol	100	99.27		ug/L		99	41 - 131
Diethyl phthalate	100	104.9		ug/L		105	43 - 135
Dimethoate	44.8	47.03		ug/L		105	31 - 150
7,12-Dimethylbenz(a)anthracene	51.2	46.70		ug/L		91	47 - 129
3,3'-Dimethylbenzidine	51.2	9.367	J	ug/L		18	10 - 147
2,4-Dimethylphenol	100	111.6		ug/L		112	30 - 128
Dimethyl phthalate	100	104.9		ug/L		105	46 - 129
Di-n-butyl phthalate	100	98.24		ug/L		98	49 - 138
1,3-Dinitrobenzene	100	88.78		ug/L		89	36 - 147
4,6-Dinitro-2-methylphenol	200	146.0		ug/L		73	22 - 150
2,4-Dinitrophenol	200	119.1		ug/L		60	10 - 150
2,4-Dinitrotoluene	100	101.6		ug/L		102	48 - 136
2,6-Dinitrotoluene	100	95.57		ug/L		96	49 - 135
Dinoseb	51.2	34.15		ug/L		67	22 - 150
Diphenylamine	85.0	89.71		ug/L		106	43 - 132
Disulfoton	44.8	40.55		ug/L		91	27 - 138
Ethyl methanesulfonate	51.2	41.36		ug/L		81	44 - 110
Ethyl Parathion	44.8	37.71		ug/L		84	52 - 141
Famphur	44.8	45.80	E	ug/L		102	67 - 150
Fluoranthene	100	96.39		ug/L		96	49 - 132
Fluorene	100	97.54		ug/L		98	46 - 118
Hexachlorobenzene	100	103.2		ug/L		103	42 - 134
Hexachlorobutadiene	100	78.05		ug/L		78	29 - 110
Hexachlorocyclopentadiene	100	61.08		ug/L		61	10 - 110
Hexachloroethane	100	64.78		ug/L		65	25 - 110
Hexachloropropene	51.2	16.65		ug/L		33	10 - 110
Indeno[1,2,3-cd]pyrene	100	65.96		ug/L		66	36 - 149
Isodrin	51.2	47.82		ug/L		93	50 - 122
Isophorone	100	100.9		ug/L		101	46 - 126

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 310-470953/2-A
Matrix: Water
Analysis Batch: 471377

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 470953

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Isosafrole	51.2	42.09		ug/L		82	10 - 129
Kepone	44.8	31.66		ug/L		71	10 - 150
Methapyrilene	44.8	4.996	J	ug/L		11	10 - 110
3-Methylcholanthrene	51.2	29.78		ug/L		58	13 - 140
Methyl methanesulfonate	51.2	34.57		ug/L		68	16 - 110
2-Methylnaphthalene	100	85.87		ug/L		86	35 - 110
Methyl parathion	44.8	50.73		ug/L		113	49 - 150
2-Methylphenol	100	86.58		ug/L		87	47 - 114
Methylphenol, 3 & 4	100	91.88		ug/L		92	45 - 114
1,4-Naphthoquinone	51.2	48.11		ug/L		94	38 - 137
1-Naphthylamine	51.2	20.23		ug/L		40	10 - 110
2-Naphthylamine	51.2	38.36		ug/L		75	18 - 111
2-Nitroaniline	100	103.8		ug/L		104	48 - 135
3-Nitroaniline	100	93.70		ug/L		94	38 - 142
4-Nitroaniline	100	104.9		ug/L		105	33 - 141
Nitrobenzene	100	99.08		ug/L		99	42 - 123
5-Nitro-o-toluidine	51.2	47.62		ug/L		93	43 - 139
2-Nitrophenol	100	91.89		ug/L		92	36 - 144
4-Nitrophenol	200	127.6		ug/L		64	22 - 110
N-Nitrosodiethylamine	51.2	39.97		ug/L		78	51 - 116
N-Nitrosodimethylamine	100	86.96		ug/L		87	37 - 110
N-Nitrosodi-n-butylamine	51.2	45.66		ug/L		89	49 - 135
N-Nitrosodi-n-propylamine	100	101.5		ug/L		101	44 - 124
N-Nitrosodiphenylamine	100	102.7		ug/L		103	43 - 132
N-Nitrosomethylethylamine	51.2	46.35		ug/L		91	43 - 114
N-Nitrosopiperidine	51.2	51.03		ug/L		100	50 - 120
N-Nitrosopyrrolidine	51.2	45.65		ug/L		89	47 - 129
o,o',o''-Triethylphosphorothioate	44.8	38.77		ug/L		87	34 - 125
o-Toluidine	51.2	35.50		ug/L		69	19 - 128
p-Dimethylamino azobenzene	51.2	45.32		ug/L		89	45 - 133
Pentachlorobenzene	51.2	39.64		ug/L		77	27 - 112
Pentachloronitrobenzene	51.2	49.61		ug/L		97	45 - 132
Pentachlorophenol	200	180.4		ug/L		90	28 - 142
Phenacetin	51.2	48.50		ug/L		95	51 - 139
Phenanthrene	100	101.2		ug/L		101	48 - 126
Phenol	100	62.25		ug/L		62	29 - 110
Phorate	44.8	44.74		ug/L		100	21 - 147
Pronamide	51.2	49.36		ug/L		96	52 - 135
Pyrene	100	112.8		ug/L		113	45 - 134
Safrole	44.8	35.81		ug/L		80	26 - 117
1,2,4,5-Tetrachlorobenzene	100	75.17		ug/L		75	35 - 110
2,3,4,6-Tetrachlorophenol	100	97.29		ug/L		97	32 - 142
Thionazin	44.8	47.55		ug/L		106	48 - 135
2,4,5-Trichlorophenol	100	92.20		ug/L		92	39 - 136
2,4,6-Trichlorophenol	100	90.84		ug/L		91	35 - 141
1,3,5-Trinitrobenzene	51.2	37.11		ug/L		72	26 - 150

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 310-470953/2-A
Matrix: Water
Analysis Batch: 471377

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 470953

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*113*		*33 - 126*
2-Fluorophenol (Surr)	*85*		*21 - 110*
Nitrobenzene-d5 (Surr)	*129*		*39 - 140*
Phenol-d5 (Surr)	*72*		*21 - 110*
Terphenyl-d14 (Surr)	*145*		*13 - 150*
2,4,6-Tribromophenol (Surr)	*131*		*20 - 144*

Lab Sample ID: LCS 310-470953/2-A
Matrix: Water
Analysis Batch: 471537

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 470953

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-phenylenediamine			51.2	<1.90	*-	ug/L		3	20 - 120		

Lab Sample ID: LCSD 310-470953/3-A
Matrix: Water
Analysis Batch: 471377

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 470953

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			100	89.47		ug/L		89	38 - 118	3	35
Acenaphthylene			100	89.79		ug/L		90	39 - 115	1	35
Acetophenone			100	99.06		ug/L		99	47 - 118	1	35
2-Acetylaminofluorene			51.2	28.30		ug/L		55	37 - 149	3	26
4-Aminobiphenyl			51.2	41.81		ug/L		82	23 - 123	16	35
Anthracene			100	100.1		ug/L		100	49 - 127	0	35
Benzo[a]anthracene			100	93.36		ug/L		93	49 - 126	3	35
Benzo[a]pyrene			100	79.89		ug/L		80	44 - 133	12	35
Benzo[b]fluoranthene			100	88.47		ug/L		88	44 - 136	4	35
Benzo[g,h,i]perylene			100	81.69		ug/L		82	42 - 135	1	35
Benzo[k]fluoranthene			100	111.0		ug/L		111	49 - 134	6	35
Benzyl alcohol			100	94.20		ug/L		94	46 - 123	0	35
Bis(2-chloroethoxy)methane			100	100.3		ug/L		100	44 - 126	3	35
Bis(2-chloroethyl)ether			100	93.62		ug/L		94	41 - 116	6	35
bis (2-chloroisopropyl) ether			100	88.10		ug/L		88	36 - 115	1	35
Bis(2-ethylhexyl) phthalate			100	78.03		ug/L		78	46 - 138	9	35
4-Bromophenyl phenyl ether			100	95.96		ug/L		96	41 - 131	3	35
Butyl benzyl phthalate			100	101.1		ug/L		101	47 - 133	1	35
4-Chloroaniline			100	93.45		ug/L		93	13 - 143	0	35
Chlorobenzilate			51.2	56.37		ug/L		110	39 - 145	4	28
4-Chloro-3-methylphenol			100	104.6		ug/L		105	51 - 132	4	35
2-Chloronaphthalene			100	84.10		ug/L		84	33 - 112	0	35
2-Chlorophenol			100	85.86		ug/L		86	43 - 119	2	35
4-Chlorophenyl phenyl ether			100	93.86		ug/L		94	44 - 118	4	35
Chrysene			100	101.1		ug/L		101	50 - 128	2	35
Diallate			44.8	48.78		ug/L		109	40 - 135	4	29
Dibenzo(a,h)anthracene			100	68.06		ug/L		68	36 - 146	5	35
Dibenzofuran			100	92.54		ug/L		93	44 - 114	1	35
2,4-Dichlorophenol			100	98.13		ug/L		98	44 - 131	1	35
2,6-Dichlorophenol			100	97.45		ug/L		97	41 - 131	2	35

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 310-470953/3-A
Matrix: Water
Analysis Batch: 471377

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 470953

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diethyl phthalate			100	104.6		ug/L		105	43 - 135	0	35
Dimethoate			44.8	49.22		ug/L		110	31 - 150	5	35
7,12-Dimethylbenz(a)anthracene			51.2	48.46		ug/L		95	47 - 129	4	29
3,3'-Dimethylbenzidine			51.2	25.50	*1	ug/L		50	10 - 147	93	35
2,4-Dimethylphenol			100	106.2		ug/L		106	30 - 128	5	35
Dimethyl phthalate			100	100.8		ug/L		101	46 - 129	4	35
Di-n-butyl phthalate			100	97.53		ug/L		98	49 - 138	1	35
1,3-Dinitrobenzene			100	100.1		ug/L		100	36 - 147	12	35
4,6-Dinitro-2-methylphenol			200	155.2		ug/L		78	22 - 150	6	35
2,4-Dinitrophenol			200	127.4		ug/L		64	10 - 150	7	35
2,4-Dinitrotoluene			100	102.3		ug/L		102	48 - 136	1	35
2,6-Dinitrotoluene			100	94.41		ug/L		94	49 - 135	1	35
Dinoseb			51.2	38.83		ug/L		76	22 - 150	13	35
Diphenylamine			85.0	87.77		ug/L		103	43 - 132	2	35
Disulfoton			44.8	41.86		ug/L		93	27 - 138	3	32
Ethyl methanesulfonate			51.2	42.86		ug/L		84	44 - 110	4	30
Ethyl Parathion			44.8	40.23		ug/L		90	52 - 141	6	30
Famphur			44.8	49.94	E	ug/L		111	67 - 150	9	28
Fluoranthene			100	98.56		ug/L		99	49 - 132	2	35
Fluorene			100	96.53		ug/L		97	46 - 118	1	35
Hexachlorobenzene			100	106.7		ug/L		107	42 - 134	3	35
Hexachlorobutadiene			100	74.83		ug/L		75	29 - 110	4	35
Hexachlorocyclopentadiene			100	65.54		ug/L		66	10 - 110	7	35
Hexachloroethane			100	67.63		ug/L		68	25 - 110	4	35
Hexachloropropene			51.2	16.42		ug/L		32	10 - 110	1	35
Indeno[1,2,3-cd]pyrene			100	64.39		ug/L		64	36 - 149	2	35
Isodrin			51.2	46.69		ug/L		91	50 - 122	2	28
Isophorone			100	101.1		ug/L		101	46 - 126	0	35
Isosafrole			51.2	41.96		ug/L		82	10 - 129	0	35
Kepone			44.8	33.64		ug/L		75	10 - 150	6	35
Methapyrilene			44.8	12.40	*1	ug/L		28	10 - 110	85	35
3-Methylcholanthrene			51.2	28.07		ug/L		55	13 - 140	6	35
Methyl methanesulfonate			51.2	36.81		ug/L		72	16 - 110	6	28
2-Methylnaphthalene			100	82.12		ug/L		82	35 - 110	4	35
Methyl parathion			44.8	51.23		ug/L		114	49 - 150	1	29
2-Methylphenol			100	88.33		ug/L		88	47 - 114	2	35
Methylphenol, 3 & 4			100	89.06		ug/L		89	45 - 114	3	35
1,4-Naphthoquinone			51.2	50.82		ug/L		99	38 - 137	5	27
1-Naphthylamine			51.2	20.77		ug/L		41	10 - 110	3	35
2-Naphthylamine			51.2	41.31		ug/L		81	18 - 111	7	35
2-Nitroaniline			100	102.6		ug/L		103	48 - 135	1	35
3-Nitroaniline			100	97.73		ug/L		98	38 - 142	4	35
4-Nitroaniline			100	99.58		ug/L		100	33 - 141	5	35
Nitrobenzene			100	98.42		ug/L		98	42 - 123	1	35
5-Nitro-o-toluidine			51.2	47.50		ug/L		93	43 - 139	0	32
2-Nitrophenol			100	100.1		ug/L		100	36 - 144	9	35
4-Nitrophenol			200	136.8		ug/L		68	22 - 110	7	35
N-Nitrosodiethylamine			51.2	41.24		ug/L		81	51 - 116	3	27
N-Nitrosodimethylamine			100	83.61		ug/L		84	37 - 110	4	35

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 310-470953/3-A
Matrix: Water
Analysis Batch: 471377

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 470953

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
N-Nitrosodi-n-butylamine			51.2	48.79		ug/L		95	49 - 135	7	28
N-Nitrosodi-n-propylamine			100	96.85		ug/L		97	44 - 124	5	35
N-Nitrosodiphenylamine			100	101.4		ug/L		101	43 - 132	1	35
N-Nitrosomethylethylamine			51.2	46.29		ug/L		90	43 - 114	0	29
N-Nitrosopiperidine			51.2	50.63		ug/L		99	50 - 120	1	26
N-Nitrosopyrrolidine			51.2	45.55		ug/L		89	47 - 129	0	31
o,o',o''-Triethylphosphorothioate			44.8	39.28		ug/L		88	34 - 125	1	33
o-Toluidine			51.2	39.48		ug/L		77	19 - 128	11	35
p-Dimethylamino azobenzene			51.2	47.48		ug/L		93	45 - 133	5	31
Pentachlorobenzene			51.2	41.71		ug/L		81	27 - 112	5	35
Pentachloronitrobenzene			51.2	51.12		ug/L		100	45 - 132	3	29
Pentachlorophenol			200	182.0		ug/L		91	28 - 142	1	35
Phenacetin			51.2	50.49		ug/L		99	51 - 139	4	29
Phenanthrene			100	100.6		ug/L		101	48 - 126	1	35
Phenol			100	61.77		ug/L		62	29 - 110	1	35
Phorate			44.8	45.21		ug/L		101	21 - 147	1	35
Pronamide			51.2	51.04		ug/L		100	52 - 135	3	28
Pyrene			100	109.0		ug/L		109	45 - 134	3	35
Safrole			44.8	35.79		ug/L		80	26 - 117	0	35
1,2,4,5-Tetrachlorobenzene			100	77.86		ug/L		78	35 - 110	4	35
2,3,4,6-Tetrachlorophenol			100	95.80		ug/L		96	32 - 142	2	35
Thionazin			44.8	44.95		ug/L		100	48 - 135	6	30
2,4,5-Trichlorophenol			100	93.60		ug/L		94	39 - 136	2	35
2,4,6-Trichlorophenol			100	93.26		ug/L		93	35 - 141	3	35
1,3,5-Trinitrobenzene			51.2	42.18		ug/L		82	26 - 150	13	29

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*105*		*33 - 126*
2-Fluorophenol (Surr)	*84*		*21 - 110*
Nitrobenzene-d5 (Surr)	*120*		*39 - 140*
Phenol-d5 (Surr)	*71*		*21 - 110*
Terphenyl-d14 (Surr)	*137*		*13 - 150*
2,4,6-Tribromophenol (Surr)	*130*		*20 - 144*

Lab Sample ID: LCSD 310-470953/3-A
Matrix: Water
Analysis Batch: 471537

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 470953

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-phenylenediamine			51.2	<1.90	*-	ug/L		3	20 - 120	1	35

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Lab Sample ID: MB 310-470974/4
Matrix: Water
Analysis Batch: 470974

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	<2600		10000	2600	ug/L			10/22/25 13:20	1

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection) (Continued)

Lab Sample ID: MB 310-470974/4
Matrix: Water
Analysis Batch: 470974

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isobutanol	<2400		10000	2400	ug/L			10/22/25 13:20	1

Lab Sample ID: LCS 310-470974/5
Matrix: Water
Analysis Batch: 470974

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Acetonitrile			89700	104800		ug/L		117	67 - 131		
Isobutanol			98900	112300		ug/L		114	80 - 120		

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 310-471080/1-A
Matrix: Water
Analysis Batch: 471384

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 471080

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan I	<0.0275		0.0980	0.0275	ug/L		10/23/25 09:48	10/27/25 13:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*133*		*10 - 150*	*10/23/25 09:48*	*10/27/25 13:57*	*1*
Tetrachloro-m-xylene	*127*	*p*	*17 - 150*	*10/23/25 09:48*	*10/27/25 13:57*	*1*

Lab Sample ID: LCS 310-471080/2-A
Matrix: Water
Analysis Batch: 471384

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 471080

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Endosulfan I			2.79	2.736		ug/L		98	26 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*125*		*10 - 150*
Tetrachloro-m-xylene	*123*	*p*	*17 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 310-471080/1-A
Matrix: Water
Analysis Batch: 471383

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 471080

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.804		1.96	0.804	ug/L		10/23/25 09:48	10/27/25 13:57	1
PCB-1221	<0.804		1.96	0.804	ug/L		10/23/25 09:48	10/27/25 13:57	1
PCB-1232	<0.804		1.96	0.804	ug/L		10/23/25 09:48	10/27/25 13:57	1
PCB-1242	<0.804		1.96	0.804	ug/L		10/23/25 09:48	10/27/25 13:57	1
PCB-1248	<0.676		1.96	0.676	ug/L		10/23/25 09:48	10/27/25 13:57	1
PCB-1254	<0.676		1.96	0.676	ug/L		10/23/25 09:48	10/27/25 13:57	1
PCB-1260	<0.676		1.96	0.676	ug/L		10/23/25 09:48	10/27/25 13:57	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 310-471080/1-A
Matrix: Water
Analysis Batch: 471383

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 471080

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	133		10 - 150	10/23/25 09:48	10/27/25 13:57	1
Tetrachloro-m-xylene	127	p	17 - 150	10/23/25 09:48	10/27/25 13:57	1

Lab Sample ID: LCS 310-471080/27-A
Matrix: Water
Analysis Batch: 471500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 471080

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016			27.8	23.03		ug/L		83	25 - 150		
PCB-1260			27.8	22.89		ug/L		82	14 - 150		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	71		10 - 150
Tetrachloro-m-xylene	88	p	17 - 150

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 410-719980/1-A
Matrix: Water
Analysis Batch: 719993

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 719980

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.250		0.600	0.250	ug/L		10/26/25 20:35	10/27/25 06:38	1
Silvex (2,4,5-TP)	<0.0220		0.0500	0.0220	ug/L		10/26/25 20:35	10/27/25 06:38	1
2,4,5-T	<0.0650		0.150	0.0650	ug/L		10/26/25 20:35	10/27/25 06:38	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCAA	97		34 - 142	10/26/25 20:35	10/27/25 06:38	1

Lab Sample ID: LCS 410-719980/2-A
Matrix: Water
Analysis Batch: 719993

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 719980

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4-D			2.00	1.928		ug/L		96	53 - 159		
2,4,5-T			0.400	0.4322		ug/L		108	57 - 171		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCAA	96		34 - 142

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-471282/1-A
Matrix: Water
Analysis Batch: 471990

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 471282

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.530		2.00	0.530	ug/L		10/27/25 08:30	10/30/25 16:21	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 310-471282/1-A
Matrix: Water
Analysis Batch: 471990

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 471282

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.660		2.00	0.660	ug/L		10/27/25 08:30	10/30/25 16:21	1
Beryllium	<0.330		1.00	0.330	ug/L		10/27/25 08:30	10/30/25 16:21	1
Cadmium	<0.100		0.200	0.100	ug/L		10/27/25 08:30	10/30/25 16:21	1
Chromium	<1.80		5.00	1.80	ug/L		10/27/25 08:30	10/30/25 16:21	1
Cobalt	<0.170		0.500	0.170	ug/L		10/27/25 08:30	10/30/25 16:21	1
Copper	<3.20		5.00	3.20	ug/L		10/27/25 08:30	10/30/25 16:21	1
Lead	<0.330		0.500	0.330	ug/L		10/27/25 08:30	10/30/25 16:21	1
Nickel	<2.30		5.00	2.30	ug/L		10/27/25 08:30	10/30/25 16:21	1
Selenium	<1.40		5.00	1.40	ug/L		10/27/25 08:30	10/30/25 16:21	1
Silver	<0.500		1.00	0.500	ug/L		10/27/25 08:30	10/30/25 16:21	1
Vanadium	<1.70		5.00	1.70	ug/L		10/27/25 08:30	10/30/25 16:21	1
Zinc	<13.0		20.0	13.0	ug/L		10/27/25 08:30	10/30/25 16:21	1
Sodium	<650		1000	650	ug/L		10/27/25 08:30	10/30/25 16:21	1
Potassium	<170		500	170	ug/L		10/27/25 08:30	10/30/25 16:21	1
Calcium	<190		500	190	ug/L		10/27/25 08:30	10/30/25 16:21	1
Magnesium	<150		500	150	ug/L		10/27/25 08:30	10/30/25 16:21	1

Lab Sample ID: MB 310-471282/1-A
Matrix: Water
Analysis Batch: 472178

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 471282

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		10/27/25 08:30	10/31/25 15:26	1
Thallium	<0.570		1.00	0.570	ug/L		10/27/25 08:30	10/31/25 15:26	1

Lab Sample ID: LCS 310-471282/2-A
Matrix: Water
Analysis Batch: 471990

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 471282

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	200	199.2		ug/L		100	80 - 120
Barium	100	104.0		ug/L		104	80 - 120
Beryllium	100	101.3		ug/L		101	80 - 120
Cadmium	100	99.28		ug/L		99	80 - 120
Chromium	100	105.8		ug/L		106	80 - 120
Cobalt	100	102.1		ug/L		102	80 - 120
Copper	200	198.3		ug/L		99	80 - 120
Lead	200	200.4		ug/L		100	80 - 120
Nickel	200	200.1		ug/L		100	80 - 120
Selenium	400	389.2		ug/L		97	80 - 120
Silver	100	118.4		ug/L		118	80 - 120
Vanadium	100	102.5		ug/L		103	80 - 120
Zinc	200	200.5		ug/L		100	80 - 120
Sodium	2000	2254		ug/L		113	80 - 120
Potassium	2000	2223		ug/L		111	80 - 120
Calcium	2000	2140		ug/L		107	80 - 120
Magnesium	2000	2204		ug/L		110	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 310-471282/2-A
Matrix: Water
Analysis Batch: 472178

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 471282

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			200	215.6		ug/L		108	80 - 120		
Thallium			100	108.7		ug/L		109	80 - 120		

Lab Sample ID: 310-318534-5 DU
Matrix: Water
Analysis Batch: 471990

Client Sample ID: MW-25A_25_10
Prep Type: Total/NA
Prep Batch: 471282

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Arsenic	<0.530			<0.530		ug/L				NC	20
Barium	203			208.9		ug/L				3	20
Beryllium	<0.330			<0.330		ug/L				NC	20
Cadmium	<0.100			<0.100		ug/L				NC	20
Chromium	<1.80			5.792		ug/L				NC	20
Cobalt	<0.170			<0.170		ug/L				NC	20
Copper	<3.20			<3.20		ug/L				NC	20
Lead	<0.330			<0.330		ug/L				NC	20
Nickel	2.47	J		3.671	J F5	ug/L				39	20
Selenium	<1.40			<1.40		ug/L				NC	20
Silver	<0.500			<0.500		ug/L				NC	20
Vanadium	<1.70			<1.70		ug/L				NC	20
Zinc	<13.0			<13.0		ug/L				NC	20
Sodium	9650			9999		ug/L				4	20
Potassium	576			574.9		ug/L				0.2	20
Calcium	169000			174100		ug/L				3	20
Magnesium	63700			64950		ug/L				2	20

Lab Sample ID: 310-318534-5 DU
Matrix: Water
Analysis Batch: 472178

Client Sample ID: MW-25A_25_10
Prep Type: Total/NA
Prep Batch: 471282

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Thallium	<0.570			<0.570		ug/L				NC	20

Lab Sample ID: MB 310-471283/1-A
Matrix: Water
Analysis Batch: 471824

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 471283

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.530		2.00	0.530	ug/L		10/27/25 08:30	10/29/25 17:59	1
Barium	<0.660		2.00	0.660	ug/L		10/27/25 08:30	10/29/25 17:59	1
Beryllium	<0.330		1.00	0.330	ug/L		10/27/25 08:30	10/29/25 17:59	1
Cadmium	<0.100		0.200	0.100	ug/L		10/27/25 08:30	10/29/25 17:59	1
Chromium	<1.80		5.00	1.80	ug/L		10/27/25 08:30	10/29/25 17:59	1
Copper	<3.20		5.00	3.20	ug/L		10/27/25 08:30	10/29/25 17:59	1
Lead	<0.330		0.500	0.330	ug/L		10/27/25 08:30	10/29/25 17:59	1
Nickel	<2.30		5.00	2.30	ug/L		10/27/25 08:30	10/29/25 17:59	1
Selenium	<1.40		5.00	1.40	ug/L		10/27/25 08:30	10/29/25 17:59	1
Silver	<0.500		1.00	0.500	ug/L		10/27/25 08:30	10/29/25 17:59	1
Vanadium	<1.70		5.00	1.70	ug/L		10/27/25 08:30	10/29/25 17:59	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 310-471283/1-A
Matrix: Water
Analysis Batch: 471824

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 471283

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	<13.0		20.0	13.0	ug/L		10/27/25 08:30	10/29/25 17:59	1
Tin	4.191	J	5.00	2.50	ug/L		10/27/25 08:30	10/29/25 17:59	1

Lab Sample ID: MB 310-471283/1-A
Matrix: Water
Analysis Batch: 472178

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 471283

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		10/27/25 08:30	10/31/25 16:37	1
Cobalt	<0.170		0.500	0.170	ug/L		10/27/25 08:30	10/31/25 16:37	1
Thallium	<0.570		1.00	0.570	ug/L		10/27/25 08:30	10/31/25 16:37	1
Zinc	<13.0		20.0	13.0	ug/L		10/27/25 08:30	10/31/25 16:37	1

Lab Sample ID: LCS 310-471283/2-A
Matrix: Water
Analysis Batch: 471824

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 471283

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	200	172.2		ug/L		86	80 - 120
Barium	100	89.48		ug/L		89	80 - 120
Beryllium	100	80.45		ug/L		80	80 - 120
Cadmium	100	84.32		ug/L		84	80 - 120
Chromium	100	85.00		ug/L		85	80 - 120
Copper	200	170.7		ug/L		85	80 - 120
Lead	200	175.5		ug/L		88	80 - 120
Nickel	200	164.7		ug/L		82	80 - 120
Selenium	400	338.4		ug/L		85	80 - 120
Silver	100	105.9		ug/L		106	80 - 120
Vanadium	100	82.69		ug/L		83	80 - 120
Zinc	200	168.1		ug/L		84	80 - 120
Tin	200	177.7		ug/L		89	80 - 120

Lab Sample ID: LCS 310-471283/2-A
Matrix: Water
Analysis Batch: 472178

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 471283

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	200	197.2		ug/L		99	80 - 120
Cobalt	100	92.36		ug/L		92	80 - 120
Thallium	100	106.8		ug/L		107	80 - 120
Zinc	200	181.0		ug/L		90	80 - 120

Lab Sample ID: 310-318534-14 MS
Matrix: Water
Analysis Batch: 471824

Client Sample ID: EB-1_25_10
Prep Type: Total/NA
Prep Batch: 471283

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	<0.530		200	182.8		ug/L		91	75 - 125
Barium	<0.660		100	94.58		ug/L		95	75 - 125
Beryllium	<0.330		100	86.63		ug/L		87	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 310-318534-14 MS
Matrix: Water
Analysis Batch: 471824

Client Sample ID: EB-1_25_10
Prep Type: Total/NA
Prep Batch: 471283

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	<0.100		100	89.62		ug/L		90	75 - 125
Chromium	<1.80		100	90.69		ug/L		91	75 - 125
Cobalt	<0.170	*-	100	85.13		ug/L		85	75 - 125
Copper	<3.20		200	181.0		ug/L		90	75 - 125
Lead	<0.330		200	184.9		ug/L		92	75 - 125
Nickel	<2.30		200	175.8		ug/L		88	75 - 125
Selenium	<1.40		400	359.1		ug/L		90	75 - 125
Silver	<0.500		100	110.8		ug/L		111	75 - 125
Vanadium	<1.70		100	89.88		ug/L		90	75 - 125
Zinc	<13.0		200	179.8		ug/L		90	75 - 125
Tin	<2.50		200	184.7		ug/L		92	75 - 125

Lab Sample ID: 310-318534-14 MS
Matrix: Water
Analysis Batch: 472178

Client Sample ID: EB-1_25_10
Prep Type: Total/NA
Prep Batch: 471283

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<1.00		200	206.1		ug/L		103	75 - 125
Cobalt	<0.170		100	96.71		ug/L		97	75 - 125
Thallium	<0.570		100	104.9		ug/L		105	75 - 125
Sodium	<650		2000	2125		ug/L		106	75 - 125
Potassium	<170		2000	1941		ug/L		97	75 - 125
Calcium	<190		2000	1880		ug/L		94	75 - 125
Magnesium	<150		2000	1884		ug/L		94	75 - 125

Lab Sample ID: 310-318534-14 MSD
Matrix: Water
Analysis Batch: 471824

Client Sample ID: EB-1_25_10
Prep Type: Total/NA
Prep Batch: 471283

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	<0.530		200	178.5		ug/L		89	75 - 125	2	20
Barium	<0.660		100	91.57		ug/L		92	75 - 125	3	20
Beryllium	<0.330		100	83.77		ug/L		84	75 - 125	3	20
Cadmium	<0.100		100	86.80		ug/L		87	75 - 125	3	20
Chromium	<1.80		100	89.15		ug/L		89	75 - 125	2	20
Cobalt	<0.170	*-	100	83.89		ug/L		84	75 - 125	1	20
Copper	<3.20		200	175.1		ug/L		88	75 - 125	3	20
Lead	<0.330		200	179.7		ug/L		90	75 - 125	3	20
Nickel	<2.30		200	171.1		ug/L		86	75 - 125	3	20
Selenium	<1.40		400	350.9		ug/L		88	75 - 125	2	20
Silver	<0.500		100	107.3		ug/L		107	75 - 125	3	20
Vanadium	<1.70		100	86.88		ug/L		87	75 - 125	3	20
Zinc	<13.0		200	178.9		ug/L		89	75 - 125	0	20
Tin	<2.50		200	179.7		ug/L		90	75 - 125	3	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 310-318534-14 MSD — **Client Sample ID: EB-1_25_10**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 472178 — **Prep Batch: 471283**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<1.00		200	201.3		ug/L		101	75 - 125	2	20
Cobalt	<0.170		100	94.32		ug/L		94	75 - 125	2	20
Thallium	<0.570		100	100.4		ug/L		100	75 - 125	4	20
Sodium	<650		2000	2061		ug/L		103	75 - 125	3	20
Potassium	<170		2000	1877		ug/L		94	75 - 125	3	20
Calcium	<190		2000	1818		ug/L		91	75 - 125	3	20
Magnesium	<150		2000	1821		ug/L		91	75 - 125	3	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-471735/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 471929 — **Prep Batch: 471735**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.110		0.200	0.110	ug/L		10/29/25 13:30	10/30/25 10:26	1

Lab Sample ID: LCS 310-471735/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 471929 — **Prep Batch: 471735**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.67	1.680		ug/L		101	80 - 120

Method: 4500 F C-2011 - Fluoride (Ion-selective Electrode)

Lab Sample ID: MB 310-471362/5 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 471362

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.0490		0.100	0.0490	mg/L			10/25/25 16:29	1

Lab Sample ID: LCS 310-471362/6 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 471362

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.00	1.991		mg/L		100	90 - 110

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 310-471200/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 471314 — **Prep Batch: 471200**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<3.50		10.0	3.50	ug/L		10/24/25 08:50	10/24/25 20:34	1

Method: 9012B - Cyanide, Total andor Amenable (Continued)

Lab Sample ID: LCS 310-471200/2-A
Matrix: Water
Analysis Batch: 471314

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 471200

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	200	193.7		ug/L		97	90 - 110

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 240-677777/1-A
Matrix: Water
Analysis Batch: 677814

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 677777

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<1410		3000	1410	ug/L		10/27/25 07:26	10/27/25 09:23	1

Lab Sample ID: LCS 240-677777/2-A
Matrix: Water
Analysis Batch: 677814

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677777

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	7730	7067		ug/L		91	70 - 120

Lab Sample ID: MB 240-678036/1-A
Matrix: Water
Analysis Batch: 678118

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 678036

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<1410		3000	1410	ug/L		10/28/25 09:19	10/28/25 14:07	1

Lab Sample ID: LCS 240-678036/2-A
Matrix: Water
Analysis Batch: 678118

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 678036

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	6530	5200		ug/L		80	70 - 120

Method: D516-16 - Sulfate

Lab Sample ID: MB 310-471308/16
Matrix: Water
Analysis Batch: 471308

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<1.80		5.00	1.80	mg/L			10/24/25 14:33	1

Lab Sample ID: MB 310-471308/46
Matrix: Water
Analysis Batch: 471308

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<1.80		5.00	1.80	mg/L			10/24/25 14:45	1

Method: D516-16 - Sulfate (Continued)

Lab Sample ID: LCS 310-471308/17
Matrix: Water
Analysis Batch: 471308

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	10.0	10.26		mg/L		103	85 - 115

Lab Sample ID: LCS 310-471308/47
Matrix: Water
Analysis Batch: 471308

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	10.0	9.370		mg/L		94	85 - 115

Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: MB 310-470980/1
Matrix: Water
Analysis Batch: 470980

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<3.50		5.00	3.50	mg/L			10/22/25 13:18	1

Lab Sample ID: LCS 310-470980/2
Matrix: Water
Analysis Batch: 470980

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	109.0		mg/L		109	82 - 117

Lab Sample ID: 310-318534-7 DU
Matrix: Water
Analysis Batch: 470980

Client Sample ID: MW-33A_25_10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	62.0		63.00		mg/L		2	35

Lab Sample ID: MB 310-471101/1
Matrix: Water
Analysis Batch: 471101

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<3.50		5.00	3.50	mg/L			10/23/25 10:58	1

Lab Sample ID: LCS 310-471101/2
Matrix: Water
Analysis Batch: 471101

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	95.00		mg/L		95	82 - 117

Method: I-3765-85 - Residue, Non-filterable (TSS) (Continued)

Lab Sample ID: MB 310-471171/1
Matrix: Water
Analysis Batch: 471171

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<3.50		5.00	3.50	mg/L			10/24/25 06:30	1

Lab Sample ID: LCS 310-471171/2
Matrix: Water
Analysis Batch: 471171

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			100	98.00		mg/L		98	82 - 117		

Lab Sample ID: MB 310-471260/1
Matrix: Water
Analysis Batch: 471260

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<3.50		5.00	3.50	mg/L			10/24/25 12:31	1

Lab Sample ID: LCS 310-471260/2
Matrix: Water
Analysis Batch: 471260

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			100	96.00		mg/L		96	82 - 117		

Method: SM 2320B - Alkalinity

Lab Sample ID: LCS 310-471526/2
Matrix: Water
Analysis Batch: 471526

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Alkalinity			1000	942.8		mg/L		94	85 - 115		

Lab Sample ID: LCS 310-471526/25
Matrix: Water
Analysis Batch: 471526

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Alkalinity			1000	955.5		mg/L		96	85 - 115		

Lab Sample ID: 310-318534-4 DU
Matrix: Water
Analysis Batch: 471526

Client Sample ID: MW-19R_25_10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Alkalinity	298			290.1		mg/L				3	13
Bicarbonate Alkalinity as CaCO3	298			290.1		mg/L				3	
Carbonate Alkalinity as CaCO3	<2.50			<2.50		mg/L				NC	
Hydroxide Alkalinity as CaCO3	<2.50			<2.50		mg/L				NC	
Phenolphthalein Alkalinity as CaCO3 to pH 8.3	<2.50			<2.50		mg/L				NC	

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 310-471117/1
Matrix: Water
Analysis Batch: 471117

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<36.0		50.0	36.0	mg/L			10/23/25 13:12	1

Lab Sample ID: LCS 310-471117/2
Matrix: Water
Analysis Batch: 471117

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	938.0		mg/L		94	89 - 110		

Lab Sample ID: 310-318534-1 DU
Matrix: Water
Analysis Batch: 471117

Client Sample ID: MW_1_25_10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	612			600.0		mg/L				2	13

Lab Sample ID: MB 310-471130/1
Matrix: Water
Analysis Batch: 471130

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<36.0		50.0	36.0	mg/L			10/23/25 14:36	1

Lab Sample ID: LCS 310-471130/2
Matrix: Water
Analysis Batch: 471130

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	952.0		mg/L		95	89 - 110		

Lab Sample ID: MB 310-471269/1
Matrix: Water
Analysis Batch: 471269

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<36.0		50.0	36.0	mg/L			10/24/25 12:46	1

Lab Sample ID: LCS 310-471269/2
Matrix: Water
Analysis Batch: 471269

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	958.0		mg/L		96	89 - 110		

Lab Sample ID: 310-318534-11 DU
Matrix: Water
Analysis Batch: 471269

Client Sample ID: MW-40A_25_10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	724			718.0		mg/L				0.8	13

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 310-471289/1
Matrix: Water
Analysis Batch: 471289

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<36.0		50.0	36.0	mg/L			10/24/25 14:09	1

Lab Sample ID: LCS 310-471289/2
Matrix: Water
Analysis Batch: 471289

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	962.0		mg/L		96	89 - 110

Lab Sample ID: 310-318534-10 DU
Matrix: Water
Analysis Batch: 471289

Client Sample ID: MW-38A_25_10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	438		434.0		mg/L		0.9	13

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 310-471345/35
Matrix: Water
Analysis Batch: 471345

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.40		2.00	1.40	mg/L			10/25/25 10:52	1

Lab Sample ID: MB 310-471345/6
Matrix: Water
Analysis Batch: 471345

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.40		2.00	1.40	mg/L			10/25/25 10:40	1

Lab Sample ID: LCS 310-471345/36
Matrix: Water
Analysis Batch: 471345

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	9.289		mg/L		93	90 - 110

Lab Sample ID: LCS 310-471345/4
Matrix: Water
Analysis Batch: 471345

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	9.240		mg/L		92	90 - 110

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 310-470893/1
Matrix: Water
Analysis Batch: 470893

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	<3.00		3.00	3.00	mg/L			10/22/25 06:13	1

Lab Sample ID: LCS 310-470893/2
Matrix: Water
Analysis Batch: 470893

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Biochemical Oxygen Demand	198	199.8		mg/L		101	85 - 115

Lab Sample ID: 310-318534-13 DU
Matrix: Water
Analysis Batch: 470893

Client Sample ID: MW-42A_25_10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Biochemical Oxygen Demand	<3.00		<3.00		mg/L		NC	30

Lab Sample ID: USB 310-470902/1
Matrix: Water
Analysis Batch: 470902

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	<3.00		3.00	3.00	mg/L			10/22/25 08:08	1

Lab Sample ID: LCS 310-470902/2
Matrix: Water
Analysis Batch: 470902

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Biochemical Oxygen Demand	198	213.2		mg/L		108	85 - 115

Method: SM 5220D - COD

Lab Sample ID: MB 310-470929/60
Matrix: Water
Analysis Batch: 470929

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	<4.60		5.00	4.60	mg/L			10/22/25 09:22	1

Lab Sample ID: LCS 310-470929/63
Matrix: Water
Analysis Batch: 470929

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	62.7	63.49		mg/L		101	85 - 115

Method: SM 5220D - COD (Continued)

Lab Sample ID: MB 310-471918/5
Matrix: Water
Analysis Batch: 471918

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	<4.60		5.00	4.60	mg/L			10/30/25 13:52	1

Lab Sample ID: LCS 310-471918/3
Matrix: Water
Analysis Batch: 471918

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chemical Oxygen Demand			62.7	57.50		mg/L		92	85 - 115		

QC Association Summary

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318534-1
SDG: 25W024.00

GC/MS VOA

Analysis Batch: 471023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-1	MW_1_25_10	Total/NA	Water	8260D	
310-318534-2	MW-3_25_10	Total/NA	Water	8260D	
310-318534-3	MW-4B_25_10	Total/NA	Water	8260D	
310-318534-4	MW-19R_25_10	Total/NA	Water	8260D	
310-318534-5	MW-25A_25_10	Total/NA	Water	8260D	
310-318534-6	MW-31A_25_10	Total/NA	Water	8260D	
310-318534-7	MW-33A_25_10	Total/NA	Water	8260D	
310-318534-8	MW-34A_25_10	Total/NA	Water	8260D	
310-318534-10	MW-38A_25_10	Total/NA	Water	8260D	
310-318534-11	MW-40A_25_10	Total/NA	Water	8260D	
310-318534-12	MW-41A_25_10	Total/NA	Water	8260D	
310-318534-13	MW-42A_25_10	Total/NA	Water	8260D	
310-318534-15	FD-2_25_10	Total/NA	Water	8260D	
MB 310-471023/5	Method Blank	Total/NA	Water	8260D	
LCS 310-471023/6	Lab Control Sample	Total/NA	Water	8260D	
310-318534-1 MS	MW_1_25_10	Total/NA	Water	8260D	
310-318534-1 MSD	MW_1_25_10	Total/NA	Water	8260D	

Analysis Batch: 471134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-1	MW_1_25_10	Total/NA	Water	8260D	
310-318534-2	MW-3_25_10	Total/NA	Water	8260D	
310-318534-3	MW-4B_25_10	Total/NA	Water	8260D	
310-318534-4	MW-19R_25_10	Total/NA	Water	8260D	
310-318534-5	MW-25A_25_10	Total/NA	Water	8260D	
310-318534-6	MW-31A_25_10	Total/NA	Water	8260D	
310-318534-7	MW-33A_25_10	Total/NA	Water	8260D	
310-318534-8	MW-34A_25_10	Total/NA	Water	8260D	
310-318534-9	MW-37A_25_10	Total/NA	Water	8260D	
310-318534-10	MW-38A_25_10	Total/NA	Water	8260D	
310-318534-11	MW-40A_25_10	Total/NA	Water	8260D	
310-318534-12	MW-41A_25_10	Total/NA	Water	8260D	
310-318534-13	MW-42A_25_10	Total/NA	Water	8260D	
310-318534-14	EB-1_25_10	Total/NA	Water	8260D	
310-318534-15	FD-2_25_10	Total/NA	Water	8260D	
MB 310-471134/5	Method Blank	Total/NA	Water	8260D	
LCS 310-471134/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-471134/7	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 471853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-9	MW-37A_25_10	Total/NA	Water	8260D	
310-318534-14	EB-1_25_10	Total/NA	Water	8260D	
MB 310-471853/5	Method Blank	Total/NA	Water	8260D	
LCS 310-471853/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-471853/7	Lab Control Sample	Total/NA	Water	8260D	
310-318534-9 MS	MW-37A_25_10	Total/NA	Water	8260D	
310-318534-9 MSD	MW-37A_25_10	Total/NA	Water	8260D	

QC Association Summary

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318534-1
SDG: 25W024.00

GC/MS Semi VOA

Prep Batch: 470953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-14	EB-1_25_10	Total/NA	Water	3510C	
MB 310-470953/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-470953/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-470953/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 471377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-14	EB-1_25_10	Total/NA	Water	8270E	470953
MB 310-470953/1-A	Method Blank	Total/NA	Water	8270E	470953
LCS 310-470953/2-A	Lab Control Sample	Total/NA	Water	8270E	470953
LCSD 310-470953/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	470953

Analysis Batch: 471537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-14	EB-1_25_10	Total/NA	Water	8270E	470953
MB 310-470953/1-A	Method Blank	Total/NA	Water	8270E	470953
LCS 310-470953/2-A	Lab Control Sample	Total/NA	Water	8270E	470953
LCSD 310-470953/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	470953

Analysis Batch: 471665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-14	EB-1_25_10	Total/NA	Water	8270E	470953

GC Semi VOA

Analysis Batch: 470974

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-14	EB-1_25_10	Total/NA	Water	8015C	
MB 310-470974/4	Method Blank	Total/NA	Water	8015C	
LCS 310-470974/5	Lab Control Sample	Total/NA	Water	8015C	

Prep Batch: 471080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-1	MW_1_25_10	Total/NA	Water	3511	
310-318534-4	MW-19R_25_10	Total/NA	Water	3511	
310-318534-6	MW-31A_25_10	Total/NA	Water	3511	
310-318534-9	MW-37A_25_10	Total/NA	Water	3511	
310-318534-14	EB-1_25_10	Total/NA	Water	3511	
MB 310-471080/1-A	Method Blank	Total/NA	Water	3511	
LCS 310-471080/27-A	Lab Control Sample	Total/NA	Water	3511	
LCS 310-471080/2-A	Lab Control Sample	Total/NA	Water	3511	

Analysis Batch: 471383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-471080/1-A	Method Blank	Total/NA	Water	8082A	471080

Analysis Batch: 471384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-471080/1-A	Method Blank	Total/NA	Water	8081B	471080
LCS 310-471080/2-A	Lab Control Sample	Total/NA	Water	8081B	471080

GC Semi VOA

Analysis Batch: 471500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 310-471080/27-A	Lab Control Sample	Total/NA	Water	8082A	471080

Analysis Batch: 471501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-1	MW_1_25_10	Total/NA	Water	8081B	471080
310-318534-4	MW-19R_25_10	Total/NA	Water	8081B	471080
310-318534-6	MW-31A_25_10	Total/NA	Water	8081B	471080
310-318534-9	MW-37A_25_10	Total/NA	Water	8081B	471080

Analysis Batch: 472343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-14	EB-1_25_10	Total/NA	Water	8081B	471080

Analysis Batch: 472344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-14	EB-1_25_10	Total/NA	Water	8082A	471080

Prep Batch: 719980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-14	EB-1_25_10	Total/NA	Water	8151A	
MB 410-719980/1-A	Method Blank	Total/NA	Water	8151A	
LCS 410-719980/2-A	Lab Control Sample	Total/NA	Water	8151A	

Analysis Batch: 719993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-14	EB-1_25_10	Total/NA	Water	8151A	719980
MB 410-719980/1-A	Method Blank	Total/NA	Water	8151A	719980
LCS 410-719980/2-A	Lab Control Sample	Total/NA	Water	8151A	719980

Metals

Prep Batch: 471282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-1	MW_1_25_10	Total/NA	Water	3005A	
310-318534-2	MW-3_25_10	Total/NA	Water	3005A	
310-318534-3	MW-4B_25_10	Total/NA	Water	3005A	
310-318534-4	MW-19R_25_10	Total/NA	Water	3005A	
310-318534-5	MW-25A_25_10	Total/NA	Water	3005A	
310-318534-6	MW-31A_25_10	Total/NA	Water	3005A	
310-318534-7	MW-33A_25_10	Total/NA	Water	3005A	
310-318534-8	MW-34A_25_10	Total/NA	Water	3005A	
310-318534-9	MW-37A_25_10	Total/NA	Water	3005A	
310-318534-10	MW-38A_25_10	Total/NA	Water	3005A	
310-318534-11	MW-40A_25_10	Total/NA	Water	3005A	
310-318534-12	MW-41A_25_10	Total/NA	Water	3005A	
310-318534-13	MW-42A_25_10	Total/NA	Water	3005A	
MB 310-471282/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-471282/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-318534-5 DU	MW-25A_25_10	Total/NA	Water	3005A	

Metals

Prep Batch: 471283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-14	EB-1_25_10	Total/NA	Water	3005A	
310-318534-15	FD-2_25_10	Total/NA	Water	3005A	
MB 310-471283/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-471283/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-318534-14 MS	EB-1_25_10	Total/NA	Water	3005A	
310-318534-14 MSD	EB-1_25_10	Total/NA	Water	3005A	

Prep Batch: 471735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-14	EB-1_25_10	Total/NA	Water	7470A	
MB 310-471735/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-471735/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 471824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-14	EB-1_25_10	Total/NA	Water	6020B	471283
310-318534-15	FD-2_25_10	Total/NA	Water	6020B	471283
MB 310-471283/1-A	Method Blank	Total/NA	Water	6020B	471283
LCS 310-471283/2-A	Lab Control Sample	Total/NA	Water	6020B	471283
310-318534-14 MS	EB-1_25_10	Total/NA	Water	6020B	471283
310-318534-14 MSD	EB-1_25_10	Total/NA	Water	6020B	471283

Analysis Batch: 471929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-14	EB-1_25_10	Total/NA	Water	7470A	471735
MB 310-471735/1-A	Method Blank	Total/NA	Water	7470A	471735
LCS 310-471735/2-A	Lab Control Sample	Total/NA	Water	7470A	471735

Analysis Batch: 471990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-1	MW_1_25_10	Total/NA	Water	6020B	471282
310-318534-2	MW-3_25_10	Total/NA	Water	6020B	471282
310-318534-3	MW-4B_25_10	Total/NA	Water	6020B	471282
310-318534-4	MW-19R_25_10	Total/NA	Water	6020B	471282
310-318534-5	MW-25A_25_10	Total/NA	Water	6020B	471282
310-318534-6	MW-31A_25_10	Total/NA	Water	6020B	471282
310-318534-7	MW-33A_25_10	Total/NA	Water	6020B	471282
310-318534-8	MW-34A_25_10	Total/NA	Water	6020B	471282
310-318534-9	MW-37A_25_10	Total/NA	Water	6020B	471282
310-318534-10	MW-38A_25_10	Total/NA	Water	6020B	471282
310-318534-11	MW-40A_25_10	Total/NA	Water	6020B	471282
310-318534-12	MW-41A_25_10	Total/NA	Water	6020B	471282
310-318534-13	MW-42A_25_10	Total/NA	Water	6020B	471282
MB 310-471282/1-A	Method Blank	Total/NA	Water	6020B	471282
LCS 310-471282/2-A	Lab Control Sample	Total/NA	Water	6020B	471282
310-318534-5 DU	MW-25A_25_10	Total/NA	Water	6020B	471282

Analysis Batch: 472178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-1	MW_1_25_10	Total/NA	Water	6020B	471282
310-318534-2	MW-3_25_10	Total/NA	Water	6020B	471282

Metals (Continued)

Analysis Batch: 472178 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-3	MW-4B_25_10	Total/NA	Water	6020B	471282
310-318534-4	MW-19R_25_10	Total/NA	Water	6020B	471282
310-318534-5	MW-25A_25_10	Total/NA	Water	6020B	471282
310-318534-6	MW-31A_25_10	Total/NA	Water	6020B	471282
310-318534-7	MW-33A_25_10	Total/NA	Water	6020B	471282
310-318534-8	MW-34A_25_10	Total/NA	Water	6020B	471282
310-318534-9	MW-37A_25_10	Total/NA	Water	6020B	471282
310-318534-10	MW-38A_25_10	Total/NA	Water	6020B	471282
310-318534-11	MW-40A_25_10	Total/NA	Water	6020B	471282
310-318534-12	MW-41A_25_10	Total/NA	Water	6020B	471282
310-318534-13	MW-42A_25_10	Total/NA	Water	6020B	471282
310-318534-14	EB-1_25_10	Total/NA	Water	6020B	471283
310-318534-15	FD-2_25_10	Total/NA	Water	6020B	471283
MB 310-471282/1-A	Method Blank	Total/NA	Water	6020B	471282
MB 310-471283/1-A	Method Blank	Total/NA	Water	6020B	471283
LCS 310-471282/2-A	Lab Control Sample	Total/NA	Water	6020B	471282
LCS 310-471283/2-A	Lab Control Sample	Total/NA	Water	6020B	471283
310-318534-14 MS	EB-1_25_10	Total/NA	Water	6020B	471283
310-318534-14 MSD	EB-1_25_10	Total/NA	Water	6020B	471283
310-318534-5 DU	MW-25A_25_10	Total/NA	Water	6020B	471282

General Chemistry

Analysis Batch: 470893

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-1	MW_1_25_10	Total/NA	Water	SM 5210B	
310-318534-2	MW-3_25_10	Total/NA	Water	SM 5210B	
310-318534-3	MW-4B_25_10	Total/NA	Water	SM 5210B	
310-318534-4	MW-19R_25_10	Total/NA	Water	SM 5210B	
310-318534-5	MW-25A_25_10	Total/NA	Water	SM 5210B	
310-318534-7	MW-33A_25_10	Total/NA	Water	SM 5210B	
310-318534-8	MW-34A_25_10	Total/NA	Water	SM 5210B	
310-318534-9	MW-37A_25_10	Total/NA	Water	SM 5210B	
310-318534-10	MW-38A_25_10	Total/NA	Water	SM 5210B	
310-318534-11	MW-40A_25_10	Total/NA	Water	SM 5210B	
310-318534-12	MW-41A_25_10	Total/NA	Water	SM 5210B	
310-318534-13	MW-42A_25_10	Total/NA	Water	SM 5210B	
USB 310-470893/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 310-470893/2	Lab Control Sample	Total/NA	Water	SM 5210B	
310-318534-13 DU	MW-42A_25_10	Total/NA	Water	SM 5210B	

Analysis Batch: 470902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-6	MW-31A_25_10	Total/NA	Water	SM 5210B	
USB 310-470902/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 310-470902/2	Lab Control Sample	Total/NA	Water	SM 5210B	

Analysis Batch: 470929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-2	MW-3_25_10	Total/NA	Water	SM 5220D	
310-318534-3	MW-4B_25_10	Total/NA	Water	SM 5220D	

General Chemistry (Continued)

Analysis Batch: 470929 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-4	MW-19R_25_10	Total/NA	Water	SM 5220D	
310-318534-5	MW-25A_25_10	Total/NA	Water	SM 5220D	
310-318534-6	MW-31A_25_10	Total/NA	Water	SM 5220D	
310-318534-7	MW-33A_25_10	Total/NA	Water	SM 5220D	
310-318534-8	MW-34A_25_10	Total/NA	Water	SM 5220D	
310-318534-9	MW-37A_25_10	Total/NA	Water	SM 5220D	
310-318534-10	MW-38A_25_10	Total/NA	Water	SM 5220D	
310-318534-11	MW-40A_25_10	Total/NA	Water	SM 5220D	
310-318534-12	MW-41A_25_10	Total/NA	Water	SM 5220D	
310-318534-13	MW-42A_25_10	Total/NA	Water	SM 5220D	
MB 310-470929/60	Method Blank	Total/NA	Water	SM 5220D	
LCS 310-470929/63	Lab Control Sample	Total/NA	Water	SM 5220D	

Analysis Batch: 470980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-1	MW_1_25_10	Total/NA	Water	I-3765-85	
310-318534-3	MW-4B_25_10	Total/NA	Water	I-3765-85	
310-318534-5	MW-25A_25_10	Total/NA	Water	I-3765-85	
310-318534-7	MW-33A_25_10	Total/NA	Water	I-3765-85	
310-318534-9	MW-37A_25_10	Total/NA	Water	I-3765-85	
MB 310-470980/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-470980/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-318534-7 DU	MW-33A_25_10	Total/NA	Water	I-3765-85	

Analysis Batch: 471101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-6	MW-31A_25_10	Total/NA	Water	I-3765-85	
310-318534-8	MW-34A_25_10	Total/NA	Water	I-3765-85	
310-318534-13	MW-42A_25_10	Total/NA	Water	I-3765-85	
MB 310-471101/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-471101/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Analysis Batch: 471117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-1	MW_1_25_10	Total/NA	Water	SM 2540C	
310-318534-3	MW-4B_25_10	Total/NA	Water	SM 2540C	
310-318534-5	MW-25A_25_10	Total/NA	Water	SM 2540C	
310-318534-7	MW-33A_25_10	Total/NA	Water	SM 2540C	
310-318534-9	MW-37A_25_10	Total/NA	Water	SM 2540C	
MB 310-471117/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-471117/2	Lab Control Sample	Total/NA	Water	SM 2540C	
310-318534-1 DU	MW_1_25_10	Total/NA	Water	SM 2540C	

Analysis Batch: 471130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-2	MW-3_25_10	Total/NA	Water	SM 2540C	
310-318534-4	MW-19R_25_10	Total/NA	Water	SM 2540C	
310-318534-6	MW-31A_25_10	Total/NA	Water	SM 2540C	
310-318534-8	MW-34A_25_10	Total/NA	Water	SM 2540C	
MB 310-471130/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-471130/2	Lab Control Sample	Total/NA	Water	SM 2540C	

General Chemistry

Analysis Batch: 471171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-4	MW-19R_25_10	Total/NA	Water	I-3765-85	
310-318534-12	MW-41A_25_10	Total/NA	Water	I-3765-85	
310-318534-14	EB-1_25_10	Total/NA	Water	I-3765-85	
310-318534-15	FD-2_25_10	Total/NA	Water	I-3765-85	
MB 310-471171/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-471171/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Prep Batch: 471200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-14	EB-1_25_10	Total/NA	Water	9012B	
MB 310-471200/1-A	Method Blank	Total/NA	Water	9012B	
LCS 310-471200/2-A	Lab Control Sample	Total/NA	Water	9012B	

Analysis Batch: 471260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-2	MW-3_25_10	Total/NA	Water	I-3765-85	
310-318534-10	MW-38A_25_10	Total/NA	Water	I-3765-85	
310-318534-11	MW-40A_25_10	Total/NA	Water	I-3765-85	
MB 310-471260/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-471260/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Analysis Batch: 471269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-11	MW-40A_25_10	Total/NA	Water	SM 2540C	
310-318534-12	MW-41A_25_10	Total/NA	Water	SM 2540C	
310-318534-13	MW-42A_25_10	Total/NA	Water	SM 2540C	
MB 310-471269/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-471269/2	Lab Control Sample	Total/NA	Water	SM 2540C	
310-318534-11 DU	MW-40A_25_10	Total/NA	Water	SM 2540C	

Analysis Batch: 471289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-10	MW-38A_25_10	Total/NA	Water	SM 2540C	
MB 310-471289/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-471289/2	Lab Control Sample	Total/NA	Water	SM 2540C	
310-318534-10 DU	MW-38A_25_10	Total/NA	Water	SM 2540C	

Analysis Batch: 471308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-1	MW_1_25_10	Total/NA	Water	D516-16	
310-318534-2	MW-3_25_10	Total/NA	Water	D516-16	
310-318534-3	MW-4B_25_10	Total/NA	Water	D516-16	
310-318534-4	MW-19R_25_10	Total/NA	Water	D516-16	
310-318534-5	MW-25A_25_10	Total/NA	Water	D516-16	
310-318534-6	MW-31A_25_10	Total/NA	Water	D516-16	
310-318534-7	MW-33A_25_10	Total/NA	Water	D516-16	
310-318534-8	MW-34A_25_10	Total/NA	Water	D516-16	
310-318534-9	MW-37A_25_10	Total/NA	Water	D516-16	
310-318534-10	MW-38A_25_10	Total/NA	Water	D516-16	
310-318534-11	MW-40A_25_10	Total/NA	Water	D516-16	
310-318534-12	MW-41A_25_10	Total/NA	Water	D516-16	

General Chemistry (Continued)

Analysis Batch: 471308 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-13	MW-42A_25_10	Total/NA	Water	D516-16	
MB 310-471308/16	Method Blank	Total/NA	Water	D516-16	
MB 310-471308/46	Method Blank	Total/NA	Water	D516-16	
LCS 310-471308/17	Lab Control Sample	Total/NA	Water	D516-16	
LCS 310-471308/47	Lab Control Sample	Total/NA	Water	D516-16	

Analysis Batch: 471314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-14	EB-1_25_10	Total/NA	Water	9012B	471200
MB 310-471200/1-A	Method Blank	Total/NA	Water	9012B	471200
LCS 310-471200/2-A	Lab Control Sample	Total/NA	Water	9012B	471200

Analysis Batch: 471345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-1	MW_1_25_10	Total/NA	Water	SM 4500 Cl- E	
310-318534-2	MW-3_25_10	Total/NA	Water	SM 4500 Cl- E	
310-318534-3	MW-4B_25_10	Total/NA	Water	SM 4500 Cl- E	
310-318534-4	MW-19R_25_10	Total/NA	Water	SM 4500 Cl- E	
310-318534-5	MW-25A_25_10	Total/NA	Water	SM 4500 Cl- E	
310-318534-6	MW-31A_25_10	Total/NA	Water	SM 4500 Cl- E	
310-318534-7	MW-33A_25_10	Total/NA	Water	SM 4500 Cl- E	
310-318534-8	MW-34A_25_10	Total/NA	Water	SM 4500 Cl- E	
310-318534-9	MW-37A_25_10	Total/NA	Water	SM 4500 Cl- E	
310-318534-10	MW-38A_25_10	Total/NA	Water	SM 4500 Cl- E	
310-318534-11	MW-40A_25_10	Total/NA	Water	SM 4500 Cl- E	
310-318534-12	MW-41A_25_10	Total/NA	Water	SM 4500 Cl- E	
310-318534-13	MW-42A_25_10	Total/NA	Water	SM 4500 Cl- E	
MB 310-471345/35	Method Blank	Total/NA	Water	SM 4500 Cl- E	
MB 310-471345/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 310-471345/36	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
LCS 310-471345/4	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 471362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-1	MW_1_25_10	Total/NA	Water	4500 F C-2011	
310-318534-2	MW-3_25_10	Total/NA	Water	4500 F C-2011	
310-318534-3	MW-4B_25_10	Total/NA	Water	4500 F C-2011	
310-318534-4	MW-19R_25_10	Total/NA	Water	4500 F C-2011	
310-318534-5	MW-25A_25_10	Total/NA	Water	4500 F C-2011	
310-318534-6	MW-31A_25_10	Total/NA	Water	4500 F C-2011	
310-318534-7	MW-33A_25_10	Total/NA	Water	4500 F C-2011	
310-318534-8	MW-34A_25_10	Total/NA	Water	4500 F C-2011	
310-318534-9	MW-37A_25_10	Total/NA	Water	4500 F C-2011	
310-318534-10	MW-38A_25_10	Total/NA	Water	4500 F C-2011	
310-318534-11	MW-40A_25_10	Total/NA	Water	4500 F C-2011	
310-318534-12	MW-41A_25_10	Total/NA	Water	4500 F C-2011	
310-318534-13	MW-42A_25_10	Total/NA	Water	4500 F C-2011	
MB 310-471362/5	Method Blank	Total/NA	Water	4500 F C-2011	
LCS 310-471362/6	Lab Control Sample	Total/NA	Water	4500 F C-2011	

General Chemistry

Analysis Batch: 471396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-1	MW_1_25_10	Total/NA	Water	SM 1030E	
310-318534-2	MW-3_25_10	Total/NA	Water	SM 1030E	
310-318534-3	MW-4B_25_10	Total/NA	Water	SM 1030E	
310-318534-4	MW-19R_25_10	Total/NA	Water	SM 1030E	
310-318534-5	MW-25A_25_10	Total/NA	Water	SM 1030E	
310-318534-6	MW-31A_25_10	Total/NA	Water	SM 1030E	
310-318534-7	MW-33A_25_10	Total/NA	Water	SM 1030E	
310-318534-8	MW-34A_25_10	Total/NA	Water	SM 1030E	
310-318534-9	MW-37A_25_10	Total/NA	Water	SM 1030E	
310-318534-10	MW-38A_25_10	Total/NA	Water	SM 1030E	
310-318534-11	MW-40A_25_10	Total/NA	Water	SM 1030E	
310-318534-12	MW-41A_25_10	Total/NA	Water	SM 1030E	
310-318534-13	MW-42A_25_10	Total/NA	Water	SM 1030E	

Analysis Batch: 471397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-1	MW_1_25_10	Total/NA	Water	353.2	
310-318534-2	MW-3_25_10	Total/NA	Water	353.2	
310-318534-3	MW-4B_25_10	Total/NA	Water	353.2	
310-318534-4	MW-19R_25_10	Total/NA	Water	353.2	
310-318534-5	MW-25A_25_10	Total/NA	Water	353.2	
310-318534-6	MW-31A_25_10	Total/NA	Water	353.2	
310-318534-7	MW-33A_25_10	Total/NA	Water	353.2	
310-318534-8	MW-34A_25_10	Total/NA	Water	353.2	
310-318534-9	MW-37A_25_10	Total/NA	Water	353.2	
310-318534-10	MW-38A_25_10	Total/NA	Water	353.2	
310-318534-11	MW-40A_25_10	Total/NA	Water	353.2	
310-318534-12	MW-41A_25_10	Total/NA	Water	353.2	
310-318534-13	MW-42A_25_10	Total/NA	Water	353.2	

Analysis Batch: 471526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-1	MW_1_25_10	Total/NA	Water	SM 2320B	
310-318534-2	MW-3_25_10	Total/NA	Water	SM 2320B	
310-318534-3	MW-4B_25_10	Total/NA	Water	SM 2320B	
310-318534-4	MW-19R_25_10	Total/NA	Water	SM 2320B	
310-318534-5	MW-25A_25_10	Total/NA	Water	SM 2320B	
310-318534-6	MW-31A_25_10	Total/NA	Water	SM 2320B	
310-318534-7	MW-33A_25_10	Total/NA	Water	SM 2320B	
310-318534-8	MW-34A_25_10	Total/NA	Water	SM 2320B	
310-318534-9	MW-37A_25_10	Total/NA	Water	SM 2320B	
310-318534-10	MW-38A_25_10	Total/NA	Water	SM 2320B	
310-318534-11	MW-40A_25_10	Total/NA	Water	SM 2320B	
310-318534-12	MW-41A_25_10	Total/NA	Water	SM 2320B	
310-318534-13	MW-42A_25_10	Total/NA	Water	SM 2320B	
LCS 310-471526/2	Lab Control Sample	Total/NA	Water	SM 2320B	
LCS 310-471526/25	Lab Control Sample	Total/NA	Water	SM 2320B	
310-318534-4 DU	MW-19R_25_10	Total/NA	Water	SM 2320B	

General Chemistry

Analysis Batch: 471918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-1	MW_1_25_10	Total/NA	Water	SM 5220D	
MB 310-471918/5	Method Blank	Total/NA	Water	SM 5220D	
LCS 310-471918/3	Lab Control Sample	Total/NA	Water	SM 5220D	

Prep Batch: 677777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-1	MW_1_25_10	Total/NA	Water	9030B	
310-318534-9	MW-37A_25_10	Total/NA	Water	9030B	
MB 240-677777/1-A	Method Blank	Total/NA	Water	9030B	
LCS 240-677777/2-A	Lab Control Sample	Total/NA	Water	9030B	

Analysis Batch: 677814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-1	MW_1_25_10	Total/NA	Water	9034	677777
310-318534-9	MW-37A_25_10	Total/NA	Water	9034	677777
MB 240-677777/1-A	Method Blank	Total/NA	Water	9034	677777
LCS 240-677777/2-A	Lab Control Sample	Total/NA	Water	9034	677777

Prep Batch: 678036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-4	MW-19R_25_10	Total/NA	Water	9030B	
310-318534-14	EB-1_25_10	Total/NA	Water	9030B	
MB 240-678036/1-A	Method Blank	Total/NA	Water	9030B	
LCS 240-678036/2-A	Lab Control Sample	Total/NA	Water	9030B	

Analysis Batch: 678118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318534-4	MW-19R_25_10	Total/NA	Water	9034	678036
310-318534-14	EB-1_25_10	Total/NA	Water	9034	678036
MB 240-678036/1-A	Method Blank	Total/NA	Water	9034	678036
LCS 240-678036/2-A	Lab Control Sample	Total/NA	Water	9034	678036

Lab Chronicle

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318534-1
SDG: 25W024.00

Client Sample ID: MW_1_25_10

Date Collected: 10/20/25 15:50
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471023	WSE8	EET CF	10/23/25 02:31
Total/NA	Analysis	8260D		1	471134	WSE8	EET CF	10/24/25 05:57
Total/NA	Prep	3511			471080	BW2O	EET CF	10/23/25 09:48
Total/NA	Analysis	8081B		1	471501	BW2O	EET CF	10/28/25 15:11
Total/NA	Prep	3005A			471282	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	471990	NFT2	EET CF	10/30/25 16:57
Total/NA	Prep	3005A			471282	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	472178	NFT2	EET CF	10/31/25 15:40
Total/NA	Analysis	353.2		1	471397	HE7K	EET CF	10/29/25 11:24
Total/NA	Analysis	4500 F C-2011		1	471362	T5AC	EET CF	10/25/25 17:10
Total/NA	Prep	9030B			677777	BLW	EET CLE	10/27/25 07:26
Total/NA	Analysis	9034		1	677814	BLW	EET CLE	10/27/25 09:23
Total/NA	Analysis	D516-16		1	471308	WZC8	EET CF	10/24/25 14:52
Total/NA	Analysis	I-3765-85		1	470980	DGU1	EET CF	10/22/25 13:18
Total/NA	Analysis	SM 1030E		1	471396	HE7K	EET CF	10/27/25 10:47
Total/NA	Analysis	SM 2320B		1	471526	HE7K	EET CF	10/27/25 13:16
Total/NA	Analysis	SM 2540C		1	471117	TGN5	EET CF	10/23/25 13:12
Total/NA	Analysis	SM 4500 Cl- E		1	471345	WZC8	EET CF	10/25/25 10:58
Total/NA	Analysis	SM 5210B		1	470893	W9YR	EET CF	10/22/25 07:48
Total/NA	Analysis	SM 5220D		5	471918	ENB7	EET CF	10/30/25 13:52

Client Sample ID: MW-3_25_10

Date Collected: 10/21/25 11:00
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471023	WSE8	EET CF	10/23/25 02:53
Total/NA	Analysis	8260D		1	471134	WSE8	EET CF	10/24/25 06:19
Total/NA	Prep	3005A			471282	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	471990	NFT2	EET CF	10/30/25 17:00
Total/NA	Prep	3005A			471282	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	472178	NFT2	EET CF	10/31/25 15:43
Total/NA	Analysis	353.2		1	471397	HE7K	EET CF	10/29/25 11:26
Total/NA	Analysis	4500 F C-2011		1	471362	T5AC	EET CF	10/25/25 17:13
Total/NA	Analysis	D516-16		1	471308	WZC8	EET CF	10/24/25 14:52
Total/NA	Analysis	I-3765-85		1	471260	DGU1	EET CF	10/24/25 12:31
Total/NA	Analysis	SM 1030E		1	471396	HE7K	EET CF	10/27/25 10:47
Total/NA	Analysis	SM 2320B		1	471526	HE7K	EET CF	10/27/25 13:29
Total/NA	Analysis	SM 2540C		1	471130	TGN5	EET CF	10/23/25 14:36
Total/NA	Analysis	SM 4500 Cl- E		1	471345	WZC8	EET CF	10/25/25 10:59
Total/NA	Analysis	SM 5210B		1	470893	W9YR	EET CF	10/22/25 07:52
Total/NA	Analysis	SM 5220D		5	470929	HE7K	EET CF	10/22/25 09:22

Lab Chronicle

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318534-1
SDG: 25W024.00

Client Sample ID: MW-4B_25_10

Date Collected: 10/20/25 15:50
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471023	WSE8	EET CF	10/23/25 03:15
Total/NA	Analysis	8260D		1	471134	WSE8	EET CF	10/24/25 06:42
Total/NA	Prep	3005A			471282	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	471990	NFT2	EET CF	10/30/25 17:02
Total/NA	Prep	3005A			471282	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	472178	NFT2	EET CF	10/31/25 15:46
Total/NA	Analysis	353.2		1	471397	HE7K	EET CF	10/28/25 13:22
Total/NA	Analysis	4500 F C-2011		1	471362	T5AC	EET CF	10/25/25 17:16
Total/NA	Analysis	D516-16		1	471308	WZC8	EET CF	10/24/25 14:54
Total/NA	Analysis	I-3765-85		1	470980	DGU1	EET CF	10/22/25 13:18
Total/NA	Analysis	SM 1030E		1	471396	HE7K	EET CF	10/27/25 10:47
Total/NA	Analysis	SM 2320B		1	471526	HE7K	EET CF	10/27/25 13:46
Total/NA	Analysis	SM 2540C		1	471117	TGN5	EET CF	10/23/25 13:12
Total/NA	Analysis	SM 4500 Cl- E		1	471345	WZC8	EET CF	10/25/25 11:20
Total/NA	Analysis	SM 5210B		1	470893	W9YR	EET CF	10/22/25 07:55
Total/NA	Analysis	SM 5220D		5	470929	HE7K	EET CF	10/22/25 09:22

Client Sample ID: MW-19R_25_10

Date Collected: 10/21/25 12:55
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471023	WSE8	EET CF	10/23/25 03:37
Total/NA	Analysis	8260D		1	471134	WSE8	EET CF	10/24/25 07:04
Total/NA	Prep	3511			471080	BW2O	EET CF	10/23/25 09:48
Total/NA	Analysis	8081B		1	471501	BW2O	EET CF	10/28/25 15:25
Total/NA	Prep	3005A			471282	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	471990	NFT2	EET CF	10/30/25 17:05
Total/NA	Prep	3005A			471282	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	472178	NFT2	EET CF	10/31/25 15:57
Total/NA	Analysis	353.2		1	471397	HE7K	EET CF	10/28/25 13:24
Total/NA	Analysis	4500 F C-2011		1	471362	T5AC	EET CF	10/25/25 17:19
Total/NA	Prep	9030B			678036	C5SV	EET CLE	10/28/25 12:38
Total/NA	Analysis	9034		1	678118	C5SV	EET CLE	10/28/25 14:07
Total/NA	Analysis	D516-16		1	471308	WZC8	EET CF	10/24/25 14:41
Total/NA	Analysis	I-3765-85		1	471171	DGU1	EET CF	10/24/25 06:30
Total/NA	Analysis	SM 1030E		1	471396	HE7K	EET CF	10/27/25 10:47
Total/NA	Analysis	SM 2320B		1	471526	HE7K	EET CF	10/27/25 17:18
Total/NA	Analysis	SM 2540C		1	471130	TGN5	EET CF	10/23/25 14:36
Total/NA	Analysis	SM 4500 Cl- E		1	471345	WZC8	EET CF	10/25/25 11:20
Total/NA	Analysis	SM 5210B		1	470893	W9YR	EET CF	10/22/25 07:59
Total/NA	Analysis	SM 5220D		5	470929	HE7K	EET CF	10/22/25 09:22

Lab Chronicle

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318534-1
SDG: 25W024.00

Client Sample ID: MW-25A_25_10

Date Collected: 10/20/25 16:55
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471023	WSE8	EET CF	10/23/25 03:59
Total/NA	Analysis	8260D		1	471134	WSE8	EET CF	10/24/25 07:27
Total/NA	Prep	3005A			471282	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	471990	NFT2	EET CF	10/30/25 17:08
Total/NA	Prep	3005A			471282	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	472178	NFT2	EET CF	10/31/25 16:00
Total/NA	Analysis	353.2		1	471397	HE7K	EET CF	10/28/25 13:25
Total/NA	Analysis	4500 F C-2011		1	471362	T5AC	EET CF	10/25/25 17:23
Total/NA	Analysis	D516-16		5	471308	WZC8	EET CF	10/24/25 14:43
Total/NA	Analysis	I-3765-85		1	470980	DGU1	EET CF	10/22/25 13:18
Total/NA	Analysis	SM 1030E		1	471396	HE7K	EET CF	10/27/25 10:47
Total/NA	Analysis	SM 2320B		1	471526	HE7K	EET CF	10/27/25 17:36
Total/NA	Analysis	SM 2540C		1	471117	TGN5	EET CF	10/23/25 13:12
Total/NA	Analysis	SM 4500 Cl- E		1	471345	WZC8	EET CF	10/25/25 11:21
Total/NA	Analysis	SM 5210B		1	470893	W9YR	EET CF	10/22/25 08:01
Total/NA	Analysis	SM 5220D		5	470929	HE7K	EET CF	10/22/25 09:22

Client Sample ID: MW-31A_25_10

Date Collected: 10/21/25 11:25
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471023	WSE8	EET CF	10/23/25 04:21
Total/NA	Analysis	8260D		1	471134	WSE8	EET CF	10/24/25 07:50
Total/NA	Prep	3511			471080	BW2O	EET CF	10/23/25 09:48
Total/NA	Analysis	8081B		1	471501	BW2O	EET CF	10/28/25 15:39
Total/NA	Prep	3005A			471282	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	471990	NFT2	EET CF	10/30/25 17:18
Total/NA	Prep	3005A			471282	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	472178	NFT2	EET CF	10/31/25 16:06
Total/NA	Analysis	353.2		1	471397	HE7K	EET CF	10/28/25 15:39
Total/NA	Analysis	4500 F C-2011		1	471362	T5AC	EET CF	10/25/25 17:26
Total/NA	Analysis	D516-16		5	471308	WZC8	EET CF	10/24/25 14:43
Total/NA	Analysis	I-3765-85		1	471101	DGU1	EET CF	10/23/25 10:58
Total/NA	Analysis	SM 1030E		1	471396	HE7K	EET CF	10/27/25 10:47
Total/NA	Analysis	SM 2320B		1	471526	HE7K	EET CF	10/27/25 17:48
Total/NA	Analysis	SM 2540C		1	471130	TGN5	EET CF	10/23/25 14:36
Total/NA	Analysis	SM 4500 Cl- E		10	471345	WZC8	EET CF	10/25/25 11:21
Total/NA	Analysis	SM 5210B		1	470902	W9YR	EET CF	10/22/25 08:30
Total/NA	Analysis	SM 5220D		5	470929	HE7K	EET CF	10/22/25 09:22

Lab Chronicle

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318534-1
SDG: 25W024.00

Client Sample ID: MW-33A_25_10

Date Collected: 10/20/25 13:15
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471023	WSE8	EET CF	10/23/25 04:43
Total/NA	Analysis	8260D		1	471134	WSE8	EET CF	10/24/25 08:12
Total/NA	Prep	3005A			471282	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	471990	NFT2	EET CF	10/30/25 17:20
Total/NA	Prep	3005A			471282	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	472178	NFT2	EET CF	10/31/25 16:09
Total/NA	Analysis	353.2		1	471397	HE7K	EET CF	10/28/25 13:29
Total/NA	Analysis	4500 F C-2011		1	471362	T5AC	EET CF	10/25/25 17:29
Total/NA	Analysis	D516-16		1	471308	WZC8	EET CF	10/24/25 14:54
Total/NA	Analysis	I-3765-85		1	470980	DGU1	EET CF	10/22/25 13:18
Total/NA	Analysis	SM 1030E		1	471396	HE7K	EET CF	10/27/25 10:47
Total/NA	Analysis	SM 2320B		1	471526	HE7K	EET CF	10/27/25 17:59
Total/NA	Analysis	SM 2540C		1	471117	TGN5	EET CF	10/23/25 13:12
Total/NA	Analysis	SM 4500 Cl- E		1	471345	WZC8	EET CF	10/25/25 11:01
Total/NA	Analysis	SM 5210B		1	470893	W9YR	EET CF	10/22/25 08:03
Total/NA	Analysis	SM 5220D		5	470929	HE7K	EET CF	10/22/25 09:22

Client Sample ID: MW-34A_25_10

Date Collected: 10/21/25 09:20
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471023	WSE8	EET CF	10/23/25 05:05
Total/NA	Analysis	8260D		1	471134	WSE8	EET CF	10/24/25 08:35
Total/NA	Prep	3005A			471282	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	471990	NFT2	EET CF	10/30/25 17:23
Total/NA	Prep	3005A			471282	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	472178	NFT2	EET CF	10/31/25 16:11
Total/NA	Analysis	353.2		1	471397	HE7K	EET CF	10/28/25 13:31
Total/NA	Analysis	4500 F C-2011		1	471362	T5AC	EET CF	10/25/25 17:38
Total/NA	Analysis	D516-16		1	471308	WZC8	EET CF	10/24/25 14:54
Total/NA	Analysis	I-3765-85		1	471101	DGU1	EET CF	10/23/25 10:58
Total/NA	Analysis	SM 1030E		1	471396	HE7K	EET CF	10/27/25 10:47
Total/NA	Analysis	SM 2320B		1	471526	HE7K	EET CF	10/27/25 18:19
Total/NA	Analysis	SM 2540C		1	471130	TGN5	EET CF	10/23/25 14:36
Total/NA	Analysis	SM 4500 Cl- E		1	471345	WZC8	EET CF	10/25/25 11:01
Total/NA	Analysis	SM 5210B		1	470893	W9YR	EET CF	10/22/25 08:06
Total/NA	Analysis	SM 5220D		5	470929	HE7K	EET CF	10/22/25 09:22

Lab Chronicle

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318534-1
SDG: 25W024.00

Client Sample ID: MW-37A_25_10

Date Collected: 10/20/25 14:30
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471853	WSE8	EET CF	10/31/25 01:41
Total/NA	Analysis	8260D		1	471134	WSE8	EET CF	10/24/25 08:57
Total/NA	Prep	3511			471080	BW2O	EET CF	10/23/25 09:48
Total/NA	Analysis	8081B		1	471501	BW2O	EET CF	10/28/25 15:53
Total/NA	Prep	3005A			471282	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	471990	NFT2	EET CF	10/30/25 17:26
Total/NA	Prep	3005A			471282	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	472178	NFT2	EET CF	10/31/25 16:14
Total/NA	Analysis	353.2		1	471397	HE7K	EET CF	10/28/25 13:33
Total/NA	Analysis	4500 F C-2011		1	471362	T5AC	EET CF	10/25/25 17:41
Total/NA	Prep	9030B			677777	BLW	EET CLE	10/27/25 07:26
Total/NA	Analysis	9034		1	677814	BLW	EET CLE	10/27/25 09:23
Total/NA	Analysis	D516-16		1	471308	WZC8	EET CF	10/24/25 14:55
Total/NA	Analysis	I-3765-85		1	470980	DGU1	EET CF	10/22/25 13:18
Total/NA	Analysis	SM 1030E		1	471396	HE7K	EET CF	10/27/25 10:47
Total/NA	Analysis	SM 2320B		1	471526	HE7K	EET CF	10/27/25 18:27
Total/NA	Analysis	SM 2540C		1	471117	TGN5	EET CF	10/23/25 13:12
Total/NA	Analysis	SM 4500 Cl- E		1	471345	WZC8	EET CF	10/25/25 11:01
Total/NA	Analysis	SM 5210B		1	470893	W9YR	EET CF	10/22/25 08:09
Total/NA	Analysis	SM 5220D		5	470929	HE7K	EET CF	10/22/25 09:22

Client Sample ID: MW-38A_25_10

Date Collected: 10/21/25 10:25
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471023	WSE8	EET CF	10/23/25 05:49
Total/NA	Analysis	8260D		1	471134	WSE8	EET CF	10/24/25 09:43
Total/NA	Prep	3005A			471282	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	471990	NFT2	EET CF	10/30/25 17:28
Total/NA	Prep	3005A			471282	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	472178	NFT2	EET CF	10/31/25 16:17
Total/NA	Analysis	353.2		1	471397	HE7K	EET CF	10/28/25 15:41
Total/NA	Analysis	4500 F C-2011		1	471362	T5AC	EET CF	10/25/25 17:44
Total/NA	Analysis	D516-16		1	471308	WZC8	EET CF	10/24/25 14:55
Total/NA	Analysis	I-3765-85		1	471260	DGU1	EET CF	10/24/25 12:31
Total/NA	Analysis	SM 1030E		1	471396	HE7K	EET CF	10/27/25 10:47
Total/NA	Analysis	SM 2320B		1	471526	HE7K	EET CF	10/27/25 18:38
Total/NA	Analysis	SM 2540C		1	471289	TGN5	EET CF	10/24/25 14:09
Total/NA	Analysis	SM 4500 Cl- E		1	471345	WZC8	EET CF	10/25/25 11:02
Total/NA	Analysis	SM 5210B		1	470893	W9YR	EET CF	10/22/25 08:12
Total/NA	Analysis	SM 5220D		5	470929	HE7K	EET CF	10/22/25 09:22

Lab Chronicle

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318534-1
SDG: 25W024.00

Client Sample ID: MW-40A_25_10

Date Collected: 10/21/25 15:15
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471023	WSE8	EET CF	10/23/25 06:11
Total/NA	Analysis	8260D		1	471134	WSE8	EET CF	10/24/25 10:05
Total/NA	Prep	3005A			471282	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	471990	NFT2	EET CF	10/30/25 17:31
Total/NA	Prep	3005A			471282	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	472178	NFT2	EET CF	10/31/25 16:20
Total/NA	Analysis	353.2		1	471397	HE7K	EET CF	10/29/25 11:27
Total/NA	Analysis	4500 F C-2011		1	471362	T5AC	EET CF	10/25/25 17:47
Total/NA	Analysis	D516-16		5	471308	WZC8	EET CF	10/24/25 14:44
Total/NA	Analysis	I-3765-85		1	471260	DGU1	EET CF	10/24/25 12:31
Total/NA	Analysis	SM 1030E		1	471396	HE7K	EET CF	10/27/25 10:47
Total/NA	Analysis	SM 2320B		1	471526	HE7K	EET CF	10/27/25 13:56
Total/NA	Analysis	SM 2540C		1	471269	TGN5	EET CF	10/24/25 12:46
Total/NA	Analysis	SM 4500 Cl- E		10	471345	WZC8	EET CF	10/25/25 11:21
Total/NA	Analysis	SM 5210B		1	470893	W9YR	EET CF	10/22/25 08:15
Total/NA	Analysis	SM 5220D		5	470929	HE7K	EET CF	10/22/25 09:22

Client Sample ID: MW-41A_25_10

Date Collected: 10/21/25 13:00
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471023	WSE8	EET CF	10/23/25 06:33
Total/NA	Analysis	8260D		1	471134	WSE8	EET CF	10/24/25 10:28
Total/NA	Prep	3005A			471282	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	471990	NFT2	EET CF	10/30/25 17:33
Total/NA	Prep	3005A			471282	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	472178	NFT2	EET CF	10/31/25 16:23
Total/NA	Analysis	353.2		1	471397	HE7K	EET CF	10/29/25 11:29
Total/NA	Analysis	4500 F C-2011		1	471362	T5AC	EET CF	10/25/25 17:50
Total/NA	Analysis	D516-16		1	471308	WZC8	EET CF	10/24/25 14:44
Total/NA	Analysis	I-3765-85		1	471171	DGU1	EET CF	10/24/25 06:30
Total/NA	Analysis	SM 1030E		1	471396	HE7K	EET CF	10/27/25 10:47
Total/NA	Analysis	SM 2320B		1	471526	HE7K	EET CF	10/27/25 14:07
Total/NA	Analysis	SM 2540C		1	471269	TGN5	EET CF	10/24/25 12:46
Total/NA	Analysis	SM 4500 Cl- E		1	471345	WZC8	EET CF	10/25/25 11:22
Total/NA	Analysis	SM 5210B		1	470893	W9YR	EET CF	10/22/25 08:19
Total/NA	Analysis	SM 5220D		5	470929	HE7K	EET CF	10/22/25 09:22

Lab Chronicle

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318534-1
SDG: 25W024.00

Client Sample ID: MW-42A_25_10

Date Collected: 10/21/25 14:40
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471023	WSE8	EET CF	10/23/25 06:54
Total/NA	Analysis	8260D		1	471134	WSE8	EET CF	10/24/25 10:51
Total/NA	Prep	3005A			471282	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	471990	NFT2	EET CF	10/30/25 17:36
Total/NA	Prep	3005A			471282	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	472178	NFT2	EET CF	10/31/25 16:31
Total/NA	Analysis	353.2		1	471397	HE7K	EET CF	10/29/25 11:35
Total/NA	Analysis	4500 F C-2011		1	471362	T5AC	EET CF	10/25/25 17:54
Total/NA	Analysis	D516-16		5	471308	WZC8	EET CF	10/24/25 14:44
Total/NA	Analysis	I-3765-85		1	471101	DGU1	EET CF	10/23/25 10:58
Total/NA	Analysis	SM 1030E		1	471396	HE7K	EET CF	10/27/25 10:47
Total/NA	Analysis	SM 2320B		1	471526	HE7K	EET CF	10/27/25 18:47
Total/NA	Analysis	SM 2540C		1	471269	TGN5	EET CF	10/24/25 12:46
Total/NA	Analysis	SM 4500 Cl- E		10	471345	WZC8	EET CF	10/25/25 10:50
Total/NA	Analysis	SM 5210B		1	470893	W9YR	EET CF	10/22/25 08:22
Total/NA	Analysis	SM 5220D		5	470929	HE7K	EET CF	10/22/25 09:22

Client Sample ID: EB-1_25_10

Date Collected: 10/21/25 11:15
Date Received: 10/21/25 18:00

Lab Sample ID: 310-318534-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471853	WSE8	EET CF	10/31/25 02:03
Total/NA	Analysis	8260D		1	471134	WSE8	EET CF	10/24/25 04:26
Total/NA	Prep	3510C			470953	J5BR	EET CF	10/22/25 10:36
Total/NA	Analysis	8270E		1	471377	V7YZ	EET CF	10/27/25 22:12
Total/NA	Prep	3510C			470953	J5BR	EET CF	10/22/25 10:36
Total/NA	Analysis	8270E		1	471537	V7YZ	EET CF	10/28/25 14:38
Total/NA	Prep	3510C			470953	J5BR	EET CF	10/22/25 10:36
Total/NA	Analysis	8270E		1	471665	V7YZ	EET CF	10/29/25 18:18
Total/NA	Analysis	8015C		1	470974	BW2O	EET CF	10/22/25 19:11
Total/NA	Prep	3511			471080	BW2O	EET CF	10/23/25 09:55
Total/NA	Analysis	8081B		1	472343	BW2O	EET CF	11/04/25 11:03
Total/NA	Prep	3511			471080	BW2O	EET CF	10/23/25 09:55
Total/NA	Analysis	8082A		1	472344	BW2O	EET CF	11/04/25 11:03
Total/NA	Prep	8151A			719980	UKL2	ELLE	10/26/25 20:35
Total/NA	Analysis	8151A		1	719993	UAMZ	ELLE	10/27/25 08:03
Total/NA	Prep	3005A			471283	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	471824	NFT2	EET CF	10/29/25 18:04
Total/NA	Prep	3005A			471283	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	472178	NFT2	EET CF	10/31/25 16:43
Total/NA	Prep	7470A			471735	RLT9	EET CF	10/29/25 13:30
Total/NA	Analysis	7470A		1	471929	RLT9	EET CF	10/30/25 11:04

Lab Chronicle

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318534-1
SDG: 25W024.00

Client Sample ID: EB-1_25_10

Lab Sample ID: 310-318534-14

Date Collected: 10/21/25 11:15
Date Received: 10/21/25 18:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	9012B			471200	ENB7	EET CF	10/24/25 08:50
Total/NA	Analysis	9012B		1	471314	ZJX4	EET CF	10/24/25 20:42
Total/NA	Prep	9030B			678036	C5SV	EET CLE	10/28/25 12:38
Total/NA	Analysis	9034		1	678118	C5SV	EET CLE	10/28/25 14:07
Total/NA	Analysis	I-3765-85		1	471171	DGU1	EET CF	10/24/25 06:30

Client Sample ID: FD-2_25_10

Lab Sample ID: 310-318534-15

Date Collected: 10/21/25 00:00
Date Received: 10/21/25 18:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471023	WSE8	EET CF	10/23/25 07:16
Total/NA	Analysis	8260D		1	471134	WSE8	EET CF	10/24/25 11:13
Total/NA	Prep	3005A			471283	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	471824	NFT2	EET CF	10/29/25 18:14
Total/NA	Prep	3005A			471283	RLT9	EET CF	10/27/25 08:30
Total/NA	Analysis	6020B		1	472178	NFT2	EET CF	10/31/25 16:52
Total/NA	Analysis	I-3765-85		1	471171	DGU1	EET CF	10/24/25 06:30

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318534-1
SDG: 25W024.00

Laboratory: Eurofins Cedar Falls

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260D		Water	1,2,4-Trichlorobenzene
8260D		Water	Allyl chloride
8260D		Water	Ethyl methacrylate
8260D		Water	m,p-Xylene
8260D		Water	o-Xylene
SM 1030E		Water	Anion/Cation Balance

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-26
Iowa	State	421	06-01-27
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	2250	09-30-26
New Jersey	NELAP	OH001	06-30-26
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	10-28-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-26
Texas	NELAP	T104704517	08-31-26
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-26
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-26
A2LA	Dept. of Energy	0001.01	11-30-26
A2LA	ISO/IEC 17025	0001.01	11-30-26
Alabama	State	43200	01-31-26
Alaska	State	PA00009	06-30-26
Alaska (UST)	State	17-027	12-30-26
Arizona	State	AZ0780	03-12-26
Arkansas DEQ	State	88-00660	08-09-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2792	01-31-26
Colorado	State	PA00009	06-30-26
Connecticut	State	PH-0746	06-30-27
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-26
Delaware (DW)	State	N/A	01-31-26
Florida	NELAP	E87997	07-01-26
Georgia (DW)	State	C048	01-31-26
Illinois	NELAP	200027	10-28-25
Iowa	State	361	03-01-26
Kansas	NELAP	E-10151	10-31-25
Kentucky (DW)	State	KY90088	12-31-25
Kentucky (UST)	State	0001.01	11-30-26
Kentucky (WW)	State	KY90088	12-31-25
Louisiana (All)	NELAP	02055	06-30-26
Maine	State	2019012	03-12-27
Maryland	State	100	06-30-26
Massachusetts	State	M-PA009	06-30-26
Michigan	State	9930	01-31-26
Minnesota	NELAP	042-999-487	12-31-25
Mississippi	State	023	01-31-26
Missouri	State	450	01-31-28
Montana (DW)	State	0098	01-01-26
Nebraska	State	NE-OS-32-17	01-31-26
New Hampshire	NELAP	2730	01-10-26
New Jersey	NELAP	PA011	06-30-26
New York	NELAP	10670	04-01-26
North Carolina (DW)	State	42705	07-31-26
North Carolina (WW/SW)	State	521	12-31-25
North Dakota	State	R-205	01-31-24 *
Ohio	State	87787	01-31-26
Oklahoma	NELAP	9804	12-31-25
Oregon	NELAP	PA200001	09-12-26
Pennsylvania	NELAP	36-00037	01-31-26
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-29
Rhode Island	State	LAO00338	12-30-25
South Carolina	State	89002	01-31-26
Tennessee	State	02838	01-31-26
Texas	NELAP	T104704194-23-46	08-31-26
USDA	US Federal Programs	525-22-298-19481	01-23-26
Vermont	State	VT - 36037	10-27-25
Virginia	NELAP	460182	06-14-26
Washington	State	C457	04-11-26
West Virginia (DW)	State	9906 C	03-31-26
West Virginia DEP	State	055	07-31-26
Wyoming	State	8TMS-L	01-31-26
Wyoming (UST)	A2LA	0001.01	11-30-26

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318534-1
SDG: 25W024.00

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET CF
8015C	Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)	SW846	EET CF
8081B	Organochlorine Pesticides (GC)	SW846	EET CF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CF
8151A	Herbicides (GC)	SW846	ELLE
6020B	Metals (ICP/MS)	SW846	EET CF
7470A	Mercury (CVAA)	SW846	EET CF
353.2	Nitrogen, Nitrate (Calculation)	EPA	EET CF
4500 F C-2011	Fluoride (Ion-selective Electrode)	SM	EET CF
9012B	Cyanide, Total andor Amenable	SW846	EET CF
9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	EET CLE
D516-16	Sulfate	ASTM	EET CF
I-3765-85	Residue, Non-filterable (TSS)	USGS	EET CF
SM 1030E	Cation Anion Balance	SM	EET CF
SM 2320B	Alkalinity	SM	EET CF
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CF
SM 4500 Cl- E	Chloride, Total	SM	EET CF
SM 5210B	BOD, 5-Day	SM	EET CF
SM 5220D	COD	SM	EET CF
3005A	Preparation, Total Metals	SW846	EET CF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CF
3511	Microextraction of Organic Compounds	SW846	EET CF
5030B	Purge and Trap	SW846	EET CF
7470A	Preparation, Mercury	SW846	EET CF
8151A	Extraction (Herbicides)	SW846	ELLE
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	EET CF
9030B	Sulfide, Distillation (Acid Soluble and Insoluble)	SW846	EET CLE

Protocol References:

ASTM = ASTM International
EPA = US Environmental Protection Agency
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
USGS = "Methods For Analysis Of Water And Fluvial Sediments", USGS, 1989

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401
EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

eurofins | Environment Testing America

310-318534 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Foth

City/State. CITY: STATE: IA Project:

Receipt Information

Date/Time Received: DATE 10/21/25 TIME 1800 Received By: N

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee
☐ Lab Courier ☐ Lab Field Services ☒ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers

Sample(s) received in Cooler? ☒ Yes ☐ No *If yes:* Cooler ID:

Multiple Coolers? ☒ Yes ☐ No *If yes:* Cooler # 1 of 4

Cooler Custody Seals Present? ☐ Yes ☒ No *If yes:* Cooler custody seals intact? ☐ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☒ No *If yes:* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☐ Yes ☒ No *If yes:* Which VOA samples are in cooler? ↓

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: R Correction Factor (°C): +0.0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 0.4 Corrected Temp (°C): 0.4

• **Sample Container Temperature**

Container(s) used:	CONTAINER 1	CONTAINER 2
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE If yes, contact PM before proceeding If no, proceed with login

Additional Comments

eurofins | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Foth

City/State: CITY: | STATE: IA | Project:

Receipt Information

Date/Time Received: DATE: 10/21/25 | TIME: 1800 | Received By: N

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee
☐ Lab Courier ☐ Lab Field Services ☒ Client Drop-off ☐ Other._____

Condition of Cooler/Containers

Sample(s) received in Cooler? ☒ Yes ☐ No *If yes:* Cooler ID:

Multiple Coolers? ☒ Yes ☐ No *If yes:* Cooler # 2 of 4

Cooler Custody Seals Present? ☐ Yes ☒ No *If yes:* Cooler custody seals intact? ☐ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☒ No *If yes:* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☐ Yes ☒ No *If yes:* Which VOA samples are in cooler? ↓

Temperature Record

Coolant. ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: R | Correction Factor (°C). +0.0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 0.0 | Corrected Temp (°C): 0.0

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g , bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

eurofins | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Foth

City/State: CITY | STATE IA | Project.

Receipt Information

Date/Time Received: DATE 10/21/25 | TIME 1800 | Received By:

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☐ Lab Courier ☐ Lab Field Services ☒ Client Drop-off ☐ Other: _____

Condition of Cooler/Containers

Sample(s) received in Cooler?	☒ Yes ☐ No	*If yes:* Cooler ID:
Multiple Coolers?	☒ Yes ☐ No	*If yes:* Cooler # 3 of 4
Cooler Custody Seals Present?	☐ Yes ☒ No	*If yes:* Cooler custody seals intact? ☐ Yes ☐ No
Sample Custody Seals Present?	☐ Yes ☒ No	*If yes:* Sample custody seals intact? ☐ Yes ☐ No
Trip Blank Present?	☐ Yes ☒ No	*If yes:* Which VOA samples are in cooler? ↓

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other: _____ ☐ NONE

Thermometer ID: R | Correction Factor (°C): +0.0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 0.4 | Corrected Temp (°C): 0.6

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g , bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

eurofins | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Foth

City/State. CITY: | STATE: IA | Project:

Receipt Information

Date/Time Received: DATE: 10/21/25 | TIME: 1800 | Received By: N

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee
☐ Lab Courier ☐ Lab Field Services ☒ Client Drop-off ☐ Other: _____

Condition of Cooler/Containers

Sample(s) received in Cooler? ☒ Yes ☐ No *If yes.* Cooler ID:

Multiple Coolers? ☒ Yes ☐ No *If yes:* Cooler # 4 of 4

Cooler Custody Seals Present? ☐ Yes ☒ No *If yes:* Cooler custody seals intact? ☐ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☒ No *If yes:* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☐ Yes ☒ No *If yes:* Which VOA samples are in cooler? ↓

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other: _____ ☐ NONE

Thermometer ID: R | Correction Factor (°C). +0.0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 1.0 | Corrected Temp (°C): 1.0

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

Foth

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT All relevant fields must be completed accurately

Page: 1 of 5 **COC Number:** 1-3865545471-071825-834489

Company: Foth Infrastructure & Environment, LLC	Report To: Hannah Dubbs/Gina Wilming (Foth)	Requested Due Date:	Quote Reference:
Address: 411 6th Avenue SE, Suite 400	Copy To:	*TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To: TJ Shissel (Winneshiek)		Project #: 25W024.00
Phone: (319) 365-9565	P O		Profile #:
Email Addresses: hannah.dubbs@foth.com	Project Name: Winneshiek County Sanitary Landfill	Regulatory Agency: Iowa DNR	Sampling Team Members.
gina.wilming@foth.com	Task #: 25W024_25_10	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: IA Appendix I List	TSS	Sulfide	Endosulfan I	Appendix II VOCs	Appendix II List	Annual Parameter List	Filtered (Y/N)	REMARKS / Lab ID
1	GU-1_25_10	GU-1	WG	G	10/20/25 R.G	15:50 R.G	7	1	1	1	3 R.G	1			X	X					X		No Sample
2	GU-2_25_10	GU-2	WG	G											X	X					X		No Sample
3	MW-1_25_10	MW-1	WG	G	10/20/25	15:50	17	11	1	1	3	1			X	X	X	X			X		
4	MW-2R_25_10	MW-2R	WG	G											X	X					X		
5	MW-3_25_10	MW-3	WG	G	10/21	11:00	12	7	1	1	3				X	X					X		BOD /
6	MW-4_25_10	MW-4	WG	G											X	X					X		
7	MW-4B_25_10	MW-4B	WG	G	10/20	15:50	12	7	1	1	3				X	X					X		TES
8	MW-7A_25_10	MW-7A	WG	G																X	X		Nitrate
9	MW-11_25_10	MW-11	WG	G											X	X					X		
10	MW-18_25_10	MW-18	WG	G											X	X					X		
11	MW-19R_25_10	MW-19R	WG	G	10/21	12:55	17	11	1	1	3	1			X	X	X	X			X		
12	MW-22_25_10	MW-22	WG	G											X	X					X		

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
					OA Tech	10/21/25	18:00		10/21/25	1800

SAMPLE CONDITION:

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

SAMPLE NOTES:

Additional Comments:

Valid Matrix Codes

Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Kianna Gaskin / Tyler Meareth / Courtney Schwantz

SIGNATURE of SAMPLER: [signature] DATE Signed: 10/21/25

Foth

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 2 of 5

COC Number: 1-3865545471-071825-834489

Company: Foth Infrastructure & Environment, LLC	Report To: Hannah Dubbs/Gina Wilming (Foth)	Requested Due Date:	Quote Reference:
Address: 411 6th Avenue SE, Suite 400	Copy To:	*TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To. TJ Shissel (Winneshiek)		Project #: 25W024.00
Phone: (319) 365-9565	P.O		Profile #:
Email Addresses: hannah.dubbs@foth.com	Project Name: Winneshiek County Sanitary Landfill	Regulatory Agency: Iowa DNR	Sampling Team Members:
gina.wilming@foth.com	Task #: 25W024_25_10	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: IA Appendix I List	TSS	Sulfide	Endosulfan I	Appendix II VOCs	Appendix II List	Annual Parameter List	Filtered (Y/N)	REMARKS / Lab ID
							N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
13	MW-24A_25_10	MW-25A	WG	G											X	X					X		No Sample Submitted
14	MW-25A_25_10	MW-25A	WG	G	10/20/25	16:55	12	7	1	1	3				X	X					X		
15	MW-29A_25_10	MW-29A	WG	G											X	X	X				X		
16	MW-31A_25_10	MW-31A	WG	G	10/21	11:25	14	9	1	1	3				X	X		X			X		broken jar
17	MW-33A_25_10	MW-33A	WG	G	10/20	13:15	12	7	1	1	3				X	X					X		
18	MW-34A_25_10	MW-34A	WG	G	10/21	09:20	12	7	1	1	3				X	X					X		
19	MW-35_25_10	MW-35	WG	G											X	X					X		
20	MW-37A_25_10	MW-37A	WG	G	10/20	14:30	17	11	1	1	3	1			X	X	X	X			X		
21	MW-38A_25_10	MW-38	WG	G	10/21	10:25	12	7	1	1	3				X	X					X		
22	MW-39A_25_10	MW-39A	WG	G											X	X					X		
23	MW-40A_25_10	MW-40A	WG	G	10/21	15:15	12	7	1	1	3				X	X					X		
24	MW-41A_25_10	MW-41A	WG	G	10/21	13.00	12	7	1	1	3				X	X					X		

BOD NITRATES

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
					GN OA TECH	10/21/25	18:40		10/21/25	1800

SAMPLE CONDITION:

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

SAMPLE NOTES:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Randy Gavin / Tyler McGrath / Curtis Schwartz

SIGNATURE of SAMPLER: GN

DATE Signed: 10/21/25

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11/6/2025

Foth

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 3 **of** 5 | **COC Number:** 1-3865545471-071825-834489

Company: Foth Infrastructure & Environment, LLC	Report To: Hannah Dubbs/Gina Wilming (Foth)	Requested Due Date:	Quote Reference:
Address: 411 6th Avenue SE, Suite 400	Copy To:	*TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To: TJ Shissel (Winneshiek)		Project #: 25W024.00
Phone: (319) 365-9565	P O		Profile #:
Email Addresses: hannah.dubbs@foth.com	Project Name: Winneshiek County Sanitary Landfill	Regulatory Agency: Iowa DNR	Sampling Team Members:
gina.wilming@foth.com	Task #: 25W024_25_10	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: IA Appendix I List	TSS	Sulfide	Endosulfan I	Appendix II VOCs	Appendix II List	Annual Parameter List	Filtered (Y/N)	REMARKS / Lab ID
							N	N	N	N	N	N	N	N	N	N	N	N	N	N	N		
25	MW-42A_25_10	MW-42A	WG	G	10/21/25	14:40	12	7	1	1	3				X	X					X		
26	MW-43A_25_10	MW-43A	WG	G											X	X					X		
27	MW-44A_25_10	MW-44A	WG	G											X	X					X		
28	MW-45A_25_10	MW-45A	WG	G											X	X					X		
29	MW-46A_25_10	MW-46A	WG	G												X				X	X		
30	MW-101_25_10	MW-101	WG	G											X	X					X		
31	EB-1_25_10	Equipment Blank	WQ	G	10/21/25	11:15	25	19	1	1	3	1				X				X			
32	EB-2_25_10	Equipment Blank	WQ	G											X	X							
33	FD-1_25_10		WQ	G												X				X			
34	FD-2_25_10		WQ	G	10/21/25	—	7	4		1	2				X	X							
35	FD-3_25_10		WQ	G											X	X							
36	TB-1_25_10	Trip Blank	WQ	G															X				

PFAS NITRATES

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
					OA TECH	10/21/25	18:00		10/21/25	1800

SAMPLE CONDITION:

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

SAMPLE NOTES:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Randy Gaston / Tyler Mensch / Curtis Schwartz

SIGNATURE of SAMPLER

DATE Signed: 10/21/25

Foth

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT All relevant fields must be completed accurately

Page: 4 **of** 5 **COC Number:** 1-3865545471-071825-834489

Company: Foth Infrastructure & Environment, LLC	Report To: Hannah Dubbs/Gina Wilming (Foth)	Requested Due Date:	Quote Reference:
Address: 411 6th Avenue SE, Suite 400	Copy To:	*TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To TJ Shissel (Winneshiek)		Project #: 25W024.00
Phone: (319) 365-9565	P O		Profile #:
Email Addresses. hannah.dubbs@foth.com	Project Name: Winneshiek County Sanitary Landfill	Regulatory Agency: Iowa DNR	Sampling Team Members:
gina.wilming@foth.com	Task #: 25W024_25_10	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: N	N	N	N	N	N	N	Filtered (Y/N)	REMARKS / Lab ID
															IA Appendix I List	TSS	Sulfide	Endosulfan I	Appendix II VOCs	Appendix II List	Annual Parameter List		
37	TB-2_25_10	Trip Blank	WQ	G															X				
38	TB-3_25_10	Trip Blank	WQ	G															X				
39	TB-4_25_10	Trip Blank	WQ	G															X				
40	SW-1_25_10	SW-1	WS	G											X	X					X		
41	SW-2_25_10	SW-2	WS	G											X	X					X		
42	SW-5_25_10	SW-5	WS	G											X	X					X		
43																							
44																							
45																							
46																							
47																							
48																							

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
					OATECH	10/21/25	18:00		10/21/25	1800

SAMPLE CONDITION:

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

SAMPLE NOTES:

Additional Comments:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Randy Gaylon / Tyler Merritt / Courtes Schwartz

SIGNATURE of SAMPLER

DATE Signed: 10/21/25

Page 112 of 119

11/6/2025

Annual Parameter List

Analyte	Suggested Method
Anion/Cations Balance	SM 1030E
Calcium, Magnesium, Sodium (total)	EPA 6020B
Fluoride	SM 4500 F C-2011
Sulfate	ASTM D516-16
Nitrate as N	EPA 353.2
Total Alkalinity	SM 2320B
Bicarbonate Alkalinity as CaCO3	
Carbonate Alkalinity as CaCO3	
Hydroxide Alkalinity as CaCO3	
Phenolphthalein Alkalinity as CaCO3	
Total Dissolved Solids	SM 2540C
Chloride	SM 4500 Cl-E
Biochemical Oxygen Demand	SM 5210B
Chemical Oxygen Demend	SM 5220D

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Phone: 319-277-2401 Fax: 319-277-2425

Chain of Custody Record

eurofins Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Collins, Charlotte G	Carrier Tracking No(s): N/A	COC No: 310-88186.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Charlotte.Collins@et.eurofinsus.com	State of Origin: Iowa	Page: Page 1 of 1
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): State Program - Iowa		Job #: 310-318534-1
Address: 180 S. Van Buren Avenue,	Due Date Requested: 11/3/2025			Preservation Codes: -
City: Barberton	TAT Requested (days): N/A			
State, Zip: OH, 44203				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Winneshiek County Sanitary Landfill	Project #: 31017151			
Site: 310 - AECOM - Winneshiek County	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc/9030BSulfide	Total Number of containers	Special Instructions/Note:
			Preservation Code:						6110
MW_1_25_10 (310-318534-1)	10/20/25	15:50 Central	G	Water			X	1	
MW-19R_25_10 (310-318534-4)	10/21/25	12:55 Central	G	Water			X	1	
MW-37A_25_10 (310-318534-9)	10/20/25	14:30 Central	G	Water			X	1	
EB-1_25_10 (310-318534-14)	10/21/25	11:15 Central	G	Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10/22/25 1250		Martin	10/23/25 910	EUL
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins – Cleveland Sample Receipt Form/Narrative
Barberton Facility

Login # :

Client Eur Cedar Falls Site Name

Cooler unpacked by: ICMartin

Cooler Received on 10/23/25 Opened on 10/24/25

FedEx. 1st Grd (Exp) UPS FAS Waypoint Client Drop Off Eurofins Courier Other

Receipt After-hours Drop-off Date/Time Storage Location

Eurofins Cooler # EC Foam Box Client Cooler Box Other

Packing material used. (Bubble) Wrap Foam Plastic Bag None Other

COOLANT: (Wet) Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # 17 (CF 0.7 °C) Observed Cooler Temp. 1.9 °C Corrected Cooler Temp 2.6 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	(Yes)	No
Were the seals on the outside of the cooler(s) signed & dated?	(Yes)	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	(No)
-Were tamper/custody seals intact and uncompromised?	(Yes)	No NA
3 Shippers' packing slip attached to the cooler(s)?	(Yes)	No
4 Did custody papers accompany the sample(s)?	(Yes)	No
5 Were the custody papers relinquished & signed in the appropriate place?	(Yes)	No
6 Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	(No)
7 Did all bottles arrive in good condition (Unbroken)?	(Yes)	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	(Yes)	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp(Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	(Yes)	No
11 Sufficient quantity received to perform indicated analyses?	(Yes)	No
12 Are these work share samples and all listed on the COC?	(Yes)	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC567196
14 Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● ← Larger than this	Yes	No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #	Yes	No
17 Was a LL Hg or Me Hg trip blank present?	Yes	No

Tests that are not checked for pH by Receiving

VOAs
Oil and Grease
TOC

Contacted PM Date by via Verbal Voice Mail Other

Concerning

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:

Labels Verified by:

19 SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired

Sample(s) were received in a broken container

Sample(s) were received with bubble >6 mm in diameter (Notify PM)

20 SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory

Time preserved Preservative(s) added/Lot number(s)

VOA Sample Preservation Date/Time VOAs Frozen

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Phone: 319-277-2401 Fax: 319-277-2425

Chain of Custody Record

eurofins Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Collins, Charlotte G	Carrier Tracking No(s): N/A	COC No: 310-88183.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Charlotte.Collins@et.eurofinsus.com	State of Origin: Iowa	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): State Program - Iowa		Job #: 310-318534-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 11/3/2025			
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Winneshiek County Sanitary Landfill	Project #: 31017151			
Site: 310 - AECOM - Winneshiek County	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Wewater, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8151A/8151A_APDefault List	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
EB-1_25_10 (310-318534-14)	10/21/25	11:15 Central	G	Water			X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		10/22/25 1140				
2						
3					10/23/25 1010	

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: R:1.1 C:1.1

AW

Ver: 10/10/2024

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Phone: 319-277-2401 Fax: 319-277-2425

Chain of Custody Record

eurofins
Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Collins, Charlotte G	Carrier Tracking No(s): N/A	COC No: 310-88183.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Charlotte.Collins@et.eurofinsus.com	State of Origin: Iowa	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): State Program - Iowa		Job #: 310-318534-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 11/3/2025			
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Winneshiek County Sanitary Landfill	Project #: 31017151			
Site: 310 - AECOM - Winneshiek County	SSOW#: N/A			

Preservation Codes:

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8151A/8151A_APDefault List	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
EB-1_25_10 (310-318534-14)	10/21/25	11:15 Central	G	Water			X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
		10/22/25 1140				
	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	Relinquished by	Date/Time	Company	Received by	10/23/25 1010	

AW

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: R: 1.1 C: 1.1

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Winneshiek Co Solid Waste

Job Number: 310-318534-1
SDG Number: 25W024.00

Login Number: 318534
List Number: 1
Creator: Homolar, Dana J

List Source: Eurofins Cedar Falls

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Winneshiek Co Solid Waste

Job Number: 310-318534-1
SDG Number: 25W024.00

Login Number: 318534
List Number: 2
Creator: Williams, Aeric

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 10/23/25 12:53 PM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: TJ Schissel
Winneshiek Co Solid Waste
2000 140th Avenue
Decorah, Iowa 52101

Generated 11/10/2025 9:34:32 AM

JOB DESCRIPTION

Winneshiek County Sanitary Landfill

JOB NUMBER

310-318779-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
11/10/2025 9:34:32 AM

Authorized for release by
Charlotte Collins, Project Management Assistant I
Charlotte.Collins@et.eurofinsus.com
(319)595-2025

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Job ID: 310-318779-1 — Eurofins Cedar Falls

Job Narrative
310-318779-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 10/23/2025 3:10 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 7 coolers at receipt time were 0.4°C, 0.9°C, 1.6°C, 1.8°C, 2.1°C, 3.4°C and 3.6°C.

GC/MS VOA
Method 8260D: The initial calibration verification (ICV) result for batch 310-472433 was above the upper control limit. The affected analytes are: Vinyl acetate. Sample results were non-detects, and have been reported as qualified data.

Method 8260D: The method requirement for no headspace was not met. The following volatile sample was analyzed with headspace in the sample container: MW-29A_25_10 (310-318779-5).

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-471555 recovered outside of the control limits for Bromomethane (-25%D). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The associated sample is impacted: (CCV 310-471555/4).

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-471692 recovered outside of the control limits for Xylenes, Total (-21%D) and o-Xylene (-24%D). The LCS associated with this CCV passed CCV criteria for the affected analytes; therefore, the data have been reported. The associated sample is:(CCV 310-471692/3).

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-471692 recovered outside of the control limits for Chlorodibromomethane (-23%D). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The associated sample is impacted: (CCV 310-471692/3).

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-471692 recovered outside of the control limits for Chloroethane (-26%D), Dichlorodifluoromethane (-24%D), Chloromethane (-24%D), and Trichlorofluoromethane (-24%D). The LCS associated with this CCV passed CCV criteria for the affected analytes; therefore, the data have been reported. The associated sample is:(CCV 310-471692/4).

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-471692 recovered outside of the control limits for Bromomethane (-33%D). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The associated sample is impacted: (CCV 310-471692/4).

Method 8260D: Surrogate recovery for the following sample was outside the upper control limit: MW-44A_25_10 (310-318779-9). This sample did not contain any target analytes; therefore, re-analysis was not performed.

Method 8260D: Internal standard (ISTD) response for the following method blank was outside of acceptance limits: (MB 310-471301/7). The sample was not re-analyzed due to holding time expired. The internal standard failed low which creates a high bias, and all analytes were non-detects. Therefore, the data have been reported.

Method 8260D: Internal standard (ISTD) response for the following sample was outside of acceptance limits: MW-44A_25_10

(310-318779-9). The sample was not re-analyzed due to holding time expired. The internal standard failed low which creates a high bias, and all analytes were non-detects. Therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA
Method 8270E: The continuing calibration verification (CCV) analyzed in batch 310-472246 was outside the method criteria for the following analyte(s): Di-n-octyl phthalate(-30%D), Famphur(-82%D) and 1,4-phenylenediamine(-80%D). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 310-471206 and analytical batch 310-472246 recovered outside control limits for the following analyte(s): 1,4-phenylenediamine. 1,4-phenylenediamine have been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

Method 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 310-471206 and analytical batch 310-472246 recovered outside control limits for the following analytes: 2-Acetylaminofluorene, Kepone and Methapyrilene.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Herbicides
Method 8151A: Surrogate recovery for the following sample was outside the upper control limit: MW-46A_25_10 (310-318779-11). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

PCBs
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Pesticides
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B: The laboratory control sample (LCS) and CCV for preparation batch 310-471618 and analytical batch 310-472466 recovered outside control limits for the following analytes: thallium. These analytes were biased high in the LCS and CCV and were not detected in the associated samples; therefore, the data have been reported.

Method 6020B: The continuing calibration verification (CCV) associated with batch 310-472611 recovered above the upper control limit for thallium. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318779-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
310-318779-1	MW-2R_25_10	Water	10/22/25 15:15	10/23/25 15:10	Iowa
310-318779-2	MW-4_25_10	Water	10/22/25 09:25	10/23/25 15:10	Iowa
310-318779-3	MW-7A_25_10	Water	10/22/25 14:10	10/23/25 15:10	Iowa
310-318779-4	MW-18_25_10	Water	10/22/25 16:55	10/23/25 15:10	Iowa
310-318779-5	MW-29A_25_10	Water	10/22/25 12:00	10/23/25 15:10	Iowa
310-318779-6	MW-35_25_10	Water	10/21/25 16:40	10/23/25 15:10	Iowa
310-318779-7	MW-39A_25_10	Water	10/22/25 09:45	10/23/25 15:10	Iowa
310-318779-8	MW-43A_25_10	Water	10/21/25 15:35	10/23/25 15:10	Iowa
310-318779-9	MW-44A_25_10	Water	10/21/25 16:30	10/23/25 15:10	Iowa
310-318779-10	MW-45A_25_10	Water	10/22/25 13:40	10/23/25 15:10	Iowa
310-318779-11	MW-46A_25_10	Water	10/22/25 16:45	10/23/25 15:10	Iowa
310-318779-12	EB-2_25_10	Water	10/22/25 17:40	10/23/25 15:10	Iowa
310-318779-13	FD-1_25_10	Water	10/22/25 00:00	10/23/25 15:10	Iowa
310-318779-14	FD-3_25_10	Water	10/22/25 00:00	10/23/25 15:10	Iowa
310-318779-15	TB-1_25_10	Water	10/22/25 00:00	10/23/25 15:10	Iowa
310-318779-16	SW-2_25_10	Water	10/22/25 12:05	10/23/25 15:10	Iowa
310-318779-17	SW-5_25_10	Water	10/22/25 11:40	10/23/25 15:10	Iowa
310-318779-18	TB-2_25_10	Water	10/22/25 00:00	10/23/25 15:10	Iowa

Detection Summary

Client: Winneshiek Co Solid Waste
Job ID: 310-318779-1
Project/Site: Winneshiek County Sanitary Landfill

Client Sample ID: MW-2R_25_10 — Lab Sample ID: 310-318779-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	130		2.00	0.660	ug/L	1		6020B	Total/NA
Calcium	132		0.500	0.190	mg/L	1		6020B	Total/NA
Magnesium	32.0		0.500	0.150	mg/L	1		6020B	Total/NA
Sodium	11.4		1.00	0.650	mg/L	1		6020B	Total/NA
Nitrate as N	0.480		0.100	0.0800	mg/L	1		353.2	Total/NA
Fluoride	0.0602	J	0.100	0.0490	mg/L	1		4500 F C-2011	Total/NA
Sulfate	29.1	B	5.00	1.80	mg/L	1		D516-16	Total/NA
Anion/Cation Balance	-6.53				%	1		SM 1030E	Total/NA
Total Alkalinity	502		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	502		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	474		50.0	36.0	mg/L	1		SM 2540C	Total/NA
Chloride	14.2		2.00	1.40	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-4_25_10 — Lab Sample ID: 310-318779-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	0.246	J	1.00	0.230	ug/L	1		8260D	Total/NA
Arsenic	1.05	J	2.00	0.530	ug/L	1		6020B	Total/NA
Barium	476		2.00	0.660	ug/L	1		6020B	Total/NA
Cadmium	0.471		0.200	0.100	ug/L	1		6020B	Total/NA
Calcium	181		0.500	0.190	mg/L	1		6020B	Total/NA
Cobalt	2.21		0.500	0.170	ug/L	1		6020B	Total/NA
Magnesium	64.9		0.500	0.150	mg/L	1		6020B	Total/NA
Nickel	10.1		5.00	2.30	ug/L	1		6020B	Total/NA
Sodium	7.50		1.00	0.650	mg/L	1		6020B	Total/NA
Fluoride	0.0501	J	0.100	0.0490	mg/L	1		4500 F C-2011	Total/NA
Sulfate	8.46	B	5.00	1.80	mg/L	1		D516-16	Total/NA
Total Suspended Solids	2.75		1.88	1.31	mg/L	1		I-3765-85	Total/NA
Anion/Cation Balance	-7.37				%	1		SM 1030E	Total/NA
Total Alkalinity	837		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	837		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	720		50.0	36.0	mg/L	1		SM 2540C	Total/NA
Chloride	4.74		2.00	1.40	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-7A_25_10 — Lab Sample ID: 310-318779-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	319		2.00	0.660	ug/L	1		6020B	Total/NA
Chromium	6.92		5.00	1.80	ug/L	1		6020B	Total/NA
Cobalt	0.192	J	0.500	0.170	ug/L	1		6020B	Total/NA
Nickel	10.8		5.00	2.30	ug/L	1		6020B	Total/NA
Sodium	14200		1000	650	ug/L	1		6020B	Total/NA
Calcium	148000		500	190	ug/L	1		6020B	Total/NA
Magnesium	47600		500	150	ug/L	1		6020B	Total/NA
Fluoride	0.126		0.100	0.0490	mg/L	1		4500 F C-2011	Total/NA
Sulfate	30.2	B	5.00	1.80	mg/L	1		D516-16	Total/NA
Anion/Cation Balance	-5.86				%	1		SM 1030E	Total/NA
Total Alkalinity	536		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	536		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	600		50.0	36.0	mg/L	1		SM 2540C	Total/NA
Chloride	73.0		2.00	1.40	mg/L	1		SM 4500 Cl- E	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Winneshiek Co Solid Waste
Job ID: 310-318779-1
Project/Site: Winneshiek County Sanitary Landfill

Client Sample ID: MW-18_25_10 — Lab Sample ID: 310-318779-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.27	J	2.00	1.00	ug/L	1		6020B	Total/NA
Barium	72.5		2.00	0.660	ug/L	1		6020B	Total/NA
Calcium	69.9		0.500	0.190	mg/L	1		6020B	Total/NA
Cobalt	0.296	J	0.500	0.170	ug/L	1		6020B	Total/NA
Magnesium	24.7		0.500	0.150	mg/L	1		6020B	Total/NA
Sodium	5.08		1.00	0.650	mg/L	1		6020B	Total/NA
Fluoride	0.454		0.100	0.0490	mg/L	1		4500 F C-2011	Total/NA
Sulfate	11.1	B	5.00	1.80	mg/L	1		D516-16	Total/NA
Total Suspended Solids	2.28		1.90	1.33	mg/L	1		I-3765-85	Total/NA
Anion/Cation Balance	-6.73				%	1		SM 1030E	Total/NA
Total Alkalinity	312		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	312		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	276		50.0	36.0	mg/L	1		SM 2540C	Total/NA
Chloride	2.86		2.00	1.40	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-29A_25_10 — Lab Sample ID: 310-318779-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	4.30		2.00	0.530	ug/L	1		6020B	Total/NA
Barium	133		2.00	0.660	ug/L	1		6020B	Total/NA
Calcium	242		0.500	0.190	mg/L	1		6020B	Total/NA
Cobalt	19.3		0.500	0.170	ug/L	1		6020B	Total/NA
Magnesium	49.1		0.500	0.150	mg/L	1		6020B	Total/NA
Nickel	71.0		5.00	2.30	ug/L	1		6020B	Total/NA
Sodium	87.7		1.00	0.650	mg/L	1		6020B	Total/NA
Fluoride	0.0873	J	0.100	0.0490	mg/L	1		4500 F C-2011	Total/NA
Sulfide	3070		3000	1410	ug/L	1		9034	Total/NA
Sulfate	92.6	B	50.0	18.0	mg/L	10		D516-16	Total/NA
Total Suspended Solids	7.25		3.75	2.63	mg/L	1		I-3765-85	Total/NA
Anion/Cation Balance	-5.60				%	1		SM 1030E	Total/NA
Total Alkalinity	796		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	796		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	1070		50.0	36.0	mg/L	1		SM 2540C	Total/NA
Chloride	158		20.0	14.0	mg/L	10		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-35_25_10 — Lab Sample ID: 310-318779-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.867	J	2.00	0.530	ug/L	1		6020B	Total/NA
Barium	256		2.00	0.660	ug/L	1		6020B	Total/NA
Calcium	156		0.500	0.190	mg/L	1		6020B	Total/NA
Cobalt	4.73		0.500	0.170	ug/L	1		6020B	Total/NA
Magnesium	61.0		0.500	0.150	mg/L	1		6020B	Total/NA
Nickel	18.6		5.00	2.30	ug/L	1		6020B	Total/NA
Sodium	28.2		1.00	0.650	mg/L	1		6020B	Total/NA
Fluoride	0.222		0.100	0.0490	mg/L	1		4500 F C-2011	Total/NA
Sulfate	18.4	B	5.00	1.80	mg/L	1		D516-16	Total/NA
Total Suspended Solids	5.00		3.75	2.63	mg/L	1		I-3765-85	Total/NA
Anion/Cation Balance	-5.16				%	1		SM 1030E	Total/NA
Total Alkalinity	619		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	619		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	652		50.0	36.0	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-35_25_10 (Continued) — Lab Sample ID: 310-318779-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	99.1		20.0	14.0	mg/L	10		SM 4500 Cl- E	Total/NA
Biochemical Oxygen Demand	3.14		3.00	3.00	mg/L	1		SM 5210B	Total/NA

Client Sample ID: MW-39A_25_10 — Lab Sample ID: 310-318779-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	143		2.00	0.660	ug/L	1		6020B	Total/NA
Calcium	115		0.500	0.190	mg/L	1		6020B	Total/NA
Cobalt	0.335	J	0.500	0.170	ug/L	1		6020B	Total/NA
Magnesium	37.3		0.500	0.150	mg/L	1		6020B	Total/NA
Nickel	2.56	J	5.00	2.30	ug/L	1		6020B	Total/NA
Sodium	9.26		1.00	0.650	mg/L	1		6020B	Total/NA
Nitrate as N	13.7		1.00	0.800	mg/L	1		353.2	Total/NA
Fluoride	0.157		0.100	0.0490	mg/L	1		4500 F C-2011	Total/NA
Sulfate	29.0	B	5.00	1.80	mg/L	1		D516-16	Total/NA
Total Suspended Solids	62.0		15.0	10.5	mg/L	1		I-3765-85	Total/NA
Anion/Cation Balance	-2.69				%	1		SM 1030E	Total/NA
Total Alkalinity	364		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	364		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	440		50.0	36.0	mg/L	1		SM 2540C	Total/NA
Chloride	30.4		2.00	1.40	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-43A_25_10 — Lab Sample ID: 310-318779-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.82	J	2.00	1.00	ug/L	1		6020B	Total/NA
Arsenic	6.33		2.00	0.530	ug/L	1		6020B	Total/NA
Barium	198		2.00	0.660	ug/L	1		6020B	Total/NA
Calcium	139		0.500	0.190	mg/L	1		6020B	Total/NA
Cobalt	3.00		0.500	0.170	ug/L	1		6020B	Total/NA
Magnesium	31.9		0.500	0.150	mg/L	1		6020B	Total/NA
Nickel	24.5		5.00	2.30	ug/L	1		6020B	Total/NA
Sodium	95.2		1.00	0.650	mg/L	1		6020B	Total/NA
Nitrate as N	0.117		0.100	0.0800	mg/L	1		353.2	Total/NA
Fluoride	0.0669	J	0.100	0.0490	mg/L	1		4500 F C-2011	Total/NA
Sulfate	89.0	B	25.0	9.00	mg/L	5		D516-16	Total/NA
Total Suspended Solids	16.7		5.00	3.50	mg/L	1		I-3765-85	Total/NA
Anion/Cation Balance	-7.05				%	1		SM 1030E	Total/NA
Total Alkalinity	537		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	537		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	742		50.0	36.0	mg/L	1		SM 2540C	Total/NA
Chloride	113		20.0	14.0	mg/L	10		SM 4500 Cl- E	Total/NA
Biochemical Oxygen Demand	7.26		3.00	3.00	mg/L	1		SM 5210B	Total/NA

Client Sample ID: MW-44A_25_10 — Lab Sample ID: 310-318779-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.82	J	2.00	1.00	ug/L	1		6020B	Total/NA
Arsenic	0.671	J	2.00	0.530	ug/L	1		6020B	Total/NA
Barium	222		2.00	0.660	ug/L	1		6020B	Total/NA
Calcium	223		0.500	0.190	mg/L	1		6020B	Total/NA
Cobalt	0.492	J	0.500	0.170	ug/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-44A_25_10 (Continued) — Lab Sample ID: 310-318779-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	43.3		0.500	0.150	mg/L	1		6020B	Total/NA
Nickel	62.6		5.00	2.30	ug/L	1		6020B	Total/NA
Sodium	109		1.00	0.650	mg/L	1		6020B	Total/NA
Zinc	31.9		20.0	13.0	ug/L	1		6020B	Total/NA
Fluoride	0.0841	J	0.100	0.0490	mg/L	1		4500 F C-2011	Total/NA
Sulfate	80.4	B	25.0	9.00	mg/L	5		D516-16	Total/NA
Anion/Cation Balance	-3.63				%	1		SM 1030E	Total/NA
Total Alkalinity	736		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	736		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	974		50.0	36.0	mg/L	1		SM 2540C	Total/NA
Chloride	160		20.0	14.0	mg/L	10		SM 4500 Cl- E	Total/NA
Chemical Oxygen Demand	31.4		25.0	23.0	mg/L	5		SM 5220D	Total/NA

Client Sample ID: MW-45A_25_10 — Lab Sample ID: 310-318779-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	133		2.00	0.660	ug/L	1		6020B	Total/NA
Calcium	85.7		0.500	0.190	mg/L	1		6020B	Total/NA
Chromium	2.20	J	5.00	1.80	ug/L	1		6020B	Total/NA
Cobalt	0.299	J	0.500	0.170	ug/L	1		6020B	Total/NA
Magnesium	31.8		0.500	0.150	mg/L	1		6020B	Total/NA
Sodium	10.0		1.00	0.650	mg/L	1		6020B	Total/NA
Fluoride	0.218		0.100	0.0490	mg/L	1		4500 F C-2011	Total/NA
Sulfate	27.1	B	5.00	1.80	mg/L	1		D516-16	Total/NA
Anion/Cation Balance	-9.66				%	1		SM 1030E	Total/NA
Total Alkalinity	407		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	407		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	364		50.0	36.0	mg/L	1		SM 2540C	Total/NA
Chloride	6.66		2.00	1.40	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-46A_25_10 — Lab Sample ID: 310-318779-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.837	J	2.00	0.530	ug/L	1		6020B	Total/NA
Barium	277		2.00	0.660	ug/L	1		6020B	Total/NA
Cadmium	0.104	J	0.200	0.100	ug/L	1		6020B	Total/NA
Cobalt	0.222	J	0.500	0.170	ug/L	1		6020B	Total/NA
Nickel	32.2		5.00	2.30	ug/L	1		6020B	Total/NA
Sodium	168000		1000	650	ug/L	1		6020B	Total/NA
Calcium	190000		500	190	ug/L	1		6020B	Total/NA
Magnesium	63300		500	150	ug/L	1		6020B	Total/NA
Nitrate as N	2.36		0.100	0.0800	mg/L	1		353.2	Total/NA
Fluoride	0.130		0.100	0.0490	mg/L	1		4500 F C-2011	Total/NA
Sulfide	2270	J	3000	1410	ug/L	1		9034	Total/NA
Sulfate	76.6	B	25.0	9.00	mg/L	5		D516-16	Total/NA
Total Suspended Solids	4.25		1.88	1.31	mg/L	1		I-3765-85	Total/NA
Total Suspended Solids	4.25		1.88	1.31	mg/L	1		I-3765-85	Total/NA
Anion/Cation Balance	-3.30				%	1		SM 1030E	Total/NA
Total Alkalinity	664		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	664		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	1120		50.0	36.0	mg/L	1		SM 2540C	Total/NA
Chloride	300		20.0	14.0	mg/L	10		SM 4500 Cl- E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-46A_25_10 (Continued) — Lab Sample ID: 310-318779-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chemical Oxygen Demand	29.8		25.0	23.0	mg/L	5		SM 5220D	Total/NA

Client Sample ID: EB-2_25_10 — Lab Sample ID: 310-318779-12

No Detections.

Client Sample ID: FD-1_25_10 — Lab Sample ID: 310-318779-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	322		2.00	0.660	ug/L	1		6020B	Total/NA
Nickel	7.61		5.00	2.30	ug/L	1		6020B	Total/NA
Sodium	15700		1000	650	ug/L	1		6020B	Total/NA
Calcium	147000		500	190	ug/L	1		6020B	Total/NA
Magnesium	50900		500	150	ug/L	1		6020B	Total/NA
Sulfide	1470	J	3000	1410	ug/L	1		9034	Total/NA

Client Sample ID: FD-3_25_10 — Lab Sample ID: 310-318779-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.76	J	2.00	1.00	ug/L	1		6020B	Total/NA
Barium	140		2.00	0.660	ug/L	1		6020B	Total/NA
Nickel	2.32	J	5.00	2.30	ug/L	1		6020B	Total/NA
Sodium	9970		1000	650	ug/L	1		6020B	Total/NA
Calcium	102000		500	190	ug/L	1		6020B	Total/NA
Magnesium	38200		500	150	ug/L	1		6020B	Total/NA

Client Sample ID: TB-1_25_10 — Lab Sample ID: 310-318779-15

No Detections.

Client Sample ID: SW-2_25_10 — Lab Sample ID: 310-318779-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.693	J	2.00	0.530	ug/L	1		6020B	Total/NA
Barium	91.7		2.00	0.660	ug/L	1		6020B	Total/NA
Calcium	84.5		0.500	0.190	mg/L	1		6020B	Total/NA
Magnesium	32.3		0.500	0.150	mg/L	1		6020B	Total/NA
Sodium	6.90		1.00	0.650	mg/L	1		6020B	Total/NA
Nitrate as N	8.19		0.100	0.0800	mg/L	1		353.2	Total/NA
Fluoride	0.137		0.100	0.0490	mg/L	1		4500 F C-2011	Total/NA
Sulfate	27.9	B	5.00	1.80	mg/L	1		D516-16	Total/NA
Total Suspended Solids	2.15		1.90	1.33	mg/L	1		I-3765-85	Total/NA
Anion/Cation Balance	-7.76				%	1		SM 1030E	Total/NA
Total Alkalinity	331		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	331		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	386		50.0	36.0	mg/L	1		SM 2540C	Total/NA
Chloride	21.1		2.00	1.40	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: SW-5_25_10 — Lab Sample ID: 310-318779-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.860	J	2.00	0.530	ug/L	1		6020B	Total/NA
Barium	103		2.00	0.660	ug/L	1		6020B	Total/NA
Calcium	66.1		0.500	0.190	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SW-5_25_10 (Continued)
Lab Sample ID: 310-318779-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.663		0.500	0.170	ug/L	1		6020B	Total/NA
Lead	0.594		0.500	0.330	ug/L	1		6020B	Total/NA
Magnesium	36.9		0.500	0.150	mg/L	1		6020B	Total/NA
Nickel	3.43	J	5.00	2.30	ug/L	1		6020B	Total/NA
Sodium	10.8		1.00	0.650	mg/L	1		6020B	Total/NA
Vanadium	1.78	J	5.00	1.70	ug/L	1		6020B	Total/NA
Nitrate as N	6.66		0.100	0.0800	mg/L	1		353.2	Total/NA
Fluoride	0.133		0.100	0.0490	mg/L	1		4500 F C-2011	Total/NA
Sulfate	34.7	B	5.00	1.80	mg/L	1		D516-16	Total/NA
Total Suspended Solids	15.2		1.94	1.35	mg/L	1		I-3765-85	Total/NA
Anion/Cation Balance	-7.05				%	1		SM 1030E	Total/NA
Total Alkalinity	286		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	286		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	370		50.0	36.0	mg/L	1		SM 2540C	Total/NA
Chloride	32.5		2.00	1.40	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: TB-2_25_10
Lab Sample ID: 310-318779-18

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-2R_25_10
Date Collected: 10/22/25 15:15
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/28/25 15:18	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/28/25 15:18	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/28/25 15:18	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/28/25 15:18	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/28/25 15:18	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/28/25 15:18	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/28/25 15:18	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/28/25 15:18	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/28/25 15:18	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/28/25 15:18	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/28/25 15:18	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/28/25 15:18	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/28/25 15:18	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/28/25 15:18	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/28/25 15:18	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/28/25 15:18	1
Acetone	<3.10		10.0	3.10	ug/L			10/28/25 15:18	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/28/25 15:18	1
Benzene	<0.220		0.500	0.220	ug/L			10/28/25 15:18	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/28/25 15:18	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/28/25 15:18	1
Bromoform	<0.780		5.00	0.780	ug/L			10/28/25 15:18	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/28/25 15:18	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/28/25 15:18	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/28/25 15:18	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/28/25 15:18	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/28/25 15:18	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/28/25 15:18	1
Chloroform	<1.30		3.00	1.30	ug/L			10/28/25 15:18	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/28/25 15:18	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/28/25 15:18	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/28/25 15:18	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/28/25 15:18	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/28/25 15:18	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/28/25 15:18	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/28/25 15:18	1
Styrene	<0.370		1.00	0.370	ug/L			10/28/25 15:18	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/28/25 15:18	1
Toluene	<0.430		1.00	0.430	ug/L			10/28/25 15:18	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/28/25 15:18	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/28/25 15:18	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/28/25 15:18	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/28/25 15:18	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/28/25 15:18	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/28/25 15:18	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/28/25 15:18	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/28/25 15:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*109*		*76 - 130*		*10/28/25 15:18*	*1*

Client Sample ID: MW-2R_25_10
Lab Sample ID: 310-318779-1

Date Collected: 10/22/25 15:15
Matrix: Water
Date Received: 10/23/25 15:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/28/25 15:18*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*10/28/25 15:18*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		10/29/25 09:00	11/03/25 17:54	1
Arsenic	<0.530		2.00	0.530	ug/L		10/29/25 09:00	11/03/25 17:54	1
Barium	**130**		2.00	0.660	ug/L		10/29/25 09:00	11/03/25 17:54	1
Beryllium	<0.330		1.00	0.330	ug/L		10/29/25 09:00	11/03/25 17:54	1
Cadmium	<0.100		0.200	0.100	ug/L		10/29/25 09:00	11/03/25 17:54	1
Calcium	**132**		0.500	0.190	mg/L		10/29/25 09:00	11/03/25 17:54	1
Chromium	<1.80		5.00	1.80	ug/L		10/29/25 09:00	11/03/25 17:54	1
Cobalt	<0.170		0.500	0.170	ug/L		10/29/25 09:00	11/03/25 17:54	1
Copper	<3.20		5.00	3.20	ug/L		10/29/25 09:00	11/03/25 17:54	1
Lead	<0.330		0.500	0.330	ug/L		10/29/25 09:00	11/03/25 17:54	1
Magnesium	**32.0**		0.500	0.150	mg/L		10/29/25 09:00	11/03/25 17:54	1
Nickel	<2.30		5.00	2.30	ug/L		10/29/25 09:00	11/03/25 17:54	1
Selenium	<1.40		5.00	1.40	ug/L		10/29/25 09:00	11/03/25 17:54	1
Silver	<0.500		1.00	0.500	ug/L		10/29/25 09:00	11/03/25 17:54	1
Sodium	**11.4**		1.00	0.650	mg/L		10/29/25 09:00	11/03/25 17:54	1
Thallium	<0.570	*+ ^+	1.00	0.570	ug/L		10/29/25 09:00	11/04/25 15:30	1
Vanadium	<1.70		5.00	1.70	ug/L		10/29/25 09:00	11/03/25 17:54	1
Zinc	<13.0		20.0	13.0	ug/L		10/29/25 09:00	11/03/25 17:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 353.2)	**0.480**		0.100	0.0800	mg/L			10/31/25 13:23	1
Fluoride (SM 4500 F C-2011)	**0.0602**	**J**	0.100	0.0490	mg/L			11/02/25 12:11	1
Sulfate (ASTM D516-16)	**29.1**	**B**	5.00	1.80	mg/L			10/31/25 14:57	1
Total Suspended Solids (USGS I-3765-85)	<1.31		1.88	1.31	mg/L			10/27/25 13:58	1
Anion/Cation Balance (SM 1030E)	**-6.53**				%			10/27/25 10:47	1
Total Alkalinity (SM 2320B)	**502**		5.00	2.50	mg/L			10/29/25 19:50	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**502**		5.00	2.50	mg/L			10/29/25 19:50	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 19:50	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 19:50	1
Phenolphthalein Alkalinity as CaCO3 to pH 8.3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 19:50	1
Total Dissolved Solids (SM 2540C)	**474**		50.0	36.0	mg/L			10/27/25 12:05	1
Chloride (SM 4500 Cl- E)	**14.2**		2.00	1.40	mg/L			10/28/25 23:48	1
Biochemical Oxygen Demand (SM 5210B)	<3.00		3.00	3.00	mg/L			10/23/25 16:10	1
Chemical Oxygen Demand (SM 5220D)	<23.0		25.0	23.0	mg/L			10/30/25 13:52	5

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318779-1

Client Sample ID: MW-4_25_10
Date Collected: 10/22/25 09:25
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-2
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/28/25 15:40	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/28/25 15:40	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/28/25 15:40	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/28/25 15:40	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/28/25 15:40	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/28/25 15:40	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/28/25 15:40	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/28/25 15:40	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/28/25 15:40	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/28/25 15:40	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/28/25 15:40	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/28/25 15:40	1
1,4-Dichlorobenzene	**0.246**	**J**	1.00	0.230	ug/L			10/28/25 15:40	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/28/25 15:40	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/28/25 15:40	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/28/25 15:40	1
Acetone	<3.10		10.0	3.10	ug/L			10/28/25 15:40	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/28/25 15:40	1
Benzene	<0.220		0.500	0.220	ug/L			10/28/25 15:40	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/28/25 15:40	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/28/25 15:40	1
Bromoform	<0.780		5.00	0.780	ug/L			10/28/25 15:40	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/28/25 15:40	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/28/25 15:40	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/28/25 15:40	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/28/25 15:40	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/28/25 15:40	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/28/25 15:40	1
Chloroform	<1.30		3.00	1.30	ug/L			10/28/25 15:40	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/28/25 15:40	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/28/25 15:40	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/28/25 15:40	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/28/25 15:40	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/28/25 15:40	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/28/25 15:40	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/28/25 15:40	1
Styrene	<0.370		1.00	0.370	ug/L			10/28/25 15:40	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/28/25 15:40	1
Toluene	<0.430		1.00	0.430	ug/L			10/28/25 15:40	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/28/25 15:40	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/28/25 15:40	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/28/25 15:40	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/28/25 15:40	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/28/25 15:40	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/28/25 15:40	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/28/25 15:40	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/28/25 15:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*105*		*76 - 130*		*10/28/25 15:40*	*1*

Client Sample ID: MW-4_25_10
Lab Sample ID: 310-318779-2

Date Collected: 10/22/25 09:25
Matrix: Water
Date Received: 10/23/25 15:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/28/25 15:40*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*10/28/25 15:40*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		10/29/25 09:00	11/03/25 17:57	1
Arsenic	**1.05**	**J**	2.00	0.530	ug/L		10/29/25 09:00	11/03/25 17:57	1
Barium	**476**		2.00	0.660	ug/L		10/29/25 09:00	11/03/25 17:57	1
Beryllium	<0.330		1.00	0.330	ug/L		10/29/25 09:00	11/03/25 17:57	1
Cadmium	**0.471**		0.200	0.100	ug/L		10/29/25 09:00	11/03/25 17:57	1
Calcium	**181**		0.500	0.190	mg/L		10/29/25 09:00	11/03/25 17:57	1
Chromium	<1.80		5.00	1.80	ug/L		10/29/25 09:00	11/03/25 17:57	1
Cobalt	**2.21**		0.500	0.170	ug/L		10/29/25 09:00	11/03/25 17:57	1
Copper	<3.20		5.00	3.20	ug/L		10/29/25 09:00	11/03/25 17:57	1
Lead	<0.330		0.500	0.330	ug/L		10/29/25 09:00	11/03/25 17:57	1
Magnesium	**64.9**		0.500	0.150	mg/L		10/29/25 09:00	11/03/25 17:57	1
Nickel	**10.1**		5.00	2.30	ug/L		10/29/25 09:00	11/03/25 17:57	1
Selenium	<1.40		5.00	1.40	ug/L		10/29/25 09:00	11/03/25 17:57	1
Silver	<0.500		1.00	0.500	ug/L		10/29/25 09:00	11/03/25 17:57	1
Sodium	**7.50**		1.00	0.650	mg/L		10/29/25 09:00	11/03/25 17:57	1
Thallium	<0.570	*+ ^+	1.00	0.570	ug/L		10/29/25 09:00	11/04/25 15:33	1
Vanadium	<1.70		5.00	1.70	ug/L		10/29/25 09:00	11/03/25 17:57	1
Zinc	<13.0		20.0	13.0	ug/L		10/29/25 09:00	11/03/25 17:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 353.2)	<0.0800		0.100	0.0800	mg/L			10/31/25 13:24	1
Fluoride (SM 4500 F C-2011)	**0.0501**	**J**	0.100	0.0490	mg/L			11/02/25 12:14	1
Sulfate (ASTM D516-16)	**8.46**	**B**	5.00	1.80	mg/L			10/31/25 14:58	1
Total Suspended Solids (USGS I-3765-85)	**2.75**		1.88	1.31	mg/L			10/28/25 11:38	1
Anion/Cation Balance (SM 1030E)	**-7.37**				%			10/27/25 10:47	1
Total Alkalinity (SM 2320B)	**837**		5.00	2.50	mg/L			10/29/25 20:02	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**837**		5.00	2.50	mg/L			10/29/25 20:02	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 20:02	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 20:02	1
Phenolphthalein Alkalinity as CaCO3 tc pH 8.3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 20:02	1
Total Dissolved Solids (SM 2540C)	**720**		50.0	36.0	mg/L			10/27/25 12:05	1
Chloride (SM 4500 Cl- E)	**4.74**		2.00	1.40	mg/L			10/28/25 23:48	1
Biochemical Oxygen Demand (SM 5210B)	<3.00		3.00	3.00	mg/L			10/23/25 16:04	1
Chemical Oxygen Demand (SM 5220D)	<23.0		25.0	23.0	mg/L			10/30/25 13:52	5

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318779-1

Client Sample ID: MW-7A_25_10
Date Collected: 10/22/25 14:10
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<3.10		10.0	3.10	ug/L			10/28/25 16:03	1
Acrolein	<3.60		10.0	3.60	ug/L			10/28/25 16:03	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/28/25 16:03	1
Allyl chloride	<0.700		2.00	0.700	ug/L			10/28/25 16:03	1
Benzene	<0.220		0.500	0.220	ug/L			10/28/25 16:03	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/28/25 16:03	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/28/25 16:03	1
Bromoform	<0.780		5.00	0.780	ug/L			10/28/25 16:03	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/28/25 16:03	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/28/25 16:03	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/28/25 16:03	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/28/25 16:03	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/28/25 16:03	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/28/25 16:03	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/28/25 16:03	1
Chloroform	<1.30		3.00	1.30	ug/L			10/28/25 16:03	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/28/25 16:03	1
Chloroprene	<0.230		1.00	0.230	ug/L			10/28/25 16:03	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/28/25 16:03	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/28/25 16:03	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/28/25 16:03	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/28/25 16:03	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/28/25 16:03	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/28/25 16:03	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			10/28/25 16:03	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/28/25 16:03	1
Dichlorodifluoromethane	<0.250		3.00	0.250	ug/L			10/28/25 16:03	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/28/25 16:03	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/28/25 16:03	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/28/25 16:03	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/28/25 16:03	1
1,3-Dichloropropane	<0.400		1.00	0.400	ug/L			10/28/25 16:03	1
2,2-Dichloropropane	<0.690		4.00	0.690	ug/L			10/28/25 16:03	1
1,1-Dichloropropene	<0.430		1.00	0.430	ug/L			10/28/25 16:03	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/28/25 16:03	1
Ethyl methacrylate	<0.680		2.00	0.680	ug/L			10/28/25 16:03	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/28/25 16:03	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/28/25 16:03	1
Methacrylonitrile	<3.30		10.0	3.30	ug/L			10/28/25 16:03	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/28/25 16:03	1
Methyl methacrylate	<0.760		2.00	0.760	ug/L			10/28/25 16:03	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/28/25 16:03	1
m,p-Xylene	<0.380		2.00	0.380	ug/L			10/28/25 16:03	1
Naphthalene	<3.00		5.00	3.00	ug/L			10/28/25 16:03	1
o-Xylene	<0.400		1.00	0.400	ug/L			10/28/25 16:03	1
Propionitrile	<3.40		10.0	3.40	ug/L			10/28/25 16:03	1
Styrene	<0.370		1.00	0.370	ug/L			10/28/25 16:03	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/28/25 16:03	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/28/25 16:03	1

Client: Winneshiek Co Solid Waste
Job ID: 310-318779-1
Project/Site: Winneshiek County Sanitary Landfill

Client Sample ID: MW-7A_25_10
Lab Sample ID: 310-318779-3
Date Collected: 10/22/25 14:10
Matrix: Water
Date Received: 10/23/25 15:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/28/25 16:03	1
Toluene	<0.430		1.00	0.430	ug/L			10/28/25 16:03	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/28/25 16:03	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/28/25 16:03	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/28/25 16:03	1
1,2,4-Trichlorobenzene	<0.750		5.00	0.750	ug/L			10/28/25 16:03	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/28/25 16:03	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/28/25 16:03	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/28/25 16:03	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/28/25 16:03	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/28/25 16:03	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/28/25 16:03	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/28/25 16:03	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/28/25 16:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*80 - 120*		*10/28/25 16:03*	*1*
Dibromofluoromethane (Surr)	*108*		*76 - 130*		*10/28/25 16:03*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*10/28/25 16:03*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.696		10.9	0.696	ug/L		10/24/25 09:22	11/03/25 21:45	1
Acenaphthylene	<0.783		10.9	0.783	ug/L		10/24/25 09:22	11/03/25 21:45	1
Acetophenone	<0.750		10.9	0.750	ug/L		10/24/25 09:22	11/03/25 21:45	1
2-Acetylaminofluorene	<2.93	*1	10.9	2.93	ug/L		10/24/25 09:22	11/03/25 21:45	1
4-Aminobiphenyl	<2.39		10.9	2.39	ug/L		10/24/25 09:22	11/03/25 21:45	1
Anthracene	<0.946		10.9	0.946	ug/L		10/24/25 09:22	11/03/25 21:45	1
Benzo[a]anthracene	<0.924		10.9	0.924	ug/L		10/24/25 09:22	11/03/25 21:45	1
Benzo[a]pyrene	<8.80		10.9	8.80	ug/L		10/24/25 09:22	11/03/25 21:45	1
Benzo[b]fluoranthene	<5.33		10.9	5.33	ug/L		10/24/25 09:22	11/03/25 21:45	1
Benzo[g,h,i]perylene	<6.85		10.9	6.85	ug/L		10/24/25 09:22	11/03/25 21:45	1
Benzo[k]fluoranthene	<2.39		10.9	2.39	ug/L		10/24/25 09:22	11/03/25 21:45	1
Benzyl alcohol	<1.41		10.9	1.41	ug/L		10/24/25 09:22	11/03/25 21:45	1
Bis(2-chloroethoxy)methane	<0.826		10.9	0.826	ug/L		10/24/25 09:22	11/03/25 21:45	1
Bis(2-chloroethyl)ether	<0.891		10.9	0.891	ug/L		10/24/25 09:22	11/03/25 21:45	1
bis (2-chloroisopropyl) ether	<0.587		10.9	0.587	ug/L		10/24/25 09:22	11/03/25 21:45	1
Bis(2-ethylhexyl) phthalate	<5.98		10.9	5.98	ug/L		10/24/25 09:22	11/03/25 21:45	1
4-Bromophenyl phenyl ether	<0.761		10.9	0.761	ug/L		10/24/25 09:22	11/03/25 21:45	1
Butyl benzyl phthalate	<5.87		10.9	5.87	ug/L		10/24/25 09:22	11/03/25 21:45	1
4-Chloroaniline	<0.674		10.9	0.674	ug/L		10/24/25 09:22	11/03/25 21:45	1
Chlorobenzilate	<3.91		10.9	3.91	ug/L		10/24/25 09:22	11/03/25 21:45	1
4-Chloro-3-methylphenol	<0.913		10.9	0.913	ug/L		10/24/25 09:22	11/03/25 21:45	1
2-Chloronaphthalene	<0.696		10.9	0.696	ug/L		10/24/25 09:22	11/03/25 21:45	1
2-Chlorophenol	<0.587		10.9	0.587	ug/L		10/24/25 09:22	11/03/25 21:45	1
4-Chlorophenyl phenyl ether	<0.750		10.9	0.750	ug/L		10/24/25 09:22	11/03/25 21:45	1
Chrysene	<0.946		10.9	0.946	ug/L		10/24/25 09:22	11/03/25 21:45	1
Diallate	<4.35		10.9	4.35	ug/L		10/24/25 09:22	11/03/25 21:45	1
Dibenzo(a,h)anthracene	<4.24		10.9	4.24	ug/L		10/24/25 09:22	11/03/25 21:45	1
Dibenzofuran	<0.804		10.9	0.804	ug/L		10/24/25 09:22	11/03/25 21:45	1

Client: Winneshiek Co Solid Waste
Job ID: 310-318779-1
Project/Site: Winneshiek County Sanitary Landfill

Client Sample ID: MW-7A_25_10
Lab Sample ID: 310-318779-3
Date Collected: 10/22/25 14:10
Matrix: Water
Date Received: 10/23/25 15:10

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3,3'-Dichlorobenzidine	<1.52		10.9	1.52	ug/L		10/24/25 09:22	11/03/25 21:45	1
2,4-Dichlorophenol	<0.924		10.9	0.924	ug/L		10/24/25 09:22	11/03/25 21:45	1
2,6-Dichlorophenol	<0.750		10.9	0.750	ug/L		10/24/25 09:22	11/03/25 21:45	1
Diethyl phthalate	<1.85		10.9	1.85	ug/L		10/24/25 09:22	11/03/25 21:45	1
Dimethoate	<3.91		10.9	3.91	ug/L		10/24/25 09:22	11/03/25 21:45	1
7,12-Dimethylbenz(a)anthracene	<2.07		10.9	2.07	ug/L		10/24/25 09:22	11/03/25 21:45	1
3,3'-Dimethylbenzidine	<1.63		10.9	1.63	ug/L		10/24/25 09:22	11/03/25 21:45	1
2,4-Dimethylphenol	<0.630		10.9	0.630	ug/L		10/24/25 09:22	11/03/25 21:45	1
Dimethyl phthalate	<1.09		10.9	1.09	ug/L		10/24/25 09:22	11/03/25 21:45	1
Di-n-butyl phthalate	<6.09		10.9	6.09	ug/L		10/24/25 09:22	11/03/25 21:45	1
1,3-Dinitrobenzene	<3.48		10.9	3.48	ug/L		10/24/25 09:22	11/03/25 21:45	1
4,6-Dinitro-2-methylphenol	<7.50		10.9	7.50	ug/L		10/24/25 09:22	11/03/25 21:45	1
2,4-Dinitrophenol	<14.1		21.7	14.1	ug/L		10/24/25 09:22	11/03/25 21:45	1
2,4-Dinitrotoluene	<6.96		10.9	6.96	ug/L		10/24/25 09:22	11/03/25 21:45	1
2,6-Dinitrotoluene	<0.565		10.9	0.565	ug/L		10/24/25 09:22	11/03/25 21:45	1
Di-n-octyl phthalate	<7.61		21.7	7.61	ug/L		10/24/25 09:22	11/03/25 21:45	1
Dinoseb	<2.61		10.9	2.61	ug/L		10/24/25 09:22	11/03/25 21:45	1
Diphenylamine	<6.52		10.9	6.52	ug/L		10/24/25 09:22	11/03/25 21:45	1
Disulfoton	<2.61		10.9	2.61	ug/L		10/24/25 09:22	11/03/25 21:45	1
Ethyl methanesulfonate	<3.91		10.9	3.91	ug/L		10/24/25 09:22	11/03/25 21:45	1
Ethyl Parathion	<2.39		10.9	2.39	ug/L		10/24/25 09:22	11/03/25 21:45	1
Famphur	<4.13		10.9	4.13	ug/L		10/24/25 09:22	11/03/25 21:45	1
Fluoranthene	<1.85		10.9	1.85	ug/L		10/24/25 09:22	11/03/25 21:45	1
Fluorene	<0.859		10.9	0.859	ug/L		10/24/25 09:22	11/03/25 21:45	1
Hexachlorobenzene	<0.761		10.9	0.761	ug/L		10/24/25 09:22	11/03/25 21:45	1
Hexachlorobutadiene	<0.935		10.9	0.935	ug/L		10/24/25 09:22	11/03/25 21:45	1
Hexachlorocyclopentadiene	<5.54		10.9	5.54	ug/L		10/24/25 09:22	11/03/25 21:45	1
Hexachloroethane	<1.05		10.9	1.05	ug/L		10/24/25 09:22	11/03/25 21:45	1
Hexachloropropene	<2.83		10.9	2.83	ug/L		10/24/25 09:22	11/03/25 21:45	1
Indeno[1,2,3-cd]pyrene	<4.57		10.9	4.57	ug/L		10/24/25 09:22	11/03/25 21:45	1
Isodrin	<5.11		10.9	5.11	ug/L		10/24/25 09:22	11/03/25 21:45	1
Isophorone	<1.01		10.9	1.01	ug/L		10/24/25 09:22	11/03/25 21:45	1
Isosafrole	<2.50		10.9	2.50	ug/L		10/24/25 09:22	11/03/25 21:45	1
Kepone	<1.09	*1	10.9	1.09	ug/L		10/24/25 09:22	11/03/25 21:45	1
Methapyrilene	<0.826	*- *1	10.9	0.826	ug/L		10/24/25 09:22	11/03/25 21:45	1
3-Methylcholanthrene	<0.348		10.9	0.348	ug/L		10/24/25 09:22	11/03/25 21:45	1
Methyl methanesulfonate	<3.59		10.9	3.59	ug/L		10/24/25 09:22	11/03/25 21:45	1
2-Methylnaphthalene	<0.641		10.9	0.641	ug/L		10/24/25 09:22	11/03/25 21:45	1
Methyl parathion	<2.50		10.9	2.50	ug/L		10/24/25 09:22	11/03/25 21:45	1
2-Methylphenol	<0.707		10.9	0.707	ug/L		10/24/25 09:22	11/03/25 21:45	1
Methylphenol, 3 & 4	<0.761		10.9	0.761	ug/L		10/24/25 09:22	11/03/25 21:45	1
1,4-Naphthoquinone	<3.91		10.9	3.91	ug/L		10/24/25 09:22	11/03/25 21:45	1
1-Naphthylamine	<2.72		10.9	2.72	ug/L		10/24/25 09:22	11/03/25 21:45	1
2-Naphthylamine	<2.28		10.9	2.28	ug/L		10/24/25 09:22	11/03/25 21:45	1
2-Nitroaniline	<6.41		10.9	6.41	ug/L		10/24/25 09:22	11/03/25 21:45	1
3-Nitroaniline	<2.93		10.9	2.93	ug/L		10/24/25 09:22	11/03/25 21:45	1
4-Nitroaniline	<1.41		10.9	1.41	ug/L		10/24/25 09:22	11/03/25 21:45	1
Nitrobenzene	<0.870		10.9	0.870	ug/L		10/24/25 09:22	11/03/25 21:45	1
5-Nitro-o-toluidine	<3.04		10.9	3.04	ug/L		10/24/25 09:22	11/03/25 21:45	1

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318779-1

Client Sample ID: MW-7A_25_10

Date Collected: 10/22/25 14:10
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-3

Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	<7.39		10.9	7.39	ug/L		10/24/25 09:22	11/03/25 21:45	1
4-Nitrophenol	<8.26		10.9	8.26	ug/L		10/24/25 09:22	11/03/25 21:45	1
N-Nitrosodiethylamine	<3.70		10.9	3.70	ug/L		10/24/25 09:22	11/03/25 21:45	1
N-Nitrosodimethylamine	<0.783		10.9	0.783	ug/L		10/24/25 09:22	11/03/25 21:45	1
N-Nitrosodi-n-butylamine	<4.24		10.9	4.24	ug/L		10/24/25 09:22	11/03/25 21:45	1
N-Nitrosodi-n-propylamine	<1.00		10.9	1.00	ug/L		10/24/25 09:22	11/03/25 21:45	1
N-Nitrosodiphenylamine	<0.815		10.9	0.815	ug/L		10/24/25 09:22	11/03/25 21:45	1
N-Nitrosomethylethylamine	<5.33		10.9	5.33	ug/L		10/24/25 09:22	11/03/25 21:45	1
N-Nitrosopiperidine	<2.93		10.9	2.93	ug/L		10/24/25 09:22	11/03/25 21:45	1
N-Nitrosopyrrolidine	<3.91		10.9	3.91	ug/L		10/24/25 09:22	11/03/25 21:45	1
o,o',o''-Triethylphosphorothioate	<3.48		10.9	3.48	ug/L		10/24/25 09:22	11/03/25 21:45	1
o-Toluidine	<3.15		10.9	3.15	ug/L		10/24/25 09:22	11/03/25 21:45	1
p-Dimethylamino azobenzene	<2.39		10.9	2.39	ug/L		10/24/25 09:22	11/03/25 21:45	1
Pentachlorobenzene	<3.04		10.9	3.04	ug/L		10/24/25 09:22	11/03/25 21:45	1
Pentachloronitrobenzene	<6.30		10.9	6.30	ug/L		10/24/25 09:22	11/03/25 21:45	1
Pentachlorophenol	<10.4		10.9	10.4	ug/L		10/24/25 09:22	11/03/25 21:45	1
Phenacetin	<2.07		10.9	2.07	ug/L		10/24/25 09:22	11/03/25 21:45	1
Phenanthrene	<0.859		10.9	0.859	ug/L		10/24/25 09:22	11/03/25 21:45	1
Phenol	<1.20		10.9	1.20	ug/L		10/24/25 09:22	11/03/25 21:45	1
1,4-phenylenediamine	<2.07	*-	10.9	2.07	ug/L		10/24/25 09:22	11/03/25 21:45	1
Phorate	<3.48		10.9	3.48	ug/L		10/24/25 09:22	11/03/25 21:45	1
Pronamide	<2.93		10.9	2.93	ug/L		10/24/25 09:22	11/03/25 21:45	1
Pyrene	<0.859		10.9	0.859	ug/L		10/24/25 09:22	11/03/25 21:45	1
Safrole	<3.04		10.9	3.04	ug/L		10/24/25 09:22	11/03/25 21:45	1
1,2,4,5-Tetrachlorobenzene	<0.587		10.9	0.587	ug/L		10/24/25 09:22	11/03/25 21:45	1
2,3,4,6-Tetrachlorophenol	<5.76		10.9	5.76	ug/L		10/24/25 09:22	11/03/25 21:45	1
Thionazin	<3.80		10.9	3.80	ug/L		10/24/25 09:22	11/03/25 21:45	1
2,4,5-Trichlorophenol	<5.76		10.9	5.76	ug/L		10/24/25 09:22	11/03/25 21:45	1
2,4,6-Trichlorophenol	<5.43		10.9	5.43	ug/L		10/24/25 09:22	11/03/25 21:45	1
1,3,5-Trinitrobenzene	<2.50		10.9	2.50	ug/L		10/24/25 09:22	11/03/25 21:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*88*		*33 - 126*	*10/24/25 09:22*	*11/03/25 21:45*	*1*
2-Fluorophenol (Surr)	*73*		*21 - 110*	*10/24/25 09:22*	*11/03/25 21:45*	*1*
Nitrobenzene-d5 (Surr)	*98*		*39 - 140*	*10/24/25 09:22*	*11/03/25 21:45*	*1*
Phenol-d5 (Surr)	*62*		*21 - 110*	*10/24/25 09:22*	*11/03/25 21:45*	*1*
Terphenyl-d14 (Surr)	*108*		*13 - 150*	*10/24/25 09:22*	*11/03/25 21:45*	*1*
2,4,6-Tribromophenol (Surr)	*98*		*20 - 144*	*10/24/25 09:22*	*11/03/25 21:45*	*1*

Method: SW846 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	<2600		10000	2600	ug/L			10/31/25 21:39	1
Isobutanol	<2400		10000	2400	ug/L			10/31/25 21:39	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.0205		0.0931	0.0205	ug/L		10/29/25 10:07	10/30/25 12:49	1
alpha-BHC	<0.00931		0.0931	0.00931	ug/L		10/29/25 10:07	10/30/25 12:49	1
beta-BHC	<0.0391		0.0931	0.0391	ug/L		10/29/25 10:07	10/30/25 12:49	1
Chlordane (technical)	<0.363		1.86	0.363	ug/L		10/29/25 10:07	10/30/25 12:49	1

Client Sample ID: MW-7A_25_10
Lab Sample ID: 310-318779-3
Date Collected: 10/22/25 14:10
Matrix: Water
Date Received: 10/23/25 15:10

Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.0233		0.0931	0.0233	ug/L		10/29/25 10:07	10/30/25 12:49	1
4,4'-DDE	<0.0279		0.0931	0.0279	ug/L		10/29/25 10:07	10/30/25 12:49	1
4,4'-DDT	<0.0186		0.0931	0.0186	ug/L		10/29/25 10:07	10/30/25 12:49	1
delta-BHC	<0.0298		0.0931	0.0298	ug/L		10/29/25 10:07	10/30/25 12:49	1
Dieldrin	<0.0195		0.0931	0.0195	ug/L		10/29/25 10:07	10/30/25 12:49	1
Endosulfan I	<0.0261		0.0931	0.0261	ug/L		10/29/25 10:07	10/30/25 12:49	1
Endosulfan II	<0.0242		0.0931	0.0242	ug/L		10/29/25 10:07	10/30/25 12:49	1
Endosulfan sulfate	<0.0168		0.0931	0.0168	ug/L		10/29/25 10:07	10/30/25 12:49	1
Endrin	<0.0261		0.0931	0.0261	ug/L		10/29/25 10:07	10/30/25 12:49	1
Endrin aldehyde	<0.0251		0.0931	0.0251	ug/L		10/29/25 10:07	10/30/25 12:49	1
gamma-BHC (Lindane)	<0.00931		0.0931	0.00931	ug/L		10/29/25 10:07	10/30/25 12:49	1
Heptachlor	<0.0214		0.0931	0.0214	ug/L		10/29/25 10:07	10/30/25 12:49	1
Heptachlor epoxide	<0.0298		0.0931	0.0298	ug/L		10/29/25 10:07	10/30/25 12:49	1
Methoxychlor	<0.0298		0.0931	0.0298	ug/L		10/29/25 10:07	10/30/25 12:49	1
Toxaphene	<0.931		1.86	0.931	ug/L		10/29/25 10:07	10/30/25 12:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*72*		*10 - 150*	*10/29/25 10:07*	*10/30/25 12:49*	*1*
Tetrachloro-m-xylene	*86*		*17 - 150*	*10/29/25 10:07*	*10/30/25 12:49*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.763		1.86	0.763	ug/L		10/29/25 10:07	10/30/25 12:49	1
PCB-1221	<0.763		1.86	0.763	ug/L		10/29/25 10:07	10/30/25 12:49	1
PCB-1232	<0.763		1.86	0.763	ug/L		10/29/25 10:07	10/30/25 12:49	1
PCB-1242	<0.763		1.86	0.763	ug/L		10/29/25 10:07	10/30/25 12:49	1
PCB-1248	<0.642		1.86	0.642	ug/L		10/29/25 10:07	10/30/25 12:49	1
PCB-1254	<0.642		1.86	0.642	ug/L		10/29/25 10:07	10/30/25 12:49	1
PCB-1260	<0.642		1.86	0.642	ug/L		10/29/25 10:07	10/30/25 12:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*72*		*10 - 150*	*10/29/25 10:07*	*10/30/25 12:49*	*1*
Tetrachloro-m-xylene	*86*		*17 - 150*	*10/29/25 10:07*	*10/30/25 12:49*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.302		0.726	0.302	ug/L		10/29/25 15:26	10/30/25 18:09	1
Silvex (2,4,5-TP)	<0.0266		0.0605	0.0266	ug/L		10/29/25 15:26	10/30/25 18:09	1
2,4,5-T	<0.0786		0.181	0.0786	ug/L		10/29/25 15:26	10/30/25 18:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*77*		*34 - 142*	*10/29/25 15:26*	*10/30/25 18:09*	*1*
DCAA	*94*		*34 - 142*	*10/29/25 15:26*	*10/30/25 18:09*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		10/29/25 09:00	11/03/25 17:59	1
Arsenic	<0.530		2.00	0.530	ug/L		10/29/25 09:00	11/03/25 17:59	1
Barium	**319**		2.00	0.660	ug/L		10/29/25 09:00	11/03/25 17:59	1
Beryllium	<0.330		1.00	0.330	ug/L		10/29/25 09:00	11/03/25 17:59	1
Cadmium	<0.100		0.200	0.100	ug/L		10/29/25 09:00	11/03/25 17:59	1

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318779-1

Client Sample ID: MW-7A_25_10

Date Collected: 10/22/25 14:10
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-3

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**6.92**		5.00	1.80	ug/L		10/29/25 09:00	11/03/25 17:59	1
Cobalt	**0.192**	**J**	0.500	0.170	ug/L		10/29/25 09:00	11/03/25 17:59	1
Copper	<3.20		5.00	3.20	ug/L		10/29/25 09:00	11/03/25 17:59	1
Lead	<0.330		0.500	0.330	ug/L		10/29/25 09:00	11/03/25 17:59	1
Nickel	**10.8**		5.00	2.30	ug/L		10/29/25 09:00	11/03/25 17:59	1
Selenium	<1.40		5.00	1.40	ug/L		10/29/25 09:00	11/03/25 17:59	1
Silver	<0.500		1.00	0.500	ug/L		10/29/25 09:00	11/03/25 17:59	1
Thallium	<0.570	*+ ^+	1.00	0.570	ug/L		10/29/25 09:00	11/04/25 15:36	1
Vanadium	<1.70		5.00	1.70	ug/L		10/29/25 09:00	11/03/25 17:59	1
Zinc	<13.0		20.0	13.0	ug/L		10/29/25 09:00	11/03/25 17:59	1
Tin	<2.50		5.00	2.50	ug/L		10/29/25 09:00	11/03/25 17:59	1
Sodium	**14200**		1000	650	ug/L		10/29/25 09:00	11/03/25 17:59	1
Calcium	**148000**		500	190	ug/L		10/29/25 09:00	11/03/25 17:59	1
Magnesium	**47600**		500	150	ug/L		10/29/25 09:00	11/03/25 17:59	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.110		0.200	0.110	ug/L		11/03/25 12:50	11/04/25 11:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 353.2)	<0.0800		0.100	0.0800	mg/L			10/31/25 13:26	1
Fluoride (SM 4500 F C-2011)	**0.126**		0.100	0.0490	mg/L			11/02/25 12:17	1
Cyanide, Total (SW846 9012B)	<3.50		10.0	3.50	ug/L		10/28/25 10:55	10/29/25 21:06	1
Sulfide (SW846 9034)	<1410		3000	1410	ug/L		10/29/25 12:25	10/29/25 16:45	1
Sulfate (ASTM D516-16)	**30.2**	**B**	5.00	1.80	mg/L			10/31/25 14:58	1
Total Suspended Solids (USGS I-3765-85)	<1.33		1.90	1.33	mg/L			10/28/25 11:38	1
Total Suspended Solids (USGS I-3765-85)	<1.33		1.90	1.33	mg/L			10/28/25 11:38	1
Anion/Cation Balance (SM 1030E)	**-5.86**				%			10/27/25 10:47	1
Total Alkalinity (SM 2320B)	**536**		5.00	2.50	mg/L			10/29/25 20:22	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**536**		5.00	2.50	mg/L			10/29/25 20:22	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 20:22	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 20:22	1
Phenolphthalein Alkalinity as CaCO3 to pH 8.3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 20:22	1
Total Dissolved Solids (SM 2540C)	**600**		50.0	36.0	mg/L			10/27/25 12:05	1
Chloride (SM 4500 Cl- E)	**73.0**		2.00	1.40	mg/L			10/28/25 23:49	1
Biochemical Oxygen Demand (SM 5210B)	<3.00		3.00	3.00	mg/L			10/23/25 16:17	1
Chemical Oxygen Demand (SM 5220D)	<23.0		25.0	23.0	mg/L			10/30/25 13:52	5

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318779-1

Client Sample ID: MW-18_25_10
Date Collected: 10/22/25 16:55
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/28/25 16:26	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/28/25 16:26	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/28/25 16:26	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/28/25 16:26	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/28/25 16:26	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/28/25 16:26	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/28/25 16:26	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/28/25 16:26	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/28/25 16:26	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/28/25 16:26	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/28/25 16:26	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/28/25 16:26	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/28/25 16:26	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/28/25 16:26	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/28/25 16:26	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/28/25 16:26	1
Acetone	<3.10		10.0	3.10	ug/L			10/28/25 16:26	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/28/25 16:26	1
Benzene	<0.220		0.500	0.220	ug/L			10/28/25 16:26	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/28/25 16:26	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/28/25 16:26	1
Bromoform	<0.780		5.00	0.780	ug/L			10/28/25 16:26	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/28/25 16:26	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/28/25 16:26	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/28/25 16:26	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/28/25 16:26	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/28/25 16:26	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/28/25 16:26	1
Chloroform	<1.30		3.00	1.30	ug/L			10/28/25 16:26	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/28/25 16:26	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/28/25 16:26	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/28/25 16:26	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/28/25 16:26	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/28/25 16:26	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/28/25 16:26	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/28/25 16:26	1
Styrene	<0.370		1.00	0.370	ug/L			10/28/25 16:26	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/28/25 16:26	1
Toluene	<0.430		1.00	0.430	ug/L			10/28/25 16:26	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/28/25 16:26	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/28/25 16:26	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/28/25 16:26	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/28/25 16:26	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/28/25 16:26	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/28/25 16:26	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/28/25 16:26	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/28/25 16:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*109*		*76 - 130*		*10/28/25 16:26*	*1*

Client Sample ID: MW-18_25_10
Lab Sample ID: 310-318779-4

Date Collected: 10/22/25 16:55
Matrix: Water
Date Received: 10/23/25 15:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/28/25 16:26*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*10/28/25 16:26*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.27**	**J**	2.00	1.00	ug/L		10/29/25 09:00	11/03/25 18:08	1
Arsenic	<0.530		2.00	0.530	ug/L		10/29/25 09:00	11/03/25 18:08	1
Barium	**72.5**		2.00	0.660	ug/L		10/29/25 09:00	11/03/25 18:08	1
Beryllium	<0.330		1.00	0.330	ug/L		10/29/25 09:00	11/03/25 18:08	1
Cadmium	<0.100		0.200	0.100	ug/L		10/29/25 09:00	11/03/25 18:08	1
Calcium	**69.9**		0.500	0.190	mg/L		10/29/25 09:00	11/03/25 18:08	1
Chromium	<1.80		5.00	1.80	ug/L		10/29/25 09:00	11/03/25 18:08	1
Cobalt	**0.296**	**J**	0.500	0.170	ug/L		10/29/25 09:00	11/03/25 18:08	1
Copper	<3.20		5.00	3.20	ug/L		10/29/25 09:00	11/03/25 18:08	1
Lead	<0.330		0.500	0.330	ug/L		10/29/25 09:00	11/03/25 18:08	1
Magnesium	**24.7**		0.500	0.150	mg/L		10/29/25 09:00	11/03/25 18:08	1
Nickel	<2.30		5.00	2.30	ug/L		10/29/25 09:00	11/03/25 18:08	1
Selenium	<1.40		5.00	1.40	ug/L		10/29/25 09:00	11/03/25 18:08	1
Silver	<0.500		1.00	0.500	ug/L		10/29/25 09:00	11/03/25 18:08	1
Sodium	**5.08**		1.00	0.650	mg/L		10/29/25 09:00	11/03/25 18:08	1
Thallium	<0.570	*+ ^+	1.00	0.570	ug/L		10/29/25 09:00	11/04/25 15:39	1
Vanadium	<1.70		5.00	1.70	ug/L		10/29/25 09:00	11/03/25 18:08	1
Zinc	<13.0		20.0	13.0	ug/L		10/29/25 09:00	11/03/25 18:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 353.2)	<0.0800		0.100	0.0800	mg/L			10/31/25 13:28	1
Fluoride (SM 4500 F C-2011)	**0.454**		0.100	0.0490	mg/L			11/02/25 12:20	1
Sulfate (ASTM D516-16)	**11.1**	**B**	5.00	1.80	mg/L			10/31/25 14:59	1
Total Suspended Solids (USGS I-3765-85)	**2.28**		1.90	1.33	mg/L			10/28/25 11:38	1
Anion/Cation Balance (SM 1030E)	**-6.73**				%			10/27/25 10:47	1
Total Alkalinity (SM 2320B)	**312**		5.00	2.50	mg/L			10/29/25 14:23	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**312**		5.00	2.50	mg/L			10/29/25 14:23	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 14:23	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 14:23	1
Phenolphthalein Alkalinity as CaCO3 tc pH 8.3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 14:23	1
Total Dissolved Solids (SM 2540C)	**276**		50.0	36.0	mg/L			10/27/25 12:05	1
Chloride (SM 4500 Cl- E)	**2.86**		2.00	1.40	mg/L			10/27/25 20:21	1
Biochemical Oxygen Demand (SM 5210B)	<3.00		3.00	3.00	mg/L			10/23/25 16:07	1
Chemical Oxygen Demand (SM 5220D)	<23.0		25.0	23.0	mg/L			10/30/25 13:52	5

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318779-1

Client Sample ID: MW-29A_25_10
Date Collected: 10/22/25 12:00
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/28/25 16:48	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/28/25 16:48	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/28/25 16:48	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/28/25 16:48	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/28/25 16:48	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/28/25 16:48	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/28/25 16:48	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/28/25 16:48	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/28/25 16:48	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/28/25 16:48	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/28/25 16:48	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/28/25 16:48	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/28/25 16:48	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/28/25 16:48	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/28/25 16:48	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/28/25 16:48	1
Acetone	<3.10		10.0	3.10	ug/L			10/28/25 16:48	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/28/25 16:48	1
Benzene	<0.220		0.500	0.220	ug/L			10/28/25 16:48	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/28/25 16:48	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/28/25 16:48	1
Bromoform	<0.780		5.00	0.780	ug/L			10/28/25 16:48	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/28/25 16:48	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/28/25 16:48	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/28/25 16:48	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/28/25 16:48	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/28/25 16:48	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/28/25 16:48	1
Chloroform	<1.30		3.00	1.30	ug/L			10/28/25 16:48	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/28/25 16:48	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/28/25 16:48	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/28/25 16:48	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/28/25 16:48	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/28/25 16:48	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/28/25 16:48	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/28/25 16:48	1
Styrene	<0.370		1.00	0.370	ug/L			10/28/25 16:48	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/28/25 16:48	1
Toluene	<0.430		1.00	0.430	ug/L			10/28/25 16:48	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/28/25 16:48	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/28/25 16:48	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/28/25 16:48	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/28/25 16:48	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/28/25 16:48	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/28/25 16:48	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/28/25 16:48	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/28/25 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*103*		*76 - 130*		*10/28/25 16:48*	*1*

Client Sample ID: MW-29A_25_10

Date Collected: 10/22/25 12:00
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-5

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/28/25 16:48*	*1*
4-Bromofluorobenzene (Surr)	*110*		*80 - 120*		*10/28/25 16:48*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		10/29/25 09:00	11/03/25 18:11	1
Arsenic	**4.30**		2.00	0.530	ug/L		10/29/25 09:00	11/03/25 18:11	1
Barium	**133**		2.00	0.660	ug/L		10/29/25 09:00	11/03/25 18:11	1
Beryllium	<0.330		1.00	0.330	ug/L		10/29/25 09:00	11/03/25 18:11	1
Cadmium	<0.100		0.200	0.100	ug/L		10/29/25 09:00	11/03/25 18:11	1
Calcium	**242**		0.500	0.190	mg/L		10/29/25 09:00	11/03/25 18:11	1
Chromium	<1.80		5.00	1.80	ug/L		10/29/25 09:00	11/03/25 18:11	1
Cobalt	**19.3**		0.500	0.170	ug/L		10/29/25 09:00	11/03/25 18:11	1
Copper	<3.20		5.00	3.20	ug/L		10/29/25 09:00	11/03/25 18:11	1
Lead	<0.330		0.500	0.330	ug/L		10/29/25 09:00	11/03/25 18:11	1
Magnesium	**49.1**		0.500	0.150	mg/L		10/29/25 09:00	11/03/25 18:11	1
Nickel	**71.0**		5.00	2.30	ug/L		10/29/25 09:00	11/03/25 18:11	1
Selenium	<1.40		5.00	1.40	ug/L		10/29/25 09:00	11/03/25 18:11	1
Silver	<0.500		1.00	0.500	ug/L		10/29/25 09:00	11/03/25 18:11	1
Sodium	**87.7**		1.00	0.650	mg/L		10/29/25 09:00	11/03/25 18:11	1
Thallium	<0.570	*+ ^+	1.00	0.570	ug/L		10/29/25 09:00	11/04/25 15:41	1
Vanadium	<1.70		5.00	1.70	ug/L		10/29/25 09:00	11/03/25 18:11	1
Zinc	<13.0		20.0	13.0	ug/L		10/29/25 09:00	11/03/25 18:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 353.2)	<0.0800		0.100	0.0800	mg/L			10/31/25 13:30	1
Fluoride (SM 4500 F C-2011)	**0.0873**	**J**	0.100	0.0490	mg/L			11/02/25 12:23	1
Sulfide (SW846 9034)	**3070**		3000	1410	ug/L		10/29/25 12:25	10/29/25 16:45	1
Sulfate (ASTM D516-16)	**92.6**	**B**	50.0	18.0	mg/L			10/31/25 14:59	10
Total Suspended Solids (USGS I-3765-85)	**7.25**		3.75	2.63	mg/L			10/28/25 11:38	1
Anion/Cation Balance (SM 1030E)	**-5.60**				%			10/27/25 10:47	1
Total Alkalinity (SM 2320B)	**796**		5.00	2.50	mg/L			10/29/25 14:33	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**796**		5.00	2.50	mg/L			10/29/25 14:33	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 14:33	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 14:33	1
Phenolphthalein Alkalinity as CaCO3 tc pH 8.3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 14:33	1
Total Dissolved Solids (SM 2540C)	**1070**		50.0	36.0	mg/L			10/27/25 12:05	1
Chloride (SM 4500 Cl- E)	**158**		20.0	14.0	mg/L			10/27/25 20:37	10
Biochemical Oxygen Demand (SM 5210B)	<3.00		3.00	3.00	mg/L			10/23/25 15:50	1
Chemical Oxygen Demand (SM 5220D)	<23.0		25.0	23.0	mg/L			10/30/25 13:52	5

Client Sample ID: MW-35_25_10
Lab Sample ID: 310-318779-6

Date Collected: 10/21/25 16:40
Matrix: Water
Date Received: 10/23/25 15:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/28/25 13:25	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/28/25 13:25	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/28/25 13:25	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/28/25 13:25	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/28/25 13:25	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/28/25 13:25	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/28/25 13:25	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/28/25 13:25	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/28/25 13:25	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/28/25 13:25	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/28/25 13:25	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/28/25 13:25	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/28/25 13:25	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/28/25 13:25	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/28/25 13:25	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/28/25 13:25	1
Acetone	<3.10		10.0	3.10	ug/L			10/28/25 13:25	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/28/25 13:25	1
Benzene	<0.220		0.500	0.220	ug/L			10/28/25 13:25	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/28/25 13:25	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/28/25 13:25	1
Bromoform	<0.780		5.00	0.780	ug/L			10/28/25 13:25	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/28/25 13:25	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/28/25 13:25	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/28/25 13:25	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/28/25 13:25	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/28/25 13:25	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/28/25 13:25	1
Chloroform	<1.30		3.00	1.30	ug/L			10/28/25 13:25	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/28/25 13:25	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/28/25 13:25	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/28/25 13:25	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/28/25 13:25	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/28/25 13:25	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/28/25 13:25	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/28/25 13:25	1
Styrene	<0.370		1.00	0.370	ug/L			10/28/25 13:25	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/28/25 13:25	1
Toluene	<0.430		1.00	0.430	ug/L			10/28/25 13:25	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/28/25 13:25	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/28/25 13:25	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/28/25 13:25	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/28/25 13:25	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/28/25 13:25	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/28/25 13:25	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/28/25 13:25	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/28/25 13:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*76 - 130*		*10/28/25 13:25*	*1*

Client Sample ID: MW-35_25_10
Lab Sample ID: 310-318779-6

Date Collected: 10/21/25 16:40
Matrix: Water
Date Received: 10/23/25 15:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*80 - 120*		*10/28/25 13:25*	*1*
4-Bromofluorobenzene (Surr)	*109*		*80 - 120*		*10/28/25 13:25*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		10/29/25 09:00	11/03/25 18:14	1
Arsenic	**0.867**	**J**	2.00	0.530	ug/L		10/29/25 09:00	11/03/25 18:14	1
Barium	**256**		2.00	0.660	ug/L		10/29/25 09:00	11/03/25 18:14	1
Beryllium	<0.330		1.00	0.330	ug/L		10/29/25 09:00	11/03/25 18:14	1
Cadmium	<0.100		0.200	0.100	ug/L		10/29/25 09:00	11/03/25 18:14	1
Calcium	**156**		0.500	0.190	mg/L		10/29/25 09:00	11/03/25 18:14	1
Chromium	<1.80		5.00	1.80	ug/L		10/29/25 09:00	11/03/25 18:14	1
Cobalt	**4.73**		0.500	0.170	ug/L		10/29/25 09:00	11/03/25 18:14	1
Copper	<3.20		5.00	3.20	ug/L		10/29/25 09:00	11/03/25 18:14	1
Lead	<0.330		0.500	0.330	ug/L		10/29/25 09:00	11/03/25 18:14	1
Magnesium	**61.0**		0.500	0.150	mg/L		10/29/25 09:00	11/03/25 18:14	1
Nickel	**18.6**		5.00	2.30	ug/L		10/29/25 09:00	11/03/25 18:14	1
Selenium	<1.40		5.00	1.40	ug/L		10/29/25 09:00	11/03/25 18:14	1
Silver	<0.500		1.00	0.500	ug/L		10/29/25 09:00	11/03/25 18:14	1
Sodium	**28.2**		1.00	0.650	mg/L		10/29/25 09:00	11/03/25 18:14	1
Thallium	<0.570	*+ ^+	1.00	0.570	ug/L		10/29/25 09:00	11/04/25 15:44	1
Vanadium	<1.70		5.00	1.70	ug/L		10/29/25 09:00	11/03/25 18:14	1
Zinc	<13.0		20.0	13.0	ug/L		10/29/25 09:00	11/03/25 18:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 353.2)	<0.0800		0.100	0.0800	mg/L			10/31/25 13:32	1
Fluoride (SM 4500 F C-2011)	**0.222**		0.100	0.0490	mg/L			11/02/25 12:26	1
Sulfate (ASTM D516-16)	**18.4**	**B**	5.00	1.80	mg/L			10/31/25 15:00	1
Total Suspended Solids (USGS I-3765-85)	**5.00**		3.75	2.63	mg/L			10/24/25 12:31	1
Anion/Cation Balance (SM 1030E)	**-5.16**				%			10/27/25 10:47	1
Total Alkalinity (SM 2320B)	**619**		5.00	2.50	mg/L			10/29/25 15:01	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**619**		5.00	2.50	mg/L			10/29/25 15:01	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 15:01	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 15:01	1
Phenolphthalein Alkalinity as CaCO3 to pH 8.3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 15:01	1
Total Dissolved Solids (SM 2540C)	**652**		50.0	36.0	mg/L			10/24/25 14:09	1
Chloride (SM 4500 Cl- E)	**99.1**		20.0	14.0	mg/L			10/27/25 20:38	10
Biochemical Oxygen Demand (SM 5210B)	**3.14**		3.00	3.00	mg/L			10/23/25 15:47	1
Chemical Oxygen Demand (SM 5220D)	<23.0		25.0	23.0	mg/L			10/30/25 13:52	5

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318779-1

Client Sample ID: MW-39A_25_10
Date Collected: 10/22/25 09:45
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-7
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/28/25 17:11	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/28/25 17:11	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/28/25 17:11	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/28/25 17:11	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/28/25 17:11	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/28/25 17:11	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/28/25 17:11	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/28/25 17:11	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/28/25 17:11	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/28/25 17:11	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/28/25 17:11	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/28/25 17:11	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/28/25 17:11	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/28/25 17:11	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/28/25 17:11	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/28/25 17:11	1
Acetone	<3.10		10.0	3.10	ug/L			10/28/25 17:11	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/28/25 17:11	1
Benzene	<0.220		0.500	0.220	ug/L			10/28/25 17:11	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/28/25 17:11	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/28/25 17:11	1
Bromoform	<0.780		5.00	0.780	ug/L			10/28/25 17:11	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/28/25 17:11	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/28/25 17:11	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/28/25 17:11	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/28/25 17:11	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/28/25 17:11	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/28/25 17:11	1
Chloroform	<1.30		3.00	1.30	ug/L			10/28/25 17:11	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/28/25 17:11	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/28/25 17:11	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/28/25 17:11	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/28/25 17:11	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/28/25 17:11	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/28/25 17:11	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/28/25 17:11	1
Styrene	<0.370		1.00	0.370	ug/L			10/28/25 17:11	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/28/25 17:11	1
Toluene	<0.430		1.00	0.430	ug/L			10/28/25 17:11	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/28/25 17:11	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/28/25 17:11	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/28/25 17:11	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/28/25 17:11	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/28/25 17:11	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/28/25 17:11	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/28/25 17:11	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/28/25 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*108*		*76 - 130*		*10/28/25 17:11*	*1*

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318779-1

Client Sample ID: MW-39A_25_10

Date Collected: 10/22/25 09:45
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-7

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/28/25 17:11*	*1*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*		*10/28/25 17:11*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		10/29/25 09:00	11/03/25 18:17	1
Arsenic	<0.530		2.00	0.530	ug/L		10/29/25 09:00	11/03/25 18:17	1
Barium	**143**		2.00	0.660	ug/L		10/29/25 09:00	11/03/25 18:17	1
Beryllium	<0.330		1.00	0.330	ug/L		10/29/25 09:00	11/03/25 18:17	1
Cadmium	<0.100		0.200	0.100	ug/L		10/29/25 09:00	11/03/25 18:17	1
Calcium	**115**		0.500	0.190	mg/L		10/29/25 09:00	11/03/25 18:17	1
Chromium	<1.80		5.00	1.80	ug/L		10/29/25 09:00	11/03/25 18:17	1
Cobalt	**0.335**	**J**	0.500	0.170	ug/L		10/29/25 09:00	11/03/25 18:17	1
Copper	<3.20		5.00	3.20	ug/L		10/29/25 09:00	11/03/25 18:17	1
Lead	<0.330		0.500	0.330	ug/L		10/29/25 09:00	11/03/25 18:17	1
Magnesium	**37.3**		0.500	0.150	mg/L		10/29/25 09:00	11/03/25 18:17	1
Nickel	**2.56**	**J**	5.00	2.30	ug/L		10/29/25 09:00	11/03/25 18:17	1
Selenium	<1.40		5.00	1.40	ug/L		10/29/25 09:00	11/03/25 18:17	1
Silver	<0.500		1.00	0.500	ug/L		10/29/25 09:00	11/03/25 18:17	1
Sodium	**9.26**		1.00	0.650	mg/L		10/29/25 09:00	11/03/25 18:17	1
Thallium	<0.570	*+ ^+	1.00	0.570	ug/L		10/29/25 09:00	11/04/25 15:53	1
Vanadium	<1.70		5.00	1.70	ug/L		10/29/25 09:00	11/03/25 18:17	1
Zinc	<13.0		20.0	13.0	ug/L		10/29/25 09:00	11/03/25 18:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 353.2)	**13.7**		1.00	0.800	mg/L			10/31/25 15:03	1
Fluoride (SM 4500 F C-2011)	**0.157**		0.100	0.0490	mg/L			11/02/25 12:29	1
Sulfate (ASTM D516-16)	**29.0**	**B**	5.00	1.80	mg/L			10/31/25 15:00	1
Total Suspended Solids (USGS I-3765-85)	**62.0**		15.0	10.5	mg/L			10/28/25 11:38	1
Anion/Cation Balance (SM 1030E)	**-2.69**				%			10/27/25 10:47	1
Total Alkalinity (SM 2320B)	**364**		5.00	2.50	mg/L			10/29/25 15:13	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**364**		5.00	2.50	mg/L			10/29/25 15:13	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 15:13	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 15:13	1
Phenolphthalein Alkalinity as CaCO3 tc pH 8.3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 15:13	1
Total Dissolved Solids (SM 2540C)	**440**		50.0	36.0	mg/L			10/24/25 14:09	1
Chloride (SM 4500 Cl- E)	**30.4**		2.00	1.40	mg/L			10/27/25 20:22	1
Biochemical Oxygen Demand (SM 5210B)	<3.00		3.00	3.00	mg/L			10/23/25 15:54	1
Chemical Oxygen Demand (SM 5220D)	<23.0		25.0	23.0	mg/L			10/30/25 13:52	5

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318779-1

Client Sample ID: MW-43A_25_10
Date Collected: 10/21/25 15:35
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-8
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/28/25 13:48	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/28/25 13:48	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/28/25 13:48	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/28/25 13:48	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/28/25 13:48	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/28/25 13:48	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/28/25 13:48	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/28/25 13:48	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/28/25 13:48	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/28/25 13:48	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/28/25 13:48	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/28/25 13:48	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/28/25 13:48	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/28/25 13:48	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/28/25 13:48	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/28/25 13:48	1
Acetone	<3.10		10.0	3.10	ug/L			10/28/25 13:48	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/28/25 13:48	1
Benzene	<0.220		0.500	0.220	ug/L			10/28/25 13:48	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/28/25 13:48	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/28/25 13:48	1
Bromoform	<0.780		5.00	0.780	ug/L			10/28/25 13:48	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/28/25 13:48	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/28/25 13:48	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/28/25 13:48	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/28/25 13:48	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/28/25 13:48	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/28/25 13:48	1
Chloroform	<1.30		3.00	1.30	ug/L			10/28/25 13:48	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/28/25 13:48	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/28/25 13:48	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/28/25 13:48	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/28/25 13:48	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/28/25 13:48	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/28/25 13:48	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/28/25 13:48	1
Styrene	<0.370		1.00	0.370	ug/L			10/28/25 13:48	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/28/25 13:48	1
Toluene	<0.430		1.00	0.430	ug/L			10/28/25 13:48	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/28/25 13:48	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/28/25 13:48	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/28/25 13:48	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/28/25 13:48	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/28/25 13:48	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/28/25 13:48	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/28/25 13:48	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/28/25 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*76 - 130*		*10/28/25 13:48*	*1*

Client Sample ID: MW-43A_25_10
Lab Sample ID: 310-318779-8

Date Collected: 10/21/25 15:35
Matrix: Water
Date Received: 10/23/25 15:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*80 - 120*		*10/28/25 13:48*	*1*
4-Bromofluorobenzene (Surr)	*109*		*80 - 120*		*10/28/25 13:48*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.82**	**J**	2.00	1.00	ug/L		10/29/25 09:00	11/05/25 14:19	1
Arsenic	**6.33**		2.00	0.530	ug/L		10/29/25 09:00	11/05/25 14:19	1
Barium	**198**		2.00	0.660	ug/L		10/29/25 09:00	11/05/25 14:19	1
Beryllium	<0.330		1.00	0.330	ug/L		10/29/25 09:00	11/05/25 14:19	1
Cadmium	<0.100		0.200	0.100	ug/L		10/29/25 09:00	11/05/25 14:19	1
Calcium	**139**		0.500	0.190	mg/L		10/29/25 09:00	11/05/25 14:19	1
Chromium	<1.80		5.00	1.80	ug/L		10/29/25 09:00	11/05/25 14:19	1
Cobalt	**3.00**		0.500	0.170	ug/L		10/29/25 09:00	11/05/25 14:19	1
Copper	<3.20		5.00	3.20	ug/L		10/29/25 09:00	11/05/25 14:19	1
Lead	<0.330		0.500	0.330	ug/L		10/29/25 09:00	11/05/25 14:19	1
Magnesium	**31.9**		0.500	0.150	mg/L		10/29/25 09:00	11/05/25 14:19	1
Nickel	**24.5**		5.00	2.30	ug/L		10/29/25 09:00	11/05/25 14:19	1
Selenium	<1.40		5.00	1.40	ug/L		10/29/25 09:00	11/05/25 14:19	1
Silver	<0.500		1.00	0.500	ug/L		10/29/25 09:00	11/05/25 14:19	1
Sodium	**95.2**		1.00	0.650	mg/L		10/29/25 09:00	11/05/25 14:19	1
Thallium	<0.570	^+	1.00	0.570	ug/L		10/29/25 09:00	11/05/25 14:19	1
Vanadium	<1.70		5.00	1.70	ug/L		10/29/25 09:00	11/05/25 14:19	1
Zinc	<13.0		20.0	13.0	ug/L		10/29/25 09:00	11/05/25 14:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 353.2)	**0.117**		0.100	0.0800	mg/L			10/31/25 13:36	1
Fluoride (SM 4500 F C-2011)	**0.0669**	**J**	0.100	0.0490	mg/L			11/02/25 12:32	1
Sulfate (ASTM D516-16)	**89.0**	**B**	25.0	9.00	mg/L			10/31/25 15:00	5
Total Suspended Solids (USGS I-3765-85)	**16.7**		5.00	3.50	mg/L			10/24/25 12:31	1
Anion/Cation Balance (SM 1030E)	**-7.05**				%			10/27/25 10:47	1
Total Alkalinity (SM 2320B)	**537**		5.00	2.50	mg/L			10/29/25 15:23	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**537**		5.00	2.50	mg/L			10/29/25 15:23	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 15:23	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 15:23	1
Phenolphthalein Alkalinity as CaCO3 to pH 8.3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 15:23	1
Total Dissolved Solids (SM 2540C)	**742**		50.0	36.0	mg/L			10/24/25 12:46	1
Chloride (SM 4500 Cl- E)	**113**		20.0	14.0	mg/L			10/29/25 00:15	10
Biochemical Oxygen Demand (SM 5210B)	**7.26**		3.00	3.00	mg/L			10/23/25 15:27	1
Chemical Oxygen Demand (SM 5220D)	<23.0		25.0	23.0	mg/L			10/30/25 13:52	5

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318779-1

Client Sample ID: MW-44A_25_10

Date Collected: 10/21/25 16:30
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-9

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			11/04/25 20:32	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			11/04/25 20:32	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			11/04/25 20:32	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			11/04/25 20:32	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			11/04/25 20:32	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			11/04/25 20:32	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			11/04/25 20:32	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			11/04/25 20:32	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			11/04/25 20:32	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			11/04/25 20:32	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			11/04/25 20:32	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			11/04/25 20:32	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			11/04/25 20:32	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			11/04/25 20:32	1
2-Hexanone	<2.00		10.0	2.00	ug/L			11/04/25 20:32	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			11/04/25 20:32	1
Acetone	<3.10		10.0	3.10	ug/L			11/04/25 20:32	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/25/25 13:29	1
Benzene	<0.220		0.500	0.220	ug/L			11/04/25 20:32	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			11/04/25 20:32	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			11/04/25 20:32	1
Bromoform	<0.780		5.00	0.780	ug/L			11/04/25 20:32	1
Bromomethane	<1.10		4.00	1.10	ug/L			11/04/25 20:32	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			11/04/25 20:32	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			11/04/25 20:32	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			11/04/25 20:32	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			11/04/25 20:32	1
Chloroethane	<0.790		4.00	0.790	ug/L			11/04/25 20:32	1
Chloroform	<1.30		3.00	1.30	ug/L			11/04/25 20:32	1
Chloromethane	<0.610		3.00	0.610	ug/L			11/04/25 20:32	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			11/04/25 20:32	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			11/04/25 20:32	1
Dibromomethane	<0.330		1.00	0.330	ug/L			11/04/25 20:32	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			11/04/25 20:32	1
Iodomethane	<7.00		10.0	7.00	ug/L			11/04/25 20:32	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			11/04/25 20:32	1
Styrene	<0.370		1.00	0.370	ug/L			11/04/25 20:32	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			11/04/25 20:32	1
Toluene	<0.430		1.00	0.430	ug/L			11/04/25 20:32	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			11/04/25 20:32	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			11/04/25 20:32	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			11/04/25 20:32	1
Trichloroethene	<0.430		1.00	0.430	ug/L			11/04/25 20:32	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			11/04/25 20:32	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			11/04/25 20:32	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			11/04/25 20:32	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			11/04/25 20:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*120*		*76 - 130*		*11/04/25 20:32*	*1*

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318779-1

Client Sample ID: MW-44A_25_10

Date Collected: 10/21/25 16:30
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-9

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*112*		*76 - 130*		*10/25/25 13:29*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*11/04/25 20:32*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*11/04/25 20:32*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*10/25/25 13:29*	*1*
4-Bromofluorobenzene (Surr)	*136*	*S1+ *3*	*80 - 120*		*10/25/25 13:29*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.82**	**J**	2.00	1.00	ug/L		10/29/25 09:00	11/05/25 14:30	1
Arsenic	**0.671**	**J**	2.00	0.530	ug/L		10/29/25 09:00	11/05/25 14:30	1
Barium	**222**		2.00	0.660	ug/L		10/29/25 09:00	11/05/25 14:30	1
Beryllium	<0.330		1.00	0.330	ug/L		10/29/25 09:00	11/05/25 14:30	1
Cadmium	<0.100		0.200	0.100	ug/L		10/29/25 09:00	11/05/25 14:30	1
Calcium	**223**		0.500	0.190	mg/L		10/29/25 09:00	11/05/25 14:30	1
Chromium	<1.80		5.00	1.80	ug/L		10/29/25 09:00	11/05/25 14:30	1
Cobalt	**0.492**	**J**	0.500	0.170	ug/L		10/29/25 09:00	11/05/25 14:30	1
Copper	<3.20		5.00	3.20	ug/L		10/29/25 09:00	11/05/25 14:30	1
Lead	<0.330		0.500	0.330	ug/L		10/29/25 09:00	11/05/25 14:30	1
Magnesium	**43.3**		0.500	0.150	mg/L		10/29/25 09:00	11/05/25 14:30	1
Nickel	**62.6**		5.00	2.30	ug/L		10/29/25 09:00	11/05/25 14:30	1
Selenium	<1.40		5.00	1.40	ug/L		10/29/25 09:00	11/05/25 14:30	1
Silver	<0.500		1.00	0.500	ug/L		10/29/25 09:00	11/05/25 14:30	1
Sodium	**109**		1.00	0.650	mg/L		10/29/25 09:00	11/05/25 14:30	1
Thallium	<0.570		1.00	0.570	ug/L		10/29/25 09:00	11/06/25 13:50	1
Vanadium	<1.70		5.00	1.70	ug/L		10/29/25 09:00	11/05/25 14:30	1
Zinc	**31.9**		20.0	13.0	ug/L		10/29/25 09:00	11/05/25 14:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 353.2)	<0.0800		0.100	0.0800	mg/L			10/31/25 14:25	1
Fluoride (SM 4500 F C-2011)	**0.0841**	**J**	0.100	0.0490	mg/L			11/02/25 12:35	1
Sulfate (ASTM D516-16)	**80.4**	**B**	25.0	9.00	mg/L			10/31/25 15:02	5
Total Suspended Solids (USGS I-3765-85)	<1.31		1.88	1.31	mg/L			10/24/25 12:31	1
Anion/Cation Balance (SM 1030E)	**-3.63**				%			10/27/25 10:47	1
Total Alkalinity (SM 2320B)	**736**		5.00	2.50	mg/L			10/29/25 15:34	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**736**		5.00	2.50	mg/L			10/29/25 15:34	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 15:34	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 15:34	1
Phenolphthalein Alkalinity as CaCO3 to pH 8.3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 15:34	1
Total Dissolved Solids (SM 2540C)	**974**		50.0	36.0	mg/L			10/24/25 12:46	1
Chloride (SM 4500 Cl- E)	**160**		20.0	14.0	mg/L			10/29/25 00:15	10
Biochemical Oxygen Demand (SM 5210B)	<3.00		3.00	3.00	mg/L			10/23/25 15:30	1
Chemical Oxygen Demand (SM 5220D)	**31.4**		25.0	23.0	mg/L			10/30/25 13:52	5

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318779-1

Client Sample ID: MW-45A_25_10

Date Collected: 10/22/25 13:40
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-10

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/28/25 17:33	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/28/25 17:33	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/28/25 17:33	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/28/25 17:33	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/28/25 17:33	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/28/25 17:33	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/28/25 17:33	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/28/25 17:33	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/28/25 17:33	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/28/25 17:33	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/28/25 17:33	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/28/25 17:33	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/28/25 17:33	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/28/25 17:33	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/28/25 17:33	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/28/25 17:33	1
Acetone	<3.10		10.0	3.10	ug/L			10/28/25 17:33	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/28/25 17:33	1
Benzene	<0.220		0.500	0.220	ug/L			10/28/25 17:33	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/28/25 17:33	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/28/25 17:33	1
Bromoform	<0.780		5.00	0.780	ug/L			10/28/25 17:33	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/28/25 17:33	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/28/25 17:33	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/28/25 17:33	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/28/25 17:33	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/28/25 17:33	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/28/25 17:33	1
Chloroform	<1.30		3.00	1.30	ug/L			10/28/25 17:33	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/28/25 17:33	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/28/25 17:33	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/28/25 17:33	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/28/25 17:33	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/28/25 17:33	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/28/25 17:33	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/28/25 17:33	1
Styrene	<0.370		1.00	0.370	ug/L			10/28/25 17:33	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/28/25 17:33	1
Toluene	<0.430		1.00	0.430	ug/L			10/28/25 17:33	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/28/25 17:33	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/28/25 17:33	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/28/25 17:33	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/28/25 17:33	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/28/25 17:33	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/28/25 17:33	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/28/25 17:33	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/28/25 17:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*107*		*76 - 130*		*10/28/25 17:33*	*1*

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318779-1

Client Sample ID: MW-45A_25_10

Date Collected: 10/22/25 13:40
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-10

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*80 - 120*		*10/28/25 17:33*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*10/28/25 17:33*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		10/29/25 09:00	11/05/25 14:33	1
Arsenic	<0.530		2.00	0.530	ug/L		10/29/25 09:00	11/05/25 14:33	1
Barium	**133**		2.00	0.660	ug/L		10/29/25 09:00	11/05/25 14:33	1
Beryllium	<0.330		1.00	0.330	ug/L		10/29/25 09:00	11/05/25 14:33	1
Cadmium	<0.100		0.200	0.100	ug/L		10/29/25 09:00	11/05/25 14:33	1
Calcium	**85.7**		0.500	0.190	mg/L		10/29/25 09:00	11/05/25 14:33	1
Chromium	**2.20**	**J**	5.00	1.80	ug/L		10/29/25 09:00	11/05/25 14:33	1
Cobalt	**0.299**	**J**	0.500	0.170	ug/L		10/29/25 09:00	11/05/25 14:33	1
Copper	<3.20		5.00	3.20	ug/L		10/29/25 09:00	11/05/25 14:33	1
Lead	<0.330		0.500	0.330	ug/L		10/29/25 09:00	11/05/25 14:33	1
Magnesium	**31.8**		0.500	0.150	mg/L		10/29/25 09:00	11/05/25 14:33	1
Nickel	<2.30		5.00	2.30	ug/L		10/29/25 09:00	11/05/25 14:33	1
Selenium	<1.40		5.00	1.40	ug/L		10/29/25 09:00	11/05/25 14:33	1
Silver	<0.500		1.00	0.500	ug/L		10/29/25 09:00	11/05/25 14:33	1
Sodium	**10.0**		1.00	0.650	mg/L		10/29/25 09:00	11/05/25 14:33	1
Thallium	<0.570	^+	1.00	0.570	ug/L		10/29/25 09:00	11/05/25 14:33	1
Vanadium	<1.70		5.00	1.70	ug/L		10/29/25 09:00	11/05/25 14:33	1
Zinc	<13.0		20.0	13.0	ug/L		10/29/25 09:00	11/05/25 14:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 353.2)	<0.0800		0.100	0.0800	mg/L			10/31/25 14:27	1
Fluoride (SM 4500 F C-2011)	**0.218**		0.100	0.0490	mg/L			11/02/25 12:44	1
Sulfate (ASTM D516-16)	**27.1**	**B**	5.00	1.80	mg/L			10/31/25 15:02	1
Total Suspended Solids (USGS I-3765-85)	<1.31		1.88	1.31	mg/L			10/28/25 11:38	1
Anion/Cation Balance (SM 1030E)	**-9.66**				%			10/27/25 10:47	1
Total Alkalinity (SM 2320B)	**407**		5.00	2.50	mg/L			10/29/25 15:49	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**407**		5.00	2.50	mg/L			10/29/25 15:49	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 15:49	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 15:49	1
Phenolphthalein Alkalinity as CaCO3 to pH 8.3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 15:49	1
Total Dissolved Solids (SM 2540C)	**364**		50.0	36.0	mg/L			10/24/25 14:09	1
Chloride (SM 4500 Cl- E)	**6.66**		2.00	1.40	mg/L			10/28/25 23:49	1
Biochemical Oxygen Demand (SM 5210B)	<3.00		3.00	3.00	mg/L			10/23/25 15:34	1
Chemical Oxygen Demand (SM 5220D)	<23.0		25.0	23.0	mg/L			10/30/25 13:52	5

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318779-1

Client Sample ID: MW-46A_25_10
Date Collected: 10/22/25 16:45
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-11
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<3.10		10.0	3.10	ug/L			10/28/25 17:56	1
Acrolein	<3.60		10.0	3.60	ug/L			10/28/25 17:56	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/28/25 17:56	1
Allyl chloride	<0.700		2.00	0.700	ug/L			10/28/25 17:56	1
Benzene	<0.220		0.500	0.220	ug/L			10/28/25 17:56	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/28/25 17:56	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/28/25 17:56	1
Bromoform	<0.780		5.00	0.780	ug/L			10/28/25 17:56	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/28/25 17:56	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/28/25 17:56	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/28/25 17:56	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/28/25 17:56	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/28/25 17:56	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/28/25 17:56	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/28/25 17:56	1
Chloroform	<1.30		3.00	1.30	ug/L			10/28/25 17:56	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/28/25 17:56	1
Chloroprene	<0.230		1.00	0.230	ug/L			10/28/25 17:56	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/28/25 17:56	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/28/25 17:56	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/28/25 17:56	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/28/25 17:56	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/28/25 17:56	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/28/25 17:56	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			10/28/25 17:56	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/28/25 17:56	1
Dichlorodifluoromethane	<0.250		3.00	0.250	ug/L			10/28/25 17:56	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/28/25 17:56	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/28/25 17:56	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/28/25 17:56	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/28/25 17:56	1
1,3-Dichloropropane	<0.400		1.00	0.400	ug/L			10/28/25 17:56	1
2,2-Dichloropropane	<0.690		4.00	0.690	ug/L			10/28/25 17:56	1
1,1-Dichloropropene	<0.430		1.00	0.430	ug/L			10/28/25 17:56	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/28/25 17:56	1
Ethyl methacrylate	<0.680		2.00	0.680	ug/L			10/28/25 17:56	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/28/25 17:56	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/28/25 17:56	1
Methacrylonitrile	<3.30		10.0	3.30	ug/L			10/28/25 17:56	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/28/25 17:56	1
Methyl methacrylate	<0.760		2.00	0.760	ug/L			10/28/25 17:56	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/28/25 17:56	1
m,p-Xylene	<0.380		2.00	0.380	ug/L			10/28/25 17:56	1
Naphthalene	<3.00		5.00	3.00	ug/L			10/28/25 17:56	1
o-Xylene	<0.400		1.00	0.400	ug/L			10/28/25 17:56	1
Propionitrile	<3.40		10.0	3.40	ug/L			10/28/25 17:56	1
Styrene	<0.370		1.00	0.370	ug/L			10/28/25 17:56	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/28/25 17:56	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/28/25 17:56	1

Client: Winneshiek Co Solid Waste
Job ID: 310-318779-1
Project/Site: Winneshiek County Sanitary Landfill

Client Sample ID: MW-46A_25_10
Lab Sample ID: 310-318779-11
Date Collected: 10/22/25 16:45
Matrix: Water
Date Received: 10/23/25 15:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/28/25 17:56	1
Toluene	<0.430		1.00	0.430	ug/L			10/28/25 17:56	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/28/25 17:56	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/28/25 17:56	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/28/25 17:56	1
1,2,4-Trichlorobenzene	<0.750		5.00	0.750	ug/L			10/28/25 17:56	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/28/25 17:56	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/28/25 17:56	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/28/25 17:56	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/28/25 17:56	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/28/25 17:56	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/28/25 17:56	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/28/25 17:56	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/28/25 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*		*10/28/25 17:56*	*1*
Dibromofluoromethane (Surr)	*107*		*76 - 130*		*10/28/25 17:56*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/28/25 17:56*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.653		10.2	0.653	ug/L		10/24/25 09:22	11/03/25 22:11	1
Acenaphthylene	<0.735		10.2	0.735	ug/L		10/24/25 09:22	11/03/25 22:11	1
Acetophenone	<0.704		10.2	0.704	ug/L		10/24/25 09:22	11/03/25 22:11	1
2-Acetylaminofluorene	<2.76	*1	10.2	2.76	ug/L		10/24/25 09:22	11/03/25 22:11	1
4-Aminobiphenyl	<2.24		10.2	2.24	ug/L		10/24/25 09:22	11/03/25 22:11	1
Anthracene	<0.888		10.2	0.888	ug/L		10/24/25 09:22	11/03/25 22:11	1
Benzo[a]anthracene	<0.867		10.2	0.867	ug/L		10/24/25 09:22	11/03/25 22:11	1
Benzo[a]pyrene	<8.27		10.2	8.27	ug/L		10/24/25 09:22	11/03/25 22:11	1
Benzo[b]fluoranthene	<5.00		10.2	5.00	ug/L		10/24/25 09:22	11/03/25 22:11	1
Benzo[g,h,i]perylene	<6.43		10.2	6.43	ug/L		10/24/25 09:22	11/03/25 22:11	1
Benzo[k]fluoranthene	<2.24		10.2	2.24	ug/L		10/24/25 09:22	11/03/25 22:11	1
Benzyl alcohol	<1.33		10.2	1.33	ug/L		10/24/25 09:22	11/03/25 22:11	1
Bis(2-chloroethoxy)methane	<0.776		10.2	0.776	ug/L		10/24/25 09:22	11/03/25 22:11	1
Bis(2-chloroethyl)ether	<0.837		10.2	0.837	ug/L		10/24/25 09:22	11/03/25 22:11	1
bis (2-chloroisopropyl) ether	<0.551		10.2	0.551	ug/L		10/24/25 09:22	11/03/25 22:11	1
Bis(2-ethylhexyl) phthalate	<5.61		10.2	5.61	ug/L		10/24/25 09:22	11/03/25 22:11	1
4-Bromophenyl phenyl ether	<0.714		10.2	0.714	ug/L		10/24/25 09:22	11/03/25 22:11	1
Butyl benzyl phthalate	<5.51		10.2	5.51	ug/L		10/24/25 09:22	11/03/25 22:11	1
4-Chloroaniline	<0.633		10.2	0.633	ug/L		10/24/25 09:22	11/03/25 22:11	1
Chlorobenzilate	<3.67		10.2	3.67	ug/L		10/24/25 09:22	11/03/25 22:11	1
4-Chloro-3-methylphenol	<0.857		10.2	0.857	ug/L		10/24/25 09:22	11/03/25 22:11	1
2-Chloronaphthalene	<0.653		10.2	0.653	ug/L		10/24/25 09:22	11/03/25 22:11	1
2-Chlorophenol	<0.551		10.2	0.551	ug/L		10/24/25 09:22	11/03/25 22:11	1
4-Chlorophenyl phenyl ether	<0.704		10.2	0.704	ug/L		10/24/25 09:22	11/03/25 22:11	1
Chrysene	<0.888		10.2	0.888	ug/L		10/24/25 09:22	11/03/25 22:11	1
Diallate	<4.08		10.2	4.08	ug/L		10/24/25 09:22	11/03/25 22:11	1
Dibenzo(a,h)anthracene	<3.98		10.2	3.98	ug/L		10/24/25 09:22	11/03/25 22:11	1
Dibenzofuran	<0.755		10.2	0.755	ug/L		10/24/25 09:22	11/03/25 22:11	1

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318779-1

Client Sample ID: MW-46A_25_10
Date Collected: 10/22/25 16:45
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-11
Matrix: Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3,3'-Dichlorobenzidine	<1.43		10.2	1.43	ug/L		10/24/25 09:22	11/03/25 22:11	1
2,4-Dichlorophenol	<0.867		10.2	0.867	ug/L		10/24/25 09:22	11/03/25 22:11	1
2,6-Dichlorophenol	<0.704		10.2	0.704	ug/L		10/24/25 09:22	11/03/25 22:11	1
Diethyl phthalate	<1.73		10.2	1.73	ug/L		10/24/25 09:22	11/03/25 22:11	1
Dimethoate	<3.67		10.2	3.67	ug/L		10/24/25 09:22	11/03/25 22:11	1
7,12-Dimethylbenz(a)anthracene	<1.94		10.2	1.94	ug/L		10/24/25 09:22	11/03/25 22:11	1
3,3'-Dimethylbenzidine	<1.53		10.2	1.53	ug/L		10/24/25 09:22	11/03/25 22:11	1
2,4-Dimethylphenol	<0.592		10.2	0.592	ug/L		10/24/25 09:22	11/03/25 22:11	1
Dimethyl phthalate	<1.02		10.2	1.02	ug/L		10/24/25 09:22	11/03/25 22:11	1
Di-n-butyl phthalate	<5.71		10.2	5.71	ug/L		10/24/25 09:22	11/03/25 22:11	1
1,3-Dinitrobenzene	<3.27		10.2	3.27	ug/L		10/24/25 09:22	11/03/25 22:11	1
4,6-Dinitro-2-methylphenol	<7.04		10.2	7.04	ug/L		10/24/25 09:22	11/03/25 22:11	1
2,4-Dinitrophenol	<13.3		20.4	13.3	ug/L		10/24/25 09:22	11/03/25 22:11	1
2,4-Dinitrotoluene	<6.53		10.2	6.53	ug/L		10/24/25 09:22	11/03/25 22:11	1
2,6-Dinitrotoluene	<0.531		10.2	0.531	ug/L		10/24/25 09:22	11/03/25 22:11	1
Di-n-octyl phthalate	<7.14		20.4	7.14	ug/L		10/24/25 09:22	11/03/25 22:11	1
Dinoseb	<2.45		10.2	2.45	ug/L		10/24/25 09:22	11/03/25 22:11	1
Diphenylamine	<6.12		10.2	6.12	ug/L		10/24/25 09:22	11/03/25 22:11	1
Disulfoton	<2.45		10.2	2.45	ug/L		10/24/25 09:22	11/03/25 22:11	1
Ethyl methanesulfonate	<3.67		10.2	3.67	ug/L		10/24/25 09:22	11/03/25 22:11	1
Ethyl Parathion	<2.24		10.2	2.24	ug/L		10/24/25 09:22	11/03/25 22:11	1
Famphur	<3.88		10.2	3.88	ug/L		10/24/25 09:22	11/03/25 22:11	1
Fluoranthene	<1.73		10.2	1.73	ug/L		10/24/25 09:22	11/03/25 22:11	1
Fluorene	<0.806		10.2	0.806	ug/L		10/24/25 09:22	11/03/25 22:11	1
Hexachlorobenzene	<0.714		10.2	0.714	ug/L		10/24/25 09:22	11/03/25 22:11	1
Hexachlorobutadiene	<0.878		10.2	0.878	ug/L		10/24/25 09:22	11/03/25 22:11	1
Hexachlorocyclopentadiene	<5.20		10.2	5.20	ug/L		10/24/25 09:22	11/03/25 22:11	1
Hexachloroethane	<0.990		10.2	0.990	ug/L		10/24/25 09:22	11/03/25 22:11	1
Hexachloropropene	<2.65		10.2	2.65	ug/L		10/24/25 09:22	11/03/25 22:11	1
Indeno[1,2,3-cd]pyrene	<4.29		10.2	4.29	ug/L		10/24/25 09:22	11/03/25 22:11	1
Isodrin	<4.80		10.2	4.80	ug/L		10/24/25 09:22	11/03/25 22:11	1
Isophorone	<0.949		10.2	0.949	ug/L		10/24/25 09:22	11/03/25 22:11	1
Isosafrole	<2.35		10.2	2.35	ug/L		10/24/25 09:22	11/03/25 22:11	1
Kepone	<1.02	*1	10.2	1.02	ug/L		10/24/25 09:22	11/03/25 22:11	1
Methapyrilene	<0.776	*- *1	10.2	0.776	ug/L		10/24/25 09:22	11/03/25 22:11	1
3-Methylcholanthrene	<0.327		10.2	0.327	ug/L		10/24/25 09:22	11/03/25 22:11	1
Methyl methanesulfonate	<3.37		10.2	3.37	ug/L		10/24/25 09:22	11/03/25 22:11	1
2-Methylnaphthalene	<0.602		10.2	0.602	ug/L		10/24/25 09:22	11/03/25 22:11	1
Methyl parathion	<2.35		10.2	2.35	ug/L		10/24/25 09:22	11/03/25 22:11	1
2-Methylphenol	<0.663		10.2	0.663	ug/L		10/24/25 09:22	11/03/25 22:11	1
Methylphenol, 3 & 4	<0.714		10.2	0.714	ug/L		10/24/25 09:22	11/03/25 22:11	1
1,4-Naphthoquinone	<3.67		10.2	3.67	ug/L		10/24/25 09:22	11/03/25 22:11	1
1-Naphthylamine	<2.55		10.2	2.55	ug/L		10/24/25 09:22	11/03/25 22:11	1
2-Naphthylamine	<2.14		10.2	2.14	ug/L		10/24/25 09:22	11/03/25 22:11	1
2-Nitroaniline	<6.02		10.2	6.02	ug/L		10/24/25 09:22	11/03/25 22:11	1
3-Nitroaniline	<2.76		10.2	2.76	ug/L		10/24/25 09:22	11/03/25 22:11	1
4-Nitroaniline	<1.33		10.2	1.33	ug/L		10/24/25 09:22	11/03/25 22:11	1
Nitrobenzene	<0.816		10.2	0.816	ug/L		10/24/25 09:22	11/03/25 22:11	1
5-Nitro-o-toluidine	<2.86		10.2	2.86	ug/L		10/24/25 09:22	11/03/25 22:11	1

Client Sample ID: MW-46A_25_10
Lab Sample ID: 310-318779-11
Date Collected: 10/22/25 16:45
Matrix: Water
Date Received: 10/23/25 15:10

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	<6.94		10.2	6.94	ug/L		10/24/25 09:22	11/03/25 22:11	1
4-Nitrophenol	<7.76		10.2	7.76	ug/L		10/24/25 09:22	11/03/25 22:11	1
N-Nitrosodiethylamine	<3.47		10.2	3.47	ug/L		10/24/25 09:22	11/03/25 22:11	1
N-Nitrosodimethylamine	<0.735		10.2	0.735	ug/L		10/24/25 09:22	11/03/25 22:11	1
N-Nitrosodi-n-butylamine	<3.98		10.2	3.98	ug/L		10/24/25 09:22	11/03/25 22:11	1
N-Nitrosodi-n-propylamine	<0.939		10.2	0.939	ug/L		10/24/25 09:22	11/03/25 22:11	1
N-Nitrosodiphenylamine	<0.765		10.2	0.765	ug/L		10/24/25 09:22	11/03/25 22:11	1
N-Nitrosomethylethylamine	<5.00		10.2	5.00	ug/L		10/24/25 09:22	11/03/25 22:11	1
N-Nitrosopiperidine	<2.76		10.2	2.76	ug/L		10/24/25 09:22	11/03/25 22:11	1
N-Nitrosopyrrolidine	<3.67		10.2	3.67	ug/L		10/24/25 09:22	11/03/25 22:11	1
o,o',o''-Triethylphosphorothioate	<3.27		10.2	3.27	ug/L		10/24/25 09:22	11/03/25 22:11	1
o-Toluidine	<2.96		10.2	2.96	ug/L		10/24/25 09:22	11/03/25 22:11	1
p-Dimethylamino azobenzene	<2.24		10.2	2.24	ug/L		10/24/25 09:22	11/03/25 22:11	1
Pentachlorobenzene	<2.86		10.2	2.86	ug/L		10/24/25 09:22	11/03/25 22:11	1
Pentachloronitrobenzene	<5.92		10.2	5.92	ug/L		10/24/25 09:22	11/03/25 22:11	1
Pentachlorophenol	<9.80		10.2	9.80	ug/L		10/24/25 09:22	11/03/25 22:11	1
Phenacetin	<1.94		10.2	1.94	ug/L		10/24/25 09:22	11/03/25 22:11	1
Phenanthrene	<0.806		10.2	0.806	ug/L		10/24/25 09:22	11/03/25 22:11	1
Phenol	<1.12		10.2	1.12	ug/L		10/24/25 09:22	11/03/25 22:11	1
1,4-phenylenediamine	<1.94	*-	10.2	1.94	ug/L		10/24/25 09:22	11/03/25 22:11	1
Phorate	<3.27		10.2	3.27	ug/L		10/24/25 09:22	11/03/25 22:11	1
Pronamide	<2.76		10.2	2.76	ug/L		10/24/25 09:22	11/03/25 22:11	1
Pyrene	<0.806		10.2	0.806	ug/L		10/24/25 09:22	11/03/25 22:11	1
Safrole	<2.86		10.2	2.86	ug/L		10/24/25 09:22	11/03/25 22:11	1
1,2,4,5-Tetrachlorobenzene	<0.551		10.2	0.551	ug/L		10/24/25 09:22	11/03/25 22:11	1
2,3,4,6-Tetrachlorophenol	<5.41		10.2	5.41	ug/L		10/24/25 09:22	11/03/25 22:11	1
Thionazin	<3.57		10.2	3.57	ug/L		10/24/25 09:22	11/03/25 22:11	1
2,4,5-Trichlorophenol	<5.41		10.2	5.41	ug/L		10/24/25 09:22	11/03/25 22:11	1
2,4,6-Trichlorophenol	<5.10		10.2	5.10	ug/L		10/24/25 09:22	11/03/25 22:11	1
1,3,5-Trinitrobenzene	<2.35		10.2	2.35	ug/L		10/24/25 09:22	11/03/25 22:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*98*		*33 - 126*	*10/24/25 09:22*	*11/03/25 22:11*	*1*
2-Fluorophenol (Surr)	*76*		*21 - 110*	*10/24/25 09:22*	*11/03/25 22:11*	*1*
Nitrobenzene-d5 (Surr)	*105*		*39 - 140*	*10/24/25 09:22*	*11/03/25 22:11*	*1*
Phenol-d5 (Surr)	*63*		*21 - 110*	*10/24/25 09:22*	*11/03/25 22:11*	*1*
Terphenyl-d14 (Surr)	*116*		*13 - 150*	*10/24/25 09:22*	*11/03/25 22:11*	*1*
2,4,6-Tribromophenol (Surr)	*108*		*20 - 144*	*10/24/25 09:22*	*11/03/25 22:11*	*1*

Method: SW846 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	<2600		10000	2600	ug/L			10/31/25 21:59	1
Isobutanol	<2400		10000	2400	ug/L			10/31/25 21:59	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.0206		0.0936	0.0206	ug/L		10/29/25 10:07	10/30/25 13:03	1
alpha-BHC	<0.00936		0.0936	0.00936	ug/L		10/29/25 10:07	10/30/25 13:03	1
beta-BHC	<0.0393		0.0936	0.0393	ug/L		10/29/25 10:07	10/30/25 13:03	1
Chlordane (technical)	<0.365		1.87	0.365	ug/L		10/29/25 10:07	10/30/25 13:03	1

Client Sample ID: MW-46A_25_10
Lab Sample ID: 310-318779-11

Date Collected: 10/22/25 16:45
Matrix: Water
Date Received: 10/23/25 15:10

Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.0234		0.0936	0.0234	ug/L		10/29/25 10:07	10/30/25 13:03	1
4,4'-DDE	<0.0281		0.0936	0.0281	ug/L		10/29/25 10:07	10/30/25 13:03	1
4,4'-DDT	<0.0187		0.0936	0.0187	ug/L		10/29/25 10:07	10/30/25 13:03	1
delta-BHC	<0.0299		0.0936	0.0299	ug/L		10/29/25 10:07	10/30/25 13:03	1
Dieldrin	<0.0197		0.0936	0.0197	ug/L		10/29/25 10:07	10/30/25 13:03	1
Endosulfan I	<0.0262		0.0936	0.0262	ug/L		10/29/25 10:07	10/30/25 13:03	1
Endosulfan II	<0.0243		0.0936	0.0243	ug/L		10/29/25 10:07	10/30/25 13:03	1
Endosulfan sulfate	<0.0168		0.0936	0.0168	ug/L		10/29/25 10:07	10/30/25 13:03	1
Endrin	<0.0262		0.0936	0.0262	ug/L		10/29/25 10:07	10/30/25 13:03	1
Endrin aldehyde	<0.0253		0.0936	0.0253	ug/L		10/29/25 10:07	10/30/25 13:03	1
gamma-BHC (Lindane)	<0.00936		0.0936	0.00936	ug/L		10/29/25 10:07	10/30/25 13:03	1
Heptachlor	<0.0215		0.0936	0.0215	ug/L		10/29/25 10:07	10/30/25 13:03	1
Heptachlor epoxide	<0.0299		0.0936	0.0299	ug/L		10/29/25 10:07	10/30/25 13:03	1
Methoxychlor	<0.0299		0.0936	0.0299	ug/L		10/29/25 10:07	10/30/25 13:03	1
Toxaphene	<0.936		1.87	0.936	ug/L		10/29/25 10:07	10/30/25 13:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*73*		*10 - 150*	*10/29/25 10:07*	*10/30/25 13:03*	*1*
Tetrachloro-m-xylene	*86*		*17 - 150*	*10/29/25 10:07*	*10/30/25 13:03*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.767		1.87	0.767	ug/L		10/29/25 10:07	10/30/25 13:03	1
PCB-1221	<0.767		1.87	0.767	ug/L		10/29/25 10:07	10/30/25 13:03	1
PCB-1232	<0.767		1.87	0.767	ug/L		10/29/25 10:07	10/30/25 13:03	1
PCB-1242	<0.767		1.87	0.767	ug/L		10/29/25 10:07	10/30/25 13:03	1
PCB-1248	<0.646		1.87	0.646	ug/L		10/29/25 10:07	10/30/25 13:03	1
PCB-1254	<0.646		1.87	0.646	ug/L		10/29/25 10:07	10/30/25 13:03	1
PCB-1260	<0.646		1.87	0.646	ug/L		10/29/25 10:07	10/30/25 13:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*73*		*10 - 150*	*10/29/25 10:07*	*10/30/25 13:03*	*1*
Tetrachloro-m-xylene	*86*		*17 - 150*	*10/29/25 10:07*	*10/30/25 13:03*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.263		0.631	0.263	ug/L		10/29/25 15:26	10/30/25 18:37	1
Silvex (2,4,5-TP)	<0.0231		0.0526	0.0231	ug/L		10/29/25 15:26	10/30/25 18:37	1
2,4,5-T	<0.0683		0.158	0.0683	ug/L		10/29/25 15:26	10/30/25 18:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*99*	*p*	*34 - 142*	*10/29/25 15:26*	*10/30/25 18:37*	*1*
DCAA	*333*	*S1+*	*34 - 142*	*10/29/25 15:26*	*10/30/25 18:37*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		10/29/25 09:00	11/05/25 14:36	1
Arsenic	**0.837**	**J**	2.00	0.530	ug/L		10/29/25 09:00	11/05/25 14:36	1
Barium	**277**		2.00	0.660	ug/L		10/29/25 09:00	11/05/25 14:36	1
Beryllium	<0.330		1.00	0.330	ug/L		10/29/25 09:00	11/05/25 14:36	1
Cadmium	**0.104**	**J**	0.200	0.100	ug/L		10/29/25 09:00	11/05/25 14:36	1

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318779-1

Client Sample ID: MW-46A_25_10

Date Collected: 10/22/25 16:45
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-11

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<1.80		5.00	1.80	ug/L		10/29/25 09:00	11/05/25 14:36	1
Cobalt	**0.222**	**J**	0.500	0.170	ug/L		10/29/25 09:00	11/05/25 14:36	1
Copper	<3.20		5.00	3.20	ug/L		10/29/25 09:00	11/05/25 14:36	1
Lead	<0.330		0.500	0.330	ug/L		10/29/25 09:00	11/05/25 14:36	1
Nickel	**32.2**		5.00	2.30	ug/L		10/29/25 09:00	11/05/25 14:36	1
Selenium	<1.40		5.00	1.40	ug/L		10/29/25 09:00	11/05/25 14:36	1
Silver	<0.500		1.00	0.500	ug/L		10/29/25 09:00	11/05/25 14:36	1
Thallium	<0.570	^+	1.00	0.570	ug/L		10/29/25 09:00	11/05/25 14:36	1
Vanadium	<1.70		5.00	1.70	ug/L		10/29/25 09:00	11/05/25 14:36	1
Zinc	<13.0		20.0	13.0	ug/L		10/29/25 09:00	11/05/25 14:36	1
Tin	<2.50		5.00	2.50	ug/L		10/29/25 09:00	11/05/25 14:36	1
Sodium	**168000**		1000	650	ug/L		10/29/25 09:00	11/05/25 14:36	1
Calcium	**190000**		500	190	ug/L		10/29/25 09:00	11/05/25 14:36	1
Magnesium	**63300**		500	150	ug/L		10/29/25 09:00	11/05/25 14:36	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.110		0.200	0.110	ug/L		11/03/25 12:50	11/04/25 11:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 353.2)	**2.36**		0.100	0.0800	mg/L			10/31/25 14:29	1
Fluoride (SM 4500 F C-2011)	**0.130**		0.100	0.0490	mg/L			11/02/25 12:47	1
Cyanide, Total (SW846 9012B)	<3.50		10.0	3.50	ug/L		10/28/25 10:55	10/29/25 20:54	1
Sulfide (SW846 9034)	**2270**	**J**	3000	1410	ug/L		10/29/25 12:25	10/29/25 16:45	1
Sulfate (ASTM D516-16)	**76.6**	**B**	25.0	9.00	mg/L			10/31/25 15:03	5
Total Suspended Solids (USGS I-3765-85)	**4.25**		1.88	1.31	mg/L			10/28/25 11:38	1
Total Suspended Solids (USGS I-3765-85)	**4.25**		1.88	1.31	mg/L			10/28/25 11:38	1
Anion/Cation Balance (SM 1030E)	**-3.30**				%			10/27/25 10:47	1
Total Alkalinity (SM 2320B)	**664**		5.00	2.50	mg/L			10/29/25 15:59	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**664**		5.00	2.50	mg/L			10/29/25 15:59	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 15:59	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 15:59	1
Phenolphthalein Alkalinity as CaCO3 to pH 8.3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 15:59	1
Total Dissolved Solids (SM 2540C)	**1120**		50.0	36.0	mg/L			10/28/25 14:22	1
Chloride (SM 4500 Cl- E)	**300**		20.0	14.0	mg/L			10/29/25 00:13	10
Biochemical Oxygen Demand (SM 5210B)	<3.00		3.00	3.00	mg/L			10/23/25 15:37	1
Chemical Oxygen Demand (SM 5220D)	**29.8**		25.0	23.0	mg/L			10/30/25 13:52	5

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318779-1

Client Sample ID: EB-2_25_10

Date Collected: 10/22/25 17:40
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-12

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/28/25 18:18	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/28/25 18:18	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/28/25 18:18	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/28/25 18:18	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/28/25 18:18	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/28/25 18:18	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/28/25 18:18	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/28/25 18:18	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/28/25 18:18	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/28/25 18:18	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/28/25 18:18	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/28/25 18:18	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/28/25 18:18	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/28/25 18:18	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/28/25 18:18	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/28/25 18:18	1
Acetone	<3.10		10.0	3.10	ug/L			10/28/25 18:18	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/28/25 18:18	1
Benzene	<0.220		0.500	0.220	ug/L			10/28/25 18:18	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/28/25 18:18	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/28/25 18:18	1
Bromoform	<0.780		5.00	0.780	ug/L			10/28/25 18:18	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/28/25 18:18	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/28/25 18:18	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/28/25 18:18	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/28/25 18:18	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/28/25 18:18	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/28/25 18:18	1
Chloroform	<1.30		3.00	1.30	ug/L			10/28/25 18:18	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/28/25 18:18	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/28/25 18:18	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/28/25 18:18	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/28/25 18:18	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/28/25 18:18	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/28/25 18:18	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/28/25 18:18	1
Styrene	<0.370		1.00	0.370	ug/L			10/28/25 18:18	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/28/25 18:18	1
Toluene	<0.430		1.00	0.430	ug/L			10/28/25 18:18	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/28/25 18:18	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/28/25 18:18	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/28/25 18:18	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/28/25 18:18	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/28/25 18:18	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/28/25 18:18	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/28/25 18:18	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/28/25 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*104*		*76 - 130*		*10/28/25 18:18*	*1*

Client: Winneshiek Co Solid Waste
Job ID: 310-318779-1
Project/Site: Winneshiek County Sanitary Landfill

Client Sample ID: EB-2_25_10
Lab Sample ID: 310-318779-12
Date Collected: 10/22/25 17:40
Matrix: Water
Date Received: 10/23/25 15:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/28/25 18:18*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*10/28/25 18:18*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		10/29/25 09:00	11/05/25 14:38	1
Arsenic	<0.530		2.00	0.530	ug/L		10/29/25 09:00	11/05/25 14:38	1
Barium	<0.660		2.00	0.660	ug/L		10/29/25 09:00	11/05/25 14:38	1
Beryllium	<0.330		1.00	0.330	ug/L		10/29/25 09:00	11/05/25 14:38	1
Cadmium	<0.100		0.200	0.100	ug/L		10/29/25 09:00	11/05/25 14:38	1
Chromium	<1.80		5.00	1.80	ug/L		10/29/25 09:00	11/05/25 14:38	1
Cobalt	<0.170		0.500	0.170	ug/L		10/29/25 09:00	11/05/25 14:38	1
Copper	<3.20		5.00	3.20	ug/L		10/29/25 09:00	11/05/25 14:38	1
Lead	<0.330		0.500	0.330	ug/L		10/29/25 09:00	11/05/25 14:38	1
Nickel	<2.30		5.00	2.30	ug/L		10/29/25 09:00	11/05/25 14:38	1
Selenium	<1.40		5.00	1.40	ug/L		10/29/25 09:00	11/05/25 14:38	1
Silver	<0.500		1.00	0.500	ug/L		10/29/25 09:00	11/05/25 14:38	1
Thallium	<0.570	^+	1.00	0.570	ug/L		10/29/25 09:00	11/05/25 14:38	1
Vanadium	<1.70		5.00	1.70	ug/L		10/29/25 09:00	11/05/25 14:38	1
Zinc	<13.0		20.0	13.0	ug/L		10/29/25 09:00	11/05/25 14:38	1
Sodium	<650		1000	650	ug/L		10/29/25 09:00	11/05/25 14:38	1
Calcium	<190		500	190	ug/L		10/29/25 09:00	11/05/25 14:38	1
Magnesium	<150		500	150	ug/L		10/29/25 09:00	11/05/25 14:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.31		1.88	1.31	mg/L			10/28/25 11:38	1

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318779-1

Client Sample ID: FD-1_25_10
Date Collected: 10/22/25 00:00
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-13
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<3.10		10.0	3.10	ug/L			10/28/25 18:41	1
Acrolein	<3.60		10.0	3.60	ug/L			10/28/25 18:41	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/28/25 18:41	1
Allyl chloride	<0.700		2.00	0.700	ug/L			10/28/25 18:41	1
Benzene	<0.220		0.500	0.220	ug/L			10/28/25 18:41	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/28/25 18:41	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/28/25 18:41	1
Bromoform	<0.780		5.00	0.780	ug/L			10/28/25 18:41	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/28/25 18:41	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/28/25 18:41	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/28/25 18:41	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/28/25 18:41	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/28/25 18:41	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/28/25 18:41	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/28/25 18:41	1
Chloroform	<1.30		3.00	1.30	ug/L			10/28/25 18:41	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/28/25 18:41	1
Chloroprene	<0.230		1.00	0.230	ug/L			10/28/25 18:41	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/28/25 18:41	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/28/25 18:41	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/28/25 18:41	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/28/25 18:41	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/28/25 18:41	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/28/25 18:41	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			10/28/25 18:41	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/28/25 18:41	1
Dichlorodifluoromethane	<0.250		3.00	0.250	ug/L			10/28/25 18:41	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/28/25 18:41	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/28/25 18:41	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/28/25 18:41	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/28/25 18:41	1
1,3-Dichloropropane	<0.400		1.00	0.400	ug/L			10/28/25 18:41	1
2,2-Dichloropropane	<0.690		4.00	0.690	ug/L			10/28/25 18:41	1
1,1-Dichloropropene	<0.430		1.00	0.430	ug/L			10/28/25 18:41	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/28/25 18:41	1
Ethyl methacrylate	<0.680		2.00	0.680	ug/L			10/28/25 18:41	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/28/25 18:41	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/28/25 18:41	1
Methacrylonitrile	<3.30		10.0	3.30	ug/L			10/28/25 18:41	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/28/25 18:41	1
Methyl methacrylate	<0.760		2.00	0.760	ug/L			10/28/25 18:41	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/28/25 18:41	1
m,p-Xylene	<0.380		2.00	0.380	ug/L			10/28/25 18:41	1
Naphthalene	<3.00		5.00	3.00	ug/L			10/28/25 18:41	1
o-Xylene	<0.400		1.00	0.400	ug/L			10/28/25 18:41	1
Propionitrile	<3.40		10.0	3.40	ug/L			10/28/25 18:41	1
Styrene	<0.370		1.00	0.370	ug/L			10/28/25 18:41	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/28/25 18:41	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/28/25 18:41	1

Client: Winneshiek Co Solid Waste
Job ID: 310-318779-1
Project/Site: Winneshiek County Sanitary Landfill

Client Sample ID: FD-1_25_10
Lab Sample ID: 310-318779-13
Date Collected: 10/22/25 00:00
Matrix: Water
Date Received: 10/23/25 15:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/28/25 18:41	1
Toluene	<0.430		1.00	0.430	ug/L			10/28/25 18:41	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/28/25 18:41	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/28/25 18:41	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/28/25 18:41	1
1,2,4-Trichlorobenzene	<0.750		5.00	0.750	ug/L			10/28/25 18:41	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/28/25 18:41	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/28/25 18:41	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/28/25 18:41	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/28/25 18:41	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/28/25 18:41	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/28/25 18:41	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/28/25 18:41	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/28/25 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*10/28/25 18:41*	*1*
Dibromofluoromethane (Surr)	*105*		*76 - 130*		*10/28/25 18:41*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/28/25 18:41*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.727		11.4	0.727	ug/L		10/24/25 09:22	11/03/25 22:38	1
Acenaphthylene	<0.818		11.4	0.818	ug/L		10/24/25 09:22	11/03/25 22:38	1
Acetophenone	<0.784		11.4	0.784	ug/L		10/24/25 09:22	11/03/25 22:38	1
2-Acetylaminofluorene	<3.07	*1	11.4	3.07	ug/L		10/24/25 09:22	11/03/25 22:38	1
4-Aminobiphenyl	<2.50		11.4	2.50	ug/L		10/24/25 09:22	11/03/25 22:38	1
Anthracene	<0.989		11.4	0.989	ug/L		10/24/25 09:22	11/03/25 22:38	1
Benzo[a]anthracene	<0.966		11.4	0.966	ug/L		10/24/25 09:22	11/03/25 22:38	1
Benzo[a]pyrene	<9.20		11.4	9.20	ug/L		10/24/25 09:22	11/03/25 22:38	1
Benzo[b]fluoranthene	<5.57		11.4	5.57	ug/L		10/24/25 09:22	11/03/25 22:38	1
Benzo[g,h,i]perylene	<7.16		11.4	7.16	ug/L		10/24/25 09:22	11/03/25 22:38	1
Benzo[k]fluoranthene	<2.50		11.4	2.50	ug/L		10/24/25 09:22	11/03/25 22:38	1
Benzyl alcohol	<1.48		11.4	1.48	ug/L		10/24/25 09:22	11/03/25 22:38	1
Bis(2-chloroethoxy)methane	<0.864		11.4	0.864	ug/L		10/24/25 09:22	11/03/25 22:38	1
Bis(2-chloroethyl)ether	<0.932		11.4	0.932	ug/L		10/24/25 09:22	11/03/25 22:38	1
bis (2-chloroisopropyl) ether	<0.614		11.4	0.614	ug/L		10/24/25 09:22	11/03/25 22:38	1
Bis(2-ethylhexyl) phthalate	<6.25		11.4	6.25	ug/L		10/24/25 09:22	11/03/25 22:38	1
4-Bromophenyl phenyl ether	<0.795		11.4	0.795	ug/L		10/24/25 09:22	11/03/25 22:38	1
Butyl benzyl phthalate	<6.14		11.4	6.14	ug/L		10/24/25 09:22	11/03/25 22:38	1
4-Chloroaniline	<0.705		11.4	0.705	ug/L		10/24/25 09:22	11/03/25 22:38	1
Chlorobenzilate	<4.09		11.4	4.09	ug/L		10/24/25 09:22	11/03/25 22:38	1
4-Chloro-3-methylphenol	<0.955		11.4	0.955	ug/L		10/24/25 09:22	11/03/25 22:38	1
2-Chloronaphthalene	<0.727		11.4	0.727	ug/L		10/24/25 09:22	11/03/25 22:38	1
2-Chlorophenol	<0.614		11.4	0.614	ug/L		10/24/25 09:22	11/03/25 22:38	1
4-Chlorophenyl phenyl ether	<0.784		11.4	0.784	ug/L		10/24/25 09:22	11/03/25 22:38	1
Chrysene	<0.989		11.4	0.989	ug/L		10/24/25 09:22	11/03/25 22:38	1
Diallate	<4.55		11.4	4.55	ug/L		10/24/25 09:22	11/03/25 22:38	1
Dibenzo(a,h)anthracene	<4.43		11.4	4.43	ug/L		10/24/25 09:22	11/03/25 22:38	1
Dibenzofuran	<0.841		11.4	0.841	ug/L		10/24/25 09:22	11/03/25 22:38	1

Client: Winneshiek Co Solid Waste
Job ID: 310-318779-1
Project/Site: Winneshiek County Sanitary Landfill

Client Sample ID: FD-1_25_10
Lab Sample ID: 310-318779-13
Date Collected: 10/22/25 00:00
Matrix: Water
Date Received: 10/23/25 15:10

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3,3'-Dichlorobenzidine	<1.59		11.4	1.59	ug/L		10/24/25 09:22	11/03/25 22:38	1
2,4-Dichlorophenol	<0.966		11.4	0.966	ug/L		10/24/25 09:22	11/03/25 22:38	1
2,6-Dichlorophenol	<0.784		11.4	0.784	ug/L		10/24/25 09:22	11/03/25 22:38	1
Diethyl phthalate	<1.93		11.4	1.93	ug/L		10/24/25 09:22	11/03/25 22:38	1
Dimethoate	<4.09		11.4	4.09	ug/L		10/24/25 09:22	11/03/25 22:38	1
7,12-Dimethylbenz(a)anthracene	<2.16		11.4	2.16	ug/L		10/24/25 09:22	11/03/25 22:38	1
3,3'-Dimethylbenzidine	<1.70		11.4	1.70	ug/L		10/24/25 09:22	11/03/25 22:38	1
2,4-Dimethylphenol	<0.659		11.4	0.659	ug/L		10/24/25 09:22	11/03/25 22:38	1
Dimethyl phthalate	<1.14		11.4	1.14	ug/L		10/24/25 09:22	11/03/25 22:38	1
Di-n-butyl phthalate	<6.36		11.4	6.36	ug/L		10/24/25 09:22	11/03/25 22:38	1
1,3-Dinitrobenzene	<3.64		11.4	3.64	ug/L		10/24/25 09:22	11/03/25 22:38	1
4,6-Dinitro-2-methylphenol	<7.84		11.4	7.84	ug/L		10/24/25 09:22	11/03/25 22:38	1
2,4-Dinitrophenol	<14.8		22.7	14.8	ug/L		10/24/25 09:22	11/03/25 22:38	1
2,4-Dinitrotoluene	<7.27		11.4	7.27	ug/L		10/24/25 09:22	11/03/25 22:38	1
2,6-Dinitrotoluene	<0.591		11.4	0.591	ug/L		10/24/25 09:22	11/03/25 22:38	1
Di-n-octyl phthalate	<7.95		22.7	7.95	ug/L		10/24/25 09:22	11/03/25 22:38	1
Dinoseb	<2.73		11.4	2.73	ug/L		10/24/25 09:22	11/03/25 22:38	1
Diphenylamine	<6.82		11.4	6.82	ug/L		10/24/25 09:22	11/03/25 22:38	1
Disulfoton	<2.73		11.4	2.73	ug/L		10/24/25 09:22	11/03/25 22:38	1
Ethyl methanesulfonate	<4.09		11.4	4.09	ug/L		10/24/25 09:22	11/03/25 22:38	1
Ethyl Parathion	<2.50		11.4	2.50	ug/L		10/24/25 09:22	11/03/25 22:38	1
Famphur	<4.32		11.4	4.32	ug/L		10/24/25 09:22	11/03/25 22:38	1
Fluoranthene	<1.93		11.4	1.93	ug/L		10/24/25 09:22	11/03/25 22:38	1
Fluorene	<0.898		11.4	0.898	ug/L		10/24/25 09:22	11/03/25 22:38	1
Hexachlorobenzene	<0.795		11.4	0.795	ug/L		10/24/25 09:22	11/03/25 22:38	1
Hexachlorobutadiene	<0.977		11.4	0.977	ug/L		10/24/25 09:22	11/03/25 22:38	1
Hexachlorocyclopentadiene	<5.80		11.4	5.80	ug/L		10/24/25 09:22	11/03/25 22:38	1
Hexachloroethane	<1.10		11.4	1.10	ug/L		10/24/25 09:22	11/03/25 22:38	1
Hexachloropropene	<2.95		11.4	2.95	ug/L		10/24/25 09:22	11/03/25 22:38	1
Indeno[1,2,3-cd]pyrene	<4.77		11.4	4.77	ug/L		10/24/25 09:22	11/03/25 22:38	1
Isodrin	<5.34		11.4	5.34	ug/L		10/24/25 09:22	11/03/25 22:38	1
Isophorone	<1.06		11.4	1.06	ug/L		10/24/25 09:22	11/03/25 22:38	1
Isosafrole	<2.61		11.4	2.61	ug/L		10/24/25 09:22	11/03/25 22:38	1
Kepone	<1.14	*1	11.4	1.14	ug/L		10/24/25 09:22	11/03/25 22:38	1
Methapyrilene	<0.864	*- *1	11.4	0.864	ug/L		10/24/25 09:22	11/03/25 22:38	1
3-Methylcholanthrene	<0.364		11.4	0.364	ug/L		10/24/25 09:22	11/03/25 22:38	1
Methyl methanesulfonate	<3.75		11.4	3.75	ug/L		10/24/25 09:22	11/03/25 22:38	1
2-Methylnaphthalene	<0.670		11.4	0.670	ug/L		10/24/25 09:22	11/03/25 22:38	1
Methyl parathion	<2.61		11.4	2.61	ug/L		10/24/25 09:22	11/03/25 22:38	1
2-Methylphenol	<0.739		11.4	0.739	ug/L		10/24/25 09:22	11/03/25 22:38	1
Methylphenol, 3 & 4	<0.795		11.4	0.795	ug/L		10/24/25 09:22	11/03/25 22:38	1
1,4-Naphthoquinone	<4.09		11.4	4.09	ug/L		10/24/25 09:22	11/03/25 22:38	1
1-Naphthylamine	<2.84		11.4	2.84	ug/L		10/24/25 09:22	11/03/25 22:38	1
2-Naphthylamine	<2.39		11.4	2.39	ug/L		10/24/25 09:22	11/03/25 22:38	1
2-Nitroaniline	<6.70		11.4	6.70	ug/L		10/24/25 09:22	11/03/25 22:38	1
3-Nitroaniline	<3.07		11.4	3.07	ug/L		10/24/25 09:22	11/03/25 22:38	1
4-Nitroaniline	<1.48		11.4	1.48	ug/L		10/24/25 09:22	11/03/25 22:38	1
Nitrobenzene	<0.909		11.4	0.909	ug/L		10/24/25 09:22	11/03/25 22:38	1
5-Nitro-o-toluidine	<3.18		11.4	3.18	ug/L		10/24/25 09:22	11/03/25 22:38	1

Client Sample ID: FD-1_25_10
Lab Sample ID: 310-318779-13

Date Collected: 10/22/25 00:00
Matrix: Water
Date Received: 10/23/25 15:10

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	<7.73		11.4	7.73	ug/L		10/24/25 09:22	11/03/25 22:38	1
4-Nitrophenol	<8.64		11.4	8.64	ug/L		10/24/25 09:22	11/03/25 22:38	1
N-Nitrosodiethylamine	<3.86		11.4	3.86	ug/L		10/24/25 09:22	11/03/25 22:38	1
N-Nitrosodimethylamine	<0.818		11.4	0.818	ug/L		10/24/25 09:22	11/03/25 22:38	1
N-Nitrosodi-n-butylamine	<4.43		11.4	4.43	ug/L		10/24/25 09:22	11/03/25 22:38	1
N-Nitrosodi-n-propylamine	<1.05		11.4	1.05	ug/L		10/24/25 09:22	11/03/25 22:38	1
N-Nitrosodiphenylamine	<0.852		11.4	0.852	ug/L		10/24/25 09:22	11/03/25 22:38	1
N-Nitrosomethylethylamine	<5.57		11.4	5.57	ug/L		10/24/25 09:22	11/03/25 22:38	1
N-Nitrosopiperidine	<3.07		11.4	3.07	ug/L		10/24/25 09:22	11/03/25 22:38	1
N-Nitrosopyrrolidine	<4.09		11.4	4.09	ug/L		10/24/25 09:22	11/03/25 22:38	1
o,o',o''-Triethylphosphorothioate	<3.64		11.4	3.64	ug/L		10/24/25 09:22	11/03/25 22:38	1
o-Toluidine	<3.30		11.4	3.30	ug/L		10/24/25 09:22	11/03/25 22:38	1
p-Dimethylamino azobenzene	<2.50		11.4	2.50	ug/L		10/24/25 09:22	11/03/25 22:38	1
Pentachlorobenzene	<3.18		11.4	3.18	ug/L		10/24/25 09:22	11/03/25 22:38	1
Pentachloronitrobenzene	<6.59		11.4	6.59	ug/L		10/24/25 09:22	11/03/25 22:38	1
Pentachlorophenol	<10.9		11.4	10.9	ug/L		10/24/25 09:22	11/03/25 22:38	1
Phenacetin	<2.16		11.4	2.16	ug/L		10/24/25 09:22	11/03/25 22:38	1
Phenanthrene	<0.898		11.4	0.898	ug/L		10/24/25 09:22	11/03/25 22:38	1
Phenol	<1.25		11.4	1.25	ug/L		10/24/25 09:22	11/03/25 22:38	1
1,4-phenylenediamine	<2.16	*-	11.4	2.16	ug/L		10/24/25 09:22	11/03/25 22:38	1
Phorate	<3.64		11.4	3.64	ug/L		10/24/25 09:22	11/03/25 22:38	1
Pronamide	<3.07		11.4	3.07	ug/L		10/24/25 09:22	11/03/25 22:38	1
Pyrene	<0.898		11.4	0.898	ug/L		10/24/25 09:22	11/03/25 22:38	1
Safrole	<3.18		11.4	3.18	ug/L		10/24/25 09:22	11/03/25 22:38	1
1,2,4,5-Tetrachlorobenzene	<0.614		11.4	0.614	ug/L		10/24/25 09:22	11/03/25 22:38	1
2,3,4,6-Tetrachlorophenol	<6.02		11.4	6.02	ug/L		10/24/25 09:22	11/03/25 22:38	1
Thionazin	<3.98		11.4	3.98	ug/L		10/24/25 09:22	11/03/25 22:38	1
2,4,5-Trichlorophenol	<6.02		11.4	6.02	ug/L		10/24/25 09:22	11/03/25 22:38	1
2,4,6-Trichlorophenol	<5.68		11.4	5.68	ug/L		10/24/25 09:22	11/03/25 22:38	1
1,3,5-Trinitrobenzene	<2.61		11.4	2.61	ug/L		10/24/25 09:22	11/03/25 22:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*89*		*33 - 126*	*10/24/25 09:22*	*11/03/25 22:38*	*1*
2-Fluorophenol (Surr)	*77*		*21 - 110*	*10/24/25 09:22*	*11/03/25 22:38*	*1*
Nitrobenzene-d5 (Surr)	*97*		*39 - 140*	*10/24/25 09:22*	*11/03/25 22:38*	*1*
Phenol-d5 (Surr)	*65*		*21 - 110*	*10/24/25 09:22*	*11/03/25 22:38*	*1*
Terphenyl-d14 (Surr)	*112*		*13 - 150*	*10/24/25 09:22*	*11/03/25 22:38*	*1*
2,4,6-Tribromophenol (Surr)	*102*		*20 - 144*	*10/24/25 09:22*	*11/03/25 22:38*	*1*

Method: SW846 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	<2600		10000	2600	ug/L			10/31/25 22:20	1
Isobutanol	<2400		10000	2400	ug/L			10/31/25 22:20	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.0201		0.0914	0.0201	ug/L		10/29/25 10:07	10/30/25 13:17	1
alpha-BHC	<0.00914		0.0914	0.00914	ug/L		10/29/25 10:07	10/30/25 13:17	1
beta-BHC	<0.0384		0.0914	0.0384	ug/L		10/29/25 10:07	10/30/25 13:17	1
Chlordane (technical)	<0.356		1.83	0.356	ug/L		10/29/25 10:07	10/30/25 13:17	1

Client Sample ID: FD-1_25_10
Lab Sample ID: 310-318779-13
Date Collected: 10/22/25 00:00
Matrix: Water
Date Received: 10/23/25 15:10

Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.0228		0.0914	0.0228	ug/L		10/29/25 10:07	10/30/25 13:17	1
4,4'-DDE	<0.0274		0.0914	0.0274	ug/L		10/29/25 10:07	10/30/25 13:17	1
4,4'-DDT	<0.0183		0.0914	0.0183	ug/L		10/29/25 10:07	10/30/25 13:17	1
delta-BHC	<0.0292		0.0914	0.0292	ug/L		10/29/25 10:07	10/30/25 13:17	1
Dieldrin	<0.0192		0.0914	0.0192	ug/L		10/29/25 10:07	10/30/25 13:17	1
Endosulfan I	<0.0256		0.0914	0.0256	ug/L		10/29/25 10:07	10/30/25 13:17	1
Endosulfan II	<0.0238		0.0914	0.0238	ug/L		10/29/25 10:07	10/30/25 13:17	1
Endosulfan sulfate	<0.0164		0.0914	0.0164	ug/L		10/29/25 10:07	10/30/25 13:17	1
Endrin	<0.0256		0.0914	0.0256	ug/L		10/29/25 10:07	10/30/25 13:17	1
Endrin aldehyde	<0.0247		0.0914	0.0247	ug/L		10/29/25 10:07	10/30/25 13:17	1
gamma-BHC (Lindane)	<0.00914		0.0914	0.00914	ug/L		10/29/25 10:07	10/30/25 13:17	1
Heptachlor	<0.0210		0.0914	0.0210	ug/L		10/29/25 10:07	10/30/25 13:17	1
Heptachlor epoxide	<0.0292		0.0914	0.0292	ug/L		10/29/25 10:07	10/30/25 13:17	1
Methoxychlor	<0.0292		0.0914	0.0292	ug/L		10/29/25 10:07	10/30/25 13:17	1
Toxaphene	<0.914		1.83	0.914	ug/L		10/29/25 10:07	10/30/25 13:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*79*		*10 - 150*	*10/29/25 10:07*	*10/30/25 13:17*	*1*
Tetrachloro-m-xylene	*86*		*17 - 150*	*10/29/25 10:07*	*10/30/25 13:17*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.749		1.83	0.749	ug/L		10/29/25 10:07	10/30/25 13:17	1
PCB-1221	<0.749		1.83	0.749	ug/L		10/29/25 10:07	10/30/25 13:17	1
PCB-1232	<0.749		1.83	0.749	ug/L		10/29/25 10:07	10/30/25 13:17	1
PCB-1242	<0.749		1.83	0.749	ug/L		10/29/25 10:07	10/30/25 13:17	1
PCB-1248	<0.631		1.83	0.631	ug/L		10/29/25 10:07	10/30/25 13:17	1
PCB-1254	<0.631		1.83	0.631	ug/L		10/29/25 10:07	10/30/25 13:17	1
PCB-1260	<0.631		1.83	0.631	ug/L		10/29/25 10:07	10/30/25 13:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*79*		*10 - 150*	*10/29/25 10:07*	*10/30/25 13:17*	*1*
Tetrachloro-m-xylene	*86*		*17 - 150*	*10/29/25 10:07*	*10/30/25 13:17*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.290		0.697	0.290	ug/L		10/29/25 15:26	10/30/25 19:06	1
Silvex (2,4,5-TP)	<0.0255		0.0581	0.0255	ug/L		10/29/25 15:26	10/30/25 19:06	1
2,4,5-T	<0.0755		0.174	0.0755	ug/L		10/29/25 15:26	10/30/25 19:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*89*		*34 - 142*	*10/29/25 15:26*	*10/30/25 19:06*	*1*
DCAA	*105*		*34 - 142*	*10/29/25 15:26*	*10/30/25 19:06*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		10/29/25 09:00	11/05/25 14:41	1
Arsenic	<0.530		2.00	0.530	ug/L		10/29/25 09:00	11/05/25 14:41	1
Barium	**322**		2.00	0.660	ug/L		10/29/25 09:00	11/05/25 14:41	1
Beryllium	<0.330		1.00	0.330	ug/L		10/29/25 09:00	11/05/25 14:41	1
Cadmium	<0.100		0.200	0.100	ug/L		10/29/25 09:00	11/05/25 14:41	1

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318779-1

Client Sample ID: FD-1_25_10

Date Collected: 10/22/25 00:00
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-13

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<1.80		5.00	1.80	ug/L		10/29/25 09:00	11/05/25 14:41	1
Cobalt	<0.170		0.500	0.170	ug/L		10/29/25 09:00	11/05/25 14:41	1
Copper	<3.20		5.00	3.20	ug/L		10/29/25 09:00	11/05/25 14:41	1
Lead	<0.330		0.500	0.330	ug/L		10/29/25 09:00	11/05/25 14:41	1
Nickel	**7.61**		5.00	2.30	ug/L		10/29/25 09:00	11/05/25 14:41	1
Selenium	<1.40		5.00	1.40	ug/L		10/29/25 09:00	11/05/25 14:41	1
Silver	<0.500		1.00	0.500	ug/L		10/29/25 09:00	11/05/25 14:41	1
Thallium	<0.570	^+	1.00	0.570	ug/L		10/29/25 09:00	11/05/25 14:41	1
Vanadium	<1.70		5.00	1.70	ug/L		10/29/25 09:00	11/05/25 14:41	1
Zinc	<13.0		20.0	13.0	ug/L		10/29/25 09:00	11/05/25 14:41	1
Tin	<2.50		5.00	2.50	ug/L		10/29/25 09:00	11/05/25 14:41	1
Sodium	**15700**		1000	650	ug/L		10/29/25 09:00	11/05/25 14:41	1
Calcium	**147000**		500	190	ug/L		10/29/25 09:00	11/05/25 14:41	1
Magnesium	**50900**		500	150	ug/L		10/29/25 09:00	11/05/25 14:41	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.110		0.200	0.110	ug/L		11/03/25 12:50	11/04/25 11:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<3.50		10.0	3.50	ug/L		10/28/25 10:55	10/29/25 21:05	1
Sulfide (SW846 9034)	**1470**	**J**	3000	1410	ug/L		10/29/25 12:25	10/29/25 16:45	1
Total Suspended Solids (USGS I-3765-85)	<1.31		1.88	1.31	mg/L			10/28/25 11:38	1

Client Sample ID: FD-3_25_10
Date Collected: 10/22/25 00:00
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-14
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/28/25 19:03	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/28/25 19:03	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/28/25 19:03	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/28/25 19:03	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/28/25 19:03	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/28/25 19:03	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/28/25 19:03	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/28/25 19:03	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/28/25 19:03	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/28/25 19:03	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/28/25 19:03	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/28/25 19:03	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/28/25 19:03	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/28/25 19:03	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/28/25 19:03	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/28/25 19:03	1
Acetone	<3.10		10.0	3.10	ug/L			10/28/25 19:03	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/28/25 19:03	1
Benzene	<0.220		0.500	0.220	ug/L			10/28/25 19:03	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/28/25 19:03	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/28/25 19:03	1
Bromoform	<0.780		5.00	0.780	ug/L			10/28/25 19:03	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/28/25 19:03	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/28/25 19:03	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/28/25 19:03	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/28/25 19:03	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/28/25 19:03	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/28/25 19:03	1
Chloroform	<1.30		3.00	1.30	ug/L			10/28/25 19:03	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/28/25 19:03	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/28/25 19:03	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/28/25 19:03	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/28/25 19:03	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/28/25 19:03	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/28/25 19:03	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/28/25 19:03	1
Styrene	<0.370		1.00	0.370	ug/L			10/28/25 19:03	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/28/25 19:03	1
Toluene	<0.430		1.00	0.430	ug/L			10/28/25 19:03	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/28/25 19:03	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/28/25 19:03	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/28/25 19:03	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/28/25 19:03	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/28/25 19:03	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/28/25 19:03	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/28/25 19:03	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/28/25 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*76 - 130*		*10/28/25 19:03*	*1*

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318779-1

Client Sample ID: FD-3_25_10

Date Collected: 10/22/25 00:00
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-14

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/28/25 19:03*	*1*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*10/28/25 19:03*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.76**	**J**	2.00	1.00	ug/L		10/29/25 09:00	11/05/25 14:50	1
Arsenic	<0.530		2.00	0.530	ug/L		10/29/25 09:00	11/05/25 14:50	1
Barium	**140**		2.00	0.660	ug/L		10/29/25 09:00	11/05/25 14:50	1
Beryllium	<0.330		1.00	0.330	ug/L		10/29/25 09:00	11/05/25 14:50	1
Cadmium	<0.100		0.200	0.100	ug/L		10/29/25 09:00	11/05/25 14:50	1
Chromium	<1.80		5.00	1.80	ug/L		10/29/25 09:00	11/05/25 14:50	1
Cobalt	<0.170		0.500	0.170	ug/L		10/29/25 09:00	11/05/25 14:50	1
Copper	<3.20		5.00	3.20	ug/L		10/29/25 09:00	11/05/25 14:50	1
Lead	<0.330		0.500	0.330	ug/L		10/29/25 09:00	11/05/25 14:50	1
Nickel	**2.32**	**J**	5.00	2.30	ug/L		10/29/25 09:00	11/05/25 14:50	1
Selenium	<1.40		5.00	1.40	ug/L		10/29/25 09:00	11/05/25 14:50	1
Silver	<0.500		1.00	0.500	ug/L		10/29/25 09:00	11/05/25 14:50	1
Thallium	<0.570	^+	1.00	0.570	ug/L		10/29/25 09:00	11/05/25 14:50	1
Vanadium	<1.70		5.00	1.70	ug/L		10/29/25 09:00	11/05/25 14:50	1
Zinc	<13.0		20.0	13.0	ug/L		10/29/25 09:00	11/05/25 14:50	1
Sodium	**9970**		1000	650	ug/L		10/29/25 09:00	11/05/25 14:50	1
Calcium	**102000**		500	190	ug/L		10/29/25 09:00	11/05/25 14:50	1
Magnesium	**38200**		500	150	ug/L		10/29/25 09:00	11/05/25 14:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.31		1.88	1.31	mg/L			10/27/25 13:58	1

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318779-1

Client Sample ID: TB-1_25_10
Date Collected: 10/22/25 00:00
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-15
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<3.10		10.0	3.10	ug/L			10/28/25 14:33	1
Acrolein	<3.60		10.0	3.60	ug/L			10/28/25 14:33	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/28/25 14:33	1
Allyl chloride	<0.700		2.00	0.700	ug/L			10/28/25 14:33	1
Benzene	<0.220		0.500	0.220	ug/L			10/28/25 14:33	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/28/25 14:33	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/28/25 14:33	1
Bromoform	<0.780		5.00	0.780	ug/L			10/28/25 14:33	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/28/25 14:33	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/28/25 14:33	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/28/25 14:33	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/28/25 14:33	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/28/25 14:33	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/28/25 14:33	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/28/25 14:33	1
Chloroform	<1.30		3.00	1.30	ug/L			10/28/25 14:33	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/28/25 14:33	1
Chloroprene	<0.230		1.00	0.230	ug/L			10/28/25 14:33	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/28/25 14:33	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/28/25 14:33	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/28/25 14:33	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/28/25 14:33	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/28/25 14:33	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/28/25 14:33	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			10/28/25 14:33	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/28/25 14:33	1
Dichlorodifluoromethane	<0.250		3.00	0.250	ug/L			10/28/25 14:33	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/28/25 14:33	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/28/25 14:33	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/28/25 14:33	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/28/25 14:33	1
1,3-Dichloropropane	<0.400		1.00	0.400	ug/L			10/28/25 14:33	1
2,2-Dichloropropane	<0.690		4.00	0.690	ug/L			10/28/25 14:33	1
1,1-Dichloropropene	<0.430		1.00	0.430	ug/L			10/28/25 14:33	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/28/25 14:33	1
Ethyl methacrylate	<0.680		2.00	0.680	ug/L			10/28/25 14:33	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/28/25 14:33	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/28/25 14:33	1
Methacrylonitrile	<3.30		10.0	3.30	ug/L			10/28/25 14:33	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/28/25 14:33	1
Methyl methacrylate	<0.760		2.00	0.760	ug/L			10/28/25 14:33	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/28/25 14:33	1
m,p-Xylene	<0.380		2.00	0.380	ug/L			10/28/25 14:33	1
Naphthalene	<3.00		5.00	3.00	ug/L			10/28/25 14:33	1
o-Xylene	<0.400		1.00	0.400	ug/L			10/28/25 14:33	1
Propionitrile	<3.40		10.0	3.40	ug/L			10/28/25 14:33	1
Styrene	<0.370		1.00	0.370	ug/L			10/28/25 14:33	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/28/25 14:33	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/28/25 14:33	1

Client: Winneshiek Co Solid Waste
Job ID: 310-318779-1
Project/Site: Winneshiek County Sanitary Landfill

Client Sample ID: TB-1_25_10
Lab Sample ID: 310-318779-15
Date Collected: 10/22/25 00:00
Matrix: Water
Date Received: 10/23/25 15:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/28/25 14:33	1
Toluene	<0.430		1.00	0.430	ug/L			10/28/25 14:33	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/28/25 14:33	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/28/25 14:33	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/28/25 14:33	1
1,2,4-Trichlorobenzene	<0.750		5.00	0.750	ug/L			10/28/25 14:33	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/28/25 14:33	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/28/25 14:33	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/28/25 14:33	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/28/25 14:33	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/28/25 14:33	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/28/25 14:33	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/28/25 14:33	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/28/25 14:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*10/28/25 14:33*	*1*
Dibromofluoromethane (Surr)	*103*		*76 - 130*		*10/28/25 14:33*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/28/25 14:33*	*1*

Client Sample ID: SW-2_25_10
Date Collected: 10/22/25 12:05
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-16
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/29/25 12:50	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/29/25 12:50	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/29/25 12:50	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/29/25 12:50	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/29/25 12:50	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/29/25 12:50	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/29/25 12:50	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/29/25 12:50	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/29/25 12:50	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/29/25 12:50	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/29/25 12:50	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/29/25 12:50	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/29/25 12:50	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/29/25 12:50	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/29/25 12:50	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/29/25 12:50	1
Acetone	<3.10		10.0	3.10	ug/L			10/29/25 12:50	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/29/25 12:50	1
Benzene	<0.220		0.500	0.220	ug/L			10/29/25 12:50	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/29/25 12:50	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/29/25 12:50	1
Bromoform	<0.780		5.00	0.780	ug/L			10/29/25 12:50	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/29/25 12:50	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/29/25 12:50	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/29/25 12:50	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/29/25 12:50	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/29/25 12:50	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/29/25 12:50	1
Chloroform	<1.30		3.00	1.30	ug/L			10/29/25 12:50	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/29/25 12:50	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/29/25 12:50	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/29/25 12:50	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/29/25 12:50	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/29/25 12:50	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/29/25 12:50	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/29/25 12:50	1
Styrene	<0.370		1.00	0.370	ug/L			10/29/25 12:50	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/29/25 12:50	1
Toluene	<0.430		1.00	0.430	ug/L			10/29/25 12:50	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/29/25 12:50	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/29/25 12:50	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/29/25 12:50	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/29/25 12:50	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/29/25 12:50	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/29/25 12:50	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/29/25 12:50	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/29/25 12:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*111*		*76 - 130*		*10/29/25 12:50*	*1*

Client Sample ID: SW-2_25_10
Lab Sample ID: 310-318779-16

Date Collected: 10/22/25 12:05
Matrix: Water
Date Received: 10/23/25 15:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/29/25 12:50*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*10/29/25 12:50*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		10/29/25 09:00	11/05/25 14:53	1
Arsenic	**0.693**	**J**	2.00	0.530	ug/L		10/29/25 09:00	11/05/25 14:53	1
Barium	**91.7**		2.00	0.660	ug/L		10/29/25 09:00	11/05/25 14:53	1
Beryllium	<0.330		1.00	0.330	ug/L		10/29/25 09:00	11/05/25 14:53	1
Cadmium	<0.100		0.200	0.100	ug/L		10/29/25 09:00	11/05/25 14:53	1
Calcium	**84.5**		0.500	0.190	mg/L		10/29/25 09:00	11/05/25 14:53	1
Chromium	<1.80		5.00	1.80	ug/L		10/29/25 09:00	11/05/25 14:53	1
Cobalt	<0.170		0.500	0.170	ug/L		10/29/25 09:00	11/05/25 14:53	1
Copper	<3.20		5.00	3.20	ug/L		10/29/25 09:00	11/05/25 14:53	1
Lead	<0.330		0.500	0.330	ug/L		10/29/25 09:00	11/05/25 14:53	1
Magnesium	**32.3**		0.500	0.150	mg/L		10/29/25 09:00	11/05/25 14:53	1
Nickel	<2.30		5.00	2.30	ug/L		10/29/25 09:00	11/05/25 14:53	1
Selenium	<1.40		5.00	1.40	ug/L		10/29/25 09:00	11/05/25 14:53	1
Silver	<0.500		1.00	0.500	ug/L		10/29/25 09:00	11/05/25 14:53	1
Sodium	**6.90**		1.00	0.650	mg/L		10/29/25 09:00	11/05/25 14:53	1
Thallium	<0.570	^+	1.00	0.570	ug/L		10/29/25 09:00	11/05/25 14:53	1
Vanadium	<1.70		5.00	1.70	ug/L		10/29/25 09:00	11/05/25 14:53	1
Zinc	<13.0		20.0	13.0	ug/L		10/29/25 09:00	11/05/25 14:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 353.2)	**8.19**		0.100	0.0800	mg/L			10/31/25 14:31	1
Fluoride (SM 4500 F C-2011)	**0.137**		0.100	0.0490	mg/L			11/02/25 12:50	1
Sulfate (ASTM D516-16)	**27.9**	**B**	5.00	1.80	mg/L			10/31/25 15:03	1
Total Suspended Solids (USGS I-3765-85)	**2.15**		1.90	1.33	mg/L			10/28/25 11:38	1
Anion/Cation Balance (SM 1030E)	**-7.76**				%			10/27/25 10:47	1
Total Alkalinity (SM 2320B)	**331**		5.00	2.50	mg/L			10/29/25 16:18	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**331**		5.00	2.50	mg/L			10/29/25 16:18	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 16:18	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 16:18	1
Phenolphthalein Alkalinity as CaCO3 tc pH 8.3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 16:18	1
Total Dissolved Solids (SM 2540C)	**386**		50.0	36.0	mg/L			10/27/25 12:05	1
Chloride (SM 4500 Cl- E)	**21.1**		2.00	1.40	mg/L			10/27/25 20:22	1
Biochemical Oxygen Demand (SM 5210B)	<3.00		3.00	3.00	mg/L			10/23/25 15:40	1
Chemical Oxygen Demand (SM 5220D)	<23.0		25.0	23.0	mg/L			10/30/25 13:52	5

Client: Winneshiek Co Solid Waste
Job ID: 310-318779-1
Project/Site: Winneshiek County Sanitary Landfill

Client Sample ID: SW-5_25_10
Date Collected: 10/22/25 11:40
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-17
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/29/25 12:27	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/29/25 12:27	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/29/25 12:27	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/29/25 12:27	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/29/25 12:27	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/29/25 12:27	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/29/25 12:27	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/29/25 12:27	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/29/25 12:27	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/29/25 12:27	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/29/25 12:27	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/29/25 12:27	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/29/25 12:27	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/29/25 12:27	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/29/25 12:27	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/29/25 12:27	1
Acetone	<3.10		10.0	3.10	ug/L			10/29/25 12:27	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/29/25 12:27	1
Benzene	<0.220		0.500	0.220	ug/L			10/29/25 12:27	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/29/25 12:27	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/29/25 12:27	1
Bromoform	<0.780		5.00	0.780	ug/L			10/29/25 12:27	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/29/25 12:27	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/29/25 12:27	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/29/25 12:27	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/29/25 12:27	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/29/25 12:27	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/29/25 12:27	1
Chloroform	<1.30		3.00	1.30	ug/L			10/29/25 12:27	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/29/25 12:27	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/29/25 12:27	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/29/25 12:27	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/29/25 12:27	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/29/25 12:27	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/29/25 12:27	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/29/25 12:27	1
Styrene	<0.370		1.00	0.370	ug/L			10/29/25 12:27	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/29/25 12:27	1
Toluene	<0.430		1.00	0.430	ug/L			10/29/25 12:27	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/29/25 12:27	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/29/25 12:27	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/29/25 12:27	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/29/25 12:27	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/29/25 12:27	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/29/25 12:27	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/29/25 12:27	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/29/25 12:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*108*		*76 - 130*		*10/29/25 12:27*	*1*

Client Sample ID: SW-5_25_10
Lab Sample ID: 310-318779-17

Date Collected: 10/22/25 11:40
Matrix: Water
Date Received: 10/23/25 15:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/29/25 12:27*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*10/29/25 12:27*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		10/29/25 09:00	11/05/25 14:56	1
Arsenic	**0.860**	**J**	2.00	0.530	ug/L		10/29/25 09:00	11/05/25 14:56	1
Barium	**103**		2.00	0.660	ug/L		10/29/25 09:00	11/05/25 14:56	1
Beryllium	<0.330		1.00	0.330	ug/L		10/29/25 09:00	11/05/25 14:56	1
Cadmium	<0.100		0.200	0.100	ug/L		10/29/25 09:00	11/05/25 14:56	1
Calcium	**66.1**		0.500	0.190	mg/L		10/29/25 09:00	11/05/25 14:56	1
Chromium	<1.80		5.00	1.80	ug/L		10/29/25 09:00	11/05/25 14:56	1
Cobalt	**0.663**		0.500	0.170	ug/L		10/29/25 09:00	11/05/25 14:56	1
Copper	<3.20		5.00	3.20	ug/L		10/29/25 09:00	11/05/25 14:56	1
Lead	**0.594**		0.500	0.330	ug/L		10/29/25 09:00	11/05/25 14:56	1
Magnesium	**36.9**		0.500	0.150	mg/L		10/29/25 09:00	11/05/25 14:56	1
Nickel	**3.43**	**J**	5.00	2.30	ug/L		10/29/25 09:00	11/05/25 14:56	1
Selenium	<1.40		5.00	1.40	ug/L		10/29/25 09:00	11/05/25 14:56	1
Silver	<0.500		1.00	0.500	ug/L		10/29/25 09:00	11/05/25 14:56	1
Sodium	**10.8**		1.00	0.650	mg/L		10/29/25 09:00	11/05/25 14:56	1
Thallium	<0.570	^+	1.00	0.570	ug/L		10/29/25 09:00	11/05/25 14:56	1
Vanadium	**1.78**	**J**	5.00	1.70	ug/L		10/29/25 09:00	11/05/25 14:56	1
Zinc	<13.0		20.0	13.0	ug/L		10/29/25 09:00	11/05/25 14:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 353.2)	**6.66**		0.100	0.0800	mg/L			10/31/25 14:33	1
Fluoride (SM 4500 F C-2011)	**0.133**		0.100	0.0490	mg/L			11/02/25 12:53	1
Sulfate (ASTM D516-16)	**34.7**	**B**	5.00	1.80	mg/L			10/31/25 15:04	1
Total Suspended Solids (USGS I-3765-85)	**15.2**		1.94	1.35	mg/L			10/27/25 13:58	1
Anion/Cation Balance (SM 1030E)	**-7.05**				%			10/27/25 10:47	1
Total Alkalinity (SM 2320B)	**286**		5.00	2.50	mg/L			10/29/25 16:28	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**286**		5.00	2.50	mg/L			10/29/25 16:28	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 16:28	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 16:28	1
Phenolphthalein Alkalinity as CaCO3 tc pH 8.3 (SM 2320B)	<2.50		5.00	2.50	mg/L			10/29/25 16:28	1
Total Dissolved Solids (SM 2540C)	**370**		50.0	36.0	mg/L			10/27/25 12:05	1
Chloride (SM 4500 Cl- E)	**32.5**		2.00	1.40	mg/L			10/27/25 20:23	1
Biochemical Oxygen Demand (SM 5210B)	<3.00		3.00	3.00	mg/L			10/23/25 16:14	1
Chemical Oxygen Demand (SM 5220D)	<23.0		25.0	23.0	mg/L			10/30/25 13:52	5

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318779-1

Client Sample ID: TB-2_25_10
Date Collected: 10/22/25 00:00
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-18
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<3.10		10.0	3.10	ug/L			10/28/25 14:55	1
Acrolein	<3.60		10.0	3.60	ug/L			10/28/25 14:55	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/28/25 14:55	1
Allyl chloride	<0.700		2.00	0.700	ug/L			10/28/25 14:55	1
Benzene	<0.220		0.500	0.220	ug/L			10/28/25 14:55	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/28/25 14:55	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/28/25 14:55	1
Bromoform	<0.780		5.00	0.780	ug/L			10/28/25 14:55	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/28/25 14:55	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/28/25 14:55	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/28/25 14:55	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/28/25 14:55	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/28/25 14:55	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/28/25 14:55	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/28/25 14:55	1
Chloroform	<1.30		3.00	1.30	ug/L			10/28/25 14:55	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/28/25 14:55	1
Chloroprene	<0.230		1.00	0.230	ug/L			10/28/25 14:55	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/28/25 14:55	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/28/25 14:55	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/28/25 14:55	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/28/25 14:55	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/28/25 14:55	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/28/25 14:55	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			10/28/25 14:55	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/28/25 14:55	1
Dichlorodifluoromethane	<0.250		3.00	0.250	ug/L			10/28/25 14:55	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/28/25 14:55	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/28/25 14:55	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/28/25 14:55	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/28/25 14:55	1
1,3-Dichloropropane	<0.400		1.00	0.400	ug/L			10/28/25 14:55	1
2,2-Dichloropropane	<0.690		4.00	0.690	ug/L			10/28/25 14:55	1
1,1-Dichloropropene	<0.430		1.00	0.430	ug/L			10/28/25 14:55	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/28/25 14:55	1
Ethyl methacrylate	<0.680		2.00	0.680	ug/L			10/28/25 14:55	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/28/25 14:55	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/28/25 14:55	1
Methacrylonitrile	<3.30		10.0	3.30	ug/L			10/28/25 14:55	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/28/25 14:55	1
Methyl methacrylate	<0.760		2.00	0.760	ug/L			10/28/25 14:55	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/28/25 14:55	1
m,p-Xylene	<0.380		2.00	0.380	ug/L			10/28/25 14:55	1
Naphthalene	<3.00		5.00	3.00	ug/L			10/28/25 14:55	1
o-Xylene	<0.400		1.00	0.400	ug/L			10/28/25 14:55	1
Propionitrile	<3.40		10.0	3.40	ug/L			10/28/25 14:55	1
Styrene	<0.370		1.00	0.370	ug/L			10/28/25 14:55	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/28/25 14:55	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/28/25 14:55	1

Client: Winneshiek Co Solid Waste
Job ID: 310-318779-1
Project/Site: Winneshiek County Sanitary Landfill

Client Sample ID: TB-2_25_10
Lab Sample ID: 310-318779-18
Date Collected: 10/22/25 00:00
Matrix: Water
Date Received: 10/23/25 15:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/28/25 14:55	1
Toluene	<0.430		1.00	0.430	ug/L			10/28/25 14:55	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/28/25 14:55	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/28/25 14:55	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/28/25 14:55	1
1,2,4-Trichlorobenzene	<0.750		5.00	0.750	ug/L			10/28/25 14:55	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/28/25 14:55	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/28/25 14:55	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/28/25 14:55	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/28/25 14:55	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/28/25 14:55	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/28/25 14:55	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/28/25 14:55	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/28/25 14:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*10/28/25 14:55*	*1*
Dibromofluoromethane (Surr)	*105*		*76 - 130*		*10/28/25 14:55*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/28/25 14:55*	*1*

Definitions/Glossary

Client: Winneshiek Co Solid Waste
Job ID: 310-318779-1
Project/Site: Winneshiek County Sanitary Landfill

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
S1+	Surrogate recovery exceeds control limits, high biased.

Metals

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318779-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(76-130)	(80-120)	(80-120)
310-318779-1	MW-2R_25_10	109	98	102
310-318779-2	MW-4_25_10	105	95	100
310-318779-3	MW-7A_25_10	108	99	110
310-318779-3 MS	MW-7A_25_10	108	102	96
310-318779-3 MSD	MW-7A_25_10	102	104	101
310-318779-4	MW-18_25_10	109	95	104
310-318779-5	MW-29A_25_10	103	96	110
310-318779-6	MW-35_25_10	106	99	109
310-318779-7	MW-39A_25_10	108	98	107
310-318779-8	MW-43A_25_10	106	101	109
310-318779-9	MW-44A_25_10	112	92	136 S1+ *3
310-318779-9	MW-44A_25_10	120	96	103
310-318779-10	MW-45A_25_10	107	94	105
310-318779-11	MW-46A_25_10	107	97	107
310-318779-12	EB-2_25_10	104	95	104
310-318779-13	FD-1_25_10	105	97	101
310-318779-14	FD-3_25_10	106	98	106
310-318779-15	TB-1_25_10	103	97	106
310-318779-16	SW-2_25_10	111	98	103
310-318779-17	SW-5_25_10	108	98	105
310-318779-18	TB-2_25_10	105	96	106
LCS 310-471301/8	Lab Control Sample	106	95	95
LCS 310-471555/6	Lab Control Sample	105	102	95
LCS 310-471555/7	Lab Control Sample	105	99	104
LCS 310-471692/7	Lab Control Sample	104	102	99
LCS 310-471692/8	Lab Control Sample	109	97	105
LCS 310-472433/8	Lab Control Sample	95	98	105
LCS 310-472433/9	Lab Control Sample	112	100	102
MB 310-471301/7	Method Blank	120 *3	92	104
MB 310-471555/5	Method Blank	105	98	108
MB 310-471692/6	Method Blank	108	96	102
MB 310-472433/7	Method Blank	108	96	100

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(33-126)	(21-110)	(39-140)	(21-110)	(13-150)	(20-144)
310-318779-3	MW-7A_25_10	88	73	98	62	108	98
310-318779-11	MW-46A_25_10	98	76	105	63	116	108
310-318779-13	FD-1_25_10	89	77	97	65	112	102
LCS 310-471206/2-A	Lab Control Sample	109	86	123	71	134	139
LCSD 310-471206/3-A	Lab Control Sample Dup	96	84	110	70	117	118
MB 310-471206/1-A	Method Blank	96	87	113	72	128	106

Surrogate Summary

Client: Winneshiek Co Solid Waste
Job ID: 310-318779-1
Project/Site: Winneshiek County Sanitary Landfill

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB1	TCX1
Lab Sample ID	Client Sample ID	(10-150)	(17-150)
310-318779-3	MW-7A_25_10	72	86
310-318779-11	MW-46A_25_10	73	86
310-318779-13	FD-1_25_10	79	86

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB1	TCX1
Lab Sample ID	Client Sample ID	(10-150)	(17-150)
310-318779-3	MW-7A_25_10	72	86
310-318779-11	MW-46A_25_10	73	86
310-318779-13	FD-1_25_10	79	86
LCS 310-471719/20-A	Lab Control Sample	58	57
MB 310-471719/1-A	Method Blank	37	101 p

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene

Method: 8151A - Herbicides (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCPAA1	DCPAA2
Lab Sample ID	Client Sample ID	(34-142)	(34-142)
310-318779-3	MW-7A_25_10	77	94
310-318779-11	MW-46A_25_10	99 p	333 S1+
310-318779-13	FD-1_25_10	89	105
LCS 410-721636/2-A	Lab Control Sample	88	90
LCS 410-721636/2-A - DL	Lab Control Sample	95	94
LCSD 410-721636/3-A	Lab Control Sample Dup	82	79
LCSD 410-721636/3-A - DL	Lab Control Sample Dup	101	100
MB 410-721636/1-A	Method Blank	78	74

Surrogate Legend

DCPAA = DCAA

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 310-471301/7
Matrix: Water
Analysis Batch: 471301

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrylonitrile	<2.20	*3	5.00	2.20	ug/L			10/25/25 07:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*120*	*3	*76 - 130*		*10/25/25 07:50*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*10/25/25 07:50*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*10/25/25 07:50*	*1*

Lab Sample ID: LCS 310-471301/8
Matrix: Water
Analysis Batch: 471301

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Acrylonitrile			200	205.1		ug/L		103	50 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*106*		*76 - 130*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*
Toluene-d8 (Surr)	*95*		*80 - 120*

Lab Sample ID: MB 310-471555/5
Matrix: Water
Analysis Batch: 471555

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	<3.60		10.0	3.60	ug/L			10/28/25 11:09	1
Allyl chloride	<0.700		2.00	0.700	ug/L			10/28/25 11:09	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/28/25 11:09	1
Acetone	<3.10		10.0	3.10	ug/L			10/28/25 11:09	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/28/25 11:09	1
Benzene	<0.220		0.500	0.220	ug/L			10/28/25 11:09	1
Chloroprene	<0.230		1.00	0.230	ug/L			10/28/25 11:09	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/28/25 11:09	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/28/25 11:09	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/28/25 11:09	1
Bromoform	<0.780		5.00	0.780	ug/L			10/28/25 11:09	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/28/25 11:09	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/28/25 11:09	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/28/25 11:09	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/28/25 11:09	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/28/25 11:09	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/28/25 11:09	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			10/28/25 11:09	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/28/25 11:09	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/28/25 11:09	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/28/25 11:09	1
Chloroform	<1.30		3.00	1.30	ug/L			10/28/25 11:09	1
Dichlorodifluoromethane	<0.250		3.00	0.250	ug/L			10/28/25 11:09	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/28/25 11:09	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-471555/5
Matrix: Water
Analysis Batch: 471555

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	<0.610		3.00	0.610	ug/L			10/28/25 11:09	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/28/25 11:09	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/28/25 11:09	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/28/25 11:09	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/28/25 11:09	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/28/25 11:09	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/28/25 11:09	1
1,3-Dichloropropane	<0.400		1.00	0.400	ug/L			10/28/25 11:09	1
2,2-Dichloropropane	<0.690		4.00	0.690	ug/L			10/28/25 11:09	1
1,1-Dichloropropene	<0.430		1.00	0.430	ug/L			10/28/25 11:09	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/28/25 11:09	1
Ethyl methacrylate	<0.680		2.00	0.680	ug/L			10/28/25 11:09	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/28/25 11:09	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/28/25 11:09	1
Methacrylonitrile	<3.30		10.0	3.30	ug/L			10/28/25 11:09	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/28/25 11:09	1
Methyl methacrylate	<0.760		2.00	0.760	ug/L			10/28/25 11:09	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/28/25 11:09	1
m,p-Xylene	<0.380		2.00	0.380	ug/L			10/28/25 11:09	1
Naphthalene	<3.00		5.00	3.00	ug/L			10/28/25 11:09	1
o-Xylene	<0.400		1.00	0.400	ug/L			10/28/25 11:09	1
Propionitrile	<3.40		10.0	3.40	ug/L			10/28/25 11:09	1
Styrene	<0.370		1.00	0.370	ug/L			10/28/25 11:09	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/28/25 11:09	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/28/25 11:09	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/28/25 11:09	1
Toluene	<0.430		1.00	0.430	ug/L			10/28/25 11:09	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/28/25 11:09	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/28/25 11:09	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/28/25 11:09	1
1,2,4-Trichlorobenzene	<0.750		5.00	0.750	ug/L			10/28/25 11:09	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/28/25 11:09	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/28/25 11:09	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/28/25 11:09	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/28/25 11:09	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/28/25 11:09	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/28/25 11:09	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/28/25 11:09	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/28/25 11:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*105*		*76 - 130*		*10/28/25 11:09*	*1*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*		*10/28/25 11:09*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/28/25 11:09*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-471555/6
Matrix: Water
Analysis Batch: 471555

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acrolein	94.8	92.41		ug/L		97	50 - 150
Allyl chloride	20.0	19.88		ug/L		99	61 - 136
2-Butanone (MEK)	40.0	36.11		ug/L		90	60 - 134
Acetone	40.0	36.47		ug/L		91	59 - 136
Acrylonitrile	200	193.0		ug/L		96	50 - 150
Benzene	20.0	17.67		ug/L		88	71 - 125
Chloroprene	20.0	17.71		ug/L		89	67 - 136
Bromochloromethane	20.0	19.68		ug/L		98	69 - 131
Bromodichloromethane	20.0	18.01		ug/L		90	70 - 122
1,2-Dibromo-3-Chloropropane	20.0	17.59		ug/L		88	62 - 132
Bromoform	20.0	17.66		ug/L		88	62 - 122
1,2-Dibromoethane (EDB)	20.0	17.50		ug/L		88	74 - 122
Carbon disulfide	20.0	19.49		ug/L		97	58 - 137
Carbon tetrachloride	20.0	19.28		ug/L		96	63 - 136
1,2-Dichlorobenzene	20.0	17.86		ug/L		89	74 - 120
Chlorobenzene	20.0	18.66		ug/L		93	74 - 120
1,3-Dichlorobenzene	20.0	17.98		ug/L		90	71 - 120
Chlorodibromomethane	20.0	15.80		ug/L		79	69 - 121
1,4-Dichlorobenzene	20.0	18.30		ug/L		91	72 - 120
Chloroform	20.0	20.41		ug/L		102	72 - 122
1,1-Dichloroethane	20.0	20.34		ug/L		102	69 - 127
1,2-Dichloroethane	20.0	18.17		ug/L		91	68 - 125
cis-1,2-Dichloroethene	20.0	20.18		ug/L		101	72 - 123
1,1-Dichloroethene	20.0	18.87		ug/L		94	64 - 134
cis-1,3-Dichloropropene	20.0	15.83		ug/L		79	72 - 123
1,2-Dichloropropane	20.0	17.01		ug/L		85	72 - 128
Dibromomethane	20.0	18.35		ug/L		92	72 - 122
1,3-Dichloropropane	20.0	16.07		ug/L		80	72 - 125
2,2-Dichloropropane	20.0	23.62		ug/L		118	51 - 146
1,1-Dichloropropene	20.0	17.91		ug/L		90	70 - 133
Ethylbenzene	20.0	18.92		ug/L		95	75 - 120
Ethyl methacrylate	20.0	17.51		ug/L		88	68 - 128
2-Hexanone	40.0	34.00		ug/L		85	62 - 139
Iodomethane	20.0	14.71		ug/L		74	18 - 150
Methacrylonitrile	200	163.5		ug/L		82	67 - 128
Methylene Chloride	20.0	20.54		ug/L		103	72 - 128
Methyl methacrylate	40.0	38.40		ug/L		96	69 - 129
4-Methyl-2-pentanone (MIBK)	40.0	34.17		ug/L		85	62 - 136
Naphthalene	20.0	18.26		ug/L		91	69 - 126
Propionitrile	200	194.0		ug/L		97	68 - 131
Styrene	20.0	18.37		ug/L		92	74 - 122
1,1,1,2-Tetrachloroethane	20.0	17.21		ug/L		86	70 - 121
1,1,2,2-Tetrachloroethane	20.0	18.45		ug/L		92	70 - 122
Tetrachloroethene	20.0	19.28		ug/L		96	70 - 128
Toluene	20.0	18.89		ug/L		94	74 - 120
trans-1,4-Dichloro-2-butene	20.0	17.07		ug/L		85	50 - 150
trans-1,2-Dichloroethene	20.0	20.88		ug/L		104	67 - 127
trans-1,3-Dichloropropene	20.0	16.47		ug/L		82	67 - 123

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-471555/6
Matrix: Water
Analysis Batch: 471555

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4-Trichlorobenzene	20.0	18.36		ug/L		92	69 - 125
1,1,1-Trichloroethane	20.0	20.85		ug/L		104	69 - 130
1,1,2-Trichloroethane	20.0	16.29		ug/L		81	75 - 121
Trichloroethene	20.0	17.55		ug/L		88	70 - 128
1,2,3-Trichloropropane	20.0	18.18		ug/L		91	70 - 122
Vinyl acetate	40.0	33.58		ug/L		84	50 - 150
Xylenes, Total	40.0	36.93		ug/L		92	74 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*105*		*76 - 130*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*
Toluene-d8 (Surr)	*102*		*80 - 120*

Lab Sample ID: LCS 310-471555/7
Matrix: Water
Analysis Batch: 471555

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	15.33		ug/L		77	33 - 138
Chloroethane	20.0	18.91		ug/L		95	59 - 139
Dichlorodifluoromethane	20.0	16.90		ug/L		85	45 - 150
Chloromethane	20.0	17.40		ug/L		87	52 - 146
Trichlorofluoromethane	20.0	18.08		ug/L		90	55 - 150
Vinyl chloride	20.0	19.40		ug/L		97	60 - 142

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*105*		*76 - 130*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: 310-318779-3 MS
Matrix: Water
Analysis Batch: 471555

Client Sample ID: MW-7A_25_10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acrolein	<3.60		119	95.07		ug/L		80	39 - 150
Allyl chloride	<0.700		25.0	20.06		ug/L		80	47 - 136
2-Butanone (MEK)	<2.10		50.0	37.66		ug/L		75	46 - 134
Acetone	<3.10		50.0	41.07		ug/L		82	39 - 141
Acrylonitrile	<2.20		250	212.0		ug/L		85	41 - 150
Benzene	<0.220		25.0	18.66		ug/L		75	48 - 125
Chloroprene	<0.230		25.0	18.59		ug/L		74	48 - 136
Bromochloromethane	<0.540		25.0	20.97		ug/L		84	55 - 131
Bromodichloromethane	<0.390		25.0	18.99		ug/L		76	53 - 122
1,2-Dibromo-3-Chloropropane	<1.20		25.0	19.34		ug/L		77	44 - 138
Bromoform	<0.780		25.0	17.32		ug/L		69	47 - 122
1,2-Dibromoethane (EDB)	<0.340		25.0	18.01		ug/L		72	60 - 122
Carbon disulfide	<0.450		25.0	22.24		ug/L		89	45 - 137

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 310-318779-3 MS
Client Sample ID: MW-7A_25_10
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 471555

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon tetrachloride	<0.650		25.0	20.36		ug/L		81	45 - 136
1,2-Dichlorobenzene	<0.370		25.0	19.68		ug/L		79	60 - 120
Chlorobenzene	<0.400		25.0	19.01		ug/L		76	59 - 120
1,3-Dichlorobenzene	<0.300		25.0	19.79		ug/L		79	58 - 120
Chlorodibromomethane	<0.750		25.0	16.24		ug/L		65	53 - 121
1,4-Dichlorobenzene	<0.230		25.0	19.29		ug/L		77	58 - 120
Chloroform	<1.30		25.0	21.09		ug/L		84	52 - 122
1,1-Dichloroethane	<0.220		25.0	21.20		ug/L		85	53 - 127
1,2-Dichloroethane	<0.390		25.0	19.10		ug/L		76	48 - 128
cis-1,2-Dichloroethene	<0.210		25.0	21.40		ug/L		86	51 - 123
1,1-Dichloroethene	<0.560		25.0	20.20		ug/L		81	51 - 134
cis-1,3-Dichloropropene	<0.250		25.0	16.08		ug/L		64	55 - 123
1,2-Dichloropropane	<0.270		25.0	18.30		ug/L		73	59 - 128
Dibromomethane	<0.330		25.0	19.41		ug/L		78	57 - 122
1,3-Dichloropropane	<0.400		25.0	17.34		ug/L		69	58 - 125
2,2-Dichloropropane	<0.690		25.0	21.71		ug/L		87	34 - 146
1,1-Dichloropropene	<0.430		25.0	18.97		ug/L		76	55 - 133
Ethylbenzene	<0.310		25.0	18.71		ug/L		75	53 - 120
Ethyl methacrylate	<0.680		25.0	18.08		ug/L		72	53 - 129
2-Hexanone	<2.00		50.0	38.00		ug/L		76	46 - 141
Iodomethane	<7.00		25.0	16.02		ug/L		64	18 - 150
Methacrylonitrile	<3.30		250	176.9		ug/L		71	53 - 128
Methylene Chloride	<1.70		25.0	22.04		ug/L		88	59 - 128
Methyl methacrylate	<0.760		50.0	39.84		ug/L		80	48 - 137
4-Methyl-2-pentanone (MIBK)	<2.10		50.0	39.35		ug/L		79	49 - 138
Naphthalene	<3.00		25.0	20.98		ug/L		84	45 - 144
Propionitrile	<3.40		250	213.5		ug/L		85	56 - 131
Styrene	<0.370		25.0	18.39		ug/L		74	50 - 125
1,1,1,2-Tetrachloroethane	<0.380		25.0	17.74		ug/L		71	55 - 121
1,1,2,2-Tetrachloroethane	<0.470		25.0	20.49		ug/L		82	55 - 123
Tetrachloroethene	<0.480		25.0	20.57		ug/L		82	51 - 128
Toluene	<0.430		25.0	19.16		ug/L		77	52 - 120
trans-1,4-Dichloro-2-butene	<1.10		25.0	18.58		ug/L		74	28 - 150
trans-1,2-Dichloroethene	<0.270		25.0	21.98		ug/L		88	53 - 127
trans-1,3-Dichloropropene	<0.560		25.0	17.34		ug/L		69	50 - 123
1,2,4-Trichlorobenzene	<0.750		25.0	22.16		ug/L		89	55 - 126
1,1,1-Trichloroethane	<0.190		25.0	20.99		ug/L		84	53 - 130
1,1,2-Trichloroethane	<0.450		25.0	17.07		ug/L		68	60 - 121
Trichloroethene	<0.430		25.0	18.70		ug/L		75	50 - 128
1,2,3-Trichloropropane	<0.590		25.0	19.67		ug/L		79	56 - 122
Vinyl acetate	<2.50		50.0	33.36		ug/L		67	31 - 150
Xylenes, Total	<0.400		50.0	36.05		ug/L		72	50 - 122

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*108*		*76 - 130*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Toluene-d8 (Surr)	*102*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 310-318779-3 MSD
Matrix: Water
Analysis Batch: 471555

Client Sample ID: MW-7A_25_10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acrolein	<3.60		119	94.13		ug/L		79	39 - 150	1	33
Allyl chloride	<0.700		25.0	18.71		ug/L		75	47 - 136	7	33
2-Butanone (MEK)	<2.10		50.0	40.38		ug/L		81	46 - 134	7	23
Acetone	<3.10		50.0	41.21		ug/L		82	39 - 141	0	23
Acrylonitrile	<2.20		250	210.0		ug/L		84	41 - 150	1	20
Benzene	<0.220		25.0	17.58		ug/L		70	48 - 125	6	20
Chloroprene	<0.230		25.0	17.92		ug/L		72	48 - 136	4	20
Bromochloromethane	<0.540		25.0	19.13		ug/L		77	55 - 131	9	21
Bromodichloromethane	<0.390		25.0	18.29		ug/L		73	53 - 122	4	20
1,2-Dibromo-3-Chloropropane	<1.20		25.0	20.35		ug/L		81	44 - 138	5	24
Bromoform	<0.780		25.0	17.97		ug/L		72	47 - 122	4	20
1,2-Dibromoethane (EDB)	<0.340		25.0	17.97		ug/L		72	60 - 122	0	20
Carbon disulfide	<0.450		25.0	18.86		ug/L		75	45 - 137	16	24
Carbon tetrachloride	<0.650		25.0	18.10		ug/L		72	45 - 136	12	20
1,2-Dichlorobenzene	<0.370		25.0	19.71		ug/L		79	60 - 120	0	20
Chlorobenzene	<0.400		25.0	19.06		ug/L		76	59 - 120	0	20
1,3-Dichlorobenzene	<0.300		25.0	19.50		ug/L		78	58 - 120	2	20
Chlorodibromomethane	<0.750		25.0	16.44		ug/L		66	53 - 121	1	20
1,4-Dichlorobenzene	<0.230		25.0	19.02		ug/L		76	58 - 120	1	20
Chloroform	<1.30		25.0	20.01		ug/L		80	52 - 122	5	20
1,1-Dichloroethane	<0.220		25.0	20.21		ug/L		81	53 - 127	5	20
1,2-Dichloroethane	<0.390		25.0	17.88		ug/L		72	48 - 128	7	20
cis-1,2-Dichloroethene	<0.210		25.0	19.35		ug/L		77	51 - 123	10	20
1,1-Dichloroethene	<0.560		25.0	18.61		ug/L		74	51 - 134	8	20
cis-1,3-Dichloropropene	<0.250		25.0	16.22		ug/L		65	55 - 123	1	20
1,2-Dichloropropane	<0.270		25.0	17.25		ug/L		69	59 - 128	6	20
Dibromomethane	<0.330		25.0	18.56		ug/L		74	57 - 122	4	20
1,3-Dichloropropane	<0.400		25.0	16.99		ug/L		68	58 - 125	2	20
2,2-Dichloropropane	<0.690		25.0	20.25		ug/L		81	34 - 146	7	20
1,1-Dichloropropene	<0.430		25.0	17.45		ug/L		70	55 - 133	8	20
Ethylbenzene	<0.310		25.0	18.32		ug/L		73	53 - 120	2	20
Ethyl methacrylate	<0.680		25.0	18.93		ug/L		76	53 - 129	5	20
2-Hexanone	<2.00		50.0	38.43		ug/L		77	46 - 141	1	20
Iodomethane	<7.00		25.0	17.62		ug/L		70	18 - 150	10	32
Methacrylonitrile	<3.30		250	171.3		ug/L		69	53 - 128	3	20
Methylene Chloride	<1.70		25.0	20.63		ug/L		83	59 - 128	7	20
Methyl methacrylate	<0.760		50.0	39.70		ug/L		79	48 - 137	0	20
4-Methyl-2-pentanone (MIBK)	<2.10		50.0	40.69		ug/L		81	49 - 138	3	20
Naphthalene	<3.00		25.0	21.78		ug/L		87	45 - 144	4	32
Propionitrile	<3.40		250	215.7		ug/L		86	56 - 131	1	20
Styrene	<0.370		25.0	18.12		ug/L		72	50 - 125	1	20
1,1,1,2-Tetrachloroethane	<0.380		25.0	17.05		ug/L		68	55 - 121	4	20
1,1,2,2-Tetrachloroethane	<0.470		25.0	20.04		ug/L		80	55 - 123	2	20
Tetrachloroethene	<0.480		25.0	19.58		ug/L		78	51 - 128	5	20
Toluene	<0.430		25.0	18.67		ug/L		75	52 - 120	3	20
trans-1,4-Dichloro-2-butene	<1.10		25.0	19.19		ug/L		77	28 - 150	3	24
trans-1,2-Dichloroethene	<0.270		25.0	19.80		ug/L		79	53 - 127	10	20
trans-1,3-Dichloropropene	<0.560		25.0	17.46		ug/L		70	50 - 123	1	20

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 310-318779-3 MSD
Matrix: Water
Analysis Batch: 471555

Client Sample ID: MW-7A_25_10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	<0.750		25.0	21.82		ug/L		87	55 - 126	2	20
1,1,1-Trichloroethane	<0.190		25.0	19.89		ug/L		80	53 - 130	5	20
1,1,2-Trichloroethane	<0.450		25.0	17.19		ug/L		69	60 - 121	1	20
Trichloroethene	<0.430		25.0	17.03		ug/L		68	50 - 128	9	20
1,2,3-Trichloropropane	<0.590		25.0	20.23		ug/L		81	56 - 122	3	21
Vinyl acetate	<2.50		50.0	34.42		ug/L		69	31 - 150	3	25
Xylenes, Total	<0.400		50.0	35.48		ug/L		71	50 - 122	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*102*		*76 - 130*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*

Lab Sample ID: MB 310-471692/6
Matrix: Water
Analysis Batch: 471692

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			10/29/25 10:34	1
Acetone	<3.10		10.0	3.10	ug/L			10/29/25 10:34	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			10/29/25 10:34	1
Benzene	<0.220		0.500	0.220	ug/L			10/29/25 10:34	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			10/29/25 10:34	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			10/29/25 10:34	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			10/29/25 10:34	1
Bromoform	<0.780		5.00	0.780	ug/L			10/29/25 10:34	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			10/29/25 10:34	1
Bromomethane	<1.10		4.00	1.10	ug/L			10/29/25 10:34	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			10/29/25 10:34	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			10/29/25 10:34	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			10/29/25 10:34	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			10/29/25 10:34	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			10/29/25 10:34	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			10/29/25 10:34	1
Chloroethane	<0.790		4.00	0.790	ug/L			10/29/25 10:34	1
Chloroform	<1.30		3.00	1.30	ug/L			10/29/25 10:34	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			10/29/25 10:34	1
Chloromethane	<0.610		3.00	0.610	ug/L			10/29/25 10:34	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			10/29/25 10:34	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			10/29/25 10:34	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			10/29/25 10:34	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			10/29/25 10:34	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			10/29/25 10:34	1
Dibromomethane	<0.330		1.00	0.330	ug/L			10/29/25 10:34	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			10/29/25 10:34	1
2-Hexanone	<2.00		10.0	2.00	ug/L			10/29/25 10:34	1
Iodomethane	<7.00		10.0	7.00	ug/L			10/29/25 10:34	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			10/29/25 10:34	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-471692/6
Matrix: Water
Analysis Batch: 471692

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			10/29/25 10:34	1
Styrene	<0.370		1.00	0.370	ug/L			10/29/25 10:34	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			10/29/25 10:34	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			10/29/25 10:34	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			10/29/25 10:34	1
Toluene	<0.430		1.00	0.430	ug/L			10/29/25 10:34	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			10/29/25 10:34	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			10/29/25 10:34	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			10/29/25 10:34	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			10/29/25 10:34	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			10/29/25 10:34	1
Trichloroethene	<0.430		1.00	0.430	ug/L			10/29/25 10:34	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			10/29/25 10:34	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			10/29/25 10:34	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			10/29/25 10:34	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			10/29/25 10:34	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			10/29/25 10:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*108*		*76 - 130*		*10/29/25 10:34*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*10/29/25 10:34*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/29/25 10:34*	*1*

Lab Sample ID: LCS 310-471692/7
Matrix: Water
Analysis Batch: 471692

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Butanone (MEK)	40.0	36.74		ug/L		92	60 - 134
Acetone	40.0	37.55		ug/L		94	59 - 136
Acrylonitrile	200	200.3		ug/L		100	50 - 150
Benzene	20.0	17.49		ug/L		87	71 - 125
Bromochloromethane	20.0	19.12		ug/L		96	69 - 131
Bromodichloromethane	20.0	17.17		ug/L		86	70 - 122
1,2-Dibromo-3-Chloropropane	20.0	17.03		ug/L		85	62 - 132
Bromoform	20.0	16.56		ug/L		83	62 - 122
1,2-Dibromoethane (EDB)	20.0	17.06		ug/L		85	74 - 122
Carbon disulfide	20.0	18.50		ug/L		92	58 - 137
Carbon tetrachloride	20.0	17.48		ug/L		87	63 - 136
1,2-Dichlorobenzene	20.0	17.72		ug/L		89	74 - 120
Chlorobenzene	20.0	18.31		ug/L		92	74 - 120
Chlorodibromomethane	20.0	15.40		ug/L		77	69 - 121
1,4-Dichlorobenzene	20.0	18.02		ug/L		90	72 - 120
Chloroform	20.0	19.09		ug/L		95	72 - 122
1,1-Dichloroethane	20.0	19.68		ug/L		98	69 - 127
1,2-Dichloroethane	20.0	17.20		ug/L		86	68 - 125
cis-1,2-Dichloroethene	20.0	19.06		ug/L		95	72 - 123
1,1-Dichloroethene	20.0	18.07		ug/L		90	64 - 134

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-471692/7
Matrix: Water
Analysis Batch: 471692

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
cis-1,3-Dichloropropene	20.0	15.50		ug/L		78	72 - 123
1,2-Dichloropropane	20.0	16.67		ug/L		83	72 - 128
Dibromomethane	20.0	17.41		ug/L		87	72 - 122
Ethylbenzene	20.0	18.06		ug/L		90	75 - 120
2-Hexanone	40.0	34.53		ug/L		86	62 - 139
Iodomethane	20.0	15.16		ug/L		76	18 - 150
Methylene Chloride	20.0	19.86		ug/L		99	72 - 128
4-Methyl-2-pentanone (MIBK)	40.0	37.23		ug/L		93	62 - 136
Styrene	20.0	17.40		ug/L		87	74 - 122
1,1,1,2-Tetrachloroethane	20.0	16.89		ug/L		84	70 - 121
1,1,2,2-Tetrachloroethane	20.0	18.74		ug/L		94	70 - 122
Tetrachloroethene	20.0	18.57		ug/L		93	70 - 128
Toluene	20.0	18.01		ug/L		90	74 - 120
trans-1,4-Dichloro-2-butene	20.0	17.62		ug/L		88	50 - 150
trans-1,2-Dichloroethene	20.0	19.76		ug/L		99	67 - 127
trans-1,3-Dichloropropene	20.0	16.33		ug/L		82	67 - 123
1,1,1-Trichloroethane	20.0	19.22		ug/L		96	69 - 130
1,1,2-Trichloroethane	20.0	16.79		ug/L		84	75 - 121
Trichloroethene	20.0	16.79		ug/L		84	70 - 128
1,2,3-Trichloropropane	20.0	17.89		ug/L		89	70 - 122
Vinyl acetate	40.0	33.72		ug/L		84	50 - 150
Xylenes, Total	40.0	34.82		ug/L		87	74 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*104*		*76 - 130*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*102*		*80 - 120*

Lab Sample ID: LCS 310-471692/8
Matrix: Water
Analysis Batch: 471692

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	14.92		ug/L		75	33 - 138
Chloroethane	20.0	17.43		ug/L		87	59 - 139
Chloromethane	20.0	17.77		ug/L		89	52 - 146
Trichlorofluoromethane	20.0	17.04		ug/L		85	55 - 150
Vinyl chloride	20.0	18.36		ug/L		92	60 - 142

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*109*		*76 - 130*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*
Toluene-d8 (Surr)	*97*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-472433/7
Matrix: Water
Analysis Batch: 472433

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			11/04/25 17:15	1
Acetone	<3.10		10.0	3.10	ug/L			11/04/25 17:15	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			11/04/25 17:15	1
Benzene	<0.220		0.500	0.220	ug/L			11/04/25 17:15	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			11/04/25 17:15	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			11/04/25 17:15	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			11/04/25 17:15	1
Bromoform	<0.780		5.00	0.780	ug/L			11/04/25 17:15	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			11/04/25 17:15	1
Bromomethane	<1.10		4.00	1.10	ug/L			11/04/25 17:15	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			11/04/25 17:15	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			11/04/25 17:15	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			11/04/25 17:15	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			11/04/25 17:15	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			11/04/25 17:15	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			11/04/25 17:15	1
Chloroethane	<0.790		4.00	0.790	ug/L			11/04/25 17:15	1
Chloroform	<1.30		3.00	1.30	ug/L			11/04/25 17:15	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			11/04/25 17:15	1
Chloromethane	<0.610		3.00	0.610	ug/L			11/04/25 17:15	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			11/04/25 17:15	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			11/04/25 17:15	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			11/04/25 17:15	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			11/04/25 17:15	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			11/04/25 17:15	1
Dibromomethane	<0.330		1.00	0.330	ug/L			11/04/25 17:15	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			11/04/25 17:15	1
2-Hexanone	<2.00		10.0	2.00	ug/L			11/04/25 17:15	1
Iodomethane	<7.00		10.0	7.00	ug/L			11/04/25 17:15	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			11/04/25 17:15	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			11/04/25 17:15	1
Styrene	<0.370		1.00	0.370	ug/L			11/04/25 17:15	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			11/04/25 17:15	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			11/04/25 17:15	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			11/04/25 17:15	1
Toluene	<0.430		1.00	0.430	ug/L			11/04/25 17:15	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			11/04/25 17:15	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			11/04/25 17:15	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			11/04/25 17:15	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			11/04/25 17:15	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			11/04/25 17:15	1
Trichloroethene	<0.430		1.00	0.430	ug/L			11/04/25 17:15	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			11/04/25 17:15	1
1,2,3-Trichloropropane	<0.590		1.00	0.590	ug/L			11/04/25 17:15	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			11/04/25 17:15	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			11/04/25 17:15	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			11/04/25 17:15	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-472433/7
Matrix: Water
Analysis Batch: 472433

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*108*		*76 - 130*		*11/04/25 17:15*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*11/04/25 17:15*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*11/04/25 17:15*	*1*

Lab Sample ID: LCS 310-472433/8
Matrix: Water
Analysis Batch: 472433

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Butanone (MEK)	40.0	42.90		ug/L		107	60 - 134
Acetone	40.0	38.46		ug/L		96	59 - 136
Acrylonitrile	200	205.0		ug/L		102	50 - 150
Benzene	20.0	20.77		ug/L		104	71 - 125
Bromochloromethane	20.0	20.90		ug/L		105	69 - 131
Bromodichloromethane	20.0	20.88		ug/L		104	70 - 122
1,2-Dibromo-3-Chloropropane	20.0	19.60		ug/L		98	62 - 132
Bromoform	20.0	20.77		ug/L		104	62 - 122
1,2-Dibromoethane (EDB)	20.0	18.82		ug/L		94	74 - 122
Carbon disulfide	20.0	20.81		ug/L		104	58 - 137
Carbon tetrachloride	20.0	20.53		ug/L		103	63 - 136
1,2-Dichlorobenzene	20.0	18.83		ug/L		94	74 - 120
Chlorobenzene	20.0	19.86		ug/L		99	74 - 120
Chlorodibromomethane	20.0	20.07		ug/L		100	69 - 121
1,4-Dichlorobenzene	20.0	19.36		ug/L		97	72 - 120
Chloroform	20.0	21.05		ug/L		105	72 - 122
1,1-Dichloroethane	20.0	20.91		ug/L		105	69 - 127
1,2-Dichloroethane	20.0	20.91		ug/L		105	68 - 125
cis-1,2-Dichloroethene	20.0	19.31		ug/L		97	72 - 123
1,1-Dichloroethene	20.0	21.19		ug/L		106	64 - 134
cis-1,3-Dichloropropene	20.0	19.65		ug/L		98	72 - 123
1,2-Dichloropropane	20.0	21.16		ug/L		106	72 - 128
Dibromomethane	20.0	20.14		ug/L		101	72 - 122
Ethylbenzene	20.0	20.76		ug/L		104	75 - 120
2-Hexanone	40.0	39.89		ug/L		100	62 - 139
Iodomethane	20.0	20.29		ug/L		101	18 - 150
Methylene Chloride	20.0	21.22		ug/L		106	72 - 128
4-Methyl-2-pentanone (MIBK)	40.0	41.36		ug/L		103	62 - 136
Styrene	20.0	21.56		ug/L		108	74 - 122
1,1,1,2-Tetrachloroethane	20.0	19.49		ug/L		97	70 - 121
1,1,2,2-Tetrachloroethane	20.0	20.63		ug/L		103	70 - 122
Tetrachloroethene	20.0	19.29		ug/L		96	70 - 128
Toluene	20.0	19.98		ug/L		100	74 - 120
trans-1,4-Dichloro-2-butene	20.0	21.35		ug/L		107	50 - 150
trans-1,2-Dichloroethene	20.0	20.26		ug/L		101	67 - 127
trans-1,3-Dichloropropene	20.0	19.41		ug/L		97	67 - 123
1,1,1-Trichloroethane	20.0	20.49		ug/L		102	69 - 130
1,1,2-Trichloroethane	20.0	20.45		ug/L		102	75 - 121
Trichloroethene	20.0	20.29		ug/L		101	70 - 128

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-472433/8
Matrix: Water
Analysis Batch: 472433

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	20.0	20.87		ug/L		104	70 - 122
Vinyl acetate	40.0	52.78		ug/L		132	50 - 150
Xylenes, Total	40.0	42.96		ug/L		107	74 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*95*		*76 - 130*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: LCS 310-472433/9
Matrix: Water
Analysis Batch: 472433

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	15.82		ug/L		79	33 - 138
Chloroethane	20.0	14.71		ug/L		74	59 - 139
Chloromethane	20.0	15.39		ug/L		77	52 - 146
Trichlorofluoromethane	20.0	15.83		ug/L		79	55 - 150
Vinyl chloride	20.0	15.66		ug/L		78	60 - 142

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*112*		*76 - 130*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 310-471206/1-A
Matrix: Water
Analysis Batch: 472246

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 471206

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.640		10.0	0.640	ug/L		10/24/25 09:22	11/03/25 13:48	1
Acenaphthylene	<0.720		10.0	0.720	ug/L		10/24/25 09:22	11/03/25 13:48	1
Acetophenone	<0.690		10.0	0.690	ug/L		10/24/25 09:22	11/03/25 13:48	1
2-Acetylaminofluorene	<2.70		10.0	2.70	ug/L		10/24/25 09:22	11/03/25 13:48	1
4-Aminobiphenyl	<2.20		10.0	2.20	ug/L		10/24/25 09:22	11/03/25 13:48	1
Anthracene	<0.870		10.0	0.870	ug/L		10/24/25 09:22	11/03/25 13:48	1
Benzo[a]anthracene	<0.850		10.0	0.850	ug/L		10/24/25 09:22	11/03/25 13:48	1
Benzo[a]pyrene	<8.10		10.0	8.10	ug/L		10/24/25 09:22	11/03/25 13:48	1
Benzo[b]fluoranthene	<4.90		10.0	4.90	ug/L		10/24/25 09:22	11/03/25 13:48	1
Benzo[g,h,i]perylene	<6.30		10.0	6.30	ug/L		10/24/25 09:22	11/03/25 13:48	1
Benzo[k]fluoranthene	<2.20		10.0	2.20	ug/L		10/24/25 09:22	11/03/25 13:48	1
Benzyl alcohol	<1.30		10.0	1.30	ug/L		10/24/25 09:22	11/03/25 13:48	1
Bis(2-chloroethoxy)methane	<0.760		10.0	0.760	ug/L		10/24/25 09:22	11/03/25 13:48	1
Bis(2-chloroethyl)ether	<0.820		10.0	0.820	ug/L		10/24/25 09:22	11/03/25 13:48	1
bis (2-chloroisopropyl) ether	<0.540		10.0	0.540	ug/L		10/24/25 09:22	11/03/25 13:48	1
Bis(2-ethylhexyl) phthalate	<5.50		10.0	5.50	ug/L		10/24/25 09:22	11/03/25 13:48	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 310-471206/1-A
Matrix: Water
Analysis Batch: 472246

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 471206

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Bromophenyl phenyl ether	<0.700		10.0	0.700	ug/L		10/24/25 09:22	11/03/25 13:48	1
Butyl benzyl phthalate	<5.40		10.0	5.40	ug/L		10/24/25 09:22	11/03/25 13:48	1
4-Chloroaniline	<0.620		10.0	0.620	ug/L		10/24/25 09:22	11/03/25 13:48	1
Chlorobenzilate	<3.60		10.0	3.60	ug/L		10/24/25 09:22	11/03/25 13:48	1
4-Chloro-3-methylphenol	<0.840		10.0	0.840	ug/L		10/24/25 09:22	11/03/25 13:48	1
2-Chloronaphthalene	<0.640		10.0	0.640	ug/L		10/24/25 09:22	11/03/25 13:48	1
2-Chlorophenol	<0.540		10.0	0.540	ug/L		10/24/25 09:22	11/03/25 13:48	1
4-Chlorophenyl phenyl ether	<0.690		10.0	0.690	ug/L		10/24/25 09:22	11/03/25 13:48	1
Chrysene	<0.870		10.0	0.870	ug/L		10/24/25 09:22	11/03/25 13:48	1
Diallate	<4.00		10.0	4.00	ug/L		10/24/25 09:22	11/03/25 13:48	1
Dibenzo(a,h)anthracene	<3.90		10.0	3.90	ug/L		10/24/25 09:22	11/03/25 13:48	1
Dibenzofuran	<0.740		10.0	0.740	ug/L		10/24/25 09:22	11/03/25 13:48	1
3,3'-Dichlorobenzidine	<1.40		10.0	1.40	ug/L		10/24/25 09:22	11/03/25 13:48	1
2,4-Dichlorophenol	<0.850		10.0	0.850	ug/L		10/24/25 09:22	11/03/25 13:48	1
2,6-Dichlorophenol	<0.690		10.0	0.690	ug/L		10/24/25 09:22	11/03/25 13:48	1
Diethyl phthalate	<1.70		10.0	1.70	ug/L		10/24/25 09:22	11/03/25 13:48	1
Dimethoate	<3.60		10.0	3.60	ug/L		10/24/25 09:22	11/03/25 13:48	1
7,12-Dimethylbenz(a)anthracene	<1.90		10.0	1.90	ug/L		10/24/25 09:22	11/03/25 13:48	1
3,3'-Dimethylbenzidine	<1.50		10.0	1.50	ug/L		10/24/25 09:22	11/03/25 13:48	1
2,4-Dimethylphenol	<0.580		10.0	0.580	ug/L		10/24/25 09:22	11/03/25 13:48	1
Dimethyl phthalate	<1.00		10.0	1.00	ug/L		10/24/25 09:22	11/03/25 13:48	1
Di-n-butyl phthalate	<5.60		10.0	5.60	ug/L		10/24/25 09:22	11/03/25 13:48	1
1,3-Dinitrobenzene	<3.20		10.0	3.20	ug/L		10/24/25 09:22	11/03/25 13:48	1
4,6-Dinitro-2-methylphenol	<6.90		10.0	6.90	ug/L		10/24/25 09:22	11/03/25 13:48	1
2,4-Dinitrophenol	<13.0		20.0	13.0	ug/L		10/24/25 09:22	11/03/25 13:48	1
2,4-Dinitrotoluene	<6.40		10.0	6.40	ug/L		10/24/25 09:22	11/03/25 13:48	1
2,6-Dinitrotoluene	<0.520		10.0	0.520	ug/L		10/24/25 09:22	11/03/25 13:48	1
Di-n-octyl phthalate	<7.00		20.0	7.00	ug/L		10/24/25 09:22	11/03/25 13:48	1
Dinoseb	<2.40		10.0	2.40	ug/L		10/24/25 09:22	11/03/25 13:48	1
Diphenylamine	<6.00		10.0	6.00	ug/L		10/24/25 09:22	11/03/25 13:48	1
Disulfoton	<2.40		10.0	2.40	ug/L		10/24/25 09:22	11/03/25 13:48	1
Ethyl methanesulfonate	<3.60		10.0	3.60	ug/L		10/24/25 09:22	11/03/25 13:48	1
Ethyl Parathion	<2.20		10.0	2.20	ug/L		10/24/25 09:22	11/03/25 13:48	1
Famphur	<3.80		10.0	3.80	ug/L		10/24/25 09:22	11/03/25 13:48	1
Fluoranthene	<1.70		10.0	1.70	ug/L		10/24/25 09:22	11/03/25 13:48	1
Fluorene	<0.790		10.0	0.790	ug/L		10/24/25 09:22	11/03/25 13:48	1
Hexachlorobenzene	<0.700		10.0	0.700	ug/L		10/24/25 09:22	11/03/25 13:48	1
Hexachlorobutadiene	<0.860		10.0	0.860	ug/L		10/24/25 09:22	11/03/25 13:48	1
Hexachlorocyclopentadiene	<5.10		10.0	5.10	ug/L		10/24/25 09:22	11/03/25 13:48	1
Hexachloroethane	<0.970		10.0	0.970	ug/L		10/24/25 09:22	11/03/25 13:48	1
Hexachloropropene	<2.60		10.0	2.60	ug/L		10/24/25 09:22	11/03/25 13:48	1
Indeno[1,2,3-cd]pyrene	<4.20		10.0	4.20	ug/L		10/24/25 09:22	11/03/25 13:48	1
Isodrin	<4.70		10.0	4.70	ug/L		10/24/25 09:22	11/03/25 13:48	1
Isophorone	<0.930		10.0	0.930	ug/L		10/24/25 09:22	11/03/25 13:48	1
Isosafrole	<2.30		10.0	2.30	ug/L		10/24/25 09:22	11/03/25 13:48	1
Kepone	<1.00		10.0	1.00	ug/L		10/24/25 09:22	11/03/25 13:48	1
Methapyrilene	<0.760		10.0	0.760	ug/L		10/24/25 09:22	11/03/25 13:48	1
3-Methylcholanthrene	<0.320		10.0	0.320	ug/L		10/24/25 09:22	11/03/25 13:48	1
Methyl methanesulfonate	<3.30		10.0	3.30	ug/L		10/24/25 09:22	11/03/25 13:48	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 310-471206/1-A
Matrix: Water
Analysis Batch: 472246

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 471206

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<0.590		10.0	0.590	ug/L		10/24/25 09:22	11/03/25 13:48	1
Methyl parathion	<2.30		10.0	2.30	ug/L		10/24/25 09:22	11/03/25 13:48	1
2-Methylphenol	<0.650		10.0	0.650	ug/L		10/24/25 09:22	11/03/25 13:48	1
Methylphenol, 3 & 4	<0.700		10.0	0.700	ug/L		10/24/25 09:22	11/03/25 13:48	1
1,4-Naphthoquinone	<3.60		10.0	3.60	ug/L		10/24/25 09:22	11/03/25 13:48	1
1-Naphthylamine	<2.50		10.0	2.50	ug/L		10/24/25 09:22	11/03/25 13:48	1
2-Naphthylamine	<2.10		10.0	2.10	ug/L		10/24/25 09:22	11/03/25 13:48	1
2-Nitroaniline	<5.90		10.0	5.90	ug/L		10/24/25 09:22	11/03/25 13:48	1
3-Nitroaniline	<2.70		10.0	2.70	ug/L		10/24/25 09:22	11/03/25 13:48	1
4-Nitroaniline	<1.30		10.0	1.30	ug/L		10/24/25 09:22	11/03/25 13:48	1
Nitrobenzene	<0.800		10.0	0.800	ug/L		10/24/25 09:22	11/03/25 13:48	1
5-Nitro-o-toluidine	<2.80		10.0	2.80	ug/L		10/24/25 09:22	11/03/25 13:48	1
2-Nitrophenol	<6.80		10.0	6.80	ug/L		10/24/25 09:22	11/03/25 13:48	1
4-Nitrophenol	<7.60		10.0	7.60	ug/L		10/24/25 09:22	11/03/25 13:48	1
N-Nitrosodiethylamine	<3.40		10.0	3.40	ug/L		10/24/25 09:22	11/03/25 13:48	1
N-Nitrosodimethylamine	<0.720		10.0	0.720	ug/L		10/24/25 09:22	11/03/25 13:48	1
N-Nitrosodi-n-butylamine	<3.90		10.0	3.90	ug/L		10/24/25 09:22	11/03/25 13:48	1
N-Nitrosodi-n-propylamine	<0.920		10.0	0.920	ug/L		10/24/25 09:22	11/03/25 13:48	1
N-Nitrosodiphenylamine	<0.750		10.0	0.750	ug/L		10/24/25 09:22	11/03/25 13:48	1
N-Nitrosomethylethylamine	<4.90		10.0	4.90	ug/L		10/24/25 09:22	11/03/25 13:48	1
N-Nitrosopiperidine	<2.70		10.0	2.70	ug/L		10/24/25 09:22	11/03/25 13:48	1
N-Nitrosopyrrolidine	<3.60		10.0	3.60	ug/L		10/24/25 09:22	11/03/25 13:48	1
o,o',o''-Triethylphosphorothioate	<3.20		10.0	3.20	ug/L		10/24/25 09:22	11/03/25 13:48	1
o-Toluidine	<2.90		10.0	2.90	ug/L		10/24/25 09:22	11/03/25 13:48	1
p-Dimethylamino azobenzene	<2.20		10.0	2.20	ug/L		10/24/25 09:22	11/03/25 13:48	1
Pentachlorobenzene	<2.80		10.0	2.80	ug/L		10/24/25 09:22	11/03/25 13:48	1
Pentachloronitrobenzene	<5.80		10.0	5.80	ug/L		10/24/25 09:22	11/03/25 13:48	1
Pentachlorophenol	<9.60		10.0	9.60	ug/L		10/24/25 09:22	11/03/25 13:48	1
Phenacetin	<1.90		10.0	1.90	ug/L		10/24/25 09:22	11/03/25 13:48	1
Phenanthrene	<0.790		10.0	0.790	ug/L		10/24/25 09:22	11/03/25 13:48	1
Phenol	<1.10		10.0	1.10	ug/L		10/24/25 09:22	11/03/25 13:48	1
1,4-phenylenediamine	<1.90		10.0	1.90	ug/L		10/24/25 09:22	11/03/25 13:48	1
Phorate	<3.20		10.0	3.20	ug/L		10/24/25 09:22	11/03/25 13:48	1
Pronamide	<2.70		10.0	2.70	ug/L		10/24/25 09:22	11/03/25 13:48	1
Pyrene	<0.790		10.0	0.790	ug/L		10/24/25 09:22	11/03/25 13:48	1
Safrole	<2.80		10.0	2.80	ug/L		10/24/25 09:22	11/03/25 13:48	1
1,2,4,5-Tetrachlorobenzene	<0.540		10.0	0.540	ug/L		10/24/25 09:22	11/03/25 13:48	1
2,3,4,6-Tetrachlorophenol	<5.30		10.0	5.30	ug/L		10/24/25 09:22	11/03/25 13:48	1
Thionazin	<3.50		10.0	3.50	ug/L		10/24/25 09:22	11/03/25 13:48	1
2,4,5-Trichlorophenol	<5.30		10.0	5.30	ug/L		10/24/25 09:22	11/03/25 13:48	1
2,4,6-Trichlorophenol	<5.00		10.0	5.00	ug/L		10/24/25 09:22	11/03/25 13:48	1
1,3,5-Trinitrobenzene	<2.30		10.0	2.30	ug/L		10/24/25 09:22	11/03/25 13:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*96*		*33 - 126*	*10/24/25 09:22*	*11/03/25 13:48*	*1*
2-Fluorophenol (Surr)	*87*		*21 - 110*	*10/24/25 09:22*	*11/03/25 13:48*	*1*
Nitrobenzene-d5 (Surr)	*113*		*39 - 140*	*10/24/25 09:22*	*11/03/25 13:48*	*1*
Phenol-d5 (Surr)	*72*		*21 - 110*	*10/24/25 09:22*	*11/03/25 13:48*	*1*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 310-471206/1-A
Matrix: Water
Analysis Batch: 472246

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 471206

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14 (Surr)	*128*		*13 - 150*	*10/24/25 09:22*	*11/03/25 13:48*	*1*
2,4,6-Tribromophenol (Surr)	*106*		*20 - 144*	*10/24/25 09:22*	*11/03/25 13:48*	*1*

Lab Sample ID: LCS 310-471206/2-A
Matrix: Water
Analysis Batch: 472246

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 471206

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	100	88.91		ug/L		89	38 - 118
Acenaphthylene	100	89.97		ug/L		90	39 - 115
Acetophenone	100	97.21		ug/L		97	47 - 118
2-Acetylaminofluorene	51.2	30.10		ug/L		59	37 - 149
4-Aminobiphenyl	51.2	41.38		ug/L		81	23 - 123
Anthracene	100	101.2		ug/L		101	49 - 127
Benzo[a]anthracene	100	95.97		ug/L		96	49 - 126
Benzo[a]pyrene	100	95.64		ug/L		96	44 - 133
Benzo[b]fluoranthene	100	92.53		ug/L		93	44 - 136
Benzo[g,h,i]perylene	100	82.81		ug/L		83	42 - 135
Benzo[k]fluoranthene	100	112.7		ug/L		113	49 - 134
Benzyl alcohol	100	90.48		ug/L		90	46 - 123
Bis(2-chloroethoxy)methane	100	104.5		ug/L		105	44 - 126
Bis(2-chloroethyl)ether	100	87.12		ug/L		87	41 - 116
bis (2-chloroisopropyl) ether	100	87.75		ug/L		88	36 - 115
Bis(2-ethylhexyl) phthalate	100	89.63		ug/L		90	46 - 138
4-Bromophenyl phenyl ether	100	103.3		ug/L		103	41 - 131
Butyl benzyl phthalate	100	103.9		ug/L		104	47 - 133
4-Chloroaniline	100	97.46		ug/L		97	13 - 143
Chlorobenzilate	51.2	51.85		ug/L		101	39 - 145
4-Chloro-3-methylphenol	100	110.2		ug/L		110	51 - 132
2-Chloronaphthalene	100	81.77		ug/L		82	33 - 112
2-Chlorophenol	100	91.25		ug/L		91	43 - 119
4-Chlorophenyl phenyl ether	100	91.79		ug/L		92	44 - 118
Chrysene	100	103.6		ug/L		104	50 - 128
Diallate	44.8	48.05		ug/L		107	40 - 135
Dibenzo(a,h)anthracene	100	69.62		ug/L		70	36 - 146
Dibenzofuran	100	94.32		ug/L		94	44 - 114
2,4-Dichlorophenol	100	99.13		ug/L		99	44 - 131
2,6-Dichlorophenol	100	102.3		ug/L		102	41 - 131
Diethyl phthalate	100	101.5		ug/L		101	43 - 135
Dimethoate	44.8	49.18		ug/L		110	31 - 150
7,12-Dimethylbenz(a)anthracene	51.2	44.97		ug/L		88	47 - 129
3,3'-Dimethylbenzidine	51.2	29.25		ug/L		57	10 - 147
2,4-Dimethylphenol	100	107.8		ug/L		108	30 - 128
Dimethyl phthalate	100	103.1		ug/L		103	46 - 129
Di-n-butyl phthalate	100	99.40		ug/L		99	49 - 138
1,3-Dinitrobenzene	100	94.89		ug/L		95	36 - 147
4,6-Dinitro-2-methylphenol	200	151.2		ug/L		76	22 - 150
2,4-Dinitrophenol	200	126.1		ug/L		63	10 - 150

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 310-471206/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 472246
Prep Batch: 471206

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-Dinitrotoluene	100	101.9		ug/L		102	48 - 136
2,6-Dinitrotoluene	100	95.14		ug/L		95	49 - 135
Di-n-octyl phthalate	100	45.47		ug/L		45	33 - 148
Dinoseb	51.2	34.12		ug/L		67	22 - 150
Diphenylamine	85.0	86.59		ug/L		102	43 - 132
Disulfoton	44.8	41.05		ug/L		92	27 - 138
Ethyl methanesulfonate	51.2	39.01		ug/L		76	44 - 110
Ethyl Parathion	44.8	37.02		ug/L		83	52 - 141
Famphur	44.8	49.09	E	ug/L		110	67 - 150
Fluoranthene	100	99.05		ug/L		99	49 - 132
Fluorene	100	95.20		ug/L		95	46 - 118
Hexachlorobenzene	100	104.4		ug/L		104	42 - 134
Hexachlorobutadiene	100	73.70		ug/L		74	29 - 110
Hexachlorocyclopentadiene	100	54.21		ug/L		54	10 - 110
Hexachloroethane	100	64.31		ug/L		64	25 - 110
Hexachloropropene	51.2	14.00		ug/L		27	10 - 110
Indeno[1,2,3-cd]pyrene	100	67.14		ug/L		67	36 - 149
Isodrin	51.2	46.67		ug/L		91	50 - 122
Isophorone	100	100.2		ug/L		100	46 - 126
Isosafrole	51.2	39.36		ug/L		77	10 - 129
Kepone	44.8	40.88		ug/L		91	10 - 150
Methapyrilene	44.8	6.179	J	ug/L		14	10 - 110
3-Methylcholanthrene	51.2	29.94		ug/L		58	13 - 140
Methyl methanesulfonate	51.2	33.43		ug/L		65	16 - 110
2-Methylnaphthalene	100	82.14		ug/L		82	35 - 110
Methyl parathion	44.8	51.33		ug/L		115	49 - 150
2-Methylphenol	100	88.53		ug/L		89	47 - 114
Methylphenol, 3 & 4	100	91.93		ug/L		92	45 - 114
1,4-Naphthoquinone	51.2	50.83		ug/L		99	38 - 137
1-Naphthylamine	51.2	22.13		ug/L		43	10 - 110
2-Naphthylamine	51.2	39.13		ug/L		76	18 - 111
2-Nitroaniline	100	103.1		ug/L		103	48 - 135
3-Nitroaniline	100	92.83		ug/L		93	38 - 142
4-Nitroaniline	100	102.1		ug/L		102	33 - 141
Nitrobenzene	100	99.09		ug/L		99	42 - 123
5-Nitro-o-toluidine	51.2	45.62		ug/L		89	43 - 139
2-Nitrophenol	100	92.36		ug/L		92	36 - 144
4-Nitrophenol	200	129.7		ug/L		65	22 - 110
N-Nitrosodiethylamine	51.2	39.66		ug/L		77	51 - 116
N-Nitrosodimethylamine	100	87.87		ug/L		88	37 - 110
N-Nitrosodi-n-butylamine	51.2	43.59		ug/L		85	49 - 135
N-Nitrosodi-n-propylamine	100	95.19		ug/L		95	44 - 124
N-Nitrosodiphenylamine	100	99.56		ug/L		100	43 - 132
N-Nitrosomethylethylamine	51.2	44.33		ug/L		87	43 - 114
N-Nitrosopiperidine	51.2	49.40		ug/L		96	50 - 120
N-Nitrosopyrrolidine	51.2	44.11		ug/L		86	47 - 129
o,o',o''-Triethylphosphorothioate	44.8	39.55		ug/L		88	34 - 125
o-Toluidine	51.2	40.22		ug/L		79	19 - 128
p-Dimethylamino azobenzene	51.2	46.72		ug/L		91	45 - 133

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 310-471206/2-A
Matrix: Water
Analysis Batch: 472246

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 471206

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Pentachlorobenzene	51.2	39.46		ug/L		77	27 - 112
Pentachloronitrobenzene	51.2	45.09		ug/L		88	45 - 132
Pentachlorophenol	200	190.6		ug/L		95	28 - 142
Phenacetin	51.2	47.27		ug/L		92	51 - 139
Phenanthrene	100	101.1		ug/L		101	48 - 126
Phenol	100	62.33		ug/L		62	29 - 110
1,4-phenylenediamine	51.2	2.073	J *-	ug/L		4	20 - 120
Phorate	44.8	42.49		ug/L		95	21 - 147
Pronamide	51.2	49.32		ug/L		96	52 - 135
Pyrene	100	115.6		ug/L		116	45 - 134
Safrole	44.8	36.87		ug/L		82	26 - 117
1,2,4,5-Tetrachlorobenzene	100	74.35		ug/L		74	35 - 110
2,3,4,6-Tetrachlorophenol	100	94.51		ug/L		95	32 - 142
Thionazin	44.8	41.87		ug/L		93	48 - 135
2,4,5-Trichlorophenol	100	94.60		ug/L		95	39 - 136
2,4,6-Trichlorophenol	100	91.07		ug/L		91	35 - 141
1,3,5-Trinitrobenzene	51.2	41.91		ug/L		82	26 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*109*		*33 - 126*
2-Fluorophenol (Surr)	*86*		*21 - 110*
Nitrobenzene-d5 (Surr)	*123*		*39 - 140*
Phenol-d5 (Surr)	*71*		*21 - 110*
Terphenyl-d14 (Surr)	*134*		*13 - 150*
2,4,6-Tribromophenol (Surr)	*139*		*20 - 144*

Lab Sample ID: LCSD 310-471206/3-A
Matrix: Water
Analysis Batch: 472246

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 471206

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	100	80.89		ug/L		81	38 - 118	9	35
Acenaphthylene	100	79.31		ug/L		79	39 - 115	13	35
Acetophenone	100	88.77		ug/L		89	47 - 118	9	35
2-Acetylaminofluorene	51.2	22.66	*1	ug/L		44	37 - 149	28	26
4-Aminobiphenyl	51.2	38.29		ug/L		75	23 - 123	8	35
Anthracene	100	92.81		ug/L		93	49 - 127	9	35
Benzo[a]anthracene	100	89.84		ug/L		90	49 - 126	7	35
Benzo[a]pyrene	100	83.29		ug/L		83	44 - 133	14	35
Benzo[b]fluoranthene	100	80.89		ug/L		81	44 - 136	13	35
Benzo[g,h,i]perylene	100	75.51		ug/L		76	42 - 135	9	35
Benzo[k]fluoranthene	100	111.9		ug/L		112	49 - 134	1	35
Benzyl alcohol	100	90.31		ug/L		90	46 - 123	0	35
Bis(2-chloroethoxy)methane	100	97.78		ug/L		98	44 - 126	7	35
Bis(2-chloroethyl)ether	100	82.08		ug/L		82	41 - 116	6	35
bis (2-chloroisopropyl) ether	100	79.21		ug/L		79	36 - 115	10	35
Bis(2-ethylhexyl) phthalate	100	73.62		ug/L		74	46 - 138	20	35
4-Bromophenyl phenyl ether	100	92.30		ug/L		92	41 - 131	11	35

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 310-471206/3-A
Client Sample ID: Lab Control Sample Dup
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 472246
Prep Batch: 471206

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Butyl benzyl phthalate	100	93.48		ug/L		93	47 - 133	11	35
4-Chloroaniline	100	87.69		ug/L		88	13 - 143	11	35
Chlorobenzilate	51.2	46.71		ug/L		91	39 - 145	10	28
4-Chloro-3-methylphenol	100	96.98		ug/L		97	51 - 132	13	35
2-Chloronaphthalene	100	72.89		ug/L		73	33 - 112	11	35
2-Chlorophenol	100	85.42		ug/L		85	43 - 119	7	35
4-Chlorophenyl phenyl ether	100	86.85		ug/L		87	44 - 118	6	35
Chrysene	100	90.45		ug/L		90	50 - 128	14	35
Diallate	44.8	42.95		ug/L		96	40 - 135	11	29
Dibenzo(a,h)anthracene	100	65.36		ug/L		65	36 - 146	6	35
Dibenzofuran	100	83.17		ug/L		83	44 - 114	13	35
2,4-Dichlorophenol	100	94.43		ug/L		94	44 - 131	5	35
2,6-Dichlorophenol	100	89.58		ug/L		90	41 - 131	13	35
Diethyl phthalate	100	96.53		ug/L		97	43 - 135	5	35
Dimethoate	44.8	43.72		ug/L		98	31 - 150	12	35
7,12-Dimethylbenz(a)anthracene	51.2	41.52		ug/L		81	47 - 129	8	29
3,3'-Dimethylbenzidine	51.2	20.99		ug/L		41	10 - 147	33	35
2,4-Dimethylphenol	100	98.10		ug/L		98	30 - 128	9	35
Dimethyl phthalate	100	92.42		ug/L		92	46 - 129	11	35
Di-n-butyl phthalate	100	92.47		ug/L		92	49 - 138	7	35
1,3-Dinitrobenzene	100	85.53		ug/L		86	36 - 147	10	35
4,6-Dinitro-2-methylphenol	200	139.5		ug/L		70	22 - 150	8	35
2,4-Dinitrophenol	200	114.0		ug/L		57	10 - 150	10	35
2,4-Dinitrotoluene	100	88.31		ug/L		88	48 - 136	14	35
2,6-Dinitrotoluene	100	84.28		ug/L		84	49 - 135	12	35
Di-n-octyl phthalate	100	46.59		ug/L		47	33 - 148	2	35
Dinoseb	51.2	33.52		ug/L		65	22 - 150	2	35
Diphenylamine	85.0	79.47		ug/L		93	43 - 132	9	35
Disulfoton	44.8	37.16		ug/L		83	27 - 138	10	32
Ethyl methanesulfonate	51.2	37.87		ug/L		74	44 - 110	3	30
Ethyl Parathion	44.8	35.29		ug/L		79	52 - 141	5	30
Famphur	44.8	43.42	E	ug/L		97	67 - 150	12	28
Fluoranthene	100	91.86		ug/L		92	49 - 132	8	35
Fluorene	100	87.59		ug/L		88	46 - 118	8	35
Hexachlorobenzene	100	98.13		ug/L		98	42 - 134	6	35
Hexachlorobutadiene	100	64.42		ug/L		64	29 - 110	13	35
Hexachlorocyclopentadiene	100	54.12		ug/L		54	10 - 110	0	35
Hexachloroethane	100	60.82		ug/L		61	25 - 110	6	35
Hexachloropropene	51.2	14.24		ug/L		28	10 - 110	2	35
Indeno[1,2,3-cd]pyrene	100	52.13		ug/L		52	36 - 149	25	35
Isodrin	51.2	40.24		ug/L		79	50 - 122	15	28
Isophorone	100	89.82		ug/L		90	46 - 126	11	35
Isosafrole	51.2	35.24		ug/L		69	10 - 129	11	35
Kepone	44.8	25.61	*1	ug/L		57	10 - 150	46	35
Methapyrilene	44.8	3.547	J *- *1	ug/L		8	10 - 110	54	35
3-Methylcholanthrene	51.2	26.10		ug/L		51	13 - 140	14	35
Methyl methanesulfonate	51.2	32.63		ug/L		64	16 - 110	2	28
2-Methylnaphthalene	100	73.56		ug/L		74	35 - 110	11	35
Methyl parathion	44.8	46.23		ug/L		103	49 - 150	10	29

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 310-471206/3-A
Matrix: Water
Analysis Batch: 472246

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 471206

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Methylphenol			100	83.51		ug/L		84	47 - 114	6	35
Methylphenol, 3 & 4			100	88.01		ug/L		88	45 - 114	4	35
1,4-Naphthoquinone			51.2	45.80		ug/L		89	38 - 137	10	27
1-Naphthylamine			51.2	20.14		ug/L		39	10 - 110	9	35
2-Naphthylamine			51.2	37.93		ug/L		74	18 - 111	3	35
2-Nitroaniline			100	94.27		ug/L		94	48 - 135	9	35
3-Nitroaniline			100	91.18		ug/L		91	38 - 142	2	35
4-Nitroaniline			100	95.82		ug/L		96	33 - 141	6	35
Nitrobenzene			100	90.12		ug/L		90	42 - 123	9	35
5-Nitro-o-toluidine			51.2	43.01		ug/L		84	43 - 139	6	32
2-Nitrophenol			100	89.15		ug/L		89	36 - 144	4	35
4-Nitrophenol			200	132.7		ug/L		66	22 - 110	2	35
N-Nitrosodiethylamine			51.2	38.47		ug/L		75	51 - 116	3	27
N-Nitrosodimethylamine			100	91.38		ug/L		91	37 - 110	4	35
N-Nitrosodi-n-butylamine			51.2	41.48		ug/L		81	49 - 135	5	28
N-Nitrosodi-n-propylamine			100	92.38		ug/L		92	44 - 124	3	35
N-Nitrosodiphenylamine			100	93.64		ug/L		94	43 - 132	6	35
N-Nitrosomethylethylamine			51.2	43.64		ug/L		85	43 - 114	2	29
N-Nitrosopiperidine			51.2	45.08		ug/L		88	50 - 120	9	26
N-Nitrosopyrrolidine			51.2	40.98		ug/L		80	47 - 129	7	31
o,o',o''-Triethylphosphorothioate			44.8	34.65		ug/L		77	34 - 125	13	33
o-Toluidine			51.2	36.73		ug/L		72	19 - 128	9	35
p-Dimethylamino azobenzene			51.2	41.84		ug/L		82	45 - 133	11	31
Pentachlorobenzene			51.2	36.61		ug/L		71	27 - 112	8	35
Pentachloronitrobenzene			51.2	41.50		ug/L		81	45 - 132	8	29
Pentachlorophenol			200	172.5		ug/L		86	28 - 142	10	35
Phenacetin			51.2	42.67		ug/L		83	51 - 139	10	29
Phenanthrene			100	91.65		ug/L		92	48 - 126	10	35
Phenol			100	63.72		ug/L		64	29 - 110	2	35
1,4-phenylenediamine			51.2	<1.90	*-	ug/L		3	20 - 120	29	35
Phorate			44.8	39.27		ug/L		88	21 - 147	8	35
Pronamide			51.2	44.17		ug/L		86	52 - 135	11	28
Pyrene			100	104.7		ug/L		105	45 - 134	10	35
Safrole			44.8	30.97		ug/L		69	26 - 117	17	35
1,2,4,5-Tetrachlorobenzene			100	72.21		ug/L		72	35 - 110	3	35
2,3,4,6-Tetrachlorophenol			100	88.35		ug/L		88	32 - 142	7	35
Thionazin			44.8	39.50		ug/L		88	48 - 135	6	30
2,4,5-Trichlorophenol			100	87.50		ug/L		87	39 - 136	8	35
2,4,6-Trichlorophenol			100	85.33		ug/L		85	35 - 141	7	35
1,3,5-Trinitrobenzene			51.2	38.92		ug/L		76	26 - 150	7	29

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*96*		*33 - 126*
2-Fluorophenol (Surr)	*84*		*21 - 110*
Nitrobenzene-d5 (Surr)	*110*		*39 - 140*
Phenol-d5 (Surr)	*70*		*21 - 110*
Terphenyl-d14 (Surr)	*117*		*13 - 150*
2,4,6-Tribromophenol (Surr)	*118*		*20 - 144*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Lab Sample ID: MB 310-472083/4
Matrix: Water
Analysis Batch: 472083

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	<2600		10000	2600	ug/L			10/31/25 15:21	1
Isobutanol	<2400		10000	2400	ug/L			10/31/25 15:21	1

Lab Sample ID: LCS 310-472083/5
Matrix: Water
Analysis Batch: 472083

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetonitrile	89700	102800		ug/L		115	67 - 131
Isobutanol	98900	105400		ug/L		107	80 - 120

Lab Sample ID: LCSD 310-472083/6
Matrix: Water
Analysis Batch: 472083

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetonitrile	89700	97600		ug/L		109	67 - 131	5	20
Isobutanol	98900	103300		ug/L		104	80 - 120	2	20

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 310-471719/1-A
Matrix: Water
Analysis Batch: 471708

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 471719

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.806		1.97	0.806	ug/L		10/29/25 10:07	10/29/25 14:34	1
PCB-1221	<0.806		1.97	0.806	ug/L		10/29/25 10:07	10/29/25 14:34	1
PCB-1232	<0.806		1.97	0.806	ug/L		10/29/25 10:07	10/29/25 14:34	1
PCB-1242	<0.806		1.97	0.806	ug/L		10/29/25 10:07	10/29/25 14:34	1
PCB-1248	<0.678		1.97	0.678	ug/L		10/29/25 10:07	10/29/25 14:34	1
PCB-1254	<0.678		1.97	0.678	ug/L		10/29/25 10:07	10/29/25 14:34	1
PCB-1260	<0.678		1.97	0.678	ug/L		10/29/25 10:07	10/29/25 14:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*37*		*10 - 150*	*10/29/25 10:07*	*10/29/25 14:34*	*1*
Tetrachloro-m-xylene	*101*	*p*	*17 - 150*	*10/29/25 10:07*	*10/29/25 14:34*	*1*

Lab Sample ID: LCS 310-471719/20-A
Matrix: Water
Analysis Batch: 471708

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 471719

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	27.8	15.78		ug/L		57	25 - 150
PCB-1260	27.8	17.95		ug/L		65	14 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*58*		*10 - 150*
Tetrachloro-m-xylene	*57*		*17 - 150*

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 410-721636/1-A
Matrix: Water
Analysis Batch: 721887

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 721636

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.250		0.600	0.250	ug/L		10/29/25 15:26	10/30/25 15:47	1
Silvex (2,4,5-TP)	<0.0220		0.0500	0.0220	ug/L		10/29/25 15:26	10/30/25 15:47	1
2,4,5-T	<0.0650		0.150	0.0650	ug/L		10/29/25 15:26	10/30/25 15:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*78*		*34 - 142*	*10/29/25 15:26*	*10/30/25 15:47*	*1*
DCAA	*74*		*34 - 142*	*10/29/25 15:26*	*10/30/25 15:47*	*1*

Lab Sample ID: LCS 410-721636/2-A
Matrix: Water
Analysis Batch: 721887

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 721636

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4-D			2.00	1.844		ug/L		92	53 - 159		
2,4,5-T			0.400	0.4053		ug/L		101	57 - 171		

Surrogate			*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCAA			*88*		*34 - 142*
DCAA			*90*		*34 - 142*

Lab Sample ID: LCSD 410-721636/3-A
Matrix: Water
Analysis Batch: 721887

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 721636

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-D			2.00	1.693		ug/L		85	53 - 159	9	30
2,4,5-T			0.400	0.3540		ug/L		89	57 - 171	13	30

Surrogate			*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCAA			*82*		*34 - 142*
DCAA			*79*		*34 - 142*

Method: 8151A - Herbicides (GC) - DL

Lab Sample ID: LCS 410-721636/2-A
Matrix: Water
Analysis Batch: 721887

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 721636

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Silvex (2,4,5-TP) - DL			4.01	3.327		ug/L		83	62 - 170		

Surrogate			*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCAA - DL			*95*		*34 - 142*
DCAA - DL			*94*		*34 - 142*

Method: 8151A - Herbicides (GC) - DL (Continued)

Lab Sample ID: LCSD 410-721636/3-A
Matrix: Water
Analysis Batch: 721887

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 721636

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silvex (2,4,5-TP) - DL			4.01	3.637		ug/L		91	62 - 170	9	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCAA - DL	*101*		*34 - 142*
DCAA - DL	*100*		*34 - 142*

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-471618/1-A
Matrix: Water
Analysis Batch: 472317

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 471618

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		10/29/25 09:00	11/03/25 16:50	1
Arsenic	<0.530		2.00	0.530	ug/L		10/29/25 09:00	11/03/25 16:50	1
Barium	<0.660		2.00	0.660	ug/L		10/29/25 09:00	11/03/25 16:50	1
Beryllium	<0.330		1.00	0.330	ug/L		10/29/25 09:00	11/03/25 16:50	1
Cadmium	<0.100		0.200	0.100	ug/L		10/29/25 09:00	11/03/25 16:50	1
Chromium	<1.80		5.00	1.80	ug/L		10/29/25 09:00	11/03/25 16:50	1
Cobalt	<0.170		0.500	0.170	ug/L		10/29/25 09:00	11/03/25 16:50	1
Copper	<3.20		5.00	3.20	ug/L		10/29/25 09:00	11/03/25 16:50	1
Lead	<0.330		0.500	0.330	ug/L		10/29/25 09:00	11/03/25 16:50	1
Nickel	<2.30		5.00	2.30	ug/L		10/29/25 09:00	11/03/25 16:50	1
Selenium	<1.40		5.00	1.40	ug/L		10/29/25 09:00	11/03/25 16:50	1
Silver	<0.500		1.00	0.500	ug/L		10/29/25 09:00	11/03/25 16:50	1
Tin	<2.50		5.00	2.50	ug/L		10/29/25 09:00	11/03/25 16:50	1
Sodium	<0.650		1.00	0.650	mg/L		10/29/25 09:00	11/03/25 16:50	1
Vanadium	<1.70		5.00	1.70	ug/L		10/29/25 09:00	11/03/25 16:50	1
Zinc	<13.0		20.0	13.0	ug/L		10/29/25 09:00	11/03/25 16:50	1
Calcium	<0.190		0.500	0.190	mg/L		10/29/25 09:00	11/03/25 16:50	1
Magnesium	<0.150		0.500	0.150	mg/L		10/29/25 09:00	11/03/25 16:50	1

Lab Sample ID: MB 310-471618/1-A
Matrix: Water
Analysis Batch: 472466

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 471618

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.570	^+	1.00	0.570	ug/L		10/29/25 09:00	11/04/25 15:04	1

Lab Sample ID: LCS 310-471618/2-A
Matrix: Water
Analysis Batch: 472317

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 471618

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			200	220.0		ug/L		110	80 - 120		
Arsenic			200	183.7		ug/L		92	80 - 120		
Barium			100	98.21		ug/L		98	80 - 120		
Beryllium			100	100.1		ug/L		100	80 - 120		
Cadmium			100	98.11		ug/L		98	80 - 120		

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 310-471618/2-A
Matrix: Water
Analysis Batch: 472317

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 471618

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium	100	103.6		ug/L		104	80 - 120
Cobalt	100	100.0		ug/L		100	80 - 120
Copper	200	182.7		ug/L		91	80 - 120
Lead	200	195.1		ug/L		98	80 - 120
Nickel	200	184.6		ug/L		92	80 - 120
Selenium	400	387.5		ug/L		97	80 - 120
Silver	100	113.7		ug/L		114	80 - 120
Tin	200	208.0		ug/L		104	80 - 120
Sodium	2.00	1.921		mg/L		96	80 - 120
Vanadium	100	101.8		ug/L		102	80 - 120
Zinc	200	184.2		ug/L		92	80 - 120
Calcium	2.00	1.933		mg/L		97	80 - 120
Magnesium	2.00	1.784		mg/L		89	80 - 120

Lab Sample ID: LCS 310-471618/2-A
Matrix: Water
Analysis Batch: 472466

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 471618

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Thallium	100	131.0	^+ *+	ug/L		131	80 - 120

Lab Sample ID: MB 310-471621/1-A
Matrix: Water
Analysis Batch: 472611

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 471621

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.00		2.00	1.00	ug/L		10/29/25 09:00	11/05/25 14:07	1
Arsenic	<0.530		2.00	0.530	ug/L		10/29/25 09:00	11/05/25 14:07	1
Barium	<0.660		2.00	0.660	ug/L		10/29/25 09:00	11/05/25 14:07	1
Beryllium	<0.330		1.00	0.330	ug/L		10/29/25 09:00	11/05/25 14:07	1
Cadmium	<0.100		0.200	0.100	ug/L		10/29/25 09:00	11/05/25 14:07	1
Chromium	<1.80		5.00	1.80	ug/L		10/29/25 09:00	11/05/25 14:07	1
Cobalt	<0.170		0.500	0.170	ug/L		10/29/25 09:00	11/05/25 14:07	1
Copper	<3.20		5.00	3.20	ug/L		10/29/25 09:00	11/05/25 14:07	1
Lead	<0.330		0.500	0.330	ug/L		10/29/25 09:00	11/05/25 14:07	1
Nickel	<2.30		5.00	2.30	ug/L		10/29/25 09:00	11/05/25 14:07	1
Selenium	<1.40		5.00	1.40	ug/L		10/29/25 09:00	11/05/25 14:07	1
Silver	<0.500		1.00	0.500	ug/L		10/29/25 09:00	11/05/25 14:07	1
Thallium	<0.570	^+	1.00	0.570	ug/L		10/29/25 09:00	11/05/25 14:07	1
Tin	<2.50		5.00	2.50	ug/L		10/29/25 09:00	11/05/25 14:07	1
Sodium	<0.650		1.00	0.650	mg/L		10/29/25 09:00	11/05/25 14:07	1
Vanadium	<1.70		5.00	1.70	ug/L		10/29/25 09:00	11/05/25 14:07	1
Zinc	<13.0		20.0	13.0	ug/L		10/29/25 09:00	11/05/25 14:07	1
Calcium	<0.190		0.500	0.190	mg/L		10/29/25 09:00	11/05/25 14:07	1
Magnesium	<0.150		0.500	0.150	mg/L		10/29/25 09:00	11/05/25 14:07	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 310-471621/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 472611
Prep Batch: 471621

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	200	223.2		ug/L		112	80 - 120
Arsenic	200	190.6		ug/L		95	80 - 120
Barium	100	100.1		ug/L		100	80 - 120
Beryllium	100	101.9		ug/L		102	80 - 120
Cadmium	100	103.4		ug/L		103	80 - 120
Chromium	100	106.3		ug/L		106	80 - 120
Cobalt	100	101.4		ug/L		101	80 - 120
Copper	200	213.0		ug/L		107	80 - 120
Lead	200	205.9		ug/L		103	80 - 120
Nickel	200	205.6		ug/L		103	80 - 120
Selenium	400	394.0		ug/L		99	80 - 120
Silver	100	117.7		ug/L		118	80 - 120
Thallium	100	115.4	^+	ug/L		115	80 - 120
Tin	200	202.1		ug/L		101	80 - 120
Sodium	2.00	2.248		mg/L		112	80 - 120
Vanadium	100	103.9		ug/L		104	80 - 120
Zinc	200	195.0		ug/L		97	80 - 120
Calcium	2.00	1.845		mg/L		92	80 - 120
Magnesium	2.00	1.896		mg/L		95	80 - 120

Lab Sample ID: 310-318779-8 MS
Client Sample ID: MW-43A_25_10
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 472611
Prep Batch: 471621

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	1.82	J	200	244.7		ug/L		121	75 - 125
Arsenic	6.33		200	219.0		ug/L		106	75 - 125
Barium	198		100	317.6		ug/L		119	75 - 125
Beryllium	<0.330		100	107.0		ug/L		107	75 - 125
Cadmium	<0.100		100	104.4		ug/L		104	75 - 125
Chromium	<1.80		100	108.1		ug/L		108	75 - 125
Cobalt	3.00		100	103.3		ug/L		100	75 - 125
Copper	<3.20		200	207.4		ug/L		104	75 - 125
Lead	<0.330		200	216.6		ug/L		108	75 - 125
Nickel	24.5		200	229.3		ug/L		102	75 - 125
Selenium	<1.40		400	419.0		ug/L		105	75 - 125
Silver	<0.500		100	119.5		ug/L		119	75 - 125
Tin	2.55	J	200	205.9		ug/L		102	75 - 125
Sodium	95.2		2.00	99.83	4	mg/L		234	75 - 125
Vanadium	<1.70		100	108.1		ug/L		108	75 - 125
Zinc	<13.0		200	207.3		ug/L		104	75 - 125
Calcium	139		2.00	149.5	4	mg/L		513	75 - 125
Magnesium	31.9		2.00	35.47	4	mg/L		180	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 310-318779-8 MSD
Client Sample ID: MW-43A_25_10
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 472611
Prep Batch: 471621

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	1.82	J	200	230.7		ug/L		114	75 - 125	6	20
Arsenic	6.33		200	207.2		ug/L		100	75 - 125	6	20
Barium	198		100	306.9		ug/L		109	75 - 125	3	20
Beryllium	<0.330		100	101.4		ug/L		101	75 - 125	5	20
Cadmium	<0.100		100	98.57		ug/L		99	75 - 125	6	20
Chromium	<1.80		100	102.7		ug/L		103	75 - 125	5	20
Cobalt	3.00		100	98.34		ug/L		95	75 - 125	5	20
Copper	<3.20		200	197.6		ug/L		99	75 - 125	5	20
Lead	<0.330		200	205.6		ug/L		103	75 - 125	5	20
Nickel	24.5		200	219.7		ug/L		98	75 - 125	4	20
Selenium	<1.40		400	396.8		ug/L		99	75 - 125	5	20
Silver	<0.500		100	116.3		ug/L		116	75 - 125	3	20
Tin	2.55	J	200	202.3		ug/L		100	75 - 125	2	20
Sodium	95.2		2.00	99.07	4	mg/L		196	75 - 125	1	20
Vanadium	<1.70		100	102.4		ug/L		102	75 - 125	5	20
Zinc	<13.0		200	195.9		ug/L		98	75 - 125	6	20
Calcium	139		2.00	147.8	4	mg/L		432	75 - 125	1	20
Magnesium	31.9		2.00	34.79	4	mg/L		146	75 - 125	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-472216/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 472402
Prep Batch: 472216

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.110		0.200	0.110	ug/L		11/03/25 12:50	11/04/25 10:14	1

Lab Sample ID: LCS 310-472216/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 472402
Prep Batch: 472216

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.67	1.715		ug/L		103	80 - 120

Method: 4500 F C-2011 - Fluoride (Ion-selective Electrode)

Lab Sample ID: MB 310-472154/5
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 472154

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.0490		0.100	0.0490	mg/L			11/02/25 11:33	1

Lab Sample ID: LCS 310-472154/6
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 472154

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	2.00	1.997		mg/L		100	90 - 110

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 310-471559/1-A
Matrix: Water
Analysis Batch: 471804

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 471559

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<3.50		10.0	3.50	ug/L		10/28/25 10:55	10/29/25 20:46	1

Lab Sample ID: LCS 310-471559/2-A
Matrix: Water
Analysis Batch: 471804

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 471559

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	200	189.9		ug/L		95	90 - 110

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 240-678305/1-A
Matrix: Water
Analysis Batch: 678361

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 678305

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<1410		3000	1410	ug/L		10/29/25 12:25	10/29/25 16:45	1

Lab Sample ID: LCS 240-678305/2-A
Matrix: Water
Analysis Batch: 678361

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 678305

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	6930	5467		ug/L		79	70 - 120

Method: D516-16 - Sulfate

Lab Sample ID: MB 310-472104/16
Matrix: Water
Analysis Batch: 472104

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	3.511	J	5.00	1.80	mg/L			10/31/25 14:52	1

Lab Sample ID: LCS 310-472104/14
Matrix: Water
Analysis Batch: 472104

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	10.0	11.29		mg/L		113	85 - 115

Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: MB 310-471260/1
Matrix: Water
Analysis Batch: 471260

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<3.50		5.00	3.50	mg/L			10/24/25 12:31	1

Method: I-3765-85 - Residue, Non-filterable (TSS) (Continued)

Lab Sample ID: LCS 310-471260/2
Matrix: Water
Analysis Batch: 471260

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			100	96.00		mg/L		96	82 - 117		

Lab Sample ID: MB 310-471447/1
Matrix: Water
Analysis Batch: 471447

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<3.50		5.00	3.50	mg/L			10/27/25 13:58	1

Lab Sample ID: LCS 310-471447/2
Matrix: Water
Analysis Batch: 471447

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			100	104.0		mg/L		104	82 - 117		

Lab Sample ID: MB 310-471567/1
Matrix: Water
Analysis Batch: 471567

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<3.50		5.00	3.50	mg/L			10/28/25 11:38	1

Lab Sample ID: LCS 310-471567/2
Matrix: Water
Analysis Batch: 471567

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			100	97.00		mg/L		97	82 - 117		

Method: SM 2320B - Alkalinity

Lab Sample ID: LCS 310-471813/2
Matrix: Water
Analysis Batch: 471813

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Alkalinity			1000	940.0		mg/L		94	85 - 115		

Lab Sample ID: LCS 310-471813/25
Matrix: Water
Analysis Batch: 471813

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Alkalinity			1000	1088		mg/L		109	85 - 115		

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 310-318779-5 DU
Matrix: Water
Analysis Batch: 471813

Client Sample ID: MW-29A_25_10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	796		785.6		mg/L		1	13
Bicarbonate Alkalinity as CaCO3	796		785.6		mg/L		1	
Carbonate Alkalinity as CaCO3	<2.50		<2.50		mg/L		NC	
Hydroxide Alkalinity as CaCO3	<2.50		<2.50		mg/L		NC	
Phenolphthalein Alkalinity as CaCO3 to pH 8.3	<2.50		<2.50		mg/L		NC	

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 310-471269/1
Matrix: Water
Analysis Batch: 471269

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<36.0		50.0	36.0	mg/L			10/24/25 12:46	1

Lab Sample ID: LCS 310-471269/2
Matrix: Water
Analysis Batch: 471269

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	958.0		mg/L		96	89 - 110

Lab Sample ID: MB 310-471289/1
Matrix: Water
Analysis Batch: 471289

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<36.0		50.0	36.0	mg/L			10/24/25 14:09	1

Lab Sample ID: LCS 310-471289/2
Matrix: Water
Analysis Batch: 471289

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	962.0		mg/L		96	89 - 110

Lab Sample ID: MB 310-471425/1
Matrix: Water
Analysis Batch: 471425

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<36.0		50.0	36.0	mg/L			10/27/25 12:05	1

Lab Sample ID: LCS 310-471425/2
Matrix: Water
Analysis Batch: 471425

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	972.0		mg/L		97	89 - 110

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: 310-318779-17 DU
Matrix: Water
Analysis Batch: 471425

Client Sample ID: SW-5_25_10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	370			356.0		mg/L				6	13

Lab Sample ID: MB 310-471606/1
Matrix: Water
Analysis Batch: 471606

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<36.0		50.0	36.0	mg/L			10/28/25 14:22	1

Lab Sample ID: LCS 310-471606/2
Matrix: Water
Analysis Batch: 471606

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	938.0		mg/L		94	89 - 110		

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 310-471484/16
Matrix: Water
Analysis Batch: 471484

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.40		2.00	1.40	mg/L			10/27/25 20:05	1

Lab Sample ID: MB 310-471484/35
Matrix: Water
Analysis Batch: 471484

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.40		2.00	1.40	mg/L			10/27/25 20:12	1

Lab Sample ID: LCS 310-471484/14
Matrix: Water
Analysis Batch: 471484

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			10.0	10.87		mg/L		109	90 - 110		

Lab Sample ID: LCS 310-471484/85
Matrix: Water
Analysis Batch: 471484

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			10.0	10.57		mg/L		106	90 - 110		

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: MB 310-471650/16
Matrix: Water
Analysis Batch: 471650

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.40		2.00	1.40	mg/L			10/28/25 23:38	1

Lab Sample ID: MB 310-471650/45
Matrix: Water
Analysis Batch: 471650

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.40		2.00	1.40	mg/L			10/28/25 23:50	1

Lab Sample ID: LCS 310-471650/46
Matrix: Water
Analysis Batch: 471650

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	10.56		mg/L		106	90 - 110

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 310-471090/1
Matrix: Water
Analysis Batch: 471090

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	<3.00		3.00	3.00	mg/L			10/23/25 10:12	1

Lab Sample ID: LCS 310-471090/2
Matrix: Water
Analysis Batch: 471090

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Biochemical Oxygen Demand	198	224.0		mg/L		113	85 - 115

Lab Sample ID: USB 310-471100/1
Matrix: Water
Analysis Batch: 471100

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	<3.00		3.00	3.00	mg/L			10/23/25 11:04	1

Lab Sample ID: LCS 310-471100/2
Matrix: Water
Analysis Batch: 471100

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Biochemical Oxygen Demand	198	197.1		mg/L		100	85 - 115

Method: SM 5220D - COD

Lab Sample ID: MB 310-471918/32
Matrix: Water
Analysis Batch: 471918

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	<4.60		5.00	4.60	mg/L			10/30/25 13:52	1

Lab Sample ID: MB 310-471918/5
Matrix: Water
Analysis Batch: 471918

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	<4.60		5.00	4.60	mg/L			10/30/25 13:52	1

Lab Sample ID: LCS 310-471918/3
Matrix: Water
Analysis Batch: 471918

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	62.7	57.50		mg/L		92	85 - 115

Lab Sample ID: LCS 310-471918/33
Matrix: Water
Analysis Batch: 471918

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	62.7	59.17		mg/L		94	85 - 115

Lab Sample ID: 310-318779-3 MS
Matrix: Water
Analysis Batch: 471918

Client Sample ID: MW-7A_25_10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	<23.0		250	299.2		mg/L		120	84 - 141

Lab Sample ID: 310-318779-3 MSD
Matrix: Water
Analysis Batch: 471918

Client Sample ID: MW-7A_25_10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chemical Oxygen Demand	<23.0		250	290.9		mg/L		116	84 - 141	3	14

GC/MS VOA

Analysis Batch: 471301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-9	MW-44A_25_10	Total/NA	Water	8260D	
MB 310-471301/7	Method Blank	Total/NA	Water	8260D	
LCS 310-471301/8	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 471555

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-1	MW-2R_25_10	Total/NA	Water	8260D	
310-318779-2	MW-4_25_10	Total/NA	Water	8260D	
310-318779-3	MW-7A_25_10	Total/NA	Water	8260D	
310-318779-4	MW-18_25_10	Total/NA	Water	8260D	
310-318779-5	MW-29A_25_10	Total/NA	Water	8260D	
310-318779-6	MW-35_25_10	Total/NA	Water	8260D	
310-318779-7	MW-39A_25_10	Total/NA	Water	8260D	
310-318779-8	MW-43A_25_10	Total/NA	Water	8260D	
310-318779-10	MW-45A_25_10	Total/NA	Water	8260D	
310-318779-11	MW-46A_25_10	Total/NA	Water	8260D	
310-318779-12	EB-2_25_10	Total/NA	Water	8260D	
310-318779-13	FD-1_25_10	Total/NA	Water	8260D	
310-318779-14	FD-3_25_10	Total/NA	Water	8260D	
310-318779-15	TB-1_25_10	Total/NA	Water	8260D	
310-318779-18	TB-2_25_10	Total/NA	Water	8260D	
MB 310-471555/5	Method Blank	Total/NA	Water	8260D	
LCS 310-471555/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-471555/7	Lab Control Sample	Total/NA	Water	8260D	
310-318779-3 MS	MW-7A_25_10	Total/NA	Water	8260D	
310-318779-3 MSD	MW-7A_25_10	Total/NA	Water	8260D	

Analysis Batch: 471692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-16	SW-2_25_10	Total/NA	Water	8260D	
310-318779-17	SW-5_25_10	Total/NA	Water	8260D	
MB 310-471692/6	Method Blank	Total/NA	Water	8260D	
LCS 310-471692/7	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-471692/8	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 472433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-9	MW-44A_25_10	Total/NA	Water	8260D	
MB 310-472433/7	Method Blank	Total/NA	Water	8260D	
LCS 310-472433/8	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-472433/9	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 471206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-3	MW-7A_25_10	Total/NA	Water	3510C	
310-318779-11	MW-46A_25_10	Total/NA	Water	3510C	
310-318779-13	FD-1_25_10	Total/NA	Water	3510C	
MB 310-471206/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-471206/2-A	Lab Control Sample	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 471206 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 310-471206/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 472246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-3	MW-7A_25_10	Total/NA	Water	8270E	471206
310-318779-11	MW-46A_25_10	Total/NA	Water	8270E	471206
310-318779-13	FD-1_25_10	Total/NA	Water	8270E	471206
MB 310-471206/1-A	Method Blank	Total/NA	Water	8270E	471206
LCS 310-471206/2-A	Lab Control Sample	Total/NA	Water	8270E	471206
LCSD 310-471206/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	471206

GC Semi VOA

Analysis Batch: 471708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-471719/1-A	Method Blank	Total/NA	Water	8082A	471719
LCS 310-471719/20-A	Lab Control Sample	Total/NA	Water	8082A	471719

Prep Batch: 471719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-3	MW-7A_25_10	Total/NA	Water	3511	
310-318779-11	MW-46A_25_10	Total/NA	Water	3511	
310-318779-13	FD-1_25_10	Total/NA	Water	3511	
MB 310-471719/1-A	Method Blank	Total/NA	Water	3511	
LCS 310-471719/20-A	Lab Control Sample	Total/NA	Water	3511	

Analysis Batch: 471864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-3	MW-7A_25_10	Total/NA	Water	8082A	471719
310-318779-11	MW-46A_25_10	Total/NA	Water	8082A	471719
310-318779-13	FD-1_25_10	Total/NA	Water	8082A	471719

Analysis Batch: 471865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-3	MW-7A_25_10	Total/NA	Water	8081B	471719
310-318779-11	MW-46A_25_10	Total/NA	Water	8081B	471719
310-318779-13	FD-1_25_10	Total/NA	Water	8081B	471719

Analysis Batch: 472083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-3	MW-7A_25_10	Total/NA	Water	8015C	
310-318779-11	MW-46A_25_10	Total/NA	Water	8015C	
310-318779-13	FD-1_25_10	Total/NA	Water	8015C	
MB 310-472083/4	Method Blank	Total/NA	Water	8015C	
LCS 310-472083/5	Lab Control Sample	Total/NA	Water	8015C	
LCSD 310-472083/6	Lab Control Sample Dup	Total/NA	Water	8015C	

Prep Batch: 721636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-3	MW-7A_25_10	Total/NA	Water	8151A	
310-318779-11	MW-46A_25_10	Total/NA	Water	8151A	

GC Semi VOA (Continued)

Prep Batch: 721636 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-13	FD-1_25_10	Total/NA	Water	8151A	
MB 410-721636/1-A	Method Blank	Total/NA	Water	8151A	
LCS 410-721636/2-A	Lab Control Sample	Total/NA	Water	8151A	
LCS 410-721636/2-A - DL	Lab Control Sample	Total/NA	Water	8151A	
LCSD 410-721636/3-A - DL	Lab Control Sample Dup	Total/NA	Water	8151A	
LCSD 410-721636/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	

Analysis Batch: 721887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-3	MW-7A_25_10	Total/NA	Water	8151A	721636
310-318779-11	MW-46A_25_10	Total/NA	Water	8151A	721636
310-318779-13	FD-1_25_10	Total/NA	Water	8151A	721636
MB 410-721636/1-A	Method Blank	Total/NA	Water	8151A	721636
LCS 410-721636/2-A	Lab Control Sample	Total/NA	Water	8151A	721636
LCS 410-721636/2-A - DL	Lab Control Sample	Total/NA	Water	8151A	721636
LCSD 410-721636/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	721636
LCSD 410-721636/3-A - DL	Lab Control Sample Dup	Total/NA	Water	8151A	721636

Metals

Prep Batch: 471618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-1	MW-2R_25_10	Total/NA	Water	3005A	
310-318779-2	MW-4_25_10	Total/NA	Water	3005A	
310-318779-3	MW-7A_25_10	Total/NA	Water	3005A	
310-318779-4	MW-18_25_10	Total/NA	Water	3005A	
310-318779-5	MW-29A_25_10	Total/NA	Water	3005A	
310-318779-6	MW-35_25_10	Total/NA	Water	3005A	
310-318779-7	MW-39A_25_10	Total/NA	Water	3005A	
MB 310-471618/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-471618/2-A	Lab Control Sample	Total/NA	Water	3005A	

Prep Batch: 471621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-8	MW-43A_25_10	Total/NA	Water	3005A	
310-318779-9	MW-44A_25_10	Total/NA	Water	3005A	
310-318779-10	MW-45A_25_10	Total/NA	Water	3005A	
310-318779-11	MW-46A_25_10	Total/NA	Water	3005A	
310-318779-12	EB-2_25_10	Total/NA	Water	3005A	
310-318779-13	FD-1_25_10	Total/NA	Water	3005A	
310-318779-14	FD-3_25_10	Total/NA	Water	3005A	
310-318779-16	SW-2_25_10	Total/NA	Water	3005A	
310-318779-17	SW-5_25_10	Total/NA	Water	3005A	
MB 310-471621/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-471621/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-318779-8 MS	MW-43A_25_10	Total/NA	Water	3005A	
310-318779-8 MSD	MW-43A_25_10	Total/NA	Water	3005A	

Prep Batch: 472216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-3	MW-7A_25_10	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 472216 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-11	MW-46A_25_10	Total/NA	Water	7470A	
310-318779-13	FD-1_25_10	Total/NA	Water	7470A	
MB 310-472216/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-472216/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 472317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-1	MW-2R_25_10	Total/NA	Water	6020B	471618
310-318779-2	MW-4_25_10	Total/NA	Water	6020B	471618
310-318779-3	MW-7A_25_10	Total/NA	Water	6020B	471618
310-318779-4	MW-18_25_10	Total/NA	Water	6020B	471618
310-318779-5	MW-29A_25_10	Total/NA	Water	6020B	471618
310-318779-6	MW-35_25_10	Total/NA	Water	6020B	471618
310-318779-7	MW-39A_25_10	Total/NA	Water	6020B	471618
MB 310-471618/1-A	Method Blank	Total/NA	Water	6020B	471618
LCS 310-471618/2-A	Lab Control Sample	Total/NA	Water	6020B	471618

Analysis Batch: 472402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-3	MW-7A_25_10	Total/NA	Water	7470A	472216
310-318779-11	MW-46A_25_10	Total/NA	Water	7470A	472216
310-318779-13	FD-1_25_10	Total/NA	Water	7470A	472216
MB 310-472216/1-A	Method Blank	Total/NA	Water	7470A	472216
LCS 310-472216/2-A	Lab Control Sample	Total/NA	Water	7470A	472216

Analysis Batch: 472466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-1	MW-2R_25_10	Total/NA	Water	6020B	471618
310-318779-2	MW-4_25_10	Total/NA	Water	6020B	471618
310-318779-3	MW-7A_25_10	Total/NA	Water	6020B	471618
310-318779-4	MW-18_25_10	Total/NA	Water	6020B	471618
310-318779-5	MW-29A_25_10	Total/NA	Water	6020B	471618
310-318779-6	MW-35_25_10	Total/NA	Water	6020B	471618
310-318779-7	MW-39A_25_10	Total/NA	Water	6020B	471618
MB 310-471618/1-A	Method Blank	Total/NA	Water	6020B	471618
LCS 310-471618/2-A	Lab Control Sample	Total/NA	Water	6020B	471618

Analysis Batch: 472611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-8	MW-43A_25_10	Total/NA	Water	6020B	471621
310-318779-9	MW-44A_25_10	Total/NA	Water	6020B	471621
310-318779-10	MW-45A_25_10	Total/NA	Water	6020B	471621
310-318779-11	MW-46A_25_10	Total/NA	Water	6020B	471621
310-318779-12	EB-2_25_10	Total/NA	Water	6020B	471621
310-318779-13	FD-1_25_10	Total/NA	Water	6020B	471621
310-318779-14	FD-3_25_10	Total/NA	Water	6020B	471621
310-318779-16	SW-2_25_10	Total/NA	Water	6020B	471621
310-318779-17	SW-5_25_10	Total/NA	Water	6020B	471621
MB 310-471621/1-A	Method Blank	Total/NA	Water	6020B	471621
LCS 310-471621/2-A	Lab Control Sample	Total/NA	Water	6020B	471621
310-318779-8 MS	MW-43A_25_10	Total/NA	Water	6020B	471621

Metals (Continued)

Analysis Batch: 472611 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-8 MSD	MW-43A_25_10	Total/NA	Water	6020B	471621

Analysis Batch: 472743

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-9	MW-44A_25_10	Total/NA	Water	6020B	471621

General Chemistry

Analysis Batch: 471090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-1	MW-2R_25_10	Total/NA	Water	SM 5210B	
310-318779-2	MW-4_25_10	Total/NA	Water	SM 5210B	
310-318779-4	MW-18_25_10	Total/NA	Water	SM 5210B	
310-318779-5	MW-29A_25_10	Total/NA	Water	SM 5210B	
310-318779-6	MW-35_25_10	Total/NA	Water	SM 5210B	
310-318779-7	MW-39A_25_10	Total/NA	Water	SM 5210B	
310-318779-8	MW-43A_25_10	Total/NA	Water	SM 5210B	
310-318779-9	MW-44A_25_10	Total/NA	Water	SM 5210B	
310-318779-10	MW-45A_25_10	Total/NA	Water	SM 5210B	
310-318779-11	MW-46A_25_10	Total/NA	Water	SM 5210B	
310-318779-16	SW-2_25_10	Total/NA	Water	SM 5210B	
310-318779-17	SW-5_25_10	Total/NA	Water	SM 5210B	
USB 310-471090/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 310-471090/2	Lab Control Sample	Total/NA	Water	SM 5210B	

Analysis Batch: 471100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-3	MW-7A_25_10	Total/NA	Water	SM 5210B	
USB 310-471100/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 310-471100/2	Lab Control Sample	Total/NA	Water	SM 5210B	

Analysis Batch: 471260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-6	MW-35_25_10	Total/NA	Water	I-3765-85	
310-318779-8	MW-43A_25_10	Total/NA	Water	I-3765-85	
310-318779-9	MW-44A_25_10	Total/NA	Water	I-3765-85	
MB 310-471260/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-471260/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Analysis Batch: 471269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-8	MW-43A_25_10	Total/NA	Water	SM 2540C	
310-318779-9	MW-44A_25_10	Total/NA	Water	SM 2540C	
MB 310-471269/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-471269/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 471289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-6	MW-35_25_10	Total/NA	Water	SM 2540C	
310-318779-7	MW-39A_25_10	Total/NA	Water	SM 2540C	
310-318779-10	MW-45A_25_10	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 471289 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-471289/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-471289/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 471396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-1	MW-2R_25_10	Total/NA	Water	SM 1030E	
310-318779-2	MW-4_25_10	Total/NA	Water	SM 1030E	
310-318779-3	MW-7A_25_10	Total/NA	Water	SM 1030E	
310-318779-4	MW-18_25_10	Total/NA	Water	SM 1030E	
310-318779-5	MW-29A_25_10	Total/NA	Water	SM 1030E	
310-318779-6	MW-35_25_10	Total/NA	Water	SM 1030E	
310-318779-7	MW-39A_25_10	Total/NA	Water	SM 1030E	
310-318779-8	MW-43A_25_10	Total/NA	Water	SM 1030E	
310-318779-9	MW-44A_25_10	Total/NA	Water	SM 1030E	
310-318779-10	MW-45A_25_10	Total/NA	Water	SM 1030E	
310-318779-11	MW-46A_25_10	Total/NA	Water	SM 1030E	
310-318779-16	SW-2_25_10	Total/NA	Water	SM 1030E	
310-318779-17	SW-5_25_10	Total/NA	Water	SM 1030E	

Analysis Batch: 471397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-1	MW-2R_25_10	Total/NA	Water	353.2	
310-318779-2	MW-4_25_10	Total/NA	Water	353.2	
310-318779-3	MW-7A_25_10	Total/NA	Water	353.2	
310-318779-4	MW-18_25_10	Total/NA	Water	353.2	
310-318779-5	MW-29A_25_10	Total/NA	Water	353.2	
310-318779-6	MW-35_25_10	Total/NA	Water	353.2	
310-318779-7	MW-39A_25_10	Total/NA	Water	353.2	
310-318779-8	MW-43A_25_10	Total/NA	Water	353.2	
310-318779-9	MW-44A_25_10	Total/NA	Water	353.2	
310-318779-10	MW-45A_25_10	Total/NA	Water	353.2	
310-318779-11	MW-46A_25_10	Total/NA	Water	353.2	
310-318779-16	SW-2_25_10	Total/NA	Water	353.2	
310-318779-17	SW-5_25_10	Total/NA	Water	353.2	

Analysis Batch: 471425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-1	MW-2R_25_10	Total/NA	Water	SM 2540C	
310-318779-2	MW-4_25_10	Total/NA	Water	SM 2540C	
310-318779-3	MW-7A_25_10	Total/NA	Water	SM 2540C	
310-318779-4	MW-18_25_10	Total/NA	Water	SM 2540C	
310-318779-5	MW-29A_25_10	Total/NA	Water	SM 2540C	
310-318779-16	SW-2_25_10	Total/NA	Water	SM 2540C	
310-318779-17	SW-5_25_10	Total/NA	Water	SM 2540C	
MB 310-471425/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-471425/2	Lab Control Sample	Total/NA	Water	SM 2540C	
310-318779-17 DU	SW-5_25_10	Total/NA	Water	SM 2540C	

Analysis Batch: 471447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-1	MW-2R_25_10	Total/NA	Water	I-3765-85	

General Chemistry (Continued)

Analysis Batch: 471447 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-14	FD-3_25_10	Total/NA	Water	I-3765-85	
310-318779-17	SW-5_25_10	Total/NA	Water	I-3765-85	
MB 310-471447/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-471447/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Analysis Batch: 471484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-4	MW-18_25_10	Total/NA	Water	SM 4500 Cl- E	
310-318779-5	MW-29A_25_10	Total/NA	Water	SM 4500 Cl- E	
310-318779-6	MW-35_25_10	Total/NA	Water	SM 4500 Cl- E	
310-318779-7	MW-39A_25_10	Total/NA	Water	SM 4500 Cl- E	
310-318779-16	SW-2_25_10	Total/NA	Water	SM 4500 Cl- E	
310-318779-17	SW-5_25_10	Total/NA	Water	SM 4500 Cl- E	
MB 310-471484/16	Method Blank	Total/NA	Water	SM 4500 Cl- E	
MB 310-471484/35	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 310-471484/14	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
LCS 310-471484/85	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

Prep Batch: 471559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-3	MW-7A_25_10	Total/NA	Water	9012B	
310-318779-11	MW-46A_25_10	Total/NA	Water	9012B	
310-318779-13	FD-1_25_10	Total/NA	Water	9012B	
MB 310-471559/1-A	Method Blank	Total/NA	Water	9012B	
LCS 310-471559/2-A	Lab Control Sample	Total/NA	Water	9012B	

Analysis Batch: 471567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-2	MW-4_25_10	Total/NA	Water	I-3765-85	
310-318779-3	MW-7A_25_10	Total/NA	Water	I-3765-85	
310-318779-4	MW-18_25_10	Total/NA	Water	I-3765-85	
310-318779-5	MW-29A_25_10	Total/NA	Water	I-3765-85	
310-318779-7	MW-39A_25_10	Total/NA	Water	I-3765-85	
310-318779-10	MW-45A_25_10	Total/NA	Water	I-3765-85	
310-318779-11	MW-46A_25_10	Total/NA	Water	I-3765-85	
310-318779-12	EB-2_25_10	Total/NA	Water	I-3765-85	
310-318779-13	FD-1_25_10	Total/NA	Water	I-3765-85	
310-318779-16	SW-2_25_10	Total/NA	Water	I-3765-85	
MB 310-471567/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-471567/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Analysis Batch: 471606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-11	MW-46A_25_10	Total/NA	Water	SM 2540C	
MB 310-471606/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-471606/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 471650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-1	MW-2R_25_10	Total/NA	Water	SM 4500 Cl- E	
310-318779-2	MW-4_25_10	Total/NA	Water	SM 4500 Cl- E	

General Chemistry (Continued)

Analysis Batch: 471650 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-3	MW-7A_25_10	Total/NA	Water	SM 4500 Cl- E	
310-318779-8	MW-43A_25_10	Total/NA	Water	SM 4500 Cl- E	
310-318779-9	MW-44A_25_10	Total/NA	Water	SM 4500 Cl- E	
310-318779-10	MW-45A_25_10	Total/NA	Water	SM 4500 Cl- E	
310-318779-11	MW-46A_25_10	Total/NA	Water	SM 4500 Cl- E	
MB 310-471650/16	Method Blank	Total/NA	Water	SM 4500 Cl- E	
MB 310-471650/45	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 310-471650/46	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 471804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-3	MW-7A_25_10	Total/NA	Water	9012B	471559
310-318779-11	MW-46A_25_10	Total/NA	Water	9012B	471559
310-318779-13	FD-1_25_10	Total/NA	Water	9012B	471559
MB 310-471559/1-A	Method Blank	Total/NA	Water	9012B	471559
LCS 310-471559/2-A	Lab Control Sample	Total/NA	Water	9012B	471559

Analysis Batch: 471813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-1	MW-2R_25_10	Total/NA	Water	SM 2320B	
310-318779-2	MW-4_25_10	Total/NA	Water	SM 2320B	
310-318779-3	MW-7A_25_10	Total/NA	Water	SM 2320B	
310-318779-4	MW-18_25_10	Total/NA	Water	SM 2320B	
310-318779-5	MW-29A_25_10	Total/NA	Water	SM 2320B	
310-318779-6	MW-35_25_10	Total/NA	Water	SM 2320B	
310-318779-7	MW-39A_25_10	Total/NA	Water	SM 2320B	
310-318779-8	MW-43A_25_10	Total/NA	Water	SM 2320B	
310-318779-9	MW-44A_25_10	Total/NA	Water	SM 2320B	
310-318779-10	MW-45A_25_10	Total/NA	Water	SM 2320B	
310-318779-11	MW-46A_25_10	Total/NA	Water	SM 2320B	
310-318779-16	SW-2_25_10	Total/NA	Water	SM 2320B	
310-318779-17	SW-5_25_10	Total/NA	Water	SM 2320B	
LCS 310-471813/2	Lab Control Sample	Total/NA	Water	SM 2320B	
LCS 310-471813/25	Lab Control Sample	Total/NA	Water	SM 2320B	
310-318779-5 DU	MW-29A_25_10	Total/NA	Water	SM 2320B	

Analysis Batch: 471918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-1	MW-2R_25_10	Total/NA	Water	SM 5220D	
310-318779-2	MW-4_25_10	Total/NA	Water	SM 5220D	
310-318779-3	MW-7A_25_10	Total/NA	Water	SM 5220D	
310-318779-4	MW-18_25_10	Total/NA	Water	SM 5220D	
310-318779-5	MW-29A_25_10	Total/NA	Water	SM 5220D	
310-318779-6	MW-35_25_10	Total/NA	Water	SM 5220D	
310-318779-7	MW-39A_25_10	Total/NA	Water	SM 5220D	
310-318779-8	MW-43A_25_10	Total/NA	Water	SM 5220D	
310-318779-9	MW-44A_25_10	Total/NA	Water	SM 5220D	
310-318779-10	MW-45A_25_10	Total/NA	Water	SM 5220D	
310-318779-11	MW-46A_25_10	Total/NA	Water	SM 5220D	
310-318779-16	SW-2_25_10	Total/NA	Water	SM 5220D	
310-318779-17	SW-5_25_10	Total/NA	Water	SM 5220D	

General Chemistry (Continued)

Analysis Batch: 471918 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-471918/32	Method Blank	Total/NA	Water	SM 5220D	
MB 310-471918/5	Method Blank	Total/NA	Water	SM 5220D	
LCS 310-471918/3	Lab Control Sample	Total/NA	Water	SM 5220D	
LCS 310-471918/33	Lab Control Sample	Total/NA	Water	SM 5220D	
310-318779-3 MS	MW-7A_25_10	Total/NA	Water	SM 5220D	
310-318779-3 MSD	MW-7A_25_10	Total/NA	Water	SM 5220D	

Analysis Batch: 472104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-1	MW-2R_25_10	Total/NA	Water	D516-16	
310-318779-2	MW-4_25_10	Total/NA	Water	D516-16	
310-318779-3	MW-7A_25_10	Total/NA	Water	D516-16	
310-318779-4	MW-18_25_10	Total/NA	Water	D516-16	
310-318779-5	MW-29A_25_10	Total/NA	Water	D516-16	
310-318779-6	MW-35_25_10	Total/NA	Water	D516-16	
310-318779-7	MW-39A_25_10	Total/NA	Water	D516-16	
310-318779-8	MW-43A_25_10	Total/NA	Water	D516-16	
310-318779-9	MW-44A_25_10	Total/NA	Water	D516-16	
310-318779-10	MW-45A_25_10	Total/NA	Water	D516-16	
310-318779-11	MW-46A_25_10	Total/NA	Water	D516-16	
310-318779-16	SW-2_25_10	Total/NA	Water	D516-16	
310-318779-17	SW-5_25_10	Total/NA	Water	D516-16	
MB 310-472104/16	Method Blank	Total/NA	Water	D516-16	
LCS 310-472104/14	Lab Control Sample	Total/NA	Water	D516-16	

Analysis Batch: 472154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-1	MW-2R_25_10	Total/NA	Water	4500 F C-2011	
310-318779-2	MW-4_25_10	Total/NA	Water	4500 F C-2011	
310-318779-3	MW-7A_25_10	Total/NA	Water	4500 F C-2011	
310-318779-4	MW-18_25_10	Total/NA	Water	4500 F C-2011	
310-318779-5	MW-29A_25_10	Total/NA	Water	4500 F C-2011	
310-318779-6	MW-35_25_10	Total/NA	Water	4500 F C-2011	
310-318779-7	MW-39A_25_10	Total/NA	Water	4500 F C-2011	
310-318779-8	MW-43A_25_10	Total/NA	Water	4500 F C-2011	
310-318779-9	MW-44A_25_10	Total/NA	Water	4500 F C-2011	
310-318779-10	MW-45A_25_10	Total/NA	Water	4500 F C-2011	
310-318779-11	MW-46A_25_10	Total/NA	Water	4500 F C-2011	
310-318779-16	SW-2_25_10	Total/NA	Water	4500 F C-2011	
310-318779-17	SW-5_25_10	Total/NA	Water	4500 F C-2011	
MB 310-472154/5	Method Blank	Total/NA	Water	4500 F C-2011	
LCS 310-472154/6	Lab Control Sample	Total/NA	Water	4500 F C-2011	

Prep Batch: 678305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-3	MW-7A_25_10	Total/NA	Water	9030B	
310-318779-5	MW-29A_25_10	Total/NA	Water	9030B	
310-318779-11	MW-46A_25_10	Total/NA	Water	9030B	
310-318779-13	FD-1_25_10	Total/NA	Water	9030B	
MB 240-678305/1-A	Method Blank	Total/NA	Water	9030B	
LCS 240-678305/2-A	Lab Control Sample	Total/NA	Water	9030B	

QC Association Summary

Client: Winneshiek Co Solid Waste
Job ID: 310-318779-1
Project/Site: Winneshiek County Sanitary Landfill

General Chemistry

Analysis Batch: 678361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318779-3	MW-7A_25_10	Total/NA	Water	9034	678305
310-318779-5	MW-29A_25_10	Total/NA	Water	9034	678305
310-318779-11	MW-46A_25_10	Total/NA	Water	9034	678305
310-318779-13	FD-1_25_10	Total/NA	Water	9034	678305
MB 240-678305/1-A	Method Blank	Total/NA	Water	9034	678305
LCS 240-678305/2-A	Lab Control Sample	Total/NA	Water	9034	678305

Lab Chronicle

Client: Winneshiek Co Solid Waste
Job ID: 310-318779-1
Project/Site: Winneshiek County Sanitary Landfill

Client Sample ID: MW-2R_25_10
Lab Sample ID: 310-318779-1
Date Collected: 10/22/25 15:15
Matrix: Water
Date Received: 10/23/25 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471555	WSE8	EET CF	10/28/25 15:18
Total/NA	Prep	3005A			471618	RLT9	EET CF	10/29/25 09:00
Total/NA	Analysis	6020B		1	472317	NFT2	EET CF	11/03/25 17:54
Total/NA	Prep	3005A			471618	RLT9	EET CF	10/29/25 09:00
Total/NA	Analysis	6020B		1	472466	NFT2	EET CF	11/04/25 15:30
Total/NA	Analysis	353.2		1	471397	HE7K	EET CF	10/31/25 13:23
Total/NA	Analysis	4500 F C-2011		1	472154	WZC8	EET CF	11/02/25 12:11
Total/NA	Analysis	D516-16		1	472104	WZC8	EET CF	10/31/25 14:57
Total/NA	Analysis	I-3765-85		1	471447	DGU1	EET CF	10/27/25 13:58
Total/NA	Analysis	SM 1030E		1	471396	HE7K	EET CF	10/27/25 10:47
Total/NA	Analysis	SM 2320B		1	471813	HE7K	EET CF	10/29/25 19:50
Total/NA	Analysis	SM 2540C		1	471425	ENB7	EET CF	10/27/25 12:05
Total/NA	Analysis	SM 4500 Cl- E		1	471650	ZJX4	EET CF	10/28/25 23:48
Total/NA	Analysis	SM 5210B		1	471090	W9YR	EET CF	10/23/25 16:10
Total/NA	Analysis	SM 5220D		5	471918	ENB7	EET CF	10/30/25 13:52

Client Sample ID: MW-4_25_10
Lab Sample ID: 310-318779-2
Date Collected: 10/22/25 09:25
Matrix: Water
Date Received: 10/23/25 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471555	WSE8	EET CF	10/28/25 15:40
Total/NA	Prep	3005A			471618	RLT9	EET CF	10/29/25 09:00
Total/NA	Analysis	6020B		1	472317	NFT2	EET CF	11/03/25 17:57
Total/NA	Prep	3005A			471618	RLT9	EET CF	10/29/25 09:00
Total/NA	Analysis	6020B		1	472466	NFT2	EET CF	11/04/25 15:33
Total/NA	Analysis	353.2		1	471397	HE7K	EET CF	10/31/25 13:24
Total/NA	Analysis	4500 F C-2011		1	472154	WZC8	EET CF	11/02/25 12:14
Total/NA	Analysis	D516-16		1	472104	WZC8	EET CF	10/31/25 14:58
Total/NA	Analysis	I-3765-85		1	471567	DGU1	EET CF	10/28/25 11:38
Total/NA	Analysis	SM 1030E		1	471396	HE7K	EET CF	10/27/25 10:47
Total/NA	Analysis	SM 2320B		1	471813	HE7K	EET CF	10/29/25 20:02
Total/NA	Analysis	SM 2540C		1	471425	ENB7	EET CF	10/27/25 12:05
Total/NA	Analysis	SM 4500 Cl- E		1	471650	ZJX4	EET CF	10/28/25 23:48
Total/NA	Analysis	SM 5210B		1	471090	W9YR	EET CF	10/23/25 16:04
Total/NA	Analysis	SM 5220D		5	471918	ENB7	EET CF	10/30/25 13:52

Client Sample ID: MW-7A_25_10
Lab Sample ID: 310-318779-3

Date Collected: 10/22/25 14:10
Matrix: Water
Date Received: 10/23/25 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471555	WSE8	EET CF	10/28/25 16:03
Total/NA	Prep	3510C			471206	J5BR	EET CF	10/24/25 09:22
Total/NA	Analysis	8270E		1	472246	V7YZ	EET CF	11/03/25 21:45
Total/NA	Analysis	8015C		1	472083	BW2O	EET CF	10/31/25 21:39
Total/NA	Prep	3511			471719	BW2O	EET CF	10/29/25 10:07
Total/NA	Analysis	8081B		1	471865	BW2O	EET CF	10/30/25 12:49
Total/NA	Prep	3511			471719	BW2O	EET CF	10/29/25 10:07
Total/NA	Analysis	8082A		1	471864	BW2O	EET CF	10/30/25 12:49
Total/NA	Prep	8151A			721636	QJZ6	ELLE	10/29/25 15:26
Total/NA	Analysis	8151A		1	721887	UAMZ	ELLE	10/30/25 18:09
Total/NA	Prep	3005A			471618	RLT9	EET CF	10/29/25 09:00
Total/NA	Analysis	6020B		1	472317	NFT2	EET CF	11/03/25 17:59
Total/NA	Prep	3005A			471618	RLT9	EET CF	10/29/25 09:00
Total/NA	Analysis	6020B		1	472466	NFT2	EET CF	11/04/25 15:36
Total/NA	Prep	7470A			472216	RLT9	EET CF	11/03/25 12:50
Total/NA	Analysis	7470A		1	472402	RLT9	EET CF	11/04/25 11:03
Total/NA	Analysis	353.2		1	471397	HE7K	EET CF	10/31/25 13:26
Total/NA	Analysis	4500 F C-2011		1	472154	WZC8	EET CF	11/02/25 12:17
Total/NA	Prep	9012B			471559	ENB7	EET CF	10/28/25 10:55
Total/NA	Analysis	9012B		1	471804	ZJX4	EET CF	10/29/25 21:06
Total/NA	Prep	9030B			678305	VH6H	EET CLE	10/29/25 12:25
Total/NA	Analysis	9034		1	678361	VH6H	EET CLE	10/29/25 16:45
Total/NA	Analysis	D516-16		1	472104	WZC8	EET CF	10/31/25 14:58
Total/NA	Analysis	I-3765-85		1	471567	DGU1	EET CF	10/28/25 11:38
Total/NA	Analysis	SM 1030E		1	471396	HE7K	EET CF	10/27/25 10:47
Total/NA	Analysis	SM 2320B		1	471813	HE7K	EET CF	10/29/25 20:22
Total/NA	Analysis	SM 2540C		1	471425	ENB7	EET CF	10/27/25 12:05
Total/NA	Analysis	SM 4500 Cl- E		1	471650	ZJX4	EET CF	10/28/25 23:49
Total/NA	Analysis	SM 5210B		1	471100	W9YR	EET CF	10/23/25 16:17
Total/NA	Analysis	SM 5220D		5	471918	ENB7	EET CF	10/30/25 13:52

Client Sample ID: MW-18_25_10
Lab Sample ID: 310-318779-4

Date Collected: 10/22/25 16:55
Matrix: Water
Date Received: 10/23/25 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471555	WSE8	EET CF	10/28/25 16:26
Total/NA	Prep	3005A			471618	RLT9	EET CF	10/29/25 09:00
Total/NA	Analysis	6020B		1	472317	NFT2	EET CF	11/03/25 18:08
Total/NA	Prep	3005A			471618	RLT9	EET CF	10/29/25 09:00
Total/NA	Analysis	6020B		1	472466	NFT2	EET CF	11/04/25 15:39
Total/NA	Analysis	353.2		1	471397	HE7K	EET CF	10/31/25 13:28
Total/NA	Analysis	4500 F C-2011		1	472154	WZC8	EET CF	11/02/25 12:20

Lab Chronicle

Client: Winneshiek Co Solid Waste
Job ID: 310-318779-1
Project/Site: Winneshiek County Sanitary Landfill

Client Sample ID: MW-18_25_10
Lab Sample ID: 310-318779-4
Date Collected: 10/22/25 16:55
Matrix: Water
Date Received: 10/23/25 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D516-16		1	472104	WZC8	EET CF	10/31/25 14:59
Total/NA	Analysis	I-3765-85		1	471567	DGU1	EET CF	10/28/25 11:38
Total/NA	Analysis	SM 1030E		1	471396	HE7K	EET CF	10/27/25 10:47
Total/NA	Analysis	SM 2320B		1	471813	HE7K	EET CF	10/29/25 14:23
Total/NA	Analysis	SM 2540C		1	471425	ENB7	EET CF	10/27/25 12:05
Total/NA	Analysis	SM 4500 Cl- E		1	471484	ZJX4	EET CF	10/27/25 20:21
Total/NA	Analysis	SM 5210B		1	471090	W9YR	EET CF	10/23/25 16:07
Total/NA	Analysis	SM 5220D		5	471918	ENB7	EET CF	10/30/25 13:52

Client Sample ID: MW-29A_25_10
Lab Sample ID: 310-318779-5
Date Collected: 10/22/25 12:00
Matrix: Water
Date Received: 10/23/25 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471555	WSE8	EET CF	10/28/25 16:48
Total/NA	Prep	3005A			471618	RLT9	EET CF	10/29/25 09:00
Total/NA	Analysis	6020B		1	472317	NFT2	EET CF	11/03/25 18:11
Total/NA	Prep	3005A			471618	RLT9	EET CF	10/29/25 09:00
Total/NA	Analysis	6020B		1	472466	NFT2	EET CF	11/04/25 15:41
Total/NA	Analysis	353.2		1	471397	HE7K	EET CF	10/31/25 13:30
Total/NA	Analysis	4500 F C-2011		1	472154	WZC8	EET CF	11/02/25 12:23
Total/NA	Prep	9030B			678305	VH6H	EET CLE	10/29/25 12:25
Total/NA	Analysis	9034		1	678361	VH6H	EET CLE	10/29/25 16:45
Total/NA	Analysis	D516-16		10	472104	WZC8	EET CF	10/31/25 14:59
Total/NA	Analysis	I-3765-85		1	471567	DGU1	EET CF	10/28/25 11:38
Total/NA	Analysis	SM 1030E		1	471396	HE7K	EET CF	10/27/25 10:47
Total/NA	Analysis	SM 2320B		1	471813	HE7K	EET CF	10/29/25 14:33
Total/NA	Analysis	SM 2540C		1	471425	ENB7	EET CF	10/27/25 12:05
Total/NA	Analysis	SM 4500 Cl- E		10	471484	ZJX4	EET CF	10/27/25 20:37
Total/NA	Analysis	SM 5210B		1	471090	W9YR	EET CF	10/23/25 15:50
Total/NA	Analysis	SM 5220D		5	471918	ENB7	EET CF	10/30/25 13:52

Client Sample ID: MW-35_25_10
Lab Sample ID: 310-318779-6
Date Collected: 10/21/25 16:40
Matrix: Water
Date Received: 10/23/25 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471555	WSE8	EET CF	10/28/25 13:25
Total/NA	Prep	3005A			471618	RLT9	EET CF	10/29/25 09:00
Total/NA	Analysis	6020B		1	472317	NFT2	EET CF	11/03/25 18:14
Total/NA	Prep	3005A			471618	RLT9	EET CF	10/29/25 09:00
Total/NA	Analysis	6020B		1	472466	NFT2	EET CF	11/04/25 15:44
Total/NA	Analysis	353.2		1	471397	HE7K	EET CF	10/31/25 13:32

Lab Chronicle

Client: Winneshiek Co Solid Waste
Job ID: 310-318779-1
Project/Site: Winneshiek County Sanitary Landfill

Client Sample ID: MW-35_25_10
Lab Sample ID: 310-318779-6
Date Collected: 10/21/25 16:40
Matrix: Water
Date Received: 10/23/25 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	4500 F C-2011		1	472154	WZC8	EET CF	11/02/25 12:26
Total/NA	Analysis	D516-16		1	472104	WZC8	EET CF	10/31/25 15:00
Total/NA	Analysis	I-3765-85		1	471260	DGU1	EET CF	10/24/25 12:31
Total/NA	Analysis	SM 1030E		1	471396	HE7K	EET CF	10/27/25 10:47
Total/NA	Analysis	SM 2320B		1	471813	HE7K	EET CF	10/29/25 15:01
Total/NA	Analysis	SM 2540C		1	471289	TGN5	EET CF	10/24/25 14:09
Total/NA	Analysis	SM 4500 Cl- E		10	471484	ZJX4	EET CF	10/27/25 20:38
Total/NA	Analysis	SM 5210B		1	471090	W9YR	EET CF	10/23/25 15:47
Total/NA	Analysis	SM 5220D		5	471918	ENB7	EET CF	10/30/25 13:52

Client Sample ID: MW-39A_25_10
Lab Sample ID: 310-318779-7
Date Collected: 10/22/25 09:45
Matrix: Water
Date Received: 10/23/25 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471555	WSE8	EET CF	10/28/25 17:11
Total/NA	Prep	3005A			471618	RLT9	EET CF	10/29/25 09:00
Total/NA	Analysis	6020B		1	472317	NFT2	EET CF	11/03/25 18:17
Total/NA	Prep	3005A			471618	RLT9	EET CF	10/29/25 09:00
Total/NA	Analysis	6020B		1	472466	NFT2	EET CF	11/04/25 15:53
Total/NA	Analysis	353.2		1	471397	HE7K	EET CF	10/31/25 15:03
Total/NA	Analysis	4500 F C-2011		1	472154	WZC8	EET CF	11/02/25 12:29
Total/NA	Analysis	D516-16		1	472104	WZC8	EET CF	10/31/25 15:00
Total/NA	Analysis	I-3765-85		1	471567	DGU1	EET CF	10/28/25 11:38
Total/NA	Analysis	SM 1030E		1	471396	HE7K	EET CF	10/27/25 10:47
Total/NA	Analysis	SM 2320B		1	471813	HE7K	EET CF	10/29/25 15:13
Total/NA	Analysis	SM 2540C		1	471289	TGN5	EET CF	10/24/25 14:09
Total/NA	Analysis	SM 4500 Cl- E		1	471484	ZJX4	EET CF	10/27/25 20:22
Total/NA	Analysis	SM 5210B		1	471090	W9YR	EET CF	10/23/25 15:54
Total/NA	Analysis	SM 5220D		5	471918	ENB7	EET CF	10/30/25 13:52

Client Sample ID: MW-43A_25_10
Lab Sample ID: 310-318779-8
Date Collected: 10/21/25 15:35
Matrix: Water
Date Received: 10/23/25 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471555	WSE8	EET CF	10/28/25 13:48
Total/NA	Prep	3005A			471621	RLT9	EET CF	10/29/25 09:00
Total/NA	Analysis	6020B		1	472611	NFT2	EET CF	11/05/25 14:19
Total/NA	Analysis	353.2		1	471397	HE7K	EET CF	10/31/25 13:36
Total/NA	Analysis	4500 F C-2011		1	472154	WZC8	EET CF	11/02/25 12:32
Total/NA	Analysis	D516-16		5	472104	WZC8	EET CF	10/31/25 15:00

Lab Chronicle

Client: Winneshiek Co Solid Waste
Job ID: 310-318779-1
Project/Site: Winneshiek County Sanitary Landfill

Client Sample ID: MW-43A_25_10
Lab Sample ID: 310-318779-8
Date Collected: 10/21/25 15:35
Matrix: Water
Date Received: 10/23/25 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	I-3765-85		1	471260	DGU1	EET CF	10/24/25 12:31
Total/NA	Analysis	SM 1030E		1	471396	HE7K	EET CF	10/27/25 10:47
Total/NA	Analysis	SM 2320B		1	471813	HE7K	EET CF	10/29/25 15:23
Total/NA	Analysis	SM 2540C		1	471269	TGN5	EET CF	10/24/25 12:46
Total/NA	Analysis	SM 4500 Cl- E		10	471650	ZJX4	EET CF	10/29/25 00:15
Total/NA	Analysis	SM 5210B		1	471090	W9YR	EET CF	10/23/25 15:27
Total/NA	Analysis	SM 5220D		5	471918	ENB7	EET CF	10/30/25 13:52

Client Sample ID: MW-44A_25_10
Lab Sample ID: 310-318779-9
Date Collected: 10/21/25 16:30
Matrix: Water
Date Received: 10/23/25 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	472433	WSE8	EET CF	11/04/25 20:32
Total/NA	Analysis	8260D		1	471301	WSE8	EET CF	10/25/25 13:29
Total/NA	Prep	3005A			471621	RLT9	EET CF	10/29/25 09:00
Total/NA	Analysis	6020B		1	472611	NFT2	EET CF	11/05/25 14:30
Total/NA	Prep	3005A			471621	RLT9	EET CF	10/29/25 09:00
Total/NA	Analysis	6020B		1	472743	NFT2	EET CF	11/06/25 13:50
Total/NA	Analysis	353.2		1	471397	HE7K	EET CF	10/31/25 14:25
Total/NA	Analysis	4500 F C-2011		1	472154	WZC8	EET CF	11/02/25 12:35
Total/NA	Analysis	D516-16		5	472104	WZC8	EET CF	10/31/25 15:02
Total/NA	Analysis	I-3765-85		1	471260	DGU1	EET CF	10/24/25 12:31
Total/NA	Analysis	SM 1030E		1	471396	HE7K	EET CF	10/27/25 10:47
Total/NA	Analysis	SM 2320B		1	471813	HE7K	EET CF	10/29/25 15:34
Total/NA	Analysis	SM 2540C		1	471269	TGN5	EET CF	10/24/25 12:46
Total/NA	Analysis	SM 4500 Cl- E		10	471650	ZJX4	EET CF	10/29/25 00:15
Total/NA	Analysis	SM 5210B		1	471090	W9YR	EET CF	10/23/25 15:30
Total/NA	Analysis	SM 5220D		5	471918	ENB7	EET CF	10/30/25 13:52

Client Sample ID: MW-45A_25_10
Lab Sample ID: 310-318779-10
Date Collected: 10/22/25 13:40
Matrix: Water
Date Received: 10/23/25 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471555	WSE8	EET CF	10/28/25 17:33
Total/NA	Prep	3005A			471621	RLT9	EET CF	10/29/25 09:00
Total/NA	Analysis	6020B		1	472611	NFT2	EET CF	11/05/25 14:33
Total/NA	Analysis	353.2		1	471397	HE7K	EET CF	10/31/25 14:27
Total/NA	Analysis	4500 F C-2011		1	472154	WZC8	EET CF	11/02/25 12:44
Total/NA	Analysis	D516-16		1	472104	WZC8	EET CF	10/31/25 15:02
Total/NA	Analysis	I-3765-85		1	471567	DGU1	EET CF	10/28/25 11:38

Lab Chronicle

Client: Winneshiek Co Solid Waste
Job ID: 310-318779-1
Project/Site: Winneshiek County Sanitary Landfill

Client Sample ID: MW-45A_25_10
Lab Sample ID: 310-318779-10
Date Collected: 10/22/25 13:40
Matrix: Water
Date Received: 10/23/25 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 1030E		1	471396	HE7K	EET CF	10/27/25 10:47
Total/NA	Analysis	SM 2320B		1	471813	HE7K	EET CF	10/29/25 15:49
Total/NA	Analysis	SM 2540C		1	471289	TGN5	EET CF	10/24/25 14:09
Total/NA	Analysis	SM 4500 Cl- E		1	471650	ZJX4	EET CF	10/28/25 23:49
Total/NA	Analysis	SM 5210B		1	471090	W9YR	EET CF	10/23/25 15:34
Total/NA	Analysis	SM 5220D		5	471918	ENB7	EET CF	10/30/25 13:52

Client Sample ID: MW-46A_25_10
Lab Sample ID: 310-318779-11
Date Collected: 10/22/25 16:45
Matrix: Water
Date Received: 10/23/25 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471555	WSE8	EET CF	10/28/25 17:56
Total/NA	Prep	3510C			471206	J5BR	EET CF	10/24/25 09:22
Total/NA	Analysis	8270E		1	472246	V7YZ	EET CF	11/03/25 22:11
Total/NA	Analysis	8015C		1	472083	BW2O	EET CF	10/31/25 21:59
Total/NA	Prep	3511			471719	BW2O	EET CF	10/29/25 10:07
Total/NA	Analysis	8081B		1	471865	BW2O	EET CF	10/30/25 13:03
Total/NA	Prep	3511			471719	BW2O	EET CF	10/29/25 10:07
Total/NA	Analysis	8082A		1	471864	BW2O	EET CF	10/30/25 13:03
Total/NA	Prep	8151A			721636	QJZ6	ELLE	10/29/25 15:26
Total/NA	Analysis	8151A		1	721887	UAMZ	ELLE	10/30/25 18:37
Total/NA	Prep	3005A			471621	RLT9	EET CF	10/29/25 09:00
Total/NA	Analysis	6020B		1	472611	NFT2	EET CF	11/05/25 14:36
Total/NA	Prep	7470A			472216	RLT9	EET CF	11/03/25 12:50
Total/NA	Analysis	7470A		1	472402	RLT9	EET CF	11/04/25 11:05
Total/NA	Analysis	353.2		1	471397	HE7K	EET CF	10/31/25 14:29
Total/NA	Analysis	4500 F C-2011		1	472154	WZC8	EET CF	11/02/25 12:47
Total/NA	Prep	9012B			471559	ENB7	EET CF	10/28/25 10:55
Total/NA	Analysis	9012B		1	471804	ZJX4	EET CF	10/29/25 20:54
Total/NA	Prep	9030B			678305	VH6H	EET CLE	10/29/25 12:25
Total/NA	Analysis	9034		1	678361	VH6H	EET CLE	10/29/25 16:45
Total/NA	Analysis	D516-16		5	472104	WZC8	EET CF	10/31/25 15:03
Total/NA	Analysis	I-3765-85		1	471567	DGU1	EET CF	10/28/25 11:38
Total/NA	Analysis	SM 1030E		1	471396	HE7K	EET CF	10/27/25 10:47
Total/NA	Analysis	SM 2320B		1	471813	HE7K	EET CF	10/29/25 15:59
Total/NA	Analysis	SM 2540C		1	471606	TGN5	EET CF	10/28/25 14:22
Total/NA	Analysis	SM 4500 Cl- E		10	471650	ZJX4	EET CF	10/29/25 00:13
Total/NA	Analysis	SM 5210B		1	471090	W9YR	EET CF	10/23/25 15:37
Total/NA	Analysis	SM 5220D		5	471918	ENB7	EET CF	10/30/25 13:52

Lab Chronicle

Client: Winneshiek Co Solid Waste
Job ID: 310-318779-1
Project/Site: Winneshiek County Sanitary Landfill

Client Sample ID: EB-2_25_10
Lab Sample ID: 310-318779-12
Date Collected: 10/22/25 17:40
Matrix: Water
Date Received: 10/23/25 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471555	WSE8	EET CF	10/28/25 18:18
Total/NA	Prep	3005A			471621	RLT9	EET CF	10/29/25 09:00
Total/NA	Analysis	6020B		1	472611	NFT2	EET CF	11/05/25 14:38
Total/NA	Analysis	I-3765-85		1	471567	DGU1	EET CF	10/28/25 11:38

Client Sample ID: FD-1_25_10
Lab Sample ID: 310-318779-13
Date Collected: 10/22/25 00:00
Matrix: Water
Date Received: 10/23/25 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471555	WSE8	EET CF	10/28/25 18:41
Total/NA	Prep	3510C			471206	J5BR	EET CF	10/24/25 09:22
Total/NA	Analysis	8270E		1	472246	V7YZ	EET CF	11/03/25 22:38
Total/NA	Analysis	8015C		1	472083	BW2O	EET CF	10/31/25 22:20
Total/NA	Prep	3511			471719	BW2O	EET CF	10/29/25 10:07
Total/NA	Analysis	8081B		1	471865	BW2O	EET CF	10/30/25 13:17
Total/NA	Prep	3511			471719	BW2O	EET CF	10/29/25 10:07
Total/NA	Analysis	8082A		1	471864	BW2O	EET CF	10/30/25 13:17
Total/NA	Prep	8151A			721636	QJZ6	ELLE	10/29/25 15:26
Total/NA	Analysis	8151A		1	721887	UAMZ	ELLE	10/30/25 19:06
Total/NA	Prep	3005A			471621	RLT9	EET CF	10/29/25 09:00
Total/NA	Analysis	6020B		1	472611	NFT2	EET CF	11/05/25 14:41
Total/NA	Prep	7470A			472216	RLT9	EET CF	11/03/25 12:50
Total/NA	Analysis	7470A		1	472402	RLT9	EET CF	11/04/25 11:07
Total/NA	Prep	9012B			471559	ENB7	EET CF	10/28/25 10:55
Total/NA	Analysis	9012B		1	471804	ZJX4	EET CF	10/29/25 21:05
Total/NA	Prep	9030B			678305	VH6H	EET CLE	10/29/25 12:25
Total/NA	Analysis	9034		1	678361	VH6H	EET CLE	10/29/25 16:45
Total/NA	Analysis	I-3765-85		1	471567	DGU1	EET CF	10/28/25 11:38

Client Sample ID: FD-3_25_10
Lab Sample ID: 310-318779-14
Date Collected: 10/22/25 00:00
Matrix: Water
Date Received: 10/23/25 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471555	WSE8	EET CF	10/28/25 19:03
Total/NA	Prep	3005A			471621	RLT9	EET CF	10/29/25 09:00
Total/NA	Analysis	6020B		1	472611	NFT2	EET CF	11/05/25 14:50
Total/NA	Analysis	I-3765-85		1	471447	DGU1	EET CF	10/27/25 13:58

Lab Chronicle

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318779-1

Client Sample ID: TB-1_25_10

Date Collected: 10/22/25 00:00
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471555	WSE8	EET CF	10/28/25 14:33

Client Sample ID: SW-2_25_10

Date Collected: 10/22/25 12:05
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471692	WSE8	EET CF	10/29/25 12:50
Total/NA	Prep	3005A			471621	RLT9	EET CF	10/29/25 09:00
Total/NA	Analysis	6020B		1	472611	NFT2	EET CF	11/05/25 14:53
Total/NA	Analysis	353.2		1	471397	HE7K	EET CF	10/31/25 14:31
Total/NA	Analysis	4500 F C-2011		1	472154	WZC8	EET CF	11/02/25 12:50
Total/NA	Analysis	D516-16		1	472104	WZC8	EET CF	10/31/25 15:03
Total/NA	Analysis	I-3765-85		1	471567	DGU1	EET CF	10/28/25 11:38
Total/NA	Analysis	SM 1030E		1	471396	HE7K	EET CF	10/27/25 10:47
Total/NA	Analysis	SM 2320B		1	471813	HE7K	EET CF	10/29/25 16:18
Total/NA	Analysis	SM 2540C		1	471425	ENB7	EET CF	10/27/25 12:05
Total/NA	Analysis	SM 4500 Cl- E		1	471484	ZJX4	EET CF	10/27/25 20:22
Total/NA	Analysis	SM 5210B		1	471090	W9YR	EET CF	10/23/25 15:40
Total/NA	Analysis	SM 5220D		5	471918	ENB7	EET CF	10/30/25 13:52

Client Sample ID: SW-5_25_10

Date Collected: 10/22/25 11:40
Date Received: 10/23/25 15:10

Lab Sample ID: 310-318779-17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471692	WSE8	EET CF	10/29/25 12:27
Total/NA	Prep	3005A			471621	RLT9	EET CF	10/29/25 09:00
Total/NA	Analysis	6020B		1	472611	NFT2	EET CF	11/05/25 14:56
Total/NA	Analysis	353.2		1	471397	HE7K	EET CF	10/31/25 14:33
Total/NA	Analysis	4500 F C-2011		1	472154	WZC8	EET CF	11/02/25 12:53
Total/NA	Analysis	D516-16		1	472104	WZC8	EET CF	10/31/25 15:04
Total/NA	Analysis	I-3765-85		1	471447	DGU1	EET CF	10/27/25 13:58
Total/NA	Analysis	SM 1030E		1	471396	HE7K	EET CF	10/27/25 10:47
Total/NA	Analysis	SM 2320B		1	471813	HE7K	EET CF	10/29/25 16:28
Total/NA	Analysis	SM 2540C		1	471425	ENB7	EET CF	10/27/25 12:05
Total/NA	Analysis	SM 4500 Cl- E		1	471484	ZJX4	EET CF	10/27/25 20:23
Total/NA	Analysis	SM 5210B		1	471090	W9YR	EET CF	10/23/25 16:14
Total/NA	Analysis	SM 5220D		5	471918	ENB7	EET CF	10/30/25 13:52

Lab Chronicle

Client: Winneshiek Co Solid Waste
Job ID: 310-318779-1
Project/Site: Winneshiek County Sanitary Landfill

Client Sample ID: TB-2_25_10
Lab Sample ID: 310-318779-18
Date Collected: 10/22/25 00:00
Matrix: Water
Date Received: 10/23/25 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	471555	WSE8	EET CF	10/28/25 14:55

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Winneshiek Co Solid Waste
Job ID: 310-318779-1
Project/Site: Winneshiek County Sanitary Landfill

Laboratory: Eurofins Cedar Falls

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260D		Water	1,2,4-Trichlorobenzene
8260D		Water	Allyl chloride
8260D		Water	Ethyl methacrylate
8260D		Water	m,p-Xylene
8260D		Water	o-Xylene
SM 1030E		Water	Anion/Cation Balance

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-26
Iowa	State	421	06-01-27
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	2250	09-30-26
New Jersey	NELAP	OH001	06-30-26
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	02-27-26
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-26
Texas	NELAP	T104704517	08-31-26
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-26
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-26
A2LA	Dept. of Energy	0001.01	11-30-26
A2LA	ISO/IEC 17025	0001.01	11-30-26
Alabama	State	43200	01-31-26
Alaska	State	PA00009	06-30-26
Alaska (UST)	State	17-027	12-30-26
Arizona	State	AZ0780	03-12-26
Arkansas DEQ	State	88-00660	08-09-26

Accreditation/Certification Summary

Client: Winneshiek Co Solid Waste
Job ID: 310-318779-1
Project/Site: Winneshiek County Sanitary Landfill

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2792	01-31-26
Colorado	State	PA00009	06-30-26
Connecticut	State	PH-0746	06-30-27
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-26
Delaware (DW)	State	N/A	01-31-26
Florida	NELAP	E87997	07-01-26
Georgia (DW)	State	C048	01-31-26
Illinois	NELAP	200027	01-31-26
Iowa	State	361	03-01-26
Kansas	NELAP	E-10151	10-31-25
Kentucky (DW)	State	KY90088	12-31-25
Kentucky (UST)	State	0001.01	11-30-26
Kentucky (WW)	State	KY90088	12-31-25
Louisiana (All)	NELAP	02055	06-30-26
Maine	State	2019012	03-12-27
Maryland	State	100	06-30-26
Massachusetts	State	M-PA009	06-30-26
Michigan	State	9930	01-31-26
Minnesota	NELAP	042-999-487	12-31-25
Mississippi	State	023	01-31-26
Missouri	State	450	01-31-28
Montana (DW)	State	0098	01-01-26
Nebraska	State	NE-OS-32-17	01-31-26
New Hampshire	NELAP	2730	01-10-26
New Jersey	NELAP	PA011	06-30-26
New York	NELAP	10670	04-01-26
North Carolina (DW)	State	42705	07-31-26
North Carolina (WW/SW)	State	521	12-31-25
North Dakota	State	R-205	01-31-24 *
Ohio	State	87787	01-31-26
Oklahoma	NELAP	9804	12-31-25
Oregon	NELAP	PA200001	09-12-26
Pennsylvania	NELAP	36-00037	01-31-26
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-29
Rhode Island	State	LAO00338	12-30-25
South Carolina	State	89002	01-31-26
Tennessee	State	02838	01-31-26
Texas	NELAP	T104704194-23-46	08-31-26
USDA	US Federal Programs	525-22-298-19481	01-23-26
Vermont	State	VT - 36037	10-28-26
Virginia	NELAP	460182	06-14-26
Washington	State	C457	04-11-26
West Virginia (DW)	State	9906 C	03-31-26
West Virginia DEP	State	055	07-31-26
Wyoming	State	8TMS-L	01-31-26
Wyoming (UST)	A2LA	0001.01	11-30-26

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Winneshiek Co Solid Waste
Project/Site: Winneshiek County Sanitary Landfill

Job ID: 310-318779-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET CF
8015C	Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)	SW846	EET CF
8081B	Organochlorine Pesticides (GC)	SW846	EET CF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CF
8151A	Herbicides (GC)	SW846	ELLE
6020B	Metals (ICP/MS)	SW846	EET CF
7470A	Mercury (CVAA)	SW846	EET CF
353.2	Nitrogen, Nitrate (Calculation)	EPA	EET CF
4500 F C-2011	Fluoride (Ion-selective Electrode)	SM	EET CF
9012B	Cyanide, Total andor Amenable	SW846	EET CF
9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	EET CLE
D516-16	Sulfate	ASTM	EET CF
I-3765-85	Residue, Non-filterable (TSS)	USGS	EET CF
SM 1030E	Cation Anion Balance	SM	EET CF
SM 2320B	Alkalinity	SM	EET CF
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CF
SM 4500 Cl- E	Chloride, Total	SM	EET CF
SM 5210B	BOD, 5-Day	SM	EET CF
SM 5220D	COD	SM	EET CF
3005A	Preparation, Total Metals	SW846	EET CF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CF
3511	Microextraction of Organic Compounds	SW846	EET CF
5030B	Purge and Trap	SW846	EET CF
7470A	Preparation, Mercury	SW846	EET CF
8151A	Extraction (Herbicides)	SW846	ELLE
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	EET CF
9030B	Sulfide, Distillation (Acid Soluble and Insoluble)	SW846	EET CLE

Protocol References:

ASTM = ASTM International
EPA = US Environmental Protection Agency
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
USGS = "Methods For Analysis Of Water And Fluvial Sediments", USGS, 1989

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401
EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

eurofins | Environment Testing America

310-318779 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Winneshiek County Landfill

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 10-23-25 | TIME 1510 | Received By: CGC

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☐ Lab Courier ☐ Lab Field Services ☑ Client Drop-off ☐ Other:

Condition of Cooler/Containers

Sample(s) received in Cooler? ☑ Yes ☐ No *If yes:* Cooler ID:

Multiple Coolers? ☑ Yes ☐ No *If yes:* Cooler # 1 of 7

Cooler Custody Seals Present? ☐ Yes ☑ No *If yes:* Cooler custody seals intact? ☐ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☑ No *If yes:* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☐ Yes ☑ No *If yes.* Which VOA samples are in cooler? ↓

Temperature Record

Coolant: ☑ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other: ☐ NONE

Thermometer ID: AA | Correction Factor (°C): 0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 3.4 | Corrected Temp (°C): 3.4

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g , bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding If no, proceed with login

Additional Comments

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Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Winneshiek County Landfill

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 10-23-25 | TIME 1510 | Received By: CGC

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☐ Lab Courier ☐ Lab Field Services ☑ Client Drop-off ☐ Other.

Condition of Cooler/Containers

Sample(s) received in Cooler? ☑ Yes ☐ No *If yes:* Cooler ID:

Multiple Coolers? ☑ Yes ☐ No *If yes:* Cooler # 2 of 7

Cooler Custody Seals Present? ☐ Yes ☑ No *If yes:* Cooler custody seals intact? ☐ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☑ No *If yes:* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☐ Yes ☑ No *If yes:* Which VOA samples are in cooler? ↓

Temperature Record

Coolant: ☑ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other: ☐ NONE

Thermometer ID: AA | Correction Factor (°C): 0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 0.4 | Corrected Temp (°C): 0.4

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding If no, proceed with login

Additional Comments

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Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Winneshiek County Landfill

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 10-23-25 | TIME 1510 | Received By: CGC

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☐ Lab Courier ☐ Lab Field Services ☑ Client Drop-off ☐ Other:

Condition of Cooler/Containers

Sample(s) received in Cooler? ☑ Yes ☐ No *If yes:* Cooler ID:

Multiple Coolers? ☑ Yes ☐ No *If yes:* Cooler # 3 of 7

Cooler Custody Seals Present? ☐ Yes ☑ No *If yes:* Cooler custody seals intact? ☐ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☑ No *If yes:* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☑ Yes ☐ No *If yes.* Which VOA samples are in cooler? ↓

MW 2R-25-10, MW-18-25-10, MW-35_25-10

Temperature Record

Coolant: ☑ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other: ☐ NONE

Thermometer ID: AA | Correction Factor (°C): 0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 1.6 | Corrected Temp (°C): 1.6

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g , bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE If yes, contact PM before proceeding If no, proceed with login

Additional Comments

TB-1

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Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Winneshiek County Landfill

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 10-23-25 | TIME 1510 | Received By: CGC

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☐ Lab Courier ☐ Lab Field Services ☑ Client Drop-off ☐ Other: _____

Condition of Cooler/Containers

Sample(s) received in Cooler? ☑ Yes ☐ No *If yes:* Cooler ID:

Multiple Coolers? ☑ Yes ☐ No *If yes:* Cooler # 4 of 7

Cooler Custody Seals Present? ☐ Yes ☑ No *If yes:* Cooler custody seals intact? ☐ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☑ No *If yes:* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☐ Yes ☑ No *If yes:* Which VOA samples are in cooler? ↓

Temperature Record

Coolant: ☑ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other: _____ ☐ NONE

Thermometer ID: AA | Correction Factor (°C): 0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 2.1 | Corrected Temp (°C): 2.1

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g , bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE If yes, contact PM before proceeding If no, proceed with login

Additional Comments

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Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Winneshiek County Landfill

City/State. CITY: | STATE: | Project:

Receipt Information

Date/Time Received. DATE: 10-23-25 | TIME: 1510 | Received By: CGC

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee
☐ Lab Courier ☐ Lab Field Services ☑ Client Drop-off ☐ Other:

Condition of Cooler/Containers

Sample(s) received in Cooler? ☑ Yes ☐ No *If yes:* Cooler ID:

Multiple Coolers? ☑ Yes ☐ No *If yes:* Cooler # 5 of 7

Cooler Custody Seals Present? ☐ Yes ☑ No *If yes.* Cooler custody seals intact? ☐ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☑ No *If yes:* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☐ Yes ☑ No *If yes.* Which VOA samples are in cooler? ↓

Temperature Record

Coolant: ☑ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other: ☐ NONE

Thermometer ID: AA | Correction Factor (°C): 0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 1.8 | Corrected Temp (°C): 1.8

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE If yes, contact PM before proceeding If no, proceed with login

Additional Comments

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Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Winneshiek County Landfill

City/State | CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 10-23-25 | TIME 1510 | Received By: CGC

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☐ Lab Courier ☐ Lab Field Services ☑ Client Drop-off ☐ Other: _____

Condition of Cooler/Containers

Sample(s) received in Cooler? ☑ Yes ☐ No *If yes* Cooler ID:

Multiple Coolers? ☑ Yes ☐ No *If yes:* Cooler # 6 of 7

Cooler Custody Seals Present? ☐ Yes ☒ No *If yes:* Cooler custody seals intact? ☐ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☒ No *If yes:* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☑ Yes ☐ No *If yes.* Which VOA samples are in cooler? ↓

MW-43A-25-10, MW-44A-25-10, MW-45A-25-10

Temperature Record

Coolant: ☑ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other: _____ ☐ NONE

Thermometer ID: AA | Correction Factor (°C): 0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 3.6 | Corrected Temp (°C): 3.6

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding If no, proceed with login

Additional Comments

TB-2

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Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: Winneshiek County Landfill

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 10-23-25 | TIME 1510 | Received By: CGC

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☐ Lab Courier ☐ Lab Field Services ☑ Client Drop-off ☐ Other:

Condition of Cooler/Containers

Sample(s) received in Cooler?	☑ Yes	☐ No	*If yes* Cooler ID:
Multiple Coolers?	☑ Yes	☐ No	*If yes:* Cooler # 7 of 7
Cooler Custody Seals Present?	☐ Yes	☑ No	*If yes:* Cooler custody seals intact? ☐ Yes ☐ No
Sample Custody Seals Present?	☐ Yes	☑ No	*If yes:* Sample custody seals intact? ☐ Yes ☐ No
Trip Blank Present?	☐ Yes	☑ No	*If yes:* Which VOA samples are in cooler? ↓

Temperature Record

Coolant: ☑ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other: ☐ NONE

Thermometer ID: AA | Correction Factor (°C): 0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 0.9 | Corrected Temp (°C): 0.9

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g , bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE: If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

Foth

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT All relevant fields must be completed accurately

Page: 1 of 5 **COC Number:** 1-3865545471-071825-834489

Company: Foth Infrastructure & Environment, LLC	Report To: Hannah Dubbs/Gina Wilming (Foth)	Requested Due Date:	Quote Reference:
Address: 411 6th Avenue SE, Suite 400	Copy To:	*TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To: TJ Shissel (Winneshiek)		Project #: 25W024.00
Phone: (319) 365-9565	P O		Profile #:
Email Addresses: hannah.dubbs@foth.com	Project Name: Winneshiek County Sanitary Landfill	Regulatory Agency: Iowa DNR	Sampling Team Members. Tyler Merritt Curtis Schwartz
gina.wilming@foth.com	Task #: 25W024_25_10	State Location: Iowa	

Lab ID NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: IA Appendix I List	TSS	Sulfide	Endosulfan I	Appendix II VOCs	Appendix II List	Annual Parameter List	Filtered (Y/N)	REMARKS / Lab ID
															N	N	N	N	N	N	N		
1	GU-1_25_10	GU-1	WG	G	—	—									X	X					X		No Sample Submitted
2	GU-2_25_10	GU-2	WG	G	—	—									X	X					X		No Sample Submitted
3	MW-1_25_10	MW-1	WG	G											X	X	X	X			X		
4	MW-2R_25_10	MW-2R	WG	G	10/22/25	15:15	12	7	1	1	3				X	X					X		
5	MW-3_25_10	MW-3	WG	G											X	X					X		
6	MW-4_25_10	MW-4	WG	G	10/22	9:25	12	7	1	1	3				X	X					X		
7	MW-4B_25_10	MW-4B	WG	G											X	X					X		
8	MW-7A_25_10	MW-7A	WG	G	10/23	14:10	29	22	1	1	3	2								X	X		
9	MW-11_25_10	MW-11	WG	G	—	—									X	X					X		No Sample Submitted
10	MW-18_25_10	MW-18	WG	G	10/22	16:55	12	7	1	1	3				X	X					X		
11	MW-19R_25_10	MW-19R	WG	G											X	X	X	X			X		
12	MW-22_25_10	MW-22	WG	G	—	—									X	X					X		No Sample Submitted

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
					Tyler Merritt Ord Tech	10/23	1515			
								CC 10.23.25 1510		

SAMPLE CONDITION:

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

SAMPLE NOTES:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Tyler Merritt

SIGNATURE of SAMPLER: Tyler Merritt

DATE Signed: 10/23

11/10/2025

Foth

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT All relevant fields must be completed accurately

Page: 2 of 5 | **COC Number:** 1-3865545471-071825-834489

Company: Foth Infrastructure & Environment, LLC	Report To: Hannah Dubbs/Gina Wilming (Foth)	Requested Due Date:	Quote Reference:
Address: 411 6th Avenue SE, Suite 400	Copy To.	*TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To: TJ Shissel (Winneshiek)		Project #: 25W024.00
Phone: (319) 365-9565	P.O		Profile #:
Email Addresses: hannah.dubbs@foth.com	Project Name: Winneshiek County Sanitary Landfill	Regulatory Agency: Iowa DNR	Sampling Team Members: Tyler Merritt, Curtis Schwartz
gina.wilming@foth.com	Task #: 25W024_25_10	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE (G = Grab, C = Composite)	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: N	N	N	N	N	N	N	Filtered (Y/N)	REMARKS / Lab ID
															IA Appendix I List	TSS	Sulfide	Endosulfan I	Appendix II VOCs	Appendix II List	Annual Parameter List		
13	MW-24A_25_10	MW-25A	WG	G	—	—									X	X					X		No Sample Submitted
14	MW-25A_25_10	MW-25A	WG	G											X	X					X		
15	MW-29A_25_10	MW-29A	WG	G	10/22/25	12:00	13	7	1	1	3	1			X	X	X				X		
16	MW-31A_25_10	MW-31A	WG	G											X	X		X			X		
17	MW-33A_25_10	MW-33A	WG	G											X	X					X		
18	MW-34A_25_10	MW-34A	WG	G											X	X					X		
19	MW-35_25_10	MW-35	WG	G	10/21/25	16:40	12	7	1	1	3				X	X					X		
20	MW-37A_25_10	MW-37A	WG	G											X	X	X	X			X		
21	MW-38A_25_10	MW-38	WG	G											X	X					X		
22	MW-39A_25_10	MW-39A	WG	G	10/22	9:45	12	7	1	1	3				X	X					X		
23	MW-40A_25_10	MW-40A	WG	G											X	X					X		
24	MW-41A_25_10	MW-41A	WG	G											X	X					X		

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
					O.A.Tech	10/23	15:10			
								CC 10-23-25 1510		

SAMPLE CONDITION:

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

SAMPLE NOTES:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Tyler Merritt

SIGNATURE of SAMPLER: Tyler Merritt

DATE Signed: 10/23/25

11/10/2025

Foth

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT All relevant fields must be completed accurately

Page: 3 of 5 | **COC Number:** 1-3865545471-071825-834489

Company: Foth Infrastructure & Environment, LLC	Report To: Hannah Dubbs/Gina Wilming (Foth)	Requested Due Date:	Quote Reference:
Address: 411 6th Avenue SE, Suite 400	Copy To:	*TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To: TJ Shissel (Winneshiek)		Project #: 25W024.00
Phone: (319) 365-9565	P O		Profile #:
Email Addresses: hannah.dubbs@foth.com	Project Name: Winneshiek County Sanitary Landfill	Regulatory Agency: Iowa DNR	Sampling Team Members: Tyler Merritt Curtis Schwartz
gina.wilming@foth.com	Task #: 25W024_25_10	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: IA Appendix I List	TSS	Sulfide	Endosulfan I	Appendix II VOCs	Appendix II List	Annual Parameter List	Filtered (Y/N)	REMARKS / Lab ID
25	MW-42A_25_10	MW-42A	WG	G											X	X					X		
26	MW-43A_25_10	MW-43A	WG	G	10/21/25	15:35	12	7	1	1	3				X	X					X		
27	MW-44A_25_10	MW-44A	WG	G	10/21/25	16:30	12	7	1	1	3				X	X					X		
28	MW-45A_25_10	MW-45A	WG	G	10/22/25	13:40	12	7	1	1	3				X	X					X		
29	MW-46A_25_10	MW-46A	WG	G	10/22	16:45	09	22	1	1	3	2				X				X	X		
30	MW-101_25_10	MW-101	WG	G	—	—									X	X					X		No Sample Submitted
31	EB-1_25_10	Equipment Blank	WQ	G												X				X			
32	EB-2_25_10	Equipment Blank	WQ	G	10/23	17:40	8	4		1	3				X	X							
33	FD-1_25_10		WQ	G	10/22	—	25	19		1	3	2				X				X			
34	FD-2_25_10		WQ	G											X	X							
35	FD-3_25_10		WQ	G	10/22	—	8	4		1	3				X	X							
36	TB-1_25_10	Trip Blank	WQ	G	—	—	4	2			2								X				

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
					Tyler Merritt OA Tech	10/23	1540			
								CC 10-23-25 1510		

SAMPLE CONDITION:

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

SAMPLE NOTES:

Additional Comments:

Valid Matrix Codes	
Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Tyler Merritt

SIGNATURE of SAMPLER: Tyler Merritt

DATE Signed: 10/23/25

Foth

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT All relevant fields must be completed accurately

Page: 4 of 5 **COC Number:** 1-3865545471-071825-834489

Company: Foth Infrastructure & Environment, LLC	Report To: Hannah Dubbs/Gina Wilming (Foth)	Requested Due Date:	Quote Reference:
Address: 411 6th Avenue SE, Suite 400	Copy To:	*TAT: Standard	Project Manager: Gina Wilming
Cedar Rapids, IA 52401	Invoice To. TJ Shissel (Winneshiek)		Project #: 25W024 00
Phone: (319) 365-9565	P.O		Profile #:
Email Addresses: hannah.dubbs@foth.com	Project Name: Winneshiek County Sanitary Landfill	Regulatory Agency: Iowa DNR	Sampling Team Members: Tyler Merritt Curtis Schwartz
gina.wilming@foth.com	Task #: 25W024_25_10	State Location: Iowa	

ITEM NUMBER	SAMPLE ID	Sample Location	MATRIX CODE	SAMPLE TYPE G = Grab C = Composite	DATE COLLECTED MM/DD/YYYY	TIME COLLECTED (Military time)	Preservatives: Total # Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Requested Analysis: IA Appendix I List	TSS	Sulfide	Endosulfan I	Appendix II VOCs	Appendix II List	Annual Parameter List	Filtered (Y/N)	REMARKS / Lab ID
															N	N	N	N	N	N	N		
37	~~TB-2_25_10~~	Trip Blank	WQ	G			4	2			2								X				Do Not Analyze
38	~~TB-3_25_10~~	Trip Blank	WQ	G															X				Do Not Analyze
39	~~TB-4_25_10~~	Trip Blank	WQ	G															X				Do Not Analyze
40	SW-1_25_10	SW-1	WS	G	—	—									X	X					X		No Sample Submitted
41	SW-2_25_10	SW-2	WS	G	10/22/25	12:05	12	7	1	1	3				X	X					X		
42	SW-5_25_10	SW-5	WS	G	10/22/25	11:40	12	7	1	1	3				X	X					X		
43																							
44																							
45																							
46																							
47																							
48																							

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM #	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
					Tyler Merritt O.Atch	10/23	5:10			
								CC 10 23 25 1510		

SAMPLE CONDITION:

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Sample Intact	Y / N

SAMPLE NOTES:

Valid Matrix Codes

Matrix	Code
Soil	SO
Sediment	SE
Surface Water	WS
Wastewater	WW
Groundwater	WG
Ambient Air	AA
Other	X

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Tyler Merritt

SIGNATURE of SAMPLER Tyler Merritt

DATE Signed 10/23/25

Page 11 of 15 11/18/2025

Annual Parameter List

Analyte	Suggested Method
Anion/Cations Balance	SM 1030E
Calcium, Magnesium, Sodium (total)	EPA 6020B
Fluoride	SM 4500 F C-2011
Sulfate	ASTM D516-16
Nitrate as N	EPA 353.2
Total Alkalinity	SM 2320B
Bicarbonate Alkalinity as CaCO3	
Carbonate Alkalinity as CaCO3	
Hydroxide Alkalinity as CaCO3	
Phenolphthalein Alkalinity as CaCO3	
Total Dissolved Solids	SM 2540C
Chloride	SM 4500 Cl-E
Biochemical Oxygen Demand	SM 5210B
Chemical Oxygen Demend	SM 5220D

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Phone: 319-277-2401 Fax: 319-277-2425

Chain of Custody Record

eurofins
Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Collins, Charlotte G	Carrier Tracking No(s): N/A	COC No: 310-88285.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Charlotte.Collins@et.eurofinsus.com	State of Origin: Iowa	Page: Page 1 of 1
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): State Program - Iowa		Job #: 310-318779-1
Address: 180 S. Van Buren Avenue,	Due Date Requested: 11/5/2025			Preservation Codes: -
City: Barberton	TAT Requested (days): N/A			
State, Zip: OH, 44203				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Winneshiek County Sanitary Landfill	Project #: 31017151			
Site: 310 - AECOM - Winneshiek County	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc/9030BSulfide	Total Number of containers	Special Instructions/Note:
			Preservation Code:						6013
MW-7A_25_10 (310-318779-3)	10/22/25	14:10 Central	G	Water			X	1	
MW-29A_25_10 (310-318779-5)	10/22/25	12:00 Central	G	Water			X	1	
MW-46A_25_10 (310-318779-11)	10/22/25	16:45 Central	G	Water			X	1	
FD-1_25_10 (310-318779-13)	10/22/25	Central	G	Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	10/24/25 1225			10/25/25 0930	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins – Cleveland Sample Receipt Form/Narrative **Login # .**
Barberton Facility

Client Eurofins Site Name

Cooler Received on 10/25/25 Opened on 10/27/25

Cooler unpacked by

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

Eurofins Cooler # 15 Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # 13 (CF +0.6°C) Observed Cooler Temp. 2.5 °C Corrected Cooler Temp 3.1 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 2	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3 Shippers' packing slip attached to the cooler(s)?	Yes	No
4 Did custody papers accompany the sample(s)?	Yes	No
5 Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6 Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7 Did all bottles arrive in good condition (Unbroken)?	Yes	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp(Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	Yes	No
11 Sufficient quantity received to perform indicated analyses?	Yes	No
12 Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC567196
14 Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● ← Larger than this	Yes	No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #	Yes	No
17 Was a LL Hg or Me Hg trip blank present?	Yes	No

Tests that are not checked for pH by Receiving

VOAs
Oil and Grease
TOC

Contacted PM Date by via Verbal Voice Mail Other

Concerning

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by

Labels Verified by

19 SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired

Sample(s) were received in a broken container

Sample(s) were received with bubble >6 mm in diameter (Notify PM)

20 SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory

Time preserved Preservative(s) added/Lot number(s)

VOA Sample Preservation - Date/Time VOAs Frozen

eurofins | Environment Testing

Temperature Controlled

IF THIS SHIPMENT IS DELAYED IN TRANSIT,
STORE REFRIGERATED (2° TO 8° C / 36° TO 47° F)

SDR

FedEx® Saturday Delivery

161966 10/04 MWT

ORIGIN ID:ALOA (319) 277-2401
SAMPLE RECEIVING
EUROFINS TESTAMERICA
3019 VENTURE WAY

CEDAR FALLS, IA 50613
UNITED STATES US

SHIP DATE: 24OCT25
ACTWGT: 28.65 LB
CAD: 0870970/CAFE3953

BILL SENDER

TO SHIPPING/RECEIVING
EUROFINS ENVIRONMENT TESTING NORTH
180 S. VAN BUREN AVENUE

BARBERTON OH 44203
(330) 497-9396
REF: S310-111995

[redacted]

FedEx Express

SATURDAY 12:00P
TRK# [redacted] PRIORITY OVERNIGHT

XO CAKA

44203
OH-US CLE

[redacted]

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Phone: 319-277-2401 Fax: 319-277-2425

Chain of Custody Record

eurofins Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Collins, Charlotte G	Carrier Tracking No(s): N/A	COC No: 310-88291.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Charlotte.Collins@et.eurofinsus.com	State of Origin: Iowa	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): State Program - Iowa		Job #: 310-318779-1
Address: 2425 New Holland Pike,	Due Date Requested: 11/5/2025			Preservation Codes: -
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Winneshiek County Sanitary Landfill	Project #: 31017151			
Site: 310 - AECOM - Winneshiek County	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8151A/8151A_APDefault List	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-7A_25_10 (310-318779-3)	10/22/25	14:10 Central	G	Water			X	2	
MW-46A_25_10 (310-318779-11)	10/22/25	16:45 Central	G	Water			X	2	
FD-1_25_10 (310-318779-13)	10/22/25	Central	G	Water			X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
T Delta	10/24/25 1255				
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				10/25/25 1100	ELLET

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: R: 3.8 C: 3.9

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Winneshiek Co Solid Waste

Job Number: 310-318779-1

Login Number: 318779
List Number: 1
Creator: Hirsch, Preston

List Source: Eurofins Cedar Falls

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Winneshiek Co Solid Waste

Job Number: 310-318779-1

Login Number: 318779
List Number: 2
Creator: Williams, Aeric

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 10/25/25 12:43 PM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Data Validation Report

Project Name:	Winneshiek County Sanitary Landfill – Decorah, IA (25W024.00)
Task Name:	25W024_25_10
Data Set Description:	Fall 2025 Groundwater Event
Laboratory(s):	Eurofins – Cedar Falls, IA; Cleveland, OH; and Lancaster, PA
Laboratory Sample Delivery Group (SDG) ID(s):	310-318534-1 and 310-318779-1
Sample Collection Dates:	10/20/2025 – 10/22/2025
Sample Analysis Dates:	10/232/2025 – 11/6/2025
Sample Matrices:	Groundwater
Sample IDs Reviewed:	See Table 1
Verification and Validation Stage, 100% data:	☐ 1 ☒ 2A ☐ 2B ☐ 3 ☐ 4
Verified and Validated By:	Hannah Dubbs, Project Environmental Scientist 12/3/2025

The analytical data were validated to verify that laboratory quality assurance and quality control (QA/QC) procedures were documented and to evaluate the overall quality of the data reported. Analytical reports include 26 investigative groundwater samples collected via low-flow or no-purge sampling techniques at the Winneshiek County Sanitary Landfill from October 20 through October 22, 2025; samples are listed in Table 1. The data were collected in accordance with the *Winneshiek Hydrologic Monitoring System Plan* (AECOM, 2024), Iowa Department of Natural Resources (IDNR) Sanitary Disposal Closure Permit Number 96-SDP-01-74, and 567 Iowa Administrative Code (IAC) 113.10.

Validation Summary

Stage 2A data validation was performed on 100% of the data from these SDGs, with review tasks and items of note documented in the summary table below.

Validation Task and Description	Review Notes	Action
Chain of Custody (COC) and Sample Receipt Form Confirm relinquish & receipt signatures. Confirm parameters and analytical methods match COC and Hydrologic Monitoring System Plan (HMSP).	All appropriate relinquish and receipt signatures were present . Parameters and analytical methods analyzed match the COC and current sampling program.	Not applicable
	Eurofins inadvertently labeled sample MW-1_25_10 as MW_1_25_10 in laboratory report 310-318534-1. Foth did not request a revised report. The sample name will be corrected in the laboratory electronic data deliverable (EDD) prior to data upload.	Mislabeled sample ID will be updated in the lab EDD prior to data upload.
	Potassium was reported for MW-1_25_10, MW-3_25_10, MW-4B_25_10, MW-19R_25_10, MW-25A_25_10, MW-31A_25_10, MW-33A_25_10, MW-34A_25_10, MW-37A_25_10, MW-38A_25_10, MW-40A_25_10, MW-41A_25_10, MW-42A_25_10, and FD-2 in laboratory report 310-318534-1; calcium, magnesium, and sodium were reported for EB-2_25_10, FD-1_25_10, FD-2_25_10, and FD-3_25_10 in	Not applicable

Validation Task and Description	Review Notes	Action
COC Continued	laboratory reports 310-318534-1 and 310-318779-1; and tin was reported for FD-2_25_10 in laboratory report 310-318534-1 when they were not requested on the COC. Since these are additional parameters, no further action is required.	See above
Case Narrative Review for items noted by the laboratory that may impact the validation process.	The case narrative for 310-318779-1 indicated that volatile organic analysis (VOA) vials for MW-29A_25_10 were analyzed with headspace. According to the *National Functional Guidelines for Organic Superfund Methods Data Review* (USEPA, 2020a) for volatile organic compounds (VOCs), proper preservation includes the absence of headspace. Professional judgment was utilized to qualify the non-detect VOC results in MW-29A_25_10 as UJ. Resampling is not recommended, as VOCs have historically not been detected at MW-29A. The case narrative for 310-318534-1 indicated that the unseeded control blank (USB) dilution water dissolved oxygen depletion was greater than 0.2 milligrams per liter (mg/L). Guidance is not provided in the *National Functional Guidelines for Organic Superfund Methods Data Review* (USEPA, 2020a) for biochemical oxygen demand (BOD). Professional judgement was utilized to qualify the detects J and non-detects UJ. Resampling is not recommended since BOD is not a required parameter according to the *Winneshiek Hydrologic Monitoring System Plan* (AECOM, 2024), the Permit, and 567 IAC 113.10. The remaining quality control issues noted in the case narratives were reviewed and found acceptable. Issues either were addressed in the comments below; had no impact on investigative samples; were corrected/qualified by the laboratory; or were outside of the modified Stage 2A validation scope, which will be submitted with the updated Hydrologic Monitoring System Plan. No additional actions are required.	Qualifiers assigned; Resampling not recommended Qualifiers assigned; Resampling not recommended Not applicable
Sample Condition Upon Receipt (SCUR) Confirm samples in acceptable condition and no discrepancies noted. Confirm preservation meets method requirements.	With the exception identified below, samples were received by Eurofins – Cedar Falls, IA in acceptable conditions. In addition, the sulfide and herbicide sample shipments from Eurofins – Cedar Falls, IA to Eurofins – Cleveland, OH and Eurofins – Lancaster, PA, respectively, were received in acceptable conditions. As detailed in the Case Narrative Review Notes, the VOA vials for MW-29A_25_10 were analyzed with headspace; therefore, the non-detect VOC results were qualified UJ. Resampling was not recommended.	Not applicable Qualifiers assigned; resampling not recommended

Validation Task and Description	Review Notes	Action
Methods Requested Confirm methods match project requirements and lab provided all methods ordered.	The methods ordered and analyzed were performed in accordance with the project requirements. Methods include United States Environmental Protection Agency (USEPA) 8260D VOCs, USEPA 8270E Semivolatile Organic Compounds (SVOCs), USEPA 8015C Nonhalogenated Organics, USEPA 8151A Herbicides, USEPA 8081B Organochlorine Pesticides, USEPA 8082A Polychlorinated Biphenyls (PCBs), USEPA 8151A Herbicides, USEPA 6020B Total Metals, USEPA 7470A Mercury, USEPA 353.2 Nitrogen, Nitrate, Standard Method (SM) 4500 F C-2011 Fluoride, 9012B Cyanide, USEPA 9034 Sulfide, Advancing Standards Transforming Markets (ASTM) D516-16 Sulfate, United States Geological Survey (USGS) I-3765-85 Total Suspended Solids (TSS), SM 1030E Cation Anion Balance, SM 2320B Alkalinity, SM 2540C Total Dissolved Solids (TDS), SM 4500 CL-E Total Chloride, SM 5210B BOD, and SM 5220D Chemical Oxygen Demand (COD).	Not applicable
Analytes Requested Confirm analytes ordered match project requirements and lab provided all analytes ordered.	The analytes requested were analyzed in accordance with the project requirements. The laboratory provided all analytes ordered. As detailed in the COC and Sample Receipt Form Review Notes, the following analytes were reported when not requested on the COC: potassium was reported for MW-1_25_10, MW-3_25_10, MW-4B_25_10, MW-19R_25_10, MW-25A_25_10, MW-31A_25_10, MW-33A_25_10, MW-34A_25_10, MW-37A_25_10, MW-38A_25_10, MW-40A_25_10, MW-41A_25_10, MW-42A_25_10, and FD-2 in laboratory report 310-318534-1; calcium, magnesium, and sodium were reported for EB-2_25_10, FD-1_25_10, FD-2_25_10, and FD-3_25_10 in laboratory reports 310-318534-1 and 310-318779-1; and tin was reported for FD-2_25_10 in laboratory report 310-318534-1.	Not applicable Not applicable
Holding Times Confirm laboratory performed extractions and analyses within method-required holding times.	Eurofins performed analysis within the method-required holding times with the exceptions below. <u>310-318534-1</u> Analysis for nitrate per USEPA 353.2 is required to be analyzed within 48 hours of sampling for non-preserved samples. MW-3_25_10, MW-4B_25_10, MW-31A_25_10, MW-33A_25_10, MW-34A_25_10, MW-37A_25_10, MW-38A_25_10, MW-40A_25_10, MW-41A_25_20, MW-42_25_10 were analyzed outside the 48-hour holding time. In accordance with the *National Functional Guidelines for Inorganic Superfund Methods Data Review* (USEPA, 2020b) for anions, when samples are analyzed outside the 48-hour hold time, detected results are qualified J- and non-detects are rejected (qualified R). Resampling is not recommended for these wells since nitrate is not a required parameter according to the *Winneshiek Hydrologic Monitoring System Plan* (AECOM, 2024), the Permit, and 567 IAC 113.10. Analysis for sulfide per USEPA Method 9034 is required to be extracted within 7 days of sampling and analyzed within 7 days of extraction. EB-1_25_10 was extracted outside the 7-day holding time, but analyzed within 7 days of extraction. The sample exceeded the 7-day extraction time by approximately 1 hour. No guidance is provided in the *National Functional Guidelines for Inorganic Superfund Methods Data Review* (USEPA, 2020b) for sulfide analysis. However,	Qualifiers assigned, resampling not recommended No qualifiers assigned, resampling not recommended

Validation Task and Description	Review Notes	Action
Hold Times Continued	professional judgment was utilized not to qualify the non-detect sulfide results in EB-1_25_10 since the extraction holding time for sulfide was only slightly exceeded. Resampling for EB-1 is not applicable since it is a quality control sample. 310-318779-1 Analysis for nitrate per USEPA 353.2 is required to be analyzed within 48 hours of sampling for non-preserved samples. MW-2R_25_10, MW-4_25_10, MW-7A_25_10, MW-18_25_10, MW-29A_25_10, MW-35_25_10, MW-39A_25_10, MW-43A_25_10, MW-44A_25_10, MW-45A_25_10, MW-46A_25_10, SW-2_25_20, SW-5_25_10 were analyzed outside the 48-hour holding time. In accordance with the *National Functional Guidelines for Inorganic Superfund Methods Data Review* (USEPA, 2020b) for anions, when samples are analyzed outside the 48-hour hold time, detected results are qualified J- and non-detects are rejected (qualified R). Resampling is not recommended for these wells since nitrate is not a required parameter according to the *Winneshiek Hydrologic Monitoring System Plan* (AECOM, 2024), the Permit, and 567 IAC 113.10. Analysis for VOCs per USEPA Method 8260D is required to be analyzed within 7 days of sampling if unpreserved and within 14 days if preserved. For MW-44A_25_10, acrylonitrile, which was analyzed from the unpreserved VOA vials, was analyzed within the 7-day hold time. The remaining VOC parameters analyzed at MW-44A_25_10 were analyzed outside the 14-day hold time by approximately 4 hours. In accordance with the *National Functional Guidelines for Organic Superfund Methods Data Review* (USEPA, 2020a), when VOC samples are analyzed outside the 14-day hold time for preserved samples, non-detects are rejected (qualified R). Professional judgment was utilized not to qualify the non-detect VOC results in MW-44A_25_10 since the holding time for VOCs was only slightly exceeded. Resampling is not recommended since the analysis hold times were only slightly exceeded, the results were not rejected, and VOCs have not been detected at MW-44A previously. Analysis for VOCs per USEPA Method 8260D is required to be analyzed within 7 days of sampling if unpreserved and within 14 days if preserved. For SW-2_25_20 and SW-5_25_10, acrylonitrile, which was analyzed from the unpreserved VOA vials, was analyzed outside the 7-day hold time by less than 1 hour. The remaining VOC parameters analyzed at SW-2_25_20 and SW-5_25_10 were analyzed within the 14-day hold time. In accordance with the National Functional Guidelines for Organic Superfund Methods Data Review (USEPA, 2020a), when VOC samples are analyzed outside the 7-day hold time for unpreserved samples, non-detects are rejected (qualified R). Professional judgment was utilized not to qualify the non-detect acrylonitrile results in SW-2_25_20 and SW-5_25_10 since the holding time for VOCs was only slightly exceeded. Resampling is not recommended since the analysis hold times were only slightly	See above Qualifiers assigned, resampling not recommended No qualifiers assigned, resampling not recommended No qualifiers assigned, resampling not recommended

Validation Task and Description	Review Notes	Action
Hold Times Continued	exceeded, the results were not rejected, and VOCs have not been detected at SW-2 and SW-5 previously. Analysis for herbicides per USEPA Method 8151A is required to be extracted within 7 days of sampling and analyzed within 40 days of extraction. FD-1_25_10 and MW-7A_25_10 were extracted outside the 7-day holding time, but analyzed within the 40-day holding time. Samples exceeded the 7-day extraction hold time by approximately 1 hour. In accordance with the National Functional Guidelines for Organic Superfund Methods Data Review (USEPA, 2020a), when herbicide samples are extracted outside the 7-day hold time and analyzed outside or within the 40-day holding time, non-detects are rejected (qualified R). Professional judgment was utilized not to qualify the non-detect herbicide results in FD-1_25_10 and MW-7A_25_10 since the extraction holding times for herbicides were only slightly exceeded. Resampling is not recommended for MW-7A since the extraction hold time was only slightly exceeded, and the results were not rejected. Resampling for FD-1 is not applicable since it is a quality control sample. Analysis for sulfide per USEPA Method 9034 is required to be extracted within 7 days of sampling and analyzed within 7 days of extraction. FD-1_25_10 and MW-29A_25_10 were extracted outside the 7-day holding time, but analyzed within 7 days of extraction. The samples exceeded the 7-day extraction time by approximately 1 hour. No guidance is provided in the *National Functional Guidelines for Inorganic Superfund Methods Data Review* (USEPA, 2020b) for sulfide analysis. However, professional judgment was utilized not to qualify the detected sulfide results in FD-1_25_10 and MW-29A_25_10 since the extraction holding time for sulfide were only slightly exceeded. Resampling for MW-29A_25_10 was not considered since the result was not considered for rejection. Resampling for FD-1 is not applicable since it is a quality control sample.	See above No qualifiers assigned, resampling not recommended No qualifiers assigned, resampling not recommended
Blanks Confirm no detections in laboratory method blanks, field blanks, and trip blanks.	Table 3 presents analytes detected in the method blanks. No detections were found in the equipment and trip blanks. <u>310-318534-1</u> Tin was detected in the method blank (MB 310-471283/1-A) at a concentration of 4.191 micrograms per liter (ug/L). In accordance with the *National Functional Guidelines for Inorganic Superfund Methods Data Review* (USEPA, 2020b) for inductively coupled plasma mass spectrometry (ICP-MS), when the blank concentration is greater than the method detection limit (MDL) and less than the practical quantitation limit (PQL), associated non-detect sample results are not qualified.	No qualifiers assigned
Surrogates or Deuterated Monitoring Compounds	Table 4 presents the surrogate recoveries that were outside the control limits. <u>310-318534-1</u> The toluene-d8 surrogate recoveries for MW-1_25_10 and MW-31_25_10 were above the upper acceptance limit, indicating potential	

Validation Task and Description	Review Notes	Action
Surrogates or Deuterated Monitoring Compounds Continued For *organic analyses only*, confirm surrogates analyzed and surrogate recovery within QC limits.	high bias for VOCs in these samples. In accordance with the *National Functional Guidelines for Organic Superfund Methods Data Review* (USEPA, 2020a) for VOCs, when surrogate recovery is above the recovery limit, associated detect sample results are qualified J+ and non-detects are not qualified. The 2,4-dichlorophenylacetic acid surrogate recovery for EB-1_25_10 was above the upper acceptance limit, indicating potential high bias for herbicides in the sample. In accordance with the *National Functional Guidelines for Organic Superfund Methods Data Review* (USEPA, 2020a) for herbicides, when surrogate recovery is above the recovery limit and below the expanded upper acceptance limit (200%), non-detect herbicides in the samples are not qualified. 310-318779-1 The 4-bromofluorobenzene surrogate recovery for MW44A_25_10 was above the upper acceptance limit, indicating potential high bias for VOCs in the sample. In accordance with the *National Functional Guidelines for Organic Superfund Methods Data Review* (USEPA, 2020a) for VOCs, when surrogate recovery is above the recovery limit, associated non-detect sample results are not qualified.	Qualifiers assigned No qualifiers assigned No qualifiers assigned
Field Duplicates Confirm field duplicates collected at required frequency and field duplicate RPD within acceptable limits.	Field duplicate samples were collected at a 1 per 10 frequency in accordance with the project requirements. Table 8 contains the precision evaluation of the parent/field duplicate samples. The RPDs between the investigative and field duplicate samples were within the duplicate sample validation criteria.	Not applicable

Abbreviations:

ASTM = Advancing Standards Transforming Markets
COC = chain of custody
COD = chemical oxygen demand
EDD = electronic data deliverable
HMSP = Hydrologic Monitoring System Plan
ICP-MS = Inductively Coupled Plasma Mass Spectrometry
MDL = method detection limit
mg/L = milligrams per liter
PCB = polychlorinated biphenyls
PQL = Practical Quantitation Limit
QA = quality assurance
QC = quality control
RPD = relative percent difference
SCUR = sample condition upon receipt
SDG = sample delivery group
SOP = standard operating procedure
SVOC = semivolatile organic compound
ug/L = microgram per liter
USB = unseeded control blank
USEPA = United States Environmental Protection Agency
USGS = United States Geological Survey
SM = standard method
TDS = total dissolved solids
TSS = total suspended solids

Abbreviations Continued:
VOA = volatile organic analysis
VOC = volatile organic compound

Overall Assessment of Data

Item	Acceptable		Comments
	Yes	No	
1. Method Criteria		X	Samples were collected, preserved, shipped/delivered, and analyzed within the method protocols, with the exceptions listed below. As detailed in the Case Narrative Review Notes, the VOA vials for MW-29A8_25_10 were analyzed with headspace; therefore, the non-detect VOC results were qualified UJ. As further described in the Holding Times Review Notes, there were multiple extraction and analysis hold time exceedances in SDGs 310-318534-1 and 310-318779-1. For nitrate analysis hold time exceedances, associated detected results were qualified as J-, and associated non-detected results were rejected (qualified R). Professional judgment was utilized not to qualify the remaining extraction and analysis hold time exceedance associated results. Resampling was not recommended.
2. Precision	X		Field precision was evaluated through investigative and field duplicate RPDs. The RPDs between the investigative and field duplicate samples were within the duplicate sample validation criteria.
3. Accuracy	X		Accuracy was evaluated through surrogate recovery. The percent recoveries for surrogates were within control limits with the exceptions below. As listed in Table 4, toluene-d8 surrogate recoveries for MW-1_25_10 and MW-31_25_10 were above the upper acceptance limit. Associated detected sample results were qualified J+, and non-detected sample results were not qualified. In addition, 2,4-dichlorophenylacetic acid surrogate recovery for EB-1_25_10 and 4-bromofluorobenzene surrogate recovery for MW44A_25_10 were above the recovery limits, and the associated non-detect sample results were not qualified.
4. Representativeness	X		Sampling was conducted in accordance with the sample collection procedures described in the approved HMSP, approved HMSP revisions, and SOPs.
5. Comparability	X		Collection techniques, measurement procedures, methods, and reporting were equivalent to currently approved procedures and are comparable to historical data.
6. Completeness	X		Valid analytical results exceeded 90%.
7. Suitability for Intended Use	X		No evidence of gross contamination or significant issues with the method criteria, precision, accuracy, representativeness, comparability, or completeness were identified.

Overall, the data reported are of good quality and the results for the QA/QC measurements that were used by the laboratories during the analysis of the samples were generally acceptable. Some sample results required qualification during data validation because method-specific QA/QC criteria were not met; results may be qualified for more than one reason. Qualified data are usable (unless qualified as rejected

[R]), represent data of good quality and reasonable confidence, and have an acceptable degree of uncertainty (i.e., may be less precise or less accurate than unqualified data). Table 2 provides a definition of the qualifiers that may be assigned by the validator and/or retained from the laboratory. A summary of the validation qualifiers is provided below.

- No results were qualified as non-detect at a concentration less than the reporting limit (assigned as U) and presumptive evidence of presence of an analyte (assigned as N or NJ qualifiers).
- One result (0.03%) was qualified as estimated (assigned as J).
- Three results (0.09%) were qualified as biased high (assigned J+).
- Sixteen results (0.51%) were qualified as biased low (assigned J-).
- 58 results (1.83%) were qualified as non-detect with the reporting limit an estimated value (UJ).
- Eight results (0.25%) were not usable and rejected (assigned as R qualifier).
- 99.75% of the reported data is usable for project data quality objectives.

Attachment 1

Tables

Table 1
Sample IDs Reviewed

Project Sample ID	Analyzed Lab Sample ID	Project Sample ID Matches Lab Client Sample ID	Lab Sample Date/Time Match COC/Logbook	Parameters and Analytical Methods Match COC	Within Hold Times	Sample Type
MW-1_25_10	310-318534-1	**No**	Yes	Yes	**No**	Normal
MW-3_25_10	310-318534-2	Yes	Yes	Yes	**No**	Normal
MW-4B_25_10	310-318534-3	Yes	Yes	Yes	**No**	Normal
MW-19R_25_10	310-318534-4	Yes	Yes	Yes	**No**	Normal
MW-25A_25_10	310-318534-5	Yes	Yes	Yes	**No**	Normal
MW-31A_25_10	310-318534-6	Yes	Yes	Yes	**No**	Normal
MW-33A_25_10	310-318534-7	Yes	Yes	Yes	**No**	Normal
MW-34A_25_10	310-318534-8	Yes	Yes	Yes	**No**	Normal
MW-37A_25_10	310-318534-9	Yes	Yes	Yes	**No**	Normal
MW-38_25_10	310-318534-10	Yes	Yes	Yes	**No**	Normal
MW-40A_25_10	310-318534-11	Yes	Yes	Yes	**No**	Normal
MW-41A_25_10	310-318534-12	Yes	Yes	Yes	**No**	Normal
MW-42A_25_10	310-318534-13	Yes	Yes	Yes	**No**	Normal
EB-1_25_10	310-318534-14	Yes	Yes	Yes	**No**	EB
FD-2_25_10	310-318534-15	Yes	Yes	Yes	Yes	FD
MW-2R_25_10	310-318779-1	Yes	Yes	Yes	**No**	Normal
MW-4_25_10	310-318779-2	Yes	Yes	Yes	**No**	Normal
MW-7A_25_10	310-318779-3	Yes	Yes	Yes	**No**	Normal
MW-18_25_10	310-318779-4	Yes	Yes	Yes	**No**	Normal
MW-29A_25_10	310-318779-5	Yes	Yes	Yes	**No**	Normal
MW-35_25_10	310-318779-6	Yes	Yes	Yes	**No**	Normal
MW-39A_25_10	310-318779-7	Yes	Yes	Yes	**No**	Normal
MW-43A_25_10	310-318779-8	Yes	Yes	Yes	**No**	Normal
MW-44A_25_10	310-318779-9	Yes	Yes	Yes	**No**	Normal
MW-45A_25_10	310-318779-10	Yes	Yes	Yes	**No**	Normal
MW-46A_25_10	310-318779-11	Yes	Yes	Yes	**No**	Normal
EB-2_25_10	310-318779-12	Yes	Yes	Yes	Yes	EB
FD-1_25_10	310-318779-13	Yes	Yes	Yes	**No**	FD
FD-3_25_10	310-318779-14	Yes	Yes	Yes	Yes	FD
TB-1_25_10	310-318779-15	Yes	Yes	Yes	Yes	TB
SW-2_25_10	310-318779-16	Yes	Yes	Yes	**No**	Normal
SW-5_25_10	310-318779-17	Yes	Yes	Yes	**No**	Normal
TB-2_25_10	310-318779-18	Yes	Yes	Yes	Yes	TB

Notes:

EB = equipment blank
FD = field duplicate
TB = trip blank

Table 2
Explanation of Qualifiers

Qualifier	Explanation
U	The analyte was analyzed for and was not detected above the numerical quantitation limit.
J	The analyte was analyzed for and was positively identified, but the analytical result (i.e., quantitation) is an estimated value. In some cases it is recognized that the estimated value is biased high (J+) suggesting the actual value is lower than estimated; or biased low (J-) suggesting the actual value is higher than estimated.
UJ	The analyte was analyzed for and was not detected above the reporting limit, but the reporting limit is an estimated value.
R	The analyte was analyzed for but may or may not be present and/or quantifiable due to quality control issues. The analytical result is not usable and should be rejected.
N	The analysis indicates presumptive evidence of the presence of the analyte.
NJ	The analysis indicates presumptive evidence of the presence of the analyte, but the numerical value is an estimated quantity.

Notes:
Results qualified as "J" or "UJ" are of acceptable data quality and may be used quantitatively per United States Environmental Protection Agency guidelines.

Table 3
Method, Field, and Trip Blank Exceedances

Lab Report	Blank Type	Lab Sample ID	Analysis Batch	Prep Batch	Parameter	Result	Units	Lab Qualifier	MDL	PQL	Associated Samples
310-318534-1	MB	MB 310-471283/1-A	471824	471283	Tin	4.191	ug/L	J	2.50	5.00	EB-1_25_10 , FD-2_25_10

Notes:
MB = method blank
MDL = minimum detection limit
PQL = practical quantitation limit
ug/L = micrograms per liter

Table 4
Surrogate Recovery Exceedances

Lab Sample ID	Parent Sample	Parameter	Surrogate % Recovery	% Recovery Limits	
310-318534-1	MW-1_25_10	Toluene-d8	127	80	120
310-318534-14	EB-1_25_10	2,4-Dichlorophenylacetic Acid	205	34	142
310-318534-6	MW-31A_25_10	Toluene-d8	121	80	120
310-318779-9	MW-44A_25_10	4-Bromofluorobenzene	136	80	120

Notes:
% = percent

Table 5
Relative Percent Difference (RPD) Analysis for Field Duplicate Samples
Appendix II Constituents & TSS

RPD = $\dfrac{\text{absolute value (a - b)}}{\text{(a + b)/2}} \times 100\%$

Acceptance Criteria*: 35%

* Unless otherwise noted in project planning documents, the acceptance criteria for field duplicates RPD is as follows:
- For analytes with concentrations greater than 5x (2x for soil matrices) the reporting limit, the RPD should be within 35% for water matrices (50% for soil matrices).
- For analytes with either or both concentrations less than 5x (2x for soil matrices) the reporting limit (indicated below by "low-level"), the absolute difference between the sample and field duplicate should not exceed 5x the reporting limit.

Duplicate Result Analysis:

Parameter	Unit	Parent	Duplicate Sample	RPD	Acceptable?
		MW-7A_25_10	**FD-1_25_10**		
Barium	mg/L	0.319	0.322	0.9%	Yes
Calcium	mg/L	148	147	0.7%	Yes
Chromium	mg/L	0.00692	< 0.0018	low-level	Yes
Cobalt	mg/L	J 0.000192	< 0.0017	low-level	Yes
Magnesium	mg/L	47.6	50.9	6.7%	Yes
Nickel	mg/L	0.0108	0.00761	low-level	Yes
Sodium	mg/L	14.2	15.7	10.0%	Yes
Sulfide	mg/L	< 1.41	J 1.47	low-level	Yes
		MW-31A_25_10	**FD-2_25_10**		
1,1-Dichloroethane	mg/L	J+ 0.916	J 0.931	low-level	Yes
Antimony	mg/L	< 0.001	J 0.00151	low-level	Yes
Arsenic	mg/L	J 0.000751	J 0.000729	low-level	Yes
Barium	mg/L	0.206	0.208	1.0%	Yes
Cadmium	mg/L	J 0.000161	J 0.000138	low-level	Yes
Calcium	mg/L	223	223	0.0%	Yes
Cobalt	mg/L	0.00263	0.00262	0.4%	Yes
Magnesium	mg/L	61.8	58.7	5.1%	Yes
Nickel	mg/L	0.0287	0.0275	4.3%	Yes
Potassium	mg/L	3.63	3.34	8.3%	Yes
Sodium	mg/L	71.7	72.4	1.0%	Yes
Total Suspended Solids	mg/L	3.25	< 1.31	low-level	Yes

Table 6
Qualified Results from Data Validation

Sample ID	Lab Sample ID	Method	Parameter	Result	Lab Qualifier	Units	Qualified Result	Validator Qualifier	Explanation
MW-29A_25_10	310-318779-5	USEPA 8260D	1,1,1,2-Tetrachloroethane	1.00	U	ug/L	1.00	UJ	Proper preservation was not maintained as evidenced by headspace in the VOA vials. Non-detect results were qualified UJ.
MW-29A_25_10	310-318779-5	USEPA 8260D	1,1,1-Trichloroethane	1.00	U	ug/L	1.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	1,1,2,2-Tetrachloroethane	1.00	U	ug/L	1.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	1,1,2-Trichloroethane	1.00	U	ug/L	1.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	1,1-Dichloroethane	1.00	U	ug/L	1.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	1,1-Dichloroethene	2.00	U	ug/L	2.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	1,2,3-Trichloropropane	1.00	U	ug/L	1.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	1,2-Dibromo-3-chloropropane	5.00	U	ug/L	5.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	1,2-Dibromoethane	1.00	U	ug/L	1.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	1,2-Dichlorobenzene	1.00	U	ug/L	1.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	1,2-Dichloroethane	1.00	U	ug/L	1.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	1,2-Dichloropropane	1.00	U	ug/L	1.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	1,4-Dichlorobenzene	1.00	U	ug/L	1.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	2-Butanone	10.0	U	ug/L	10.0	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	2-Hexanone	10.0	U	ug/L	10.0	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	4-Methyl-2-pentanone	10.0	U	ug/L	10.0	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	Acetone	10.0	U	ug/L	10.0	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	Acrylonitrile	5.00	U	ug/L	5.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	Benzene	0.500	U	ug/L	0.500	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	Bromochloromethane	5.00	U	ug/L	5.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	Bromodichloromethane	1.00	U	ug/L	1.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	Bromoform	5.00	U	ug/L	5.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	Bromomethane	4.00	U	ug/L	4.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	Carbon Disulfide	1.00	U	ug/L	1.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	Carbon Tetrachloride	2.00	U	ug/L	2.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	Chlorobenzene	1.00	U	ug/L	1.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	Chlorodibromomethane	5.00	U	ug/L	5.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	Chloroethane	4.00	U	ug/L	4.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	Chloroform	3.00	U	ug/L	3.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	Chloromethane	3.00	U	ug/L	3.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	cis-1,2-Dichloroethene	1.00	U	ug/L	1.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	cis-1,3-Dichloropropene	5.00	U	ug/L	5.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	Dibromomethane	1.00	U	ug/L	1.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	Ethylbenzene	1.00	U	ug/L	1.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	Fluorotrichloromethane	4.00	U	ug/L	4.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	Iodomethane	10.00	U	ug/L	10.0	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	Methylene Chloride	5.00	U	ug/L	5.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	Styrene	1.00	U	ug/L	1.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	Tetrachloroethene	1.00	U	ug/L	1.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	Toluene	1.00	U	ug/L	1.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	trans-1,2-Dichloroethene	1.00	U	ug/L	1.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	trans-1,3-Dichloropropene	5.00	U	ug/L	5.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	trans-1,4-Dichloro-2-butene	10.0	U	ug/L	10.0	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	Trichloroethene	1.00	U	ug/L	1.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	Vinyl Acetate	10.0	U	ug/L	10.0	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	Vinyl Chloride	1.00	U	ug/L	1.00	UJ	
MW-29A_25_10	310-318779-5	USEPA 8260D	Xylenes, Total	3.00	U	ug/L	3.00	UJ	

Table 6
Qualified Results from Data Validation

Sample ID	Lab Sample ID	Method	Parameter	Result	Lab Qualifier	Units	Qualified Result	Validator Qualifier	Explanation
MW-1_25_10	310-318534-1	SM 5210B	Biochemical Oxygen Demand	3.00	U	mg/L	3.00	UJ	Associated USB dilution water dissolved oxygen depletion was greater than 0.2 mg/L. Qualified UJ since result is non-detect.
MW-3_25_10	310-318534-2	SM 5210B	Biochemical Oxygen Demand	3.00	U	mg/L	3.00	UJ	Associated USB dilution water dissolved oxygen depletion was greater than 0.2 mg/L. Qualified UJ since result is non-detect.
MW-4B_25_10	310-318534-3	SM 5210B	Biochemical Oxygen Demand	3.00	U	mg/L	3.00	UJ	Associated USB dilution water dissolved oxygen depletion was greater than 0.2 mg/L. Qualified UJ since result is non-detect.
MW-19R_25_10	310-318534-4	SM 5210B	Biochemical Oxygen Demand	3.00	U	mg/L	3.00	UJ	Associated USB dilution water dissolved oxygen depletion was greater than 0.2 mg/L. Qualified UJ since result is non-detect.
MW-25A_25_10	310-318534-5	SM 5210B	Biochemical Oxygen Demand	3.00	U	mg/L	3.00	UJ	Associated USB dilution water dissolved oxygen depletion was greater than 0.2 mg/L. Qualified UJ since result is non-detect.
MW-33A_25_10	310-318534-7	SM 5210B	Biochemical Oxygen Demand	9.72		mg/L	3.00	J	Associated USB dilution water dissolved oxygen depletion was greater than 0.2 mg/L. Qualified J since result is >PQL.
MW-34A_25_10	310-318534-8	SM 5210B	Biochemical Oxygen Demand	3.00	U	mg/L	3.00	UJ	Associated USB dilution water dissolved oxygen depletion was greater than 0.2 mg/L. Qualified UJ since result is non-detect.
MW-37A_25_10	310-318534-9	SM 5210B	Biochemical Oxygen Demand	3.00	U	mg/L	3.00	UJ	Associated USB dilution water dissolved oxygen depletion was greater than 0.2 mg/L. Qualified UJ since result is non-detect.
MW-38A_25_10	310-318534-10	SM 5210B	Biochemical Oxygen Demand	3.00	U	mg/L	3.00	UJ	Associated USB dilution water dissolved oxygen depletion was greater than 0.2 mg/L. Qualified UJ since result is non-detect.
MW-40A_25_10	310-318534-11	SM 5210B	Biochemical Oxygen Demand	3.00	U	mg/L	3.00	UJ	Associated USB dilution water dissolved oxygen depletion was greater than 0.2 mg/L. Qualified UJ since result is non-detect.
MW-41A_25_10	310-318534-12	SM 5210B	Biochemical Oxygen Demand	3.00	U	mg/L	3.00	UJ	Associated USB dilution water dissolved oxygen depletion was greater than 0.2 mg/L. Qualified UJ since result is non-detect.
MW-42A_25_10	310-318534-13	SM 5210B	Biochemical Oxygen Demand	3.00	U	mg/L	3.00	UJ	Associated USB dilution water dissolved oxygen depletion was greater than 0.2 mg/L. Qualified UJ since result is non-detect.
MW-3_25_10	310-318534-2	USEPA 353.2	Nitrogen, Nitrate	0.143	U	mg/L	0.143	R	Analytical method hold time exceeded, indicating potential low bias. Qualified R since result is non-detect.
MW-4B_25_10	310-318534-3	USEPA 353.2	Nitrogen, Nitrate	0.52		mg/L	0.52	J-	Analytical method hold time exceeded, indicating potential low bias. Qualified J- since result is >PQL.
MW-31A_25_10	310-318534-6	USEPA 353.2	Nitrogen, Nitrate	22.6		mg/L	22.6	J-	Analytical method hold time exceeded, indicating potential low bias. Qualified J- since result is >PQL.
MW-33A_25_10	310-318534-7	USEPA 353.2	Nitrogen, Nitrate	0.122		mg/L	0.122	J-	Analytical method hold time exceeded, indicating potential low bias. Qualified J- since result is >PQL.

Table 6
Qualified Results from Data Validation

Sample ID	Lab Sample ID	Method	Parameter	Result	Lab Qualifier	Units	Qualified Result	Validator Qualifier	Explanation
MW-34A_25_10	310-318534-8	USEPA 353.2	Nitrogen, Nitrate	9.11		mg/L	9.11	J-	Analytical method hold time exceeded, indicating potential low bias. Qualified J- since result is >PQL.
MW-37A_25_10	310-318534-9	USEPA 353.2	Nitrogen, Nitrate	0.143		mg/L	0.143	J-	Analytical method hold time exceeded, indicating potential low bias. Qualified J- since result is >PQL.
MW-38A_25_10	310-318534-10	USEPA 353.2	Nitrogen, Nitrate	15.5		mg/L	15.5	J-	Analytical method hold time exceeded, indicating potential low bias. Qualified J- since result is >PQL.
MW-40A_25_10	310-318534-11	USEPA 353.2	Nitrogen, Nitrate	0.0882	J	mg/L	0.088	J-	Analytical method hold time exceeded, indicating potential low bias. Qualified J- since result is >MDL and <PQL.
MW-41A_25_10	310-318534-12	USEPA 353.2	Nitrogen, Nitrate	0.835		mg/L	0.835	J-	Analytical method hold time exceeded, indicating potential low bias. Qualified J- since result is >PQL.
MW-42A_25_10	310-318534-13	USEPA 353.2	Nitrogen, Nitrate	0.889		mg/L	0.889	J-	Analytical method hold time exceeded, indicating potential low bias. Qualified J- since result is >PQL.
MW-2R_25_10	310-318779-1	USEPA 353.2	Nitrogen, Nitrate	0.48		mg/L	0.48	J-	Analytical method hold time exceeded, indicating potential low bias. Qualified J- since result is >PQL.
MW-4_25_10	310-318779-2	USEPA 353.2	Nitrogen, Nitrate	0.1	U	mg/L	<0.1	R	Analytical method hold time exceeded, indicating potential low bias. Qualified R since result is non-detect.
MW-7A_25_10	310-318779-3	USEPA 353.2	Nitrogen, Nitrate	0.1	U	mg/L	<0.1	R	Analytical method hold time exceeded, indicating potential low bias. Qualified R since result is non-detect.
MW-18_25_10	310-318779-4	USEPA 353.2	Nitrogen, Nitrate	0.1	U	mg/L	<0.1	R	Analytical method hold time exceeded, indicating potential low bias. Qualified R since result is non-detect.
MW-29A_25_10	310-318779-5	USEPA 353.2	Nitrogen, Nitrate	0.1	U	mg/L	<0.1	R	Analytical method hold time exceeded, indicating potential low bias. Qualified R since result is non-detect.
MW-35_25_10	310-318779-6	USEPA 353.2	Nitrogen, Nitrate	0.1	U	mg/L	<0.1	R	Analytical method hold time exceeded, indicating potential low bias. Qualified R since result is non-detect.
MW-39A_25_10	310-318779-7	USEPA 353.2	Nitrogen, Nitrate	13.7		mg/L	13.7	J-	Analytical method hold time exceeded, indicating potential low bias. Qualified J- since result is >PQL.
MW-43A_25_10	310-318779-8	USEPA 353.2	Nitrogen, Nitrate	0.117		mg/L	0.117	J-	Analytical method hold time exceeded, indicating potential low bias. Qualified J- since result is >PQL.
MW-44A_25_10	310-318779-9	USEPA 353.2	Nitrogen, Nitrate	0.1	U	mg/L	<0.1	R	Analytical method hold time exceeded, indicating potential low bias. Qualified R since result is non-detect.
MW-45A_25_10	310-318779-10	USEPA 353.2	Nitrogen, Nitrate	0.1	U	mg/L	<0.1	R	Analytical method hold time exceeded, indicating potential low bias. Qualified R since result is non-detect.
MW-46A_25_10	310-318779-11	USEPA 353.2	Nitrogen, Nitrate	2.36		mg/L	0.088	J-	Analytical method hold time exceeded, indicating potential low bias. Qualified J- since result is >PQL.
SW-2_25_10	310-318779-16	USEPA 353.2	Nitrogen, Nitrate	8.19		mg/L	8.19	J-	Analytical method hold time exceeded, indicating potential low bias. Qualified J- since result is >PQL.
SW-5_25_10	310-318779-17	USEPA 353.2	Nitrogen, Nitrate	6.66		mg/L	6.66	J-	Analytical method hold time exceeded, indicating potential low bias. Qualified J- since result is >PQL.
MW-1_25_10	310-318534-1	USEPA 8260	1,4-Dichlorobenzene	0.278	J	ug/L	0.278	J+	Associated surrogate recovery above the upper acceptance limit. Qualified J+ since the sample result was >MDL and <PQL.
MW-1_25_10	310-318534-1	USEPA 8260	Chlorobenzene	0.927	J	ug/L	0.927	J+	Associated surrogate recovery above the upper acceptance limit. Qualified J+ since the sample result was >MDL and <PQL.

Table 6
Qualified Results from Data Validation

Sample ID	Lab Sample ID	Method	Parameter	Result	Lab Qualifier	Units	Qualified Result	Validator Qualifier	Explanation
MW-31A_25_10	310-318534-6	USEPA 8260	1,1-Dichloroethane	0.916	J	ug/L	0.916	J+	Associated surrogate recovery above the upper acceptance limit. Qualified J+ since the sample result was >MDL and <PQL.

Notes:
This table only lists validator qualified data. Not all laboratory qualified data are listed; only the laboratory qualified data that was validator qualified are included.
> = greater than
< = less than
MDL = minimum detection limit
mg/L - milligrams per liter
PQL = practical quantitation limit
ug/L = micrograms per liter
USB = unseeded control blank
USEPA = United States Environmental Protection Agency
VOA = volatile organic analysis

Attachment 2

References

References

AECOM, 2024. *2024 UPDATE Winneshiek Hydrologic Monitoring System Plan, Winneshiek County Landfill, Decorah, Iowa.* September.

United States Environmental Protection Agency (USEPA, 2020a). *National Functional Guidelines for Organic Superfund Methods Data Review.* EPA-540-R-20-005. Office of Superfund Remediation and Technology Innovation, Washington, D.C. Revised November 2020.

USEPA, 2020b. *National Functional Guidelines for Inorganic Superfund Methods Data Review*. EPA-542-R-20-006. Office of Superfund Remediation and Technology Innovation, Washington, D.C. Revised November 2020.

Data Validation Standard Operating Procedure

Foth Infrastructure & Environment, LLC

Standard Operating Procedure

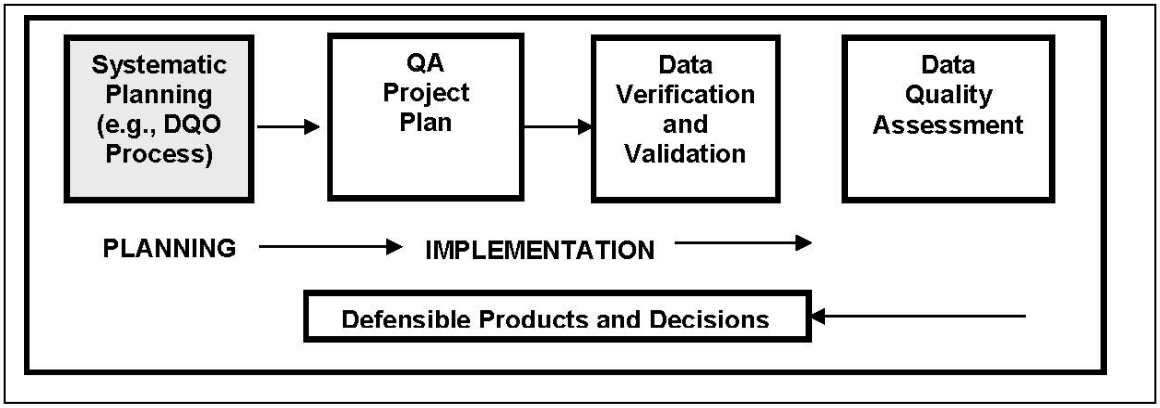
Data Verification, Validation, and Qualification

Introduction

The purpose of this Standard Operating Procedure (SOP) is to establish a procedure for the verification, validation, and qualification of laboratory analytical data. This SOP establishes guidelines for:

1. Reviewing project data quality objectives (DQOs) for environmental projects.
2. Selecting the appropriate stage (e.g., Stage 1, 2A, 2B, 3, 4) of analytical laboratory data verification and validation.
3. Selecting the appropriate level (e.g., Level I, II, III, IV) of analytical laboratory data deliverables for the intended stage of data verification and validation.
4. Performing data qualification.
5. Reporting results and data quality assessment.

This SOP assumes that the DQO process is complete. This SOP can be used during the development of a Quality Assurance Project Plan (QAPP) for specifying data quality procedures, or before, during, and after environmental sampling programs to aid in selection and execution of data quality procedures.



Definitions

Data Review – The process of examining and/or evaluating data to varying levels of detail and specificity. Data review includes verification, validation, and usability assessment.

Verification – Completeness check to confirm that the specified analytical requirements have been met. For this guidance, *data verification* consists of a completeness check to confirm that all data requested from the laboratory have been received and comply with specified requirements.

Validation – Confirmation that the accuracy and quality data requirements are fulfilled for a specific intended use. For this guidance, *data validation* consists of analyte and sample specific process for evaluating compliance of the laboratory data received with methods, procedures, or contract requirements.

References

Data Quality Objectives

United States Environmental Protection Agency (USEPA), 2000. *Guidance for Data Quality Assessment, Practical Methods for Data Analysis*. EPA QA/G-9. Office of Environmental Information, Washington, D.C. July. https://www.epa.gov/sites/production/files/2015-06/documents/g9-final.pdf.

USEPA, 2006. *Guidance on Systemic Planning Using the Data Quality Objectives Process*. EPA QA/G-4. Office of Environmental Information, Washington, D.C. February. https://www.epa.gov/quality/guidance-systematic-planning-using-data-quality-objectives-process-epa-qag-4

USEPA, 2006. *Data Quality Assessment: A Reviewer's Guide*. EPA QA/G-9R. Office of Environmental Information, Washington, D.C. February. https://www.epa.gov/sites/production/files/2015-08/documents/g9r-final.pdf.

USEPA, 2006. *Data Quality Assessment: Statistical Methods for Practitioners*. EPA QA/G-9S. Office of Environmental Information, Washington, D.C. February. https://www.epa.gov/sites/production/files/2015-08/documents/g9s-final.pdf.

Data Verification and Validation

The USEPA Superfund Analytical Services Contract Laboratory Program (USEPA CLP) website includes the most current guidance for analytical laboratory data verification and validation: https://www.epa.gov/clp. Historical guidance for laboratory analytical data verification and validation includes the following documents:

USEPA, 1987. *A Compendium of Superfund Field Operations Methods.* EPA/540/P-87/001. Office of Solid Waste and Emergency Response, Washington, D.C. December.

USEPA, 2002. *Guidance on Environmental Data Verification and Data Validation.* EPA QA/G-8. Office of Environmental Information, Washington, D.C. November. https://www.epa.gov/quality/guidance-environmental-data-verification-and-data-validation.

USEPA, 2009. *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use.* EPA 540-R-08-005. Office of Solid Waste and Emergency Response, Washington, D.C. January 13.

Data Qualification

The USEPA CLP website includes the most current National Functional Guidelines for analytical laboratory data review and qualification data: https://www.epa.gov/clp/superfund-clp-national-functional-guidelines-data-review, and includes the following documents (as of January 2022):

USEPA, 2020. *National Functional Guidelines for Superfund Organic Methods Data Review*. EPA 540-R-20-005. Office of Superfund Remediation and Technology Innovation, Washington D.C. November.

USEPA, 2020. *National Functional Guidelines for Inorganic Superfund Methods Data Review*. EPA 542-R-20-006. Office of Superfund Remediation and Technology Innovation, Washington D.C. November.

USEPA, 2020. *National Functional Guidelines for High Resolution Superfund Methods Data Review*. EPA 542-R-20-007. Office of Superfund Remediation and Technology Innovation, Washington D.C. November.

Personnel Qualifications

None, according to USEPA guidance documents.

Equipment and Supplies

Materials referenced in this SOP include:

- Project planning documents, such as a QAPP, Sampling and Analysis Plan (SAP), Hydrologic Monitoring System Plan (HMSP) or project Work Plan that state project DQOs, including performance and acceptance/usability criteria. This SOP assumes that DQOs for the project have already been established.
- Laboratory hard copy analytical data deliverables.
- Laboratory electronic analytical data deliverables (EDDs).

Procedures

Review Objectives and Determine Stage of Review

1. Review the Project DQOs to ensure understanding of data type, location, quantity, and quality needed to make defensible decisions. The performance and acceptance criteria are established in the project DQOs.

2. Select data verification and validation stage, as established in the project planning document.

    a. Stage 1 – A verification and validation based only on completeness and compliance of sample receipt condition checks. Checks include a comparison of reported results against DQOs (e.g., sample locations, field quality control (QC) samples, analytical methods, analyte counts, units, reporting limits, etc.), method preservation requirements (e.g., temperature, pH, headspace, etc.), assessment of non-QC laboratory qualifiers (e.g., primary sample holding time, primary sample dilution, etc.), and assessment of transcription or reporting errors.

    b. Stage 2A – A verification and validation based on completeness and compliance checks of sample receipt conditions and **ONLY** sample-related QC results. Checks include a review of instrument performance related results such as field QC samples (e.g., TB, FB, EB, FD, etc.) and analytical method QC samples (e.g., MB, LCS/LCSD, MS/MSD, surrogates, etc.). Stage 2A Modified excludes review of laboratory QC results (e.g., LCS/LCSD, MS/MSD, and laboratory duplicates).

    c. Stage 2B – A verification and validation based on completeness and compliance checks of sample receipt conditions and **BOTH** sample-related and instrument-related QC results. Checks include a review of instrument tuning related results such as the number, concentration, and frequency of calibration standards (e.g., initial calibration standards, ICV, ICB, CCV, CCB, etc.), as well the curves, percent recovery/difference, equations, calculations, weighting factors, and/or correlation coefficients as appropriate.

    d. Stage 3 – A verification and validation based on completeness and compliance checks of sample receipt conditions, **BOTH** sample-related and instrument-related QC results, **AND** recalculation checks (to check for computational errors). Stage 3 Validation requires the use of the laboratory reported instrument response data to recalculate calibration windows, analyte retention time, analyte concentration, and instrument performance QC sample recovery (e.g., percent recovery [%R], relative percent difference [RPD], etc.). The results of these recalculations are compared to the results of the laboratory calculations for accuracy.

e. Stage 4 – A verification and validation based on completeness and compliance checks of sample receipt conditions, both sample-related and instrument-related QC results, recalculation checks, **AND** review of the laboratory raw instrument output to check for parameterization errors. Stage 4 Validation requires the use of the laboratory raw instrument output to determine analyte identification and analyte quantitation from analyte-specific characteristics (e.g., column retention time, fluorescence, etc.) expressed as a signal in the raw instrument output. The results of this determination are compared to the laboratory determination for accuracy.

3. Select the level of laboratory analytical data deliverables. The laboratory can provide data at different levels, with each level including increasing amounts of information and detail.

   a. Level I – Cover sheet, case narrative, analytical results, sample receiving log, and Chain of Custody (COC). This report is suitable for meeting Stage 1 data verification and validation.

   b. Level II – Level I plus quality control summaries, QC qualifier legend sample summary, lab certification reports, sample analyte count, QC cross-reference table, transfer log. This report is suitable for meeting Stages 1 and 2A data verification and validation.

   c. Level III – Level II plus calibration data, tuning, and check data. This report is suitable for meeting Stages 1, 2A, and 2B data verification and validation.

   d. Level IV – Level III plus instrument run logs, raw data. This report is suitable for meeting Stages 1, 2A, 2B, 3, and 4 data verification and validation.

Perform Data Verification, Validation, and Qualification

Perform Stage 2A Modified data verification, validation, and qualification following procedures described in current USEPA CLP National Functional Guidelines and outlined below. Additional guidance regarding analyte, method, and/or instrument specific qualification may be found on the USEPA CLP website.

1. Confirm that all investigative and field QC samples planned were collected and received by the laboratory by looking at the field notes, COC, and project planning documents.

2. Verify that sample names and times were documented correctly on the COC, that sample names align with project planning documents, and confirm relinquish & receipt signatures.

3. Review the laboratory report case narrative for items noted by the laboratory that may impact the validation process.

4. Confirm sample receipt at laboratory in acceptable condition and confirm preservation meets method requirements. Any samples analyzed out of preservation requirements should be reviewed for potential bias.

5. Confirm that analytes and methods match the project planning documents and that the laboratory provided all analytes and methods ordered.

6. Confirm laboratory performed extractions and analyses within method-required holding times. Any samples extracted or analyzed out of holding time should be reviewed for potential bias.

7. Confirm field, method, and trip blanks were collected at the frequency specified in the project planning documents. Confirm no detections in laboratory method blanks, field blanks, and trip blanks. If detections are identified in the blank results, actions to be taken, including applying data qualifiers, will be conducted in accordance with the current USEPA CLP National functional guidelines unless otherwise specified in the project planning documents. A summary of the blank

evaluation criteria and actions based on the USEPA CLP National Functional Guidelines dated November 2020 is provided in Attachment 1.

8. For *organic analyses only*, confirm surrogates (or deuterated monitoring compounds) were analyzed and evaluate surrogate recovery compared to laboratory's surrogate acceptance limits or surrogate acceptance limits specified in the project planning documents. If surrogate recovery is outside the acceptance limits, actions to be taken, including applying data qualifiers, will be conducted in accordance with the current UESPA CLP National Functional Guidelines unless otherwise specified in the project planning documents. A summary of the surrogate evaluation criteria and actions based on the USEPA CLP National Functional Guidelines dated November 2020 is provided in Attachment 1.

9. Confirm field duplicates were collected at the frequency specified in the project planning documents. If the parent and duplicate sample concentrations are greater than or equal to (≥) 5x the PQL, the RPD between parent and duplicate sample concentrations will be calculated using the following equation:

$$RPD = \frac{(A - B)}{A + B/2} \times 100$$

Where:
A = analytical result from one of two duplicate measurements
B = analytical result from the second measurement

Precision measurements can be affected by how close a chemical concentration is to the practical quantitation limit, which can increase the percent error (or RPD). Therefore, in cases where either the parent or the duplicate sample concentration is less than (<) 5x the PQL, the absolute difference between the parent and duplicate sample concentrations will be calculated (i.e., low-level RPD).

Unless otherwise specified in the project planning documents, the acceptance criteria for field duplicate RPDs are as follows:

a. The field duplicate RPD criteria are less than or equal to (≤) 30 percent (%) for water samples and ≤ 50% for soil samples.

b. For low-level RPD comparisons, the absolute difference between the parent and duplicate sample concentrations shall not exceed 5x the PQL.

c. If either of these criteria are not met, both sample results should be qualified J or UJ. Detected results will be assigned a J qualifier, and non-detects will be assigned a UJ qualifier.

Data Qualifiers

The following data qualifiers may be used during data validation and/or retained from the laboratory.

- U = The analyte was analyzed for and was not detected above the numerical quantitation limit (i.e., reporting limit).
- J = The analyte was analyzed for and was positively identified, but the analytical result (i.e., quantitation) is an estimated value. In some cases, it is recognized that the estimated value is biased high (J+), suggesting the actual value is lower than estimated; or biased low (J-), suggesting the actual value is higher than estimated.

- UJ = The analyte was analyzed for and was not detected above the reporting limit, but the reporting limit is an estimated value.
- R = The analyte was analyzed for but may or may not be present and/or quantifiable due to quality control issues. The analytical result is not usable and should be rejected.
- N = The analysis indicates presumptive evidence of the presence of the analyte.
- NJ = The analysis indicates presumptive evidence of the presence of the analyte, but the numerical value is an estimated quantity.

Results qualified J (J, J+, and J-) or UJ are of acceptable data quality and may be used quantitatively per USEPA guidelines.

Reporting

The results of the data quality procedures should be summarized into a deliverable. An example deliverable used to communicate the results of Stage 2A Modified data validation is provided in Attachment 2. The deliverable should include an overall data quality assessment relative to the project DQOs and state if the data set is usable for the intended purposes of the project. The overall data quality assessment may include the following evaluations:

- Method Criteria: Review of the methods and analytes requested, chain of custody and sample receipt forms, sample conditions upon receipt, and holding times to ensure that samples were collected, preserved, shipped/delivered, and analyzed within the method protocols.
- Precision: Defined as the agreement between a set of replicate measurements without assumption or regard about the true value and is a measure of the reproducibility of individual measurements. Field duplicate samples will be used to assess precision.
- Accuracy: An expression of the degree to which a measured value represents the true value. Accuracy will be assessed through a review of surrogate, matrix spike, and laboratory control sample results. Accuracy will be defined as the percent recovery (%R) of an analyte in a reference standard or spiked sample. The acceptance criteria are dependent on the analytical method and established by individual laboratories. Acceptable accuracy will be defined as achieving %R within the recovery limits established by the analytical laboratory for the method utilized.
- Representativeness: The degree that data accurately and precisely represents the environment and conditions that the sample targeted. Representativeness will be achieved by conducting sampling in accordance with the sample collection procedures described in the project planning documents.
- Comparability: Expresses the confidence with which one data set can be evaluated in relation to another data set. Data are considered comparable if collection techniques, measurement procedures, methods, and reporting are equivalent for the samples within a sample set. Note that methods of sample collection and analyses may differ due to geologic and hydrogeologic conditions at individual sample locations and through time, meaning some data sets vary in comparability. To the extent practicable, consistent sampling techniques and analytical methods should be utilized.
- Completeness: Measures the amount of data determined to be valid relative to the amount of data collected. Completeness is also a measure of the amount of valid data generated versus the amount of data planned for collection, ensuring sufficient data are available to make project decisions. A completeness goal for most projects will be 90%.

- Suitability for Intended Use: An overall review of the event data to ensure that results are applicable for their intended use. If gross contamination or significant issues with the method criteria, precision, accuracy, representativeness, comparability, or completeness are identified, the reviewer may indicate that entire event data may not be suitable for use, and resampling or other corrective actions may be required.

Attachment 1

Summary of Data Validation Evaluation Criteria and Actions

(Based on the USEPA CLP National Functional Guidelines dated November 2020)

Foth Infrastructure & Environment, LLC

Summary of Data Validation Evaluation Criteria and Actions

This attachment provides the evaluation criteria and actions recommended for review of blank samples and surrogates based on the USEPA CLP National Functional Guidelines dated November 2020.

Blank Review

Blank Result	Sample Result	Action
VOCs and Non-Halogenated Organic Compounds (Method 8015B)		
>MDL and <PQL	Non-Detect	No qualification
	>MDL and <PQL	Qualify U and report at PQL
	≥PQL but <Blank Multiplier (1)	Qualify U and report at PQL
	≥PQL and ≥Blank Multiplier (1)	Qualify J+ and report at sample result or no qualification
≥PQL	Non-Detect	No qualification
	>MDL and <PQL	Qualify U and report at PQL
	≥PQL but <Blank Multiplier (1)	Qualify U and report at sample result
	≥PQL and ≥Blank Multiplier (1)	Qualify J+ and report at sample result or no qualification
SVOCs, Pesticides, Herbicides, and PCBs		
>MDL and <PQL	Non-Detect	No qualification
	>MDL and <PQL	Qualify U and report at PQL
	≥PQL	Qualify J+ and report at sample result or no qualification
≥PQL	Non-Detect	No qualification
	>MDL and <PQL	Qualify U and report at PQL
	≥PQL but <Blank	Qualify U and report at sample result
	≥PQL and ≥Blank	Qualify J+ and report at sample result or no qualification
Metals (ICP-AES and ICP-MS Methods), Mercury, Cyanide, Anions, and Total Organic Carbon		
>MDL and <PQL	Non-Detect	No qualification
	>MDL and <PQL	Qualify U and report at PQL
	≥PQL	Qualify J+ and report at sample result or no qualification
≤MDL but >QL	Non-Detect	UJ (2)
	Detect	J- or no qualification
≥PQL	Non-Detect	No qualification
	>MDL and <PQL	Qualify U and report at PQL
	≥PQL but <10x Blank	Qualify J+ and report at blank result or R
	≥PQL and ≥10x Blank	No qualification

MDL = minimum detection limit
PCB = polychlorinated biphenyl
PQL = practical quantitation limit
SVOC = semivolatile organic compound
VOC = volatile organic compound

(1) For VOCs, a blank multiplier of 1x will generally be utilized. For common laboratory contaminants (2-butanone, acetone, methylene chloride), a blank multiplier of 2x will be used.

(2) For cyanide, the action is no qualification.

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Surrogates or Deuterated Monitoring Compounds

Criteria	Action [1,2]	
	Detect	Non-Detect
VOCs and Non-Halogenated Organic Compounds (Method 8015B)		
%R < Expanded Lower Acceptance Limit (10%)	J-	R
Expanded Lower Acceptance Limit (10%) ≤ %R < specified Lower Acceptance Limit	J-	UJ
%R within specified Acceptance Limits	No qualification	No qualification
%R > specified Upper Acceptance Limit	J+	No qualification
SVOCs		
%R < Expanded Lower Acceptance Limit (10%, excluding surrogates with 10% as the lower acceptance limit, undiluted sample analysis)	J-	R
Expanded Lower Acceptance Limit (10%) ≤ %R (excluding surrogates with 10% as the lower acceptance limit, undiluted sample analysis) < specified Lower Acceptance Limit	J-	UJ
%R < specified Lower Acceptance Limit (diluted sample analysis)	Use professional judgment	Use professional judgment
%R within specified Acceptance Limits	No qualification	No qualification
%R > specified Upper Acceptance Limit	J+	No qualification
Pesticides, Herbicides, and PCBs		
%R < Expanded Lower Acceptance Limit (10%, undiluted sample)	J-	R
%R < Expanded Lower Acceptance Limit (10%, diluted sample)	Use professional judgment	Use professional judgment
Expanded Lower Acceptance Limit (10%) ≤ %R < specified Lower Acceptance Limit	J-	UJ
%R within specified Acceptance Limits	No qualification	No qualification
Upper Acceptance Limit < %R ≤ Expanded Upper Acceptance Limit (200%)	J+	No qualification
%R > Expanded Upper Acceptance Limit (200%)	J+	Use professional judgment

%R = percent recovery
PCB = polychlorinated biphenyl
SVOC = semivolatile organic compound
VOC = volatile organic compound

(1) For VOCs, pesticides, herbicides, and PCBs, qualifiers are assigned to all target analytes in the method for the individual sample the surrogate was analyzed with.

(2) For SVOCs, qualifiers are not assigned to all target analytes in the method for the individual sample the surrogate was analyzed with, but rather a shorter list of target analytes in the method list. The analytical laboratory or project planning document should be consulted for associated target SVOC analytes corresponding to each surrogate.

Attachment 2
Example Deliverable for Stage 2A Modified Data Validation

Foth Infrastructure & Environment, LLC

Data Validation Report

Project Name:	
Task Name:	
Data Set Description:	
Laboratory(s):	
Laboratory Sample Delivery Group (SDG) ID(s):	
Sample Collection Dates:	
Sample Analysis Dates:	
Sample Matrices:	
Sample IDs Reviewed:	See Table 1
Verification and Validation Stage, 100% data:	☐ 1 ☒ 2A Modified ☐ 2A ☐ 2B ☐ 3 ☐ 4
Verified and Validated By:	

The analytical data were validated to verify that laboratory quality assurance and quality control (QA/QC) procedures were documented and to evaluate the overall quality of the data reported. Analytical reports include [insert number and type of samples collected and collection method] at [insert site] from [insert sample collection dates]; samples are listed in Table 1. The data were collected in accordance with [insert references to the project planning documents and/or regulatory codes].

Validation Summary

Stage 2A Modified data validation was performed on 100% of the data from these sample delivery groups (SDGs), with review tasks and items of note documented in the summary table below.

Validation Task and Description	Review Notes	Action
Chain of Custody (COC) and Sample Receipt Form Confirm relinquish & receipt signatures. Confirm parameters and analytical methods match COC and project planning documents.		
Case Narrative Review for items noted by the laboratory that may impact the validation process.		

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Validation Task and Description	Review Notes	Action
Sample Condition Upon Receipt (SCUR) Confirm samples in acceptable condition and no discrepancies noted. Confirm preservation meets method requirements.		
Methods Requested Confirm methods match project requirements and lab provided all methods ordered.		
Analytes Requested Confirm analytes ordered match project requirements and lab provided all analytes ordered.		
Holding Times Confirm laboratory performed extractions and analyses within method-required holding times.		
Blanks Confirm no detections in laboratory method blanks, field blanks, and trip blanks.		
Surrogates or Deuterated Monitoring Compounds For *organic analyses only*, confirm surrogates analyzed and surrogate recovery within QC limits.		
Field Duplicates Confirm field duplicates collected at required frequency and field duplicate RPD within acceptable limits.		

Abbreviations:
COC = Chain of Custody
EDD = electronic data deliverable
LCS = laboratory control sample
LCSD = laboratory control sample duplicate
MS = matrix spike
MSD = matrix spike duplicate
RPD = relative percent difference
SCUR = Sample Condition Upon Receipt

Overall Assessment of Data

Item	Acceptable		Comments
	Yes	No	
1. Method Criteria			
2. Precision			
3. Accuracy			
4. Representativeness			
5. Comparability			
6. Completeness			
7. Suitability for Intended Use			

Overall, the data reported are of good quality and the results for the applicable quality assurance/quality control (QA/QC) measurements that were used by the laboratories during the analysis of the samples were generally acceptable. Some sample results required qualification during data validation because method-specific QA/QC criteria were not met; results may be qualified for more than one reason. These qualified data are usable, represent data of good quality and reasonable confidence, and have an acceptable degree of uncertainty (i.e., may be less precise or less accurate than unqualified data). Table 2 provides a definition of the qualifiers that may be assigned by the validator and/or retained from the laboratory. A summary of the validation qualifiers is provided below.

- No results were qualified as [insert qualifiers not utilized].
- Insert discussion on number of results that were assigned qualifiers. For example: Two results (0.1%) were qualified as estimated (assigned as J qualifiers).
- [Insert percent] of the data is usable for project data quality objectives.

Attachments

Attachment 1 – Tables

Table 1 – Sample IDs Reviewed
Table 2 – Data Qualifiers That May Be Used to Qualify Analytical Results During Validation
Table 3 – Method, Field, and Trip Blank Exceedances
Table 4 – Surrogate Recovery Exceedances
Table 5 – Relative Percent Difference (RPD) Analysis for Field Duplicate Samples
Table 6 – Qualified Results from Data Validation

Attachment 2 – References

Appendix B
Statistical Reports

Spring 2025 Statistical Analysis

Fall 2025 Statistical Analysis

Table 9

Analytical Data Summary for SW-1

Constituents	Units	4/24/2012	4/8/2013 4/16/2013	6/3/2013	8/14/2013 8/27/2013	6/25/2014 6/27/2014	10/31/2014 11/10/2014	5/1/2015 5/12/2015	3/24/2016 4/13/2016
Antimony	ug/L	<1.4500	.0822	1.0300	.0839	<.1190	<.1610	<.1610	<.2370
Arsenic	ug/L	<.216	1.500	<2.720	.655	<.397	<.945	<.945	<.672
Barium	ug/L	117	104	122	128	122	136	116	124
Beryllium	ug/L	<.0790	<.0696	<.3480	<.0696	<.0142	<.0390	<.0390	<.2210
Cadmium	ug/L	<.2290	<.1060	<.5300	<.1060	<.1080	<.1120	<.1120	<.0351
Chromium	ug/L	<1.810	<.418	3.840	.697	<1.370	<1.240	<1.240	<.355
Cobalt	ug/L	<1.5500	.7280	1.0800	1.1100	.4370	.0850	.1770	.1560
Copper	ug/L	1.940	3.540	2.020	4.710	1.080	.508	.677	<1.220
Lead	ug/L	<.8040	<.2070	<1.0400	1.6300	.1230	<.0967	.2320	<.2110
Nickel	ug/L	<2.580	3.700	4.500	3.350	2.120	<.581	<.581	<1.530
Selenium	ug/L	<.700	<1.460	<7.300	<1.460	<1.790	<3.340	<3.340	.916
Silver	ug/L	<1.7000	<.0789	<.3950	<.0789	<.0396	<.0420	.0630	<.1530
Thallium	ug/L	<.2880	.0338	.1410	.0478	<.0353	<.0325	<.0325	<.0255
Total suspended solids	mg/L						3.17	23.00	17.60
Turbidity, field	NTU						6.130	1.260	
Vanadium	ug/L	<2.100	<.833	<4.170	1.590	2.370	.512	.716	.495
Zinc	ug/L	14.200	<.625	<3.130	12.200	<6.950	<6.950	<6.950	<5.210

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

Table 9

Analytical Data Summary for SW-1

Constituents	11/11/2016 11/30/2016	5/5/2017 5/25/2017	11/1/2017 11/22/2017	6/4/2018 6/27/2018	10/28/2018 10/31/2018	6/4/2019 6/13/2019
Antimony	<.2370	<.1850	<.1850	<.4200	<.4200	<1.3200
Arsenic	<.672	<.505	<.505	<.570	<.570	<.232 .769J
Barium	134	115	143	139	120	121
Beryllium	<.2210	<.1250	<.1250	<.1900	<.1900	<.5300
Cadmium	<.0351	<.0441	<.0441	<.0600	<.0600	<.1670
Chromium	<.355	<.729	<.729	<.760	<.760	<1.140 1.280J
Cobalt	.3280	<.0453 .1210J	.2040	<.0610 .2180J	<.0610 .1070J	<.4020
Copper	1.430	<2.190	<2.190	<3.800 *	<1.600	<.497 1.860J
Lead	.3200	<.3240	<.3240	<.2500	<.2500	.6440
Nickel	<1.530	<.929	<.929	<1.000 1.070J	<1.000	<.625 1.060J
Selenium	<.630	<.928	<.928	<.900	<.900	<.982
Silver	<.1530	<.1400	<.1400	<.3000	<.3000	<.1150
Thallium	<.0255	<.0644	<.0644	<.1700	<.1700	<.5700
Total suspended solids	28.70	15.00	8.25	7.50	5.63	22.60
Turbidity, field	8.670	16.320	11.790	12.570	2.859	28.110
Vanadium	.645	<.840	1.390	<.520 .778J	<.520 .646J	<2.150 3.820J
Zinc	<5.210	<11.500	<11.500	<10.000	<10.000	<6.920 12.900J

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

Table 9

Analytical Data Summary for SW-1

Constituents	10/30/2019 11/20/2019	6/16/2020 7/7/2020	11/3/2020 11/23/2020	5/17/2021 6/8/2021	9/21/2021 9/29/2021	3/2/2022 3/29/2022
Antimony	<.5300	<.5100	<.5100	<1.1000	<1.1000	<.6900
Arsenic	<.750	<.880	<.880	<.750 .951J	<.750	2.540
Barium	136	113	127	121	129	201
Beryllium	<.2700	<.2700	<.2700	<.2700	<.2700	<.2700 .4970J
Cadmium	<.0390	<.0490	<.0490	.1030	<.0510	.2200
Chromium	<.980	<1.100	<1.100	<1.100 1.870J	<1.100	<1.100 1.630J
Cobalt	<.0910 .2640J	<.0910 .3270J	<.0910 .1530J	.7870	<.1900	4.3600
Copper	<2.000	<1.500	<1.500	<1.400 1.840J	<1.400	11.500
Lead	<.2700	.5310	<.1100 .1420J	.8860	<.2100	7.0800
Nickel	<1.700	<1.900	<1.900	<1.900	<1.900	7.850
Selenium	<1.000	<1.000	<1.000	<.960 1.900J	<.960	<.960 .966J
Silver	<.3700	<.3700	<.3700	<.4200	<.4200	<.4900
Thallium	<.2700	<.2600	<.2600	2.1300	<.2600	<.2600 .2810J
Total suspended solids	11.10	20.00	6.25	35.00	12.70	824.00
Turbidity, field	8.210	11.290	17.050	26.390	14.230	984.300
Vanadium	<.820 1.240J	<.850 1.410J	<.850	<1.100 4.300J	<1.100	7.590
Zinc	<10.000	<10.000	<10.000	<10.000	<10.000	20.700

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

Table 9

Analytical Data Summary for SW-1

Constituents	6/22/2022 6/27/2022	8/16/2022 9/13/2022	6/6/2023 6/27/2023	8/24/2023 8/29/2023	6/11/2024 7/3/2024	6/2/2025 6/9/2025
Antimony	<.6900	<.6900	<1.0000		<1.0000	<1.0000
Arsenic	<.750	<.750	<.530 .685J		<.530	<.530
Barium	123	112	110		103	111
Beryllium	<.2700	<.2700	<.3300		<.3300	<.3300
Cadmium	<.0550	<.0550	.2280	<.1000	<.1000	<.1000
Chromium	<1.100	<1.100	<1.100		<1.200	<1.800
Cobalt	<.1900 .2440J	<.1900	<.1700 .4110J		<.1700	<.1700
Copper	<1.800	<1.800	<1.800		<1.800	<3.200
Lead	<.2400	<.2400	.6170		<.2600	<.3300
Nickel	<1.900	<1.900	<1.900		<2.100	<2.300
Selenium	<.960	<.960	<1.400 1.770J		<1.400	<1.400
Silver	<.4900	<.4900	1.3600	<.5000	<.5000	<.5000
Thallium	<.2600	<.2600	4.6700	<.2600	<.5700	<.5700
Total suspended solids	11.50	2.25	19.30	276.00	4.75	<1.31 1.75J
Turbidity, field	12.110	18.730	28.000	143.700	19.740	14.830
Vanadium	<1.100	<1.100	<1.100		<1.100	<1.700
Zinc	<10.000	<10.000	<6.400		<9.700	<13.000

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

Table 9

Analytical Data Summary for SW-2

Constituents	Units	12/7/2011	2/21/2012	4/24/2012	6/21/2012	8/23/2012	10/24/2012 10/26/2012	4/8/2013 4/16/2013	11/5/2013 11/7/2013
Antimony	ug/L	<2.7300	<.1200	<1.4500	<.1200	<.1200	<.1200	.2270	<.0541
Arsenic	ug/L	<.600	<.730	<.216	1.050	.980	1.130	1.730	.587
Barium	ug/L	125.0	141.0	111.0	151.0	144.0	150.0	114.0	131.0
Beryllium	ug/L	<.0510	.0300	<.0790	.0400	.0200	.0300	<.0696	<.0696
Cadmium	ug/L	<.1240	<.0640	<.2290	<.0640	<.0640	.0700	<.1060	<.1060
Chromium	ug/L	<1.810	<.390	<1.810	<.390	.500	.590	.697	<.418
Cobalt	ug/L	<1.5500	.7700	<1.5500	.9400	.4400	.4400	.8050	.6530
Copper	ug/L	8.340	2.620	<1.510	2.000	1.360	1.290	4.780	1.360
Lead	ug/L	<1.000	.660	<.804	1.250	.830	.400	<.207	<.207
Nickel	ug/L	<2.580	5.560	<2.580	3.860	3.200	3.650	4.750	4.270
Selenium	ug/L	<1.690	<.297	<.700	<.297	<.297	<.297	<1.460	1.660
Silver	ug/L	<1.7000	<.0270	<1.7000	<.0270	<.0270	<.0270	<.0789	<.0789
Thallium	ug/L	<.8400	<.0087	<.2880	<.0087	.0200	<.0087	.0329	<.0267
Total suspended solids	mg/L								
Turbidity, field	NTU								
Vanadium	ug/L	<2.100	.940	2.160	1.120	<.940	<.940	.942	<.833
Zinc	ug/L	<9.110	11.600	18.700	6.370	8.310	4.680	5.620	<.625

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

Table 9

Analytical Data Summary for SW-2

Constituents	6/25/2014 6/27/2014	10/31/2014 11/10/2014	5/1/2015 5/12/2015	3/24/2016 4/13/2016	11/11/2016 11/30/2016	5/5/2017 5/25/2017	11/1/2017 11/22/2017
Antimony	<.1190	<.1610	<.1610	<.2370	<.2370	<.1850	<.1850
Arsenic	2.990	<.945	<.945	<.672	<.672	<.505	.743
Barium	105.0	117.0	105.0	128.0	100.0	60.5	104.0
Beryllium	<.0142	<.0390	.1500	<.2210	<.2210	<.1250	<.1250
Cadmium	<.1080	<.1120	<.1120	<.0351	<.0351	<.0441	<.0441
Chromium	<1.370	<1.240	1.740	<.355	.417	<.729	2.560
Cobalt	.9530	.4140	.7530	.2400	.1930	<.0453 .1380J	.2470
Copper	2.470	.591	1.670	<1.220	<1.220	<2.190	<2.190
Lead	<.420	.320	1.080	.251	.237	<.324	<.324
Nickel	1.140	.969	2.540	<1.530	<1.530	<.929	.982
Selenium	<1.790	<3.340	<3.340	.771	<.630	<.928	<.928
Silver	<.0396	<.0420	.0620	<.1530	<.1530	<.1400	<.1400
Thallium	<.0353	<.0325	.0370	<.0255	<.0255	<.0644	<.0644
Total suspended solids		15.700	79.700	17.100	16.300	20.500	10.200
Turbidity, field		18.36	59.63		16.24	33.21	28.49
Vanadium	2.440	1.280	3.530	.571	.769	<.840	1.490
Zinc	33.900	<6.950	6.970	<5.210	<5.210	<11.500	<11.500

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

Table 9

Analytical Data Summary for SW-2

Constituents	6/4/2018 6/27/2018	10/28/2018 10/31/2018	6/4/2019 6/13/2019	10/30/2019 11/20/2019	6/16/2020 7/7/2020	11/3/2020 11/23/2020
Antimony	<.4200	<.4200	<1.3200	<.5300	<.5100	<.5100
Arsenic	<.570	<.570	<.232 .877J	<.750	<.880 1.020J	<.880
Barium	98.5	99.8	91.8	104.0	195.0	96.2
Beryllium	<.1900	<.1900	<.5300	<.2700	<.2700	<.2700
Cadmium	<.0600	<.0600	<.1670	<.0390	<.0490 .0500J	<.0490
Chromium	<.760	<.760 .781J	<1.140 1.610J	<.980	<1.100	<1.100
Cobalt	<.0610 .2200J	<.0610 .2350J	<.4020	<.0910 .1710J	<.0910 .4950J	<.0910 .1740J
Copper	<3.800 *	<1.600	<.497 1.730J	<2.000	<1.500	<1.500
Lead	<.250	<.250 .354J	.721	.765	<.110	<.110 .158J
Nickel	<1.000	<1.000	<.625 1.350J	<1.700	<1.900 3.030J	<1.900
Selenium	<.900	<.900	<.982	<1.000	<1.000	<1.000
Silver	<.3000	<.3000	<.1150	<.3700	<.3700	<.3700
Thallium	<.1700	<.1700	<.5700	<.2700	<.2600	<.2600
Total suspended solids	13.400	11.000	31.500	6.250	<.638 1.750J	6.750
Turbidity, field	14.11	8.81	28.63	10.11	21.23	18.91
Vanadium	<.520 1.270J	<.520 1.340J	<2.150 4.500J	<.820 .951J	<.850	<.850 1.300J
Zinc	<10.000	<10.000	<6.920 12.000J	<10.000	<10.000	<10.000

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

Table 9

Analytical Data Summary for SW-2

Constituents	5/17/2021 6/8/2021	9/21/2021 9/29/2021	3/2/2022 3/29/2022	6/22/2022 6/27/2022	8/16/2022 9/13/2022	6/6/2023 6/27/2023
Antimony	<1.1000	<1.1000	<.6900	<.6900	<.6900	<1.0000
Arsenic	<.750	<.750	<.750 1.520J	<.750 .806J	<.750	<.530 .840J
Barium	90.0	107.0	156.0	110.0	89.7	101.0
Beryllium	<.2700	<.2700	<.2700 .3210J	<.2700	<.2700	<.3300
Cadmium	<.0510	<.0510	.1810	<.0550	<.0550	<.1000 .1570J
Chromium	<1.100	<1.100	<1.100 1.260J	<1.100 1.730J	<1.100	<1.100
Cobalt	<.0910 .3020J	<.1900 .3610J	3.1700	.6930	<.1900 .2120J	.6220
Copper	<1.400	<1.400	6.760	<1.800	<1.800	<1.800
Lead	<.210 .238J	<.210 .308J	5.300	.939	<.240	.867
Nickel	<1.900	<1.900	6.590	<1.900	<1.900	<1.900
Selenium	<.960 1.280J	<.960	<.960	<.960	<.960	<1.400 1.580J
Silver	<.4200	<.4200	<.4900	<.4900	<.4900	1.4300
Thallium	<.2600	<.2600	<.2600	<.2600	<.2600	3.9300
Total suspended solids	10.300	17.400	564.000	63.800	6.380	37.900
Turbidity, field	21.23	19.32	1009.40	13.24	26.43	22.39
Vanadium	<1.100 2.310J	<1.100 1.440J	5.450	<1.100 3.840J	<1.100 1.190J	<1.100 1.520J
Zinc	<10.000	<10.000	<10.000 16.700J	<10.000	<10.000	<6.400

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

Table 9

Analytical Data Summary for SW-2

Constituents	8/24/2023 8/29/2023	11/1/2023 11/20/2023	6/11/2024 7/3/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony		<1.0000	<1.0000	<1.0000	<1.0000
Arsenic		<.530 .591J	<.530 .627J	<.530	<.530 .772J
Barium		94.1	104.0	110.0	99.6
Beryllium		<.3300	<.3300	<.3300	<.3300
Cadmium		<.1000	<.1000	<.1000	<.1000
Chromium		<1.100	<1.200	<1.200	<1.800
Cobalt		<.1700	<.1700 .3880J	<.1700 .2370J	<.1700 .3890J
Copper		<1.800	<1.800	<1.800	<3.200
Lead		<.240	.583	<.260	<.330 .362J
Nickel		<1.900	<2.100	<2.100 3.270J	<2.300
Selenium		<1.400	<1.400	<1.400	<1.400
Silver	<.5000	<.5000	<.5000	<.5000	<.5000
Thallium	<.2600 .2790J	<.2600	<.5700	<.5700	<.5700
Total suspended solids	17.000	4.880	24.100	<3.700 4.670J	26.100
Turbidity, field	28.30	23.11	12.79	4.76	34.21
Vanadium		<1.100 1.110J	<1.100 2.140J	<1.100	<1.700
Zinc		<6.400	<9.700	<9.700	<13.000

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

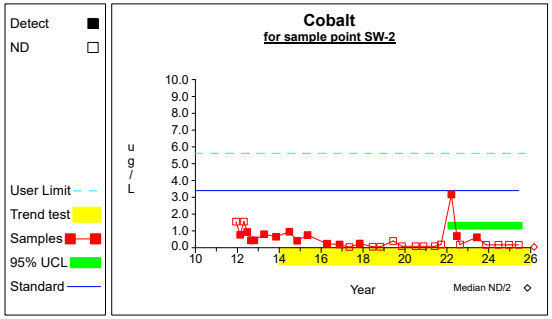
Table 9

Analytical Data Summary for SW-5

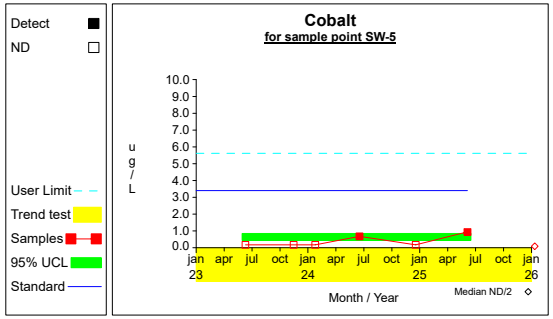
Constituents	Units	6/6/2023 6/27/2023	8/24/2023 8/29/2023	11/1/2023 11/20/2023	1/23/2024 1/25/2024	6/11/2024 7/3/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	ug/L	<1		<1	<1	<1	<1	<1
Arsenic	ug/L	<.530 .745J		<.530 .582J	<.530 .569J	<.530 .764J	<.530	<.530 1.310J
Barium	ug/L	91.4		90.0	87.1	70.1	87.2	86.9
Beryllium	ug/L	<.33		<.33	<.33	<.33	<.33	<.33
Cadmium	ug/L	<.1		<.1	<.1	<.1	<.1	<.1
Chromium	ug/L	<1.10		<1.10	<1.10	<1.20 1.27J	<1.20	<1.80
Cobalt	ug/L	<.170 .287J		<.170 .181J	<.170	.679	<.170	.938
Copper	ug/L	<1.8		<1.8	<1.8	<1.8	<1.8	<3.2
Lead	ug/L	<.240 .388J		<.240	<.240	.689	<.260	.862
Nickel	ug/L	<1.90		<1.90	<1.90	<2.10 2.33J	<2.10	<2.30 3.20J
Selenium	ug/L	<1.40 1.51J		<1.40	<1.40	<1.40	<1.40	<1.40
Silver	ug/L	1.54	<.50	<.50	<.50	<.50	<.50	<.50
Thallium	ug/L	<.26		<.26	<.26	<.57	<.57	<.57
Total suspended solids	mg/L	10.400	19.000	5.630	<.638 1.750J	37.000	<3.700	59.000
Turbidity, field	NTU	20.19	18.23	18.21	5.29	17.89	4.78	48.32
Vanadium	ug/L	<1.10		<1.10 1.61J	<1.10	<1.10 2.40J	<1.10	<1.70
Zinc	ug/L	<6.4		<6.4	<6.4	<9.7	<9.7	<13.0

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

Confidence Limits (Assessment)



Graph 1



Graph 2

Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
Cobalt	ug/L	SW-2	8	0.589	1.079	0.670	0.000	1.312	3.400	
Cobalt	ug/L	SW-5	6	0.326	0.382	0.822	0.012	0.641	3.400	

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

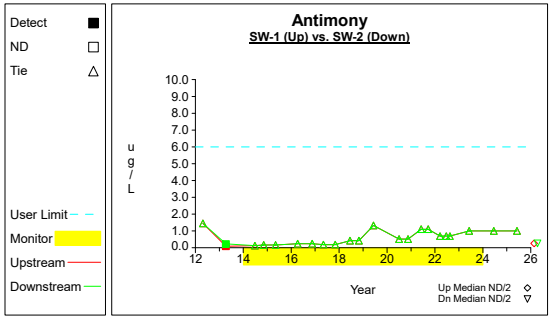
Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at SW-2

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.713** / **8** = **0.589**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))$^{1/2}$ = ((**10.926** - **22.208**/**8**) / (**8**-1))$^{1/2}$ = **1.079**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**$^{1/2}$ = **0.589** - **1.895** * **1.079**/**8**$^{1/2}$ = **0.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**$^{1/2}$ = **0.589** + **1.895** * **1.079**/**8**$^{1/2}$ = **1.312**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **1100.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**253** ± **2.576** * **1100.0**$^{1/2}$) / 2 = [**83.782**, **169.218**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.05**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

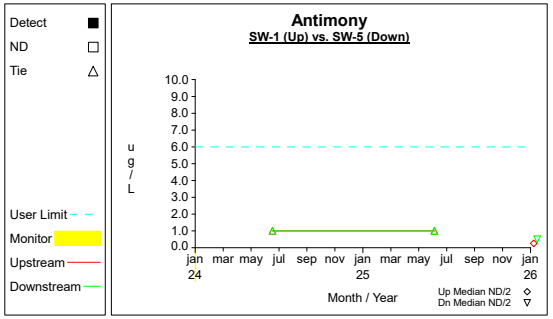
Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at SW-5

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.957** / **6** = **0.326**	Compute the mean of the last 6 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.37** - **3.83**/**6**) / (**6**-1))^{½} = **0.382**	Compute sd of the last 6 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.326** - **2.014** * **0.382**/**6**^{½} = **0.012**	Compute lower confidence limit for the mean of the last 6 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.326** + **2.014** * **0.382**/**6**^{½} = **0.641**	Compute upper confidence limit for the mean of the last 6 measurements.
5	N' = **N** * (**N**-1) / 2 = **6** * (**6**-1) / 2 = **15**	Number of sample pairs during trend detection period.
6	S = **0.269**	Sen's estimator of trend.
7	var(S) = **19.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**15** ± **2.576** * **19.667**^{½}) / 2 = [**1.788**, **13.212**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.25**, **1.116**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

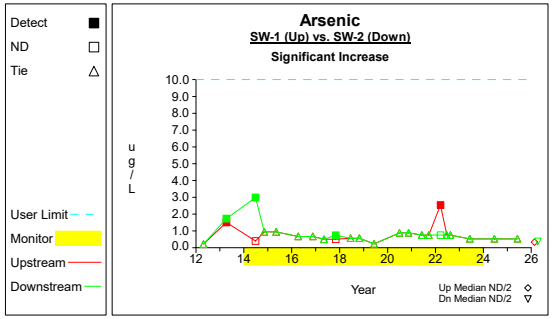
Surface Water Monitoring



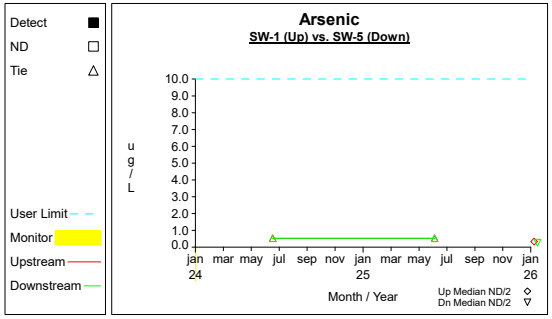
Graph 1



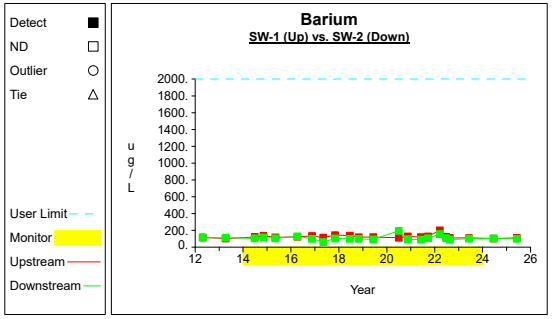
Graph 2



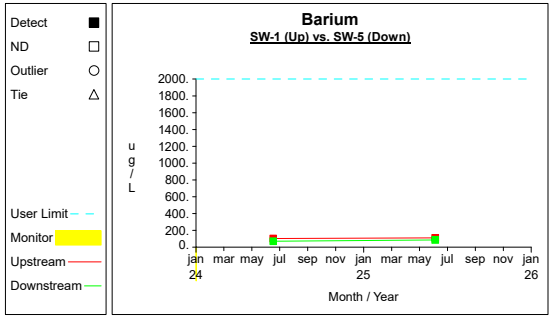
Graph 3



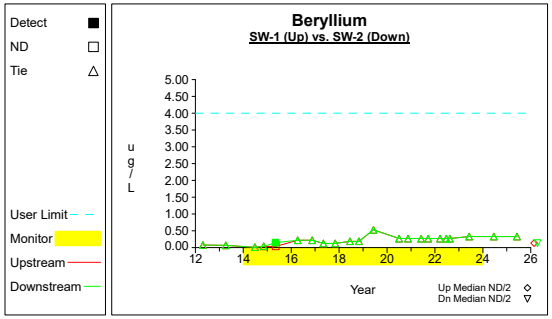
Graph 4



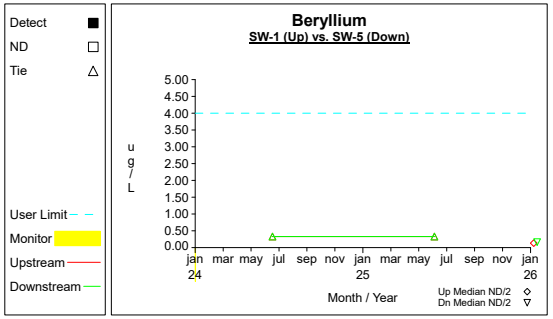
Graph 5



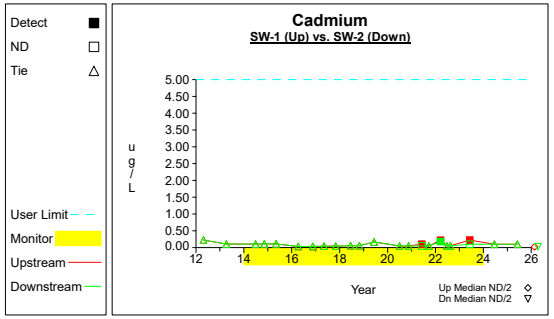
Graph 6



Graph 7

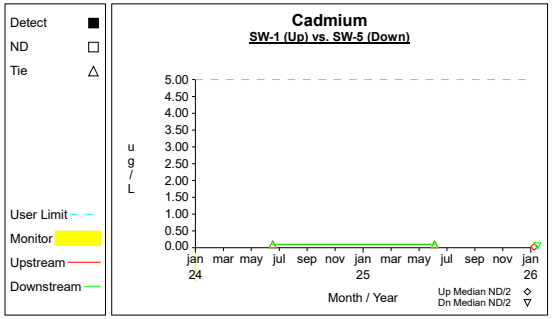


Graph 8

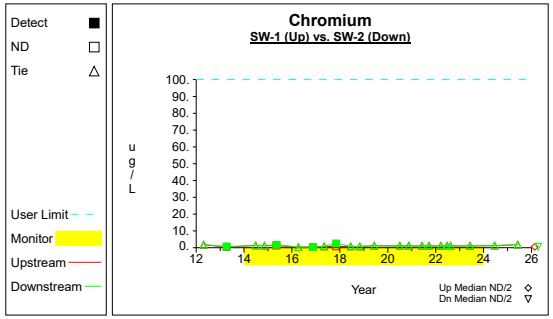


Graph 9

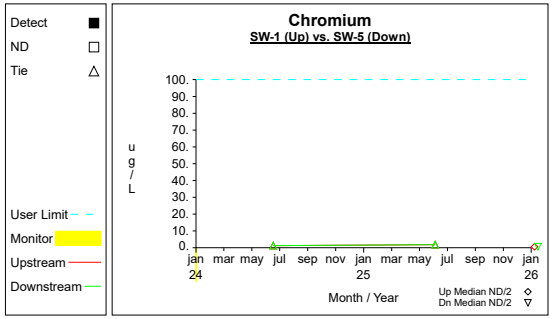
Surface Water Monitoring



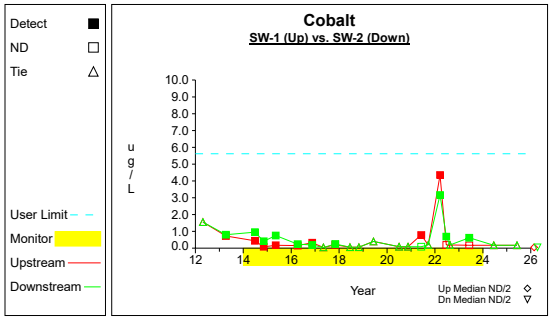
Graph 10



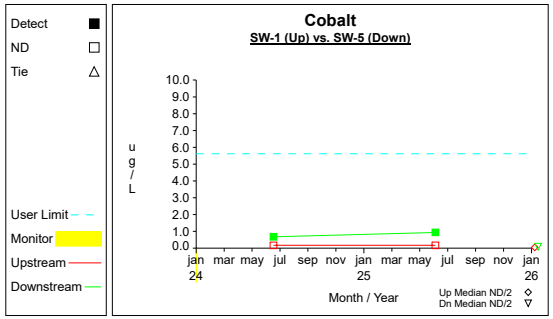
Graph 11



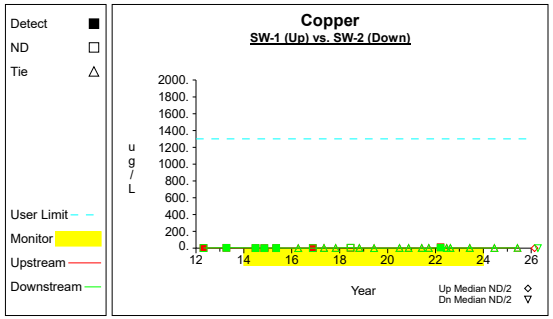
Graph 12



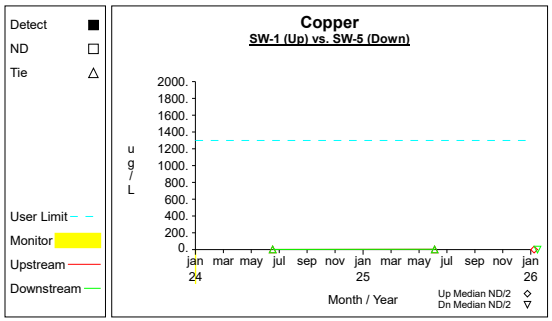
Graph 13



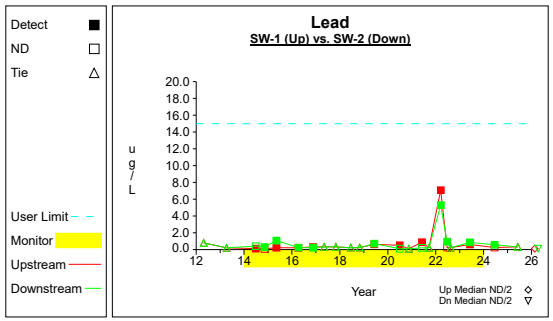
Graph 14



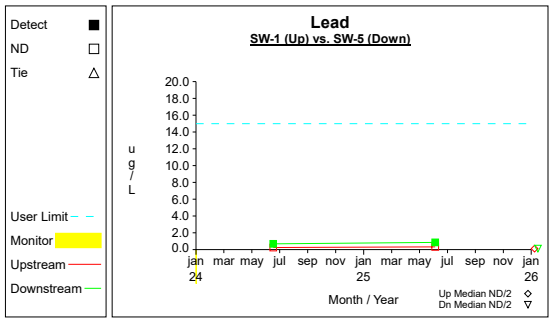
Graph 15



Graph 16

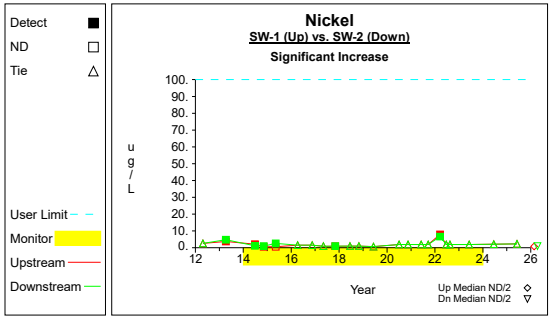


Graph 17

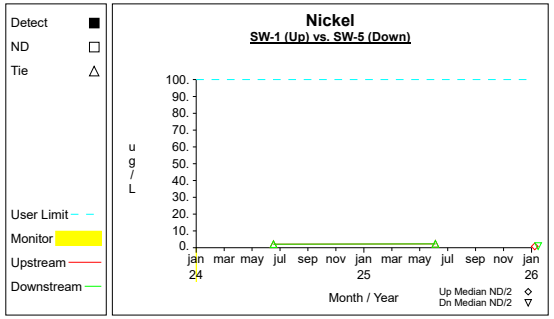


Graph 18

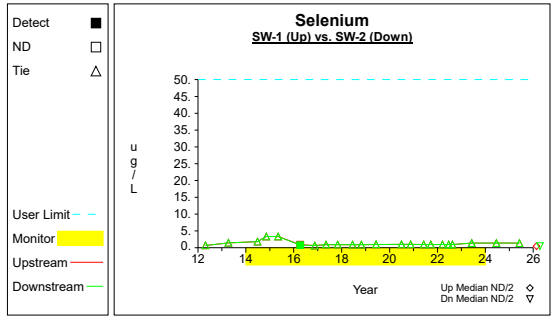
Surface Water Monitoring



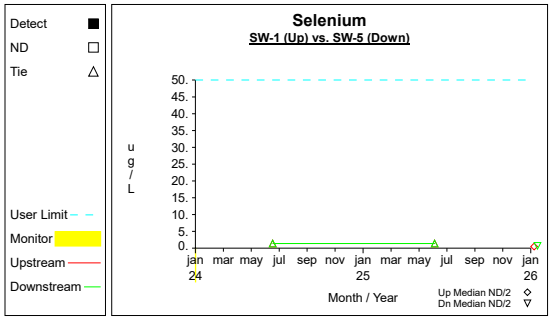
Graph 19



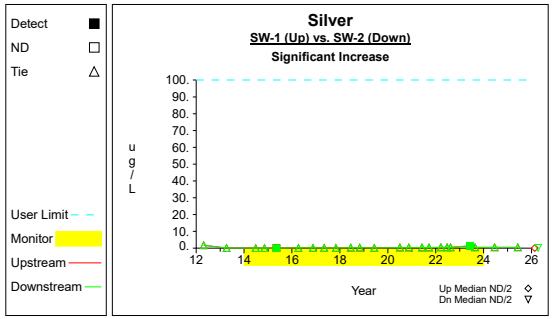
Graph 20



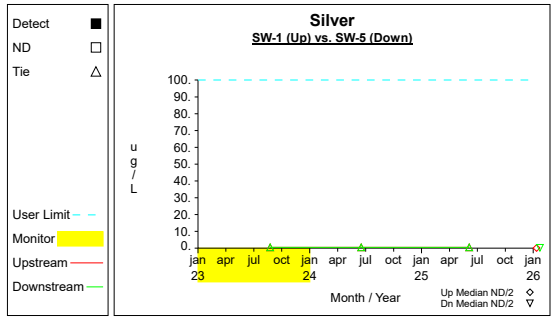
Graph 21



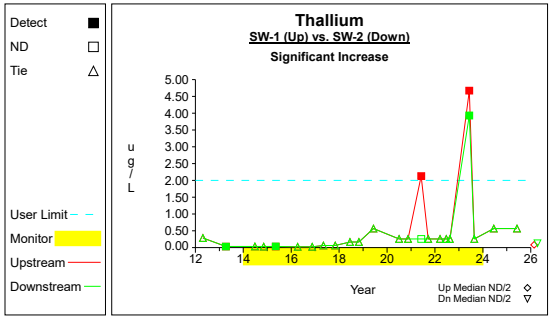
Graph 22



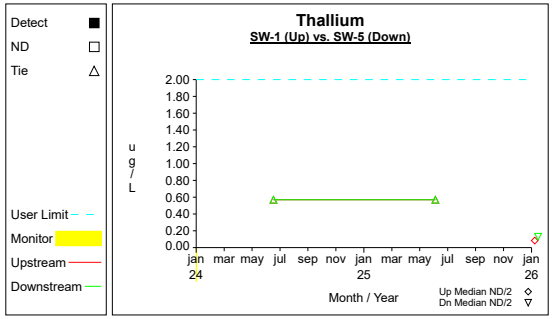
Graph 23



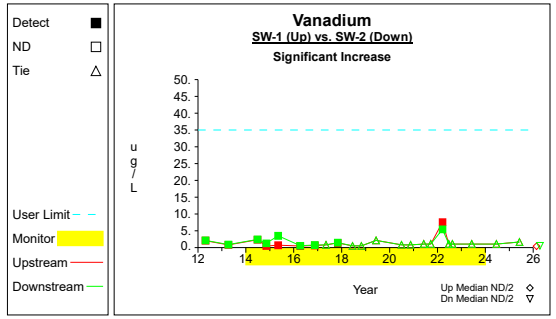
Graph 24



Graph 25

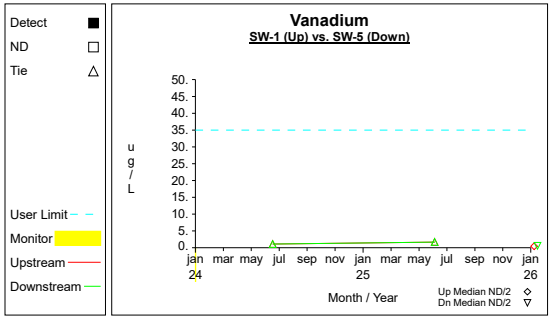


Graph 26

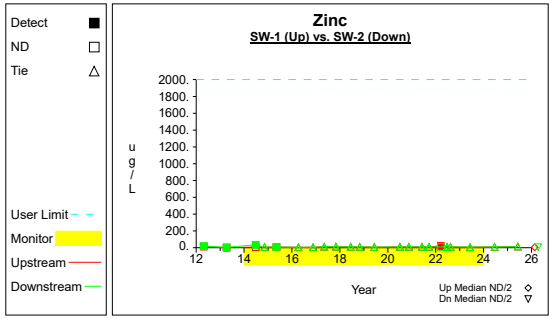


Graph 27

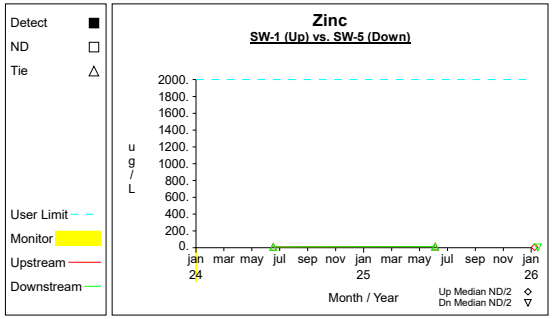
Surface Water Monitoring



Graph 28

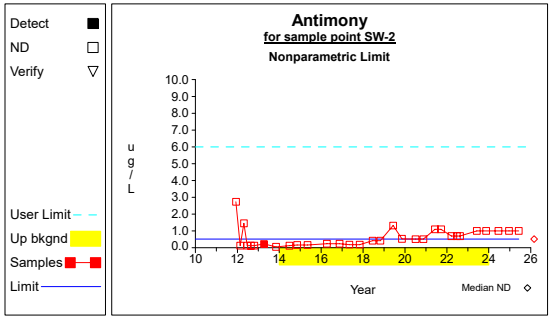


Graph 29

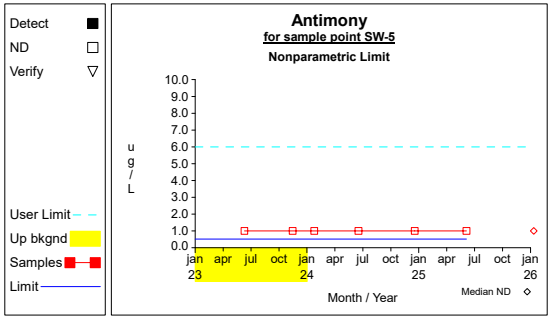


Graph 30

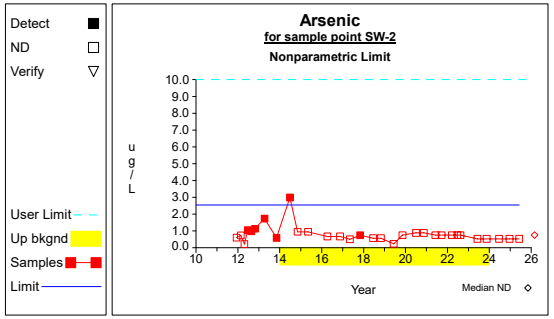
Up vs. Down Prediction Limits



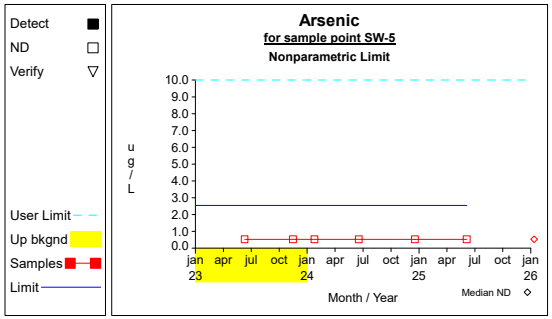
Graph 1



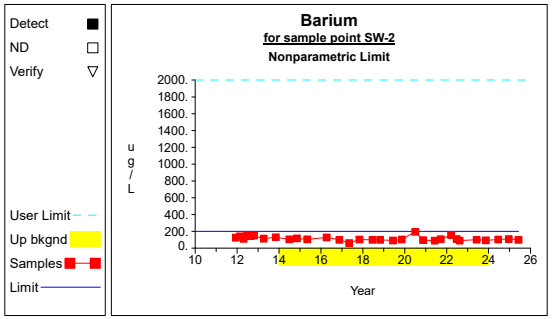
Graph 2



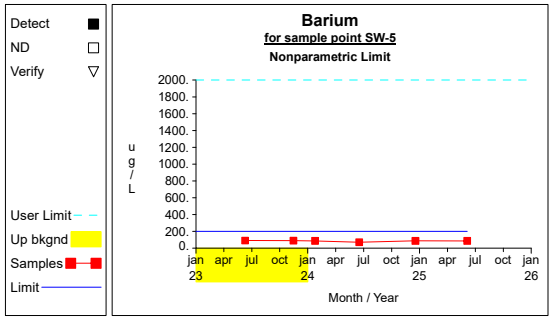
Graph 3



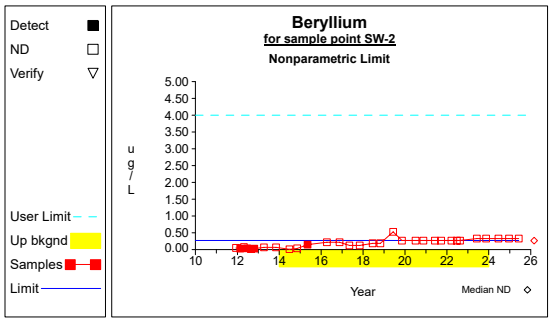
Graph 4



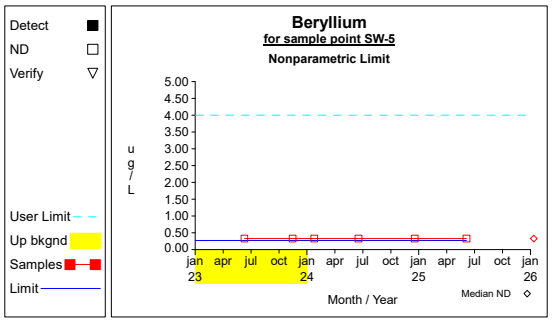
Graph 5



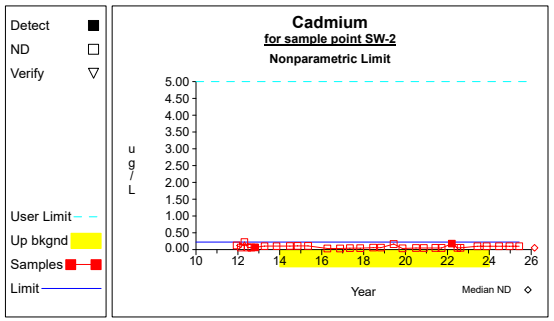
Graph 6



Graph 7

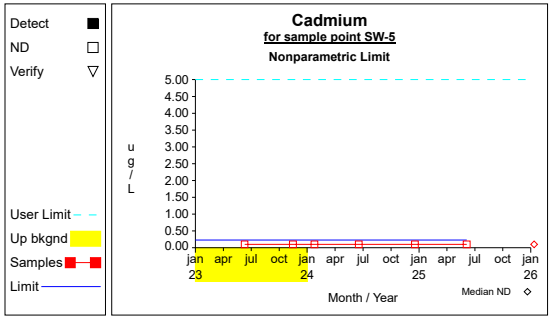


Graph 8

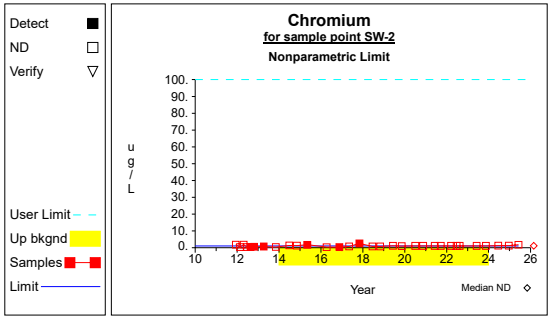


Graph 9

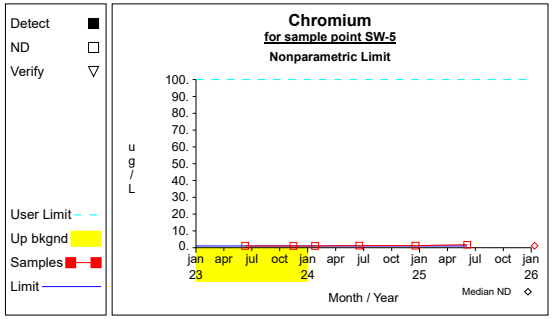
Up vs. Down Prediction Limits



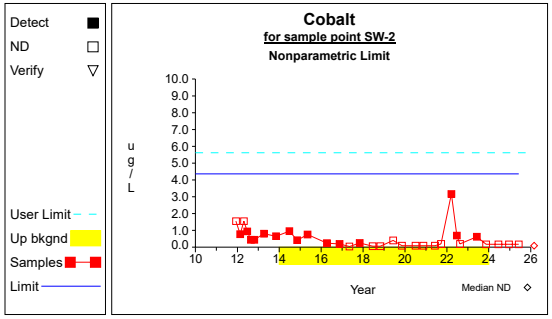
Graph 10



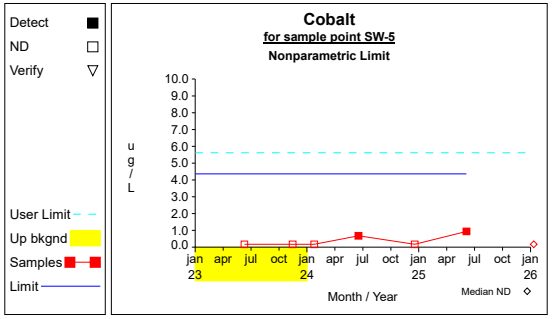
Graph 11



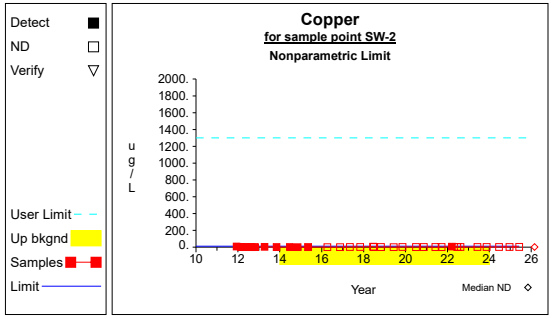
Graph 12



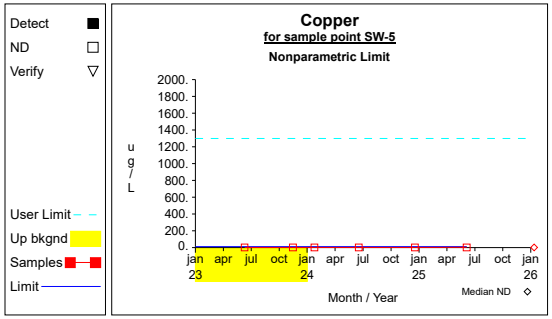
Graph 13



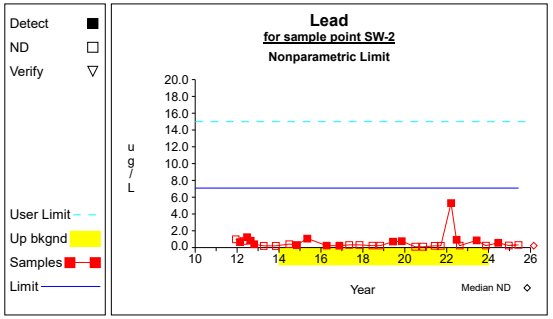
Graph 14



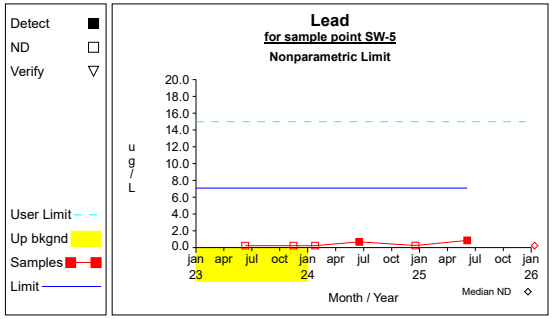
Graph 15



Graph 16

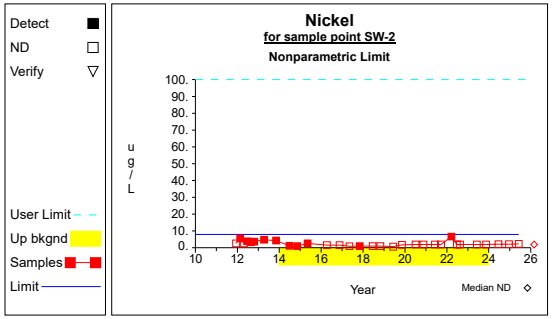


Graph 17

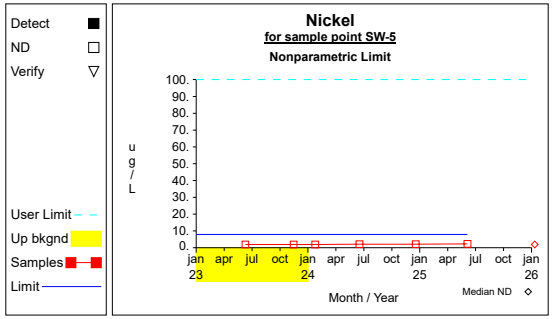


Graph 18

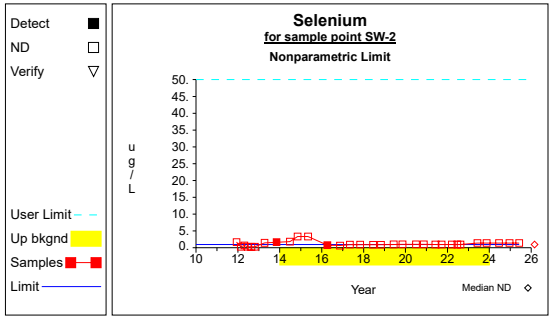
Up vs. Down Prediction Limits



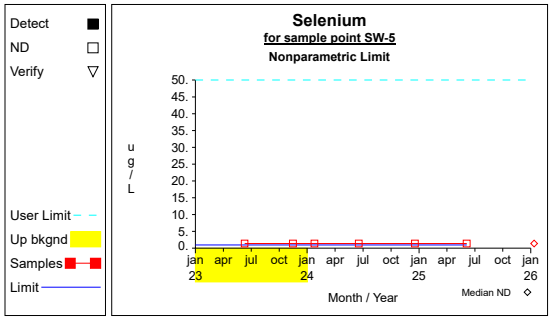
Graph 19



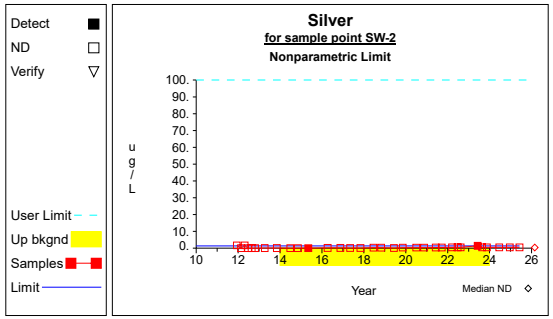
Graph 20



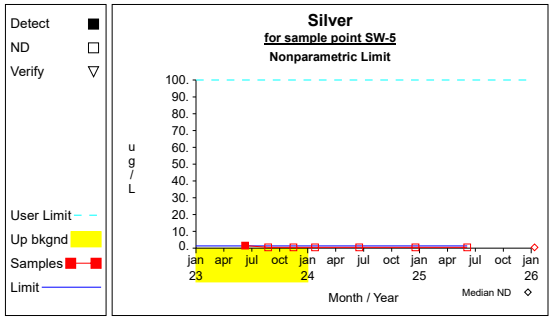
Graph 21



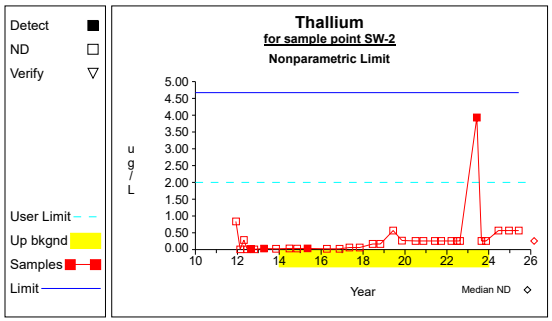
Graph 22



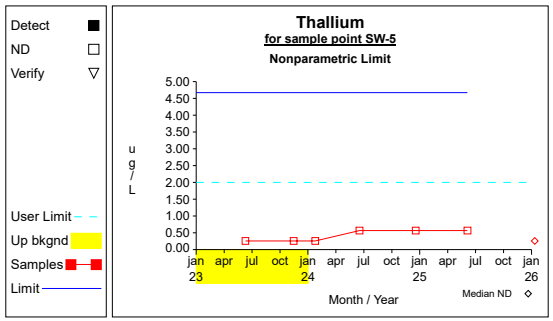
Graph 23



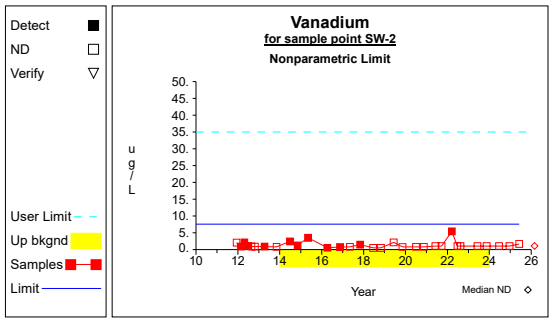
Graph 24



Graph 25

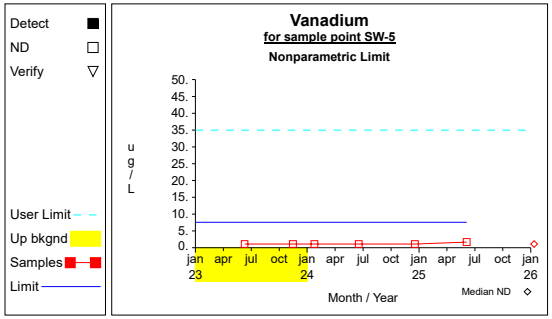


Graph 26

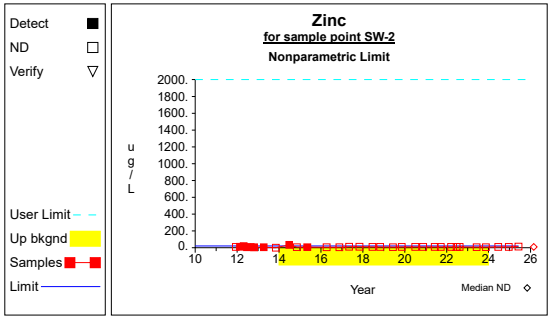


Graph 27

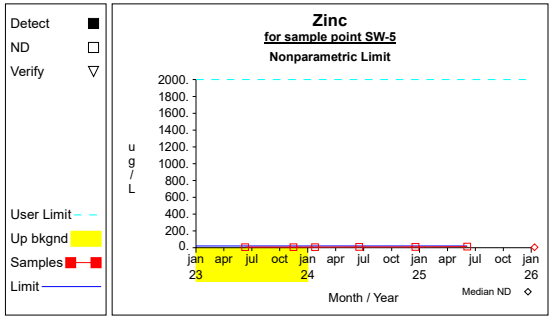
Up vs. Down Prediction Limits



Graph 28



Graph 29



Graph 30

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

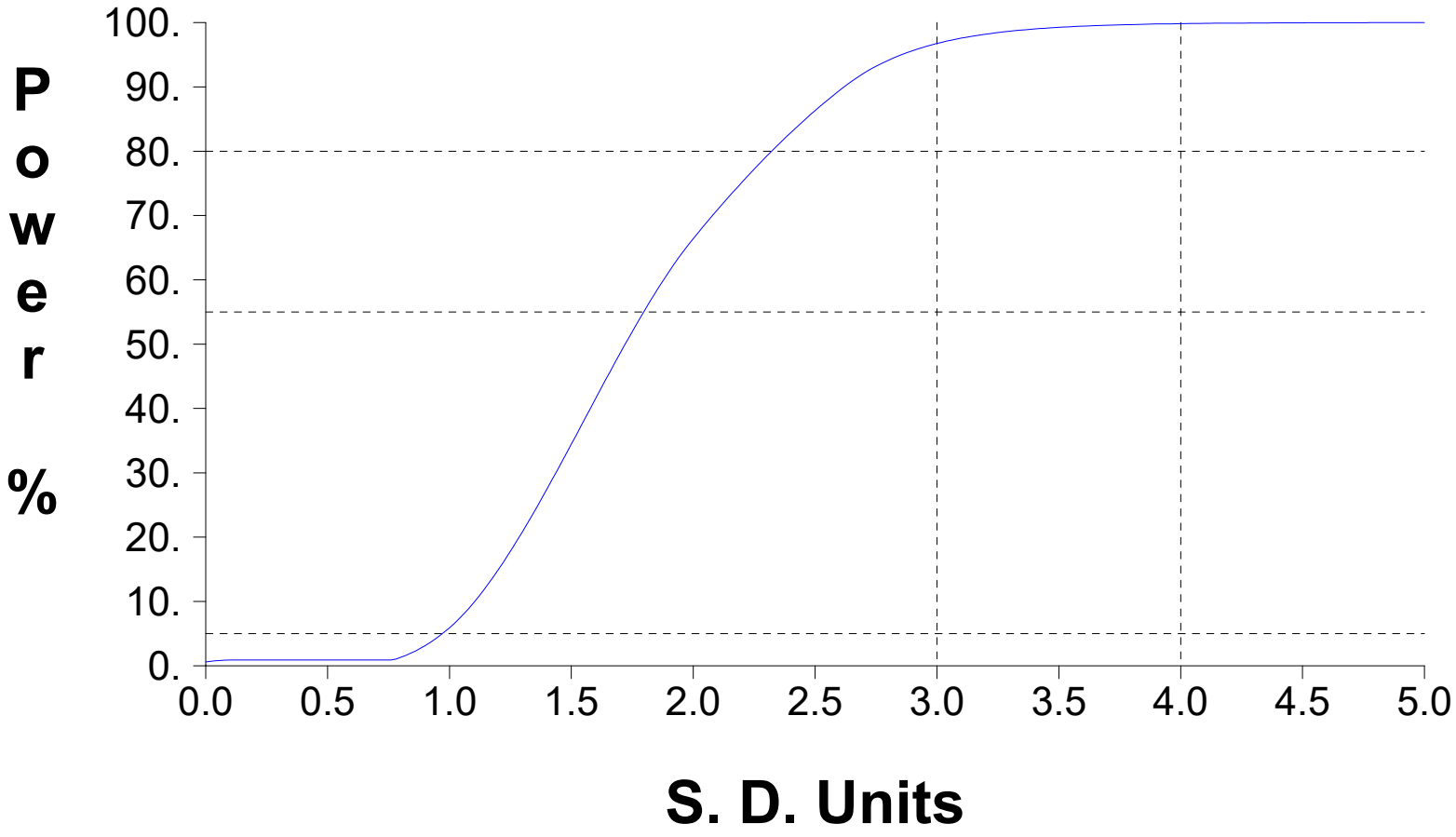


Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony	ug/L	SW-1	06/26/2014	ND	0.1190	0.5100	**
Antimony	ug/L	SW-1	11/07/2014	ND	0.1610	0.5100	**
Antimony	ug/L	SW-1	05/06/2015	ND	0.1610	0.5100	**
Antimony	ug/L	SW-1	04/08/2016	ND	0.2370	0.5100	**
Antimony	ug/L	SW-1	11/17/2016	ND	0.2370	0.5100	**
Antimony	ug/L	SW-1	05/05/2017	ND	0.1850	0.5100	**
Antimony	ug/L	SW-1	11/01/2017	ND	0.1850	0.5100	**
Antimony	ug/L	SW-1	06/15/2018	ND	0.4200	0.5100	**
Antimony	ug/L	SW-1	10/29/2018	ND	0.4200	0.5100	**
Antimony	ug/L	SW-1	06/07/2019	ND	1.3200	0.5100	**
Antimony	ug/L	SW-1	11/01/2019	ND	0.5300	0.5100	**
Antimony	ug/L	SW-1	07/01/2020	ND	0.5100		
Antimony	ug/L	SW-1	11/17/2020	ND	0.5100		
Antimony	ug/L	SW-1	06/04/2021	ND	1.1000	0.5100	**
Antimony	ug/L	SW-1	09/21/2021	ND	1.1000	0.5100	**
Antimony	ug/L	SW-1	03/18/2022	ND	0.6900	0.5100	**
Antimony	ug/L	SW-1	06/22/2022	ND	0.6900	0.5100	**
Antimony	ug/L	SW-1	08/16/2022	ND	0.6900	0.5100	**
Antimony	ug/L	SW-1	06/06/2023	ND	1.0000	0.5100	**
Arsenic	ug/L	SW-1	06/26/2014	ND	0.3970	0.6720	**
Arsenic	ug/L	SW-1	11/07/2014	ND	0.9450	0.6720	**
Arsenic	ug/L	SW-1	05/06/2015	ND	0.9450	0.6720	**
Arsenic	ug/L	SW-1	04/08/2016	ND	0.6720		
Arsenic	ug/L	SW-1	11/17/2016	ND	0.6720		
Arsenic	ug/L	SW-1	05/05/2017	ND	0.5050	0.6720	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Arsenic	ug/L	SW-1	11/01/2017	ND	0.5050	0.6720	**
Arsenic	ug/L	SW-1	06/15/2018	ND	0.5700	0.6720	**
Arsenic	ug/L	SW-1	10/29/2018	ND	0.5700	0.6720	**
Arsenic	ug/L	SW-1	06/07/2019	ND	0.2320	0.6720	**
Arsenic	ug/L	SW-1	11/01/2019	ND	0.7500	0.6720	**
Arsenic	ug/L	SW-1	07/01/2020	ND	0.8800	0.6720	**
Arsenic	ug/L	SW-1	11/17/2020	ND	0.8800	0.6720	**
Arsenic	ug/L	SW-1	06/04/2021	ND	0.7500	0.6720	**
Arsenic	ug/L	SW-1	09/21/2021	ND	0.7500	0.6720	**
Arsenic	ug/L	SW-1	03/18/2022		2.5400		
Arsenic	ug/L	SW-1	06/22/2022	ND	0.7500	0.6720	**
Arsenic	ug/L	SW-1	08/16/2022	ND	0.7500	0.6720	**
Arsenic	ug/L	SW-1	06/06/2023	ND	0.5300	0.6720	**
Barium	ug/L	SW-1	06/26/2014		122.0000		
Barium	ug/L	SW-1	11/07/2014		136.0000		
Barium	ug/L	SW-1	05/06/2015		116.0000		
Barium	ug/L	SW-1	04/08/2016		124.0000		
Barium	ug/L	SW-1	11/17/2016		134.0000		
Barium	ug/L	SW-1	05/05/2017		115.0000		
Barium	ug/L	SW-1	11/01/2017		143.0000		
Barium	ug/L	SW-1	06/15/2018		139.0000		
Barium	ug/L	SW-1	10/29/2018		120.0000		
Barium	ug/L	SW-1	06/07/2019		121.0000		
Barium	ug/L	SW-1	11/01/2019		136.0000		
Barium	ug/L	SW-1	07/01/2020		113.0000		

* - 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	ug/L	SW-1	11/17/2020		127.0000		
Barium	ug/L	SW-1	06/04/2021		121.0000		
Barium	ug/L	SW-1	09/21/2021		129.0000		
Barium	ug/L	SW-1	03/18/2022		201.0000		
Barium	ug/L	SW-1	06/22/2022		123.0000		
Barium	ug/L	SW-1	08/16/2022		112.0000		
Barium	ug/L	SW-1	06/06/2023		110.0000		
Beryllium	ug/L	SW-1	06/26/2014	ND	0.0142	0.2700	**
Beryllium	ug/L	SW-1	11/07/2014	ND	0.0390	0.2700	**
Beryllium	ug/L	SW-1	05/06/2015	ND	0.0390	0.2700	**
Beryllium	ug/L	SW-1	04/08/2016	ND	0.2210	0.2700	**
Beryllium	ug/L	SW-1	11/17/2016	ND	0.2210	0.2700	**
Beryllium	ug/L	SW-1	05/05/2017	ND	0.1250	0.2700	**
Beryllium	ug/L	SW-1	11/01/2017	ND	0.1250	0.2700	**
Beryllium	ug/L	SW-1	06/15/2018	ND	0.1900	0.2700	**
Beryllium	ug/L	SW-1	10/29/2018	ND	0.1900	0.2700	**
Beryllium	ug/L	SW-1	06/07/2019	ND	0.5300	0.2700	**
Beryllium	ug/L	SW-1	11/01/2019	ND	0.2700		
Beryllium	ug/L	SW-1	07/01/2020	ND	0.2700		
Beryllium	ug/L	SW-1	11/17/2020	ND	0.2700		
Beryllium	ug/L	SW-1	06/04/2021	ND	0.2700		
Beryllium	ug/L	SW-1	09/21/2021	ND	0.2700		
Beryllium	ug/L	SW-1	03/18/2022	ND	0.2700		
Beryllium	ug/L	SW-1	06/22/2022	ND	0.2700		
Beryllium	ug/L	SW-1	08/16/2022	ND	0.2700		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Beryllium	ug/L	SW-1	06/06/2023	ND	0.3300	0.2700	**
Cadmium	ug/L	SW-1	06/26/2014	ND	0.1080	0.0550	**
Cadmium	ug/L	SW-1	11/07/2014	ND	0.1120	0.0550	**
Cadmium	ug/L	SW-1	05/06/2015	ND	0.1120	0.0550	**
Cadmium	ug/L	SW-1	04/08/2016	ND	0.0351	0.0550	**
Cadmium	ug/L	SW-1	11/17/2016	ND	0.0351	0.0550	**
Cadmium	ug/L	SW-1	05/05/2017	ND	0.0441	0.0550	**
Cadmium	ug/L	SW-1	11/01/2017	ND	0.0441	0.0550	**
Cadmium	ug/L	SW-1	06/15/2018	ND	0.0600	0.0550	**
Cadmium	ug/L	SW-1	10/29/2018	ND	0.0600	0.0550	**
Cadmium	ug/L	SW-1	06/07/2019	ND	0.1670	0.0550	**
Cadmium	ug/L	SW-1	11/01/2019	ND	0.0390	0.0550	**
Cadmium	ug/L	SW-1	07/01/2020	ND	0.0490	0.0550	**
Cadmium	ug/L	SW-1	11/17/2020	ND	0.0490	0.0550	**
Cadmium	ug/L	SW-1	06/04/2021		0.1030		
Cadmium	ug/L	SW-1	09/21/2021	ND	0.0510	0.0550	**
Cadmium	ug/L	SW-1	03/18/2022		0.2200		
Cadmium	ug/L	SW-1	06/22/2022	ND	0.0550		
Cadmium	ug/L	SW-1	08/16/2022	ND	0.0550		
Cadmium	ug/L	SW-1	06/06/2023		0.2280		
Cadmium	ug/L	SW-1	08/24/2023	ND	0.1000	0.0550	**
Chromium	ug/L	SW-1	06/26/2014	ND	1.3700	1.1000	**
Chromium	ug/L	SW-1	11/07/2014	ND	1.2400	1.1000	**
Chromium	ug/L	SW-1	05/06/2015	ND	1.2400	1.1000	**
Chromium	ug/L	SW-1	04/08/2016	ND	0.3550	1.1000	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Chromium	ug/L	SW-1	11/17/2016	ND	0.3550	1.1000	**
Chromium	ug/L	SW-1	05/05/2017	ND	0.7290	1.1000	**
Chromium	ug/L	SW-1	11/01/2017	ND	0.7290	1.1000	**
Chromium	ug/L	SW-1	06/15/2018	ND	0.7600	1.1000	**
Chromium	ug/L	SW-1	10/29/2018	ND	0.7600	1.1000	**
Chromium	ug/L	SW-1	06/07/2019	ND	1.1400	1.1000	**
Chromium	ug/L	SW-1	11/01/2019	ND	0.9800	1.1000	**
Chromium	ug/L	SW-1	07/01/2020	ND	1.1000		
Chromium	ug/L	SW-1	11/17/2020	ND	1.1000		
Chromium	ug/L	SW-1	06/04/2021	ND	1.1000		
Chromium	ug/L	SW-1	09/21/2021	ND	1.1000		
Chromium	ug/L	SW-1	03/18/2022	ND	1.1000		
Chromium	ug/L	SW-1	06/22/2022	ND	1.1000		
Chromium	ug/L	SW-1	08/16/2022	ND	1.1000		
Chromium	ug/L	SW-1	06/06/2023	ND	1.1000		
Cobalt	ug/L	SW-1	06/26/2014		0.4370		
Cobalt	ug/L	SW-1	11/07/2014		0.0850		
Cobalt	ug/L	SW-1	05/06/2015		0.1770		
Cobalt	ug/L	SW-1	04/08/2016		0.1560		
Cobalt	ug/L	SW-1	11/17/2016		0.3280		
Cobalt	ug/L	SW-1	05/05/2017	ND	0.0453	0.0910	**
Cobalt	ug/L	SW-1	11/01/2017		0.2040		
Cobalt	ug/L	SW-1	06/15/2018	ND	0.0610	0.0910	**
Cobalt	ug/L	SW-1	10/29/2018	ND	0.0610	0.0910	**
Cobalt	ug/L	SW-1	06/07/2019	ND	0.4020	0.0910	**

* - 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	ug/L	SW-1	11/01/2019	ND	0.0910		
Cobalt	ug/L	SW-1	07/01/2020	ND	0.0910		
Cobalt	ug/L	SW-1	11/17/2020	ND	0.0910		
Cobalt	ug/L	SW-1	06/04/2021		0.7870		
Cobalt	ug/L	SW-1	09/21/2021	ND	0.1900	0.0910	**
Cobalt	ug/L	SW-1	03/18/2022		4.3600		
Cobalt	ug/L	SW-1	06/22/2022	ND	0.1900	0.0910	**
Cobalt	ug/L	SW-1	08/16/2022	ND	0.1900	0.0910	**
Cobalt	ug/L	SW-1	06/06/2023	ND	0.1700	0.0910	**
Copper	ug/L	SW-1	06/26/2014		1.0800		
Copper	ug/L	SW-1	11/07/2014		0.5080		
Copper	ug/L	SW-1	05/06/2015		0.6770		
Copper	ug/L	SW-1	04/08/2016	ND	1.2200	1.6000	**
Copper	ug/L	SW-1	11/17/2016		1.4300		
Copper	ug/L	SW-1	05/05/2017	ND	2.1900	1.6000	**
Copper	ug/L	SW-1	11/01/2017	ND	2.1900	1.6000	**
Copper	ug/L	SW-1	06/15/2018	ND	3.8000	1.6000	**
Copper	ug/L	SW-1	10/29/2018	ND	1.6000		
Copper	ug/L	SW-1	06/07/2019	ND	0.4970	1.6000	**
Copper	ug/L	SW-1	11/01/2019	ND	2.0000	1.6000	**
Copper	ug/L	SW-1	07/01/2020	ND	1.5000	1.6000	**
Copper	ug/L	SW-1	11/17/2020	ND	1.5000	1.6000	**
Copper	ug/L	SW-1	06/04/2021	ND	1.4000	1.6000	**
Copper	ug/L	SW-1	09/21/2021	ND	1.4000	1.6000	**
Copper	ug/L	SW-1	03/18/2022		11.5000		

* - 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	ug/L	SW-1	06/22/2022	ND	1.8000	1.6000	**
Copper	ug/L	SW-1	08/16/2022	ND	1.8000	1.6000	**
Copper	ug/L	SW-1	06/06/2023	ND	1.8000	1.6000	**
Lead	ug/L	SW-1	06/26/2014		0.1230		
Lead	ug/L	SW-1	11/07/2014	ND	0.0967	0.2400	**
Lead	ug/L	SW-1	05/06/2015		0.2320		
Lead	ug/L	SW-1	04/08/2016	ND	0.2110	0.2400	**
Lead	ug/L	SW-1	11/17/2016		0.3200		
Lead	ug/L	SW-1	05/05/2017	ND	0.3240	0.2400	**
Lead	ug/L	SW-1	11/01/2017	ND	0.3240	0.2400	**
Lead	ug/L	SW-1	06/15/2018	ND	0.2500	0.2400	**
Lead	ug/L	SW-1	10/29/2018	ND	0.2500	0.2400	**
Lead	ug/L	SW-1	06/07/2019		0.6440		
Lead	ug/L	SW-1	11/01/2019	ND	0.2700	0.2400	**
Lead	ug/L	SW-1	07/01/2020		0.5310		
Lead	ug/L	SW-1	11/17/2020	ND	0.1100	0.2400	**
Lead	ug/L	SW-1	06/04/2021		0.8860		
Lead	ug/L	SW-1	09/21/2021	ND	0.2100	0.2400	**
Lead	ug/L	SW-1	03/18/2022		7.0800		
Lead	ug/L	SW-1	06/22/2022	ND	0.2400		
Lead	ug/L	SW-1	08/16/2022	ND	0.2400		
Lead	ug/L	SW-1	06/06/2023		0.6170		
Nickel	ug/L	SW-1	06/26/2014		2.1200		
Nickel	ug/L	SW-1	11/07/2014	ND	0.5810	1.5300	**
Nickel	ug/L	SW-1	05/06/2015	ND	0.5810	1.5300	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Nickel	ug/L	SW-1	04/08/2016	ND	1.5300		
Nickel	ug/L	SW-1	11/17/2016	ND	1.5300		
Nickel	ug/L	SW-1	05/05/2017	ND	0.9290	1.5300	**
Nickel	ug/L	SW-1	11/01/2017	ND	0.9290	1.5300	**
Nickel	ug/L	SW-1	06/15/2018	ND	1.0000	1.5300	**
Nickel	ug/L	SW-1	10/29/2018	ND	1.0000	1.5300	**
Nickel	ug/L	SW-1	06/07/2019	ND	0.6250	1.5300	**
Nickel	ug/L	SW-1	11/01/2019	ND	1.7000	1.5300	**
Nickel	ug/L	SW-1	07/01/2020	ND	1.9000	1.5300	**
Nickel	ug/L	SW-1	11/17/2020	ND	1.9000	1.5300	**
Nickel	ug/L	SW-1	06/04/2021	ND	1.9000	1.5300	**
Nickel	ug/L	SW-1	09/21/2021	ND	1.9000	1.5300	**
Nickel	ug/L	SW-1	03/18/2022		7.8500		
Nickel	ug/L	SW-1	06/22/2022	ND	1.9000	1.5300	**
Nickel	ug/L	SW-1	08/16/2022	ND	1.9000	1.5300	**
Nickel	ug/L	SW-1	06/06/2023	ND	1.9000	1.5300	**
Selenium	ug/L	SW-1	06/26/2014	ND	1.7900	0.9600	**
Selenium	ug/L	SW-1	11/07/2014	ND	3.3400	0.9600	**
Selenium	ug/L	SW-1	05/06/2015	ND	3.3400	0.9600	**
Selenium	ug/L	SW-1	04/08/2016		0.9160		
Selenium	ug/L	SW-1	11/17/2016	ND	0.6300	0.9600	**
Selenium	ug/L	SW-1	05/05/2017	ND	0.9280	0.9600	**
Selenium	ug/L	SW-1	11/01/2017	ND	0.9280	0.9600	**
Selenium	ug/L	SW-1	06/15/2018	ND	0.9000	0.9600	**
Selenium	ug/L	SW-1	10/29/2018	ND	0.9000	0.9600	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Selenium	ug/L	SW-1	06/07/2019	ND	0.9820	0.9600	**
Selenium	ug/L	SW-1	11/01/2019	ND	1.0000	0.9600	**
Selenium	ug/L	SW-1	07/01/2020	ND	1.0000	0.9600	**
Selenium	ug/L	SW-1	11/17/2020	ND	1.0000	0.9600	**
Selenium	ug/L	SW-1	06/04/2021	ND	0.9600		
Selenium	ug/L	SW-1	09/21/2021	ND	0.9600		
Selenium	ug/L	SW-1	03/18/2022	ND	0.9600		
Selenium	ug/L	SW-1	06/22/2022	ND	0.9600		
Selenium	ug/L	SW-1	08/16/2022	ND	0.9600		
Selenium	ug/L	SW-1	06/06/2023	ND	1.4000	0.9600	**
Silver	ug/L	SW-1	06/26/2014	ND	0.0396	0.3000	**
Silver	ug/L	SW-1	11/07/2014	ND	0.0420	0.3000	**
Silver	ug/L	SW-1	05/06/2015		0.0630		
Silver	ug/L	SW-1	04/08/2016	ND	0.1530	0.3000	**
Silver	ug/L	SW-1	11/17/2016	ND	0.1530	0.3000	**
Silver	ug/L	SW-1	05/05/2017	ND	0.1400	0.3000	**
Silver	ug/L	SW-1	11/01/2017	ND	0.1400	0.3000	**
Silver	ug/L	SW-1	06/15/2018	ND	0.3000		
Silver	ug/L	SW-1	10/29/2018	ND	0.3000		
Silver	ug/L	SW-1	06/07/2019	ND	0.1150	0.3000	**
Silver	ug/L	SW-1	11/01/2019	ND	0.3700	0.3000	**
Silver	ug/L	SW-1	07/01/2020	ND	0.3700	0.3000	**
Silver	ug/L	SW-1	11/17/2020	ND	0.3700	0.3000	**
Silver	ug/L	SW-1	06/04/2021	ND	0.4200	0.3000	**
Silver	ug/L	SW-1	09/21/2021	ND	0.4200	0.3000	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Silver	ug/L	SW-1	03/18/2022	ND	0.4900	0.3000	**
Silver	ug/L	SW-1	06/22/2022	ND	0.4900	0.3000	**
Silver	ug/L	SW-1	08/16/2022	ND	0.4900	0.3000	**
Silver	ug/L	SW-1	06/06/2023		1.3600		
Silver	ug/L	SW-1	08/24/2023	ND	0.5000	0.3000	**
Thallium	ug/L	SW-1	06/26/2014	ND	0.0353	0.1700	**
Thallium	ug/L	SW-1	11/07/2014	ND	0.0325	0.1700	**
Thallium	ug/L	SW-1	05/06/2015	ND	0.0325	0.1700	**
Thallium	ug/L	SW-1	04/08/2016	ND	0.0255	0.1700	**
Thallium	ug/L	SW-1	11/17/2016	ND	0.0255	0.1700	**
Thallium	ug/L	SW-1	05/05/2017	ND	0.0644	0.1700	**
Thallium	ug/L	SW-1	11/01/2017	ND	0.0644	0.1700	**
Thallium	ug/L	SW-1	06/15/2018	ND	0.1700		
Thallium	ug/L	SW-1	10/29/2018	ND	0.1700		
Thallium	ug/L	SW-1	06/07/2019	ND	0.5700	0.1700	**
Thallium	ug/L	SW-1	11/01/2019	ND	0.2700	0.1700	**
Thallium	ug/L	SW-1	07/01/2020	ND	0.2600	0.1700	**
Thallium	ug/L	SW-1	11/17/2020	ND	0.2600	0.1700	**
Thallium	ug/L	SW-1	06/04/2021		2.1300		
Thallium	ug/L	SW-1	09/21/2021	ND	0.2600	0.1700	**
Thallium	ug/L	SW-1	03/18/2022	ND	0.2600	0.1700	**
Thallium	ug/L	SW-1	06/22/2022	ND	0.2600	0.1700	**
Thallium	ug/L	SW-1	08/16/2022	ND	0.2600	0.1700	**
Thallium	ug/L	SW-1	06/06/2023		4.6700		
Thallium	ug/L	SW-1	08/24/2023	ND	0.2600	0.1700	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Vanadium	ug/L	SW-1	06/26/2014		2.3700		
Vanadium	ug/L	SW-1	11/07/2014		0.5120		
Vanadium	ug/L	SW-1	05/06/2015		0.7160		
Vanadium	ug/L	SW-1	04/08/2016		0.4950		
Vanadium	ug/L	SW-1	11/17/2016		0.6450		
Vanadium	ug/L	SW-1	05/05/2017	ND	0.8400	0.8500	**
Vanadium	ug/L	SW-1	11/01/2017		1.3900		
Vanadium	ug/L	SW-1	06/15/2018	ND	0.5200	0.8500	**
Vanadium	ug/L	SW-1	10/29/2018	ND	0.5200	0.8500	**
Vanadium	ug/L	SW-1	06/07/2019	ND	2.1500	0.8500	**
Vanadium	ug/L	SW-1	11/01/2019	ND	0.8200	0.8500	**
Vanadium	ug/L	SW-1	07/01/2020	ND	0.8500		
Vanadium	ug/L	SW-1	11/17/2020	ND	0.8500		
Vanadium	ug/L	SW-1	06/04/2021	ND	1.1000	0.8500	**
Vanadium	ug/L	SW-1	09/21/2021	ND	1.1000	0.8500	**
Vanadium	ug/L	SW-1	03/18/2022		7.5900		
Vanadium	ug/L	SW-1	06/22/2022	ND	1.1000	0.8500	**
Vanadium	ug/L	SW-1	08/16/2022	ND	1.1000	0.8500	**
Vanadium	ug/L	SW-1	06/06/2023	ND	1.1000	0.8500	**
Zinc	ug/L	SW-1	06/26/2014	ND	6.9500	10.0000	**
Zinc	ug/L	SW-1	11/07/2014	ND	6.9500	10.0000	**
Zinc	ug/L	SW-1	05/06/2015	ND	6.9500	10.0000	**
Zinc	ug/L	SW-1	04/08/2016	ND	5.2100	10.0000	**
Zinc	ug/L	SW-1	11/17/2016	ND	5.2100	10.0000	**
Zinc	ug/L	SW-1	05/05/2017	ND	11.5000	10.0000	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Zinc	ug/L	SW-1	11/01/2017	ND	11.5000	10.0000	**
Zinc	ug/L	SW-1	06/15/2018	ND	10.0000		
Zinc	ug/L	SW-1	10/29/2018	ND	10.0000		
Zinc	ug/L	SW-1	06/07/2019	ND	6.9200	10.0000	**
Zinc	ug/L	SW-1	11/01/2019	ND	10.0000		
Zinc	ug/L	SW-1	07/01/2020	ND	10.0000		
Zinc	ug/L	SW-1	11/17/2020	ND	10.0000		
Zinc	ug/L	SW-1	06/04/2021	ND	10.0000		
Zinc	ug/L	SW-1	09/21/2021	ND	10.0000		
Zinc	ug/L	SW-1	03/18/2022		20.7000		
Zinc	ug/L	SW-1	06/22/2022	ND	10.0000		
Zinc	ug/L	SW-1	08/16/2022	ND	10.0000		
Zinc	ug/L	SW-1	06/06/2023	ND	6.4000	10.0000	**

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result	Pred. Limit
Antimony	ug/L	SW-2	06/04/2025	ND	1.0000	0.5100
Antimony	ug/L	SW-5	06/04/2025	ND	1.0000	0.5100
Arsenic	ug/L	SW-2	06/04/2025	ND	0.5300	2.5400
Arsenic	ug/L	SW-5	06/04/2025	ND	0.5300	2.5400
Barium	ug/L	SW-2	06/04/2025		99.6000	201.0000
Barium	ug/L	SW-5	06/04/2025		86.9000	201.0000
Beryllium	ug/L	SW-2	06/04/2025	ND	0.3300	0.2700
Beryllium	ug/L	SW-5	06/04/2025	ND	0.3300	0.2700
Cadmium	ug/L	SW-2	06/04/2025	ND	0.1000	0.2280
Cadmium	ug/L	SW-5	06/04/2025	ND	0.1000	0.2280
Chromium	ug/L	SW-2	06/04/2025	ND	1.8000	1.1000
Chromium	ug/L	SW-5	06/04/2025	ND	1.8000	1.1000
Cobalt	ug/L	SW-2	06/04/2025	ND	0.1700	4.3600
Cobalt	ug/L	SW-5	06/04/2025		0.9380	4.3600
Copper	ug/L	SW-2	06/04/2025	ND	3.2000	11.5000
Copper	ug/L	SW-5	06/04/2025	ND	3.2000	11.5000
Lead	ug/L	SW-2	06/04/2025	ND	0.3300	7.0800
Lead	ug/L	SW-5	06/04/2025		0.8620	7.0800
Nickel	ug/L	SW-2	06/04/2025	ND	2.3000	7.8500
Nickel	ug/L	SW-5	06/04/2025	ND	2.3000	7.8500
Selenium	ug/L	SW-2	06/04/2025	ND	1.4000	0.9600
Selenium	ug/L	SW-5	06/04/2025	ND	1.4000	0.9600
Silver	ug/L	SW-2	06/04/2025	ND	0.5000	1.3600

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result	Pred. Limit
Silver	ug/L	SW-5	06/04/2025	ND	0.5000	1.3600
Thallium	ug/L	SW-2	06/04/2025	ND	0.5700	4.6700
Thallium	ug/L	SW-5	06/04/2025	ND	0.5700	4.6700
Vanadium	ug/L	SW-2	06/04/2025	ND	1.7000	7.5900
Vanadium	ug/L	SW-5	06/04/2025	ND	1.7000	7.5900
Zinc	ug/L	SW-2	06/04/2025	ND	13.0000	20.7000
Zinc	ug/L	SW-5	06/04/2025	ND	13.0000	20.7000

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

Table 3

Detection Frequencies in Upgradient and Downgradient Wells

Constituent	Upgradient Detect	Upgradient N	Upgradient Proportion	Downgradient Detect	Downgradient N	Downgradient Proportion
Antimony	0	19	0.000	1	37	0.027
Arsenic	1	19	0.053	7	37	0.189
Barium	19	19	1.000	37	37	1.000
Beryllium	0	19	0.000	5	37	0.135
Cadmium	3	20	0.150	2	37	0.054
Chromium	0	19	0.000	6	37	0.162
Cobalt	8	19	0.421	17	37	0.459
Copper	5	19	0.263	11	38	0.289
Lead	8	19	0.421	16	37	0.432
Nickel	2	19	0.105	11	37	0.297
Selenium	1	19	0.053	2	37	0.054
Silver	2	20	0.100	3	39	0.077
Thallium	2	20	0.100	4	38	0.105
Vanadium	7	19	0.368	11	37	0.297
Zinc	1	19	0.053	8	37	0.216

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
Antimony	0	19	0.000	5.018	5.018					2.326	non-norm
Arsenic	1	19	0.053	24.856	24.856					2.326	non-norm
Barium	19	19	1.000	4.264	3.330					2.326	non-norm
Beryllium	0	19	0.000	5.018	5.018					2.326	non-norm
Cadmium	3	20	0.150	7.265	7.012					2.326	non-norm
Chromium	0	19	0.000	5.018	5.018					2.326	non-norm
Cobalt	8	19	0.421	8.232	4.707					2.326	non-norm
Copper	5	19	0.263	8.486	5.292					2.326	non-norm
Lead	8	19	0.421	8.711	4.662					2.326	non-norm
Nickel	2	19	0.105	10.585	9.258					2.326	non-norm
Selenium	1	19	0.053	24.856	24.856					2.326	non-norm
Silver	2	20	0.100	8.712	6.875					2.326	non-norm
Thallium	2	20	0.100	8.362	8.079					2.326	non-norm
Vanadium	7	19	0.368	7.478	4.832					2.326	non-norm
Zinc	1	19	0.053	24.856	24.856					2.326	non-norm

* - 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 4

Shapiro-Wilk Multiple Group Test of Normality

Constituent	Model Type
Antimony	nonpar
Arsenic	nonpar
Barium	nonpar
Beryllium	nonpar
Cadmium	nonpar
Chromium	nonpar
Cobalt	nonpar
Copper	nonpar
Lead	nonpar
Nickel	nonpar
Selenium	nonpar
Silver	nonpar
Thallium	nonpar
Vanadium	nonpar
Zinc	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	ug/L	0	19					0.5100	nonpar	***	0.99
Arsenic	ug/L	1	19					2.5400	nonpar		0.99
Barium	ug/L	19	19					201.0000	nonpar		0.99
Beryllium	ug/L	0	19					0.2700	nonpar	***	0.99
Cadmium	ug/L	3	20					0.2280	nonpar		0.99
Chromium	ug/L	0	19					1.1000	nonpar	***	0.99
Cobalt	ug/L	8	19					4.3600	nonpar		0.99
Copper	ug/L	5	19					11.5000	nonpar		0.99
Lead	ug/L	8	19					7.0800	nonpar		0.99
Nickel	ug/L	2	19					7.8500	nonpar		0.99
Selenium	ug/L	1	19					0.9600	nonpar	***	0.99
Silver	ug/L	2	20					1.3600	nonpar		0.99
Thallium	ug/L	2	20					4.6700	nonpar		0.99
Vanadium	ug/L	7	19					7.5900	nonpar		0.99
Zinc	ug/L	1	19					20.7000	nonpar		0.99

Conf = confidence level for passing initial test or one of two verification resamples 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

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 7

Censored Data Outliers Test
for datasets with 75% or more NDs

Constituent	Units	Well	Date	Result	Detects	N	% >= PQL	% >= MDL	Manual RL	Median	>= Med
Arsenic	ug/L	SW-1	03/18/2022	2.5400	1	19	5	21	no	0.6720	yes
Cadmium	ug/L	SW-1	06/04/2021	0.1030	3	20	15	15	no	0.0550	
Cadmium	ug/L	SW-1	03/18/2022	0.2200	3	20	15	15	no	0.0550	
Cadmium	ug/L	SW-1	06/06/2023	0.2280	3	20	15	15	no	0.0550	
Nickel	ug/L	SW-1	06/26/2014	2.1200	2	19	11	21	no	1.5300	
Nickel	ug/L	SW-1	03/18/2022	7.8500	2	19	11	21	no	1.5300	
Selenium	ug/L	SW-1	04/08/2016	0.9160	1	19	5	21	no	0.9600	no
Silver	ug/L	SW-1	05/06/2015	0.0630	2	20	10	10	no	0.3000	
Silver	ug/L	SW-1	06/06/2023	1.3600	2	20	10	10	no	0.3000	
Thallium	ug/L	SW-1	06/04/2021	2.1300	2	20	10	15	no	0.1700	
Thallium	ug/L	SW-1	06/06/2023	4.6700	2	20	10	15	no	0.1700	
Zinc	ug/L	SW-1	03/18/2022	20.7000	1	19	5	11	no	10.0000	yes

* Failed test - potential outlier.
Potential outliers are not removed from statistical analyses.
>= Med - indicates if the result is greater than or equal to the median PQL value.
>= 2x - indicates if the result is greater than or equal to 2 x the median PQL value.
>= 3x - indicates if the result is greater than or equal to 3 x the median PQL value.

Table 7

Censored Data Outliers Test
for datasets with 75% or more NDs

Constituent	>= 2x	>= 3x	
Arsenic			*
Cadmium	no		
Cadmium	yes		*
Cadmium	yes		*
Nickel	no		
Nickel	yes		*
Selenium			
Silver	no		
Silver	yes		*
Thallium	yes		*
Thallium	yes		*
Zinc			*

* Failed test - potential outlier.
Potential outliers are not removed from statistical analyses.
>= Med - indicates if the result is greater than or equal to the median PQL value.
>= 2x - indicates if the result is greater than or equal to 2 x the median PQL value.
>= 3x - indicates if the result is greater than or equal to 3 x the median PQL value.

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

Step	Equation	Description
1	PL = median(X) = **0.51**	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **2.54**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

Worksheet 1 - Upgradient vs. Downgradient Comparisons
Barium (ug/L)
Nonparametric Prediction Limit

Step	Equation	Description
1	PL = max(X) = **201.0**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = median(X) = **0.27**	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **0.228**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = median(X) = **1.1**	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **4.36**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **11.5**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **7.08**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **7.85**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **0.96**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **1.36**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **4.67**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **7.59**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **20.7**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

Table 1

Confidence Intervals and Sign Test for Comparing Upstream and Downstream Concentrations

Constituent	Units	Upstream	Downstream	# of Pairs	# of Ties	# DN > UP	Critical #		UP UCL	DN UCL
Antimony	ug/L	SW-1	SW-2	18	18	0	5		0.255	0.255
Antimony	ug/L	SW-1	SW-5	0				*		
Arsenic	ug/L	SW-1	SW-2	18	0	17	13	**	0.653	0.751
Arsenic	ug/L	SW-1	SW-5	0				*		
Barium	ug/L	SW-1	SW-2	18	0	2	13		136.478	118.194
Barium	ug/L	SW-1	SW-5	0				*		
Beryllium	ug/L	SW-1	SW-2	18	17	1	5		0.135	0.137
Beryllium	ug/L	SW-1	SW-5	0				*		
Cadmium	ug/L	SW-1	SW-2	18	15	0	5		0.075	0.048
Cadmium	ug/L	SW-1	SW-5	0				*		
Chromium	ug/L	SW-1	SW-2	18	15	2	5		0.550	0.902
Chromium	ug/L	SW-1	SW-5	0				*		
Cobalt	ug/L	SW-1	SW-2	18	8	7	9		0.762	0.666
Cobalt	ug/L	SW-1	SW-5	0				*		
Copper	ug/L	SW-1	SW-2	18	13	3	5		2.366	1.699
Copper	ug/L	SW-1	SW-5	0				*		
Lead	ug/L	SW-1	SW-2	18	7	6	9		1.248	1.037
Lead	ug/L	SW-1	SW-5	0				*		
Nickel	ug/L	SW-1	SW-2	18	0	16	13	**	1.861	1.822
Nickel	ug/L	SW-1	SW-5	0				*		
Selenium	ug/L	SW-1	SW-2	18	17	0	5		0.543	0.520
Selenium	ug/L	SW-1	SW-5	0				*		
Silver	ug/L	SW-1	SW-2	19	0	18	14	**	0.311	0.342
Silver	ug/L	SW-1	SW-5	1				*		
Thallium	ug/L	SW-1	SW-2	19	0	16	14	**	0.842	0.619

* - Insufficient Data
** - Downstream Significantly > Upstream
UCL = Upper Confidence Limit

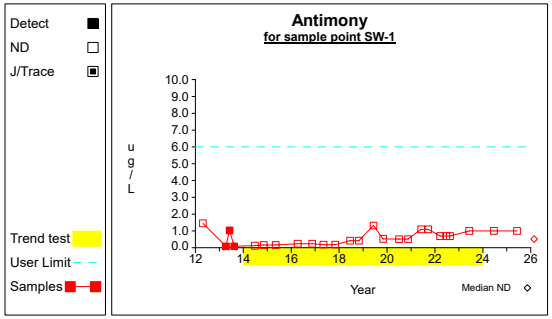
Table 1

Confidence Intervals and Sign Test for Comparing Upstream and Downstream Concentrations

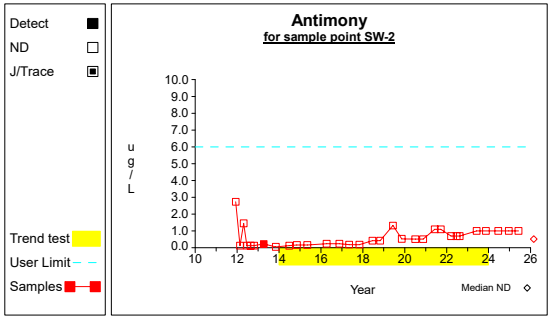
Constituent	Units	Upstream	Downstream	# of Pairs	# of Ties	# DN > UP	Critical #		UP UCL	DN UCL
Thallium	ug/L	SW-1	SW-5	0				*		
Vanadium	ug/L	SW-1	SW-2	18	0	17	13	**	1.654	1.629
Vanadium	ug/L	SW-1	SW-5	0				*		
Zinc	ug/L	SW-1	SW-2	18	15	2	5		7.259	9.039
Zinc	ug/L	SW-1	SW-5	0				*		

* - Insufficient Data
** - Downstream Significantly > Upstream
UCL = Upper Confidence Limit

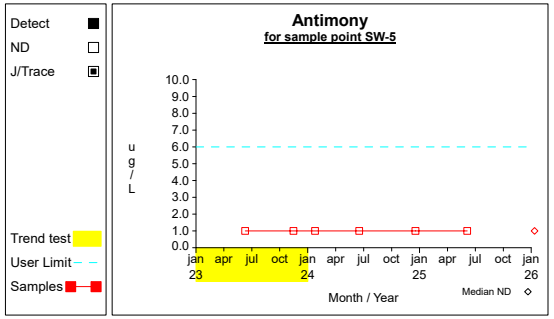
Time Series



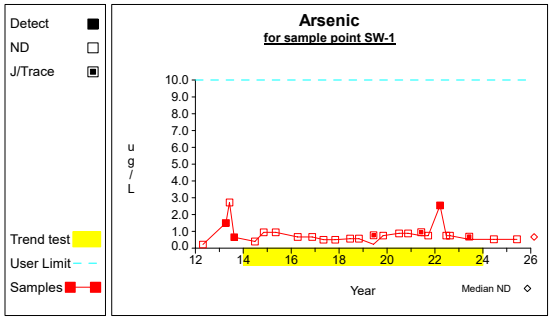
Graph 1



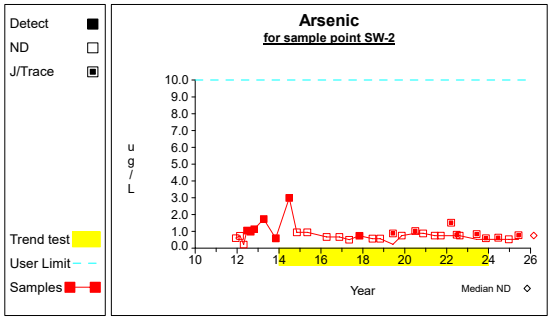
Graph 2



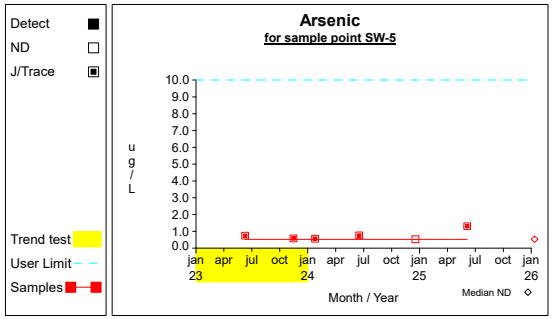
Graph 3



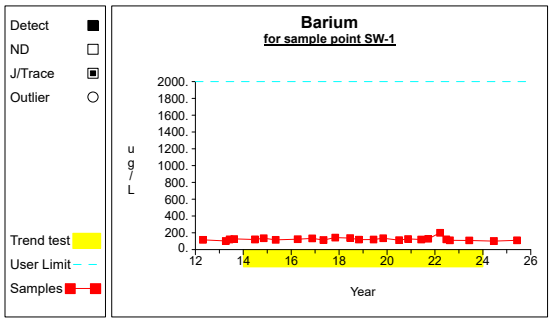
Graph 4



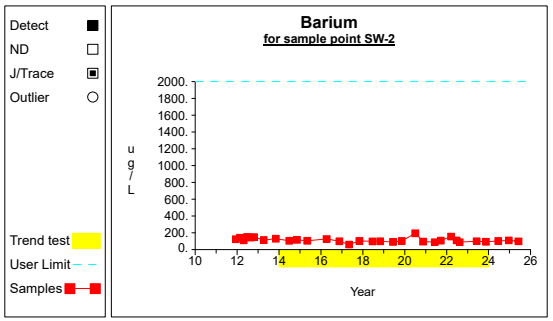
Graph 5



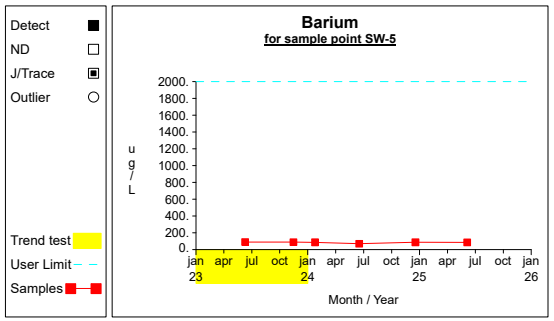
Graph 6



Graph 7

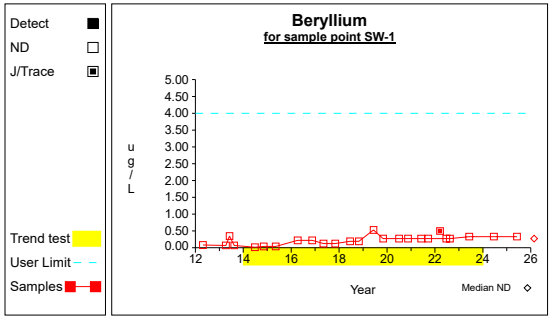


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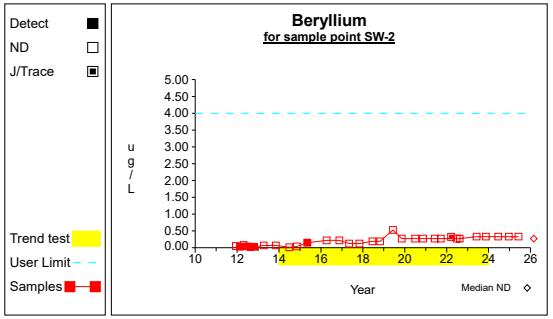


Graph 9

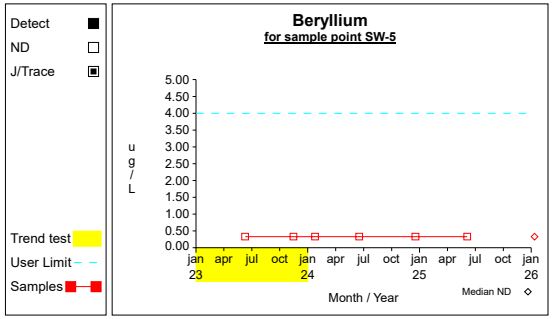
Time Series



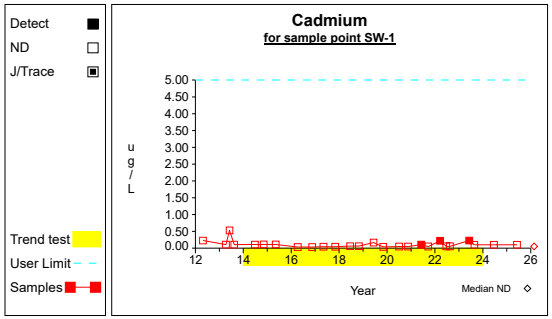
Graph 10



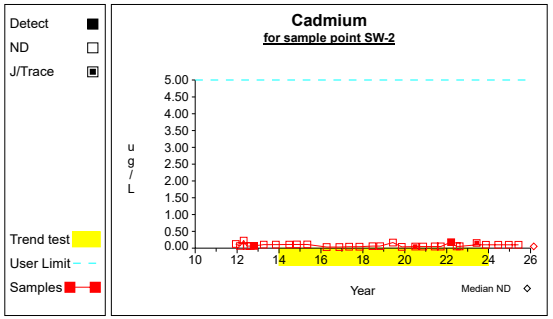
Graph 11



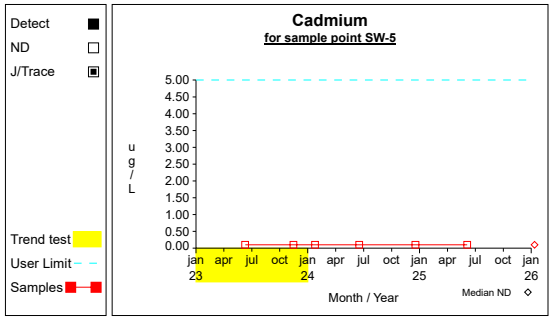
Graph 12



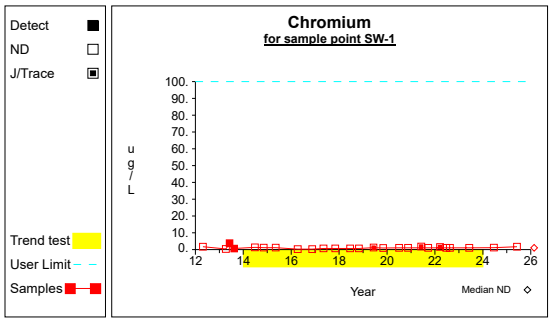
Graph 13



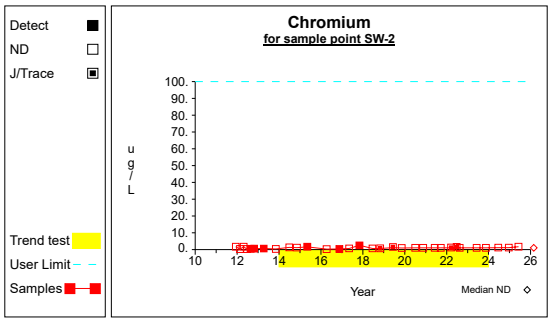
Graph 14



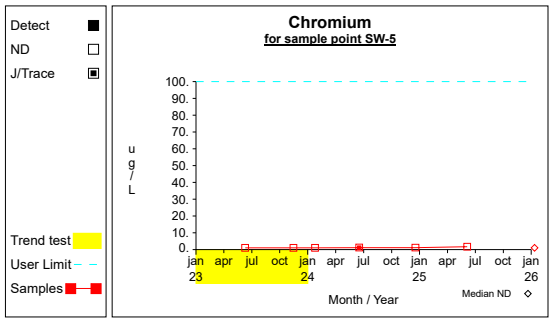
Graph 15



Graph 16

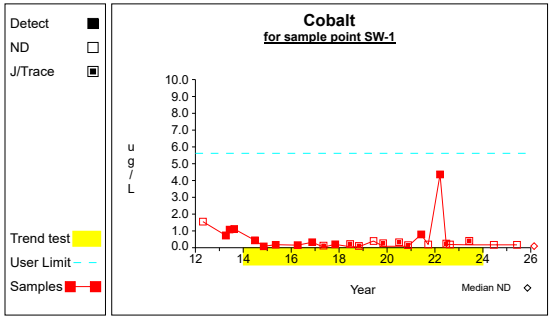


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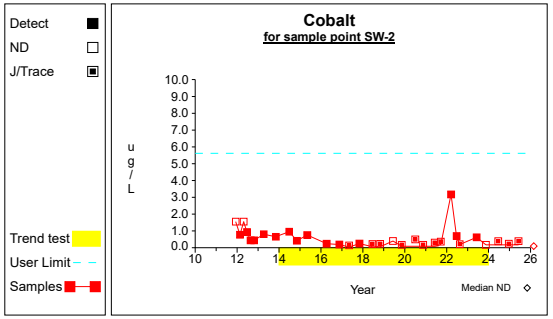


Graph 18

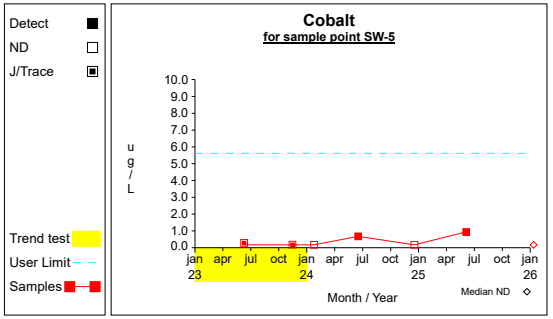
Time Series



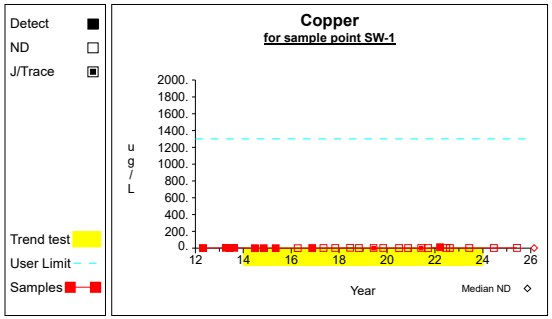
Graph 19



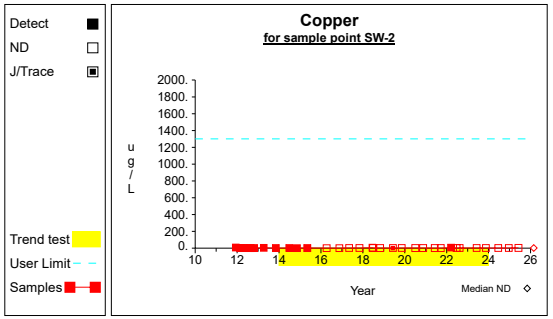
Graph 20



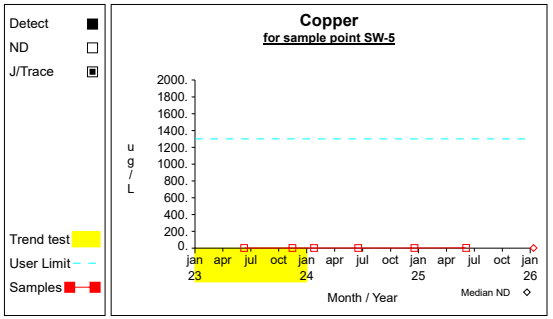
Graph 21



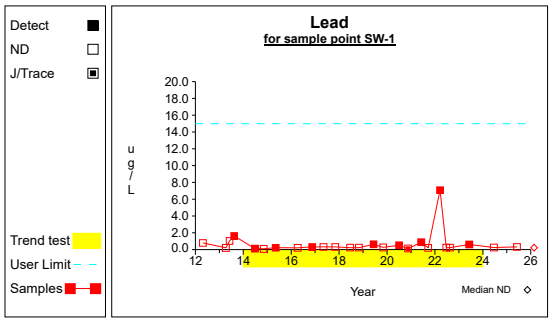
Graph 22



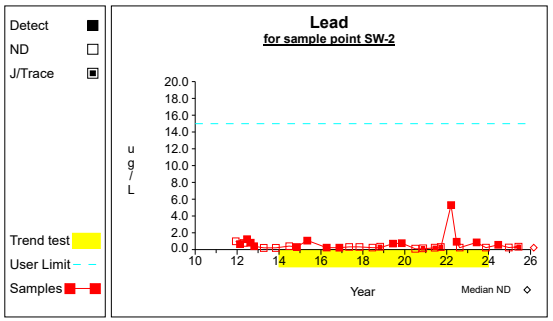
Graph 23



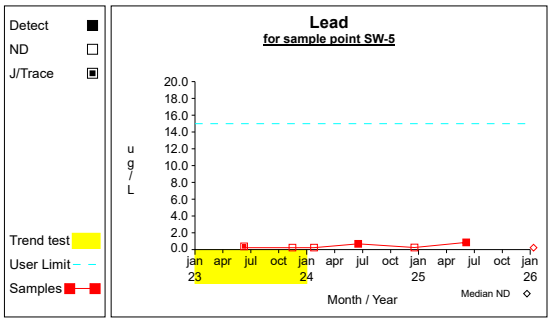
Graph 24



Graph 25

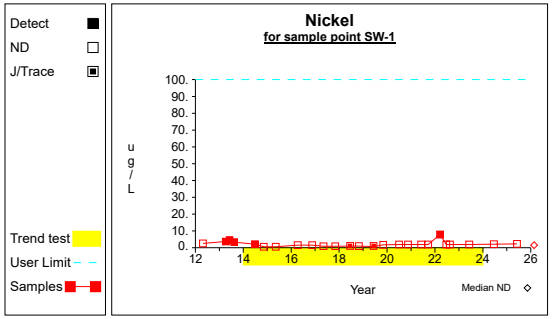


Graph 26

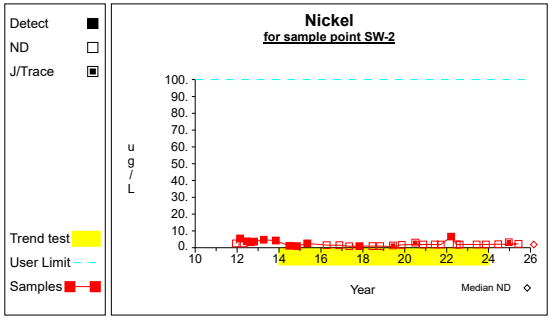


Graph 27

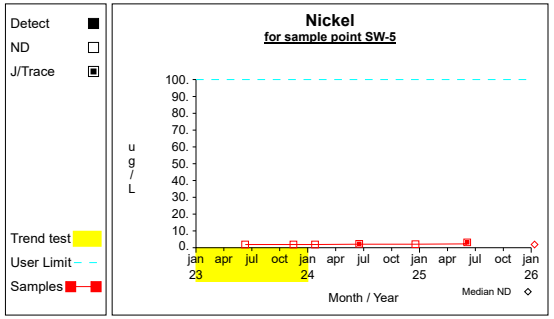
Time Series



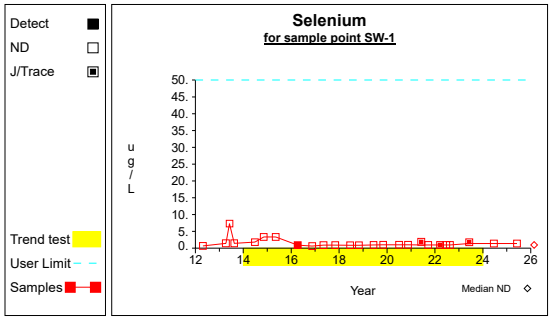
Graph 28



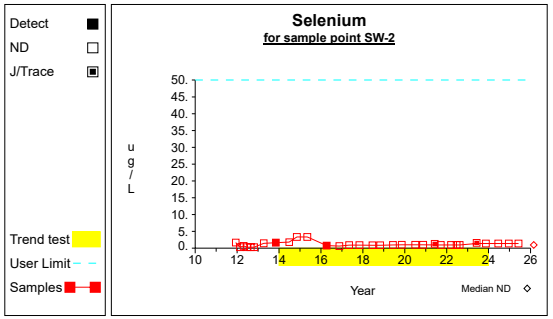
Graph 29



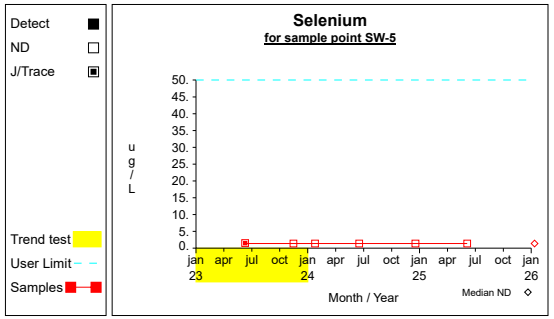
Graph 30



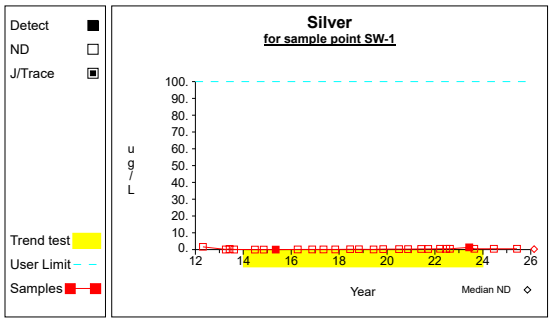
Graph 31



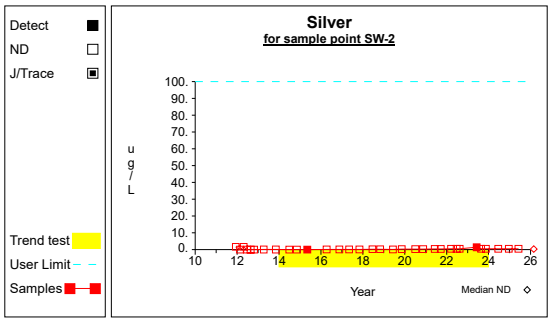
Graph 32



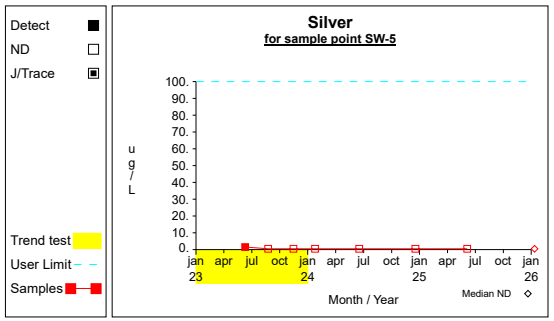
Graph 33



Graph 34

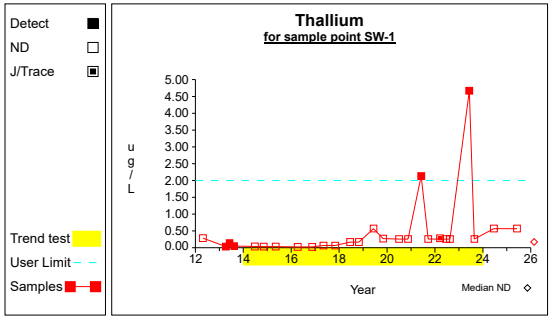


Graph 35

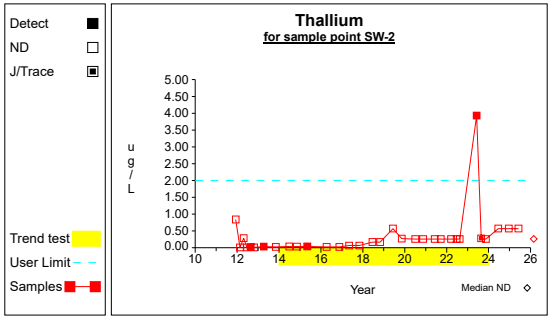


Graph 36

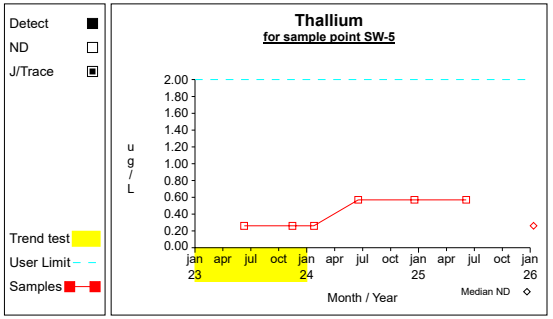
Time Series



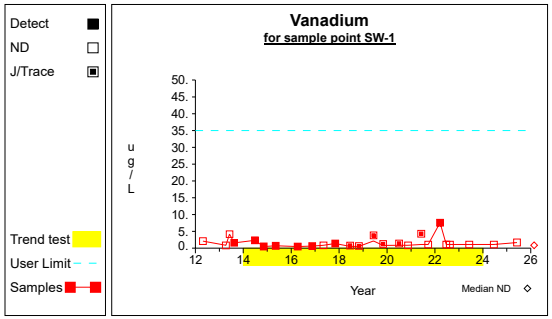
Graph 37



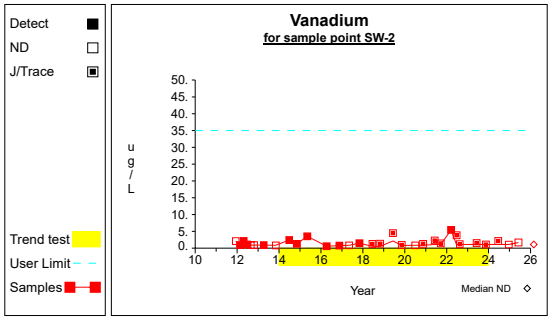
Graph 38



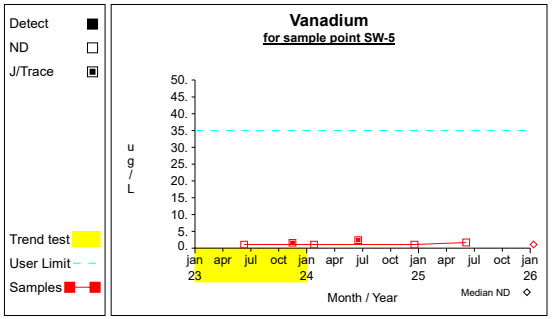
Graph 39



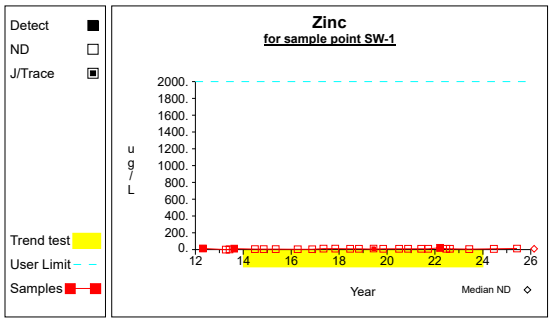
Graph 40



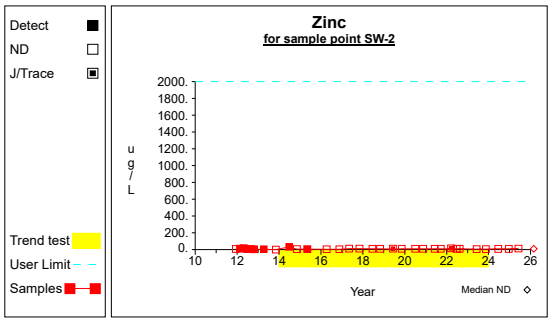
Graph 41



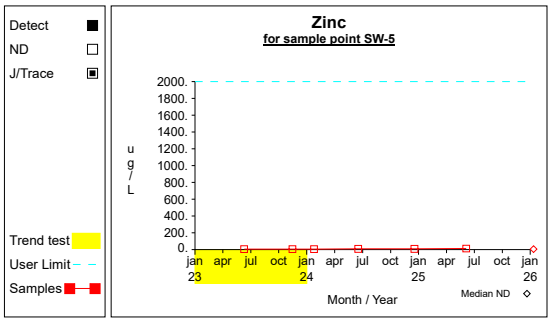
Graph 42



Graph 43



Graph 44



Graph 45

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,2-dichlorobenzene	SW-1	4/08/2013		.40	.14	ug/L
1,4-dichlorobenzene	SW-1	4/08/2013		.38	.20	ug/L
2-butanone	SW-1	4/24/2012		1.15	.47	ug/L
2-butanone	SW-1	4/08/2013		1.32	.47	ug/L
2-butanone	SW-1	6/03/2013		1.17	.47	ug/L
2-butanone	SW-1	6/26/2014		2.34	.47	ug/L
Acetone	SW-1	4/08/2013		2.19	1.79	ug/L
Acetone	SW-1	6/26/2014		3.85	1.79	ug/L
Acetone	SW-1	11/01/2017		2.88	1.79	ug/L
Dichloromethane	SW-1	6/03/2013		.391	.170	ug/L
Dichloromethane	SW-1	11/17/2016		.786	.170	ug/L
Dichloromethane	SW-1	11/01/2017		.830	.170	ug/L
Toluene	SW-1	6/03/2013		.654	.150	ug/L
1,2-dichlorobenzene	SW-2	4/08/2013		.147	.140	ug/L
2-butanone	SW-2	12/07/2011		1.24	.47	ug/L
2-butanone	SW-2	4/24/2012		1.21	.47	ug/L
2-butanone	SW-2	4/08/2013		8.70	.47	ug/L
2-butanone	SW-2	6/27/2014		1.99	.47	ug/L
Acetone	SW-2	2/21/2012		2.37	1.79	ug/L
Acetone	SW-2	4/24/2012		3.08	1.79	ug/L
Acetone	SW-2	8/23/2012		3.15	1.79	ug/L
Acetone	SW-2	4/08/2013		15.80	1.79	ug/L
Acetone	SW-2	6/27/2014		4.00	1.79	ug/L
Acetone	SW-2	4/08/2016		2.59	1.79	ug/L
Acetone	SW-2	11/14/2017		2.82	1.79	ug/L
Bromomethane	SW-2	6/27/2014		.250	.220	ug/L
Bromomethane	SW-2	5/11/2015		.249	.220	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Chloroethane	SW-2	12/07/2011		.18	.15	ug/L
Chloromethane	SW-2	11/17/2016		.507	.310	ug/L
Dichloromethane	SW-2	2/21/2012		.780	.170	ug/L
Dichloromethane	SW-2	8/23/2012		.210	.170	ug/L
Dichloromethane	SW-2	10/24/2012		.620	.170	ug/L
Dichloromethane	SW-2	11/17/2016		.707	.170	ug/L

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

Worksheet 7 - Surface Water Monitoring
Antimony (ug/L) for SW-1 (Up) vs. SW-2 (Down)

Step	Equation	Description
1	UCL(Upstream) = $\overline{\mathbf{X}}$ + **tS** / **N**$^{1/2}$ = **0.255** + **1.734** * **7.08**x**10**$^{-9}$ / **19**$^{1/2}$ = **0.255**	Upper confidence limit for all Upstream data.
2	UCL(Downstream) = $\overline{\mathbf{X}}$ + **tS** / **N**$^{1/2}$ = **0.255** + **1.729** * **7.50**x**10**$^{-9}$ / **20**$^{1/2}$ = **0.255**	Upper confidence limit for all Downstream data.
3	Number of paired observations = **18**	
4	Number of ties = **18**	
5	Number of Downstream > Upstream = **0**	
6	Critical number for Downstream > Upstream = **5**	

Worksheet 7 - Surface Water Monitoring
Arsenic (ug/L) for SW-1 (Up) vs. SW-2 (Down)

Step	Equation	Description
1	UCL(Upstream) = $\overline{\mathbf{X}}$ + **tS** / $\mathbf{N}^{1/2}$ = **0.452** + **1.734** * **0.506** / $\mathbf{19}^{1/2}$ = **0.653**	Upper confidence limit for all Upstream data.
2	UCL(Downstream) = $\overline{\mathbf{X}}$ + **tS** / $\mathbf{N}^{1/2}$ = **0.524** + **1.729** * **0.586** / $\mathbf{20}^{1/2}$ = **0.751**	Upper confidence limit for all Downstream data.
3	Number of paired observations = **18**	
4	Number of ties = **0**	
5	Number of Downstream > Upstream = **17**	
6	Critical number for Downstream > Upstream = **13**	

Worksheet 7 - Surface Water Monitoring
Barium (ug/L) for SW-1 (Up) vs. SW-2 (Down)

Step	Equation	Description
1	UCL(Upstream) = $\bar{X}$ + **tS** / **N**$^{1/2}$ = **128.526** + **1.734** * **19.99** / **19**$^{1/2}$ = **136.478**	Upper confidence limit for all Upstream data.
2	UCL(Downstream) = $\bar{X}$ + **tS** / **N**$^{1/2}$ = **107.63** + **1.729** * **27.325** / **20**$^{1/2}$ = **118.194**	Upper confidence limit for all Downstream data.
3	Number of paired observations = **18**	
4	Number of ties = **0**	
5	Number of Downstream > Upstream = **2**	
6	Critical number for Downstream > Upstream = **13**	

Worksheet 7 - Surface Water Monitoring
Beryllium (ug/L) for SW-1 (Up) vs. SW-2 (Down)

Step	Equation	Description
1	UCL(Upstream) = $\overline{\mathbf{X}}$ + **tS** / **N**$^{1/2}$ = **0.135** + **1.734** * **2.09**×**10**$^{-9}$ / **19**$^{1/2}$ = **0.135**	Upper confidence limit for all Upstream data.
2	UCL(Downstream) = $\overline{\mathbf{X}}$ + **tS** / **N**$^{1/2}$ = **0.136** + **1.729** * **0.003** / **20**$^{1/2}$ = **0.137**	Upper confidence limit for all Downstream data.
3	Number of paired observations = **18**	
4	Number of ties = **17**	
5	Number of Downstream > Upstream = **1**	
6	Critical number for Downstream > Upstream = **5**	

Worksheet 7 - Surface Water Monitoring
Cadmium (ug/L) for SW-1 (Up) vs. SW-2 (Down)

Step	Equation	Description
1	UCL(Upstream) = $\overline{\mathbf{X}}$ + **tS** / **N**$^{1/2}$ = **0.051** + **1.729** * **0.062** / **20**$^{1/2}$ = **0.075**	Upper confidence limit for all Upstream data.
2	UCL(Downstream) = $\overline{\mathbf{X}}$ + **tS** / **N**$^{1/2}$ = **0.035** + **1.729** * **0.034** / **20**$^{1/2}$ = **0.048**	Upper confidence limit for all Downstream data.
3	Number of paired observations = **18**	
4	Number of ties = **15**	
5	Number of Downstream > Upstream = **0**	
6	Critical number for Downstream > Upstream = **5**	

Worksheet 7 - Surface Water Monitoring
Chromium (ug/L) for SW-1 (Up) vs. SW-2 (Down)

Step	Equation	Description
1	UCL(Upstream) = $\overline{X}$ + **tS** / **N**$^{1/2}$ = **0.55** + **1.734** * **7.82x10**$^{-9}$ / **19**$^{1/2}$ = **0.55**	Upper confidence limit for all Upstream data.
2	UCL(Downstream) = $\overline{X}$ + **tS** / **N**$^{1/2}$ = **0.703** + **1.729** * **0.513** / **20**$^{1/2}$ = **0.902**	Upper confidence limit for all Downstream data.
3	Number of paired observations = **18**	
4	Number of ties = **15**	
5	Number of Downstream > Upstream = **2**	
6	Critical number for Downstream > Upstream = **5**	

Worksheet 7 - Surface Water Monitoring
Cobalt (ug/L) for SW-1 (Up) vs. SW-2 (Down)

Step	Equation	Description
1	UCL(Upstream) = $\overline{\mathbf{X}}$ + **tS** / $\mathbf{N}^{1/2}$ = **0.37** + **1.734** * **0.985** / $\mathbf{19}^{1/2}$ = **0.762**	Upper confidence limit for all Upstream data.
2	UCL(Downstream) = $\overline{\mathbf{X}}$ + **tS** / $\mathbf{N}^{1/2}$ = **0.389** + **1.729** * **0.715** / $\mathbf{20}^{1/2}$ = **0.666**	Upper confidence limit for all Downstream data.
3	Number of paired observations = **18**	
4	Number of ties = **8**	
5	Number of Downstream > Upstream = **7**	
6	Critical number for Downstream > Upstream = **9**	

Worksheet 7 - Surface Water Monitoring
Copper (ug/L) for SW-1 (Up) vs. SW-2 (Down)

Step	Equation	Description
1	UCL(Upstream) = $\bar{X}$ + **tS** / **N**$^{1/2}$ = **1.389** + **1.734** * **2.455** / **19**$^{1/2}$ = **2.366**	Upper confidence limit for all Upstream data.
2	UCL(Downstream) = $\bar{X}$ + **tS** / **N**$^{1/2}$ = **1.195** + **1.725** * **1.339** / **21**$^{1/2}$ = **1.699**	Upper confidence limit for all Downstream data.
3	Number of paired observations = **18**	
4	Number of ties = **13**	
5	Number of Downstream > Upstream = **3**	
6	Critical number for Downstream > Upstream = **5**	

Worksheet 7 - Surface Water Monitoring
Lead (ug/L) for SW-1 (Up) vs. SW-2 (Down)

Step	Equation	Description
1	UCL(Upstream) = $\bar{X}$ + **tS** / **N**$^{1/2}$ = **0.619** + **1.734** * **1.582** / **19**$^{1/2}$ = **1.248**	Upper confidence limit for all Upstream data.
2	UCL(Downstream) = $\bar{X}$ + **tS** / **N**$^{1/2}$ = **0.59** + **1.729** * **1.157** / **20**$^{1/2}$ = **1.037**	Upper confidence limit for all Downstream data.
3	Number of paired observations = **18**	
4	Number of ties = **7**	
5	Number of Downstream > Upstream = **6**	
6	Critical number for Downstream > Upstream = **9**	

Worksheet 7 - Surface Water Monitoring
Nickel (ug/L) for SW-1 (Up) vs. SW-2 (Down)

Step	Equation	Description
1	UCL(Upstream) = $\overline{\mathbf{X}}$ + **tS** / **N**$^{1/2}$ = **1.209** + **1.734** * **1.638** / **19**$^{1/2}$ = **1.861**	Upper confidence limit for all Upstream data.
2	UCL(Downstream) = $\overline{\mathbf{X}}$ + **tS** / **N**$^{1/2}$ = **1.324** + **1.729** * **1.289** / **20**$^{1/2}$ = **1.822**	Upper confidence limit for all Downstream data.
3	Number of paired observations = **18**	
4	Number of ties = **0**	
5	Number of Downstream > Upstream = **16**	
6	Critical number for Downstream > Upstream = **13**	

Worksheet 7 - Surface Water Monitoring
Selenium (ug/L) for SW-1 (Up) vs. SW-2 (Down)

Step	Equation	Description
1	UCL(Upstream) = $\overline{X}$ + **tS** / **N**$^{1/2}$ = **0.503** + **1.734** * **0.1** / **19**$^{1/2}$ = **0.543**	Upper confidence limit for all Upstream data.
2	UCL(Downstream) = $\overline{X}$ + **tS** / **N**$^{1/2}$ = **0.495** + **1.729** * **0.065** / **20**$^{1/2}$ = **0.52**	Upper confidence limit for all Downstream data.
3	Number of paired observations = **18**	
4	Number of ties = **17**	
5	Number of Downstream > Upstream = **0**	
6	Critical number for Downstream > Upstream = **5**	

Worksheet 7 - Surface Water Monitoring
Silver (ug/L) for SW-1 (Up) vs. SW-2 (Down)

Step	Equation	Description
1	UCL(Upstream) = $\bar{X}$ + **tS** / **N**$^{1/2}$ = **0.206** + **1.729** * **0.272** / **20**$^{1/2}$ = **0.311**	Upper confidence limit for all Upstream data.
2	UCL(Downstream) = $\bar{X}$ + **tS** / **N**$^{1/2}$ = **0.238** + **1.725** * **0.274** / **21**$^{1/2}$ = **0.342**	Upper confidence limit for all Downstream data.
3	Number of paired observations = **19**	
4	Number of ties = **0**	
5	Number of Downstream > Upstream = **18**	
6	Critical number for Downstream > Upstream = **14**	

Worksheet 7 - Surface Water Monitoring
Thallium (ug/L) for SW-1 (Up) vs. SW-2 (Down)

Step	Equation	Description
1	UCL(Upstream) = $\overline{X}$ + **tS** / **N**^{½} = **0.417** + **1.729** * **1.1** / **20**^{½} = **0.842**	Upper confidence limit for all Upstream data.
2	UCL(Downstream) = $\overline{X}$ + **tS** / **N**^{½} = **0.307** + **1.725** * **0.83** / **21**^{½} = **0.619**	Upper confidence limit for all Downstream data.
3	Number of paired observations = **19**	
4	Number of ties = **0**	
5	Number of Downstream > Upstream = **16**	
6	Critical number for Downstream > Upstream = **14**	

Worksheet 7 - Surface Water Monitoring
Vanadium (ug/L) for SW-1 (Up) vs. SW-2 (Down)

Step	Equation	Description
1	UCL(Upstream) = $\overline{\mathbf{X}}$ + **tS** / **N**^{½} = **0.99** + **1.734** * **1.669** / **19**^{½} = **1.654**	Upper confidence limit for all Upstream data.
2	UCL(Downstream) = $\overline{\mathbf{X}}$ + **tS** / **N**^{½} = **1.134** + **1.729** * **1.28** / **20**^{½} = **1.629**	Upper confidence limit for all Downstream data.
3	Number of paired observations = **18**	
4	Number of ties = **0**	
5	Number of Downstream > Upstream = **17**	
6	Critical number for Downstream > Upstream = **13**	

Worksheet 7 - Surface Water Monitoring
Zinc (ug/L) for SW-1 (Up) vs. SW-2 (Down)

Step	Equation	Description
1	UCL(Upstream) = $\overline{\mathbf{X}}$ + **tS** / **N**$^{1/2}$ = **5.826** + **1.734** * **3.602** / **19**$^{1/2}$ = **7.259**	Upper confidence limit for all Upstream data.
2	UCL(Downstream) = $\overline{\mathbf{X}}$ + **tS** / **N**$^{1/2}$ = **6.544** + **1.729** * **6.454** / **20**$^{1/2}$ = **9.039**	Upper confidence limit for all Downstream data.
3	Number of paired observations = **18**	
4	Number of ties = **15**	
5	Number of Downstream > Upstream = **2**	
6	Critical number for Downstream > Upstream = **5**	

Table 9

Analytical Data Summary for MW-1

Constituents	Units	10/12/2007 10/13/2007	1/9/2008	4/8/2008	7/16/2008	10/23/2008	4/8/2009 4/13/2009	7/24/2009	10/5/2009	2/25/2010
Antimony	ug/L	<6.0000	<6.0000	<6.0000	<6.0000	<6.0000	<6.0000	<6.0000	<6.0000	<6.0000
Arsenic	ug/L	<1.000	1.810	<1.000	1.950	<1.000	6.880	<1.000	<1.000	<1.000
Barium	ug/L	170.0	185.0	137.0	165.0	317.0	279.0	163.0	290.0	153.0
Beryllium	ug/L	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000
Cadmium	ug/L	<.5000	<.5000	<.5000	<.5000	<.5000	<.5000	<.5000	<.5000	<.5000
Chromium	ug/L	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000
Cobalt	ug/L	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000
Copper	ug/L	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000
Cyanide	ug/L							<10.00		
Lead	ug/L	<4.0000	<4.0000	<4.0000	<4.0000	5.0400	8.1000	<4.0000	5.3800	<4.0000
Mercury	ug/L							<.2000		
Nickel	ug/L	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000
Selenium	ug/L	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000
Silver	ug/L	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000
Total suspended solids	mg/L									
Turbidity, field	NTU									
Vanadium	ug/L	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000
Zinc	ug/L	51.200	<20.000	22.600	<20.000	42.900	51.200	36.600	50.800	<20.000

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

Table 9

Analytical Data Summary for MW-1

Constituents	4/21/2010	10/14/2010	4/13/2011	10/18/2011	4/24/2012	10/24/2012 10/26/2012	4/8/2013 4/16/2013	11/5/2013 11/7/2013	5/1/2014 5/8/2014
Antimony	<6.0000	<6.0000	<6.0000	<2.7300	<1.4500	<.6000	.1360	.0993	<.4000
Arsenic	<1.000	<1.000	<1.000	<.600	<.216	3.950	2.310	1.450	.354
Barium	144.0	195.0	128.0	273.0	123.0	448.0	282.0	186.0	124.0
Beryllium	<1.0000	1.1200	<1.0000	.2760	<.0790	<.0890	<.0696	<.0696	<.0800
Cadmium	<.5000	<.5000	<.5000	<.1240	<.2290	.4000	.1200	<.1060	<.1000
Chromium	<20.000	<20.000	<20.000	2.800	<1.810	2.550	.643	<.418	.816
Cobalt	<20.0000	<20.0000	<20.0000	5.1900	<1.5500	4.7000	.8570	.7450	.2310
Copper	<20.000	<20.000	<20.000	19.000	3.940	18.200	7.010	2.250	1.040
Cyanide	<10.00								<3.10
Lead	<4.0000	<4.0000	<4.0000	3.4400	1.8400	4.6000	<.2070	.2120	<.1800
Mercury	<.2000								<.0710
Nickel	<50.000	<50.000	<50.000	19.400	4.800	46.000	21.000	12.900	4.010
Selenium	<5.000	<5.000	<5.000	<1.690	<.700	<1.480	4.980	4.170	1.150
Silver	<20.0000	<20.0000	<20.0000	<1.7000	<1.7000	<.1350	<.0789	<.0789	<.0330
Thallium	<2.0000	<2.0000	<2.0000	<.8400	<.2880	<.0435	.0796	<.0267	<.0500
Total suspended solids									
Turbidity, field									
Vanadium	<50.000	<50.000	<50.000	3.590	2.740	6.350	.904	<.833	.676
Zinc	24.000	44.900	<20.000	13.900	<9.110	18.000	1.710	<.625	<2.000

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

Table 9

Analytical Data Summary for MW-1

Constituents	10/31/2014 11/10/2014	12/19/2014 12/22/2014	5/1/2015 5/12/2015	9/14/2015 9/22/2015	12/9/2015	3/24/2016 4/13/2016	11/11/2016 11/30/2016	5/5/2017 5/25/2017	11/1/2017 11/22/2017
Antimony	<.1610		<.1610	<.1610		<.2370	<.2370	<.1850	<.1850
Arsenic	<.945		<.945	<.945		<.672	<.672	<.505	.662
Barium	190.0		104.0	166.0		93.8	114.0	95.1	130.0
Beryllium	<.0390		<.0390	<.0390		<.2210	<.2210	<.1250	<.1250
Cadmium	<.1120		<.1120	<.1120		<.0351	<.0351	<.0441	<.0441
Chromium	<1.240		<1.240	<1.240		.852	.423	<.729 .870J	<.729
Cobalt	.1680		<.0528	.1820		.0520	.0470	<.0453 .0650J	.0830
Copper	.906		<.485	.526		<1.220	<1.220	<2.190	<2.190
Cyanide				<3.04			<3.52		
Lead	<.0967		<.0967	.3030		<.2110	<.2110	<.3240	<.3240
Mercury				<.0926			<.1420		
Nickel	6.200		1.490	5.870		<1.530	<1.530	<.929 .971J	1.530
Selenium	<3.340		<3.340	<3.340		1.410	<.630	<.928	<.928
Silver	<.0420		<.0420	.1170		<.1530	<.1530	<.1400 .1420J	<.1400
Thallium	<.0325		<.0325	.0380		<.0255	<.0255	<.0644	<.0644
Total suspended solids	2.170		<1.200	<3.200	3.380	<.581	.875	<.581 1.750J	6.870
Turbidity, field	2.8350	1.9810	.3323	3.4630	7.8000	.0104	.1540	6.9930	1.6980
Vanadium	.510		<.449	.542		.466	.394	<.840	<.840
Zinc	<6.950		<6.950	<6.950		<5.210	<5.210	<11.500	<11.500

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

Table 9

Analytical Data Summary for MW-1

Constituents	6/4/2018 6/27/2018	10/28/2018 10/31/2018	6/4/2019 6/13/2019	10/30/2019 11/20/2019	6/16/2020 7/7/2020	11/3/2020 11/23/2020	5/17/2021 6/8/2021
Antimony	<.4200	<.4200	<1.3200	<.5300	<.5100	<.5100	<1.1000
Arsenic	<.570	<.570	<.232 .604J	<.750	<.880	<.880	<.750
Barium	119.0	142.0	93.8	124.0	94.9	184.0	146.0
Beryllium	<.1900	<.1900	<.5300	<.2700	<.2700	<.2700	<.2700
Cadmium	<.0600	<.0600	<.1670	<.0390	<.0490	<.0490	<.0510
Chromium	<.760	<.760 1.150J	<1.140 2.080J	<.980	<1.100	<1.100	<1.100
Cobalt	<.0610	<.0610 .0960J	<.4020	<.0910	<.0910	<.0910 .1050J	<.0910
Copper	<3.800 *	<1.600	<.497 .991J	<2.000	<1.500	<1.500	<1.400
Cyanide							
Lead	<.2500	<.2500 .4590J	<.1860	<.2700	<.1100	<.1100	<.2100
Mercury							
Nickel	<1.000 1.320J	<1.000 1.840J	<.625 1.880J	<1.700	<1.900	<1.900 3.250J	<1.900
Selenium	<.900	<.900	<.982	<1.000	<1.000	<1.000	<.960
Silver	<.3000	<.3000	<.1150	<.3700	<.3700	<.3700	<.4200
Thallium	<.1700	<.1700	<.5700	<.2700	<.2600	<.2600	<.2600
Total suspended solids	<.638	2.880	<.638	<.638	<.638 1.250J	<1.700	<.638 1.500J
Turbidity, field	1.7410	6.9230		.4400	.6400	1.0100	1.3700
Vanadium	<.520	<.520 .973J	<2.150	<.820 1.040J	<.850	<.850	<1.100
Zinc	<10.000	<10.000	<6.920	<10.000	<10.000	<10.000	<10.000

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

Table 9

Analytical Data Summary for MW-1

Constituents	9/21/2021 9/29/2021	3/2/2022 3/29/2022	8/16/2022 9/13/2022	6/6/2023 6/27/2023	11/1/2023 11/20/2023	1/23/2024 1/25/2024	6/11/2024 7/3/2024	11/19/2024 12/18/2024
Antimony	<1.1000	<.6900	<.6900	<1.0000	<1.0000		<1.0000	<1.0000
Arsenic	<.750	<.750	<.750	<.530	<.530 1.030J		<.530	<.530
Barium	111.0	112.0	112.0	106.0	282.0		94.7	201.0
Beryllium	<.2700	<.2700	<.2700	<.3300	<.3300		<.3300	<.3300
Cadmium	<.0510	<.0550	<.0550	<.1000	.2090		<.1000	<.1000
Chromium	<1.100	<1.100	<1.100	<1.100	<1.100		<1.200	<1.200
Cobalt	<.1900	<.1900 .3170J	<.1900	<.1700	<.1700 .8440J		<.1700	<.1700 .2250J
Copper	<1.400	<1.800	<1.800	<1.800	5.270		<1.800	<1.800
Cyanide								
Lead	<.2100	<.2400	<.2400	<.2400	.9940		<.2600	<.2600
Mercury								
Nickel	<1.900	<1.900	<1.900	<1.900	20.900		<2.100	9.010
Selenium	<.960	<.960	<.960	<1.400	<1.400		<1.400	<1.400
Silver	<.4200	<.4900	<.4900	<.5000	<.5000		<.5000	<.5000
Thallium	<.2600	<.2600	<.2600	<.2600	<.2600		<.5700	<.5700
Total suspended solids	<.638 .750J	<.638	<.638	<.638	276.000		<1.390	3.860
Turbidity, field	3.4400	10.9700	.0000	.5700	146.7200	.5800	1.7300	10.6000
Vanadium	<1.100	<1.100	<1.100	<1.100	<1.100 1.530J		<1.100	<1.100
Zinc	<10.000	<10.000	<10.000	<6.400	<6.400		<9.700	<9.700

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

Table 9

Analytical Data Summary for MW-1

Constituents	6/2/2025 6/9/2025
Antimony	<1.0000
Arsenic	<.530
Barium	100.0
Beryllium	<.3300
Cadmium	<.1000
Chromium	<1.800
Cobalt	<.1700
Copper	<3.200
Cyanide	
Lead	<.3300
Mercury	
Nickel	<2.300
Selenium	<1.400 1.430J
Silver	<.5000
Thallium	<.5700
Total suspended solids	2.130
Turbidity, field	1.5900
Vanadium	<1.700
Zinc	<13.000

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

Table 9

Analytical Data Summary for MW-101

Constituents	Units	6/4/2019 6/13/2019	8/13/2019 8/15/2019	10/30/2019 11/20/2019	2/3/2020 2/17/2020	6/16/2020 7/7/2020	11/3/2020 11/23/2020	2/3/2021 2/24/2021	5/17/2021 6/8/2021
Antimony	ug/L	<1.32	<1.32	<.53	<.58	<.51	<.51		<1.10
Arsenic	ug/L	<.232 .735J	<.232 .506J	<.750	<.880	<.880	<.880		<.750
Barium	ug/L	196	213	207	194	198	205	191	183
Beryllium	ug/L	<.53	<.53	<.27	<.27	<.27	<.27		<.27
Cadmium	ug/L	<.167	<.167	<.039 .045J	<.039	<.049	<.049		<.051
Chromium	ug/L	<1.14	<1.14	<.98	<1.10	<1.10	<1.10		<1.10
Cobalt	ug/L	<.402	<.402 .521J	<.091 .480J	<.091 .434J	<.091	<.091 .113J		<.091 .399J
Copper	ug/L	<.497 1.670J	<.497 .898J	<2.000	<3.200	<1.500	<1.500		<1.400
Lead	ug/L	<.186 .261J	<.186	<.270	<.270	<.110	<.110		<.210
Nickel	ug/L	7.24	8.82	9.54	8.93	<1.90 4.61J	7.15	10.10	10.40
Selenium	ug/L	<.982	<.982	<1.000	<1.000	<1.000	<1.000		<.960
Silver	ug/L	<.115	<.115	<.370	<.370	<.370	<.370		<.420
Thallium	ug/L	<.57	<.57	<.27	<.26	<.26	<.26		<.26
Total suspended solids	mg/L	<.638 1.630J	<.638 1.250J	<.638 1.630J	3.250	<.638 1.630J	2.630	1.880	27.600
Turbidity, field	NTU	.75	3.94	2.85	1.38	1.98	1.27	1.63	480.28
Vanadium	ug/L	<2.15 2.61J	<2.15	<.82	<.82	<.85	<.85		<1.10
Zinc	ug/L	<6.92 8.28J	<6.92 7.30J	<10.00	<10.00	<10.00	<10.00		<10.00

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

Table 9

Analytical Data Summary for MW-101

Constituents	9/21/2021 9/29/2021	8/16/2022 9/13/2022	6/6/2023 6/27/2023	6/11/2024 7/3/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	<1.10	<.69	<1.00	<1.00	<1.00	<1.00
Arsenic	<.750	<.750	<.530	<.530 .541J	<.530	<.530
Barium	212	214	175	177	221	171
Beryllium	<.27	<.27	<.33	<.33	<.33	<.33
Cadmium	<.051	<.055	<.100	<.100	<.100	<.100
Chromium	<1.10	<1.10	<1.10	<1.20	<1.20	<1.80
Cobalt	<.190 .241J	<.190	<.170 .232J	1.360	<.170 .189J	<.170
Copper	<1.400	<1.800	<1.800	<1.800 3.570J	<1.800	<3.200
Lead	<.210	<.240	<.240	<.260	<.260	<.330
Nickel	8.31	<1.90 3.73J	9.62	6.92	8.19	7.93
Selenium	<.960	<.960	<1.400	<1.400	<1.400	<1.400
Silver	<.420	<.490	<.500	<.500	<.500	<.500
Thallium	<.26	<.26	<.26	<.57	<.57	<.57
Total suspended solids	3.130	2.000	<1.700	<1.390 1.750J	<1.530	<1.310 1.630J
Turbidity, field	6.14	5.49	1.73	4.32	3.35	2.17
Vanadium	<1.10	<1.10	<1.10	<1.10	<1.10	<1.70
Zinc	<10.00	<10.00	<6.40	<9.70	<9.70	<13.00

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

Table 9

Analytical Data Summary for MW-24A

Constituents	Units	2/25/2011	4/13/2011	6/22/2011	12/7/2011	2/21/2012	4/24/2012	6/21/2012	10/24/2012 10/26/2012	4/8/2013 4/16/2013
Antimony	ug/L	<6.000	<6.000	<6.000	<2.730	.200	4.410	<.120	<.120	.356
Arsenic	ug/L	<1.000	<2.000	<2.000	.679	<.730	<.216	<.730	<.730	1.670
Barium	ug/L	177.0	274.0	139.0	196.0	210.0	156.0	192.0	180.0	164.0
Beryllium	ug/L	<1.0000	<1.0000	<1.0000	<.0510	.0900	<.0790	.0200	.0500	<.0696
Cadmium	ug/L	<.5000	<.5000	<.5000	.1470	.0900	<.2290	<.0640	<.0640	.2240
Chromium	ug/L	<20.000	<20.000	<20.000	3.150	<.390	2.690	<.390	2.080	1.300
Cobalt	ug/L	<20.0000	<20.0000	<20.0000	1.7900	3.6000	<1.5500	1.0700	1.0300	5.5600
Copper	ug/L	<20.00	26.60	<20.00	13.70	5.19	2.55	1.45	2.88	3.34
Cyanide	ug/L									
Lead	ug/L	<4.0000	4.1700	<4.0000	2.1900	2.7000	2.2100	.6300	.7300	.6310
Mercury	ug/L									
Nickel	ug/L	<50.00	<50.00	<50.00	6.15	12.60	6.60	5.89	6.70	16.50
Selenium	ug/L	<5.000	<5.000	<5.000	<1.690	<.297	<.700	<.297	<.297	<1.460
Silver	ug/L	<20.0000	<20.0000	<20.0000	<1.7000	<.0270	<1.7000	<.0270	<.0270	<.0789
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<.8400	<.0087	<.2880	<.0087	<.0087	.0402
Total suspended solids	mg/L									
Turbidity, field	NTU									
Vanadium	ug/L	<50.000	<50.000	<50.000	<2.100	3.090	2.900	1.300	1.340	1.520
Zinc	ug/L	43.500	28.100	<20.000	<9.110	22.900	15.300	1.840	7.620	<.625

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

Table 9

Analytical Data Summary for MW-24A

Constituents	11/5/2013 11/7/2013	5/1/2014 5/8/2014	10/31/2014 11/10/2014	5/1/2015 5/12/2015	3/24/2016 4/13/2016	5/5/2017 5/25/2017	6/4/2018 6/27/2018	10/28/2018 10/31/2018
Antimony	.243	.602	<.161	<.161	<.237	<.185	<.420	<.420
Arsenic	.836	<.330	<.945	<.945	<.672	<.505	<.570	<.570
Barium	169.0	135.0	187.0	168.0	124.0	142.0	130.0	145.0
Beryllium	<.0696	<.0800	<.0390	<.0390	<.2210	<.1250	<.1900	<.1900
Cadmium	.3710	<.1000	.3720	.1880	.0840	<.0441 .0850J	<.0600 .0770J	<.0600 .1440J
Chromium	.824	1.170	<1.240	<1.240	1.420	<.729 1.910J	<.760 1.350J	<.760 1.080J
Cobalt	3.0000	1.1200	.5490	.3510	.3060	<.0453 .3030J	<.0610 .3390J	<.0610 .4400J
Copper	4.18	2.74	1.25	1.25	2.27	<2.19	5.26	<1.60 1.68J
Cyanide								
Lead	.6710	.5520	<.0967	.1030	<.2110	<.3240	<.2500	<.2500
Mercury								
Nickel	27.80	15.70	17.50	14.60	8.78	8.80	9.67	10.60
Selenium	<1.460	<.700	<3.340	<3.340	.653	<.928	<.900 1.170J	<.900
Silver	<.0789	<.0330	<.0420	<.0420	<.1530	<.1400	<.3000 .3400J	<.3000
Thallium	<.0267	<.0500	<.0325	<.0325	<.0255	<.0644	<.1700	<.1700
Total suspended solids			<1.410	<1.200	<.581	<.581	<.887	<.638 1.630J
Turbidity, field			2.4670	.0270	.0912	1.3300	.3474	1.3390
Vanadium	1.180	1.580	.923	.759	.674	<.840	<.520 .848J	<.520 1.300J
Zinc	7.480	<2.000	7.530	<6.950	<5.210	<11.500	<10.000	<10.000

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

Table 9

Analytical Data Summary for MW-24A

Constituents	6/4/2019 6/13/2019	8/13/2019 8/15/2019	10/30/2019 11/20/2019	6/16/2020 7/7/2020	11/3/2020 11/23/2020	5/17/2021 6/8/2021	8/16/2022 9/13/2022
Antimony	<1.320		<.530	<.510	1.990	<1.100	<.690
Arsenic	<.232 .498J		<.750	<.880	<.880	<.750	<.750
Barium	94.1		122.0	97.8	108.0	105.0	109.0
Beryllium	<.5300		<.2700	<.2700	<.2700	<.2700	<.2700
Cadmium	<.1670		.1280	<.0490 .0530J	.3330	<.0510	<.0550 .0800J
Chromium	<1.140 2.530J		<.980 1.240J	<1.100	<1.100	<1.100	<1.100
Cobalt	<.4020		<.0910 .3830J	<.0910 .3200J	.5700	<.0910 .3630J	<.1900 .3610J
Copper	2.12		<2.00	<1.50 1.79J	<1.50 1.80J	<1.40 1.78J	<1.80
Cyanide				<5.0			
Lead	<.1860		<.2700	<.1100	<.1100 .2950J	<.2100	<.2400
Mercury				<.100000			
Nickel	8.67	6.78	7.39	5.83	5.28	5.49	6.42
Selenium	<.982		<1.000 1.030J	<1.000	<1.000 1.390J	<.960	<.960
Silver	<.1150		<.3700	<.3700	<.3700	<.4200	<.4900
Thallium	<.5700		<.2700	<.2600	<.2600 .3520J	<.2600	<.2600
Total suspended solids	<.638	<.638	1.880	<.638	<.638 1.130J	<.638 .875J	<.638
Turbidity, field	5.0100	15.6100	.4500	1.0600	.0300	2.3100	.4900
Vanadium	<2.150		<.820 1.370J	<.850	<.850 1.230J	<1.100	<1.100
Zinc	<6.920		65.400	<10.000	<10.000	<10.000	<10.000

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

Table 9

Analytical Data Summary for MW-24A

Constituents	6/6/2023 6/27/2023	6/11/2024 7/3/2024	11/19/2024 12/18/2024
Antimony	<1.000	<1.000	<1.000
Arsenic	<.530	<.530	<.530
Barium	132.0	152.0	117.0
Beryllium	<.3300	<.3300	<.3300
Cadmium	<.1000	<.1000	<.1000
Chromium	<1.100 1.180J	<1.200	<1.200 1.910J
Cobalt	<.1700 .4110J	<.1700 .4070J	<.1700 .2040J
Copper	<1.80 2.82J	<1.80	<1.80
Cyanide		<3.5	
Lead	<.2400	<.2600	<.2600
Mercury		<.110000	
Nickel	7.85	8.53	<2.10 2.95J
Selenium	<1.400	<1.400	<1.400
Silver	<.5000	<.5000	<.5000
Thallium	<.2600	<.5700	<.5700
Total suspended solids	<.638 1.130J	<1.390	<1.480
Turbidity, field	1.7000	4.6900	1.3400
Vanadium	<1.100	<1.100	<1.100
Zinc	<6.400	<9.700	<9.700

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

Table 9

Analytical Data Summary for MW-25A

Constituents	Units	12/27/2010	2/25/2011	4/13/2011	6/22/2011	8/25/2011	10/18/2011	12/7/2011	4/24/2012	10/24/2012 10/26/2012
Antimony	ug/L	<6.0000	<12.0000	<6.0000	<6.0000	<6.0000	<2.7300	<2.7300	3.9000	.3900
Arsenic	ug/L	<1.000	<1.000	<2.000	<2.000	<2.000	<.600	<.600	.877	.980
Barium	ug/L	250	181	235	206	208	217	218	246	246
Beryllium	ug/L	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	.0540	<.0510	.2900	.1300
Cadmium	ug/L	<.5000	<.5000	<.5000	<.5000	<.5000	<.1240	.1300	<.2290	.3500
Chromium	ug/L	<20.000	<20.000	<20.000	<20.000	<20.000	<1.810	3.880	2.600	1.680
Cobalt	ug/L	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<1.5500	3.3600	6.4900	3.1500
Copper	ug/L	<20.000	<20.000	24.900	<20.000	20.400	13.400	15.000	6.560	5.850
Lead	ug/L	4.0000	<4.0000	<4.0000	<4.0000	<4.0000	<1.0000	1.6100	4.1800	2.6900
Nickel	ug/L	<50.000	<50.000	<50.000	<50.000	<50.000	3.210	7.370	8.700	13.100
Selenium	ug/L	<5.000	<5.000	<5.000	<5.000	<5.000	<1.690	<1.690	<.700	<.297
Silver	ug/L	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<1.7000	<1.7000	<1.7000	<.0270
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<.8400	<.8400	<.2880	<.0087
Total suspended solids	mg/L									
Turbidity, field	NTU									
Vanadium	ug/L	<50.000	<50.000	<50.000	<50.000	<50.000	<2.100	<2.100	7.510	3.050
Zinc	ug/L	106.000	51.100	<20.000	<20.000	<20.000	<9.110	11.100	<9.110	14.900

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

Table 9

Analytical Data Summary for MW-25A

Constituents	4/8/2013 4/16/2013	11/5/2013 11/7/2013	5/1/2014 5/8/2014	10/31/2014 11/10/2014	5/1/2015 5/12/2015	3/24/2016 4/13/2016	11/11/2016 11/30/2016	5/5/2017 5/25/2017	11/1/2017 11/22/2017
Antimony	.3740	.0911	.4150	<.1610	<.1610	<.2370	<.2370	<.1850	<.1850
Arsenic	1.170	.662	<.330	<.945	<.945	<.672	<.672	<.505	<.505
Barium	149	218	126	212	160	150	208	176	205
Beryllium	<.0696	<.0696	<.0800	<.0390	<.0390	<.2210	<.2210	<.1250	<.1250
Cadmium	.1750	.1890	<.1000	<.1120	<.1120	<.0351	<.0351	<.0441 .0540J	<.0441
Chromium	2.060	.990	1.380	<1.240	<1.240	1.820	<.355	<.729	<.729
Cobalt	1.3800	1.0200	<.0540	<.0528	.0730	.0940	.0750	<.0453 .0600J	.0580
Copper	5.520	1.900	1.660	<.485	<.485	<1.220	<1.220	<2.190	<2.190
Lead	.3770	<.2070	.3950	<.0967	.2520	<.2110	<.2110	<.3240	<.3240
Nickel	7.100	4.860	1.800	1.400	.972	<1.530	<1.530	<.929 2.060J	1.720
Selenium	2.960	<1.460	1.360	<3.340	<3.340	1.970	.696	<.928	1.400
Silver	<.0789	<.0789	<.0330	<.0420	<.0420	<.1530	<.1530	<.1400	.1460
Thallium	.0629	<.0267	<.0500	<.0325	<.0325	<.0255	<.0255	<.0644	<.0644
Total suspended solids				<1.410	<1.200	<.581	1.630	<.581 .625J	1.130
Turbidity, field				.3307	2.5710	.1175	.0964	2.0550	1.0350
Vanadium	1.800	.972	1.390	.710	.622	.750	.599	<.840	<.840
Zinc	4.110	<.625	<2.000	<6.950	<6.950	<5.210	<5.210	<11.500	<11.500

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

Table 9

Analytical Data Summary for MW-25A

Constituents	6/4/2018 6/27/2018	10/28/2018 10/31/2018	6/4/2019 6/13/2019	10/30/2019 11/20/2019	2/3/2020 2/17/2020	6/16/2020 7/7/2020	11/3/2020 11/23/2020
Antimony	<.4200	<.4200	<1.3200	<.5300		<.5100	<.5100
Arsenic	<.570	<.570	<.232 .796J	<.750		<.880	<.880
Barium	163	190	153	188	174	147	197
Beryllium	<.1900	<.1900	<.5300	<.2700		<.2700	<.2700
Cadmium	<.0600	<.0600 .0940J	<.1670	<.0390		<.0490	<.0490
Chromium	<.760 1.590J	<.760 1.420J	<1.140 1.840J	<.980 1.810J		<1.100 1.520J	<1.100
Cobalt	<.0610 .0740J	<.0610 .3200J	<.4020	<.0910		<.0910	<.0910
Copper	<3.800 *	<1.600	<.497 1.310J	<2.000		<1.500	<1.500
Lead	<.2500	<.2500	<.1860 .3570J	<.2700		<.1100	<.1100
Nickel	<1.000 1.170J	<1.000 3.800J	<.625 1.130J	<1.700		<1.900	<1.900
Selenium	<.900 1.190J	<.900 .994J	<.982 1.070J	<1.000 1.360J		<1.000 1.300J	<1.000 1.080J
Silver	<.3000	<.3000	<.1150	<.3700		<.3700	<.3700
Thallium	<.1700	<.1700	<.5700	<.2700		<.2600	<.2600
Total suspended solids	<.638	3.130	4.130	<.638 .875J	<.638	<.638 .750J	<.638
Turbidity, field	1.5560	3.1780	2.7300	.9400	.0000	.7600	.6500
Vanadium	<.520 .763J	<.520 1.090J	<2.150 3.000J	<.820 1.320J		<.850	<.850 .948J
Zinc	<10.000	<10.000	<6.920 14.700J	85.200	<10.000	<10.000	<10.000

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

Table 9

Analytical Data Summary for MW-25A

Constituents	5/17/2021 6/8/2021	9/21/2021 9/29/2021	3/2/2022 3/29/2022	8/16/2022 9/13/2022	6/6/2023 6/27/2023	11/1/2023 11/20/2023	1/23/2024 1/25/2024
Antimony	<1.1000	<1.1000	<.6900	<.6900	<1.0000	<1.0000	
Arsenic	<.750	<.750	<.750	<.750	<.530	<.530	
Barium	199	192	154	159	189	219	
Beryllium	<.2700	<.2700	<.2700	<.2700	<.3300	<.3300	
Cadmium	<.0510	<.0510	<.0550	<.0550 .0640J	<.1000	<.1000	
Chromium	<1.100	<1.100 1.580J	<1.100 1.650J	<1.100 1.360J	<1.100	<1.100	
Cobalt	<.0910 .1350J	<.1900	<.1900	<.1900	<.1700 .1760J	<.1700 .3910J	
Copper	<1.400	<1.400	<1.800	<1.800	<1.800	<1.800	
Lead	<.2100	<.2100	<.2400	<.2400	<.2400	<.2400	
Nickel	<1.900	<1.900	<1.900	<1.900 2.260J	<1.900	17.000	<1.900 3.930J
Selenium	<.960 2.690J	<.960 1.960J	<.960 1.760J	<.960	<1.400	<1.400	
Silver	<.4200	<.4200	<.4900	<.4900	<.5000	<.5000	
Thallium	<.2600	<.2600	<.2600	<.2600	<.2600	<.2600	
Total suspended solids	<.638	<.638	<.638 1.380J	<.638 1.130J	<.638	<.638	<.638
Turbidity, field	.8900	3.9700	2.2400	.9400	.9500	.6900	.4300
Vanadium	<1.100	<1.100	<1.100	<1.100	<1.100	<1.100	
Zinc	<10.000	<10.000	<10.000	<10.000	<6.400	<6.400	

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

Table 9

Analytical Data Summary for MW-25A

Constituents	6/11/2024 7/3/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	<1.0000	<1.0000	<1.0000
Arsenic	<.530	<.530	<.530
Barium	178	229	191
Beryllium	<.3300	<.3300	<.3300
Cadmium	<.1000	<.1000	<.1000
Chromium	<1.200 2.640J	<1.200	<1.800
Cobalt	<.1700	<.1700 .2760J	<.1700
Copper	<1.800	<1.800	<3.200
Lead	<.2600	<.2600	<.3300
Nickel	<2.100	9.120	<2.300
Selenium	<1.400 2.020J	<1.400	<1.400 2.400J
Silver	<.5000	<.5000	<.5000
Thallium	<.5700	<.5700	<.5700
Total suspended solids	<1.390	<1.480	<1.310
Turbidity, field	2.8200	3.3800	1.5600
Vanadium	<1.100	<1.100	<1.700
Zinc	<9.700	<9.700	<13.000

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

Table 9

Analytical Data Summary for MW-29A

Constituents	Units	10/30/2019 11/20/2019	2/3/2020 2/17/2020	6/16/2020 7/7/2020	8/24/2020 8/26/2020	11/3/2020 11/23/2020	5/17/2021 6/8/2021	9/21/2021 9/29/2021	3/2/2022 3/29/2022
Antimony	ug/L	<.53	<.58	<.51	<.51	<.51	<1.10	<1.10	<.69
Arsenic	ug/L	<.75 1.74J	2.28	3.40	6.84	4.59	4.09	6.09	5.57
Barium	ug/L	272	217	168	180	138	150	173	182
Beryllium	ug/L	<.27	<.27	<.27	<.27	<.27	<.27	<.27	<.27
Cadmium	ug/L	.131	.104	<.049	.180	<.049	<.051	<.051 .059J	<.055 .066J
Chromium	ug/L	<.98	<1.10	<1.10	<1.10	<1.10	<1.10	<1.10	<1.10 1.67J
Cobalt	ug/L	8.43	9.64	9.98	10.70	10.10	11.90	7.90	7.38
Copper	ug/L	<2.00	<3.20	<1.50	<1.50	<1.50	<1.40	<1.40	<1.80
Cyanide	ug/L					<5.0	<5.3		<4.3
Lead	ug/L	<.27	<.27	<.11	<.11	<.11	<.21	<.21	<.24
Mercury	ug/L					<.100000	<.150000		<.110000
Nickel	ug/L	49.7	49.2	51.1	57.0	47.2	55.5	51.0	63.6
Selenium	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<.96	<.96	<.96
Silver	ug/L	<.37	<.37	<.37	<.37	<.37	<.42	<.42	<.49
Thallium	ug/L	<.27	<.26	<.26	<.26	<.26	<.26	<.26	<.26
Total suspended solids	mg/L	<1.28 3.25J	5.00	6.25	10.40	4.80	5.38	7.50	<1.70 4.33J
Turbidity, field	NTU	1.33	4.47	22.71	63.02	45.29	56.29	43.58	48.96
Vanadium	ug/L	<.82	<.82	<.85	<.85	<.85	<1.10	<1.10	<1.10
Zinc	ug/L	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	42.10

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

Table 9

Analytical Data Summary for MW-29A

Constituents	6/22/2022 6/27/2022	8/16/2022 9/13/2022	12/6/2022 12/7/2022	6/6/2023 6/27/2023	11/1/2023 11/20/2023	6/11/2024 7/3/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony		<2.76		<1.00	<1.00	<1.00	<1.00	<1.00
Arsenic		10.20		4.37	6.49	4.54	6.75	<.53 1.91J
Barium		191		187	163	151	161	130
Beryllium		<1.08		<.33	<.33	<.33	<.33	<.33
Cadmium		<.055 .092J		<.100 .120J	<.100	<.100	<.100	<.100
Chromium		<1.10		<1.10	<1.10	<1.20	<1.20	<1.80
Cobalt		10.10		12.50	18.70	11.20	16.50	3.47
Copper		<1.80		<1.80	<1.80	<1.80 1.82J	<1.80	<3.20
Cyanide								
Lead		<.24		<.24	<.24	<.26	<.26	<.33
Mercury								
Nickel		69.1		76.0	87.0	63.9	69.6	54.0
Selenium		<.96		<1.40	<1.40	<1.40	<1.40	<1.40
Silver		<1.96		<.50	<.50	1.10	<.50	<.50
Thallium		<.26		<.26	<.26	<.57	<.57	<.57
Total suspended solids		14.30		3.87	4.00	7.00	13.70	2.25
Turbidity, field	74.41	5.11	21.07	59.78	15.27	55.13	32.22	12.60
Vanadium		<1.10		<1.10	<1.10	<1.10	<1.10	<1.70
Zinc		<10.00		<6.40 7.90J	<6.40 8.31J	<9.70	<9.70	<13.00

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

Table 9

Analytical Data Summary for MW-2R

Constituents	Units	10/12/2007 10/13/2007	1/9/2008	4/8/2008	7/16/2008	10/23/2008	4/8/2009 4/13/2009	10/5/2009	4/21/2010	10/14/2010
Antimony	ug/L	<6.000	<6.000	<6.000	<6.000	<6.000	<6.000	<6.000	<6.000	<6.000
Arsenic	ug/L	<1.000	<1.000	<1.000	<1.000	1.730	<1.000	<1.000	<2.000	<2.000
Barium	ug/L	137.0	118.0	127.0	101.0	197.0	108.0	114.0	108.0	113.0
Beryllium	ug/L	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000
Cadmium	ug/L	<.5000	<.5000	<.5000	<.5000	<.5000	<.5000	<.5000	<.5000	<.5000
Chromium	ug/L	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000
Cobalt	ug/L	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000
Copper	ug/L	<20.000	<20.000	26.900	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000
Lead	ug/L	<4.0000	<4.0000	<4.0000	<4.0000	6.2000	<4.0000	<4.0000	<4.0000	<4.0000
Nickel	ug/L	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000
Selenium	ug/L	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000
Silver	ug/L	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000
Total suspended solids	mg/L									
Turbidity, field	NTU									
Vanadium	ug/L	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000
Zinc	ug/L	52.300	<20.000	27.200	<20.000	52.700	28.700	34.600	<20.000	<20.000

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

Table 9

Analytical Data Summary for MW-2R

Constituents	4/13/2011	10/18/2011	4/24/2012	10/24/2012 10/26/2012	2/20/2013	4/8/2013 4/16/2013	11/5/2013 11/7/2013	5/1/2014 5/8/2014	10/31/2014 11/10/2014
Antimony	<6.000	<2.730	<1.450	<.600		<.541	.422	<.400	<.161
Arsenic	<1.000	<.600	<.216	3.950		<5.440	.571	<.330	<.945
Barium	93.2	101.0	136.0	133.0		132.0	128.0	115.0	127.0
Beryllium	<1.0000	<.0510	<.0790	<.0890		<.6960	<.0696	<.0800	<.0390
Cadmium	<.5000	.2400	<.2290	<.3200		<1.0600	.1160	<.1000	<.1120
Chromium	<20.000	<1.810	<1.810	<1.950		<4.180	.448	<.500	<1.240
Cobalt	<20.0000	<1.5500	<1.5500	.5000		<.5540	1.0300	.2380	.1620
Copper	<20.000	5.580	4.100	3.750		2.390	3.360	1.020	.669
Lead	<4.0000	<1.0000	2.6800	<.1450		<2.0700	.3460	<.1800	<.0967
Nickel	<50.000	3.210	6.820	11.900		4.570	5.910	2.420	2.040
Selenium	<5.000	<1.690	<.700	5.250	<1.830	<14.600	<1.460	<.700	<3.340
Silver	<20.0000	<1.7000	<1.7000	<.1350		<.7890	<.0789	<.0330	<.0420
Thallium	<2.0000	<.8400	<.2880	<.0435		<.2670	<.0267	<.0500	<.0325
Total suspended solids									1.500
Turbidity, field									.8694
Vanadium	<50.000	<2.100	2.250	<4.700		<8.330	<.833	<.500	<.449
Zinc	<20.000	<9.110	17.100	<4.600		<3.130	<.625	<2.000	<6.950

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

Table 9

Analytical Data Summary for MW-2R

Constituents	5/1/2015 5/12/2015	9/14/2015 9/22/2015	3/24/2016 4/13/2016	11/11/2016 11/30/2016	5/5/2017 5/25/2017	11/1/2017 11/22/2017	6/4/2018 6/27/2018	10/28/2018 10/31/2018
Antimony	<.161	<.161	<.237	<.237	<.185	<.185	<.420	<.420
Arsenic	<.945	<.945	<.672	<.672	<.505	.533	<.570	<.570
Barium	107.0	123.0	103.0	128.0	119.0	121.0	103.0	97.5
Beryllium	.0390	<.0390	<.2210	<.2210	<.1250	<.1250	<.1900	<.1900
Cadmium	<.1120	<.1120	<.0351	<.0351	<.0441	<.0441	<.0600	<.0600
Chromium	<1.240	<1.240	<.355	<.355	<.729	<.729	<.760	<.760
Cobalt	.0990	.1410	.0930	.1630	<.0453 .1760J	.1140	<.0610 .0670J	<.0610 .0950J
Copper	.825	<.485	<1.220	<1.220	<2.190	<2.190	<1.600	<1.600
Lead	<.0967	<.0967	<.2110	<.2110	<.3240	<.3240	<.2500	<.2500
Nickel	1.900	2.160	1.600	3.510	<.929 2.640J	2.680	<1.000 1.470J	<1.000
Selenium	<3.340	<3.340	1.150	1.180	<.928 .986J	<.928	<.900 1.170J	<.900 .989J
Silver	<.0420	<.0420	<.1530	<.1530	<.1400	<.1400	<.3000	<.3000
Thallium	<.0325	<.0325	<.0255	<.0255	<.0644	<.0644	<.1700	<.1700
Total suspended solids	<1.200	1.380	2.130	2.130	<.581 1.750J	1.000	<1.020	<.638 1.380J
Turbidity, field	.1373	3.2990	1.7520	1.4730	2.2420	.9645	2.3440	4.2830
Vanadium	<.449	<.449	<.255	<.255	<.840	<.840	<.520	<.520 .534J
Zinc	<6.950	<6.950	5.350	<5.210	<11.500	<11.500	<10.000	<10.000

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

Table 9

Analytical Data Summary for MW-2R

Constituents	6/4/2019 6/13/2019	10/30/2019 11/20/2019	6/16/2020 7/7/2020	11/3/2020 11/23/2020	5/17/2021 6/8/2021	9/21/2021 9/29/2021	3/2/2022 3/29/2022
Antimony	<1.320	<.530	<.510	<.510	<1.100	<1.100	<.690
Arsenic	<.232 .486J	<.750	<.880	<.880	<.750	<.750	<.750
Barium	82.8	86.2	79.0	124.0	120.0	129.0	120.0
Beryllium	<.5300	<.2700	<.2700	<.2700	<.2700	<.2700	<.2700
Cadmium	<.1670	<.0390	<.0490	<.0490	<.0510	<.0510	<.0550
Chromium	<1.140	<.980	<1.100	<1.100	<1.100	<1.100	<1.100
Cobalt	<.4020	<.0910	<.0910	<.0910	<.0910 .1070J	<.1900	<.1900
Copper	2.250	<2.000	<1.500	<1.500	<1.400	<1.400	<1.800
Lead	.5200	<.2700	<.1100	<.1100	<.2100	<.2100	<.2400
Nickel	<.625 .921J	<1.700	<1.900	<1.900	<1.900	<1.900	<1.900
Selenium	<.982	<1.000 1.010J	<1.000	<1.000 1.140J	<.960 1.400J	<.960 2.040J	<.960 1.510J
Silver	<.1150	<.3700	<.3700	<.3700	<.4200	<.4200	<.4900
Thallium	<.5700	<.2700	<.2600	<.2600	<.2600	<.2600	<.2600
Total suspended solids	<.638 .875J	<.638 1.250J	<.638	<.638	<.638 .875J	<.638 .750J	<.638 .750J
Turbidity, field	13.4900	1.6700	.4700	.0000	.5200	4.1600	5.1600
Vanadium	<2.150 2.400J	<.820	<.850	<.850	<1.100	<1.100	<1.100
Zinc	<6.920 7.240J	<10.000	<10.000	<10.000	<10.000	<10.000	<10.000

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

Table 9

Analytical Data Summary for MW-2R

Constituents	8/16/2022 9/13/2022	6/6/2023 6/27/2023	11/1/2023 11/20/2023	1/23/2024 1/25/2024	6/11/2024 7/3/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	<.690	<1.000	<1.000		<1.000	<1.000	<1.000
Arsenic	<.750	<.530	<.530		<.530	<.530	<.530
Barium	86.6	96.7	118.0		91.0	129.0	110.0
Beryllium	<.2700	<.3300	<.3300		<.3300	<.3300	<.3300
Cadmium	<.0550	<.1000	<.1000		<.1000	<.1000	<.1000
Chromium	<1.100	<1.100	<1.100		<1.200	<1.200	<1.800
Cobalt	<.1900	<.1700	<.1700		<.1700	<.1700	<.1700
Copper	<1.800	<1.800	<1.800 2.660J		<1.800	<1.800	<3.200
Lead	<.2400	<.2400	<.2400		<.2600	<.2600	<.3300
Nickel	<1.900	<1.900	<1.900		<2.100	<2.100	<2.300
Selenium	<.960 1.000J	<1.400 2.080J	<1.400		<1.400	<1.400	<1.400 2.890J
Silver	<.4900	<.5000	<.5000		<.5000	<.5000	<.5000
Thallium	<.2600	<.2600	<.2600		<.5700	<.5700	<.5700
Total suspended solids	<.638	<.638 1.500J	<.638 1.380J	<.638 1.750J	<1.390	2.630	<1.310
Turbidity, field	6.3300	.7900	.3800	.0000	1.3700	1.3500	1.5600
Vanadium	<1.100	<1.100	<1.100		<1.100	<1.100	<1.700
Zinc	<10.000	<6.400	21.000	<6.400 8.480J	<9.700	<9.700	<13.000

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

Table 9

Analytical Data Summary for MW-3

Constituents	Units	10/12/2007 10/13/2007	1/9/2008	4/8/2008	7/16/2008	10/23/2008	4/8/2009 4/13/2009	10/5/2009	4/21/2010	10/14/2010
Antimony	ug/L	<6.0000	<6.0000	<6.0000	<6.0000	<6.0000	<6.0000	<6.0000	<6.0000	<6.0000
Arsenic	ug/L	1.780	1.180	<1.000	1.420	<1.000	<1.000	<1.000	<1.000	<1.000
Barium	ug/L	153	140	154	151	140	143	128	147	146
Beryllium	ug/L	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000
Cadmium	ug/L	<.5000	<.5000	<.5000	<.5000	<.5000	<.5000	<.5000	<.5000	<.5000
Chromium	ug/L	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000
Cobalt	ug/L	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000
Copper	ug/L	<20.000	<20.000	38.500	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000
Lead	ug/L	<4.0000	<4.0000	<4.0000	<4.0000	<4.0000	<4.0000	<4.0000	<4.0000	<4.0000
Nickel	ug/L	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000
Selenium	ug/L	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000
Silver	ug/L	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000
Total suspended solids	mg/L									
Turbidity, field	NTU									
Vanadium	ug/L	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000
Zinc	ug/L	35.900	<20.000	40.300	<20.000	<20.000	27.400	23.000	21.200	<20.000

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

Table 9

Analytical Data Summary for MW-3

Constituents	4/13/2011	10/18/2011	4/24/2012	10/24/2012 10/26/2012	4/8/2013 4/16/2013	11/5/2013 11/7/2013	5/1/2014 5/8/2014	10/31/2014 11/10/2014	5/1/2015 5/12/2015
Antimony	<6.0000	<2.7300	<1.4500	<.6000	<.0541	<.0541	<.4000	<.1610	<.1610
Arsenic	<1.000	<.600	.782	4.150	1.600	1.520	1.320	2.030	2.030
Barium	140	132	172	147	160	176	148	193	170
Beryllium	<1.0000	<.0510	<.0790	<.0890	<.0696	<.0696	<.0800	<.0390	.0490
Cadmium	<.5000	<.1240	<.2290	<.3200	<.1060	<.1060	<.1000	<.1120	<.1120
Chromium	<20.000	<1.810	<1.810	<1.950	<.418	.920	<.500	<1.240	<1.240
Cobalt	<20.0000	<1.5500	<1.5500	<.0750	.3240	.4730	.1070	.0830	.0820
Copper	<20.000	6.600	<1.510	<.600	1.100	1.600	<.560	<.485	<.485
Lead	<4.0000	<1.0000	<.8040	<.1450	<.2070	<.2070	.1820	.0970	.1720
Nickel	<50.000	<2.580	<2.580	<1.200	1.840	1.440	.931	<.581	<.581
Selenium	<5.000	<1.690	<.700	<1.480	<1.460	<1.460	<.700	<3.340	<3.340
Silver	<20.0000	<1.7000	<1.7000	<.1350	<.0789	<.0789	<.0330	<.0420	.0600
Thallium	<2.0000	<.8400	<.2880	<.0435	<.0267	<.0267	.1490	<.0325	<.0325
Total suspended solids								9.170	7.670
Turbidity, field								8.3890	12.2000
Vanadium	<50.000	<2.100	<2.100	<4.700	<.833	<.833	<.500	<.449	<.449
Zinc	<20.000	<9.110	17.400	<4.600	<.625	<.625	<2.000	<6.950	<6.950

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

Table 9

Analytical Data Summary for MW-3

Constituents	9/14/2015 9/22/2015	3/24/2016 4/13/2016	11/11/2016 11/30/2016	5/5/2017 5/25/2017	11/1/2017 11/22/2017	6/4/2018 6/27/2018	10/28/2018 10/31/2018	6/4/2019 6/13/2019
Antimony	<.1610	<.2370	<.2370	<.1850	.2070	<.4200	<.4200	<1.3200
Arsenic	1.610	2.090	1.300	<.505 .610J	.992	<.570	2.280	1.110
Barium	180	180	184	168	166	176	189	158
Beryllium	<.0390	<.2210	<.2210	<.1250	<.1250	<.1900	<.1900	<.5300
Cadmium	<.1120	<.0351	<.0351	<.0441	<.0441	<.0600	<.0600	<.1670
Chromium	<1.240	<.355	<.355	<.729	<.729	<.760	<.760 1.120J	<1.140
Cobalt	.0790	.0910	.0510	<.0453 .0490J	.0680	<.0610 .2830J	<.0610 .2890J	<.4020
Copper	<.485	<1.220	<1.220	<2.190	<2.190	<3.800 *	<1.600	<.497 .686J
Lead	<.0967	<.2110	<.2110	<.3240	<.3240	<.2500	<.2500 .4080J	<.1860 .2060J
Nickel	.788	<1.530	<1.530	<.929	<.929	<1.000 1.390J	<1.000 2.150J	<.625 .888J
Selenium	<3.340	.785	.674	<.928	1.090	<.900	<.900	<.982
Silver	.0910	<.1530	<.1530	<.1400	<.1400	<.3000	<.3000	<.1150
Thallium	<.0325	<.0255	<.0255	<.0644	<.0644	<.1700	<.1700	<.5700
Total suspended solids	5.630	6.500	3.250	2.000	5.630	<.638 1.380J	11.000	3.630
Turbidity, field	9.0940	10.0200	7.0280	.5395	2.9880	7.0420	5.2410	18.7300
Vanadium	<.449	<.255	<.255	<.840	<.840	<.520	<.520 1.180J	<2.150 2.780J
Zinc	<6.950	<5.210	<5.210	<11.500	<11.500	<10.000	<10.000	<6.920

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

Table 9

Analytical Data Summary for MW-3

Constituents	10/30/2019 11/20/2019	6/16/2020 7/7/2020	11/3/2020 11/23/2020	5/17/2021 6/8/2021	8/2/2021 8/3/2021	9/21/2021 9/29/2021	3/2/2022 3/29/2022	6/22/2022 6/27/2022	8/16/2022 9/13/2022
Antimony	<.5300	<.5100	<.5100	<1.1000		<1.1000	<.6900		<.6900
Arsenic	<.750 .988J	2.240	<.880 1.220J	<.750 1.390J		<.750	3.700	<.750	<.750 .858J
Barium	163	176	193	199	171	188	210		205
Beryllium	<.2700	<.2700	<.2700	<.2700		<.2700	<.2700		<.2700
Cadmium	<.0390	<.0490	<.0490	<.0510		<.0510	<.0550		<.0550
Chromium	<.980	<1.100	<1.100	<1.100		<1.100	<1.100		<1.100
Cobalt	<.0910	<.0910 .1140J	<.0910	<.0910		<.1900	<.1900		<.1900
Copper	<2.000	<1.500	<1.500	<1.400		<1.400	<1.800		<1.800
Lead	<.2700	<.1100 .1220J	<.1100	<.2100		<.2100	<.2400		<.2400
Nickel	<1.700	<1.900	<1.900	<1.900		<1.900	<1.900		<1.900
Selenium	<1.000	<1.000	<1.000	<.960		<.960	<.960		<.960
Silver	<.3700	<.3700	<.3700	<.4200		<.4200	<.4900		<.4900
Thallium	<.2700	<.2600	<.2600	<.2600		<.2600	<.2600		<.2600
Total suspended solids	4.130	9.500	3.380	4.130	3.750	3.130	14.300	5.880	3.250
Turbidity, field	2.0100	21.0100	17.4100	7.4700	4.6900	4.3600	28.3800	10.8200	35.6400
Vanadium	<.820	<.850	<.850	<1.100		<1.100	<1.100		<1.100
Zinc	<10.000	<10.000	<10.000	<10.000		<10.000	<10.000		<10.000

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

Table 9

Analytical Data Summary for MW-3

Constituents	6/6/2023 6/27/2023	11/1/2023 11/20/2023	1/23/2024 1/25/2024	6/11/2024 7/3/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	<1.0000	<1.0000		<1.0000	<1.0000	<1.0000
Arsenic	<.530	<.530 1.060J		<.530	<.530 1.340J	<.530 1.390J
Barium	176	193		146	205	205
Beryllium	<.3300	<.3300		<.3300	<.3300	<.3300
Cadmium	<.1000	<.1000		<.1000	<.1000	<.1000
Chromium	<1.100	<1.100		<1.200	<1.200	<1.800
Cobalt	<.1700	<.1700		<.1700	<.1700	<.1700
Copper	<1.800	<1.800		<1.800	<1.800	<3.200
Lead	<.2400	<.2400		<.2600	<.2600	<.3300
Nickel	<1.900	<1.900		<2.100	<2.100	<2.300
Selenium	<1.400	<1.400		<1.400	<1.400	<1.400
Silver	<.5000 .7020J	<.5000		<.5000	<.5000	<.5000
Thallium	<.2600	<.2600		<.5700	<.5700	<.5700
Total suspended solids	2.630	2.880		2.380	5.000	3.870
Turbidity, field	6.3600	3.0900	1.3400	4.1900	14.7800	17.7800
Vanadium	<1.100	<1.100		<1.100	<1.100	<1.700
Zinc	<6.400	<6.400		<9.700	<9.700	<13.000

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

Table 9

Analytical Data Summary for MW-31A

Constituents	Units	10/30/2019 11/20/2019	2/3/2020 2/17/2020	6/16/2020 7/7/2020	8/24/2020 8/26/2020	11/3/2020 11/23/2020	2/3/2021 2/24/2021	5/17/2021 6/8/2021	8/2/2021 8/3/2021
Antimony	ug/L	<.530	<.580	<.510	<.510	<.510 .771J		<1.100	
Arsenic	ug/L	2.950	<.880 1.420J	2.470	3.830	2.570		<.750 .821J	
Barium	ug/L	602	591	279	317	449		160	
Beryllium	ug/L	<.27	<.27	<.27	<.27	<.27		<.27	
Cadmium	ug/L	.179	<.039 .080J	.316	<.049	.424		.260	
Chromium	ug/L	<.98	<1.10	<1.10 1.34J	<1.10	<1.10 2.50J		<1.10 1.31J	
Cobalt	ug/L	13.40	12.40	13.60	12.00	10.00		10.40	
Copper	ug/L	<2.00	<3.20	<1.50 1.84J	<1.50	5.01		<1.40 3.47J	
Cyanide	ug/L					<5.0		<5.3	
Lead	ug/L	1.150	<.270	1.370	<.110	.583		.609	
Mercury	ug/L					<.100000		<.150000	
Nickel	ug/L	20.4	21.6	27.5	47.0	52.8		53.4	
Selenium	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00 1.13J		<.96	
Silver	ug/L	<.37	<.37	<.37	<.37	<.37		<.42	
Thallium	ug/L	<.270	<.260	<.260	<.260	<.260 .286J		<.260	
Total suspended solids	mg/L	9.000	2.630	19.000	10.400	7.250		1.880	
Turbidity, field	NTU	2.06	.26	1.79	26.27	8.36	12.41	4.53 *	4.29
Vanadium	ug/L	<.820	<.820	<.850 .997J	<.850	<.850 .873J		<1.100	
Zinc	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0 13.8J		<10.0	

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

Table 9

Analytical Data Summary for MW-31A

Constituents	9/21/2021 9/29/2021	3/2/2022 3/29/2022	8/16/2022 9/13/2022	6/6/2023 6/27/2023	11/1/2023 11/20/2023	6/11/2024 7/3/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	<1.100	<.690	2.220	<1.000	<1.000	<1.000	<1.000	<1.000
Arsenic	<.750	<.750	<3.000	<.530 .602J	<.530 .571J	<.530	<.530 .562J	<.530
Barium	205	145	441	220	247	243	279	240
Beryllium	<.27	<.27	<.27	<.33	<.33	<.33	<.33	<.33
Cadmium	2.040	.302	.984	.340	<.100	<.100 .160J	<.100 .161J	<.100 .186J
Chromium	<1.10 1.39J	<1.10	7.31	<1.10	<1.10	<1.20	<1.20	<1.80
Cobalt	3.37	3.01	32.20	3.75	4.62	3.48	2.09	2.04
Copper	9.84	<1.80 3.31J	21.30	<1.80 3.61J	<1.80	<1.80 1.91J	<1.80 2.60J	<3.20
Cyanide		<4.3						
Lead	<.210	<.240	1.680	<.240 .283J	<.240	<.260	<.260	<.330
Mercury		<.110000						
Nickel	47.7	28.1	112.0	39.7	30.8	30.3	32.3	30.8
Selenium	<.96	<.96	<.96 1.86J	<1.40	<1.40	<1.40	<1.40	<1.40
Silver	<.42	<.49	<.49	<.50	<.50	<.50	<.50	<.50
Thallium	<.260 .355J	<.260	<.260 .777J	<.260	<.260	<.570	<.570	<.570
Total suspended solids	<.638 1.630J	<.638	5.000	6.070	<.638 1.250J	2.250	<3.700	<1.310
Turbidity, field	5.51	.86	74.50	4.71	4.04	2.38	5.30	8.14
Vanadium	<1.100	<1.100 1.620J	<1.100 3.260J	<1.100	<1.100	<1.100	<1.100	<1.700
Zinc	<10.0	<10.0	<10.0 18.1J	23.5	<6.4	<9.7	<9.7	<13.0

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

Table 9

Analytical Data Summary for MW-33A

Constituents	Units	10/30/2019 11/20/2019	2/3/2020 2/17/2020	6/16/2020 7/7/2020	8/24/2020 8/26/2020	11/3/2020 11/23/2020	5/17/2021 6/8/2021	8/2/2021 8/3/2021	9/21/2021 9/29/2021
Antimony	ug/L	<.530	<.580	<.510	<.510	<.510	<1.100	<1.100	<1.100
Arsenic	ug/L	42.40	80.90	5.23	65.80	17.90	35.30	52.70	18.40
Barium	ug/L	144	176	105	203	177	168	149	152
Beryllium	ug/L	<.27	<.27	<.27	<.27	<.27	<.27	<.27	<.27
Cadmium	ug/L	<.039	<.039	<.049	<.049	<.049	<.051	<.051 .098J	<.051 .068J
Chromium	ug/L	<.98	<1.10	<1.10	<1.10	<1.10	<1.10	<1.10	<1.10
Cobalt	ug/L	3.000	2.590	<.091 .478J	2.340	1.830	3.200	3.200	2.030
Copper	ug/L	<2.00	<3.20	<1.50	<1.50	<1.50	<1.40	<1.40	<1.40
Cyanide	ug/L								<5.0 5.3J
Lead	ug/L	<.270	<.270	<.110	<.110 .316J	<.110 .116J	<.210	<.210 .303J	<.210
Mercury	ug/L								<.00 .15J
Nickel	ug/L	<1.70 2.65J	<1.90 2.37J	<1.90 2.79J	<1.90 2.89J	<1.90 3.32J	<1.90 2.95J	<1.90 2.95J	<1.90
Selenium	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<.96	<.96	<.96
Silver	ug/L	<.37	<.37	<.37	<.37	<.37	<.42	<.42	<.42
Thallium	ug/L	<.27	<.26	<.26	<.26	<.26	<.26	<.26 .91J	<.26
Total suspended solids	mg/L	47.00	52.00	5.25	74.00	8.75	50.30	29.90	8.33
Turbidity, field	NTU	97.42	17.14	22.42	506.36	82.50	8.74	33.68	
Vanadium	ug/L	<.82	<.82	<.85	<.85 2.91J	<.85 1.16J	<1.10	<1.10	<1.10
Zinc	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0

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

Table 9

Analytical Data Summary for MW-33A

Constituents	3/2/2022 3/29/2022	8/16/2022 9/13/2022	6/6/2023 6/27/2023	6/11/2024 7/3/2024	8/27/2024 9/5/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	<.690 .846J	<.690	<1.000	<1.000		<1.000	<1.000
Arsenic	11.30	13.80	<.53 1.16J	24.30	51.80	112.00	9.86
Barium	176	138	108	255		199	361
Beryllium	<.27	<.27	<.33	<.33		<.33	<.33
Cadmium	<.055 .062J	.108	<.100 .113J	<.100		<.100	<.100 .107J
Chromium	<1.10	<1.10	<1.10	<1.20		<1.20	<1.80
Cobalt	.503	.743	<.170 .396J	4.510		2.400	5.210
Copper	<1.80	<1.80	<1.80	<1.80 4.25J		<1.80	8.96
Cyanide		<4.3					
Lead	<.240	<.240	<.240	.692		<.260	3.290
Mercury		<.11					
Nickel	<1.90 2.82J	5.16	<1.90	<2.10 3.31J		<2.10 2.15J	5.53
Selenium	<.96 1.56J	<.96	<1.40	<1.40		<1.40	<1.40 3.17J
Silver	<.49	<.49	<.50	<.50		<.50	<.50
Thallium	<.26	<.26	<.26	<.57		<.57	<.57
Total suspended solids	7.62	14.80	4.50	59.00	52.00	43.00	53.00
Turbidity, field	28.51	11.49	5.19	51.45	6.21	13.51	51.33
Vanadium	<1.10 1.15J	<1.10 2.48J	<1.10	<1.10 1.11J		<1.10	<1.70 2.29J
Zinc	<10.0	<10.0	<6.4	<9.7 12.9J		<9.7	<13.0

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

Table 9

Analytical Data Summary for MW-34A

Constituents	Units	10/30/2019 11/20/2019	2/3/2020 2/17/2020	6/16/2020 7/7/2020	8/24/2020 8/26/2020	11/3/2020 11/23/2020	5/17/2021 6/8/2021	9/21/2021 9/29/2021	3/2/2022 3/29/2022
Antimony	ug/L	<.53	<.58	<.51	<.51	<.51	<1.10	<1.10	<.69
Arsenic	ug/L	<.75	<.88	<.88	<.88	<.88	<.75	<.75	<.75
Barium	ug/L	80.4	80.0	76.3	75.2	73.6	76.9	74.9	69.7
Beryllium	ug/L	<.27	<.27	<.27	<.27	<.27	<.27	<.27	<.27
Cadmium	ug/L	<.039	<.039	<.049	<.049	<.049	<.051	<.051	<.055
Chromium	ug/L	<.98 1.37J	<1.10 1.66J	<1.10 1.63J	<1.10 3.06J	<1.10 1.36J	<1.10 1.29J	<1.10 1.41J	<1.10 1.56J
Cobalt	ug/L	<.091	<.091 .122J	<.091	<.091	<.091	<.091	<.190	<.190
Copper	ug/L	<2.0	<3.2	<1.5	<1.5	<1.5	<1.4	<1.4	<1.8
Lead	ug/L	<.27	<.27	<.11	<.11	<.11	<.21	<.21	<.24
Nickel	ug/L	<1.7	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9
Selenium	ug/L	<1.00 1.85J	<1.00 1.95J	<1.00 1.23J	<1.00	<1.00 1.69J	<.96 1.59J	<.96 1.59J	<.96 1.74J
Silver	ug/L	<.370	<.370	<.370	<.370	<.370	<.420	<.420	<.490
Thallium	ug/L	<.27	<.26	<.26	<.26	<.26	<.26	<.26	<.26
Total suspended solids	mg/L	1.880	4.500	3.130	<.638 1.630J	<.638 1.250J	2.750	2.000	2.880
Turbidity, field	NTU	1.46	6.78	5.06	5.97	5.00	2.73	10.46	8.91
Vanadium	ug/L	<.82	<.82	<.85	<.85 1.72J	<.85	<1.10	<1.10	<1.10
Zinc	ug/L	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00

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

Table 9

Analytical Data Summary for MW-34A

Constituents	8/16/2022 9/13/2022	6/6/2023 6/27/2023	11/1/2023 11/20/2023	6/11/2024 7/3/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	<.69	<1.00	<1.00	<1.00	<1.00	<1.00
Arsenic	<.75	<.53	<.53	<.53	<.53	<.53
Barium	79.5	65.5	69.3	70.1	67.5	70.5
Beryllium	<.27	<.33	<.33	<.33	<.33	<.33
Cadmium	<.055	<.100	<.100	<.100	<.100	<.100
Chromium	<1.10 1.81J	<1.10 1.48J	<1.10 1.96J	<1.20 1.31J	<1.20 1.88J	<1.80
Cobalt	<.190	<.170	<.170	<.170	<.170	<.170
Copper	<1.8	<1.8	<1.8	<1.8	<1.8	<3.2
Lead	<.24	<.24	<.24	<.26	<.26	<.33
Nickel	<1.9	<1.9	<1.9	<2.1	<2.1	<2.3
Selenium	<.96 2.27J	<1.40 1.46J	<1.40 2.12J	<1.40	<1.40 2.01J	<1.40 1.99J
Silver	<.490 .747J	<.500	<.500	<.500	<.500	<.500
Thallium	<.26	<.26	<.26	<.57	<.57	<.57
Total suspended solids	<2.220	2.500	2.250	<1.390	6.000	11.600
Turbidity, field	12.61	2.00	4.28	5.88	8.37	24.16
Vanadium	<1.10	<1.10	<1.10	<1.10	<1.10	<1.70
Zinc	<10.00	<6.40	<6.40 8.31J	<9.70	<9.70	<13.00

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

Table 9

Analytical Data Summary for MW-37A

Constituents	Units	9/21/2021 9/29/2021	12/14/2021	3/2/2022 3/29/2022	6/22/2022 6/27/2022	8/16/2022 9/13/2022	12/6/2022 12/7/2022	6/6/2023 6/27/2023
Antimony	ug/L	<1.10	<1.10	<.69	<.69	<.69	<.69	<1.00
Arsenic	ug/L	<.750 1.380J	<.750	4.570	<.750	<.750	<.750 .910J	<.530
Barium	ug/L	202	137	273	144	122	247	111
Beryllium	ug/L	<.27	<.27	<.27	<.27	<.27	<.27	<.33
Cadmium	ug/L	<.051 .052J	<.051	<.055	<.055	<.055	<.055	<.100
Chromium	ug/L	<1.10 1.50J	<1.10 1.16J	<1.10	<1.10 1.57J	<1.10 1.33J	<1.10	<1.10 1.33J
Cobalt	ug/L	.681	<.190 .194J	<.190 .263J	<.190	<.190	<.190	<.170 .179J
Copper	ug/L	<1.4 2.5J	<1.4	<1.8	<1.8	<1.8	<1.8	<1.8
Lead	ug/L	1.060	<.210 .275J	<.240	<.240	<.240	<.240	<.240 .244J
Nickel	ug/L	<1.90	<1.90	<1.90	<1.90	<1.90	<1.90	<1.90
Selenium	ug/L	<.96	<.96	<.96	<.96	<.96	<.96	<1.40
Silver	ug/L	<.420 .503J	<.420	<.490	<.490	<.490	<.490	<.500
Thallium	ug/L	<.26	<.26	<.26	<.26	<.26	<.26	<.26
Total suspended solids	mg/L	159.000	45.600	17.300	31.300	<.638 1.000J	4.880	26.500
Turbidity, field	NTU	97.89	47.38	16.61	9.81	.00	10.27	26.51
Vanadium	ug/L	<1.10 1.67J	<1.10 1.30J	<1.10	<1.10	<1.10	<1.10	<1.10
Zinc	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<6.4

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

Table 9

Analytical Data Summary for MW-37A

Constituents	6/11/2024 7/3/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	<1.00	<1.00	<1.00
Arsenic	<.530 1.620J	153.000	<.530 .826J
Barium	134	849	156
Beryllium	<.33	<.33	<.33
Cadmium	<.100	<.100	<.100
Chromium	<1.20	<1.20	<1.80
Cobalt	.714	9.580	<.170
Copper	<1.8	<1.8	<3.2
Lead	<.260	<.260	<.330
Nickel	<2.10	<2.10 4.39J	<2.30
Selenium	<1.40	<1.40	<1.40
Silver	<.500	<.500	<.500
Thallium	<.57	<.57	<.57
Total suspended solids	4.620	18.000	6.500
Turbidity, field	11.39	1.87	9.71
Vanadium	<1.10	<1.10	<1.70
Zinc	<9.7	<9.7	<13.0

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

Table 9

Analytical Data Summary for MW-38A

Constituents	Units	9/21/2021 9/29/2021	12/14/2021	3/2/2022 3/29/2022	6/22/2022 6/27/2022	8/16/2022 9/13/2022	12/6/2022 12/7/2022	6/6/2023 6/27/2023	11/1/2023 11/20/2023
Antimony	ug/L	<1.10	<1.10	<.69	<.69	<.69	<.69	<1.00	<1.00
Arsenic	ug/L	<.75	<.75	<.75	20.80	<.75	<.75	<.53	<.53
Barium	ug/L	148.0	94.3	139.0	200.0	133.0	145.0	133.0	141.0
Beryllium	ug/L	<.27	<.27	<.27	<.27	<.27	<.27	<.33	<.33
Cadmium	ug/L	<.051	<.051	<.055	<.055	<.055	<.055	<.100	<.100
Chromium	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
Cobalt	ug/L	<.190 .249J	<.190	<.190	<.190	<.190	<.190	<.170 .181J	<.170
Copper	ug/L	<1.4	<1.4	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Lead	ug/L	<.21	<.21	<.24	<.24	<.24	<.24	<.24	<.24
Nickel	ug/L	<1.90	<1.90	<1.90	<1.90	<1.90	<1.90	<1.90	<1.90 2.01J
Selenium	ug/L	<.96	<.96	<.96	<.96 2.77J	<.96	<.96	<1.40	<1.40
Silver	ug/L	<.42	<.42	<.49	<.49	<.49	<.49	<.50	<.50
Thallium	ug/L	<.26	<.26	<.26	<.26	<.26	<.26	<.26	<.26
Total suspended solids	mg/L	8.630	14.300	<1.700 2.670J	<.638 .875J	<.638	<.638 1.130J	9.120	3.500
Turbidity, field	NTU	11.36	29.12	2.49	.08	3.12	.00	6.34	1.10
Vanadium	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
Zinc	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<6.4	<6.4

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

Table 9

Analytical Data Summary for MW-38A

Constituents	6/11/2024 7/3/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	<1.00	<1.00	<1.00
Arsenic	<.53	<.53	<.53
Barium	153.0	153.0	140.0
Beryllium	<.33	<.33	<.33
Cadmium	<.100	<.100	<.100
Chromium	<1.2	<1.2	<1.8
Cobalt	<.170	<.170	<.170
Copper	<1.8	<1.8	<3.2
Lead	<.26	<.26	<.33
Nickel	<2.10	<2.10	<2.30
Selenium	<1.40	<1.40	<1.40
Silver	<.50	<.50	<.50
Thallium	<.57	<.57	<.57
Total suspended solids	3.130	3.000	6.250
Turbidity, field	1.62	15.68	7.35
Vanadium	<1.1	<1.1	<1.7
Zinc	<9.7	<9.7	<13.0

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

Table 9

Analytical Data Summary for MW-39A

Constituents	Units	9/21/2021 9/29/2021	12/14/2021	3/2/2022 3/29/2022	6/22/2022 6/27/2022	8/16/2022 9/13/2022	12/6/2022 12/7/2022	6/6/2023 6/27/2023	11/1/2023 11/20/2023
Antimony	ug/L	<1.10	<1.10	<.69	<.69	<.69	<.69	<1.00	<1.00
Arsenic	ug/L	<.75	<.75	<.75	<.75	<.75	<.75	<.53	<.53
Barium	ug/L	156	146	144	152	136	149	138	145
Beryllium	ug/L	<.270	<.270	<.270	<.270	<.270	<.270	<.330	<.330
Cadmium	ug/L	<.051	<.051	<.055	<.055	<.055	<.055	<.100	<.100
Chromium	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
Cobalt	ug/L	.857	<.190 .382J	<.190	<.190	<.190	<.190 .199J	<.170 .345J	<.170 .376J
Copper	ug/L	<1.40	<1.40	<1.80	<1.80	<1.80	<1.80	<1.80	<1.80
Lead	ug/L	<.210 .259J	<.210 .343J	<.240	<.240	<.240	<.240	<.240 .339J	<.240 .252J
Nickel	ug/L	<1.90 3.68J	<1.90 2.01J	<1.90	<1.90	<1.90	<1.90	<1.90	<1.90 2.54J
Selenium	ug/L	<.96	<.96	<.96	<.96	<.96	<.96	<1.40	<1.40
Silver	ug/L	<.42	<.42	<.49	<.49	<.49	<.49	<.50	<.50
Thallium	ug/L	<.26	<.26	<.26	<.26	<.26	<.26	<.26	<.26
Total suspended solids	mg/L	54.600	45.200	<1.700 3.670J	5.630	<.638 .750J	13.300	43.700	52.000
Turbidity, field	NTU	102.71	70.75	10.72	10.22	.51	20.65	71.92	71.35
Vanadium	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
Zinc	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<6.4	<6.4

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

Table 9

Analytical Data Summary for MW-39A

Constituents	6/11/2024 7/3/2024	8/27/2024 9/5/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	<1.00		<1.00	<1.00
Arsenic	<.53		<.53	<.53
Barium	152		156	146
Beryllium	<.330 .353J		<.330	<.330
Cadmium	<.100		<.100	<.100
Chromium	<1.2		<1.2	<1.8
Cobalt	<.170 .175J		.812	<.170 .329J
Copper	<1.80		<1.80 2.08J	<3.20
Lead	<.260		.589	<.330
Nickel	<2.10		<2.10 2.86J	<2.30
Selenium	<1.40		<1.40	<1.40
Silver	<.50		<.50	<.50
Thallium	<.57		<.57	<.57
Total suspended solids	14.300	34.600	116.000	27.500
Turbidity, field	25.54	66.58	271.18	36.91
Vanadium	<1.1		<1.1	<1.7
Zinc	68.3	<9.7	<9.7	<13.0

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

Table 9

Analytical Data Summary for MW-4

Constituents	Units	10/12/2007 10/13/2007	1/9/2008	4/8/2008	7/16/2008	10/23/2008	4/8/2009 4/13/2009	10/5/2009	2/25/2010
Antimony	ug/L	<6.000	<6.000	<6.000	<6.000	<6.000	<6.000	<6.000	<6.000
Arsenic	ug/L	23.600	16.600	21.400	7.640	4.720	3.400	5.900	7.850
Barium	ug/L	742.0	603.0	793.0	544.0	514.0	549.0	623.0	564.0
Beryllium	ug/L	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000
Cadmium	ug/L	1.210000	.834000	1.360000	<.500000	<.500000	<.500000	<.500000	.530000
Chromium	ug/L	<20.000	<20.000	28.000	<20.000	<20.000	<20.000	<20.000	<20.000
Cobalt	ug/L	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000
Copper	ug/L	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000
Cyanide	ug/L								
Lead	ug/L	<4.0000	<4.0000	4.1500	<4.0000	<4.0000	<4.0000	<4.0000	<4.0000
Mercury	ug/L								
Nickel	ug/L	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000
Selenium	ug/L	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000
Silver	ug/L	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000
Total suspended solids	mg/L								
Turbidity, field	NTU								
Vanadium	ug/L	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000
Zinc	ug/L	69.099998	<20.000000	36.500000	<20.000000	21.100000	50.700001	52.599998	<20.000000

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

Table 9

Analytical Data Summary for MW-4

Constituents	4/21/2010	10/14/2010	4/13/2011	10/18/2011	4/24/2012	10/24/2012 10/26/2012	4/8/2013 4/16/2013	11/5/2013 11/7/2013	5/1/2014 5/8/2014
Antimony	<6.000	<6.000	<6.000	<2.730	<1.450	<.120	3.740	.108	.422
Arsenic	6.440	8.540	6.570	4.050	2.100	2.460	16.400	1.870	1.240
Barium	580.0	529.0	542.0	513.0	533.0	710.0	774.0	514.0	513.0
Beryllium	<1.0000	<1.0000	<1.0000	<.0510	<.0790	.0600	<.0696	<.0696	<.0800
Cadmium	<.500000	<.500000	<.500000	.236000	<.229000	.410000	.430000	.191000	.144000
Chromium	<20.000	<20.000	<20.000	<1.810	<1.810	.420	6.890	<.418	147.000
Cobalt	<20.0000	<20.0000	<20.0000	8.2700	5.8500	10.1000	10.0000	4.3700	6.0900
Copper	<20.000	<20.000	23.600	12.000	<1.510	2.080	6.130	2.390	4.710
Cyanide	<10.00								<3.10
Lead	<4.0000	<4.0000	<4.0000	<1.0000	.9000	.7800	2.4500	.3240	<.1800
Mercury	<.2000								<.0710
Nickel	<50.000	<50.000	<50.000	14.000	13.300	12.800	18.200	15.800	105.000
Selenium	<5.000	<5.000	<5.000	<1.690	<.700	<.297	1.640	1.520	<.700
Silver	<20.0000	<20.0000	<20.0000	<1.7000	<1.7000	<.0270	<.0789	<.0789	<.0330
Thallium	<2.0000	<2.0000	<2.0000	<.8400	<.2880	.0100	.1480	.0371	.0790
Total suspended solids									
Turbidity, field									
Vanadium	<50.000	<50.000	<50.000	<2.100	3.660	3.250	9.470	.843	7.190
Zinc	41.000000	47.099998	<20.000000	<9.110000	14.200000	4.500000	13.600000	<.625000	2.010000

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

Table 9

Analytical Data Summary for MW-4

Constituents	10/31/2014 11/10/2014	12/19/2014 12/22/2014	5/1/2015 5/12/2015	9/14/2015 9/22/2015	3/24/2016 4/13/2016	11/11/2016 11/30/2016	5/5/2017 5/25/2017	11/1/2017 11/22/2017
Antimony	<.161		<.161	<.161	<.237	<.237	<.185	.691
Arsenic	<.945		<.945	<.945	<.672	<.672	<.505	.784
Barium	469.0		463.0	479.0	484.0	539.0	482.0	40.6
Beryllium	<.0390		<.0390	<.0390	<.2210	<.2210	<.1250	<.1250
Cadmium	.117000		.149000	.133000	.170000	.142000	<.044100 .168000J	.273000
Chromium	<1.240		<1.240	<1.240	<.355	<.355	<.729	2.280
Cobalt	.9670		.4480	.3300	.4110	.4410	<.0453 .2420J	3.7500
Copper	.520		<.485	<.485	<1.220	<1.220	<2.190	5.840
Cyanide				<3.04		<3.52		<3.46
Lead	.1090		<.0967	<.0967	<.2110	<.2110	<.3240	<.3240
Mercury				<.0926		<.1420		<.1120
Nickel	5.990		5.630	4.310	5.700	4.280	<.929 3.220J	11.900
Selenium	<3.340		<3.340	<3.340	<.630	<.630	<.928	31.600
Silver	<.0420		<.0420	<.0420	.1650	<.1530	<.1400	<.1400
Thallium	<.0325		<.0325	<.0325	.0310	.0280	<.0644 .1010J	<.0644
Total suspended solids	4.830		<1.200	<1.200	<.581	<.581	2.880	1.880
Turbidity, field	10.5800	1.3090	.0997	1.0810	.1490	1.8430	8.7800	.7597
Vanadium	1.020		.695	.787	.785	.948	<.840	1.070
Zinc	<6.950000		<6.950000	<6.950000	<5.210000	<5.210000	<11.500000	<11.500000

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

Table 9

Analytical Data Summary for MW-4

Constituents	6/4/2018 6/27/2018	10/28/2018 10/31/2018	6/4/2019 6/13/2019	10/30/2019 11/20/2019	6/16/2020 7/7/2020	11/3/2020 11/23/2020	5/17/2021 6/8/2021
Antimony	<.420	<.420	<1.320	<.530	<.510	<.510	<1.100
Arsenic	<.570 .637J	<.570	<.232 .653J	<.750	<.880	<.880	<.750
Barium	530.0	464.0	451.0	191.0	421.0	409.0	475.0
Beryllium	<.1900	<.1900	<.5300	<.2700	<.2700	<.2700	<.2700
Cadmium	<.060000 .124000J	<.060000 .158000J	<.167000	<.039000	.139000	.163000	.184000
Chromium	<.760	<.760	<1.140 1.680J	<.980	<1.100	<1.100	<1.100
Cobalt	1.4400	<.0610 .4580J	<.4020	<.0910	<.0910 .2640J	1.4800	.9370
Copper	<4.533 *	<1.600	<.497 .966J	<2.000	<1.500	<1.500	<1.400
Cyanide							
Lead	<.2500	<.2500	<.1860	<.2700	<.1100	<.1100	<.2100
Mercury							
Nickel	5.780	<1.000 3.990J	5.230	<1.700	<1.900 3.580J	11.900	5.360
Selenium	<.900	<.900	<.982	<1.000	<1.000	<1.000	<.960
Silver	<.3000	<.3000	<.1150	<.3700	<.3700	<.3700	<.4200
Thallium	<.1700	<.1700	<.5700	<.2700	<.2600	<.2600	<.2600
Total suspended solids	2.500	2.750	<.638	<.638 .750J	<.638 .750J	<.638	<.638 1.000J
Turbidity, field	1.4180	7.7670		.4900	1.2500	.0000	
Vanadium	<.520 .913J	<.520 1.230J	<2.150	<.820 1.230J	<.850 .892J	<.850 1.060J	<1.100
Zinc	<10.000000	<10.000000	<6.920000	<10.000000	<10.000000	<10.000000	<10.000000

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

Table 9

Analytical Data Summary for MW-4

Constituents	9/21/2021 9/29/2021	3/2/2022 3/29/2022	8/16/2022 9/13/2022	6/6/2023 6/27/2023	11/1/2023 11/20/2023	6/11/2024 7/3/2024	11/19/2024 12/18/2024
Antimony	<1.100	<.690	<.690	<1.000	<1.000	<1.000	<1.000
Arsenic	<.750	<.750	<.750 .762J	<.530	<.530 1.150J	<.530 .792J	<.530 1.050J
Barium	482.0	503.0	536.0	134.0	514.0	485.0	518.0
Beryllium	<.2700	<.2700	<.2700	<.3300	<.3300	<.3300	<.3300
Cadmium	.122000	.118000	<.055000 .076000J	<.100000	<.100000	<.100000	.254000
Chromium	<1.100	<1.100	<1.100	<1.100	<1.100	<1.200	<1.200
Cobalt	1.0700	1.4400	1.6100	<.1700	1.5400	1.8500	2.0400
Copper	<1.400	<1.800	<1.800	<1.800	<1.800	<1.800	<1.800
Cyanide				<4.30			
Lead	<.2100	<.2400	<.2400	<.2400	<.2400	<.2600 .2700J	<.2600
Mercury				<.1400			
Nickel	5.050	7.470	7.160	<1.900	5.360	6.270	6.170
Selenium	<.960	<.960	<.960	<1.400	<1.400	<1.400	<1.400
Silver	<.4200	<.4900	<.4900	<.5000	<.5000	1.2100	<.5000
Thallium	<.2600	<.2600	<.2600	<.2600	<.2600	<.5700	<.5700
Total suspended solids	<.638 1.380J	<1.700	<.638 1.630J	<.638 1.380J	8.500	2.250	2.450
Turbidity, field	3.8100	.0000	.0000	1.1500	1.1400	.8800	1.1700
Vanadium	<1.100	<1.100	<1.100	<1.100	<1.100	<1.100	<1.100
Zinc	<10.000000	<10.000000	<10.000000	<6.400000	<6.400000	<9.700001	<9.700000

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

Table 9

Analytical Data Summary for MW-4

Constituents	2/14/2025	6/2/2025 6/9/2025
Antimony		<1.000
Arsenic		<.530 .759J
Barium		505.0
Beryllium		<.3300
Cadmium	<.100000	<.100000
Chromium		<1.800
Cobalt		2.2500
Copper		<3.200
Cyanide		
Lead		<.3300
Mercury		
Nickel		8.820
Selenium		<1.400
Silver		<.5000
Thallium		<.5700
Total suspended solids		2.500
Turbidity, field	.8400	.6300
Vanadium		<1.700
Zinc		<13.000000

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

Table 9

Analytical Data Summary for MW-40A

Constituents	Units	9/21/2021 9/29/2021	12/14/2021	3/2/2022 3/29/2022	6/22/2022 6/27/2022	8/16/2022 9/13/2022	12/6/2022 12/7/2022	6/6/2023 6/27/2023	11/1/2023 11/20/2023
Antimony	ug/L	<1.10	<1.10	<.69	<.69	<.69	<.69	<1.00	<1.00
Arsenic	ug/L	<.750	<.750 .759J	<.750	<.750	<.750	<.750	<.530	<.530 .558J
Barium	ug/L	279	278	260	257	162	238	216	228
Beryllium	ug/L	<.27	<.27	<.27	<.27	<.27	<.27	<.33	<.33
Cadmium	ug/L	<.051	<.051	<.055	<.055	<.055 .064J	<.055	<.100 .163J	<.100
Chromium	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
Cobalt	ug/L	3.220	1.060	1.170	.807	1.470	2.190	1.510	1.860
Copper	ug/L	<1.40 2.64J	<1.40	<1.80	<1.80	<1.80 2.08J	<1.80	7.71	<1.80
Cyanide	ug/L								<4.3
Lead	ug/L	<.210 .379J	<.210 .271J	<.240	<.240	<.240 .272J	<.240	<.240	<.240
Mercury	ug/L								<.14
Nickel	ug/L	17.00	7.32	11.00	7.85	10.20	12.70	19.00	17.40
Selenium	ug/L	<.96 1.55J	<.96	<.96	<.96	<.96	<.96	<1.40	<1.40
Silver	ug/L	<.42	<.42	<.49	<.49	<.49	<.49	<.50	<.50
Thallium	ug/L	<.26	<.26	<.26	<.26	<.26	<.26	<.26	<.26
Total suspended solids	mg/L	81.50	33.00	12.30	21.40	47.70	24.50	6.75	8.25
Turbidity, field	NTU	100.92	26.96	40.36	17.09	98.21	13.86	5.58	20.13
Vanadium	ug/L	<1.10	<1.10	<1.10 1.12J	<1.10	<1.10 1.69J	<1.10	<1.10 1.91J	<1.10
Zinc	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<6.4	<6.4

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

Table 9

Analytical Data Summary for MW-40A

Constituents	6/11/2024 7/3/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	<1.00	<1.00	<1.00
Arsenic	<.530	<.530	<.530
Barium	210	215	202
Beryllium	<.33	<.33	<.33
Cadmium	<.100	<.100	<.100
Chromium	<1.2	<1.2	<1.8
Cobalt	1.690	2.140	1.570
Copper	<1.80	<1.80	<3.20
Cyanide	<3.5		
Lead	<.260	<.260 .282J	<.330
Mercury	<.11		
Nickel	11.10	16.80	14.10
Selenium	<1.40	<1.40	<1.40
Silver	<.50	<.50	<.50
Thallium	<.57	<.57	<.57
Total suspended solids	7.13	22.30	9.63
Turbidity, field	12.07	42.50	6.00
Vanadium	<1.10	<1.10	<1.70
Zinc	<9.7	<9.7	<13.0

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

Table 9

Analytical Data Summary for MW-41A

Constituents	Units	8/16/2022 9/13/2022	12/6/2022 12/7/2022	6/6/2023 6/27/2023	8/24/2023 8/29/2023	11/1/2023 11/20/2023	1/23/2024 1/25/2024	6/11/2024 7/3/2024	11/19/2024 12/18/2024
Antimony	ug/L	<.690 .761J	<.690	<1.000	<1.000	<1.000		<1.000	<1.000
Arsenic	ug/L	<.750	<.750	<.530 .708J	<.530 .866J	<.530		<.530 .595J	<.530 .967J
Barium	ug/L	154	143	145	141	169		125	159
Beryllium	ug/L	<.27	<.27	<.33	<.33	<.33		<.33	<.33
Cadmium	ug/L	<.055	<.055	<.100	<.100	<.100		<.100	<.100
Chromium	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1		<1.2	<1.2
Cobalt	ug/L	.647	<.190 .415J	.710	.541	1.010	<.170	<.170 .215J	<.170 .211J
Copper	ug/L	<1.8	<1.8	<1.8	<1.8	<1.8		<1.8	<1.8
Lead	ug/L	<.24	<.24	<.24	<.24	<.24		<.26	<.26
Nickel	ug/L	<1.9	<1.9	<1.9	<1.9	<1.9		<2.1	<2.1
Selenium	ug/L	<.96	<.96	<1.40	<1.40	<1.40		<1.40	<1.40
Silver	ug/L	<.49	<.49	<.50	<.50	<.50		<.50	<.50
Thallium	ug/L	<.26	<.26	<.26	<.26	<.26		<.57	<.57
Total suspended solids	mg/L	4.380	3.130	4.130	3.630	<.638 1.500J	<.638 1.750J	2.630	6.000
Turbidity, field	NTU	12.37	2.00	1.78	4.40	.57	.98	1.73	12.99
Vanadium	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1		<1.1	<1.1
Zinc	ug/L	<10.0	<10.0	<6.4	<6.4	<6.4		<9.7	<9.7

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

Table 9

Analytical Data Summary for MW-41A

Constituents	6/2/2025 6/9/2025
Antimony	<1.000
Arsenic	<.530 1.200J
Barium	159
Beryllium	<.33
Cadmium	<.100
Chromium	<1.8
Cobalt	<.170 .220J
Copper	<3.2
Lead	<.33
Nickel	<2.3
Selenium	<1.40
Silver	<.50
Thallium	<.57
Total suspended solids	6.630
Turbidity, field	10.17
Vanadium	<1.7
Zinc	<13.0

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

Table 9

Analytical Data Summary for MW-42A

Constituents	Units	8/16/2022 9/13/2022	12/6/2022 12/7/2022	6/6/2023 6/27/2023	8/24/2023 8/29/2023	11/1/2023 11/20/2023	6/11/2024 7/3/2024	11/19/2024 12/18/2024	2/14/2025	6/2/2025 6/9/2025
Antimony	ug/L	<.69	<.69	<1.00	<1.00	<1.00	<1.00	<1.00		<1.00
Arsenic	ug/L	<.750	2.960	<.530	<.530 .560J	<.530 .541J	<.530	<.530 .547J		<.530
Barium	ug/L	281.0	119.0	83.4	125.0	101.0	128.0	177.0		152.0
Beryllium	ug/L	<.27	<.27	<.33	<.33	<.33	<.33	<.33		<.33
Cadmium	ug/L	.281	<.055	<.100	<.100	<.100	<.100	<.100		<.100
Chromium	ug/L	<1.10 1.95J	<1.10	<1.10	<1.10	<1.10	<1.20	<1.20		<1.80
Cobalt	ug/L	3.980	3.310	.518	2.460	2.560	2.560	2.770		1.370
Copper	ug/L	9.67	<1.80	<1.80	<1.80	<1.80	<1.80	<1.80 2.00J		<3.20
Cyanide	ug/L						<3.5			<3.5
Lead	ug/L	<.24 .41J	<.24	<.24	<.24	<.24	<.26	<.26		<.33
Mercury	ug/L						<.11			<.11
Nickel	ug/L	37.20	14.70	8.62	19.30	14.80	16.60	27.60	23.50	26.10
Selenium	ug/L	<.96	<.96	<1.40	<1.40	<1.40	<1.40	<1.40		<1.40
Silver	ug/L	<.49	<.49	<.50	<.50	<.50	<.50	<.50		<.50
Thallium	ug/L	<.260 .385J	<.260	<.260	<.260	<.260	<.570	<.570		<.570
Total suspended solids	mg/L	6.25	13.30	18.60	7.00	8.00	4.38	14.10		6.25
Turbidity, field	NTU	18.52	6.50	17.27	3.57	8.67	9.00	33.63	4.29	24.38
Vanadium	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1		<1.7
Zinc	ug/L	<10.0	<10.0	<6.4	<6.4	<6.4	<9.7	<9.7		<13.0

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

Table 9

Analytical Data Summary for MW-43A

Constituents	Units	8/16/2022 9/13/2022	12/6/2022 12/7/2022	6/6/2023 6/27/2023	8/24/2023 8/29/2023	11/1/2023 11/20/2023	6/11/2024 7/3/2024	8/27/2024 9/5/2024
Antimony	ug/L	<.69	<.69	<1.00	<4.00	<1.00	<1.00	
Arsenic	ug/L	8.06	7.34	8.28	8.85	9.81	6.28	
Barium	ug/L	157	167	180	250	274	163	
Beryllium	ug/L	<.27	<.27	<.33	<.33	<.33	<.33	
Cadmium	ug/L	<.055000	<.055000	<.100000	<.100000	<.100000	<.100000	
Chromium	ug/L	<1.1	<1.1	<1.1	<1.1	12.0	<1.2	
Cobalt	ug/L	3.68	3.27	4.51	4.93	4.75	3.49	
Copper	ug/L	<1.8	<1.8	<1.8	<1.8	6.4	<1.8	
Cyanide	ug/L						<3.5	
Lead	ug/L	<.24	<.24	<.24	<.24	<.24	<.26	
Mercury	ug/L							
Nickel	ug/L	24.4	25.6	31.0	41.5	36.4	17.3	
Selenium	ug/L	<.96	<.96	<1.40	<1.40	<1.40	<1.40	
Silver	ug/L	<.49	<.49	<.50	<.50	<.50	9.36	<.50
Thallium	ug/L	<.26	<.26	<.26	<.26	<.26	<.57	
Total suspended solids	mg/L	31.5	26.0	30.3	39.0	37.0	22.0	28.5
Turbidity, field	NTU	22.75	26.61	67.20	14.62	5.00	3.89	11.63
Vanadium	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	
Zinc	ug/L	<10.000000	<10.000000	<6.400000	<6.400000 8.740000J	<6.400000 7.360000J	<9.700001	

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

Table 9

Analytical Data Summary for MW-43A

Constituents	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	<1.00	<1.00
Arsenic	6.32	7.28
Barium	214	186
Beryllium	<.33	<.33
Cadmium	<.100000	<.100000
Chromium	<1.2	<1.8
Cobalt	3.83	3.92
Copper	<1.8	<3.2
Cyanide		<3.5
Lead	<.26	<.33
Mercury		<.11
Nickel	25.9	22.5
Selenium	<1.40	<1.40
Silver	<.50	<.50
Thallium	<.57	<.57
Total suspended solids	29.0	21.0
Turbidity, field	12.02	27.15
Vanadium	<1.1	<1.7
Zinc	<9.700000 12.800000J	<13.000000

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

Table 9

Analytical Data Summary for MW-44A

Constituents	Units	8/16/2022 9/13/2022	12/6/2022 12/7/2022	6/6/2023 6/27/2023	8/24/2023 8/29/2023	11/1/2023 11/20/2023	6/11/2024 7/3/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	ug/L	<.69	<.69	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Arsenic	ug/L	<.750	<.750	<.530	<.530	<.530 .666J	<.530 .663J	<.530	<.530
Barium	ug/L	168	212	157	239	253	137	159	173
Beryllium	ug/L	<.27	<.27	<.33	<.33	<.33	<.33	<.33	<.33
Cadmium	ug/L	<.055	<.055 .082J	.306	.416	.795	.389	<.100 .181J	.499
Chromium	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1	<1.2	<1.2	<1.8
Cobalt	ug/L	.530	.583	<.170 .251J	.603	<.170 .327J	<.170 .423J	<.170 .435J	<.170 .256J
Copper	ug/L	<1.80	<1.80	<1.80	<1.80	<1.80 2.58J	<1.80 9.56J	<1.80	<3.20
Cyanide	ug/L						<3.5		<3.5
Lead	ug/L	<.240	<.240	<.240	<.240	<.240	<.260 .313J	<.260	<.330
Mercury	ug/L						<.11		<.11
Nickel	ug/L	21.7	51.8	28.7	70.2	66.6	21.6	34.2	39.1
Selenium	ug/L	<.96	<.96	<1.40	<1.40	<1.40	<1.40 1.99J	<1.40	<1.40
Silver	ug/L	<.49	<.49	<.50	<.50	<.50	1.01	<.50	<.50
Thallium	ug/L	<.260	<.260	<.260	<.260	<.260	<.570 .748J	<.570	<.570
Total suspended solids	mg/L	8.000	2.880	<.638 1.130J	<.638 1.500J	<.638 .875J	1.880	7.670	<1.310
Turbidity, field	NTU	1.79	2.06	10.04	1.56	.38	2.63	9.13	3.04
Vanadium	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.7
Zinc	ug/L	<10.0 13.4J	21.3	<6.4 18.1J	27.3	26.0	<9.7 13.8J	<9.7 19.5J	26.5

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

Table 9

Analytical Data Summary for MW-45A

Constituents	Units	11/1/2023 11/20/2023	1/23/2024 1/25/2024	6/11/2024 7/3/2024	8/27/2024 9/5/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	ug/L	<1	<1	<1	<1	<1	<1
Arsenic	ug/L	<.53	<.53	<.53	<.53	<.53	<.53
Barium	ug/L	218	137	103	118	128	136
Beryllium	ug/L	<.33	<.33	<.33	<.33	<.33	<.33
Cadmium	ug/L	<.100	<.100	<.100	<.100 .194J	<.100 .132J	<.100
Chromium	ug/L	<1.10 2.02J	<1.10	<1.20	<1.20	<1.20	<1.80
Cobalt	ug/L	<.170 .394J	<.170 .263J	<.170 .257J	<.170 .389J	<.170 .296J	<.170 .329J
Copper	ug/L	<1.8	<1.8	<1.8	<1.8	<1.8	<3.2
Lead	ug/L	<.240	<.240	<.260	<.260 .265J	<.260	<.330
Nickel	ug/L	<1.9	<1.9	<2.1	<2.1	<2.1	<2.3
Selenium	ug/L	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4
Silver	ug/L	<.5	<.5	<.5	<.5	<.5	<.5
Thallium	ug/L	<.26	<.26	<.57	<.57	<.57	<.57
Total suspended solids	mg/L	2.500	<.638 1.130J	<1.390	2.630	3.250	1.880
Turbidity, field	NTU	1.87	.00	.67	2.16	6.59	2.98
Vanadium	ug/L	<1.10 1.13J	<1.10	<1.10	<1.10	<1.10	<1.70
Zinc	ug/L	<6.40	<6.40 8.46J	<9.70	<9.70	<9.70	<13.00

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

Table 9

Analytical Data Summary for MW-46A

Constituents	Units	11/1/2023 11/20/2023	1/23/2024 1/25/2024	6/11/2024 7/3/2024	8/27/2024 9/5/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	ug/L	<1	<1	<1	<1	<1	<1
Arsenic	ug/L	<.530 .780J	<.530 .984J	<.530 .714J	<.530 .770J	<.530 .805J	<.530 .640J
Barium	ug/L	262	275	213	236	262	245
Beryllium	ug/L	<.33	<.33	<.33	<.33	<.33	<.33
Cadmium	ug/L	<.100000	<.100000 .123000J	<.100000	<.100000	<.100000 .115000J	<.100000
Chromium	ug/L	<1.10	<1.10 1.12J	<1.20	<1.20	<1.20	<1.80
Cobalt	ug/L	<.170 .405J	<.170 .253J	<.170	<.170 .241J	<.170 .288J	<.170 .178J
Copper	ug/L	<1.80	<1.80 2.39J	<1.80	<1.80 1.99J	<1.80 1.99J	<3.20
Lead	ug/L	<.240	<.240 .393J	<.260	<.260 .386J	<.260 .307J	<.330
Nickel	ug/L	33.8	35.0	26.6	26.6	28.2	24.0
Selenium	ug/L	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4
Silver	ug/L	<.50	<.50	9.06	<.50	<.50	<.50
Thallium	ug/L	<.26	<.26	<.57	<.57	<.57	<.57
Total suspended solids	mg/L	11.5	36.1	10.3	26.3	19.6	25.5
Turbidity, field	NTU	79.73	173.01	12.22	68.05	103.12	10.97
Vanadium	ug/L	<1.10	<1.10 2.14J	<1.10	<1.10 1.17J	<1.10 1.35J	<1.70
Zinc	ug/L	<6.400000	<6.400000 7.190000J	<9.700001	<9.700000	<9.700000	<13.000000

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

Table 9

Analytical Data Summary for MW-4B

Constituents	Units	10/12/2007 10/13/2007	1/9/2008	4/8/2008	7/16/2008	10/23/2008	4/8/2009 4/13/2009	10/5/2009	2/25/2010
Antimony	ug/L	<6.000	<6.000	<6.000	<6.000	<6.000	<6.000	<6.000	10.600
Arsenic	ug/L	<1.000	2.260	<1.000	<1.000	<1.000	2.290	1.450	2.340
Barium	ug/L	344	358	337	264	343	447	372	441
Beryllium	ug/L	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000
Cadmium	ug/L	<.500000	<.500000	<.500000	<.500000	<.500000	<.500000	<.500000	<.500000
Chromium	ug/L	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000
Cobalt	ug/L	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000
Copper	ug/L	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000
Cyanide	ug/L								<10.00
Lead	ug/L	<4.0000	<4.0000	<4.0000	<4.0000	<4.0000	7.6800	<4.0000	<4.0000
Mercury	ug/L								<.2000
Nickel	ug/L	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000
Selenium	ug/L	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000
Silver	ug/L	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000
Total suspended solids	mg/L								
Turbidity, field	NTU								
Vanadium	ug/L	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000
Zinc	ug/L	52.200001	<20.000000	26.200001	<20.000000	<20.000000	36.299999	31.700001	<20.000000

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

Table 9

Analytical Data Summary for MW-4B

Constituents	4/21/2010	10/14/2010	4/13/2011	10/18/2011	4/24/2012	10/24/2012 10/26/2012	4/8/2013 4/16/2013	11/5/2013 11/7/2013	5/1/2014 5/8/2014
Antimony	<6.000	<6.000	<6.000	<2.730	<1.450	.220	.698	.256	.994
Arsenic	<1.000	<1.000	<1.000	1.140	2.530	14.100	15.300	1.190	1.190
Barium	339	346	211	404	540	920	644	333	462
Beryllium	<1.0000	<1.0000	<1.0000	<.0510	<.0790	.1200	.1090	<.0696	.1140
Cadmium	<.500000	<.500000	<.500000	<.124000	<.229000	.250000	.189000	.137000	<.100000
Chromium	<20.000	<20.000	<20.000	3.500	4.470	8.600	36.000	<.418	.650
Cobalt	<20.0000	<20.0000	<20.0000	4.4300	8.7000	18.7000	15.1000	4.6700	6.7900
Copper	<20.000	<20.000	<20.000	11.800	<1.510	11.800	12.100	3.760	2.390
Cyanide									
Lead	13.8000	5.3200	<4.0000	<1.0000	.9100	3.6800	3.9700	5.5500	<.1800
Mercury									
Nickel	<50.000	<50.000	<50.000	24.400	38.700	57.600	62.400	16.000	22.300
Selenium	<5.000	<5.000	<5.000	<1.690	<.700	<.297	1.740	2.240	<.700
Silver	<20.0000	<20.0000	<20.0000	<1.7000	<1.7000	<.0270	<.0789	<.0789	<.0330
Thallium	<2.0000	<2.0000	<2.0000	<.8400	<.2880	.0100	.1550	.0384	.3080
Total suspended solids									
Turbidity, field									
Vanadium	<50.000	<50.000	<50.000	<2.100	<2.100	8.180	11.300	1.550	.783
Zinc	27.100000	22.000000	<20.000000	<9.110000	10.800000	7.010000	13.300000	<.625000	3.490000

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

Table 9

Analytical Data Summary for MW-4B

Constituents	10/31/2014 11/10/2014	12/19/2014 12/22/2014	5/1/2015 5/12/2015	7/1/2015	9/14/2015 9/22/2015	12/9/2015	3/24/2016 4/13/2016	11/11/2016 11/30/2016	5/5/2017 5/25/2017
Antimony	<.161		<.161		<.161		<.237	<.237	<.185
Arsenic	<.945		<.945		<.945		1.170	<.672	<.505
Barium	144		307		237		396	205	213
Beryllium	<.0390		<.0390		.0520		<.2210	<.2210	<.1250
Cadmium	<.112000		<.112000		<.112000		.121000	<.035100	<.044100
Chromium	<1.240		<1.240		<1.240		.400	.451	<.729
Cobalt	.9680		2.0500		1.7700		6.0500	.0350	<.0453 .0590J
Copper	4.110		1.670		.618		1.880	<1.220	<2.190
Cyanide	<3100.00				<3.04			<3.52	
Lead	.1170		<.0967		.1410		<.2110	<.2110	<.3240
Mercury	<71.0000				<.0926			<.1420	
Nickel	2.510		9.830		4.500		13.400	<1.530	<.929
Selenium	<3.340		<3.340		<3.340		<.630	.884	<.928
Silver	<.0420		.0530		<.0420		.1730	<.1530	<.1400
Thallium	<.0325		<.0325		<.0325		.0300	<.0255	<.0644 .0710J
Total suspended solids	2.130		6.830	15.500	6.000	37.000	14.400	<.581	<.581
Turbidity, field	10.8700	1.3560	.8004	1.1470	9.4000	3.7900	75.6900	1.5710	1.3420
Vanadium	1.110		.782		.707		.709	1.060	<.840 1.090J
Zinc	<6.950000		<6.950000		<6.950000		<5.210000	<5.210000	<11.500000

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

Table 9

Analytical Data Summary for MW-4B

Constituents	11/1/2017 11/22/2017	6/4/2018 6/27/2018	10/28/2018 10/31/2018	6/4/2019 6/13/2019	10/30/2019 11/20/2019	2/3/2020 2/17/2020	6/16/2020 7/7/2020
Antimony	<.185	<.420	<.420 .503J	<1.320	<.530		<.510
Arsenic	<.505	<.570	<.570	<.232 .547J	<.750		<.880
Barium	217	305	206	187	455	168	180
Beryllium	<.1250	<.1900	<.1900	<.5300	<.2700		<.2700
Cadmium	<.044100	<.060000	<.060000	<.167000	.135000	<.039000	<.049000
Chromium	<.729	<.760	<.760 1.040J	<1.140 2.130J	<.980		<1.100
Cobalt	.3620	.8340	<.0610 .0680J	<.4020	<.0910 .2210J		<.0910
Copper	<2.190	<3.800 *	<1.600	2.090	<2.000		<1.500
Cyanide	<3.46						
Lead	<.3240	<.2500	<.2500	<.1860	<.2700		<.1100
Mercury	<.1120						
Nickel	2.910	5.110	<1.000	<.625 1.570J	<1.700 3.570J		<1.900
Selenium	1.030	<.900	<.900	<.982	<1.000		<1.000
Silver	<.1400	<.3000	<.3000	<.1150	<.3700		<.3700
Thallium	<.0644	<.1700	<.1700	<.5700	<.2700		<.2600
Total suspended solids	1.380	5.370	<.638 1.000J	<.638 1.250J	<.638	<.638 .875J	<.638 1.250J
Turbidity, field	9.3110	7.8590	9.4300		.8900	1.6700	.8200
Vanadium	1.010	<.520 .990J	<.520 1.360J	<2.150	<.820 .956J		<.850 1.060J
Zinc	<11.500000	<10.000000	<10.000000	<6.920000	<10.000000		<10.000000

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

Table 9

Analytical Data Summary for MW-4B

Constituents	11/3/2020 11/23/2020	5/17/2021 6/8/2021	9/21/2021 9/29/2021	3/2/2022 3/29/2022	8/16/2022 9/13/2022	6/6/2023 6/27/2023	11/1/2023 11/20/2023
Antimony	<.510	<1.100	<1.100	<.690	<.690	<1.000	<1.000
Arsenic	<.880	<.750	<.750	<.750	<.750	<.530	<.530
Barium	178	176	189	184	209	183	267
Beryllium	<.2700	<.2700	<.2700	<.2700	<.2700	<.3300	<.3300
Cadmium	<.049000	<.051000	<.051000	<.055000	<.055000	<.100000	<.100000
Chromium	<1.100	<1.100	<1.100	<1.100 1.670J	<1.100	<1.100	<1.100
Cobalt	<.0910 .1490J	<.0910	<.1900	<.1900	<.1900	<.1700	<.1700 .2130J
Copper	<1.500	<1.400	<1.400	<1.800	<1.800	<1.800	<1.800
Cyanide							
Lead	<.1100	<.2100	<.2100	<.2400	<.2400	<.2400	<.2400
Mercury							
Nickel	<1.900	<1.900	<1.900	<1.900	<1.900	<1.900	<1.900 3.500J
Selenium	<1.000	<.960	<.960	<.960	<.960	<1.400	<1.400
Silver	<.3700	<.4200	<.4200	<.4900	<.4900	<.5000	<.5000
Thallium	<.2600	<.2600	<.2600	<.2600	<.2600	<.2600	<.2600
Total suspended solids	<.638 .750J	<.638	<.638 1.130J	<1.700	<.638	<.638 .750J	<.638 1.750J
Turbidity, field	3.9800		5.1500	.0600	.0000	.6700	1.9500
Vanadium	<.850 1.410J	<1.100 1.140J	<1.100	<1.100	<1.100 1.150J	<1.100	<1.100 1.500J
Zinc	<10.000000	<10.000000	<10.000000	<10.000000	<10.000000	<6.400000	<6.400000

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

Table 9

Analytical Data Summary for MW-4B

Constituents	1/23/2024 1/25/2024	6/11/2024 7/3/2024	8/27/2024 9/5/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony		<1.000		<1.000	<1.000
Arsenic		<.530		<.530	<.530
Barium	413	184		225	199
Beryllium		<.3300		<.3300	<.3300
Cadmium		<.100000		<.100000	<.100000
Chromium		<1.200		<1.200	<1.800
Cobalt		<.1700		<.1700	<.1700
Copper		<1.800		<1.800	<3.200
Cyanide					
Lead		<.2600		<.2600	<.3300
Mercury					
Nickel		<2.100		<2.100	<2.300
Selenium		<1.400		<1.400	<1.400
Silver		5.3700	<.5000	<.5000	<.5000
Thallium		<.5700		<.5700	<.5700
Total suspended solids	2.130	<1.390	<1.390	<1.430	<1.310 1.380J
Turbidity, field	.8700	1.7500	2.3700	1.1400	1.1000
Vanadium		<1.100		<1.100	<1.700
Zinc		<9.700001		<9.700000	<13.000000

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

Table 9

Analytical Data Summary for MW-7A

Constituents	Units	10/12/2007 10/13/2007	1/9/2008	4/8/2008	7/16/2008	10/23/2008	4/8/2009 4/13/2009	10/5/2009	4/21/2010	10/14/2010
Antimony	ug/L	<6.0000	<6.0000	<6.0000	<6.0000	<6.0000	<6.0000	<6.0000	<6.0000	<6.0000
Arsenic	ug/L	<1.000	1.450	1.150	<1.000	2.230	<1.000	<1.000	<2.000	<1.000
Barium	ug/L	191.0	202.0	301.0	185.0	381.0	195.0	220.0	181.0	263.0
Beryllium	ug/L	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000
Cadmium	ug/L	<.5000	<.5000	<.5000	<.5000	<.5000	<.5000	<.5000	<.5000	<.5000
Chromium	ug/L	<20.000	<20.000	64.500	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000
Cobalt	ug/L	<20.0000	<20.0000	21.4000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000
Copper	ug/L	<20.000	<20.000	50.700	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000
Cyanide	ug/L									
Lead	ug/L	<4.0000	<4.0000	4.1600	<4.0000	9.4600	<4.0000	<4.0000	<4.0000	5.4100
Mercury	ug/L									
Nickel	ug/L	<50.000	<50.000	53.600	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000
Selenium	ug/L	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000
Silver	ug/L	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000
Total suspended solids	mg/L									
Turbidity, field	NTU									
Vanadium	ug/L	<50.000	<50.000	75.600	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000
Zinc	ug/L	45.800	<20.000	94.900	<20.000	67.000	35.000	41.800	25.900	38.600

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

Table 9

Analytical Data Summary for MW-7A

Constituents	4/13/2011	10/18/2011	4/24/2012	10/24/2012 10/26/2012	4/8/2013 4/16/2013	11/5/2013 11/7/2013	5/1/2014 5/8/2014	10/31/2014 11/10/2014	5/1/2015 5/12/2015
Antimony	<6.0000	<2.7300	1.8400	<.1200	.4350	.0751	.9880	.1640	<.1610
Arsenic	<1.000	<.600	.876	.810	.970	<.544	<.330	<.945	<.945
Barium	197.0	319.0	307.0	316.0	155.0	326.0	149.0	184.0	152.0
Beryllium	<1.0000	.1590	.7820	.0600	<.0696	<.0696	<.0800	<.0390	<.0390
Cadmium	<.5000	<.1240	<.2290	.0800	<.1060	<.1060	<.1000	<.1120	<.1120
Chromium	<20.000	1.990	4.530	.520	6.590	.771	4.600	4.200	3.750
Cobalt	<20.0000	3.6800	7.5100	1.0300	.6610	.6040	.1500	<.0528	<.0528
Copper	<20.000	18.700	16.600	2.250	4.700	1.860	.579	<.485	<.485
Cyanide									
Lead	<4.0000	4.7200	8.9600	.8400	1.5200	.2110	.2240	.1130	<.0967
Mercury									
Nickel	<50.000	9.700	9.510	7.270	3.350	6.390	.459	.586	<.581
Selenium	<5.000	<1.690	<.700	<.297	<1.460	<1.460	<.700	<3.340	<3.340
Silver	<20.0000	<1.7000	<1.7000	<.0270	<.0789	<.0789	<.0330	<.0420	<.0420
Thallium	<2.0000	<.8400	<.2880	.0100	.0840	<.0267	.1510	<.0325	<.0325
Total suspended solids								<1.410	<1.130
Turbidity, field								.7996	.6573
Vanadium	<50.000	2.140	11.500	1.440	1.630	<.833	1.200	.727	.459
Zinc	<20.000	15.200	17.600	2.420	8.060	<.625	3.260	7.010	<6.950

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

Table 9

Analytical Data Summary for MW-7A

Constituents	9/14/2015 9/22/2015	3/24/2016 4/13/2016	11/11/2016 11/30/2016	5/5/2017 5/25/2017	11/1/2017 11/22/2017	6/4/2018 6/27/2018	10/28/2018 10/31/2018	6/4/2019 6/13/2019
Antimony	<.1610	<.2370	<.2370	<.1850	<.1850	<.4200	<.4200	<1.3200
Arsenic	<.945	<.672	<.672	<.505	<.505	<.570	<.570	<.232 .430J
Barium	240.0	165.0	315.0	150.0	172.0	166.0	171.0	160.0
Beryllium	<.0390	<.2210	<.2210	<.1250	<.1250	<.1900	<.1900	<.5300
Cadmium	<.1120	<.0351	<.0351	<.0441	<.0441	<.0600	<.0600	<.1670
Chromium	<1.240	4.020	.425	<.729 2.450J	3.220	5.260	<.760 3.270J	<1.140 4.920J
Cobalt	.0780	<.0274	.0290	<.0453	<.0453	<.0610 .0660J	<.0610	<.4020
Copper	<.485	<1.220	<1.220	<2.190	<2.190	<3.800 *	<1.600	<.497 1.020J
Cyanide								
Lead	.8000	<.2110	<.2110	<.3240	<.3240	<.2500	<.2500	<.1860
Mercury								
Nickel	3.600	<1.530	6.700	<.929 1.110J	<.929	<1.000 1.680J	<1.000	2.070
Selenium	<3.340	.821	<.630	<.928	<.928	<.900	<.900	<.982
Silver	<.0420	<.1530	<.1530	<.1400	<.1400	<.3000	<.3000	<.1150
Thallium	<.0325	<.0255	.0500	<.0644	<.0644	<.1700	<.1700	<.5700
Total suspended solids	<1.200	.750	.875	<.581 1.130J	.750	<.638 1.250J	2.500	<.638
Turbidity, field	1.0020	.5112	.6005	5.6610	1.1160	.3710	4.2110	
Vanadium	.666	.429	.377	<.840	.917	<.520 .603J	<.520 .673J	<2.150
Zinc	26.500	<5.210	<5.210	<11.500	<11.500	<10.000	<10.000	<6.920 6.990J

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

Table 9

Analytical Data Summary for MW-7A

Constituents	10/30/2019 11/20/2019	2/3/2020 2/17/2020	6/16/2020 7/7/2020	11/3/2020 11/23/2020	2/3/2021 2/24/2021	5/17/2021 6/8/2021	9/21/2021 9/29/2021
Antimony	<.5300		<.5100	1.6700	<1.1000	<1.1000	<1.1000
Arsenic	<.750		<.880	<.880		<.750	<.750
Barium	185.0	174.0	139.0	160.0		166.0	156.0
Beryllium	<.2700		<.2700	<.2700		<.2700	<.2700
Cadmium	<.0390 .0610J		<.0490	<.0490 .0580J		<.0510	<.0510
Chromium	<.980 2.950J		<1.100 2.120J	<1.100 2.390J		<1.100 3.290J	<1.100 3.380J
Cobalt	<.0910		<.0910	<.0910		<.0910	<.1900
Copper	<2.000		<1.500	<1.500		<1.400	<1.400
Cyanide							
Lead	<.2700		<.1100	<.1100		<.2100	<.2100
Mercury							
Nickel	<1.700		<1.900	<1.900		<1.900	<1.900
Selenium	<1.000		<1.000	<1.000		<.960	<.960
Silver	<.3700		<.3700	<.3700		<.4200	<.4200
Thallium	<.2700		<.2600	<.2600		<.2600	<.2600
Total suspended solids	2.630	<.638	2.500	<.638 1.000J	<.638 .875J	<.638	<.638 1.000J
Turbidity, field	1.0400	.0000	4.4100	.7600	.5100		3.3200
Vanadium	<.820 .862J		<.850	<.850		<1.100	<1.100
Zinc	35.800	<10.000	<10.000	<10.000		<10.000	<10.000

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

Table 9

Analytical Data Summary for MW-7A

Constituents	3/2/2022 3/29/2022	8/16/2022 9/13/2022	6/6/2023 6/27/2023	8/24/2023 8/29/2023	11/1/2023 11/20/2023	6/11/2024 7/3/2024	11/19/2024 12/18/2024	2/14/2025
Antimony	<.6900	<.6900	<1.0000		<1.0000	<1.0000	<1.0000	
Arsenic	<.750	<.750	<.530		<.530	<.530	<.530	
Barium	143.0	71.9	323.0	366.0	451.0	190.0	425.0	196.0
Beryllium	<.2700	<.2700	<.3300		<.3300	<.3300	<.3300	
Cadmium	<.0550	<.0550	<.1000		<.1000	<.1000	<.1000	
Chromium	<1.100 3.010J	<1.100	<1.100		<1.100	<1.200 3.340J	<1.200	
Cobalt	<.1900	<.1900 .3390J	<.1700		<.1700 .2570J	<.1700	<.1700	
Copper	<1.800	<1.800	<1.800		<1.800	<1.800	<1.800	
Cyanide						<3.5		
Lead	<.2400	<.2400	<.2400		<.2400	<.2600	<.2600	
Mercury						<.11		
Nickel	<1.900	<1.900	5.110		12.800	<2.100	8.810	
Selenium	<.960	<.960	<1.400		<1.400	<1.400	<1.400	
Silver	<.4900	<.4900	<.5000		<.5000	<.5000	<.5000	
Thallium	<.2600	<.2600	<.2600		<.2600	<.5700	<.5700	
Total suspended solids	<.638	1.880	<.638	5.130	3.130	<1.390	<1.540	
Turbidity, field	.0000	2.2400	.8400	1.1100	1.4200	1.8300	.2200	.7500
Vanadium	<1.100 1.210J	<1.100	<1.100		<1.100	<1.100	<1.100	
Zinc	<10.000	<10.000	<6.400		<6.400	<9.700	<9.700	

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

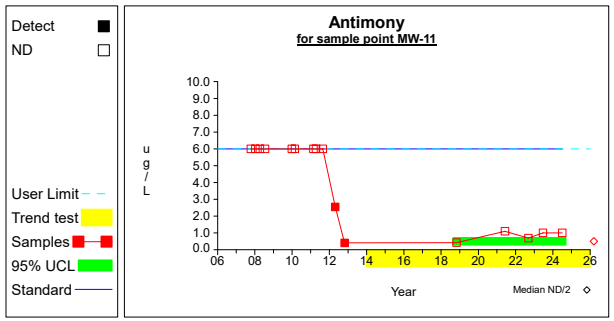
Table 9

Analytical Data Summary for MW-7A

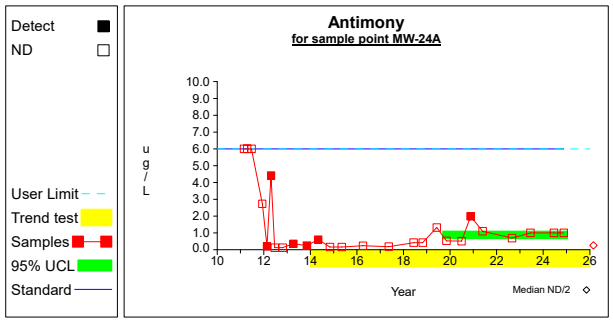
Constituents	6/2/2025 6/9/2025
Antimony	<1.0000
Arsenic	<.530
Barium	176.0
Beryllium	<.3300
Cadmium	<.1000
Chromium	<1.800 3.290J
Cobalt	<.1700
Copper	<3.200
Cyanide	
Lead	<.3300
Mercury	
Nickel	<2.300
Selenium	<1.400
Silver	<.5000
Thallium	<.5700
Total suspended solids	2.000
Turbidity, field	2.3300
Vanadium	<1.700
Zinc	<13.000

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

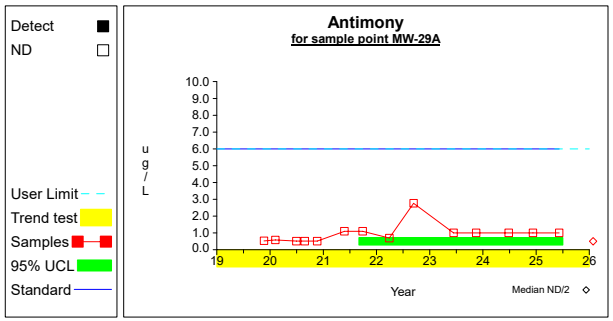
Confidence Limits (Assessment)



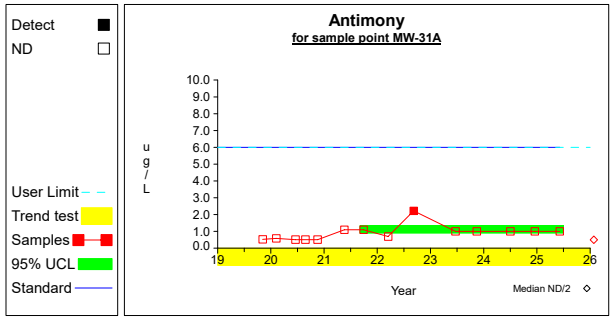
Graph 1



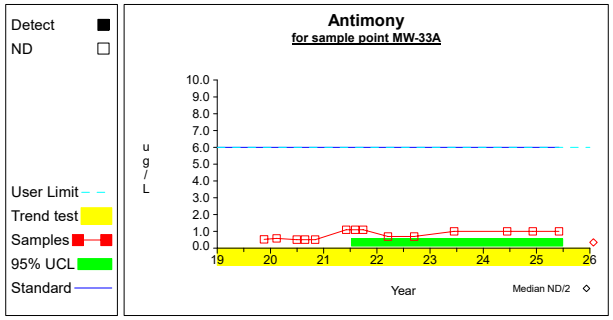
Graph 2



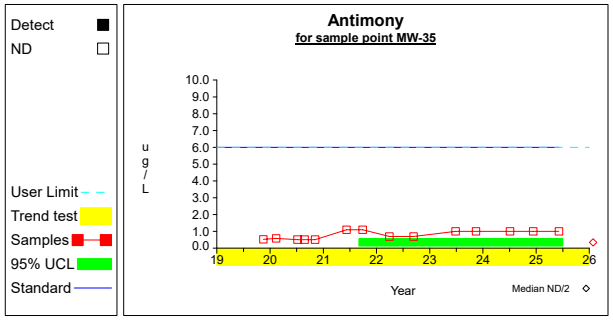
Graph 3



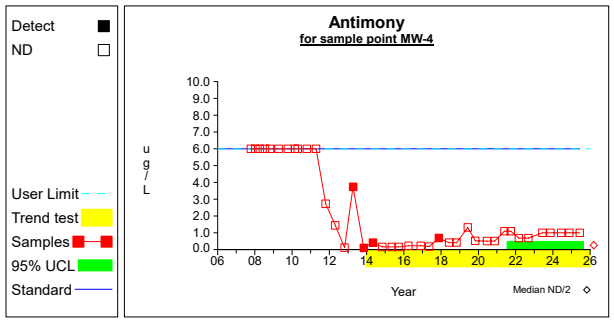
Graph 4



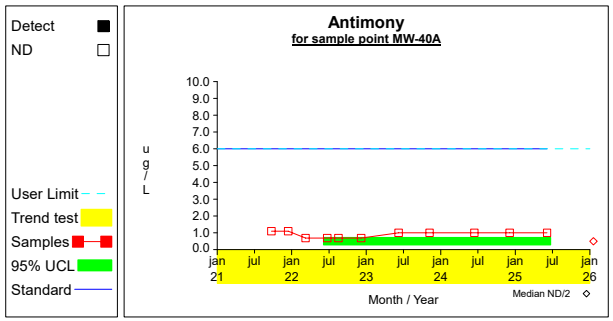
Graph 5



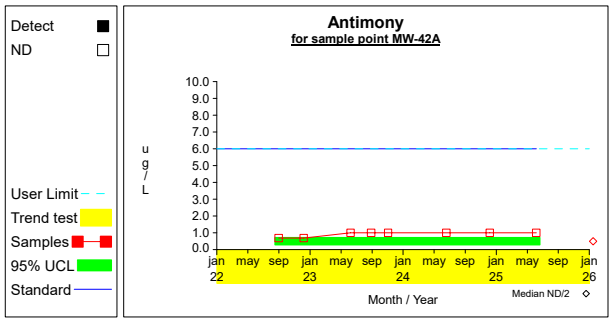
Graph 6



Graph 7

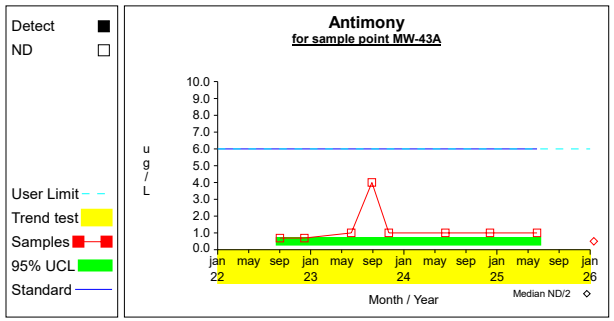


Graph 8

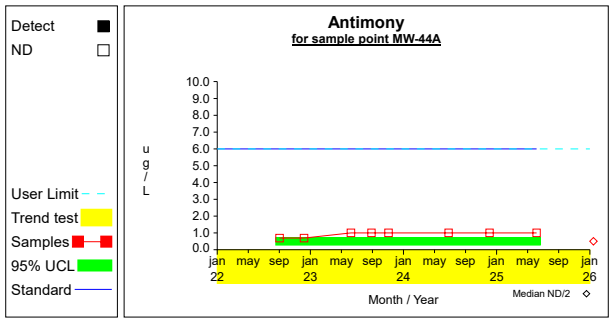


Graph 9

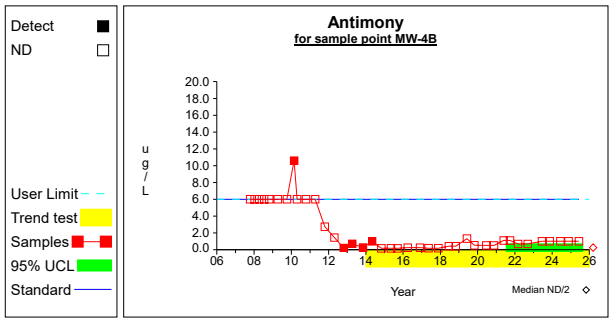
Confidence Limits (Assessment)



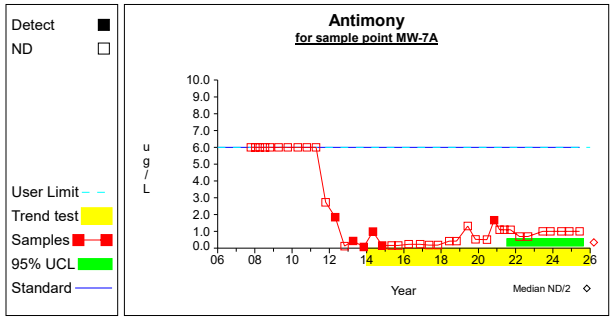
Graph 10



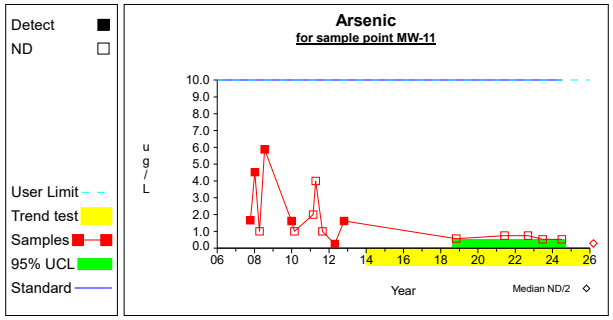
Graph 11



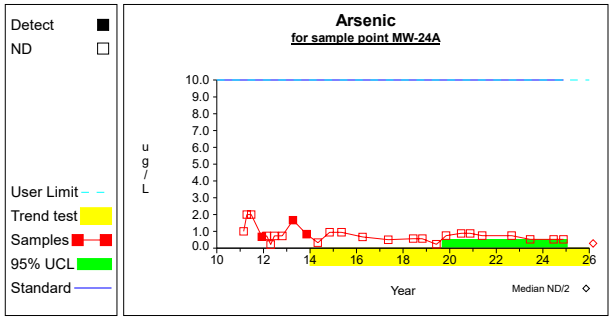
Graph 12



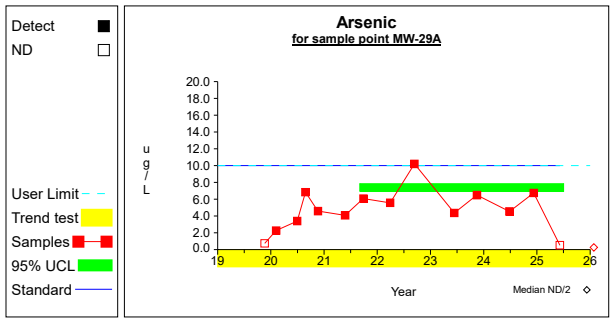
Graph 13



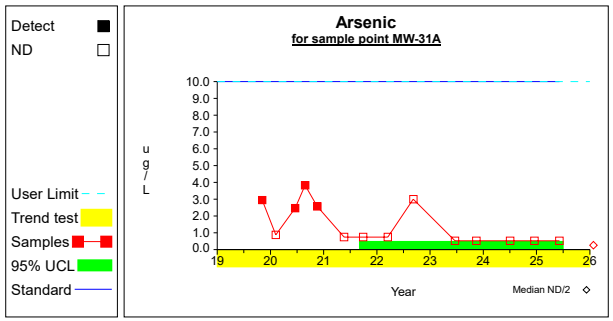
Graph 14



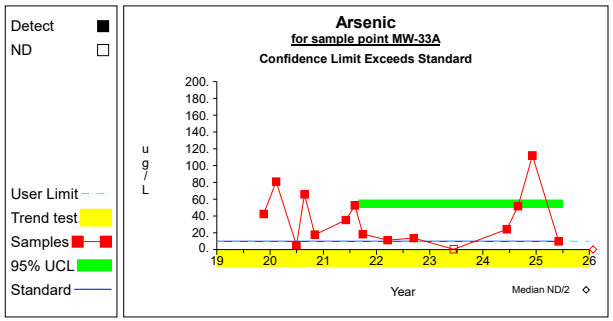
Graph 15



Graph 16

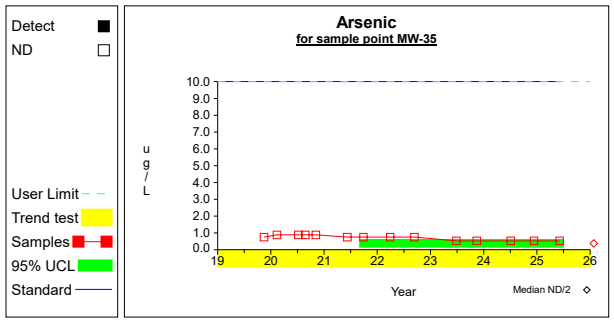


Graph 17

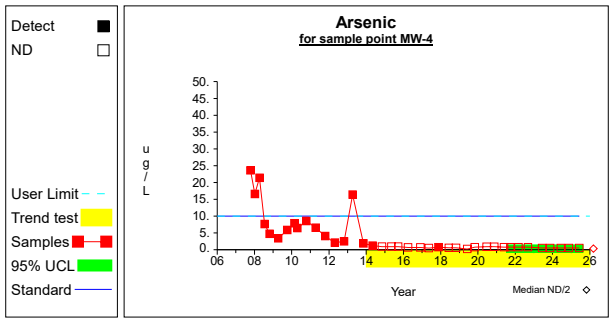


Graph 18

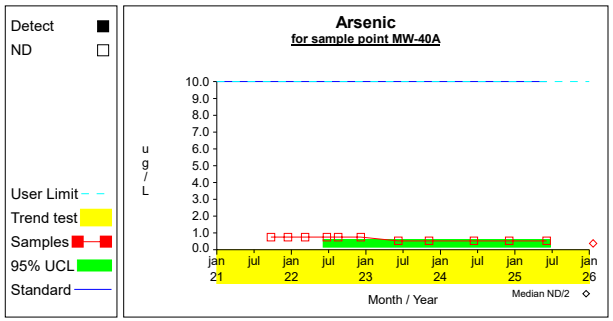
Confidence Limits (Assessment)



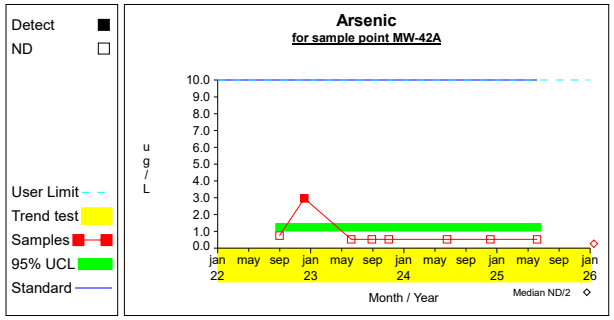
Graph 19



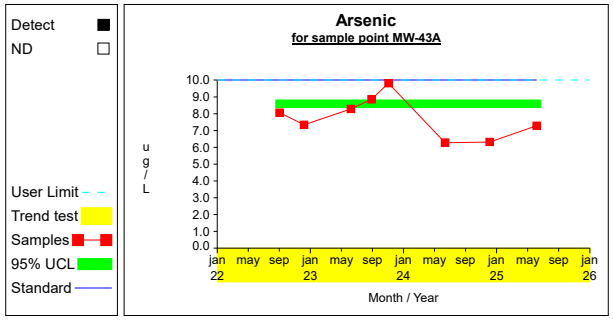
Graph 20



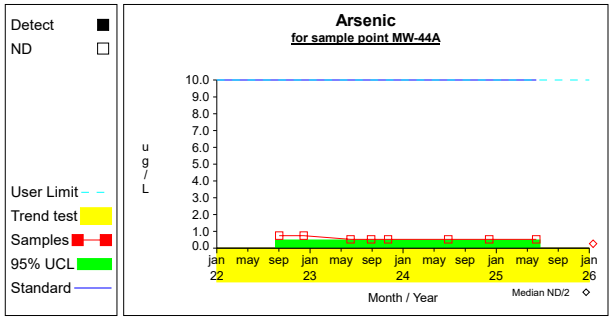
Graph 21



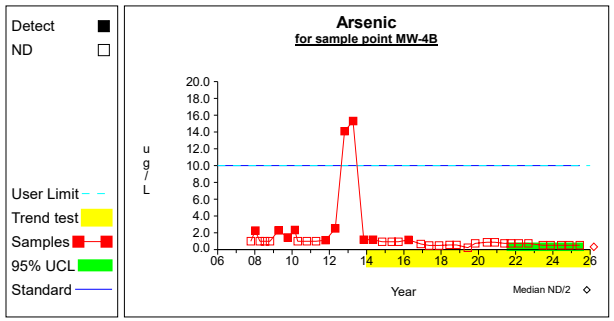
Graph 22



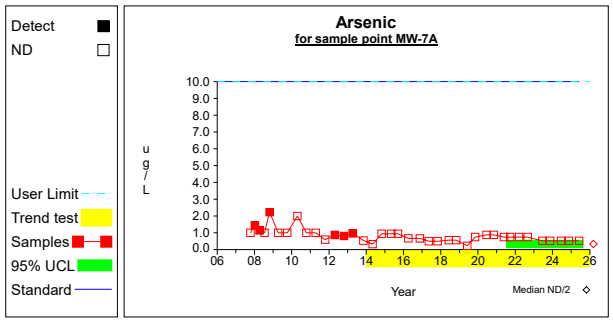
Graph 23



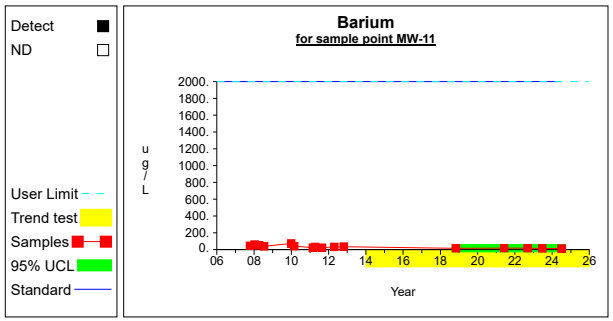
Graph 24



Graph 25

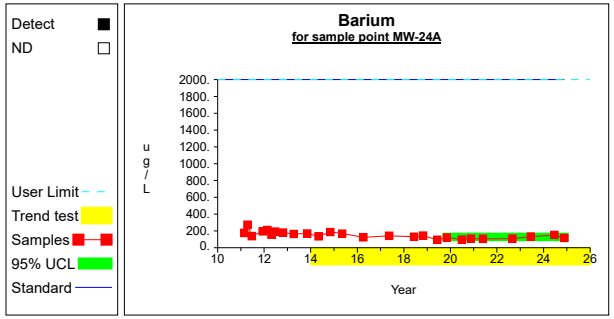


Graph 26

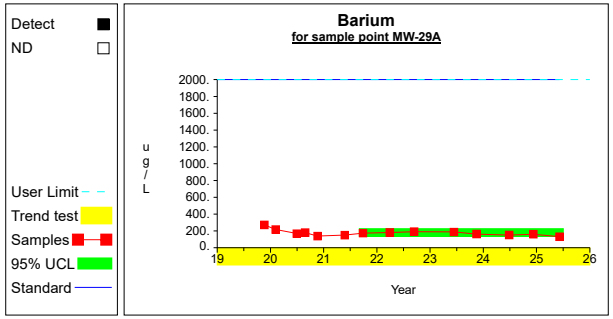


Graph 27

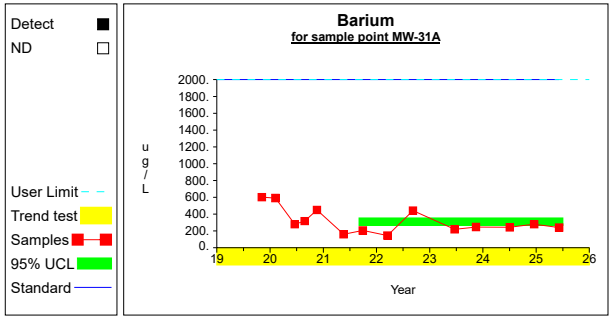
Confidence Limits (Assessment)



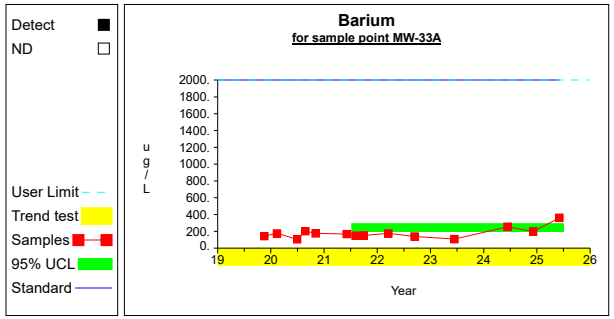
Graph 28



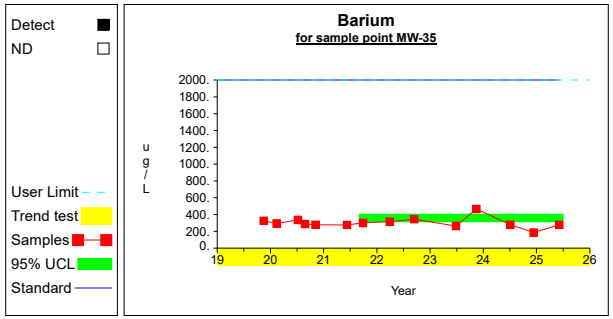
Graph 29



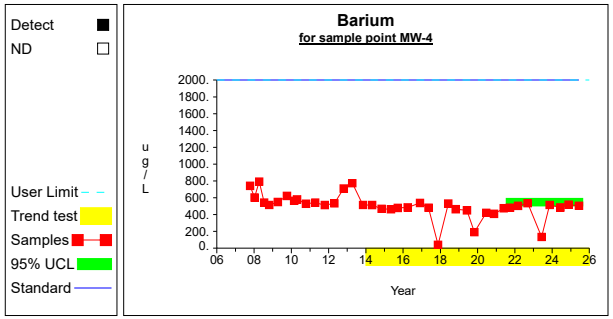
Graph 30



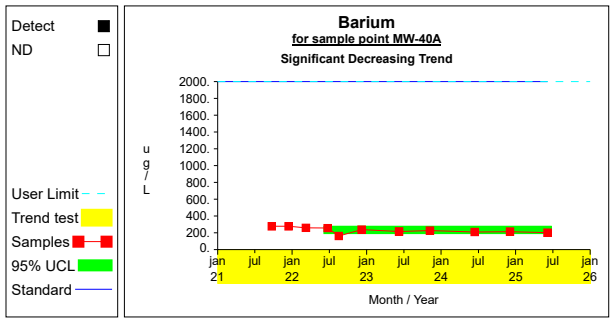
Graph 31



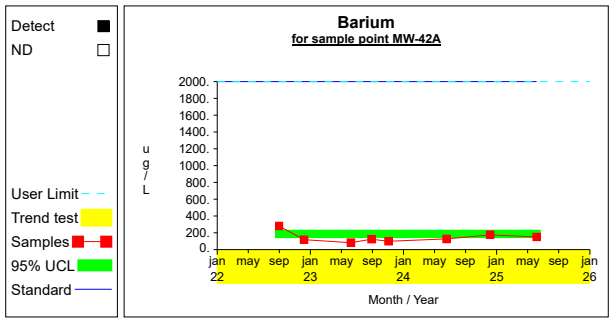
Graph 32



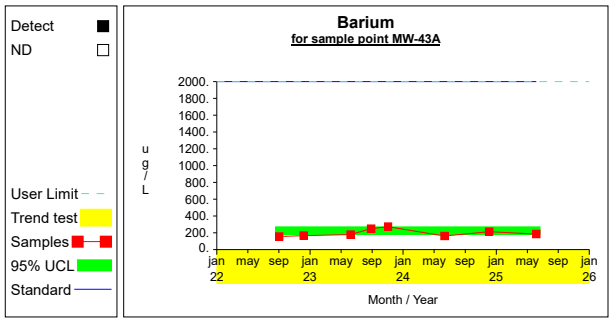
Graph 33



Graph 34

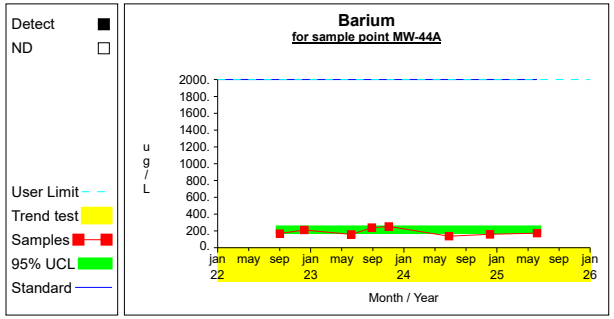


Graph 35

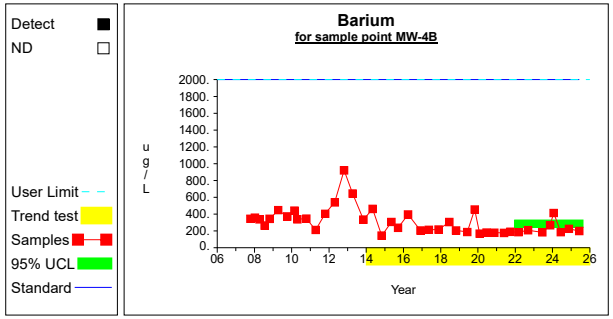


Graph 36

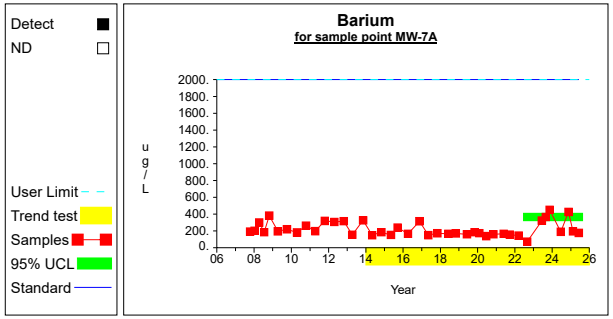
Confidence Limits (Assessment)



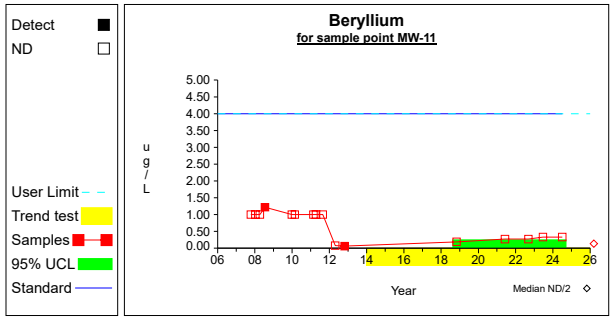
Graph 37



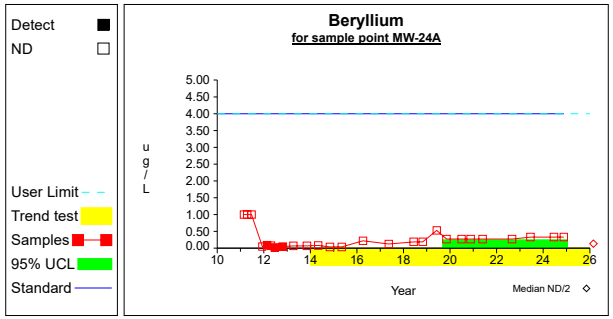
Graph 38



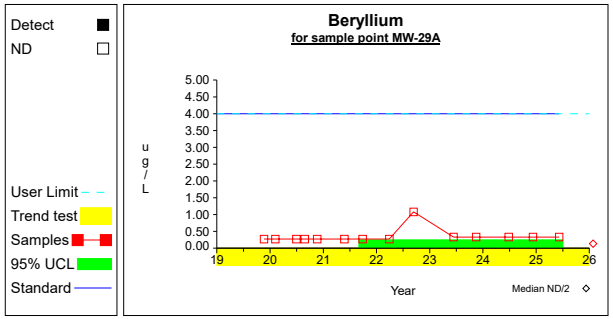
Graph 39



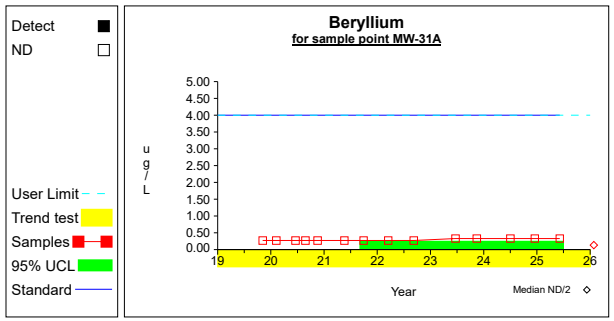
Graph 40



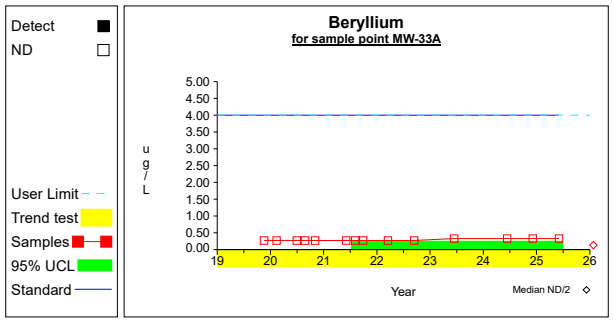
Graph 41



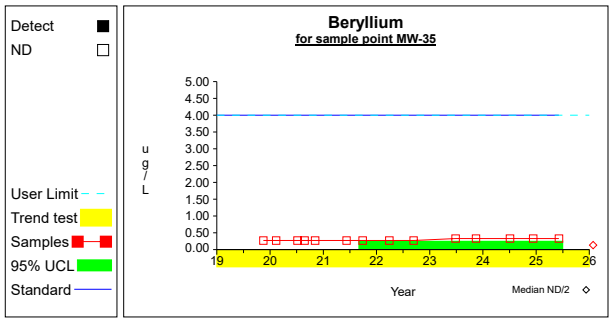
Graph 42



Graph 43

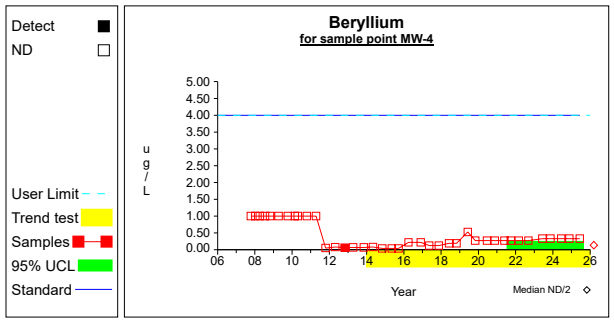


Graph 44

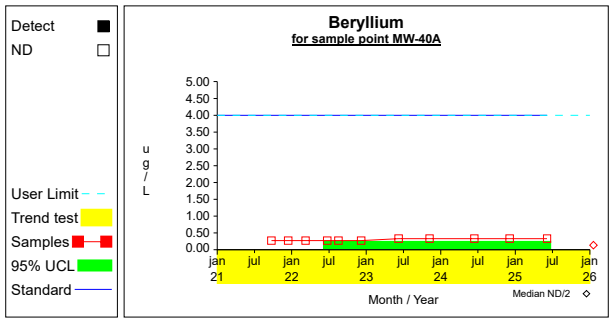


Graph 45

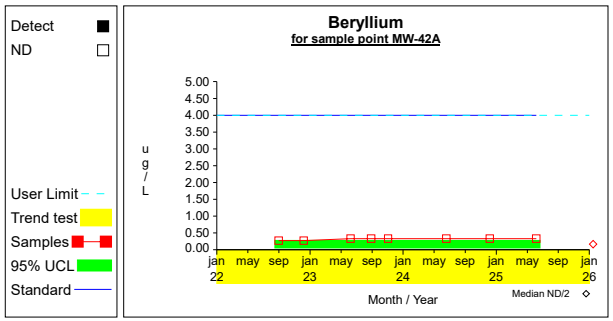
Confidence Limits (Assessment)



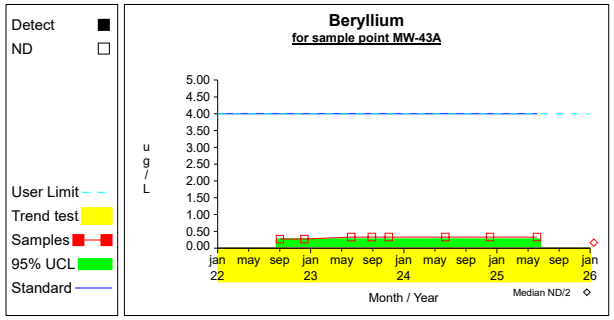
Graph 46



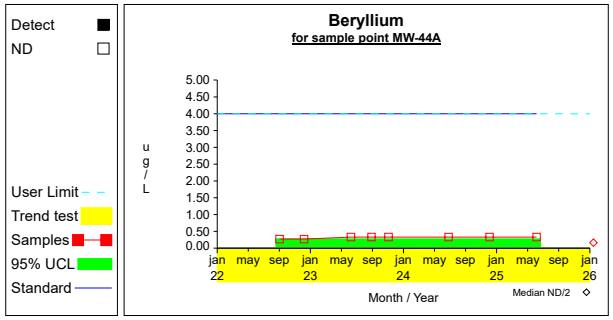
Graph 47



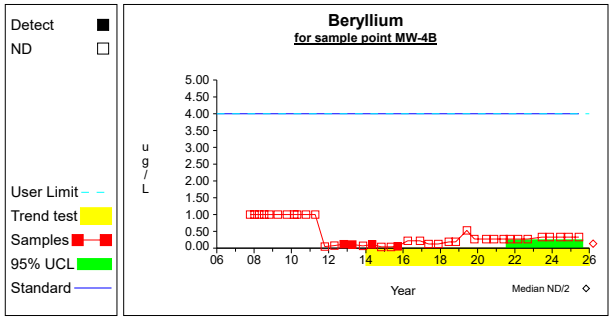
Graph 48



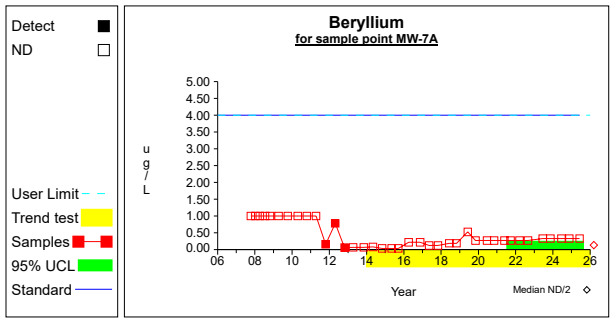
Graph 49



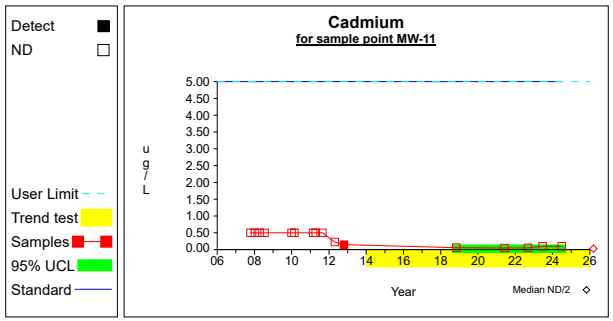
Graph 50



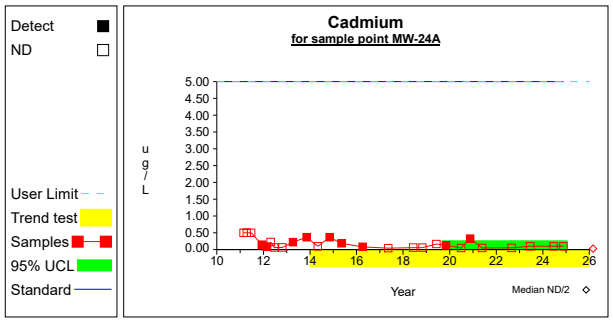
Graph 51



Graph 52

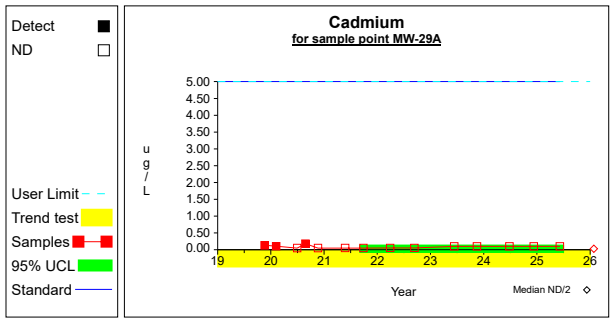


Graph 53

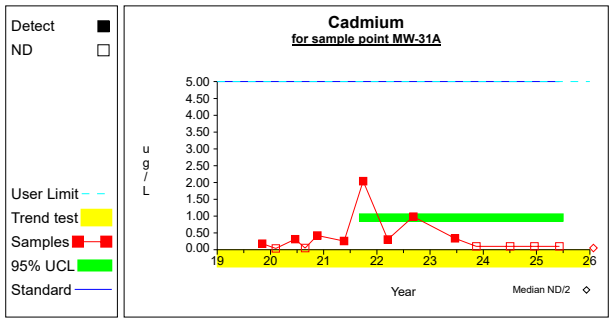


Graph 54

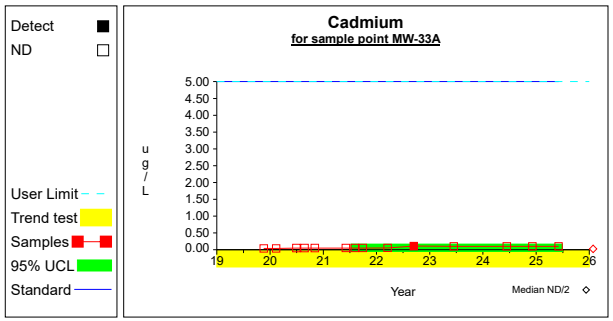
Confidence Limits (Assessment)



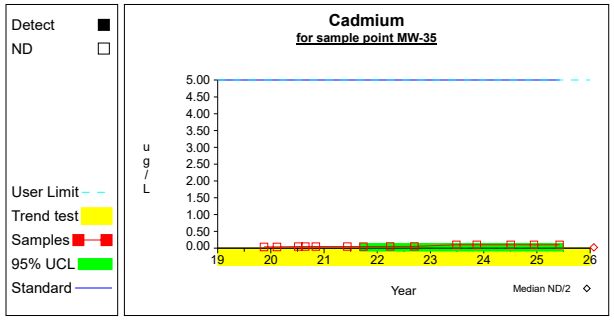
Graph 55



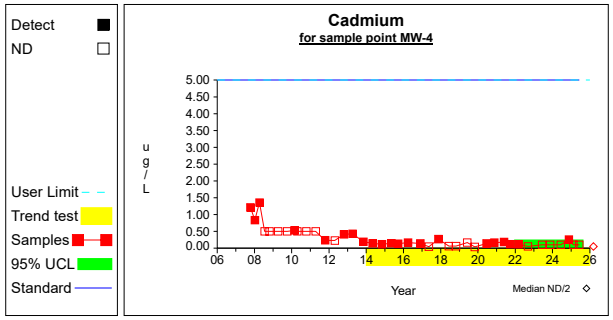
Graph 56



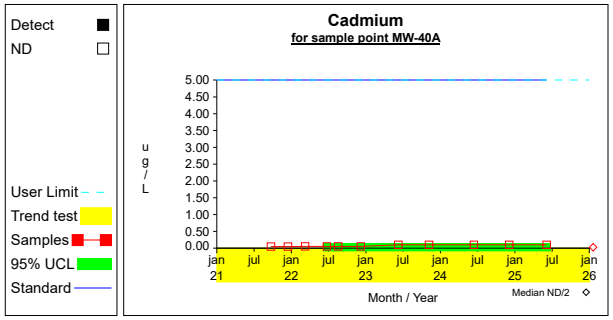
Graph 57



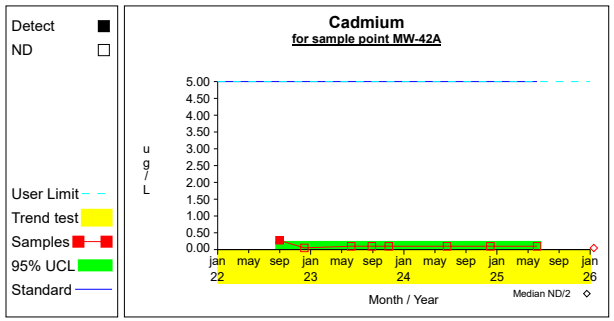
Graph 58



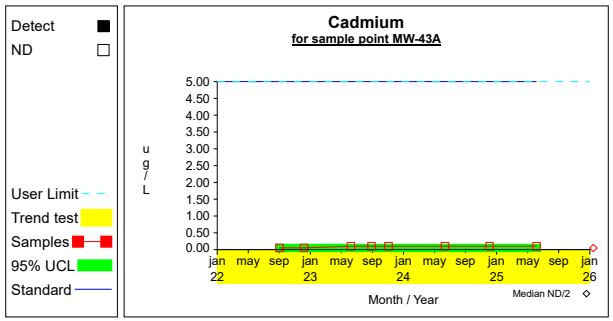
Graph 59



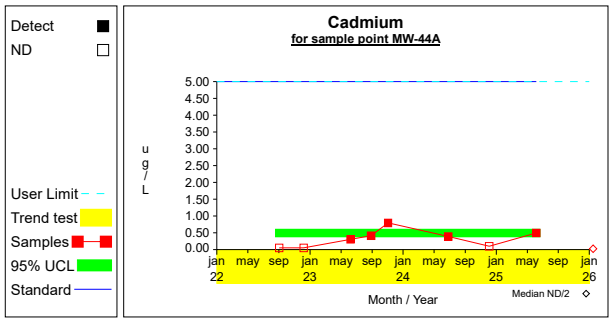
Graph 60



Graph 61

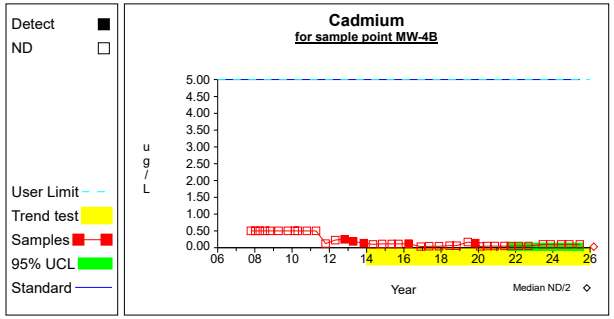


Graph 62

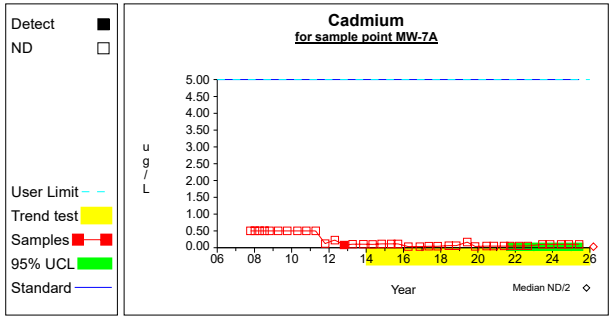


Graph 63

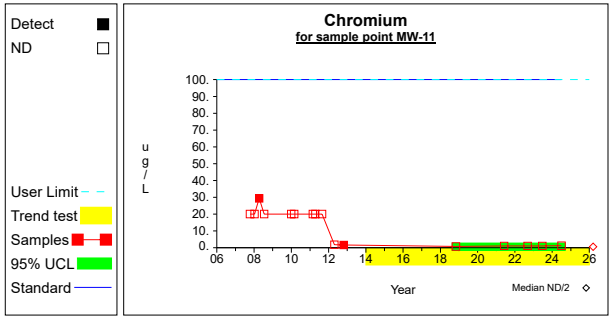
Confidence Limits (Assessment)



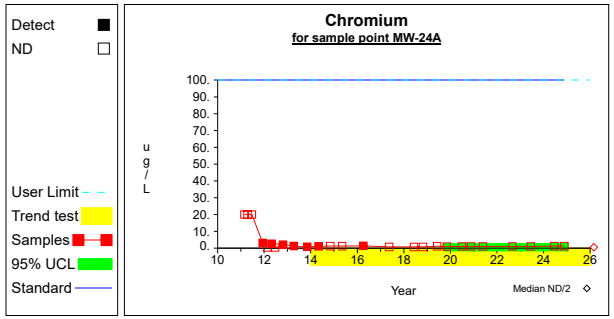
Graph 64



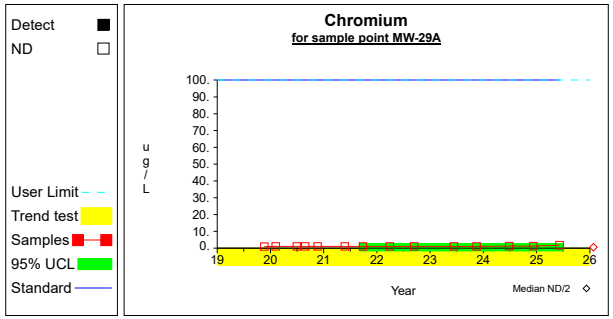
Graph 65



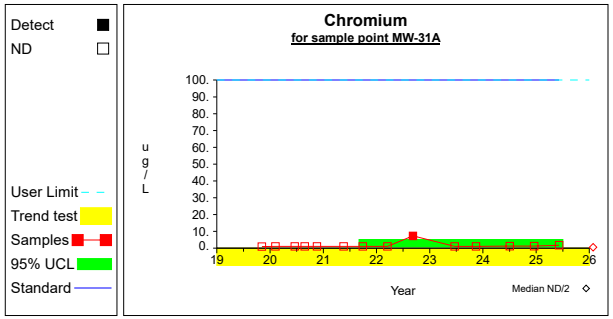
Graph 66



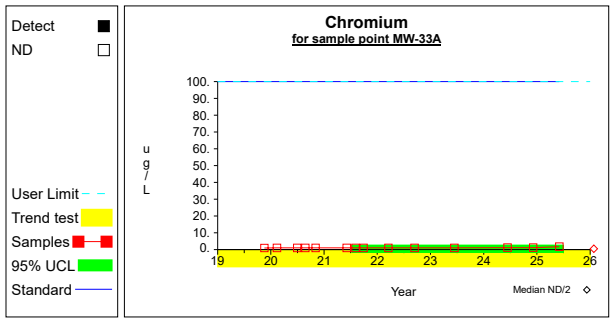
Graph 67



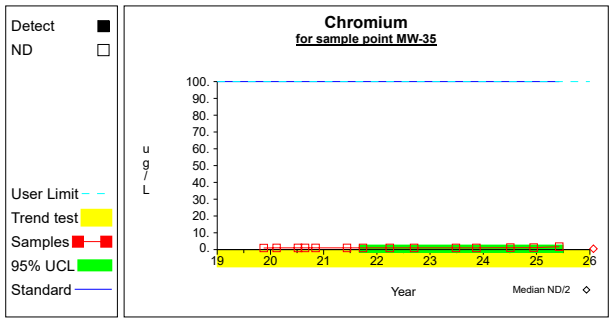
Graph 68



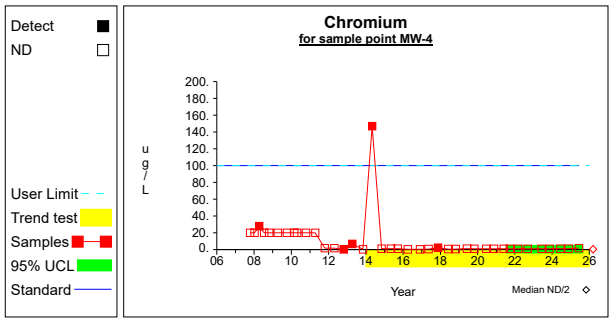
Graph 69



Graph 70

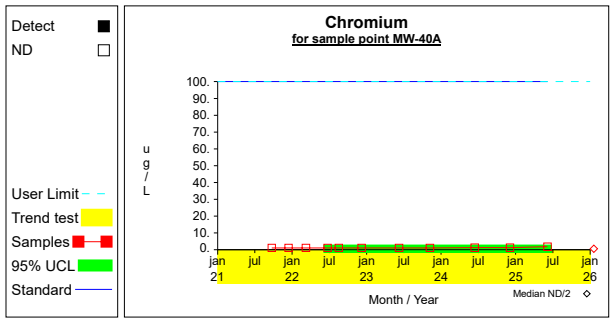


Graph 71

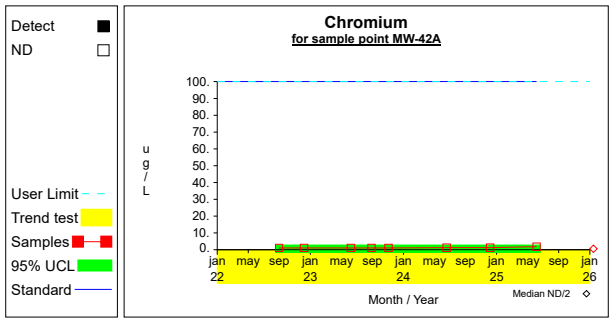


Graph 72

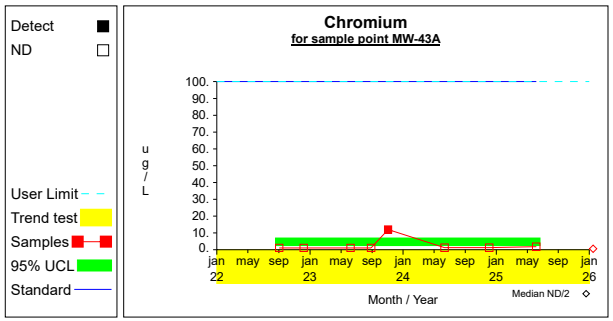
Confidence Limits (Assessment)



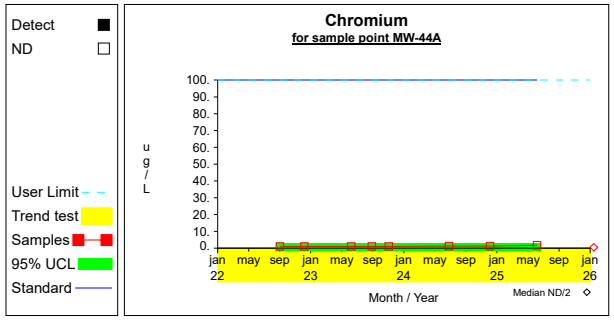
Graph 73



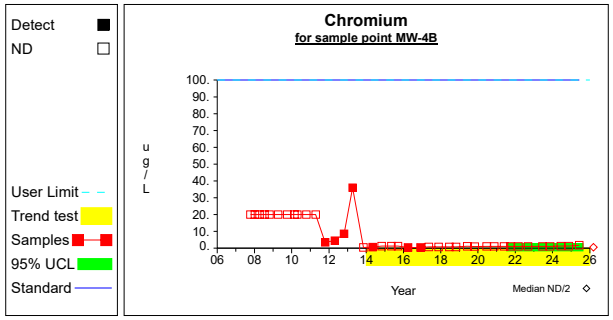
Graph 74



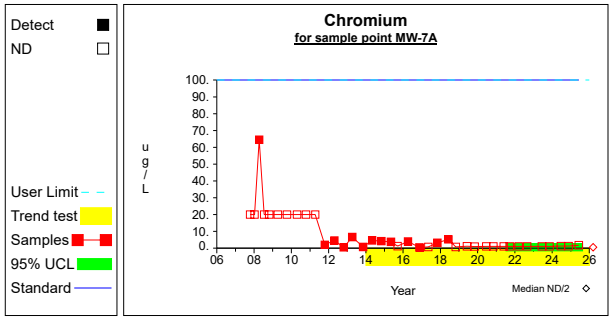
Graph 75



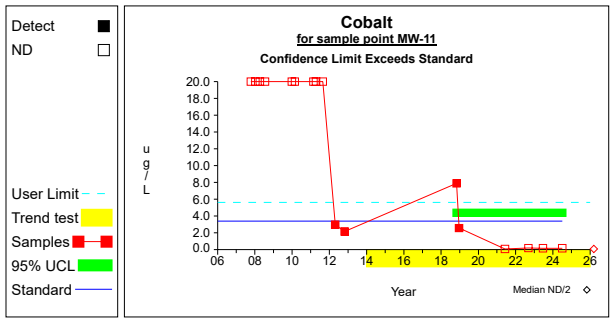
Graph 76



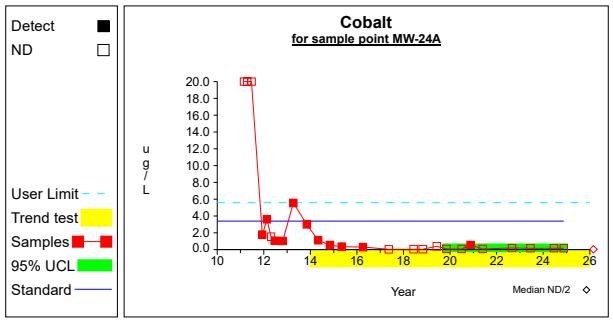
Graph 77



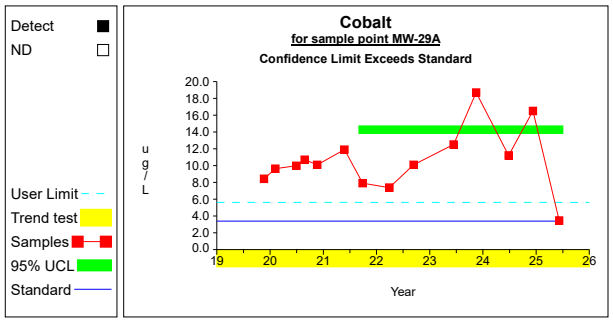
Graph 78



Graph 79

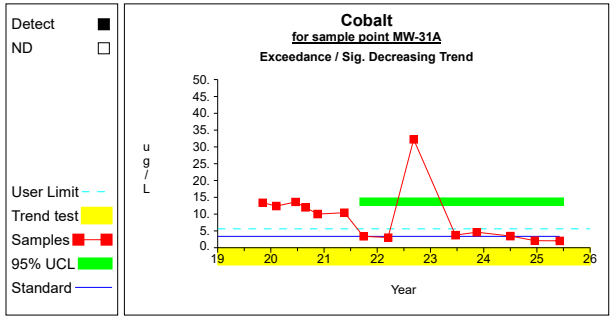


Graph 80

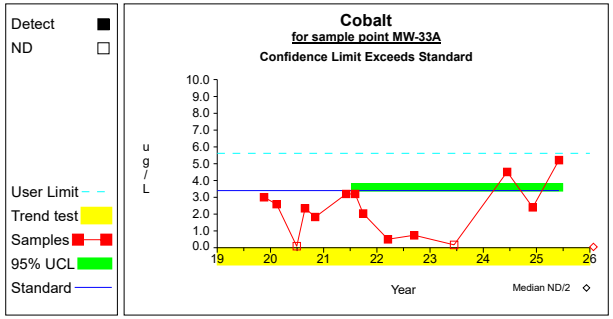


Graph 81

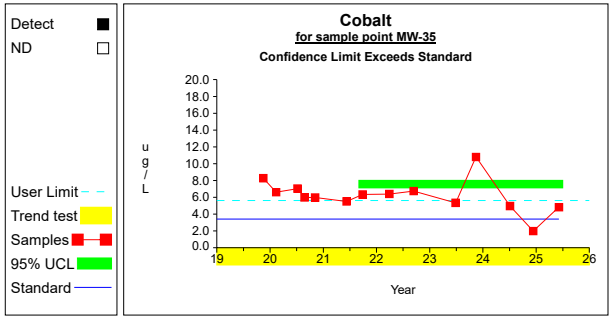
Confidence Limits (Assessment)



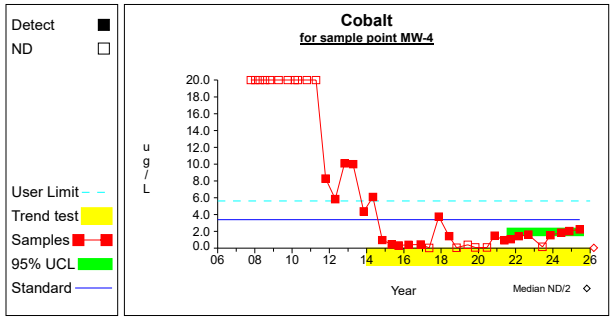
Graph 82



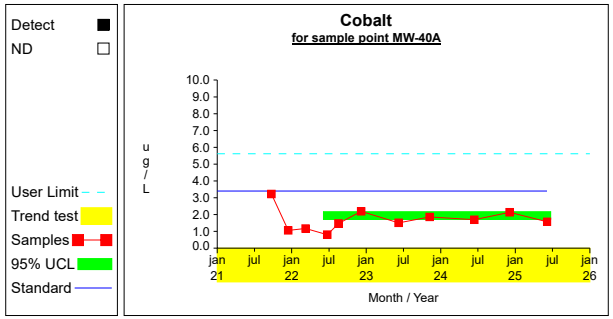
Graph 83



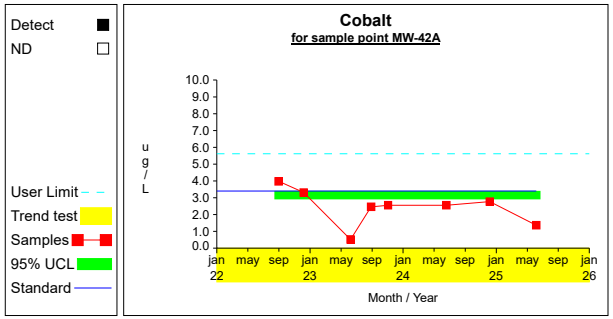
Graph 84



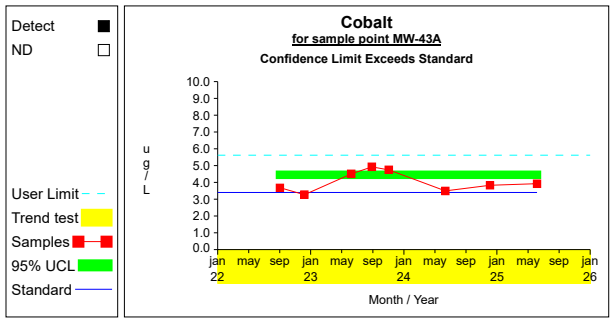
Graph 85



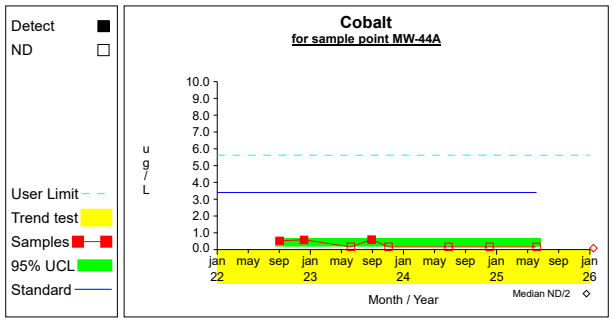
Graph 86



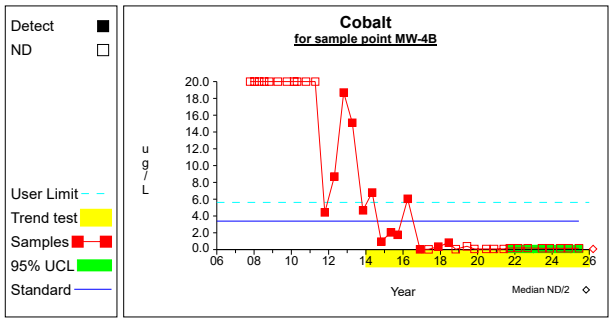
Graph 87



Graph 88

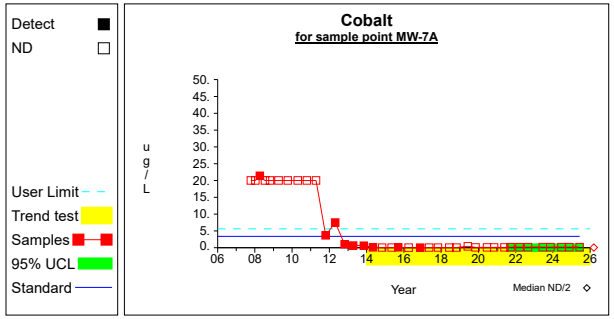


Graph 89

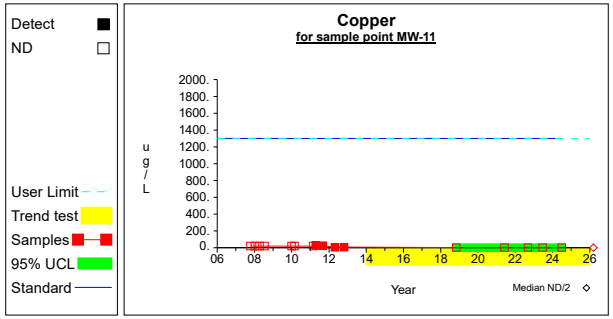


Graph 90

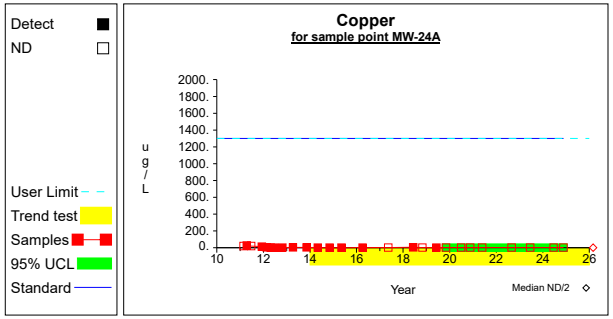
Confidence Limits (Assessment)



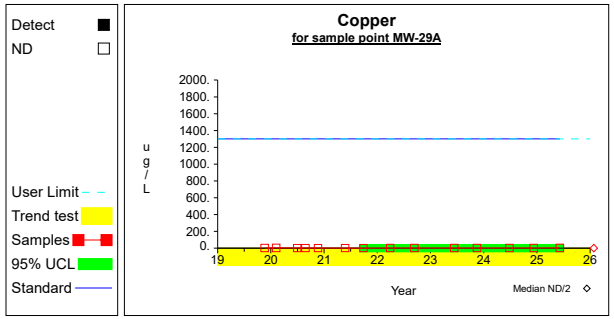
Graph 91



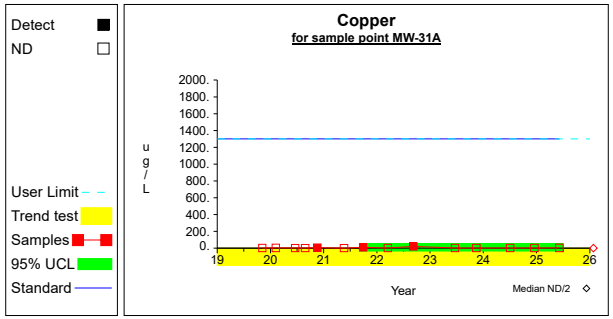
Graph 92



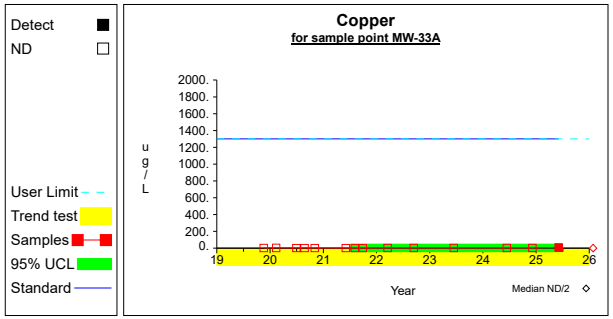
Graph 93



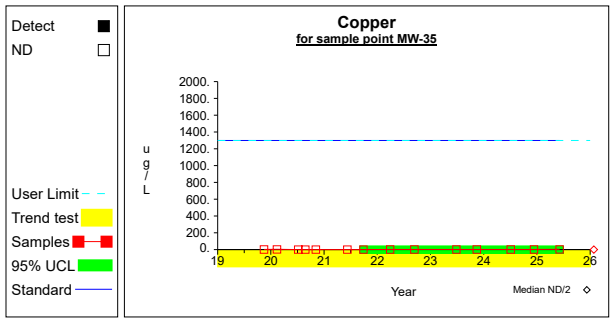
Graph 94



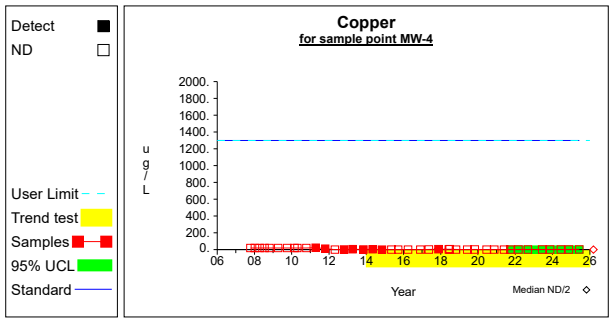
Graph 95



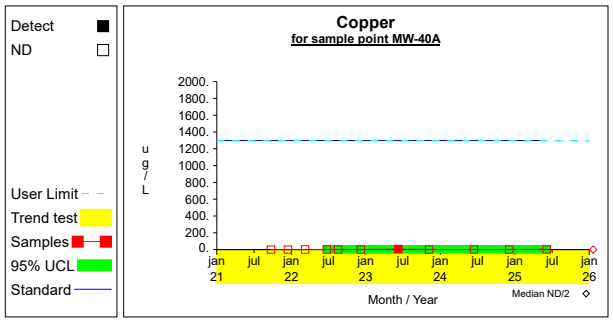
Graph 96



Graph 97

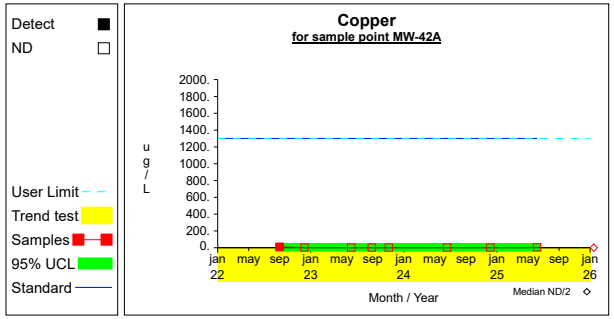


Graph 98

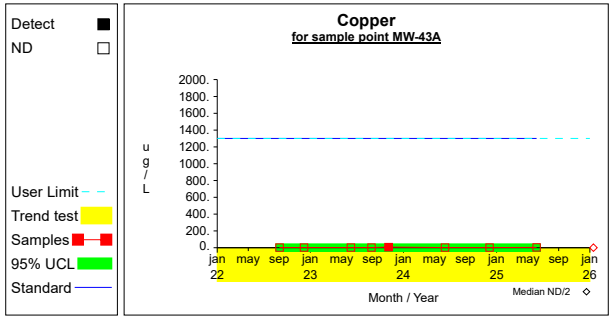


Graph 99

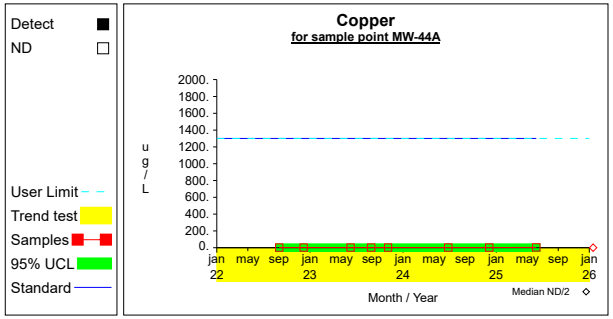
Confidence Limits (Assessment)



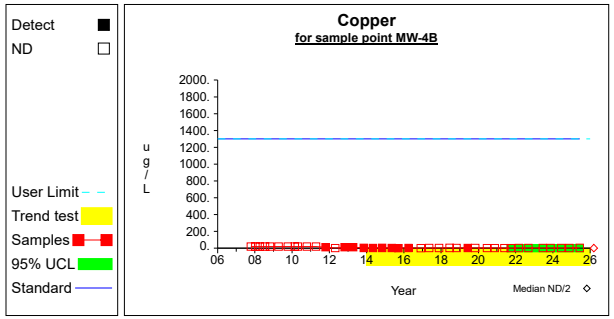
Graph 100



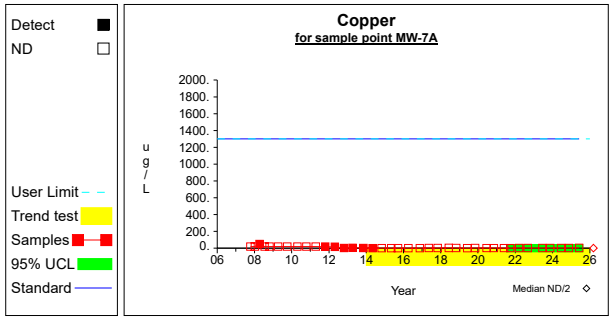
Graph 101



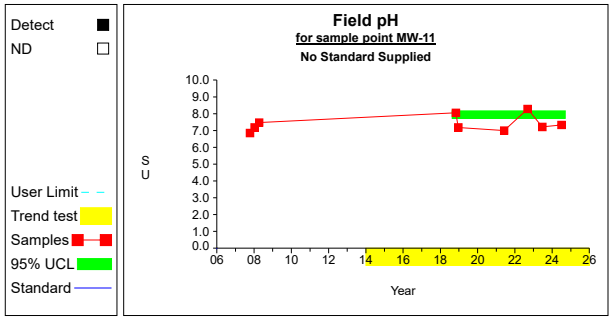
Graph 102



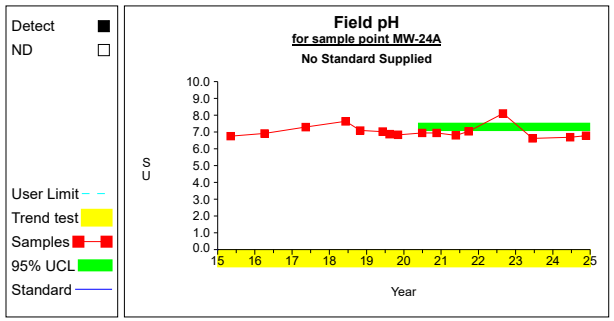
Graph 103



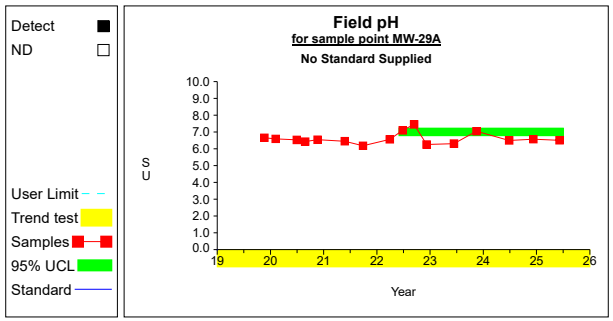
Graph 104



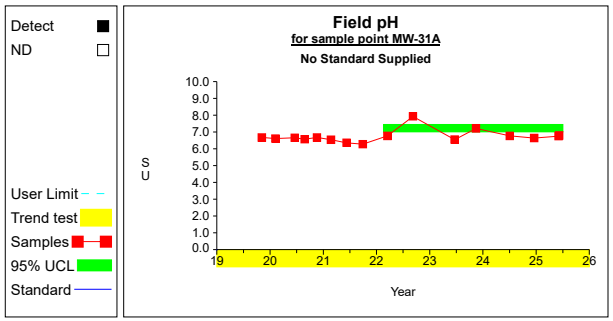
Graph 105



Graph 106

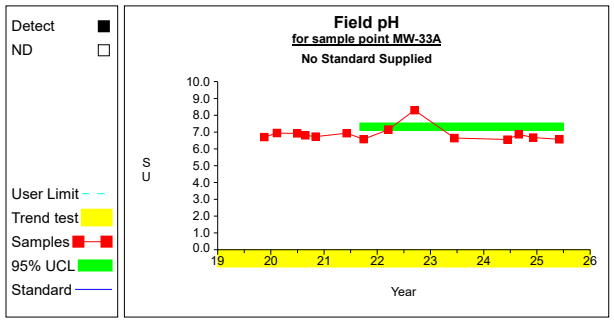


Graph 107

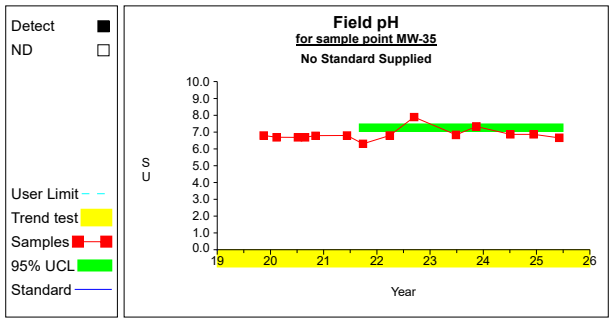


Graph 108

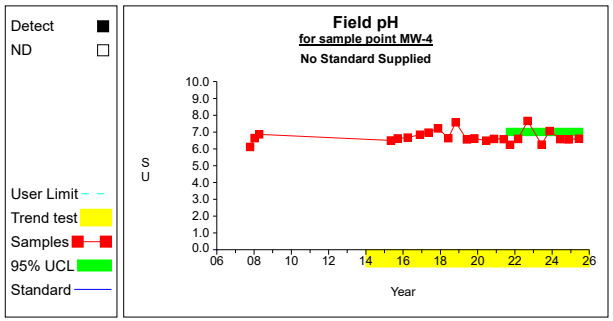
Confidence Limits (Assessment)



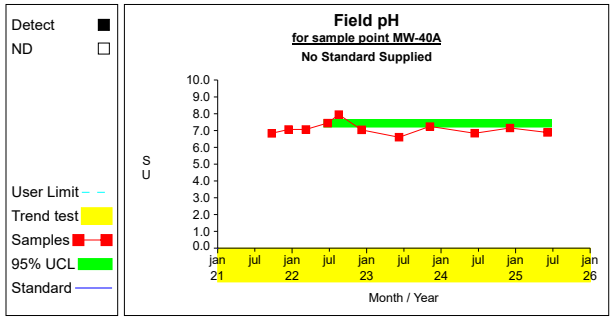
Graph 109



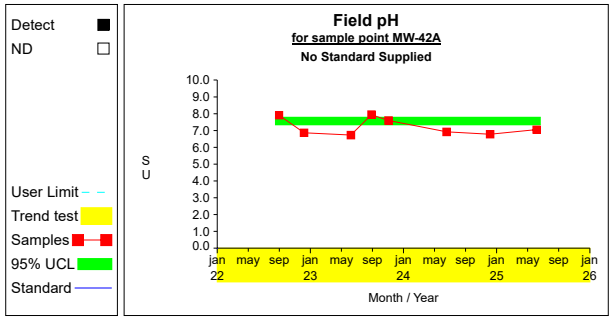
Graph 110



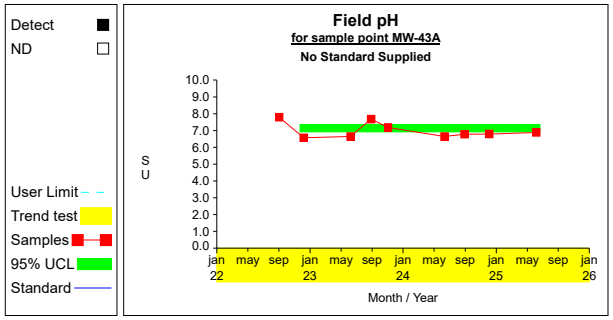
Graph 111



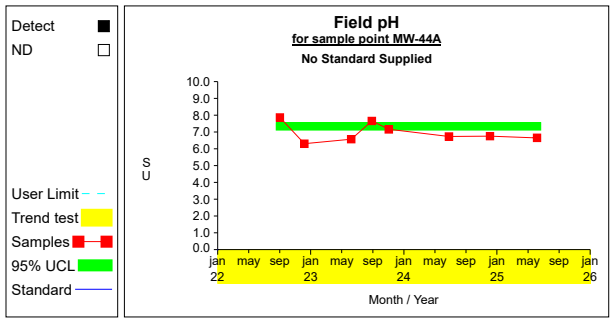
Graph 112



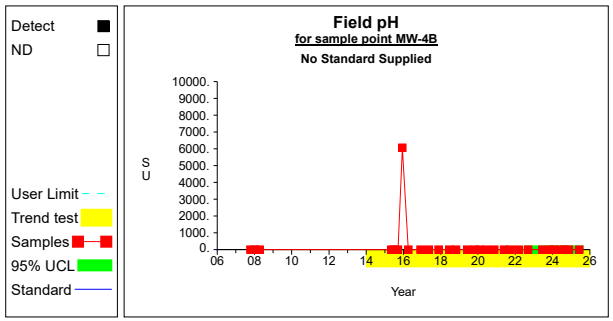
Graph 113



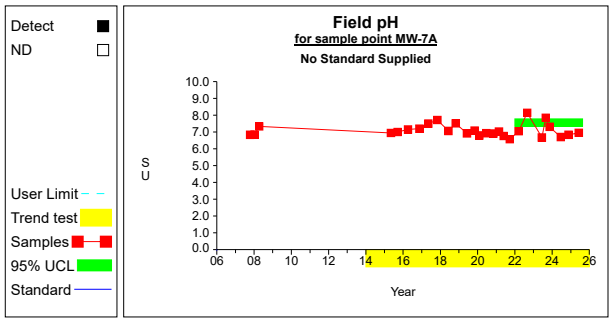
Graph 114



Graph 115

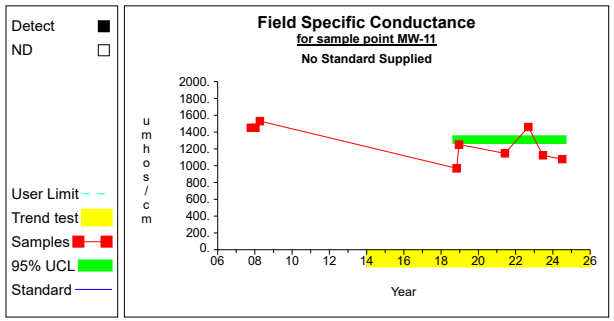


Graph 116

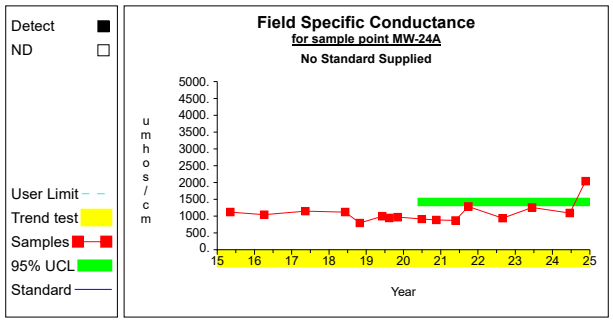


Graph 117

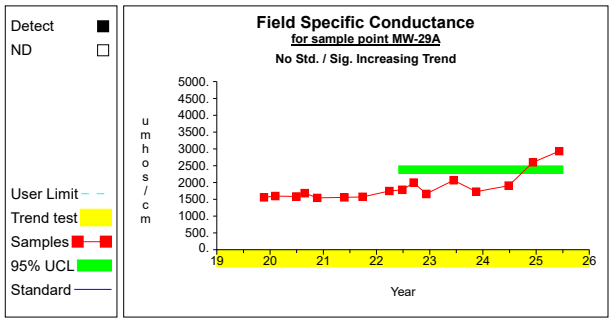
Confidence Limits (Assessment)



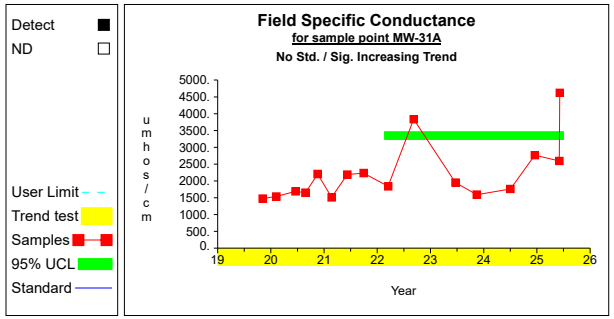
Graph 118



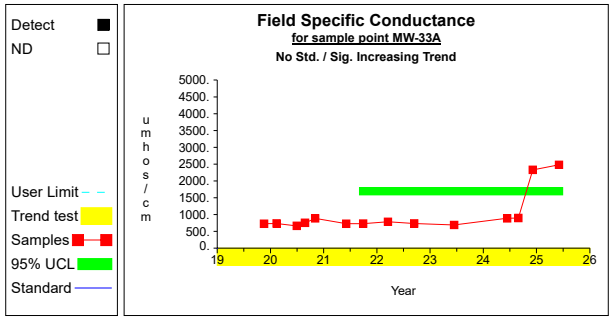
Graph 119



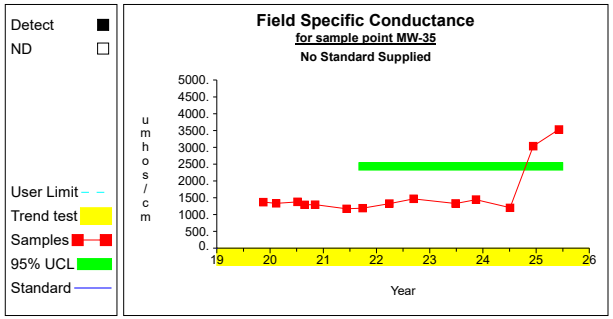
Graph 120



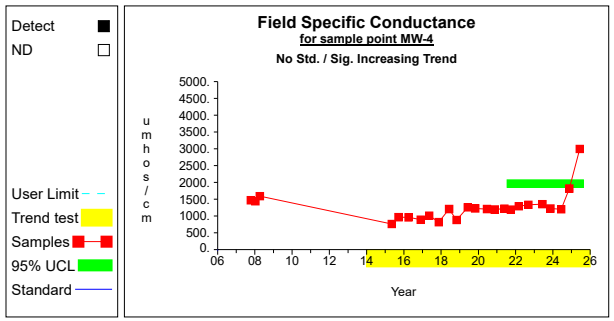
Graph 121



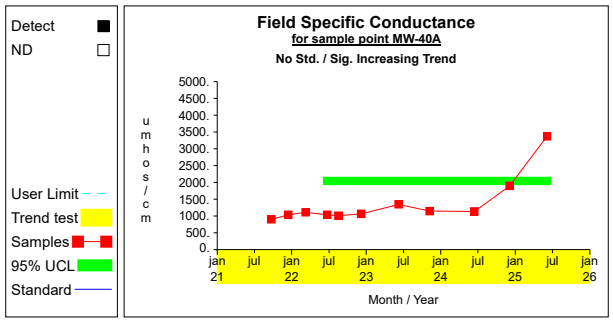
Graph 122



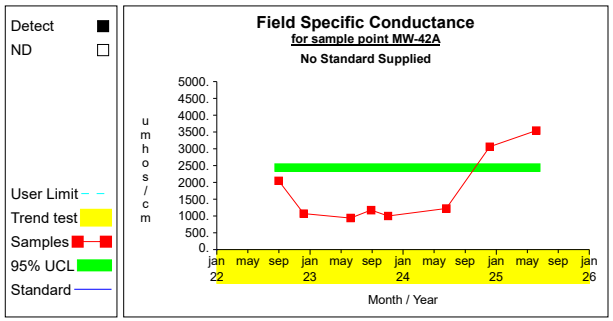
Graph 123



Graph 124

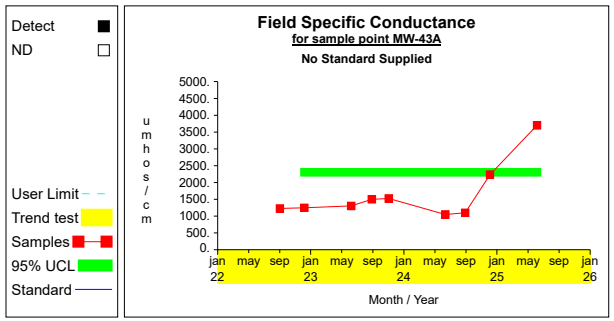


Graph 125

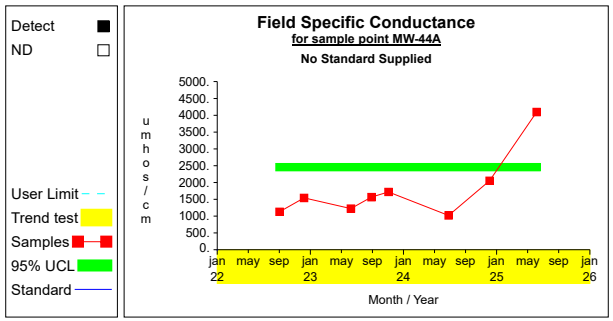


Graph 126

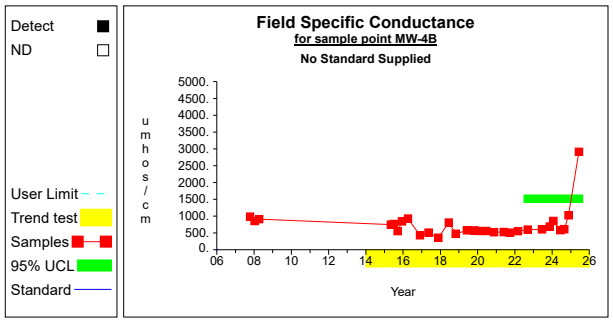
Confidence Limits (Assessment)



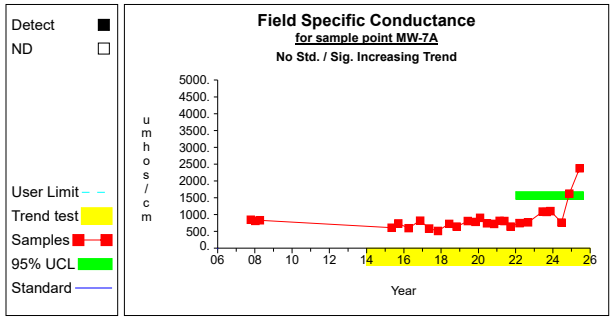
Graph 127



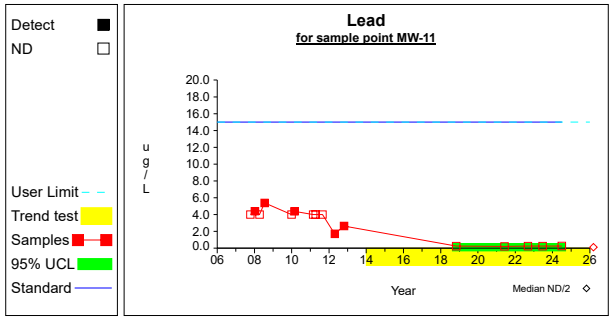
Graph 128



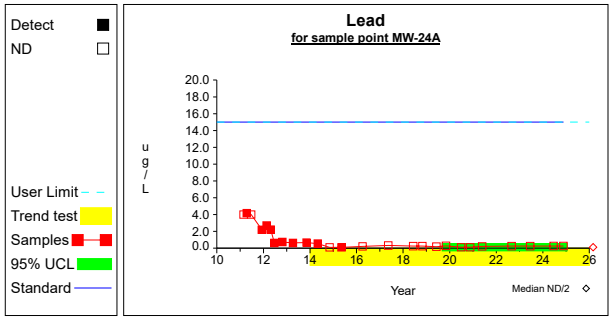
Graph 129



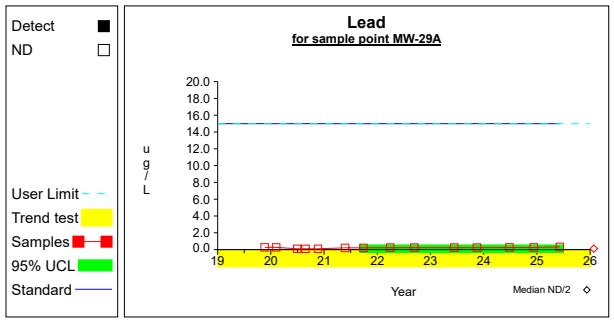
Graph 130



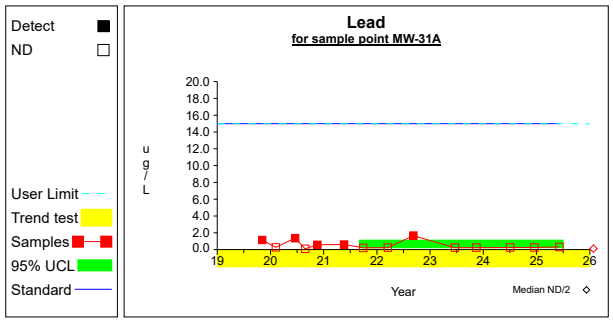
Graph 131



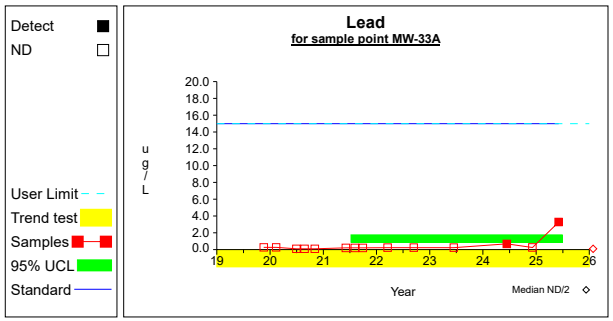
Graph 132



Graph 133

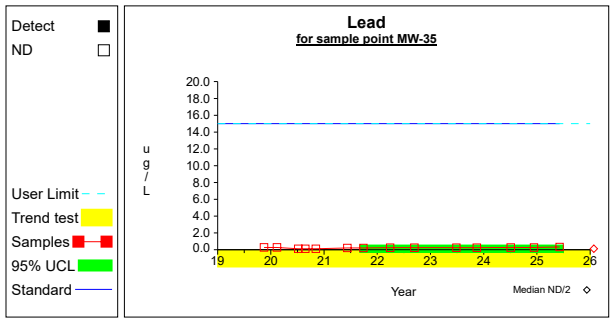


Graph 134

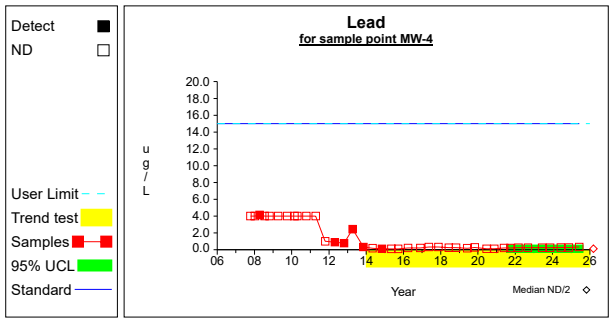


Graph 135

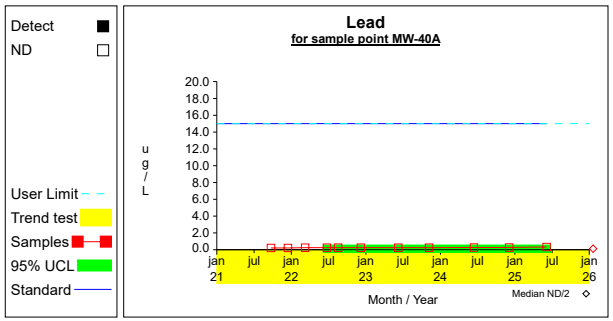
Confidence Limits (Assessment)



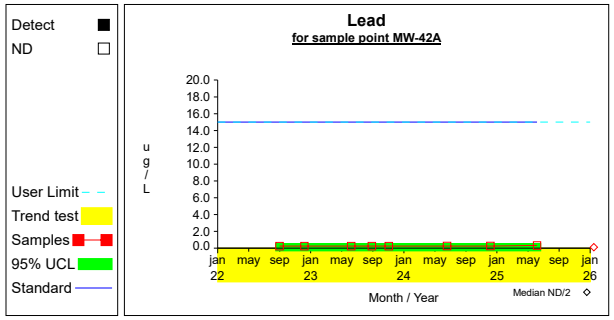
Graph 136



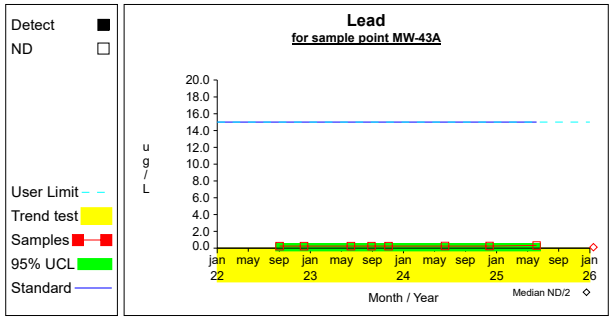
Graph 137



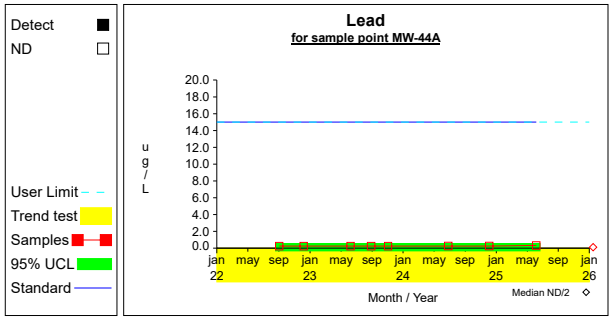
Graph 138



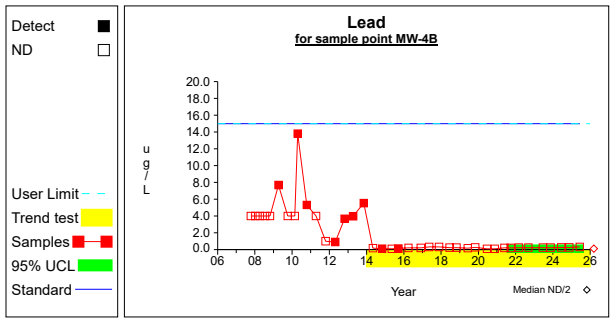
Graph 139



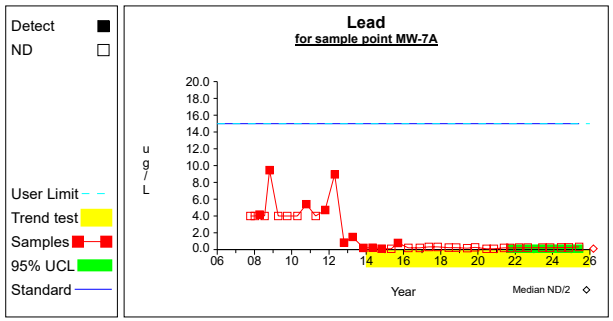
Graph 140



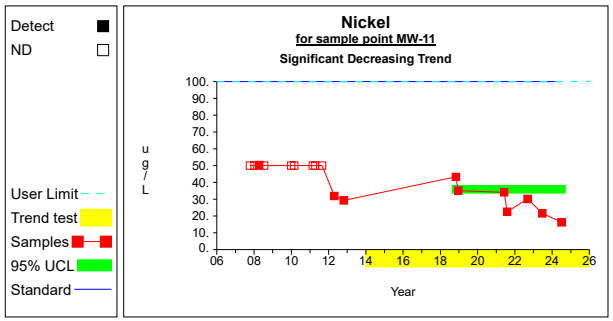
Graph 141



Graph 142

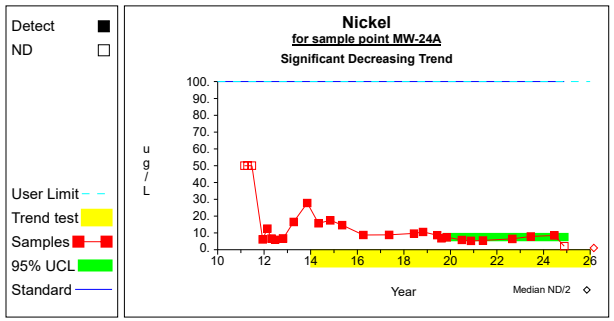


Graph 143

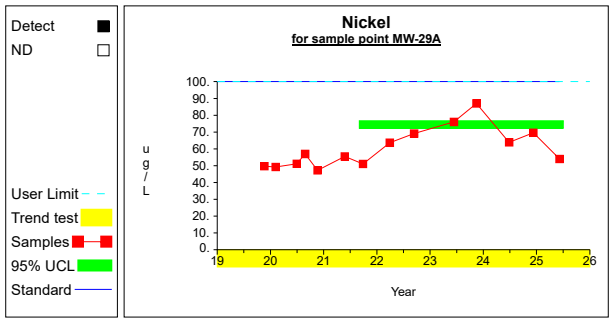


Graph 144

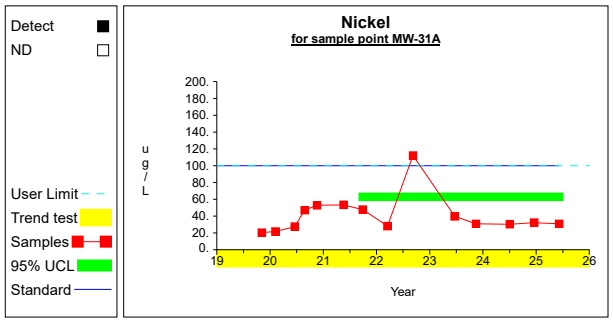
Confidence Limits (Assessment)



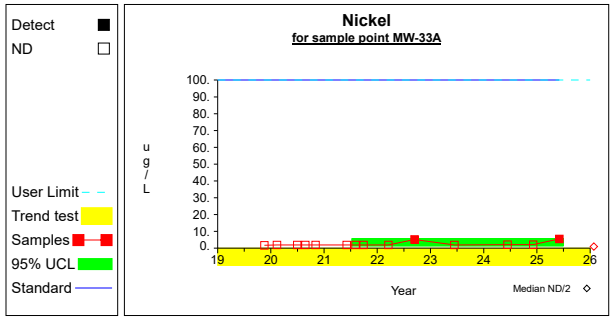
Graph 145



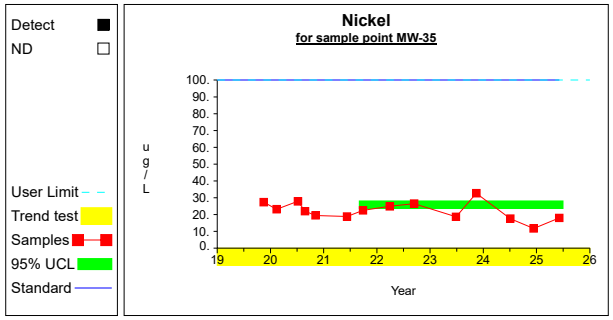
Graph 146



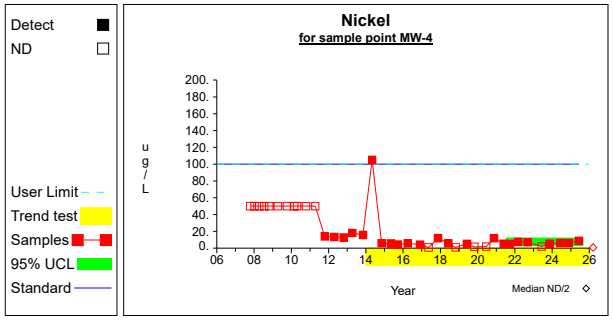
Graph 147



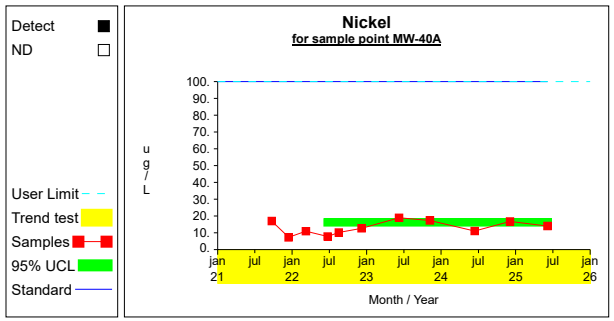
Graph 148



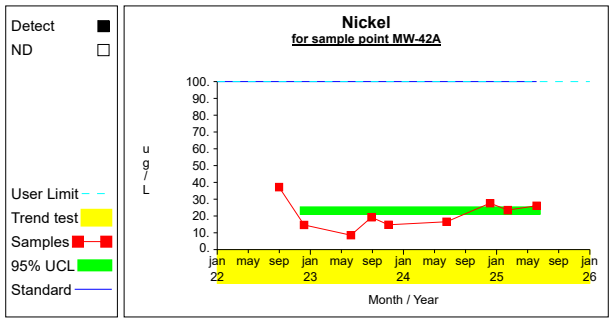
Graph 149



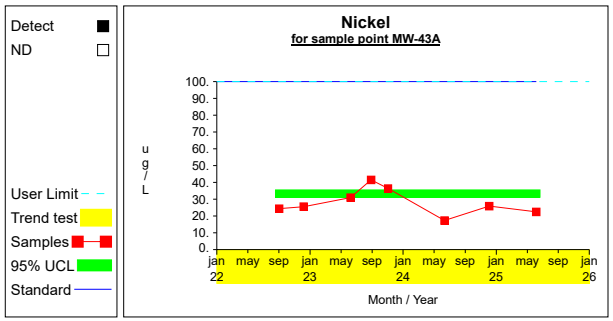
Graph 150



Graph 151

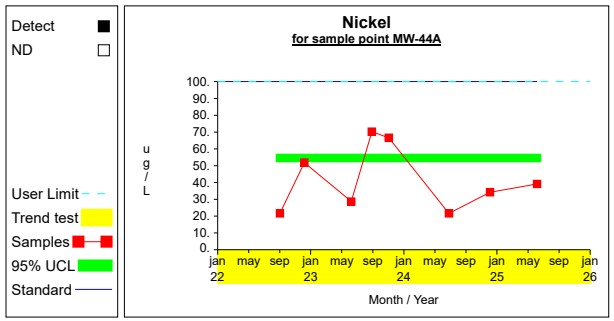


Graph 152

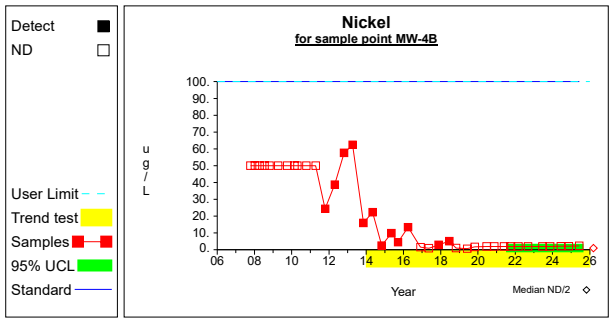


Graph 153

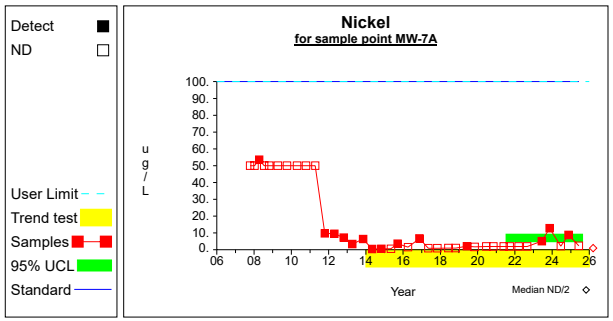
Confidence Limits (Assessment)



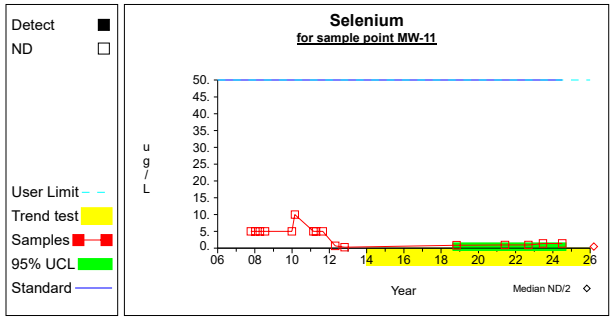
Graph 154



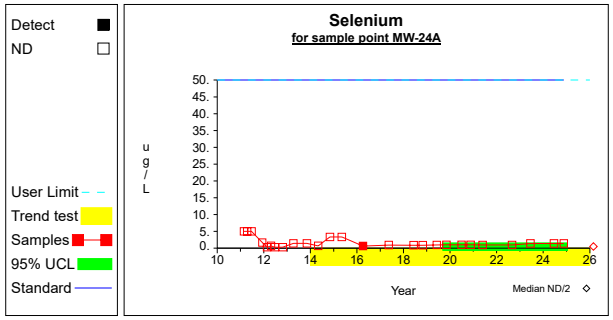
Graph 155



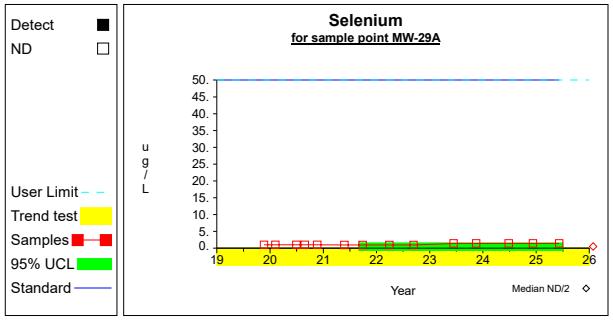
Graph 156



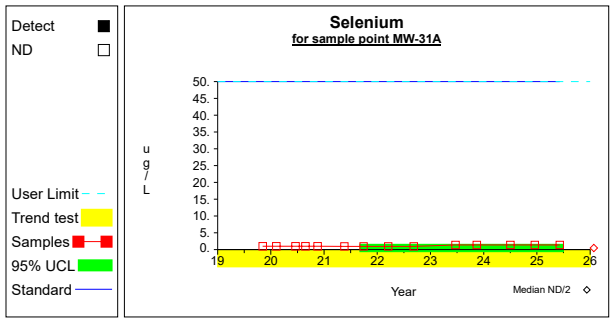
Graph 157



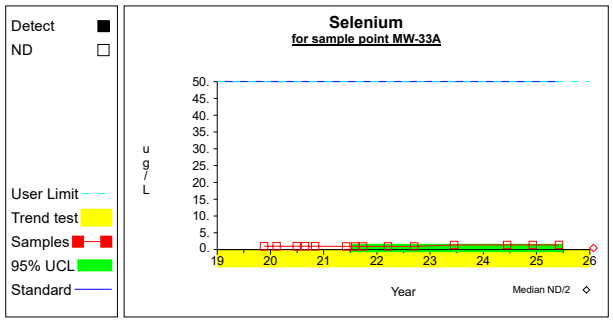
Graph 158



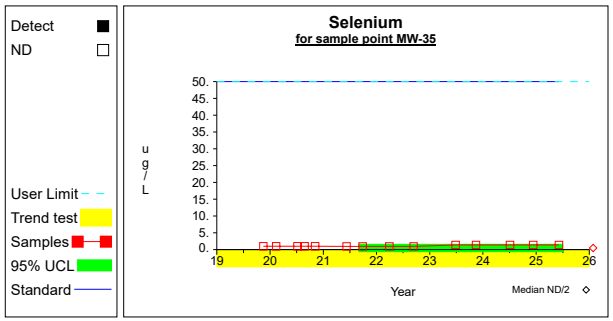
Graph 159



Graph 160

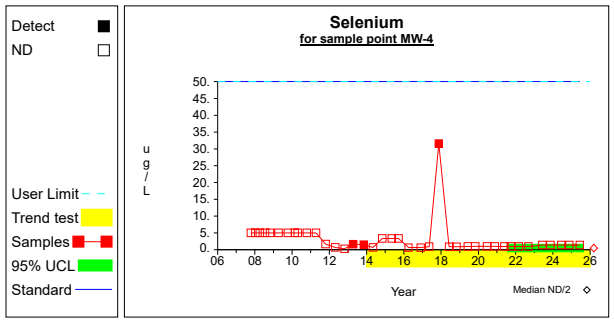


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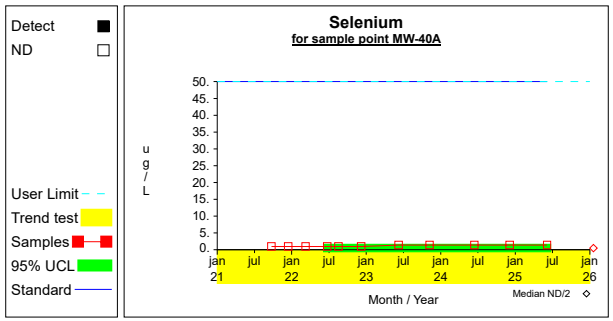


Graph 162

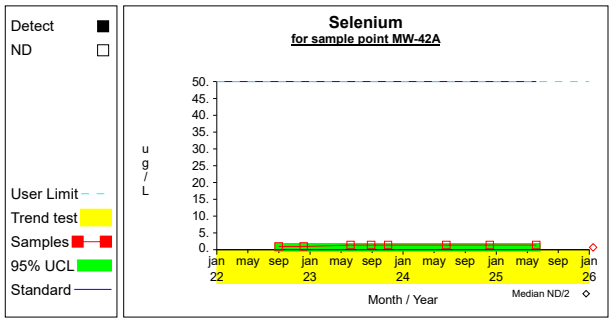
Confidence Limits (Assessment)



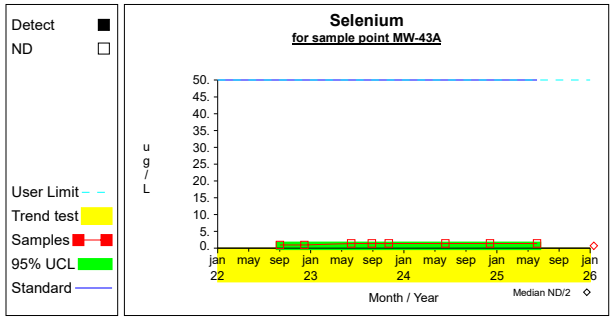
Graph 163



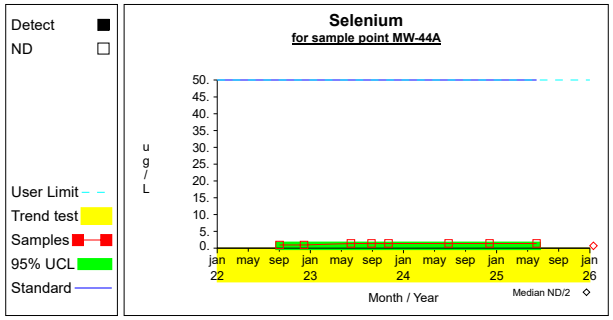
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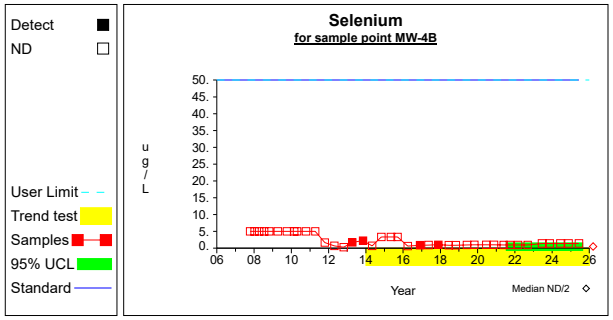
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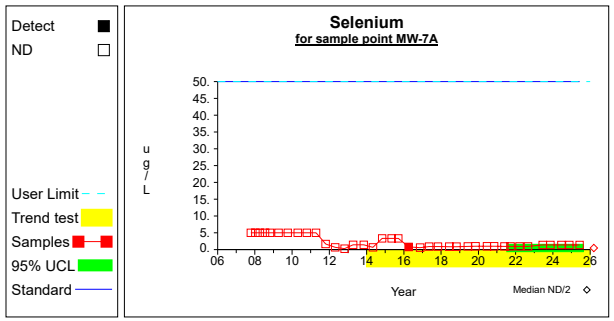
Graph 166



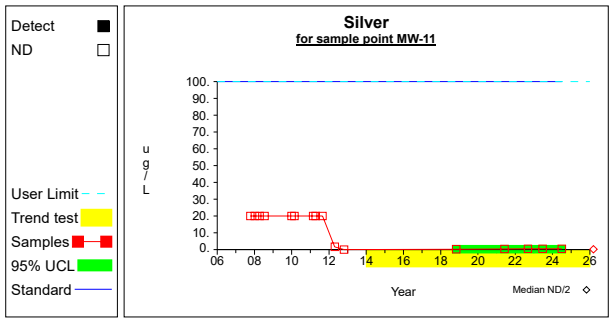
Graph 167



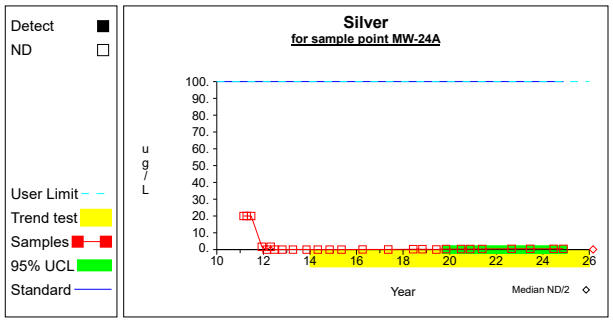
Graph 168



Graph 169

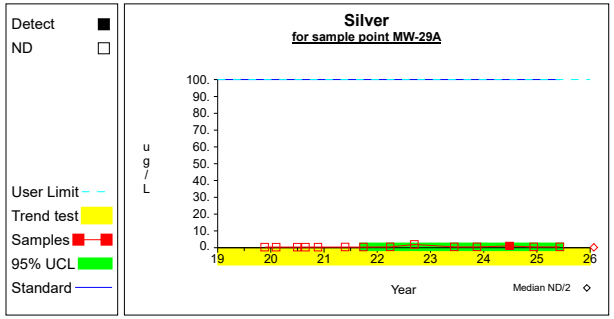


Graph 170

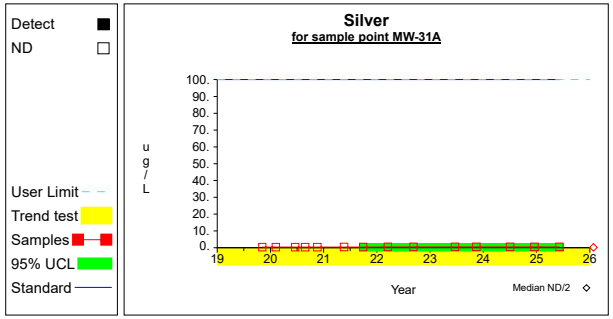


Graph 171

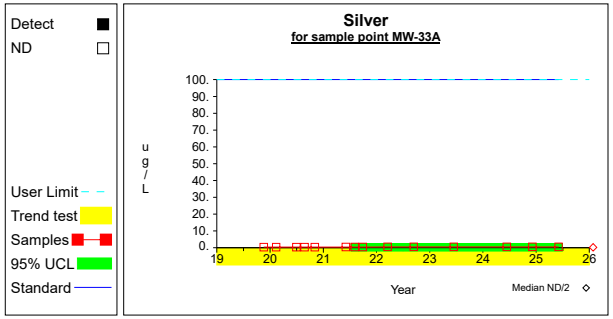
Confidence Limits (Assessment)



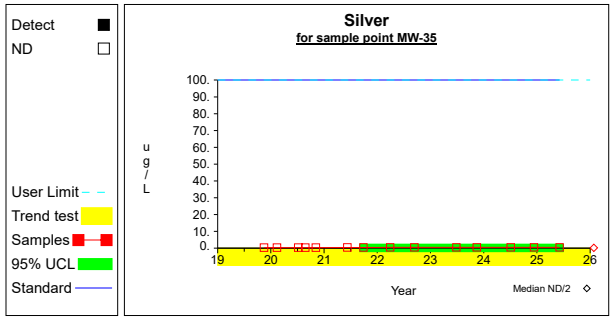
Graph 172



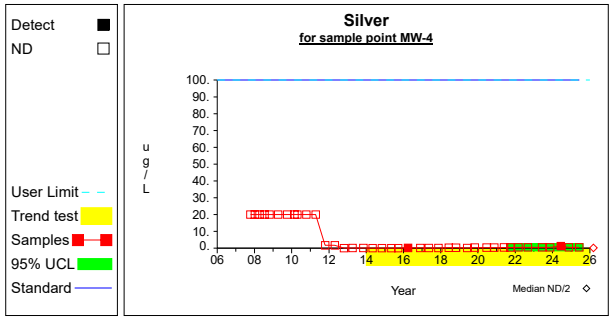
Graph 173



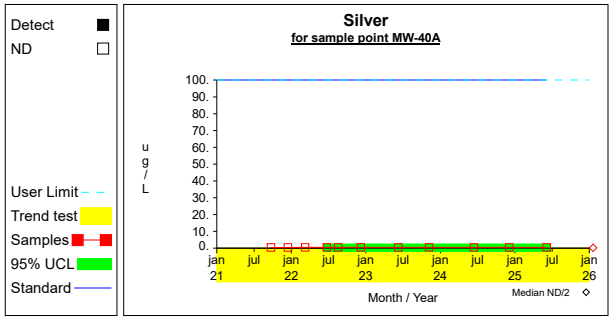
Graph 174



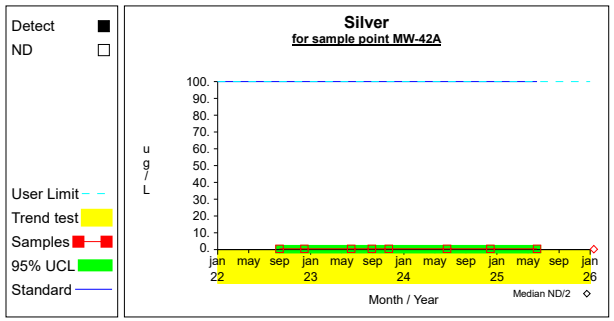
Graph 175



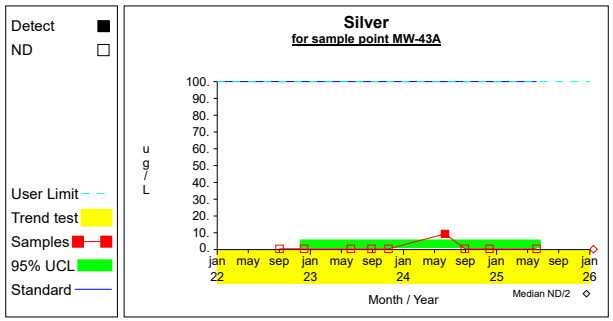
Graph 176



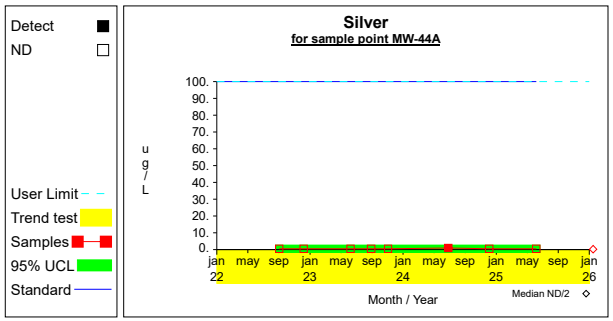
Graph 177



Graph 178

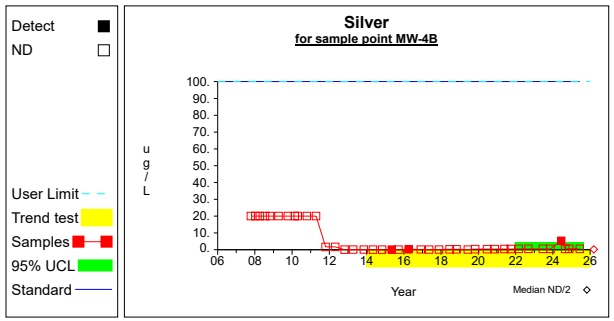


Graph 179

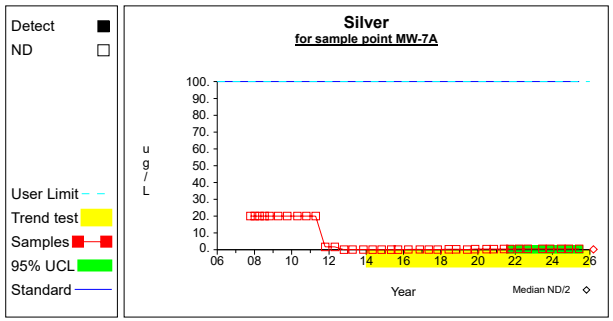


Graph 180

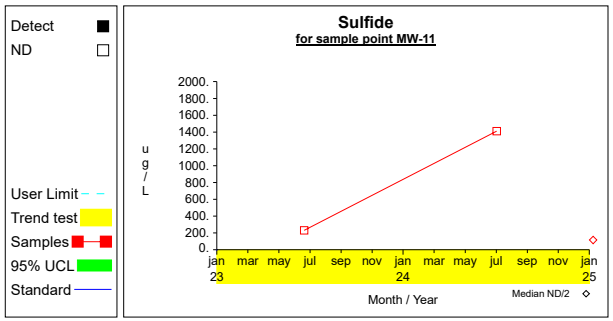
Confidence Limits (Assessment)



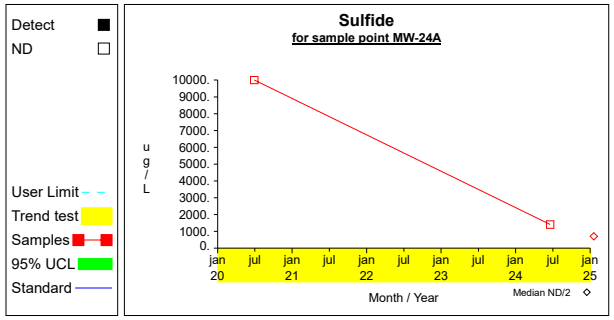
Graph 181



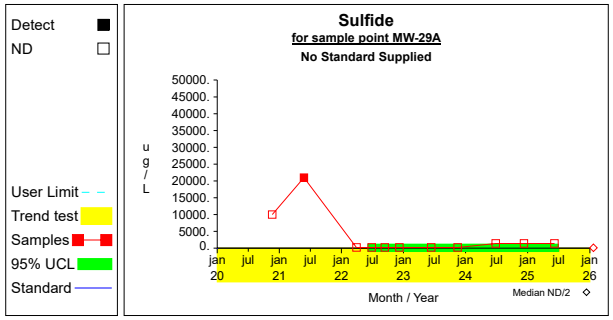
Graph 182



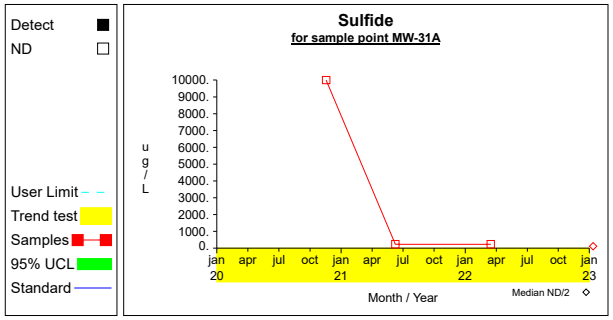
Graph 183



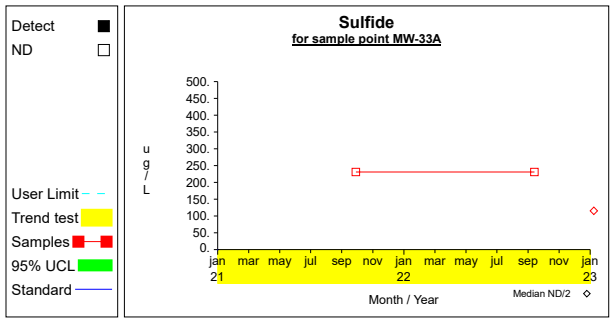
Graph 184



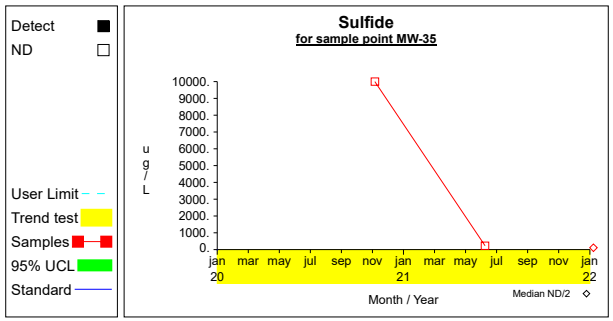
Graph 185



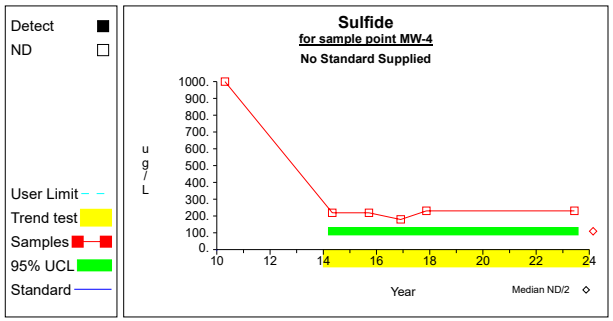
Graph 186



Graph 187

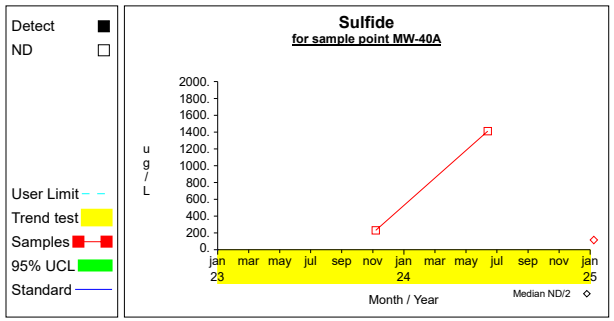


Graph 188

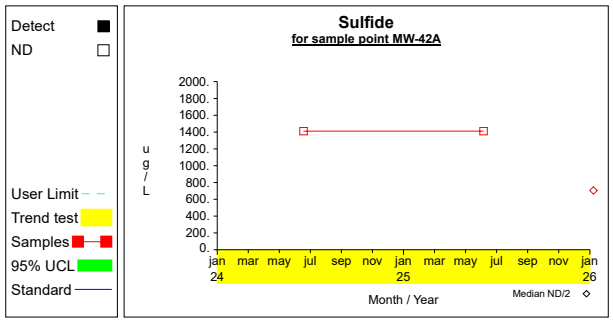


Graph 189

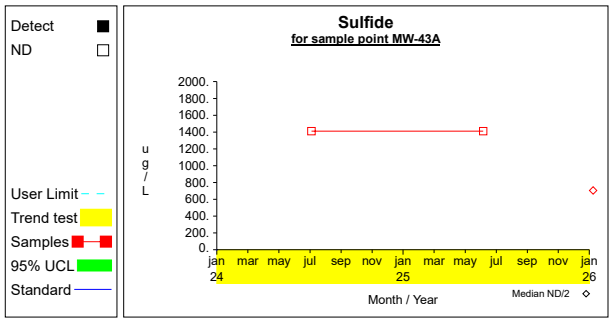
Confidence Limits (Assessment)



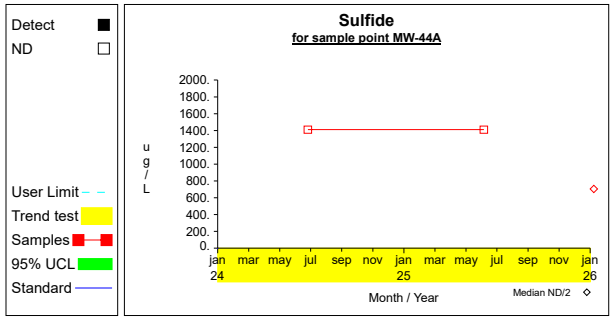
Graph 190



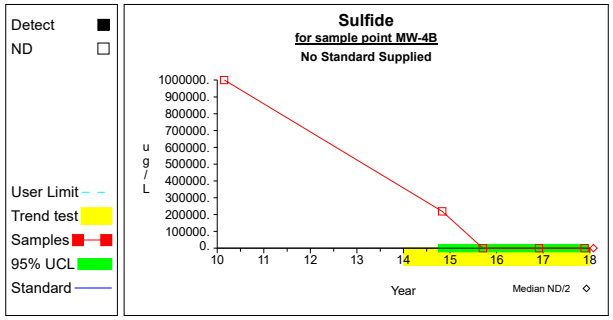
Graph 191



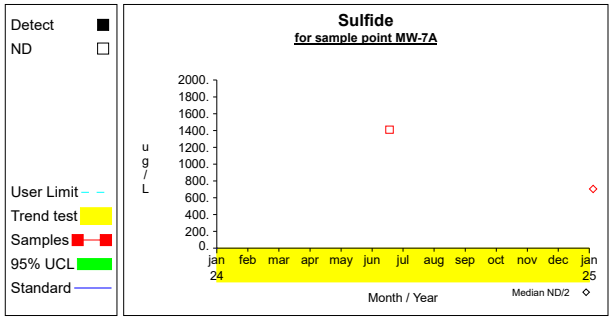
Graph 192



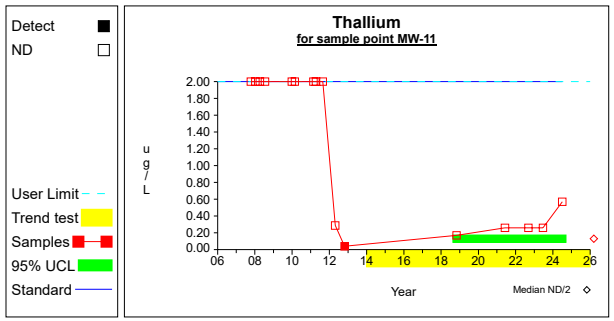
Graph 193



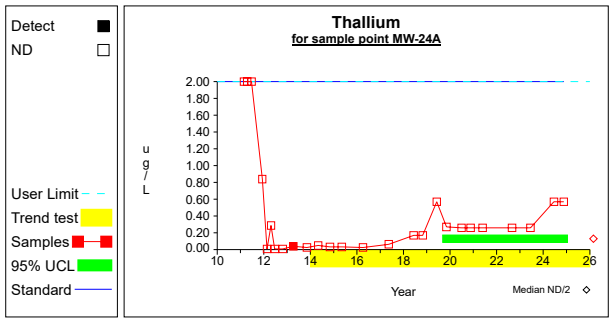
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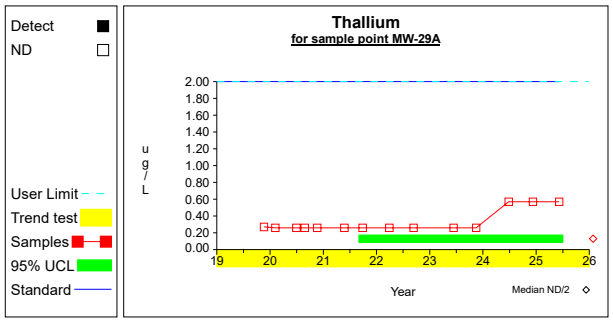
Graph 195



Graph 196

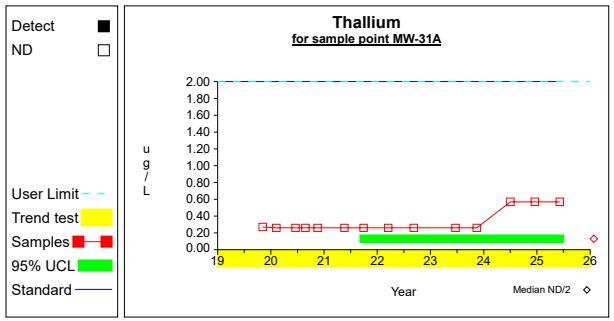


Graph 197

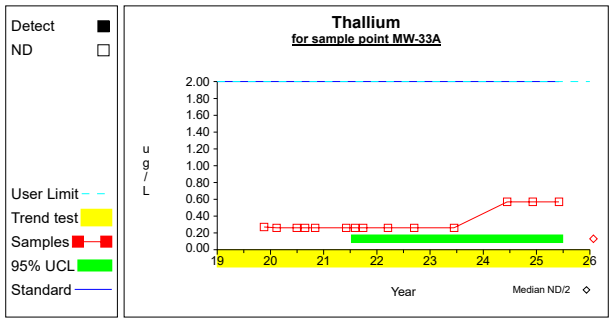


Graph 198

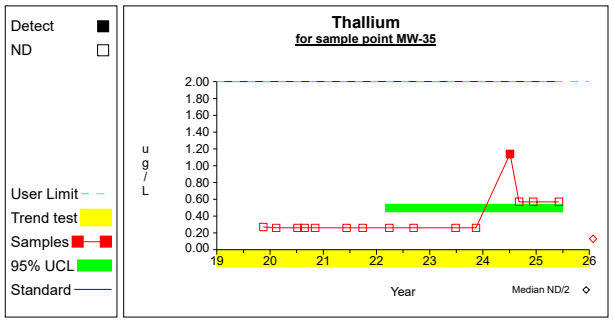
Confidence Limits (Assessment)



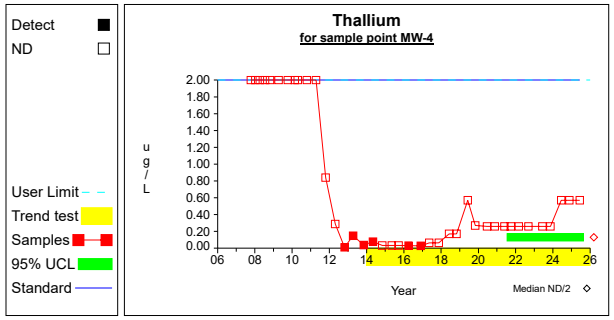
Graph 199



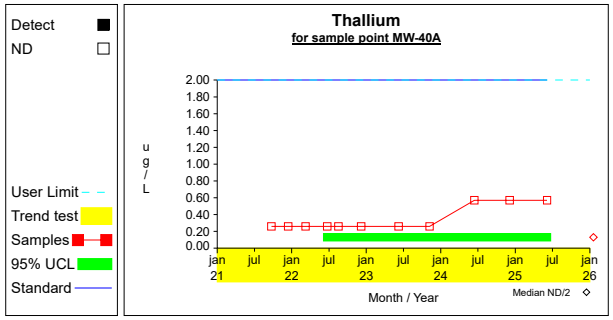
Graph 200



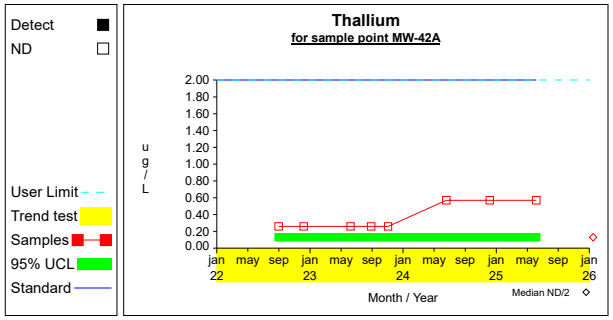
Graph 201



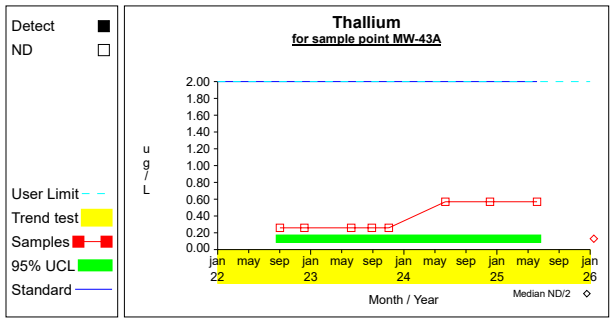
Graph 202



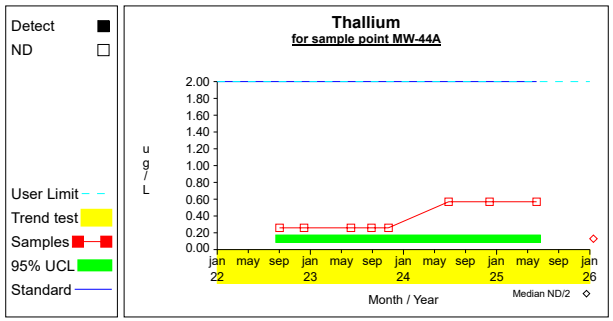
Graph 203



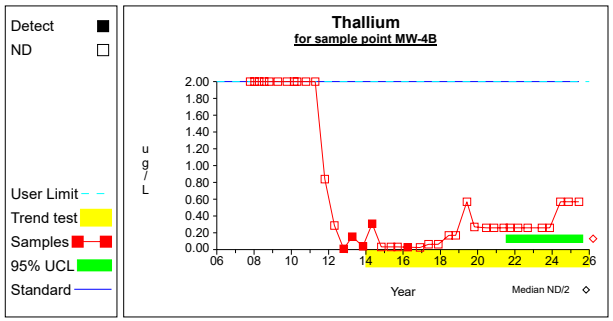
Graph 204



Graph 205

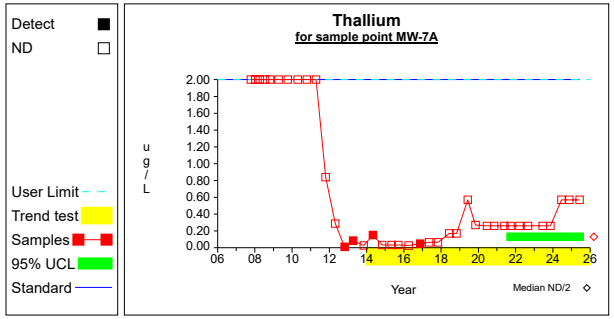


Graph 206

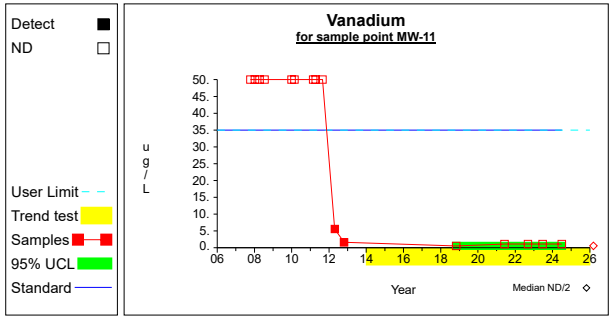


Graph 207

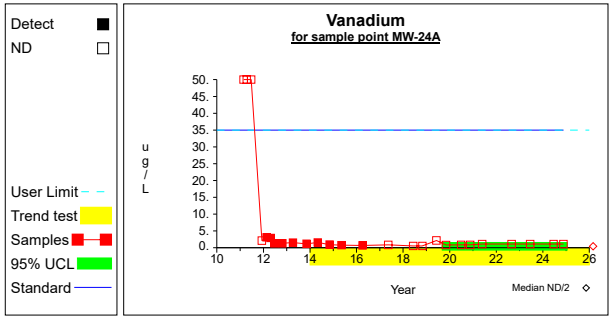
Confidence Limits (Assessment)



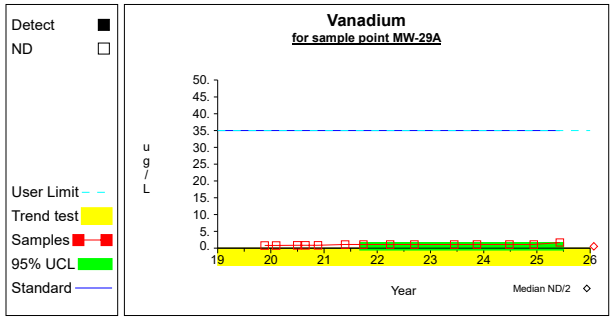
Graph 208



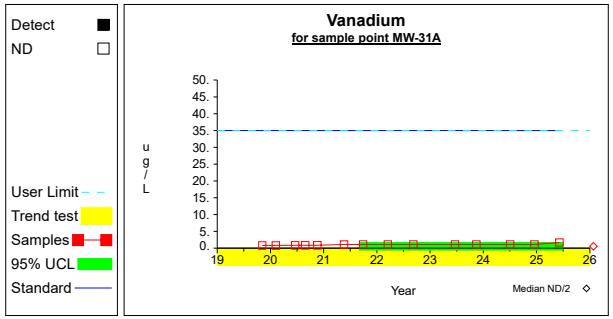
Graph 209



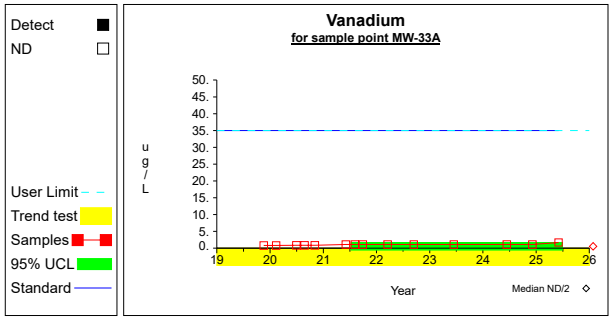
Graph 210



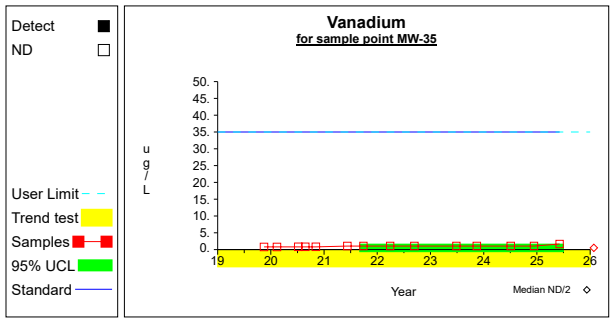
Graph 211



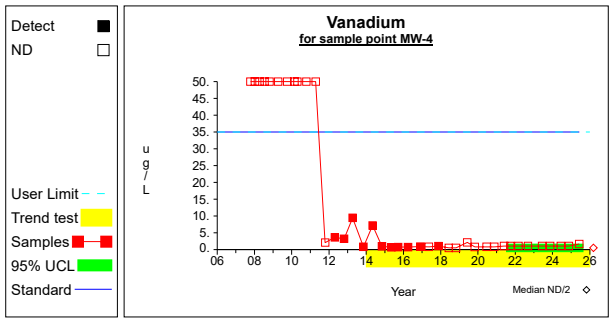
Graph 212



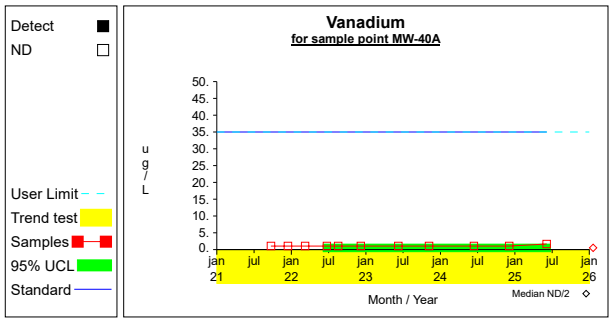
Graph 213



Graph 214

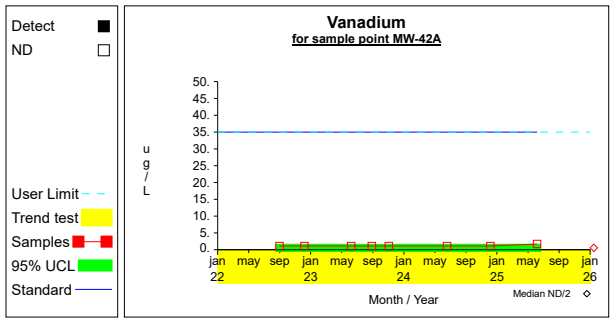


Graph 215

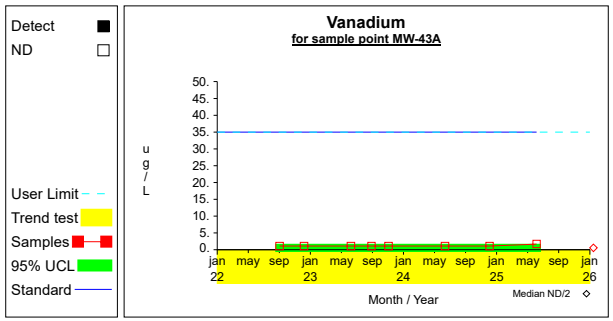


Graph 216

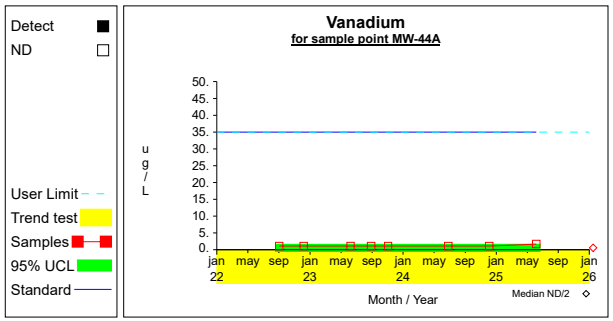
Confidence Limits (Assessment)



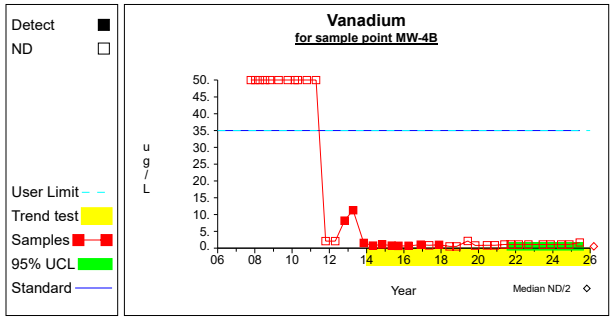
Graph 217



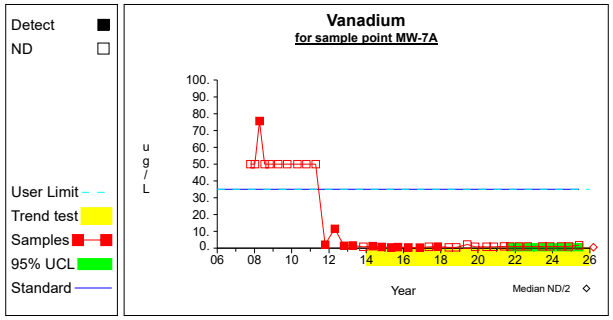
Graph 218



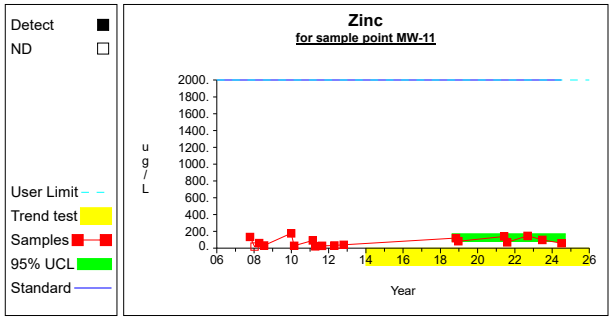
Graph 219



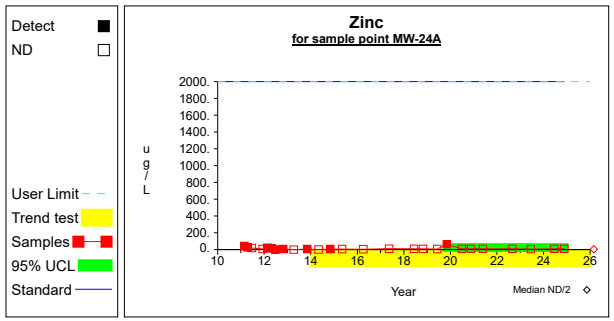
Graph 220



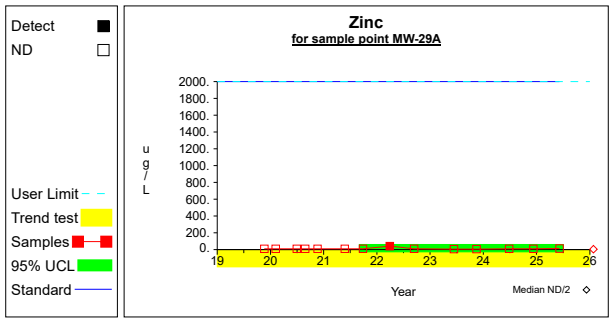
Graph 221



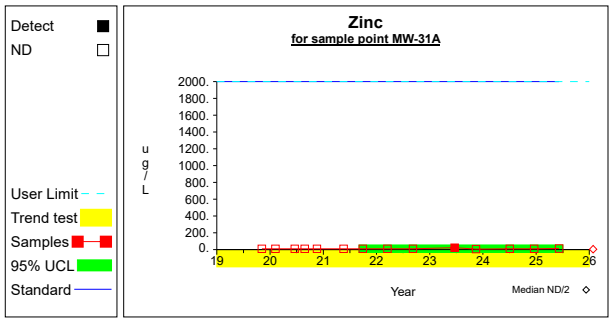
Graph 222



Graph 223

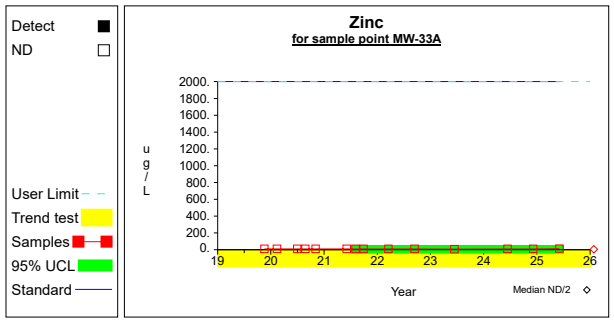


Graph 224

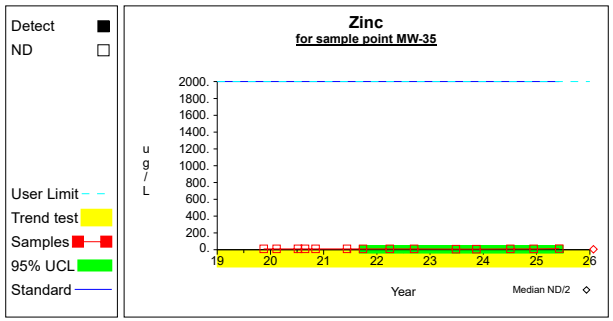


Graph 225

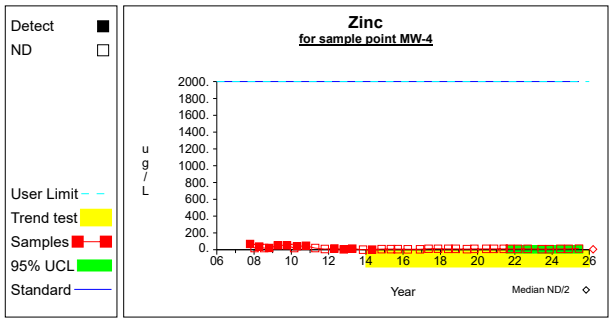
Confidence Limits (Assessment)



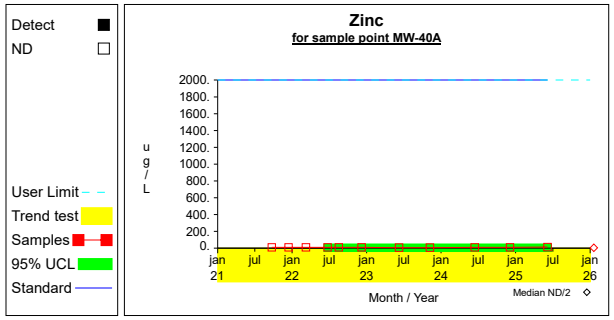
Graph 226



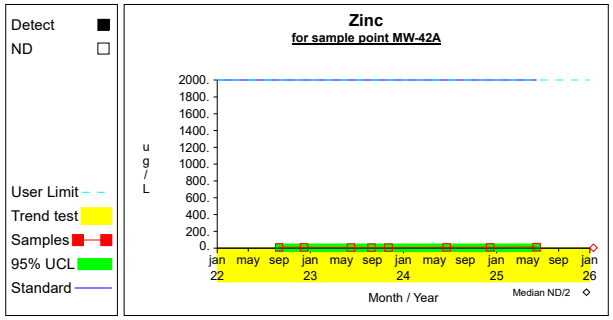
Graph 227



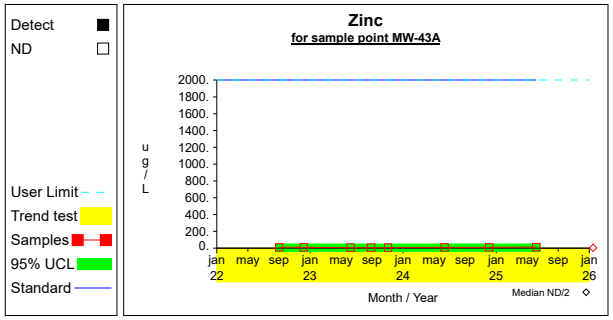
Graph 228



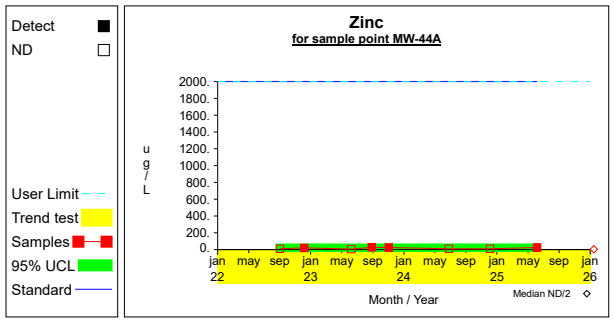
Graph 229



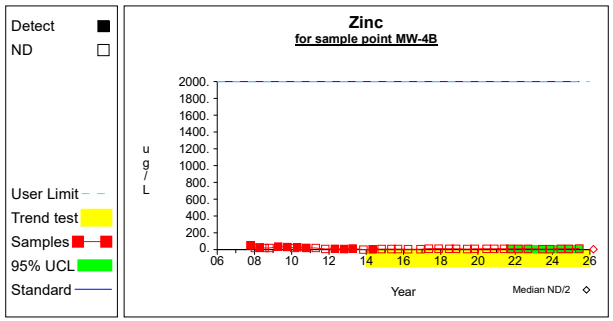
Graph 230



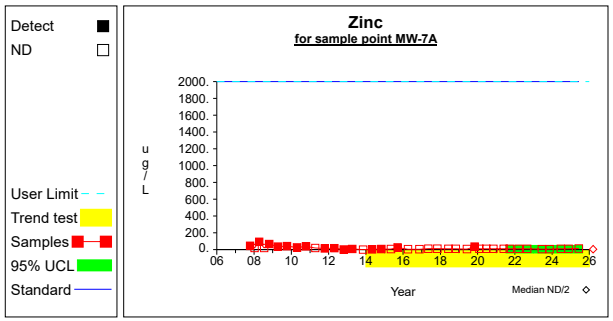
Graph 231



Graph 232



Graph 233



Graph 234

Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Antimony	ug/L	MW-11	5	0.500	0.000	0.953	0.500	0.500	6.000		
Antimony	ug/L	MW-24A	8	0.472	0.613	0.670	0.061	0.883	6.000		
Antimony	ug/L	MW-29A	8	0.500	0.000	0.670	0.500	0.500	6.000		
Antimony	ug/L	MW-31A	8	0.715	0.608	0.670	0.308	1.122	6.000		
Antimony	ug/L	MW-33A	8	0.345	0.000	0.670	0.345	0.345	6.000		
Antimony	ug/L	MW-35	8	0.345	0.000	0.670	0.345	0.345	6.000		
Antimony	ug/L	MW-4	8	0.265	0.000	0.670	0.265	0.265	6.000		
Antimony	ug/L	MW-40A	8	0.500	0.000	0.670	0.500	0.500	6.000		
Antimony	ug/L	MW-42A	8	0.500	0.000	0.670	0.500	0.500	6.000		
Antimony	ug/L	MW-43A	8	0.500	0.000	0.670	0.500	0.500	6.000		
Antimony	ug/L	MW-44A	8	0.500	0.000	0.670	0.500	0.500	6.000		
Antimony	ug/L	MW-4B	8	0.255	0.000	0.670	0.255	0.255	6.000		
Antimony	ug/L	MW-7A	8	0.345	0.000	0.670	0.345	0.345	6.000		
Arsenic	ug/L	MW-11	5	0.285	0.000	0.953	0.285	0.285	10.000		
Arsenic	ug/L	MW-24A	8	0.285	0.000	0.670	0.285	0.285	10.000		
Arsenic	ug/L	MW-29A	8	5.534	2.792	0.670	3.664	7.405	10.000		
Arsenic	ug/L	MW-31A	8	0.265	0.000	0.670	0.265	0.265	10.000		
Arsenic	ug/L	MW-33A	8	30.216	36.386	0.670	5.843	54.588	10.000		**
Arsenic	ug/L	MW-35	8	0.375	0.000	0.670	0.375	0.375	10.000		
Arsenic	ug/L	MW-4	8	0.336	0.000	0.670	0.336	0.336	10.000		
Arsenic	ug/L	MW-40A	8	0.375	0.000	0.670	0.375	0.375	10.000		
Arsenic	ug/L	MW-42A	8	0.602	0.953	0.670	0.000	1.240	10.000		
Arsenic	ug/L	MW-43A	8	7.778	1.220	0.670	6.960	8.595	10.000		
Arsenic	ug/L	MW-44A	8	0.265	0.000	0.670	0.265	0.265	10.000		

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

Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Arsenic	ug/L	MW-4B	8	0.336	0.000	0.670	0.336	0.336	10.000		
Arsenic	ug/L	MW-7A	8	0.336	0.000	0.670	0.336	0.336	10.000		
Barium	ug/L	MW-11	5	16.600	1.764	0.953	14.919	18.281	2000.000		
Barium	ug/L	MW-24A	8	117.850	17.431	0.670	106.175	129.525	2000.000		
Barium	ug/L	MW-29A	8	167.250	20.401	0.670	153.585	180.915	2000.000		
Barium	ug/L	MW-31A	8	252.500	85.674	0.670	195.115	309.885	2000.000		
Barium	ug/L	MW-33A	8	192.250	81.289	0.670	137.801	246.699	2000.000		
Barium	ug/L	MW-35	8	304.750	80.288	0.670	250.972	358.528	2000.000		
Barium	ug/L	MW-4	8	459.625	132.726	0.670	370.723	548.527	2000.000		
Barium	ug/L	MW-40A	8	216.000	27.923	0.670	197.297	234.703	2000.000	dec	
Barium	ug/L	MW-42A	8	145.800	61.713	0.670	104.464	187.136	2000.000		
Barium	ug/L	MW-43A	8	198.875	43.202	0.670	169.938	227.812	2000.000		
Barium	ug/L	MW-44A	8	187.250	42.132	0.670	159.030	215.470	2000.000		
Barium	ug/L	MW-4B	8	233.000	78.060	0.670	180.714	285.286	2000.000		
Barium	ug/L	MW-7A	8	274.863	135.529	0.670	184.083	365.642	2000.000		
Beryllium	ug/L	MW-11	5	0.135	0.000	0.953	0.135	0.135	4.000		
Beryllium	ug/L	MW-24A	8	0.135	0.000	0.670	0.135	0.135	4.000		
Beryllium	ug/L	MW-29A	8	0.135	0.000	0.670	0.135	0.135	4.000		
Beryllium	ug/L	MW-31A	8	0.135	0.000	0.670	0.135	0.135	4.000		
Beryllium	ug/L	MW-33A	8	0.135	0.000	0.670	0.135	0.135	4.000		
Beryllium	ug/L	MW-35	8	0.135	0.000	0.670	0.135	0.135	4.000		
Beryllium	ug/L	MW-4	8	0.135	0.000	0.670	0.135	0.135	4.000		
Beryllium	ug/L	MW-40A	8	0.135	0.000	0.670	0.135	0.135	4.000		
Beryllium	ug/L	MW-42A	8	0.165	0.000	0.670	0.165	0.165	4.000		

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Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Beryllium	ug/L	MW-43A	8	0.165	0.000	0.670	0.165	0.165	4.000		
Beryllium	ug/L	MW-44A	8	0.165	0.000	0.670	0.165	0.165	4.000		
Beryllium	ug/L	MW-4B	8	0.135	0.000	0.670	0.135	0.135	4.000		
Beryllium	ug/L	MW-7A	8	0.135	0.000	0.670	0.135	0.135	4.000		
Cadmium	ug/L	MW-11	5	0.030	0.000	0.953	0.030	0.030	5.000		
Cadmium	ug/L	MW-24A	8	0.080	0.108	0.670	0.008	0.152	5.000		
Cadmium	ug/L	MW-29A	8	0.028	0.000	0.670	0.028	0.028	5.000		
Cadmium	ug/L	MW-31A	8	0.483	0.705	0.670	0.011	0.955	5.000		
Cadmium	ug/L	MW-33A	8	0.036	0.029	0.670	0.016	0.055	5.000		
Cadmium	ug/L	MW-35	8	0.026	0.000	0.670	0.026	0.026	5.000		
Cadmium	ug/L	MW-4	8	0.084	0.073	0.670	0.035	0.133	5.000		
Cadmium	ug/L	MW-40A	8	0.028	0.000	0.670	0.028	0.028	5.000		
Cadmium	ug/L	MW-42A	8	0.079	0.082	0.670	0.024	0.134	5.000		
Cadmium	ug/L	MW-43A	8	0.050	0.000	0.670	0.050	0.050	5.000		
Cadmium	ug/L	MW-44A	8	0.311	0.275	0.670	0.127	0.495	5.000		
Cadmium	ug/L	MW-4B	8	0.030	0.000	0.670	0.030	0.030	5.000		
Cadmium	ug/L	MW-7A	8	0.030	0.000	0.670	0.030	0.030	5.000		
Chromium	ug/L	MW-11	5	0.550	0.000	0.953	0.550	0.550	100.000		
Chromium	ug/L	MW-24A	8	0.550	0.000	0.670	0.550	0.550	100.000		
Chromium	ug/L	MW-29A	8	0.550	0.000	0.670	0.550	0.550	100.000		
Chromium	ug/L	MW-31A	8	1.395	2.390	0.670	0.000	2.996	100.000		
Chromium	ug/L	MW-33A	8	0.550	0.000	0.670	0.550	0.550	100.000		
Chromium	ug/L	MW-35	8	0.550	0.000	0.670	0.550	0.550	100.000		
Chromium	ug/L	MW-4	8	0.550	0.000	0.670	0.550	0.550	100.000		

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Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Chromium	ug/L	MW-40A	8	0.550	0.000	0.670	0.550	0.550	100.000		
Chromium	ug/L	MW-42A	8	0.550	0.000	0.670	0.550	0.550	100.000		
Chromium	ug/L	MW-43A	8	1.981	4.048	0.670	0.000	4.693	100.000		
Chromium	ug/L	MW-44A	8	0.550	0.000	0.670	0.550	0.550	100.000		
Chromium	ug/L	MW-4B	8	0.550	0.000	0.670	0.550	0.550	100.000		
Chromium	ug/L	MW-7A	8	0.550	0.000	0.670	0.550	0.550	100.000		
Cobalt	ug/L	MW-11	6	1.800	3.145	0.822	0.000	4.386	3.400		**
Cobalt	ug/L	MW-24A	8	0.111	0.185	0.670	0.000	0.235	3.400		
Cobalt	ug/L	MW-29A	8	10.969	4.958	0.670	7.648	14.289	3.400		**
Cobalt	ug/L	MW-31A	8	6.820	10.290	0.670	0.000	13.712	3.400	dec	**
Cobalt	ug/L	MW-33A	8	2.330	1.889	0.670	1.065	3.595	3.400		**
Cobalt	ug/L	MW-35	8	5.919	2.475	0.670	4.261	7.577	3.400		**
Cobalt	ug/L	MW-4	8	1.481	0.686	0.670	1.021	1.940	3.400		
Cobalt	ug/L	MW-40A	8	1.655	0.439	0.670	1.361	1.948	3.400		
Cobalt	ug/L	MW-42A	8	2.441	1.076	0.670	1.720	3.162	3.400		
Cobalt	ug/L	MW-43A	8	4.048	0.609	0.670	3.639	4.456	3.400		**
Cobalt	ug/L	MW-44A	8	0.268	0.253	0.670	0.098	0.437	3.400		
Cobalt	ug/L	MW-4B	8	0.085	0.000	0.670	0.085	0.085	3.400		
Cobalt	ug/L	MW-7A	8	0.045	0.000	0.670	0.045	0.046	3.400		
Copper	ug/L	MW-11	5	0.900	0.000	0.953	0.900	0.900	1300.000		
Copper	ug/L	MW-24A	8	0.900	0.000	0.670	0.900	0.900	1300.000		
Copper	ug/L	MW-29A	8	0.900	0.000	0.670	0.900	0.900	1300.000		
Copper	ug/L	MW-31A	8	4.567	7.450	0.670	0.000	9.557	1300.000		
Copper	ug/L	MW-33A	8	1.908	2.850	0.670	0.000	3.816	1300.000		

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Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Copper	ug/L	MW-35	8	0.900	0.000	0.670	0.900	0.900	1300.000		
Copper	ug/L	MW-4	8	0.900	0.000	0.670	0.900	0.900	1300.000		
Copper	ug/L	MW-40A	8	1.751	2.408	0.670	0.139	3.364	1300.000		
Copper	ug/L	MW-42A	8	1.996	3.101	0.670	0.000	4.073	1300.000		
Copper	ug/L	MW-43A	8	1.588	1.945	0.670	0.285	2.890	1300.000		
Copper	ug/L	MW-44A	8	0.900	0.000	0.670	0.900	0.900	1300.000		
Copper	ug/L	MW-4B	8	0.900	0.000	0.670	0.900	0.900	1300.000		
Copper	ug/L	MW-7A	8	0.800	0.000	0.670	0.800	0.800	1300.000		
Field pH	SU	MW-11	6	7.508	0.525	0.822	7.077	7.940			
Field pH	SU	MW-24A	8	6.989	0.470	0.670	6.674	7.304			
Field pH	SU	MW-29A	8	6.717	0.429	0.670	6.430	7.005			
Field pH	SU	MW-31A	8	6.926	0.449	0.670	6.626	7.227			
Field pH	SU	MW-33A	8	6.914	0.594	0.670	6.516	7.312			
Field pH	SU	MW-35	8	6.940	0.477	0.670	6.621	7.259			
Field pH	SU	MW-4	8	6.693	0.466	0.670	6.380	7.005			
Field pH	SU	MW-40A	8	7.144	0.416	0.670	6.865	7.422			
Field pH	SU	MW-42A	8	7.223	0.509	0.670	6.882	7.563			
Field pH	SU	MW-43A	8	6.896	0.370	0.670	6.649	7.144			
Field pH	SU	MW-44A	8	6.960	0.550	0.670	6.591	7.329			
Field pH	SU	MW-4B	8	6.950	0.463	0.670	6.640	7.260			
Field pH	SU	MW-7A	8	7.188	0.544	0.670	6.823	7.552			
Field Specific Conductance	umhos/cm	MW-11	6	1170.917	169.201	0.822	1031.769	1310.065			
Field Specific Conductance	umhos/cm	MW-24A	8	1159.845	391.046	0.670	897.917	1421.773			
Field Specific Conductance	umhos/cm	MW-29A	8	2083.400	450.072	0.670	1781.935	2384.865		inc	

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Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Field Specific Conductance	umhos/cm	MW-31A	8	2621.075	1093.034	0.670	1888.946	3353.204		inc	
Field Specific Conductance	umhos/cm	MW-33A	8	1192.605	752.352	0.670	688.669	1696.541		inc	
Field Specific Conductance	umhos/cm	MW-35	8	1816.488	920.557	0.670	1199.886	2433.089			
Field Specific Conductance	umhos/cm	MW-4	8	1550.825	617.034	0.670	1137.528	1964.122		inc	
Field Specific Conductance	umhos/cm	MW-40A	8	1501.363	809.306	0.670	959.279	2043.446		inc	
Field Specific Conductance	umhos/cm	MW-42A	8	1757.739	1021.247	0.670	1073.694	2441.784			
Field Specific Conductance	umhos/cm	MW-43A	8	1707.400	887.129	0.670	1113.189	2301.611			
Field Specific Conductance	umhos/cm	MW-44A	8	1792.288	988.512	0.670	1130.169	2454.406			
Field Specific Conductance	umhos/cm	MW-4B	8	985.093	794.583	0.670	452.870	1517.315			
Field Specific Conductance	umhos/cm	MW-7A	8	1193.819	557.924	0.670	820.114	1567.524		inc	
Lead	ug/L	MW-11	5	0.120	0.000	0.953	0.120	0.120	15.000		
Lead	ug/L	MW-24A	8	0.120	0.000	0.670	0.120	0.120	15.000		
Lead	ug/L	MW-29A	8	0.120	0.000	0.670	0.120	0.120	15.000		
Lead	ug/L	MW-31A	8	0.315	0.552	0.670	0.000	0.684	15.000		
Lead	ug/L	MW-33A	8	0.577	1.115	0.670	0.000	1.324	15.000		
Lead	ug/L	MW-35	8	0.120	0.000	0.670	0.120	0.120	15.000		
Lead	ug/L	MW-4	8	0.120	0.000	0.670	0.120	0.120	15.000		
Lead	ug/L	MW-40A	8	0.120	0.000	0.670	0.120	0.120	15.000		
Lead	ug/L	MW-42A	8	0.120	0.000	0.670	0.120	0.120	15.000		
Lead	ug/L	MW-43A	8	0.120	0.000	0.670	0.120	0.120	15.000		
Lead	ug/L	MW-44A	8	0.120	0.000	0.670	0.120	0.120	15.000		
Lead	ug/L	MW-4B	8	0.120	0.000	0.670	0.120	0.120	15.000		
Lead	ug/L	MW-7A	8	0.120	0.000	0.670	0.120	0.120	15.000		
Nickel	ug/L	MW-11	7	29.029	9.364	0.734	22.154	35.903	100.000	dec	

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Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Nickel	ug/L	MW-24A	8	5.980	2.306	0.670	4.435	7.525	100.000	dec	
Nickel	ug/L	MW-29A	8	66.775	11.575	0.670	59.022	74.528	100.000		
Nickel	ug/L	MW-31A	8	43.963	28.239	0.670	25.048	62.877	100.000		
Nickel	ug/L	MW-33A	8	2.049	2.037	0.670	0.684	3.413	100.000		
Nickel	ug/L	MW-35	8	21.588	6.462	0.670	17.259	25.916	100.000		
Nickel	ug/L	MW-4	8	5.894	2.370	0.670	4.307	7.481	100.000		
Nickel	ug/L	MW-40A	8	13.644	3.887	0.670	11.040	16.247	100.000		
Nickel	ug/L	MW-42A	8	18.903	6.484	0.670	14.560	23.245	100.000		
Nickel	ug/L	MW-43A	8	28.075	7.834	0.670	22.827	33.323	100.000		
Nickel	ug/L	MW-44A	8	41.738	19.162	0.670	28.903	54.572	100.000		
Nickel	ug/L	MW-4B	8	0.950	0.000	0.670	0.950	0.950	100.000		
Nickel	ug/L	MW-7A	8	3.934	4.603	0.670	0.851	7.017	100.000		
Selenium	ug/L	MW-11	5	0.480	0.000	0.953	0.480	0.480	50.000		
Selenium	ug/L	MW-24A	8	0.500	0.000	0.670	0.500	0.500	50.000		
Selenium	ug/L	MW-29A	8	0.500	0.000	0.670	0.500	0.500	50.000		
Selenium	ug/L	MW-31A	8	0.500	0.000	0.670	0.500	0.500	50.000		
Selenium	ug/L	MW-33A	8	0.500	0.000	0.670	0.500	0.500	50.000		
Selenium	ug/L	MW-35	8	0.500	0.000	0.670	0.500	0.500	50.000		
Selenium	ug/L	MW-4	8	0.491	0.000	0.670	0.491	0.491	50.000		
Selenium	ug/L	MW-40A	8	0.480	0.000	0.670	0.480	0.480	50.000		
Selenium	ug/L	MW-42A	8	0.700	0.000	0.670	0.700	0.700	50.000		
Selenium	ug/L	MW-43A	8	0.700	0.000	0.670	0.700	0.700	50.000		
Selenium	ug/L	MW-44A	8	0.700	0.000	0.670	0.700	0.700	50.000		
Selenium	ug/L	MW-4B	8	0.500	0.000	0.670	0.500	0.500	50.000		

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Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Selenium	ug/L	MW-7A	8	0.491	0.000	0.670	0.491	0.491	50.000		
Silver	ug/L	MW-11	5	0.245	0.000	0.953	0.245	0.245	100.000		
Silver	ug/L	MW-24A	8	0.150	0.000	0.670	0.150	0.150	100.000		
Silver	ug/L	MW-29A	8	0.321	0.315	0.670	0.110	0.532	100.000		
Silver	ug/L	MW-31A	8	0.210	0.000	0.670	0.210	0.210	100.000		
Silver	ug/L	MW-33A	8	0.210	0.000	0.670	0.210	0.210	100.000		
Silver	ug/L	MW-35	8	0.210	0.000	0.670	0.210	0.210	100.000		
Silver	ug/L	MW-4	8	0.313	0.362	0.670	0.070	0.556	100.000		
Silver	ug/L	MW-40A	8	0.245	0.000	0.670	0.245	0.245	100.000		
Silver	ug/L	MW-42A	8	0.250	0.000	0.670	0.250	0.250	100.000		
Silver	ug/L	MW-43A	8	1.389	3.221	0.670	0.000	3.546	100.000		
Silver	ug/L	MW-44A	8	0.345	0.269	0.670	0.165	0.525	100.000		
Silver	ug/L	MW-4B	8	0.833	1.833	0.670	0.000	2.061	100.000		
Silver	ug/L	MW-7A	8	0.185	0.000	0.670	0.185	0.185	100.000		
Sulfide	ug/L	MW-11	2								*
Sulfide	ug/L	MW-24A	2								*
Sulfide	ug/L	MW-29A	8	115.500	0.000	0.670	115.500	115.500			
Sulfide	ug/L	MW-31A	3								*
Sulfide	ug/L	MW-33A	2								*
Sulfide	ug/L	MW-35	2								*
Sulfide	ug/L	MW-4	5	109.500	0.000	0.953	109.500	109.500			
Sulfide	ug/L	MW-40A	2								*
Sulfide	ug/L	MW-42A	2								*
Sulfide	ug/L	MW-43A	2								*

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Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Sulfide	ug/L	MW-44A	2								*
Sulfide	ug/L	MW-4B	4	109.500	0.000	1.176	109.500	109.500			
Sulfide	ug/L	MW-7A	1								*
Thallium	ug/L	MW-11	5	0.130	0.000	0.953	0.130	0.130	2.000		
Thallium	ug/L	MW-24A	8	0.130	0.000	0.670	0.130	0.130	2.000		
Thallium	ug/L	MW-29A	8	0.130	0.000	0.670	0.130	0.130	2.000		
Thallium	ug/L	MW-31A	8	0.130	0.000	0.670	0.130	0.130	2.000		
Thallium	ug/L	MW-33A	8	0.130	0.000	0.670	0.130	0.130	2.000		
Thallium	ug/L	MW-35	8	0.256	0.357	0.670	0.017	0.495	2.000		
Thallium	ug/L	MW-4	8	0.130	0.000	0.670	0.130	0.130	2.000		
Thallium	ug/L	MW-40A	8	0.130	0.000	0.670	0.130	0.130	2.000		
Thallium	ug/L	MW-42A	8	0.130	0.000	0.670	0.130	0.130	2.000		
Thallium	ug/L	MW-43A	8	0.130	0.000	0.670	0.130	0.130	2.000		
Thallium	ug/L	MW-44A	8	0.130	0.000	0.670	0.130	0.130	2.000		
Thallium	ug/L	MW-4B	8	0.130	0.000	0.670	0.130	0.130	2.000		
Thallium	ug/L	MW-7A	8	0.130	0.000	0.670	0.130	0.130	2.000		
Vanadium	ug/L	MW-11	5	0.550	0.000	0.953	0.550	0.550	35.000		
Vanadium	ug/L	MW-24A	8	0.425	0.000	0.670	0.425	0.425	35.000		
Vanadium	ug/L	MW-29A	8	0.550	0.000	0.670	0.550	0.550	35.000		
Vanadium	ug/L	MW-31A	8	0.550	0.000	0.670	0.550	0.550	35.000		
Vanadium	ug/L	MW-33A	8	0.550	0.000	0.670	0.550	0.550	35.000		
Vanadium	ug/L	MW-35	8	0.550	0.000	0.670	0.550	0.550	35.000		
Vanadium	ug/L	MW-4	8	0.550	0.000	0.670	0.550	0.550	35.000		
Vanadium	ug/L	MW-40A	8	0.550	0.000	0.670	0.550	0.550	35.000		

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Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Vanadium	ug/L	MW-42A	8	0.550	0.000	0.670	0.550	0.550	35.000		
Vanadium	ug/L	MW-43A	8	0.550	0.000	0.670	0.550	0.550	35.000		
Vanadium	ug/L	MW-44A	8	0.550	0.000	0.670	0.550	0.550	35.000		
Vanadium	ug/L	MW-4B	8	0.550	0.000	0.670	0.550	0.550	35.000		
Vanadium	ug/L	MW-7A	8	0.550	0.000	0.670	0.550	0.550	35.000		
Zinc	ug/L	MW-11	7	102.343	33.741	0.734	77.573	127.112	2000.000		
Zinc	ug/L	MW-24A	8	12.419	21.408	0.670	0.000	26.758	2000.000		
Zinc	ug/L	MW-29A	8	9.638	13.117	0.670	0.852	18.423	2000.000		
Zinc	ug/L	MW-31A	8	7.313	6.541	0.670	2.931	11.694	2000.000		
Zinc	ug/L	MW-33A	8	5.000	0.000	0.670	5.000	5.000	2000.000		
Zinc	ug/L	MW-35	8	5.000	0.000	0.670	5.000	5.000	2000.000		
Zinc	ug/L	MW-4	8	5.000	0.000	0.670	5.000	5.000	2000.000		
Zinc	ug/L	MW-40A	8	5.000	0.000	0.670	5.000	5.000	2000.000		
Zinc	ug/L	MW-42A	8	4.850	0.000	0.670	4.850	4.850	2000.000		
Zinc	ug/L	MW-43A	8	4.850	0.000	0.670	4.850	4.850	2000.000		
Zinc	ug/L	MW-44A	8	15.062	11.060	0.670	7.654	22.471	2000.000		
Zinc	ug/L	MW-4B	8	5.000	0.000	0.670	5.000	5.000	2000.000		
Zinc	ug/L	MW-7A	8	5.000	0.000	0.670	5.000	5.000	2000.000		

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Worksheet 6 - Assessment Monitoring
Antimony (ug/L) at MW-11

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.5** / **5** = **0.5**	Compute the mean of the last 5 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.25** - **6.25**/**5**) / (**5**-1))^{½} = **0.0**	Compute sd of the last 5 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.5** - **2.132** * **0.0**/**5**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 5 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.5** + **2.132** * **0.0**/**5**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 5 measurements.
5	N' = **N** * (**N**-1) / 2 = **5** * (**5**-1) / 2 = **10**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**10** ± **2.576** * **0.0**^{½}) / 2 = [**5.0**, **5.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Antimony (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **3.775** / **8** = **0.472**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**4.415** - **14.251**/**8**) / (**8**-1))^{½} = **0.613**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.472** - **1.895** * **0.613**/**8**^{½} = **0.061**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.472** + **1.895** * **0.613**/**8**^{½} = **0.883**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **159.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **159.667**^{½}) / 2 = [**43.725**, **76.275**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Antimony (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.0** / **8** = **0.5**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.0** - **16.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.5** - **1.895** * **0.0**/**8**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.5** + **1.895** * **0.0**/**8**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Antimony (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **5.72** / **8** = **0.715**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**6.678** - **32.718**/**8**) / (**8**-1))^{½} = **0.608**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.715** - **1.895** * **0.608**/**8**^{½} = **0.308**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.715** + **1.895** * **0.608**/**8**^{½} = **1.122**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **65.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **65.0**^{½}) / 2 = [**35.116**, **55.884**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Antimony (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.76** / **8** = **0.345**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.952** - **7.618**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.345** - **1.895** * **0.0**/**8**^{½} = **0.345**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.345** + **1.895** * **0.0**/**8**^{½} = **0.345**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Antimony (ug/L) at MW-35

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.76** / **8** = **0.345**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.952** - **7.618**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.345** - **1.895** * **0.0**/**8**^{½} = **0.345**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.345** + **1.895** * **0.0**/**8**^{½} = **0.345**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Antimony (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.12** / **8** = **0.265**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.562** - **4.494**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.265** - **1.895** * **0.0**/**8**^{½} = **0.265**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.265** + **1.895** * **0.0**/**8**^{½} = **0.265**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **337.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **337.0**^{½}) / 2 = [**102.855**, **150.145**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Antimony (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.0** / **8** = **0.5**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.0** - **16.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.5** - **1.895** * **0.0**/**8**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.5** + **1.895** * **0.0**/**8**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **0.0**^{½}) / 2 = [**27.5**, **27.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Antimony (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.0** / **8** = **0.5**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.0** - **16.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.5** - **1.895** * **0.0**/**8**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.5** + **1.895** * **0.0**/**8**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Antimony (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.0** / **8** = **0.5**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.0** - **16.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.5** - **1.895** * **0.0**/**8**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.5** + **1.895** * **0.0**/**8**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Antimony (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.0** / **8** = **0.5**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.0** - **16.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.5** - **1.895** * **0.0**/**8**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.5** + **1.895** * **0.0**/**8**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Antimony (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.04** / **8** = **0.255**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.52** - **4.162**/**8**) / (**8**-1))^{½} = **5.40**x**10**$^{-9}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.255** - **1.895** * **5.40**x**10**$^{-9}$/**8**^{½} = **0.255**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.255** + **1.895** * **5.40**x**10**$^{-9}$/**8**^{½} = **0.255**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **176.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **176.0**^{½}) / 2 = [**109.413**, **143.587**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Antimony (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.76** / **8** = **0.345**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.952** - **7.618**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.345** - **1.895** * **0.0**/**8**^{½} = **0.345**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.345** + **1.895** * **0.0**/**8**^{½} = **0.345**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **24** * (**24**-1) / 2 = **276**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **528.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**276** ± **2.576** * **528.667**^{½}) / 2 = [**108.385**, **167.615**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic (ug/L) at MW-11

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.425** / **5** = **0.285**	Compute the mean of the last 5 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.406** - **2.031**/**5**) / (**5**-1))^{½} = **3.86x10^{-9}**	Compute sd of the last 5 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.285** - **2.132** * **3.86x10^{-9}**/**5**^{½} = **0.285**	Compute lower confidence limit for the mean of the last 5 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.285** + **2.132** * **3.86x10^{-9}**/**5**^{½} = **0.285**	Compute upper confidence limit for the mean of the last 5 measurements.
5	N' = **N** * (**N**-1) / 2 = **5** * (**5**-1) / 2 = **10**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**10** ± **2.576** * **0.0**^{½}) / 2 = [**5.0**, **5.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.28** / **8** = **0.285**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.65** - **5.198**/**8**) / (**8**-1))^{½} = **2.52**x**10**$^{-9}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.285** - **1.895** * **2.52**x**10**$^{-9}$/**8**^{½} = **0.285**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.285** + **1.895** * **2.52**x**10**$^{-9}$/**8**^{½} = **0.285**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **0.0**^{½}) / 2 = [**60.0**, **60.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **44.275** / **8** = **5.534**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**299.614** - **1960.276**/**8**) / (**8**-1))^{½} = **2.792**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **5.534** - **1.895** * **2.792**/**8**^{½} = **3.664**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **5.534** + **1.895** * **2.792**/**8**^{½} = **7.405**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.563**	Sen's estimator of trend.
7	var(S) = **332.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **332.667**^{½}) / 2 = [**22.008**, **68.992**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.884**, **2.253**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.12** / **8** = **0.265**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.562** - **4.494**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.265** - **1.895** * **0.0**/**8**^{½} = **0.265**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.265** + **1.895** * **0.0**/**8**^{½} = **0.265**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **208.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **208.667**^{½}) / 2 = [**26.894**, **64.106**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.742**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **241.725** / **8** = **30.216**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**16571.71** - **58430.976**/**8**) / (**8**-1))^{½} = **36.386**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **30.216** - **1.895** * **36.386**/**8**^{½} = **5.843**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **30.216** + **1.895** * **36.386**/**8**^{½} = **54.588**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **15** * (**15**-1) / 2 = **105**	Number of sample pairs during trend detection period.
6	S = **-3.49**	Sen's estimator of trend.
7	var(S) = **408.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**105** ± **2.576** * **408.333**^{½}) / 2 = [**26.473**, **78.527**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-17.71**, **11.001**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic (ug/L) at MW-35

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **3.0** / **8** = **0.375**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.125** - **9.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.375** - **1.895** * **0.0**/**8**^{½} = **0.375**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.375** + **1.895** * **0.0**/**8**^{½} = **0.375**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.688** / **8** = **0.336**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.903** - **7.225**/**8**) / (**8**-1))^{½} = **6.19**x**10**$^{-9}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.336** - **1.895** * **6.19**x**10**$^{-9}$/**8**^{½} = **0.336**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.336** + **1.895** * **6.19**x**10**$^{-9}$/**8**^{½} = **0.336**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **337.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **337.0**^{½}) / 2 = [**102.855**, **150.145**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **3.0** / **8** = **0.375**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.125** - **9.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.375** - **1.895** * **0.0**/**8**^{½} = **0.375**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.375** + **1.895** * **0.0**/**8**^{½} = **0.375**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **0.0**^{½}) / 2 = [**27.5**, **27.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.815** / **8** = **0.602**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**9.253** - **23.184**/**8**) / (**8**-1))^{½} = **0.953**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.602** - **1.895** * **0.953**/**8**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.602** + **1.895** * **0.953**/**8**^{½} = **1.24**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **21.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **21.0**^{½}) / 2 = [**8.098**, **19.902**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **62.22** / **8** = **7.778**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**494.335** - **3871.328**/**8**) / (**8**-1))^{½} = **1.22**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **7.778** - **1.895** * **1.22**/**8**^{½} = **6.96**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **7.778** + **1.895** * **1.22**/**8**^{½} = **8.595**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **-0.392**	Sen's estimator of trend.
7	var(S) = **65.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **65.333**^{½}) / 2 = [**3.589**, **24.411**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-2.934**, **2.268**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.12** / **8** = **0.265**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.562** - **4.494**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.265** - **1.895** * **0.0**/**8**^{½} = **0.265**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.265** + **1.895** * **0.0**/**8**^{½} = **0.265**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.688** / **8** = **0.336**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.903** - **7.225**/**8**) / (**8**-1))^{½} = **6.19**x**10**$^{-9}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.336** - **1.895** * **6.19**x**10**$^{-9}$/**8**^{½} = **0.336**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.336** + **1.895** * **6.19**x**10**$^{-9}$/**8**^{½} = **0.336**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **337.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **337.0**^{½}) / 2 = [**102.855**, **150.145**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.688** / **8** = **0.336**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.903** - **7.225**/**8**) / (**8**-1))^{½} = **6.19**x**10**$^{-9}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.336** - **1.895** * **6.19**x**10**$^{-9}$/**8**^{½} = **0.336**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.336** + **1.895** * **6.19**x**10**$^{-9}$/**8**^{½} = **0.336**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **0.0**^{½}) / 2 = [**126.5**, **126.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium (ug/L) at MW-11

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **83.0** / **5** = **16.6**	Compute the mean of the last 5 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1390.24** - **6889.0**/**5**) / (**5**-1))^{½} = **1.764**	Compute sd of the last 5 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **16.6** - **2.132** * **1.764**/**5**^{½} = **14.919**	Compute lower confidence limit for the mean of the last 5 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **16.6** + **2.132** * **1.764**/**5**^{½} = **18.281**	Compute upper confidence limit for the mean of the last 5 measurements.
5	N' = **N** * (**N**-1) / 2 = **5** * (**5**-1) / 2 = **10**	Number of sample pairs during trend detection period.
6	S = **-0.929**	Sen's estimator of trend.
7	var(S) = **16.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**10** ± **2.576** * **16.667**^{½}) / 2 = [**-0.258**, **10.258**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-2.935**, **0.695**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **942.8** / **8** = **117.85**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**113235.84** - **888871.84**/**8**) / (**8**-1))^{½} = **17.431**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **117.85** - **1.895** * **17.431**/**8**^{½} = **106.175**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **117.85** + **1.895** * **17.431**/**8**^{½} = **129.525**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **-3.669**	Sen's estimator of trend.
7	var(S) = **493.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **493.333**^{½}) / 2 = [**31.392**, **88.608**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-10.424**, **3.004**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1338.0** / **8** = **167.25**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**226694.0** - **1.79**x**10^6**/**8**) / (**8**-1))^{½} = **20.401**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **167.25** - **1.895** * **20.401**/**8**^{½} = **153.585**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **167.25** + **1.895** * **20.401**/**8**^{½} = **180.915**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **-8.967**	Sen's estimator of trend.
7	var(S) = **333.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **333.667**^{½}) / 2 = [**21.973**, **69.027**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-26.325**, **4.178**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2020.0** / **8** = **252.5**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**561430.0** - **4.08**x**10^6**/**8**) / (**8**-1))^{½} = **85.674**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **252.5** - **1.895** * **85.674**/**8**^{½} = **195.115**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **252.5** + **1.895** * **85.674**/**8**^{½} = **309.885**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **-41.674**	Sen's estimator of trend.
7	var(S) = **332.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **332.667**^{½}) / 2 = [**22.008**, **68.992**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-110.254**, **23.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1538.0** / **8** = **192.25**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**341936.0** - **2.37**x**10^6**/**8**) / (**8**-1))^{½} = **81.289**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **192.25** - **1.895** * **81.289**/**8**^{½} = **137.801**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **192.25** + **1.895** * **81.289**/**8**^{½} = **246.699**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **10.898**	Sen's estimator of trend.
7	var(S) = **332.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **332.667**^{½}) / 2 = [**22.008**, **68.992**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-20.965**, **40.187**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium (ug/L) at MW-35

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2438.0** / **8** = **304.75**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**788104.0** - **5.94**x**10^6**/**8**) / (**8**-1))^{½} = **80.288**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **304.75** - **1.895** * **80.288**/**8**^{½} = **250.972**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **304.75** + **1.895** * **80.288**/**8**^{½} = **358.528**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **-5.975**	Sen's estimator of trend.
7	var(S) = **333.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **333.667**^{½}) / 2 = [**21.973**, **69.027**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-27.652**, **19.921**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **3677.0** / **8** = **459.625**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.81**x**10^6** - **1.35**x**10^7**/**8**) / (**8**-1))^{½} = **132.726**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **459.625** - **1.895** * **132.726**/**8**^{½} = **370.723**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **459.625** + **1.895** * **132.726**/**8**^{½} = **548.527**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **1.884**	Sen's estimator of trend.
7	var(S) = **1432.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **1432.667**^{½}) / 2 = [**77.748**, **175.252**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-10.018**, **10.274**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1728.0** / **8** = **216.0**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**378706.0** - **2.99**x**10^6**/**8**) / (**8**-1))^{½} = **27.923**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **216.0** - **1.895** * **27.923**/**8**^{½} = **197.297**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **216.0** + **1.895** * **27.923**/**8**^{½} = **234.703**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **-21.128**	Sen's estimator of trend.
7	var(S) = **165.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **165.0**^{½}) / 2 = [**10.955**, **44.045**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-40.936**, **-6.978**]	Two-sided confidence interval for slope.
10	UCL(S) < 0	**Significant decreasing trend.**

Worksheet 6 - Assessment Monitoring
Barium (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1166.4** / **8** = **145.8**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**196720.56** - **1.36**x**10^6**/**8**) / (**8**-1))^{½} = **61.713**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **145.8** - **1.895** * **61.713**/**8**^{½} = **104.464**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **145.8** + **1.895** * **61.713**/**8**^{½} = **187.136**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **10.743**	Sen's estimator of trend.
7	var(S) = **65.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **65.333**^{½}) / 2 = [**3.589**, **24.411**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-155.061**, **51.275**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1591.0** / **8** = **198.875**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**329475.0** - **2.53**x**10^6**/**8**) / (**8**-1))^{½} = **43.202**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **198.875** - **1.895** * **43.202**/**8**^{½} = **169.938**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **198.875** + **1.895** * **43.202**/**8**^{½} = **227.812**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **23.115**	Sen's estimator of trend.
7	var(S) = **65.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **65.333**^{½}) / 2 = [**3.589**, **24.411**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-55.457**, **115.828**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1498.0** / **8** = **187.25**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**292926.0** - **2.24**x**10^6**/**8**) / (**8**-1))^{½} = **42.132**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **187.25** - **1.895** * **42.132**/**8**^{½} = **159.03**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **187.25** + **1.895** * **42.132**/**8**^{½} = **215.47**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **-1.325**	Sen's estimator of trend.
7	var(S) = **65.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **65.333**^{½}) / 2 = [**3.589**, **24.411**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-96.103**, **74.616**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1864.0** / **8** = **233.0**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**476966.0** - **3.47**x**10^6**/**8**) / (**8**-1))^{½} = **78.06**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **233.0** - **1.895** * **78.06**/**8**^{½} = **180.714**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **233.0** + **1.895** * **78.06**/**8**^{½} = **285.286**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **25** * (**25**-1) / 2 = **300**	Number of sample pairs during trend detection period.
6	S = **-3.956**	Sen's estimator of trend.
7	var(S) = **1832.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**300** ± **2.576** * **1832.333**^{½}) / 2 = [**94.866**, **205.134**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-14.615**, **5.476**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2198.9** / **8** = **274.863**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**732972.61** - **4.84**x**10^6**/**8**) / (**8**-1))^{½} = **135.529**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **274.863** - **1.895** * **135.529**/**8**^{½} = **184.083**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **274.863** + **1.895** * **135.529**/**8**^{½} = **365.642**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **26** * (**26**-1) / 2 = **325**	Number of sample pairs during trend detection period.
6	S = **2.664**	Sen's estimator of trend.
7	var(S) = **2056.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**325** ± **2.576** * **2056.333**^{½}) / 2 = [**104.093**, **220.907**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-4.054**, **13.354**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Beryllium (ug/L) at MW-11

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.675** / **5** = **0.135**	Compute the mean of the last 5 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.091** - **0.456**/**5**) / (**5**-1))^{½} = **0.0**	Compute sd of the last 5 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.135** - **2.132** * **0.0**/**5**^{½} = **0.135**	Compute lower confidence limit for the mean of the last 5 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.135** + **2.132** * **0.0**/**5**^{½} = **0.135**	Compute upper confidence limit for the mean of the last 5 measurements.
5	N' = **N** * (**N**-1) / 2 = **5** * (**5**-1) / 2 = **10**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**10** ± **2.576** * **0.0**^{½}) / 2 = [**5.0**, **5.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Beryllium (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.08** / **8** = **0.135**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.146** - **1.166**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.135** - **1.895** * **0.0**/**8**^{½} = **0.135**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.135** + **1.895** * **0.0**/**8**^{½} = **0.135**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **0.0**^{½}) / 2 = [**60.0**, **60.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Beryllium (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.08** / **8** = **0.135**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.146** - **1.166**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.135** - **1.895** * **0.0**/**8**^{½} = **0.135**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.135** + **1.895** * **0.0**/**8**^{½} = **0.135**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Beryllium (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.08** / **8** = **0.135**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.146** - **1.166**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.135** - **1.895** * **0.0**/**8**^{½} = **0.135**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.135** + **1.895** * **0.0**/**8**^{½} = **0.135**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Beryllium (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.08** / **8** = **0.135**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.146** - **1.166**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.135** - **1.895** * **0.0**/**8**^{½} = **0.135**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.135** + **1.895** * **0.0**/**8**^{½} = **0.135**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Beryllium (ug/L) at MW-35

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.08** / **8** = **0.135**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.146** - **1.166**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.135** - **1.895** * **0.0**/**8**^{½} = **0.135**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.135** + **1.895** * **0.0**/**8**^{½} = **0.135**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Beryllium (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.08** / **8** = **0.135**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.146** - **1.166**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.135** - **1.895** * **0.0**/**8**^{½} = **0.135**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.135** + **1.895** * **0.0**/**8**^{½} = **0.135**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **0.0**^{½}) / 2 = [**126.5**, **126.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Beryllium (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.08** / **8** = **0.135**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.146** - **1.166**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.135** - **1.895** * **0.0**/**8**^{½} = **0.135**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.135** + **1.895** * **0.0**/**8**^{½} = **0.135**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **0.0**^{½}) / 2 = [**27.5**, **27.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Beryllium (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.32** / **8** = **0.165**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.218** - **1.742**/**8**) / (**8**-1))^{½} = **3.46**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.165** - **1.895** * **3.46**x**10**$^{-10}$/**8**^{½} = **0.165**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.165** + **1.895** * **3.46**x**10**$^{-10}$/**8**^{½} = **0.165**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Beryllium (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.32** / **8** = **0.165**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.218** - **1.742**/**8**) / (**8**-1))^{½} = **3.46**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.165** - **1.895** * **3.46**x**10**$^{-10}$/**8**^{½} = **0.165**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.165** + **1.895** * **3.46**x**10**$^{-10}$/**8**^{½} = **0.165**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Beryllium (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.32** / **8** = **0.165**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.218** - **1.742**/**8**) / (**8**-1))^{½} = **3.46**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.165** - **1.895** * **3.46**x**10**$^{-10}$/**8**^{½} = **0.165**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.165** + **1.895** * **3.46**x**10**$^{-10}$/**8**^{½} = **0.165**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Beryllium (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.08** / **8** = **0.135**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.146** - **1.166**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.135** - **1.895** * **0.0**/**8**^{½} = **0.135**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.135** + **1.895** * **0.0**/**8**^{½} = **0.135**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **337.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **337.0**^{½}) / 2 = [**102.855**, **150.145**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Beryllium (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.08** / **8** = **0.135**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.146** - **1.166**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.135** - **1.895** * **0.0**/**8**^{½} = **0.135**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.135** + **1.895** * **0.0**/**8**^{½} = **0.135**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **0.0**^{½}) / 2 = [**126.5**, **126.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium (ug/L) at MW-11

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.15** / **5** = **0.03**	Compute the mean of the last 5 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.005** - **0.023**/**5**) / (**5**-1))^{½} = **0.0**	Compute sd of the last 5 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.03** - **2.132** * **0.0**/**5**^{½} = **0.03**	Compute lower confidence limit for the mean of the last 5 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.03** + **2.132** * **0.0**/**5**^{½} = **0.03**	Compute upper confidence limit for the mean of the last 5 measurements.
5	N' = **N** * (**N**-1) / 2 = **5** * (**5**-1) / 2 = **10**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**10** ± **2.576** * **0.0**^{½}) / 2 = [**5.0**, **5.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.641** / **8** = **0.08**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.133** - **0.411**/**8**) / (**8**-1))^{½} = **0.108**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.08** - **1.895** * **0.108**/**8**^{½} = **0.008**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.08** + **1.895** * **0.108**/**8**^{½} = **0.152**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **328.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **328.333**^{½}) / 2 = [**36.661**, **83.339**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.018**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.22** / **8** = **0.028**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.006** - **0.048**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.028** - **1.895** * **0.0**/**8**^{½} = **0.028**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.028** + **1.895** * **0.0**/**8**^{½} = **0.028**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **168.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **168.667**^{½}) / 2 = [**28.773**, **62.227**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.02**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **3.866** / **8** = **0.483**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**5.347** - **14.946**/**8**) / (**8**-1))^{½} = **0.705**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.483** - **1.895** * **0.705**/**8**^{½} = **0.011**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.483** + **1.895** * **0.705**/**8**^{½} = **0.955**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **305.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **305.333**^{½}) / 2 = [**22.994**, **68.006**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.11**, **0.103**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.287** / **8** = **0.036**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.016** - **0.082**/**8**) / (**8**-1))^{½} = **0.029**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.036** - **1.895** * **0.029**/**8**^{½} = **0.016**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.036** + **1.895** * **0.029**/**8**^{½} = **0.055**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **65.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **65.0**^{½}) / 2 = [**35.116**, **55.884**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium (ug/L) at MW-35

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.204** / **8** = **0.026**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.005** - **0.042**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.026** - **1.895** * **0.0**/**8**^{½} = **0.026**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.026** + **1.895** * **0.0**/**8**^{½} = **0.026**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.672** / **8** = **0.084**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.093** - **0.452**/**8**) / (**8**-1))^{½} = **0.073**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.084** - **1.895** * **0.073**/**8**^{½} = **0.035**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.084** + **1.895** * **0.073**/**8**^{½} = **0.133**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **24** * (**24**-1) / 2 = **276**	Number of sample pairs during trend detection period.
6	S = **-0.002**	Sen's estimator of trend.
7	var(S) = **1460.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**276** ± **2.576** * **1460.333**^{½}) / 2 = [**88.78**, **187.22**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.014**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.22** / **8** = **0.028**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.006** - **0.048**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.028** - **1.895** * **0.0**/**8**^{½} = **0.028**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.028** + **1.895** * **0.0**/**8**^{½} = **0.028**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **0.0**^{½}) / 2 = [**27.5**, **27.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.631** / **8** = **0.079**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.096** - **0.398**/**8**) / (**8**-1))^{½} = **0.082**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.079** - **1.895** * **0.082**/**8**^{½} = **0.024**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.079** + **1.895** * **0.082**/**8**^{½} = **0.134**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **21.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **21.0**^{½}) / 2 = [**8.098**, **19.902**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.4** / **8** = **0.05**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.02** - **0.16**/**8**) / (**8**-1))^{½} = **7.32**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.05** - **1.895** * **7.32**x**10**$^{-10}$/**8**^{½} = **0.05**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.05** + **1.895** * **7.32**x**10**$^{-10}$/**8**^{½} = **0.05**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.488** / **8** = **0.311**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.301** - **6.188**/**8**) / (**8**-1))^{½} = **0.275**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.311** - **1.895** * **0.275**/**8**^{½} = **0.127**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.311** + **1.895** * **0.275**/**8**^{½} = **0.495**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.144**	Sen's estimator of trend.
7	var(S) = **61.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **61.667**^{½}) / 2 = [**3.886**, **24.114**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.343**, **0.678**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.24** / **8** = **0.03**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.007** - **0.058**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.03** - **1.895** * **0.0**/**8**^{½} = **0.03**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.03** + **1.895** * **0.0**/**8**^{½} = **0.03**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **24** * (**24**-1) / 2 = **276**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **367.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**276** ± **2.576** * **367.667**^{½}) / 2 = [**113.303**, **162.697**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.24** / **8** = **0.03**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.007** - **0.058**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.03** - **1.895** * **0.0**/**8**^{½} = **0.03**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.03** + **1.895** * **0.0**/**8**^{½} = **0.03**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **0.0**^{½}) / 2 = [**126.5**, **126.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chromium (ug/L) at MW-11

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.75** / **5** = **0.55**	Compute the mean of the last 5 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.513** - **7.563**/**5**) / (**5**-1))^{½} = **6.66x10^{-9}**	Compute sd of the last 5 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **2.132** * **6.66x10^{-9}**/**5**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 5 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **2.132** * **6.66x10^{-9}**/**5**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 5 measurements.
5	N' = **N** * (**N**-1) / 2 = **5** * (**5**-1) / 2 = **10**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**10** ± **2.576** * **0.0**^{½}) / 2 = [**5.0**, **5.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chromium (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **159.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **159.667**^{½}) / 2 = [**43.725**, **76.275**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chromium (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chromium (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **11.16** / **8** = **1.395**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**55.554** - **124.546**/**8**) / (**8**-1))^{½} = **2.39**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1.395** - **1.895** * **2.39**/**8**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1.395** + **1.895** * **2.39**/**8**^{½} = **2.996**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **65.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **65.0**^{½}) / 2 = [**35.116**, **55.884**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chromium (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chromium (ug/L) at MW-35

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chromium (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **337.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **337.0**^{½}) / 2 = [**102.855**, **150.145**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chromium (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **0.0**^{½}) / 2 = [**27.5**, **27.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chromium (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chromium (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **15.85** / **8** = **1.981**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**146.118** - **251.223**/**8**) / (**8**-1))^{½} = **4.048**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1.981** - **1.895** * **4.048**/**8**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1.981** + **1.895** * **4.048**/**8**^{½} = **4.693**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **21.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **21.0**^{½}) / 2 = [**8.098**, **19.902**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chromium (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chromium (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **483.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **483.667**^{½}) / 2 = [**98.174**, **154.826**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chromium (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **940.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **940.333**^{½}) / 2 = [**87.004**, **165.996**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.395**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at MW-11

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **10.8** / **6** = **1.8**	Compute the mean of the last 6 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**68.886** - **116.64**/**6**) / (**6**-1))^{½} = **3.145**	Compute sd of the last 6 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1.8** - **2.014** * **3.145**/**6**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 6 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1.8** + **2.014** * **3.145**/**6**^{½} = **4.386**	Compute upper confidence limit for the mean of the last 6 measurements.
5	N' = **N** * (**N**-1) / 2 = **6** * (**6**-1) / 2 = **15**	Number of sample pairs during trend detection period.
6	S = **-0.551**	Sen's estimator of trend.
7	var(S) = **19.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**15** ± **2.576** * **19.667**^{½}) / 2 = [**1.788**, **13.212**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-11.131**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.889** / **8** = **0.111**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.339** - **0.789**/**8**) / (**8**-1))^{½} = **0.185**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.111** - **1.895** * **0.185**/**8**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.111** + **1.895** * **0.185**/**8**^{½} = **0.235**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **328.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **328.333**^{½}) / 2 = [**36.661**, **83.339**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.076**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **87.75** / **8** = **10.969**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1134.555** - **7700.063**/**8**) / (**8**-1))^{½} = **4.958**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **10.969** - **1.895** * **4.958**/**8**^{½} = **7.648**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **10.969** + **1.895** * **4.958**/**8**^{½} = **14.289**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.615**	Sen's estimator of trend.
7	var(S) = **332.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **332.667**^{½}) / 2 = [**22.008**, **68.992**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-1.25**, **2.483**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **54.56** / **8** = **6.82**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1113.304** - **2976.794**/**8**) / (**8**-1))^{½} = **10.29**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **6.82** - **1.895** * **10.29**/**8**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **6.82** + **1.895** * **10.29**/**8**^{½} = **13.712**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **-2.132**	Sen's estimator of trend.
7	var(S) = **333.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **333.667**^{½}) / 2 = [**21.973**, **69.027**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-3.503**, **-0.36**]	Two-sided confidence interval for slope.
10	UCL(S) < 0	**Significant decreasing trend.**

Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **18.642** / **8** = **2.33**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**68.412** - **347.506**/**8**) / (**8**-1))^{½} = **1.889**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **2.33** - **1.895** * **1.889**/**8**^{½} = **1.065**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **2.33** + **1.895** * **1.889**/**8**^{½} = **3.595**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.117**	Sen's estimator of trend.
7	var(S) = **331.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **331.667**^{½}) / 2 = [**22.043**, **68.957**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.971**, **0.743**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at MW-35

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **47.35** / **8** = **5.919**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**323.132** - **2242.023**/**8**) / (**8**-1))^{½} = **2.475**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **5.919** - **1.895** * **2.475**/**8**^{½} = **4.261**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **5.919** + **1.895** * **2.475**/**8**^{½} = **7.577**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **-0.41**	Sen's estimator of trend.
7	var(S) = **333.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **333.667**^{½}) / 2 = [**21.973**, **69.027**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-1.007**, **0.259**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **11.846** / **8** = **1.481**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**20.831** - **140.316**/**8**) / (**8**-1))^{½} = **0.686**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1.481** - **1.895** * **0.686**/**8**^{½} = **1.021**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1.481** + **1.895** * **0.686**/**8**^{½} = **1.94**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.104**	Sen's estimator of trend.
7	var(S) = **1404.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **1404.333**^{½}) / 2 = [**78.233**, **174.767**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.085**, **0.233**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **13.237** / **8** = **1.655**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**23.249** - **175.218**/**8**) / (**8**-1))^{½} = **0.439**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1.655** - **1.895** * **0.439**/**8**^{½} = **1.361**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1.655** + **1.895** * **0.439**/**8**^{½} = **1.948**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.177**	Sen's estimator of trend.
7	var(S) = **165.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **165.0**^{½}) / 2 = [**10.955**, **44.045**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.566**, **0.548**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **19.528** / **8** = **2.441**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**55.773** - **381.343**/**8**) / (**8**-1))^{½} = **1.076**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **2.441** - **1.895** * **1.076**/**8**^{½} = **1.72**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **2.441** + **1.895** * **1.076**/**8**^{½} = **3.162**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **-0.575**	Sen's estimator of trend.
7	var(S) = **64.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **64.333**^{½}) / 2 = [**3.669**, **24.331**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-2.616**, **0.868**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **32.38** / **8** = **4.048**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**133.658** - **1048.464**/**8**) / (**8**-1))^{½} = **0.609**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **4.048** - **1.895** * **0.609**/**8**^{½} = **3.639**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **4.048** + **1.895** * **0.609**/**8**^{½} = **4.456**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.116**	Sen's estimator of trend.
7	var(S) = **65.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **65.333**^{½}) / 2 = [**3.589**, **24.411**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-1.234**, **1.415**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.141** / **8** = **0.268**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.021** - **4.584**/**8**) / (**8**-1))^{½} = **0.253**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.268** - **1.895** * **0.253**/**8**^{½} = **0.098**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.268** + **1.895** * **0.253**/**8**^{½} = **0.437**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **-0.081**	Sen's estimator of trend.
7	var(S) = **48.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **48.667**^{½}) / 2 = [**5.015**, **22.985**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.547**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.68** / **8** = **0.085**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.058** - **0.462**/**8**) / (**8**-1))^{½} = **1.76**x**10**$^{-9}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.085** - **1.895** * **1.76**x**10**$^{-9}$/**8**^{½} = **0.085**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.085** + **1.895** * **1.76**x**10**$^{-9}$/**8**^{½} = **0.085**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **1025.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **1025.333**^{½}) / 2 = [**85.257**, **167.743**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.201**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.364** / **8** = **0.046**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.017** - **0.132**/**8**) / (**8**-1))^{½} = **6.33**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.046** - **1.895** * **6.33**x**10**$^{-10}$/**8**^{½} = **0.045**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.046** + **1.895** * **6.33**x**10**$^{-10}$/**8**^{½} = **0.046**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **483.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **483.667**^{½}) / 2 = [**98.174**, **154.826**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper (ug/L) at MW-11

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.5** / **5** = **0.9**	Compute the mean of the last 5 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**4.05** - **20.25**/**5**) / (**5**-1))^{½} = **0.0**	Compute sd of the last 5 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.9** - **2.132** * **0.0**/**5**^{½} = **0.9**	Compute lower confidence limit for the mean of the last 5 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.9** + **2.132** * **0.0**/**5**^{½} = **0.9**	Compute upper confidence limit for the mean of the last 5 measurements.
5	N' = **N** * (**N**-1) / 2 = **5** * (**5**-1) / 2 = **10**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**10** ± **2.576** * **0.0**^{½}) / 2 = [**5.0**, **5.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **7.2** / **8** = **0.9**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**6.48** - **51.84**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.9** - **1.895** * **0.0**/**8**^{½} = **0.9**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.9** + **1.895** * **0.0**/**8**^{½} = **0.9**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **-0.038**	Sen's estimator of trend.
7	var(S) = **367.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **367.333**^{½}) / 2 = [**35.314**, **84.686**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.21**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **7.2** / **8** = **0.9**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**6.48** - **51.84**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.9** - **1.895** * **0.0**/**8**^{½} = **0.9**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.9** + **1.895** * **0.0**/**8**^{½} = **0.9**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **36.54** / **8** = **4.568**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**555.376** - **1335.172**/**8**) / (**8**-1))^{½} = **7.45**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **4.568** - **1.895** * **7.45**/**8**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **4.568** + **1.895** * **7.45**/**8**^{½} = **9.557**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **168.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **168.667**^{½}) / 2 = [**28.773**, **62.227**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **15.26** / **8** = **1.908**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**85.952** - **232.868**/**8**) / (**8**-1))^{½} = **2.85**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1.908** - **1.895** * **2.85**/**8**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1.908** + **1.895** * **2.85**/**8**^{½} = **3.816**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **65.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **65.0**^{½}) / 2 = [**35.116**, **55.884**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper (ug/L) at MW-35

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **7.2** / **8** = **0.9**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2] - sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**6.48** - **51.84**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.9** - **1.895** * **0.0**/**8**^{½} = **0.9**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.9** + **1.895** * **0.0**/**8**^{½} = **0.9**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **7.2** / **8** = **0.9**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**6.48** - **51.84**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.9** - **1.895** * **0.0**/**8**^{½} = **0.9**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.9** + **1.895** * **0.0**/**8**^{½} = **0.9**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **24** * (**24**-1) / 2 = **276**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **528.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**276** ± **2.576** * **528.667**^{½}) / 2 = [**108.385**, **167.615**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **14.01** / **8** = **1.751**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**65.114** - **196.28**/**8**) / (**8**-1))^{½} = **2.408**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1.751** - **1.895** * **2.408**/**8**^{½} = **0.139**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1.751** + **1.895** * **2.408**/**8**^{½} = **3.364**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **40.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **40.0**^{½}) / 2 = [**19.354**, **35.646**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **15.97** / **8** = **1.996**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**99.179** - **255.041**/**8**) / (**8**-1))^{½} = **3.101**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1.996** - **1.895** * **3.101**/**8**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1.996** + **1.895** * **3.101**/**8**^{½} = **4.073**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **21.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **21.0**^{½}) / 2 = [**8.098**, **19.902**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **12.7** / **8** = **1.588**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**46.63** - **161.29**/**8**) / (**8**-1))^{½} = **1.945**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1.588** - **1.895** * **1.945**/**8**^{½} = **0.285**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1.588** + **1.895** * **1.945**/**8**^{½} = **2.89**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **21.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **21.0**^{½}) / 2 = [**8.098**, **19.902**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **7.2** / **8** = **0.9**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**6.48** - **51.84**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.9** - **1.895** * **0.0**/**8**^{½} = **0.9**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.9** + **1.895** * **0.0**/**8**^{½} = **0.9**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **7.2** / **8** = **0.9**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**6.48** - **51.84**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.9** - **1.895** * **0.0**/**8**^{½} = **0.9**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.9** + **1.895** * **0.0**/**8**^{½} = **0.9**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **844.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **844.333**^{½}) / 2 = [**89.074**, **163.926**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.055**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **6.4** / **8** = **0.8**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**5.12** - **40.96**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.8** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.8**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.8** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.8**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **176.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **176.0**^{½}) / 2 = [**109.413**, **143.587**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field pH (SU) at MW-11

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **45.05** / **6** = **7.508**	Compute the mean of the last 6 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**339.626** - **2029.503**/**6**) / (**6**-1))^{½} = **0.525**	Compute sd of the last 6 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **7.508** - **2.014** * **0.525**/**6**^{½} = **7.077**	Compute lower confidence limit for the mean of the last 6 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **7.508** + **2.014** * **0.525**/**6**^{½} = **7.94**	Compute upper confidence limit for the mean of the last 6 measurements.
5	N' = **N** * (**N**-1) / 2 = **6** * (**6**-1) / 2 = **15**	Number of sample pairs during trend detection period.
6	S = **0.007**	Sen's estimator of trend.
7	var(S) = **28.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**15** ± **2.576** * **28.333**^{½}) / 2 = [**0.644**, **14.356**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-6.756**, **0.551**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field pH (SU) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **55.91** / **8** = **6.989**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**392.288** - **3125.928**/**8**) / (**8**-1))^{½} = **0.47**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **6.989** - **1.895** * **0.47**/**8**^{½} = **6.674**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **6.989** + **1.895** * **0.47**/**8**^{½} = **7.304**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **-0.036**	Sen's estimator of trend.
7	var(S) = **492.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **492.333**^{½}) / 2 = [**31.421**, **88.579**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.112**, **0.062**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field pH (SU) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **53.74** / **8** = **6.718**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**362.289** - **2887.988**/**8**) / (**8**-1))^{½} = **0.429**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **6.718** - **1.895** * **0.429**/**8**^{½} = **6.43**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **6.718** + **1.895** * **0.429**/**8**^{½} = **7.005**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **-0.005**	Sen's estimator of trend.
7	var(S) = **493.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **493.333**^{½}) / 2 = [**31.392**, **88.608**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.137**, **0.145**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field pH (SU) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **55.41** / **8** = **6.926**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**385.194** - **3070.268**/**8**) / (**8**-1))^{½} = **0.449**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **6.926** - **1.895** * **0.449**/**8**^{½} = **6.626**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **6.926** + **1.895** * **0.449**/**8**^{½} = **7.227**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.026**	Sen's estimator of trend.
7	var(S) = **491.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **491.333**^{½}) / 2 = [**31.45**, **88.55**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.088**, **0.132**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field pH (SU) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **55.31** / **8** = **6.914**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**384.872** - **3059.196**/**8**) / (**8**-1))^{½} = **0.594**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **6.914** - **1.895** * **0.594**/**8**^{½} = **6.516**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **6.914** + **1.895** * **0.594**/**8**^{½} = **7.312**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **-0.033**	Sen's estimator of trend.
7	var(S) = **333.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **333.667**^{½}) / 2 = [**21.973**, **69.027**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.166**, **0.129**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field pH (SU) at MW-35

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **55.52** / **8** = **6.94**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**386.899** - **3082.47**/**8**) / (**8**-1))^{½} = **0.477**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **6.94** - **1.895** * **0.477**/**8**^{½} = **6.621**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **6.94** + **1.895** * **0.477**/**8**^{½} = **7.259**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.023**	Sen's estimator of trend.
7	var(S) = **328.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **328.0**^{½}) / 2 = [**22.173**, **68.827**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.031**, **0.134**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field pH (SU) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **53.54** / **8** = **6.693**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**359.837** - **2866.532**/**8**) / (**8**-1))^{½} = **0.466**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **6.693** - **1.895** * **0.466**/**8**^{½} = **6.38**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **6.693** + **1.895** * **0.466**/**8**^{½} = **7.005**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **-0.008**	Sen's estimator of trend.
7	var(S) = **1092.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **1092.667**^{½}) / 2 = [**62.425**, **147.575**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.073**, **0.025**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field pH (SU) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **57.15** / **8** = **7.144**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**409.476** - **3266.123**/**8**) / (**8**-1))^{½} = **0.416**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **7.144** - **1.895** * **0.416**/**8**^{½} = **6.865**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **7.144** + **1.895** * **0.416**/**8**^{½} = **7.422**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **-0.02**	Sen's estimator of trend.
7	var(S) = **164.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **164.0**^{½}) / 2 = [**11.006**, **43.994**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.367**, **0.368**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field pH (SU) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **57.78** / **8** = **7.223**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**419.13** - **3338.528**/**8**) / (**8**-1))^{½} = **0.509**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **7.223** - **1.895** * **0.509**/**8**^{½} = **6.882**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **7.223** + **1.895** * **0.509**/**8**^{½} = **7.563**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **-0.266**	Sen's estimator of trend.
7	var(S) = **65.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **65.333**^{½}) / 2 = [**3.589**, **24.411**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-1.377**, **0.65**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field pH (SU) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **55.17** / **8** = **6.896**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**381.424** - **3043.729**/**8**) / (**8**-1))^{½} = **0.37**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **6.896** - **1.895** * **0.37**/**8**^{½} = **6.649**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **6.896** + **1.895** * **0.37**/**8**^{½} = **7.144**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **9** * (**9**-1) / 2 = **36**	Number of sample pairs during trend detection period.
6	S = **0.019**	Sen's estimator of trend.
7	var(S) = **91.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**36** ± **2.576** * **91.0**^{½}) / 2 = [**5.713**, **30.287**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.892**, **0.272**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field pH (SU) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **55.68** / **8** = **6.96**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**389.654** - **3100.262**/**8**) / (**8**-1))^{½} = **0.55**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **6.96** - **1.895** * **0.55**/**8**^{½} = **6.591**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **6.96** + **1.895** * **0.55**/**8**^{½} = **7.329**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **-0.2**	Sen's estimator of trend.
7	var(S) = **65.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **65.333**^{½}) / 2 = [**3.589**, **24.411**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-1.354**, **0.707**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field pH (SU) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **55.6** / **8** = **6.95**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**387.921** - **3091.36**/**8**) / (**8**-1))^{½} = **0.463**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **6.95** - **1.895** * **0.463**/**8**^{½} = **6.64**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **6.95** + **1.895** * **0.463**/**8**^{½} = **7.26**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **26** * (**26**-1) / 2 = **325**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **2051.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**325** ± **2.576** * **2051.667**^{½}) / 2 = [**104.16**, **220.84**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.097**, **0.034**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field pH (SU) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **57.5** / **8** = **7.188**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**415.351** - **3306.25**/**8**) / (**8**-1))^{½} = **0.544**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **7.188** - **1.895** * **0.544**/**8**^{½} = **6.823**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **7.188** + **1.895** * **0.544**/**8**^{½} = **7.552**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **24** * (**24**-1) / 2 = **276**	Number of sample pairs during trend detection period.
6	S = **-0.026**	Sen's estimator of trend.
7	var(S) = **1625.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**276** ± **2.576** * **1625.333**^{½}) / 2 = [**86.074**, **189.926**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.087**, **0.047**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field Specific Conductance (umhos/cm) at MW-11

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **7025.5** / **6** = **1170.917**	Compute the mean of the last 6 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**8.37**x**10^6** - **4.94**x**10^7**/**6**) / (**6**-1))^{½} = **169.201**	Compute sd of the last 6 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1170.917** - **2.014** * **169.201**/**6**^{½} = **1031.769**	Compute lower confidence limit for the mean of the last 6 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1170.917** + **2.014** * **169.201**/**6**^{½} = **1310.065**	Compute upper confidence limit for the mean of the last 6 measurements.
5	N' = **N** * (**N**-1) / 2 = **6** * (**6**-1) / 2 = **15**	Number of sample pairs during trend detection period.
6	S = **-11.238**	Sen's estimator of trend.
7	var(S) = **28.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**15** ± **2.576** * **28.333**^{½}) / 2 = [**0.644**, **14.356**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-430.853**, **944.287**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field Specific Conductance (umhos/cm) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **9278.76** / **8** = **1159.845**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.18**x**10^7** - **8.61**x**10^7**/**8**) / (**8**-1))^{½} = **391.046**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1159.845** - **1.895** * **391.046**/**8**^{½} = **897.917**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1159.845** + **1.895** * **391.046**/**8**^{½} = **1421.773**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **9.466**	Sen's estimator of trend.
7	var(S) = **492.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **492.333**^{½}) / 2 = [**31.421**, **88.579**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-44.471**, **91.655**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field Specific Conductance (umhos/cm) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **16667.2** / **8** = **2083.4**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**3.61**x**10^7** - **2.78**x**10^8**/**8**) / (**8**-1))^{½} = **450.072**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **2083.4** - **1.895** * **450.072**/**8**^{½} = **1781.935**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **2083.4** + **1.895** * **450.072**/**8**^{½} = **2384.865**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **137.722**	Sen's estimator of trend.
7	var(S) = **493.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **493.333**^{½}) / 2 = [**31.392**, **88.608**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**42.024**, **266.812**]	Two-sided confidence interval for slope.
10	LCL(S) > 0	**Significant increasing trend.**

Worksheet 6 - Assessment Monitoring
Field Specific Conductance (umhos/cm) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **20968.6** / **8** = **2621.075**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**6.33**x**10^7** - **4.40**x**10^8**/**8**) / (**8**-1))^{½} = **1093.034**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **2621.075** - **1.895** * **1093.034**/**8**^{½} = **1888.946**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **2621.075** + **1.895** * **1093.034**/**8**^{½} = **3353.204**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **199.803**	Sen's estimator of trend.
7	var(S) = **493.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **493.333**^{½}) / 2 = [**31.392**, **88.608**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**15.667**, **573.55**]	Two-sided confidence interval for slope.
10	LCL(S) > 0	**Significant increasing trend.**

Worksheet 6 - Assessment Monitoring
Field Specific Conductance (umhos/cm) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **9540.84** / **8** = **1192.605**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.53**x**10^7** - **9.10**x**10^7**/**8**) / (**8**-1))^{½} = **752.352**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1192.605** - **1.895** * **752.352**/**8**^{½} = **688.669**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1192.605** + **1.895** * **752.352**/**8**^{½} = **1696.541**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **46.022**	Sen's estimator of trend.
7	var(S) = **333.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **333.667**^{½}) / 2 = [**21.973**, **69.027**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.013**, **348.024**]	Two-sided confidence interval for slope.
10	LCL(S) > 0	**Significant increasing trend.**

Worksheet 6 - Assessment Monitoring
Field Specific Conductance (umhos/cm) at MW-35

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **14531.9** / **8** = **1816.488**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**3.23**x**10^7** - **2.11**x**10^8**/**8**) / (**8**-1))^{½} = **920.557**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1816.488** - **1.895** * **920.557**/**8**^{½} = **1199.886**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1816.488** + **1.895** * **920.557**/**8**^{½} = **2433.089**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **30.263**	Sen's estimator of trend.
7	var(S) = **333.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **333.667**^{½}) / 2 = [**21.973**, **69.027**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-52.195**, **374.265**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field Specific Conductance (umhos/cm) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **12406.6** / **8** = **1550.825**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.19**x**10^7** - **1.54**x**10^8**/**8**) / (**8**-1))^{½} = **617.034**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1550.825** - **1.895** * **617.034**/**8**^{½} = **1137.528**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1550.825** + **1.895** * **617.034**/**8**^{½} = **1964.122**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **62.077**	Sen's estimator of trend.
7	var(S) = **1096.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **1096.667**^{½}) / 2 = [**62.347**, **147.653**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**28.8**, **107.297**]	Two-sided confidence interval for slope.
10	LCL(S) > 0	**Significant increasing trend.**

Worksheet 6 - Assessment Monitoring
Field Specific Conductance (umhos/cm) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **12010.9** / **8** = **1501.363**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.26**x**10^7** - **1.44**x**10^8**/**8**) / (**8**-1))^{½} = **809.306**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1501.363** - **1.895** * **809.306**/**8**^{½} = **959.279**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1501.363** + **1.895** * **809.306**/**8**^{½} = **2043.446**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **189.768**	Sen's estimator of trend.
7	var(S) = **165.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **165.0**^{½}) / 2 = [**10.955**, **44.045**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**22.234**, **668.864**]	Two-sided confidence interval for slope.
10	LCL(S) > 0	**Significant increasing trend.**

Worksheet 6 - Assessment Monitoring
Field Specific Conductance (umhos/cm) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **14061.91** / **8** = **1757.739**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**3.20**x**10^7** - **1.98**x**10^8**/**8**) / (**8**-1))^{½} = **1021.247**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1757.739** - **1.895** * **1021.247**/**8**^{½} = **1073.694**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1757.739** + **1.895** * **1021.247**/**8**^{½} = **2441.784**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **399.833**	Sen's estimator of trend.
7	var(S) = **65.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **65.333**^{½}) / 2 = [**3.589**, **24.411**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-918.308**, **1531.235**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field Specific Conductance (umhos/cm) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **13659.2** / **8** = **1707.4**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.88**x**10^7** - **1.87**x**10^8**/**8**) / (**8**-1))^{½} = **887.129**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1707.4** - **1.895** * **887.129**/**8**^{½} = **1113.189**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1707.4** + **1.895** * **887.129**/**8**^{½} = **2301.611**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **9** * (**9**-1) / 2 = **36**	Number of sample pairs during trend detection period.
6	S = **325.943**	Sen's estimator of trend.
7	var(S) = **92.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**36** ± **2.576** * **92.0**^{½}) / 2 = [**5.646**, **30.354**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-193.771**, **1288.571**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field Specific Conductance (umhos/cm) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **14338.3** / **8** = **1792.288**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**3.25**x**10^7** - **2.06**x**10^8**/**8**) / (**8**-1))^{½} = **988.512**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1792.288** - **1.895** * **988.512**/**8**^{½} = **1130.169**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1792.288** + **1.895** * **988.512**/**8**^{½} = **2454.406**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **471.229**	Sen's estimator of trend.
7	var(S) = **65.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **65.333**^{½}) / 2 = [**3.589**, **24.411**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-455.955**, **1530.633**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field Specific Conductance (umhos/cm) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **7880.74** / **8** = **985.093**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.22**x**10^7** - **6.21**x**10^7**/**8**) / (**8**-1))^{½} = **794.583**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **985.093** - **1.895** * **794.583**/**8**^{½} = **452.87**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **985.093** + **1.895** * **794.583**/**8**^{½} = **1517.315**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **26** * (**26**-1) / 2 = **325**	Number of sample pairs during trend detection period.
6	S = **13.531**	Sen's estimator of trend.
7	var(S) = **2058.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**325** ± **2.576** * **2058.333**^{½}) / 2 = [**104.065**, **220.935**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-20.46**, **40.005**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field Specific Conductance (umhos/cm) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **9550.55** / **8** = **1193.819**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.36**x**10^7** - **9.12**x**10^7**/**8**) / (**8**-1))^{½} = **557.924**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1193.819** - **1.895** * **557.924**/**8**^{½} = **820.114**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1193.819** + **1.895** * **557.924**/**8**^{½} = **1567.524**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **24** * (**24**-1) / 2 = **276**	Number of sample pairs during trend detection period.
6	S = **47.011**	Sen's estimator of trend.
7	var(S) = **1625.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**276** ± **2.576** * **1625.333**^{½}) / 2 = [**86.074**, **189.926**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**10.905**, **103.476**]	Two-sided confidence interval for slope.
10	LCL(S) > 0	**Significant increasing trend.**

Worksheet 6 - Assessment Monitoring
Lead (ug/L) at MW-11

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.6** / **5** = **0.12**	Compute the mean of the last 5 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.072** - **0.36**/**5**) / (**5**-1))^{½} = **0.0**	Compute sd of the last 5 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.12** - **2.132** * **0.0**/**5**^{½} = **0.12**	Compute lower confidence limit for the mean of the last 5 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.12** + **2.132** * **0.0**/**5**^{½} = **0.12**	Compute upper confidence limit for the mean of the last 5 measurements.
5	N' = **N** * (**N**-1) / 2 = **5** * (**5**-1) / 2 = **10**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**10** ± **2.576** * **0.0**^{½}) / 2 = [**5.0**, **5.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Lead (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.96** / **8** = **0.12**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.115** - **0.922**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.12** - **1.895** * **0.0**/**8**^{½} = **0.12**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.12** + **1.895** * **0.0**/**8**^{½} = **0.12**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **159.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **159.667**^{½}) / 2 = [**43.725**, **76.275**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Lead (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.96** / **8** = **0.12**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.115** - **0.922**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.12** - **1.895** * **0.0**/**8**^{½} = **0.12**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.12** + **1.895** * **0.0**/**8**^{½} = **0.12**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Lead (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.52** / **8** = **0.315**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.923** - **6.35**/**8**) / (**8**-1))^{½} = **0.552**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.315** - **1.895** * **0.552**/**8**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.315** + **1.895** * **0.552**/**8**^{½} = **0.684**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **241.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **241.667**^{½}) / 2 = [**25.477**, **65.523**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.267**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Lead (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.612** / **8** = **0.577**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**11.369** - **21.271**/**8**) / (**8**-1))^{½} = **1.115**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.577** - **1.895** * **1.115**/**8**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.577** + **1.895** * **1.115**/**8**^{½} = **1.324**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **121.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **121.0**^{½}) / 2 = [**31.332**, **59.668**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Lead (ug/L) at MW-35

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.96** / **8** = **0.12**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.115** - **0.922**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.12** - **1.895** * **0.0**/**8**^{½} = **0.12**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.12** + **1.895** * **0.0**/**8**^{½} = **0.12**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Lead (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.96** / **8** = **0.12**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.115** - **0.922**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.12** - **1.895** * **0.0**/**8**^{½} = **0.12**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.12** + **1.895** * **0.0**/**8**^{½} = **0.12**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **176.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **176.0**^{½}) / 2 = [**109.413**, **143.587**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Lead (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.96** / **8** = **0.12**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.115** - **0.922**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.12** - **1.895** * **0.0**/**8**^{½} = **0.12**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.12** + **1.895** * **0.0**/**8**^{½} = **0.12**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **0.0**^{½}) / 2 = [**27.5**, **27.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Lead (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.96** / **8** = **0.12**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.115** - **0.922**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.12** - **1.895** * **0.0**/**8**^{½} = **0.12**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.12** + **1.895** * **0.0**/**8**^{½} = **0.12**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Lead (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.96** / **8** = **0.12**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.115** - **0.922**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.12** - **1.895** * **0.0**/**8**^{½} = **0.12**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.12** + **1.895** * **0.0**/**8**^{½} = **0.12**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Lead (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.96** / **8** = **0.12**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.115** - **0.922**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.12** - **1.895** * **0.0**/**8**^{½} = **0.12**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.12** + **1.895** * **0.0**/**8**^{½} = **0.12**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Lead (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.96** / **8** = **0.12**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.115** - **0.922**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.12** - **1.895** * **0.0**/**8**^{½} = **0.12**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.12** + **1.895** * **0.0**/**8**^{½} = **0.12**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **337.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **337.0**^{½}) / 2 = [**102.855**, **150.145**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Lead (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.96** / **8** = **0.12**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.115** - **0.922**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.12** - **1.895** * **0.0**/**8**^{½} = **0.12**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.12** + **1.895** * **0.0**/**8**^{½} = **0.12**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **483.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **483.667**^{½}) / 2 = [**98.174**, **154.826**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel (ug/L) at MW-11

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **203.2** / **7** = **29.029**	Compute the mean of the last 7 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**6424.76** - **41290.24**/**7**) / (**7**-1))^{½} = **9.364**	Compute sd of the last 7 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **29.029** - **1.942** * **9.364**/**7**^{½} = **22.154**	Compute lower confidence limit for the mean of the last 7 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **29.029** + **1.942** * **9.364**/**7**^{½} = **35.903**	Compute upper confidence limit for the mean of the last 7 measurements.
5	N' = **N** * (**N**-1) / 2 = **7** * (**7**-1) / 2 = **21**	Number of sample pairs during trend detection period.
6	S = **-4.681**	Sen's estimator of trend.
7	var(S) = **44.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**21** ± **2.576** * **44.333**^{½}) / 2 = [**1.924**, **19.076**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-64.07**, **-0.523**]	Two-sided confidence interval for slope.
10	UCL(S) < 0	**Significant decreasing trend.**

Worksheet 6 - Assessment Monitoring
Nickel (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **47.84** / **8** = **5.98**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**323.322** - **2288.666**/**8**) / (**8**-1))^{½} = **2.306**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **5.98** - **1.895** * **2.306**/**8**^{½} = **4.435**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **5.98** + **1.895** * **2.306**/**8**^{½} = **7.525**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **17** * (**17**-1) / 2 = **136**	Number of sample pairs during trend detection period.
6	S = **-1.089**	Sen's estimator of trend.
7	var(S) = **589.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**136** ± **2.576** * **589.333**^{½}) / 2 = [**36.732**, **99.268**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-1.685**, **-0.366**]	Two-sided confidence interval for slope.
10	UCL(S) < 0	**Significant decreasing trend.**

Worksheet 6 - Assessment Monitoring
Nickel (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **534.2** / **8** = **66.775**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**36609.14** - **285369.64**/**8**) / (**8**-1))^{½} = **11.575**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **66.775** - **1.895** * **11.575**/**8**^{½} = **59.022**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **66.775** + **1.895** * **11.575**/**8**^{½} = **74.528**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **4.447**	Sen's estimator of trend.
7	var(S) = **333.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **333.667**^{½}) / 2 = [**21.973**, **69.027**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.088**, **9.579**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **351.7** / **8** = **43.963**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**21043.65** - **123692.89**/**8**) / (**8**-1))^{½} = **28.239**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **43.963** - **1.895** * **28.239**/**8**^{½} = **25.048**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **43.963** + **1.895** * **28.239**/**8**^{½} = **62.877**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.969**	Sen's estimator of trend.
7	var(S) = **332.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **332.667**^{½}) / 2 = [**22.008**, **68.992**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-5.581**, **11.472**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **16.39** / **8** = **2.049**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**62.622** - **268.632**/**8**) / (**8**-1))^{½} = **2.037**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **2.049** - **1.895** * **2.037**/**8**^{½} = **0.684**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **2.049** + **1.895** * **2.037**/**8**^{½} = **3.413**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **121.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **121.0**^{½}) / 2 = [**31.332**, **59.668**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel (ug/L) at MW-35

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **172.7** / **8** = **21.588**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**4020.49** - **29825.29**/**8**) / (**8**-1))^{½} = **6.462**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **21.588** - **1.895** * **6.462**/**8**^{½} = **17.259**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **21.588** + **1.895** * **6.462**/**8**^{½} = **25.916**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **-1.222**	Sen's estimator of trend.
7	var(S) = **333.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **333.667**^{½}) / 2 = [**21.973**, **69.027**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-3.645**, **1.329**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **47.15** / **8** = **5.894**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**317.195** - **2223.123**/**8**) / (**8**-1))^{½} = **2.37**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **5.894** - **1.895** * **2.37**/**8**^{½} = **4.307**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **5.894** + **1.895** * **2.37**/**8**^{½} = **7.481**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **1415.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **1415.0**^{½}) / 2 = [**78.05**, **174.95**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.856**, **0.463**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **109.15** / **8** = **13.644**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1594.973** - **11913.723**/**8**) / (**8**-1))^{½} = **3.887**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **13.644** - **1.895** * **3.887**/**8**^{½} = **11.04**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **13.644** + **1.895** * **3.887**/**8**^{½} = **16.247**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **1.514**	Sen's estimator of trend.
7	var(S) = **165.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **165.0**^{½}) / 2 = [**10.955**, **44.045**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-2.51**, **5.915**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **151.22** / **8** = **18.903**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**3152.704** - **22867.488**/**8**) / (**8**-1))^{½} = **6.484**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **18.903** - **1.895** * **6.484**/**8**^{½} = **14.56**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **18.903** + **1.895** * **6.484**/**8**^{½} = **23.245**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **9** * (**9**-1) / 2 = **36**	Number of sample pairs during trend detection period.
6	S = **3.929**	Sen's estimator of trend.
7	var(S) = **92.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**36** ± **2.576** * **92.0**^{½}) / 2 = [**5.646**, **30.354**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-18.422**, **10.081**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **224.6** / **8** = **28.075**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**6735.28** - **50445.16**/**8**) / (**8**-1))^{½} = **7.834**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **28.075** - **1.895** * **7.834**/**8**^{½} = **22.827**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **28.075** + **1.895** * **7.834**/**8**^{½} = **33.323**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **-0.965**	Sen's estimator of trend.
7	var(S) = **65.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **65.333**^{½}) / 2 = [**3.589**, **24.411**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-19.559**, **14.949**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **333.9** / **8** = **41.738**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**16506.43** - **111489.21**/**8**) / (**8**-1))^{½} = **19.162**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **41.738** - **1.895** * **19.162**/**8**^{½} = **28.903**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **41.738** + **1.895** * **19.162**/**8**^{½} = **54.572**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **4.452**	Sen's estimator of trend.
7	var(S) = **65.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **65.333**^{½}) / 2 = [**3.589**, **24.411**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-36.519**, **42.758**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **7.6** / **8** = **0.95**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**7.22** - **57.76**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.95** - **1.895** * **0.0**/**8**^{½} = **0.95**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.95** + **1.895** * **0.0**/**8**^{½} = **0.95**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **940.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **940.333**^{½}) / 2 = [**87.004**, **165.996**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.624**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **31.47** / **8** = **3.934**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**272.081** - **990.361**/**8**) / (**8**-1))^{½} = **4.603**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **3.934** - **1.895** * **4.603**/**8**^{½} = **0.851**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **3.934** + **1.895** * **4.603**/**8**^{½} = **7.017**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **1025.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **1025.333**^{½}) / 2 = [**85.257**, **167.743**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.087**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Selenium (ug/L) at MW-11

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.4** / **5** = **0.48**	Compute the mean of the last 5 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.152** - **5.76**/**5**) / (**5**-1))^{½} = **0.0**	Compute sd of the last 5 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.48** - **2.132** * **0.0**/**5**^{½} = **0.48**	Compute lower confidence limit for the mean of the last 5 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.48** + **2.132** * **0.0**/**5**^{½} = **0.48**	Compute upper confidence limit for the mean of the last 5 measurements.
5	N' = **N** * (**N**-1) / 2 = **5** * (**5**-1) / 2 = **10**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**10** ± **2.576** * **0.0**^{½}) / 2 = [**5.0**, **5.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Selenium (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.0** / **8** = **0.5**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.0** - **16.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.5** - **1.895** * **0.0**/**8**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.5** + **1.895** * **0.0**/**8**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **85.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **85.0**^{½}) / 2 = [**48.125**, **71.875**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Selenium (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.0** / **8** = **0.5**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.0** - **16.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.5** - **1.895** * **0.0**/**8**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.5** + **1.895** * **0.0**/**8**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Selenium (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.0** / **8** = **0.5**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.0** - **16.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.5** - **1.895** * **0.0**/**8**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.5** + **1.895** * **0.0**/**8**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Selenium (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.0** / **8** = **0.5**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.0** - **16.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.5** - **1.895** * **0.0**/**8**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.5** + **1.895** * **0.0**/**8**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Selenium (ug/L) at MW-35

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.0** / **8** = **0.5**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.0** - **16.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.5** - **1.895** * **0.0**/**8**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.5** + **1.895** * **0.0**/**8**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Selenium (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **3.928** / **8** = **0.491**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.929** - **15.429**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.491** - **1.895** * **0.0**/**8**^{½} = **0.491**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.491** + **1.895** * **0.0**/**8**^{½} = **0.491**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **176.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **176.0**^{½}) / 2 = [**109.413**, **143.587**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Selenium (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **3.84** / **8** = **0.48**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.843** - **14.746**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.48** - **1.895** * **0.0**/**8**^{½} = **0.48**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.48** + **1.895** * **0.0**/**8**^{½} = **0.48**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **0.0**^{½}) / 2 = [**27.5**, **27.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Selenium (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **5.6** / **8** = **0.7**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**3.92** - **31.36**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.7** - **1.895** * **0.0**/**8**^{½} = **0.7**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.7** + **1.895** * **0.0**/**8**^{½} = **0.7**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Selenium (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **5.6** / **8** = **0.7**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**3.92** - **31.36**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.7** - **1.895** * **0.0**/**8**^{½} = **0.7**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.7** + **1.895** * **0.0**/**8**^{½} = **0.7**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Selenium (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **5.6** / **8** = **0.7**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**3.92** - **31.36**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.7** - **1.895** * **0.0**/**8**^{½} = **0.7**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.7** + **1.895** * **0.0**/**8**^{½} = **0.7**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Selenium (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.0** / **8** = **0.5**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.0** - **16.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.5** - **1.895** * **0.0**/**8**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.5** + **1.895** * **0.0**/**8**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **337.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **337.0**^{½}) / 2 = [**102.855**, **150.145**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Selenium (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **3.928** / **8** = **0.491**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.929** - **15.429**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.491** - **1.895** * **0.0**/**8**^{½} = **0.491**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.491** + **1.895** * **0.0**/**8**^{½} = **0.491**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **176.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **176.0**^{½}) / 2 = [**109.413**, **143.587**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Silver (ug/L) at MW-11

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.225** / **5** = **0.245**	Compute the mean of the last 5 measurements.
2	S = ((**sum[X^2] - sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.3 - 1.501/5**) / (**5**-1))^{½} = **0.0**	Compute sd of the last 5 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS/N**^{½} = **0.245** - **2.132** * **0.0/5**^{½} = **0.245**	Compute lower confidence limit for the mean of the last 5 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS/N**^{½} = **0.245** + **2.132** * **0.0/5**^{½} = **0.245**	Compute upper confidence limit for the mean of the last 5 measurements.
5	N' = **N** * (**N**-1) / 2 = **5** * (**5**-1) / 2 = **10**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**10** ± **2.576** * **0.0**^{½}) / 2 = [**5.0**, **5.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Silver (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.2** / **8** = **0.15**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.18** - **1.44**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.15** - **1.895** * **0.0**/**8**^{½} = **0.15**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.15** + **1.895** * **0.0**/**8**^{½} = **0.15**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **0.0**^{½}) / 2 = [**60.0**, **60.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Silver (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.57** / **8** = **0.321**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.519** - **6.605**/**8**) / (**8**-1))^{½} = **0.315**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.321** - **1.895** * **0.315**/**8**^{½} = **0.11**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.321** + **1.895** * **0.315**/**8**^{½} = **0.532**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **65.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **65.0**^{½}) / 2 = [**35.116**, **55.884**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Silver (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.68** / **8** = **0.21**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.353** - **2.822**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.21** - **1.895** * **0.0**/**8**^{½} = **0.21**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.21** + **1.895** * **0.0**/**8**^{½} = **0.21**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Silver (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.68** / **8** = **0.21**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.353** - **2.822**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.21** - **1.895** * **0.0**/**8**^{½} = **0.21**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.21** + **1.895** * **0.0**/**8**^{½} = **0.21**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Silver (ug/L) at MW-35

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.68** / **8** = **0.21**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.353** - **2.822**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.21** - **1.895** * **0.0**/**8**^{½} = **0.21**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.21** + **1.895** * **0.0**/**8**^{½} = **0.21**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Silver (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.505** / **8** = **0.313**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.704** - **6.275**/**8**) / (**8**-1))^{½} = **0.362**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.313** - **1.895** * **0.362**/**8**^{½} = **0.07**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.313** + **1.895** * **0.362**/**8**^{½} = **0.556**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **337.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **337.0**^{½}) / 2 = [**102.855**, **150.145**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Silver (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.96** / **8** = **0.245**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2] - sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.48** - **3.842**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.245** - **1.895** * **0.0**/**8**^{½} = **0.245**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.245** + **1.895** * **0.0**/**8**^{½} = **0.245**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **0.0**^{½}) / 2 = [**27.5**, **27.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Silver (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.0** / **8** = **0.25**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.5** - **4.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.25** - **1.895** * **0.0**/**8**^{½} = **0.25**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.25** + **1.895** * **0.0**/**8**^{½} = **0.25**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Silver (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **11.11** / **8** = **1.389**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**88.047** - **123.432**/**8**) / (**8**-1))^{½} = **3.221**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1.389** - **1.895** * **3.221**/**8**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1.389** + **1.895** * **3.221**/**8**^{½} = **3.546**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **9** * (**9**-1) / 2 = **36**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **26.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**36** ± **2.576** * **26.667**^{½}) / 2 = [**11.349**, **24.651**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Silver (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.76** / **8** = **0.345**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.458** - **7.618**/**8**) / (**8**-1))^{½} = **0.269**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.345** - **1.895** * **0.269**/**8**^{½} = **0.165**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.345** + **1.895** * **0.269**/**8**^{½} = **0.525**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **21.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **21.0**^{½}) / 2 = [**8.098**, **19.902**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Silver (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **6.665** / **8** = **0.833**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**29.076** - **44.422**/**8**) / (**8**-1))^{½} = **1.833**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.833** - **1.895** * **1.833**/**8**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.833** + **1.895** * **1.833**/**8**^{½} = **2.061**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **24** * (**24**-1) / 2 = **276**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **528.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**276** ± **2.576** * **528.667**^{½}) / 2 = [**108.385**, **167.615**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Silver (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.48** / **8** = **0.185**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.274** - **2.19**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.185** - **1.895** * **0.0**/**8**^{½} = **0.185**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.185** + **1.895** * **0.0**/**8**^{½} = **0.185**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **0.0**^{½}) / 2 = [**126.5**, **126.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Sulfide (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **924.0** / **8** = **115.5**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))$^{1/2}$ = ((**106722.0** - **853776.0**/**8**) / (**8**-1))$^{1/2}$ = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**$^{1/2}$ = **115.5** - **1.895** * **0.0**/**8**$^{1/2}$ = **115.5**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**$^{1/2}$ = **115.5** + **1.895** * **0.0**/**8**$^{1/2}$ = **115.5**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **40.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**55** ± **2.576** * **40.0**$^{1/2}$) / 2 = [**19.354**, **35.646**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Sulfide (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **547.5** / **5** = **109.5**	Compute the mean of the last 5 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**59951.25** - **299756.25**/**5**) / (**5**-1))^{½} = **0.0**	Compute sd of the last 5 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **109.5** - **2.132** * **0.0**/**5**^{½} = **109.5**	Compute lower confidence limit for the mean of the last 5 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **109.5** + **2.132** * **0.0**/**5**^{½} = **109.5**	Compute upper confidence limit for the mean of the last 5 measurements.
5	N' = **N** * (**N**-1) / 2 = **5** * (**5**-1) / 2 = **10**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**10** ± **2.576** * **0.0**^{½}) / 2 = [**5.0**, **5.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Sulfide (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **438.0** / **4** = **109.5**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**47961.0** - **191844.0**/**4**) / (**4**-1))^{½} = **0.0**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **109.5** - **2.353** * **0.0**/**4**^{½} = **109.5**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **109.5** + **2.353** * **0.0**/**4**^{½} = **109.5**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **4** * (**4**-1) / 2 = **6**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**6** ± **2.576** * **0.0**^{½}) / 2 = [**3.0**, **3.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Thallium (ug/L) at MW-11

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.65** / **5** = **0.13**	Compute the mean of the last 5 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.085** - **0.423**/**5**) / (**5**-1))^{½} = **0.0**	Compute sd of the last 5 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.13** - **2.132** * **0.0**/**5**^{½} = **0.13**	Compute lower confidence limit for the mean of the last 5 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.13** + **2.132** * **0.0**/**5**^{½} = **0.13**	Compute upper confidence limit for the mean of the last 5 measurements.
5	N' = **N** * (**N**-1) / 2 = **5** * (**5**-1) / 2 = **10**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**10** ± **2.576** * **0.0**^{½}) / 2 = [**5.0**, **5.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Thallium (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.04** / **8** = **0.13**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.135** - **1.082**/**8**) / (**8**-1))^{½} = **8.76**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.13** - **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.13** + **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **0.0**^{½}) / 2 = [**60.0**, **60.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Thallium (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.04** / **8** = **0.13**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.135** - **1.082**/**8**) / (**8**-1))^{½} = **8.76**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.13** - **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.13** + **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Thallium (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.04** / **8** = **0.13**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.135** - **1.082**/**8**) / (**8**-1))^{½} = **8.76**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.13** - **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.13** + **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Thallium (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.04** / **8** = **0.13**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.135** - **1.082**/**8**) / (**8**-1))^{½} = **8.76**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.13** - **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.13** + **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Thallium (ug/L) at MW-35

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.05** / **8** = **0.256**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.418** - **4.203**/**8**) / (**8**-1))^{½} = **0.357**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.256** - **1.895** * **0.357**/**8**^{½} = **0.017**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.256** + **1.895** * **0.357**/**8**^{½} = **0.495**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **15** * (**15**-1) / 2 = **105**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **74.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**105** ± **2.576** * **74.667**^{½}) / 2 = [**41.37**, **63.63**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Thallium (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.04** / **8** = **0.13**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.135** - **1.082**/**8**) / (**8**-1))^{½} = **8.76**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.13** - **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.13** + **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **483.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **483.667**^{½}) / 2 = [**98.174**, **154.826**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Thallium (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.04** / **8** = **0.13**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.135** - **1.082**/**8**) / (**8**-1))^{½} = **8.76**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.13** - **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.13** + **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **0.0**^{½}) / 2 = [**27.5**, **27.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Thallium (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.04** / **8** = **0.13**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.135** - **1.082**/**8**) / (**8**-1))^{½} = **8.76**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.13** - **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.13** + **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Thallium (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.04** / **8** = **0.13**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.135** - **1.082**/**8**) / (**8**-1))^{½} = **8.76x10^{-10}**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.13** - **1.895** * **8.76x10^{-10}**/**8**^{½} = **0.13**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.13** + **1.895** * **8.76x10^{-10}**/**8**^{½} = **0.13**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Thallium (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.04** / **8** = **0.13**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.135** - **1.082**/**8**) / (**8**-1))^{½} = **8.76x10^{-10}**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.13** - **1.895** * **8.76x10^{-10}**/**8**^{½} = **0.13**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.13** + **1.895** * **8.76x10^{-10}**/**8**^{½} = **0.13**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Thallium (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.04** / **8** = **0.13**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.135** - **1.082**/**8**) / (**8**-1))^{½} = **8.76**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.13** - **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.13** + **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **337.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **337.0**^{½}) / 2 = [**102.855**, **150.145**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Thallium (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.04** / **8** = **0.13**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.135** - **1.082**/**8**) / (**8**-1))^{½} = **8.76**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.13** - **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.13** + **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **337.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **337.0**^{½}) / 2 = [**102.855**, **150.145**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vanadium (ug/L) at MW-11

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.75** / **5** = **0.55**	Compute the mean of the last 5 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.513** - **7.563**/**5**) / (**5**-1))^{½} = **6.66x10^{-9}**	Compute sd of the last 5 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **2.132** * **6.66x10^{-9}**/**5**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 5 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **2.132** * **6.66x10^{-9}**/**5**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 5 measurements.
5	N' = **N** * (**N**-1) / 2 = **5** * (**5**-1) / 2 = **10**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**10** ± **2.576** * **0.0**^{½}) / 2 = [**5.0**, **5.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vanadium (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **3.4** / **8** = **0.425**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.445** - **11.56**/**8**) / (**8**-1))^{½} = **8.58**x**10**$^{-9}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.425** - **1.895** * **8.58**x**10**$^{-9}$/**8**^{½} = **0.425**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.425** + **1.895** * **8.58**x**10**$^{-9}$/**8**^{½} = **0.425**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **280.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **280.667**^{½}) / 2 = [**38.422**, **81.578**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.062**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vanadium (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vanadium (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vanadium (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vanadium (ug/L) at MW-35

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vanadium (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **940.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **940.333**^{½}) / 2 = [**87.004**, **165.996**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.046**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vanadium (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **0.0**^{½}) / 2 = [**27.5**, **27.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vanadium (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vanadium (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vanadium (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vanadium (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **940.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **940.333**^{½}) / 2 = [**87.004**, **165.996**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.033**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vanadium (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **940.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **940.333**^{½}) / 2 = [**87.004**, **165.996**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Zinc (ug/L) at MW-11

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **716.4** / **7** = **102.343**	Compute the mean of the last 7 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**80149.1** - **513228.96**/**7**) / (**7**-1))^{½} = **33.741**	Compute sd of the last 7 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **102.343** - **1.942** * **33.741**/**7**^{½} = **77.573**	Compute lower confidence limit for the mean of the last 7 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **102.343** + **1.942** * **33.741**/**7**^{½} = **127.112**	Compute upper confidence limit for the mean of the last 7 measurements.
5	N' = **N** * (**N**-1) / 2 = **7** * (**7**-1) / 2 = **21**	Number of sample pairs during trend detection period.
6	S = **-4.422**	Sen's estimator of trend.
7	var(S) = **44.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**21** ± **2.576** * **44.333**^{½}) / 2 = [**1.924**, **19.076**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-291.539**, **17.451**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Zinc (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **99.35** / **8** = **12.419**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**4441.818** - **9870.423**/**8**) / (**8**-1))^{½} = **21.408**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **12.419** - **1.895** * **21.408**/**8**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **12.419** + **1.895** * **21.408**/**8**^{½} = **26.758**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **159.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **159.667**^{½}) / 2 = [**43.725**, **76.275**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Zinc (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **77.1** / **8** = **9.638**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1947.41** - **5944.41**/**8**) / (**8**-1))^{½} = **13.117**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **9.638** - **1.895** * **13.117**/**8**^{½} = **0.852**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **9.638** + **1.895** * **13.117**/**8**^{½} = **18.423**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **65.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **65.0**^{½}) / 2 = [**35.116**, **55.884**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Zinc (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **58.5** / **8** = **7.313**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**727.25** - **3422.25**/**8**) / (**8**-1))^{½} = **6.541**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **7.313** - **1.895** * **6.541**/**8**^{½} = **2.931**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **7.313** + **1.895** * **6.541**/**8**^{½} = **11.694**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **65.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **65.0**^{½}) / 2 = [**35.116**, **55.884**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Zinc (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **40.0** / **8** = **5.0**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**200.0** - **1600.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **5.0** - **1.895** * **0.0**/**8**^{½} = **5.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **5.0** + **1.895** * **0.0**/**8**^{½} = **5.0**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Zinc (ug/L) at MW-35

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **40.0** / **8** = **5.0**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2] - sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**200.0** - **1600.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **5.0** - **1.895** * **0.0**/**8**^{½} = **5.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **5.0** + **1.895** * **0.0**/**8**^{½} = **5.0**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Zinc (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **40.0** / **8** = **5.0**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2] - sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**200.0** - **1600.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **5.0** - **1.895** * **0.0**/**8**^{½} = **5.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **5.0** + **1.895** * **0.0**/**8**^{½} = **5.0**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **176.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **176.0**^{½}) / 2 = [**109.413**, **143.587**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Zinc (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **40.0** / **8** = **5.0**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**200.0** - **1600.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **5.0** - **1.895** * **0.0**/**8**^{½} = **5.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **5.0** + **1.895** * **0.0**/**8**^{½} = **5.0**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **0.0**^{½}) / 2 = [**27.5**, **27.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Zinc (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **38.8** / **8** = **4.85**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**188.18** - **1505.44**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **4.85** - **1.895** * **0.0**/**8**^{½} = **4.85**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **4.85** + **1.895** * **0.0**/**8**^{½} = **4.85**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Zinc (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **38.8** / **8** = **4.85**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**188.18** - **1505.44**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **4.85** - **1.895** * **0.0**/**8**^{½} = **4.85**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **4.85** + **1.895** * **0.0**/**8**^{½} = **4.85**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Zinc (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **120.5** / **8** = **15.063**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2671.32** - **14520.25**/**8**) / (**8**-1))^{½} = **11.06**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **15.063** - **1.895** * **11.06**/**8**^{½} = **7.654**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **15.063** + **1.895** * **11.06**/**8**^{½} = **22.471**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **56.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **56.667**^{½}) / 2 = [**4.304**, **23.696**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-18.956**, **22.913**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

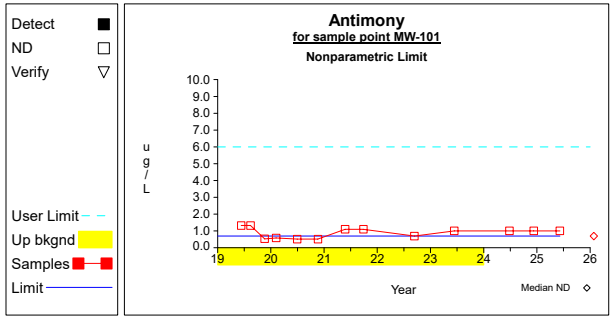
Worksheet 6 - Assessment Monitoring
Zinc (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **40.0** / **8** = **5.0**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**200.0** - **1600.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **5.0** - **1.895** * **0.0**/**8**^{½} = **5.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **5.0** + **1.895** * **0.0**/**8**^{½} = **5.0**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **176.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **176.0**^{½}) / 2 = [**109.413**, **143.587**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

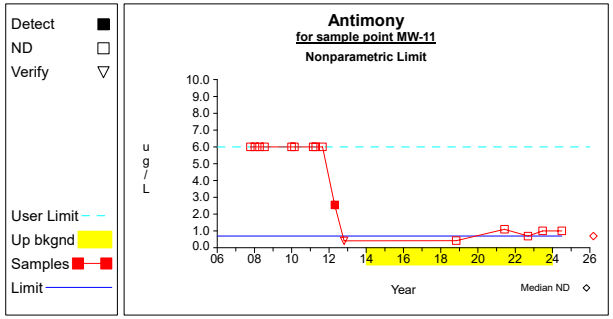
Worksheet 6 - Assessment Monitoring
Zinc (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **40.0** / **8** = **5.0**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**200.0** - **1600.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **5.0** - **1.895** * **0.0**/**8**^{½} = **5.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **5.0** + **1.895** * **0.0**/**8**^{½} = **5.0**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **24** * (**24**-1) / 2 = **276**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **675.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**276** ± **2.576** * **675.333**^{½}) / 2 = [**104.529**, **171.471**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

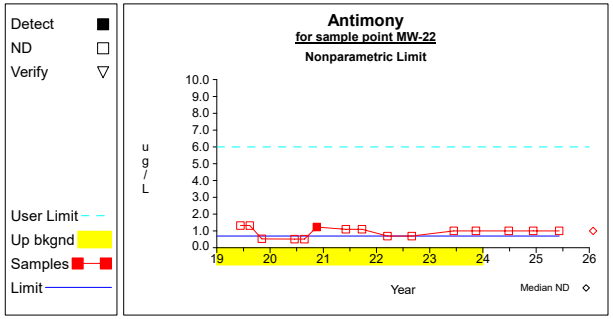
Up vs. Down Prediction Limits



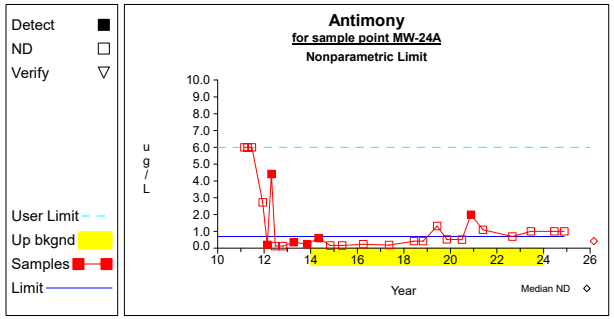
Graph 1



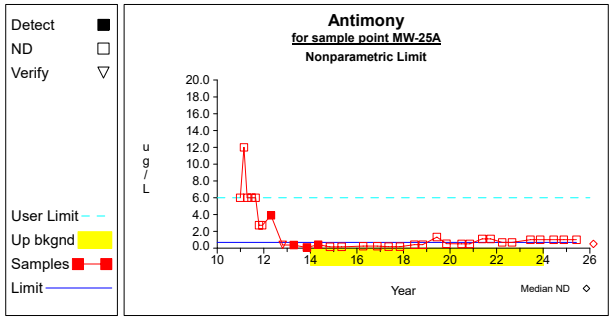
Graph 2



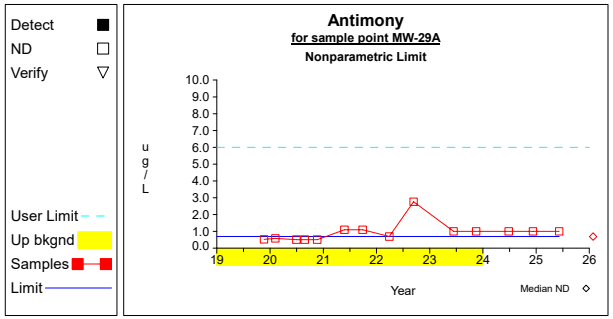
Graph 3



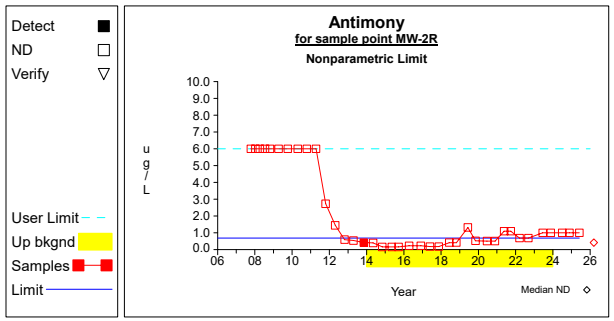
Graph 4



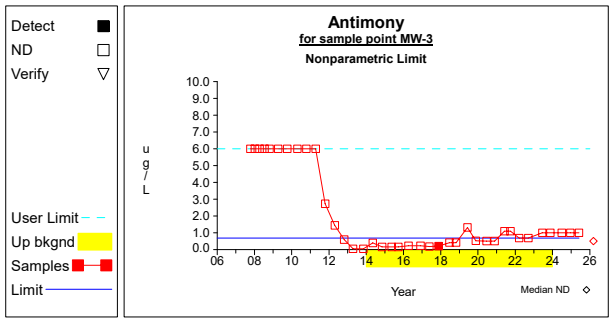
Graph 5



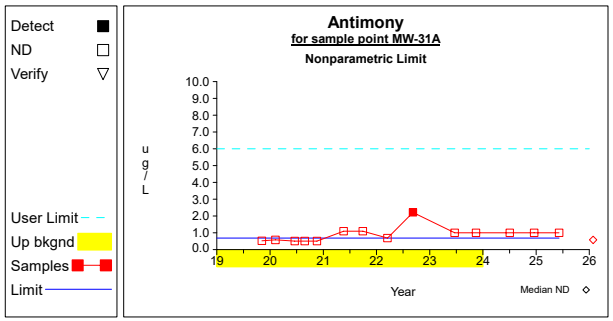
Graph 6



Graph 7

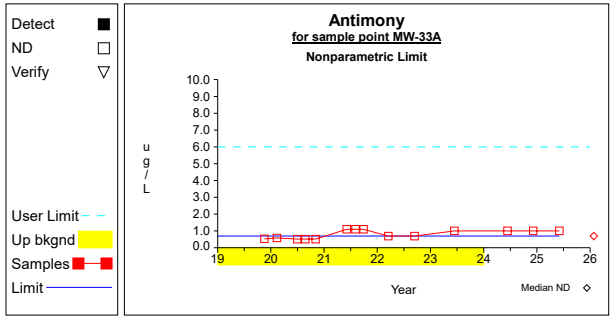


Graph 8

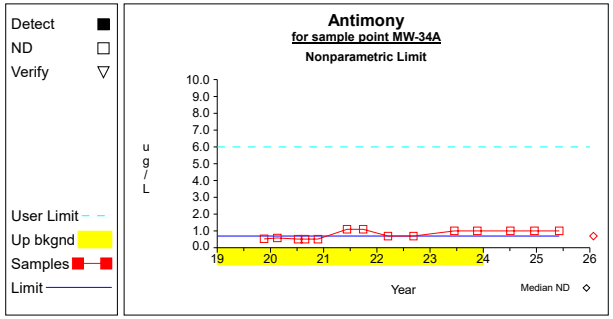


Graph 9

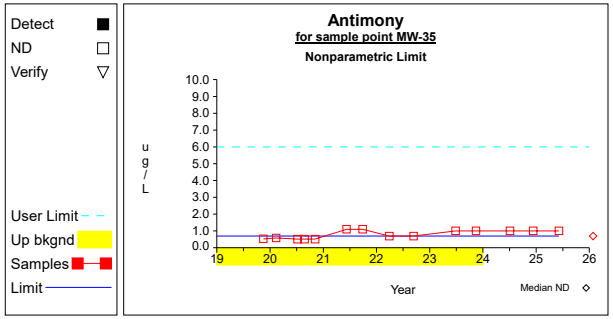
Up vs. Down Prediction Limits



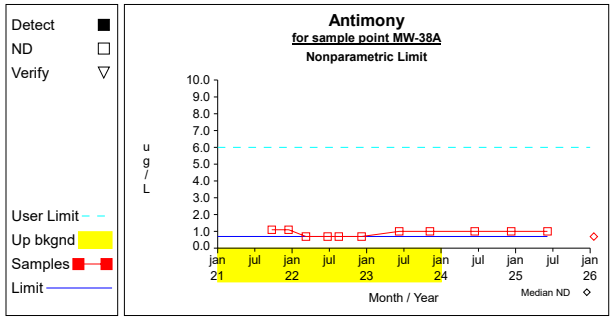
Graph 10



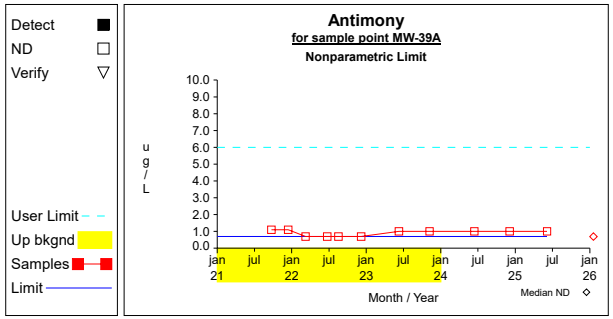
Graph 11



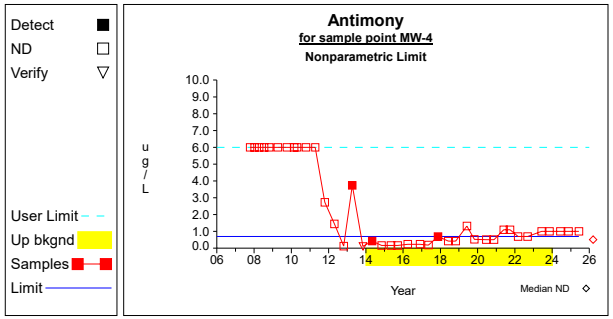
Graph 12



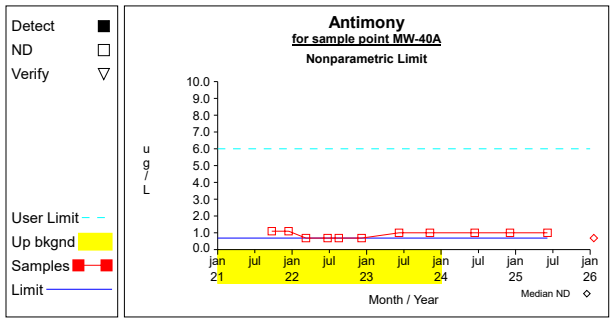
Graph 13



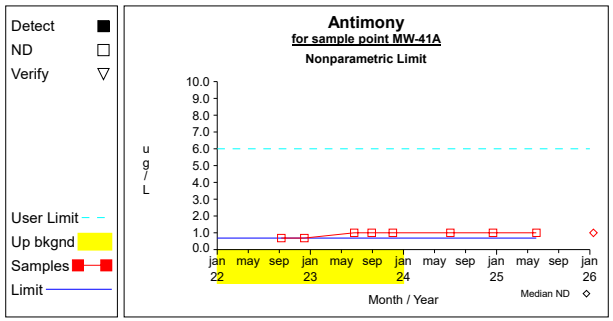
Graph 14



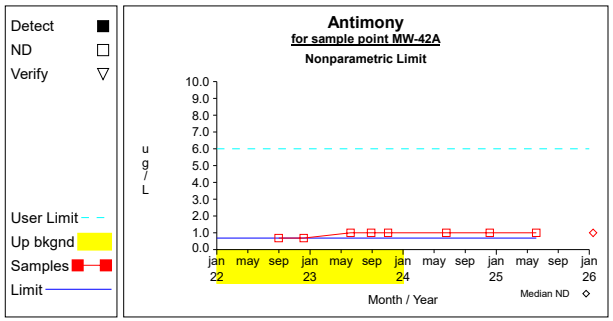
Graph 15



Graph 16

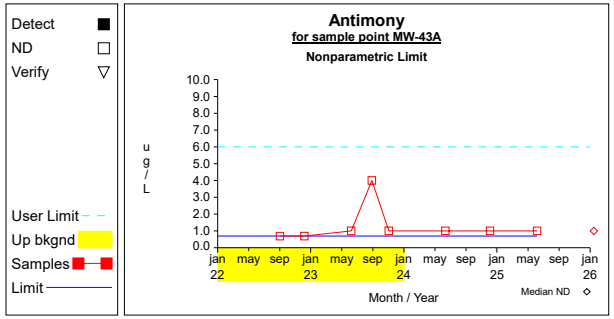


Graph 17

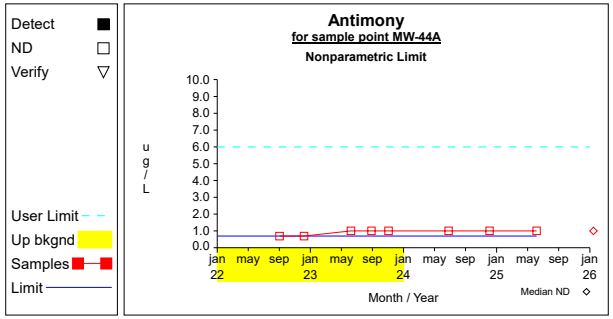


Graph 18

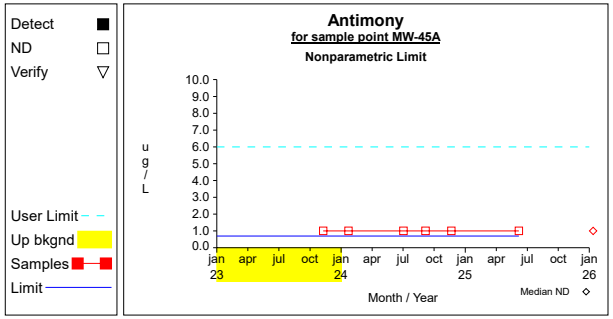
Up vs. Down Prediction Limits



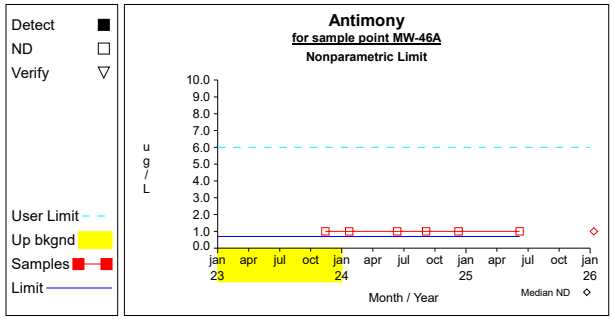
Graph 19



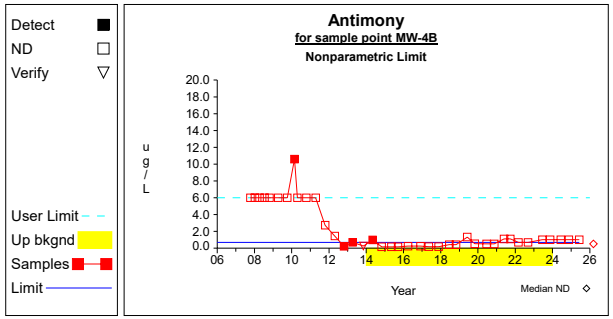
Graph 20



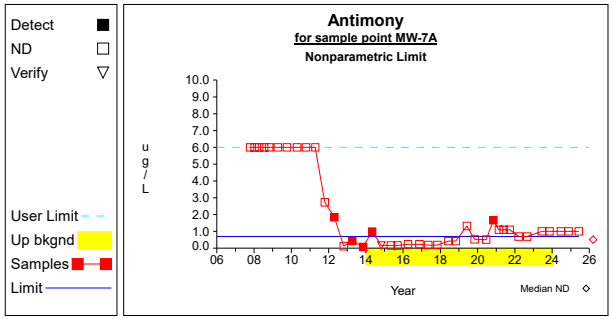
Graph 21



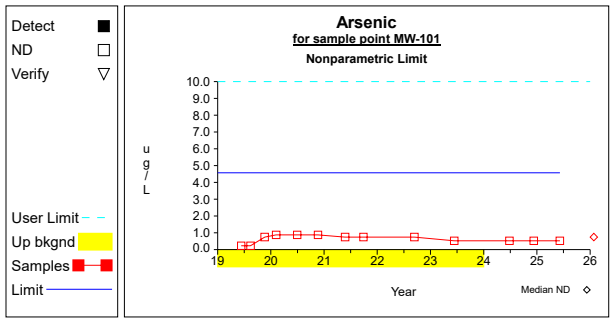
Graph 22



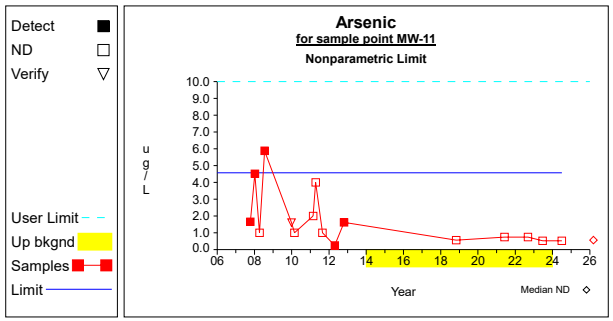
Graph 23



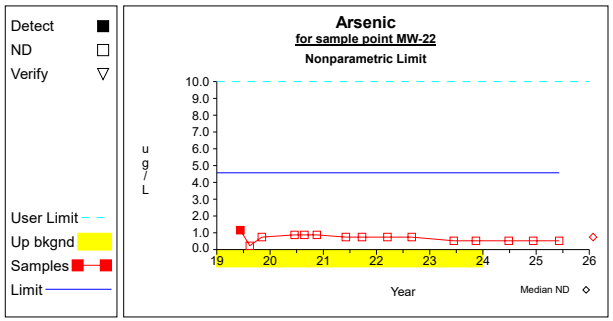
Graph 24



Graph 25

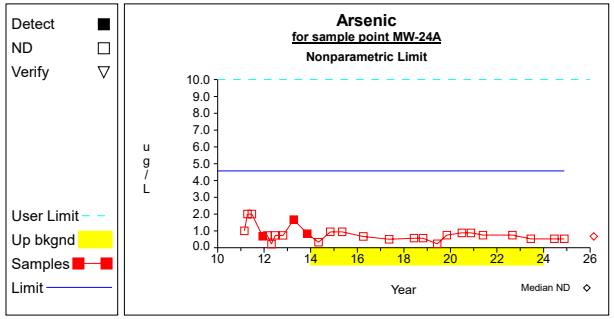


Graph 26

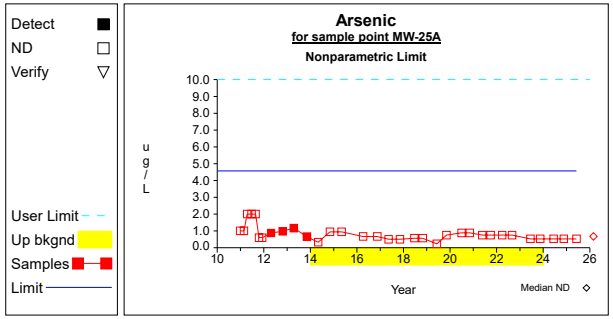


Graph 27

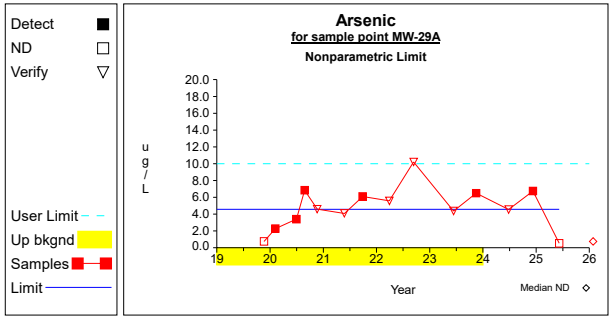
Up vs. Down Prediction Limits



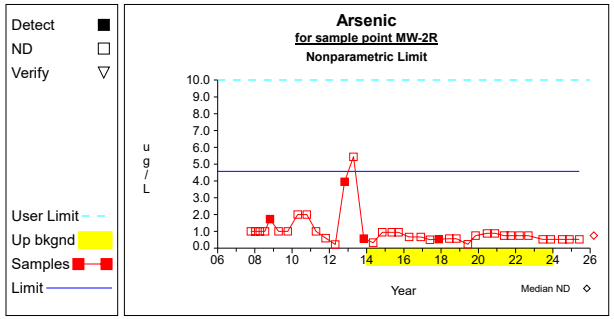
Graph 28



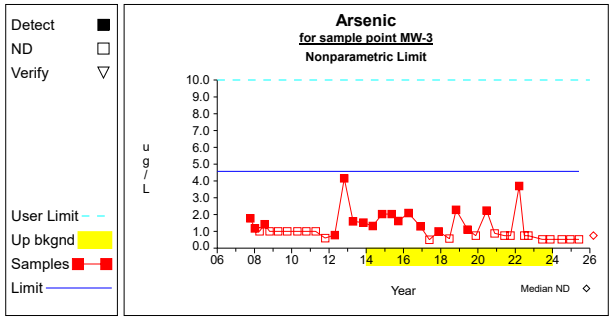
Graph 29



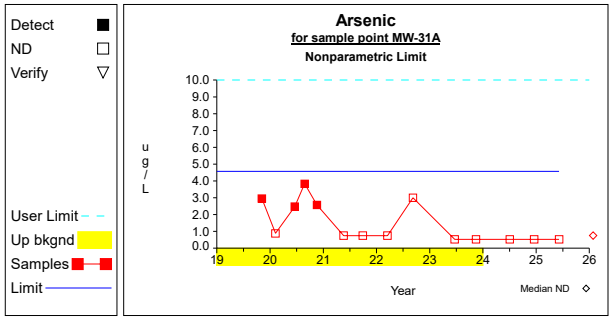
Graph 30



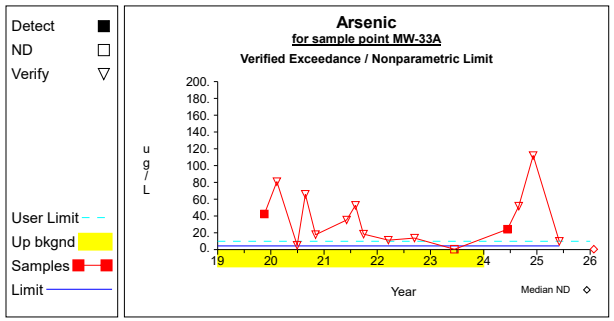
Graph 31



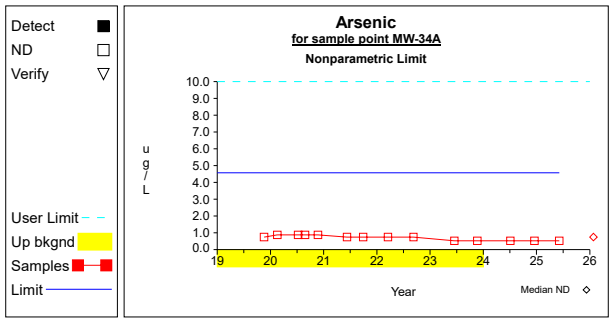
Graph 32



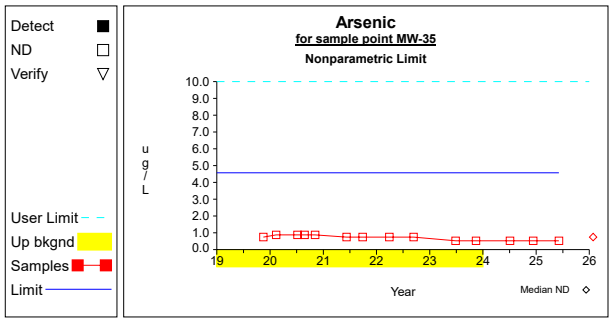
Graph 33



Graph 34

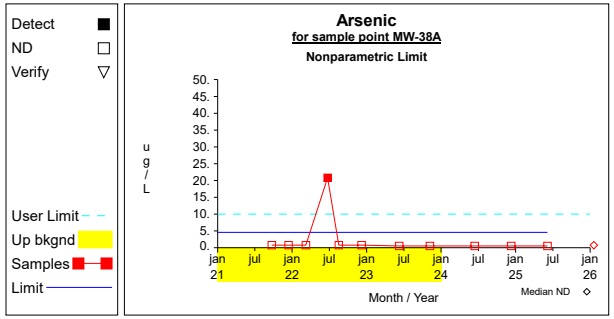


Graph 35

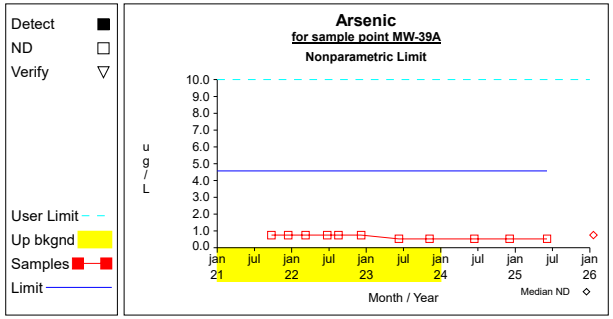


Graph 36

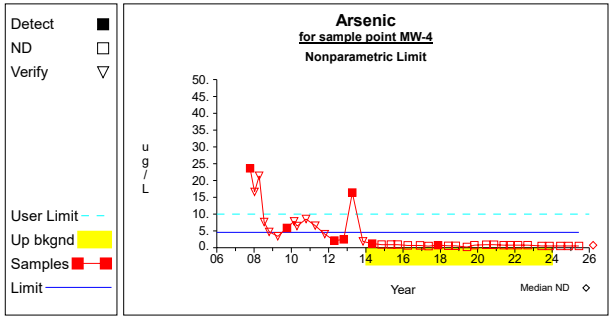
Up vs. Down Prediction Limits



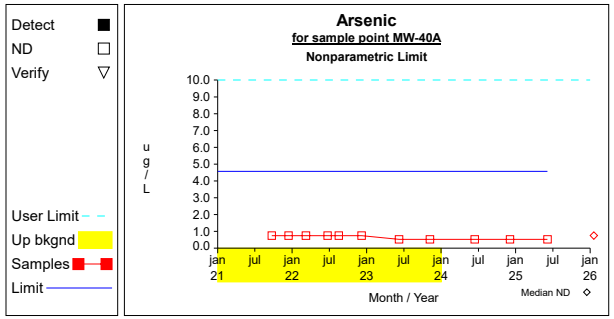
Graph 37



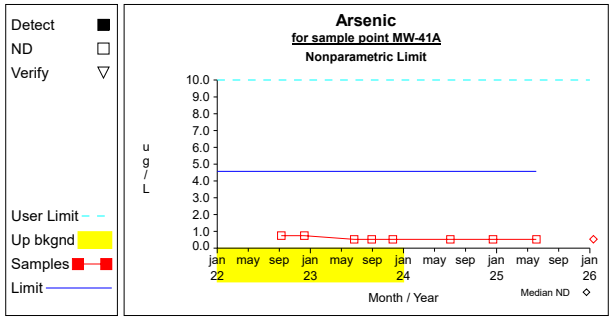
Graph 38



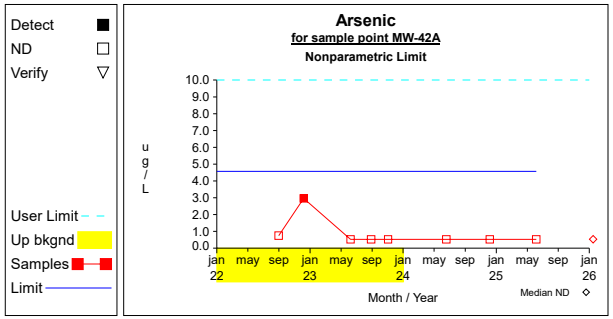
Graph 39



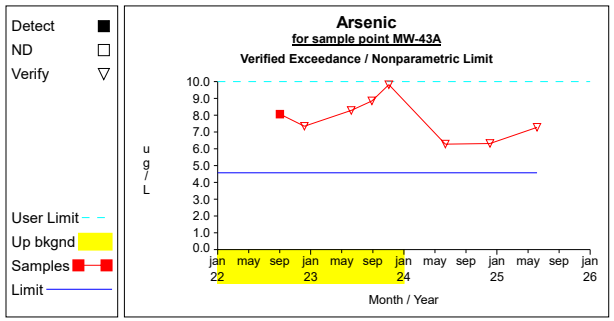
Graph 40



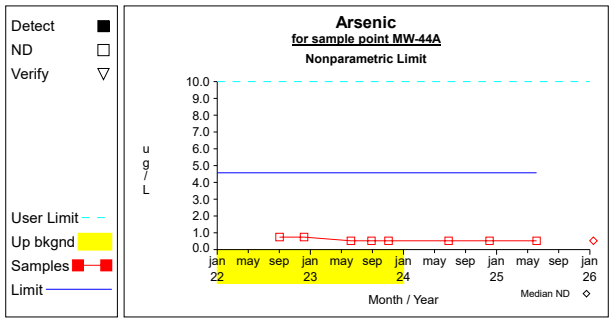
Graph 41



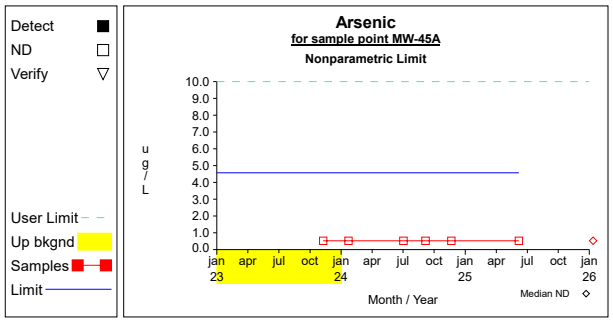
Graph 42



Graph 43

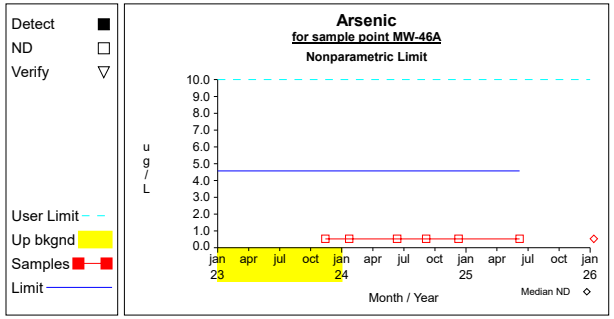


Graph 44

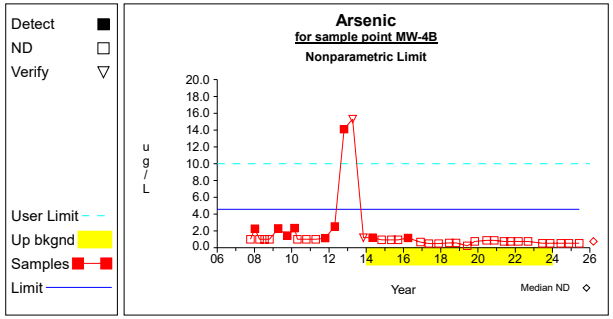


Graph 45

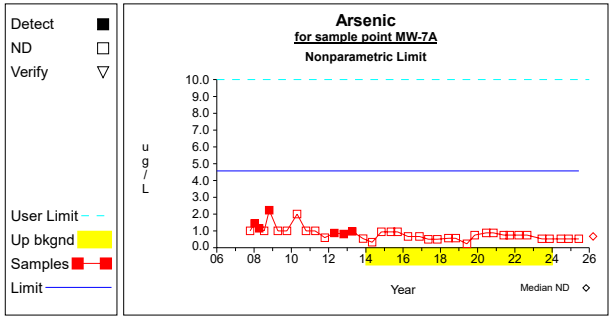
Up vs. Down Prediction Limits



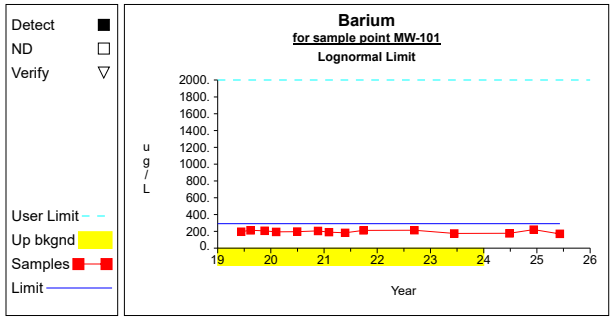
Graph 46



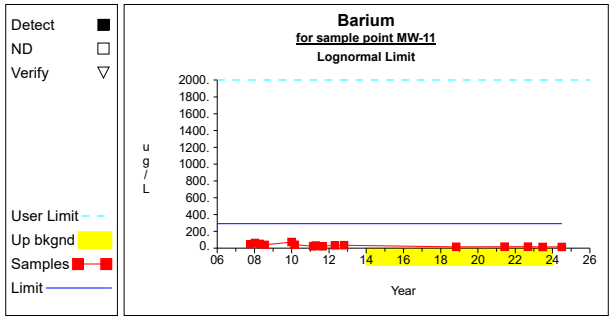
Graph 47



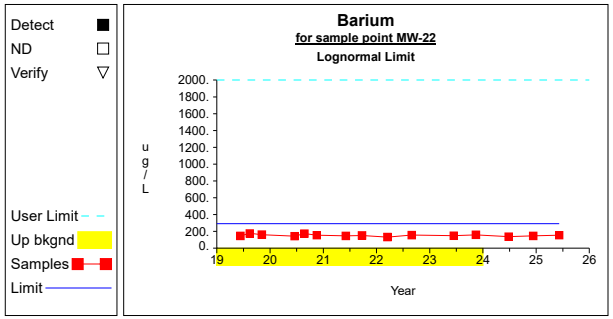
Graph 48



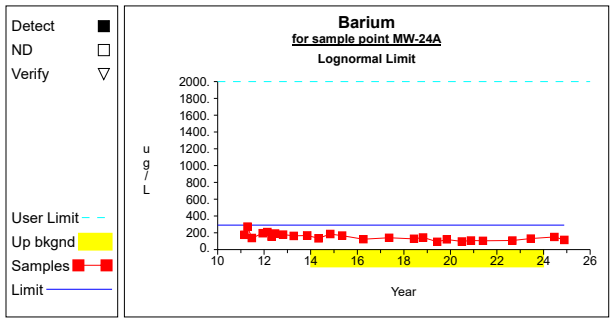
Graph 49



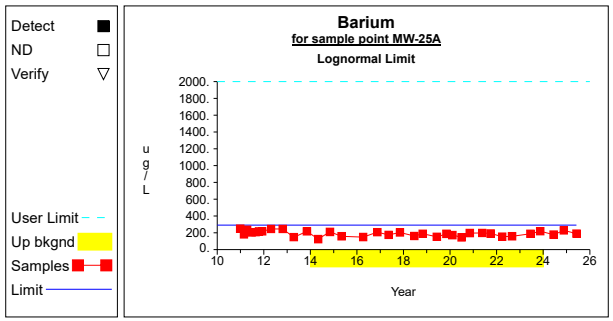
Graph 50



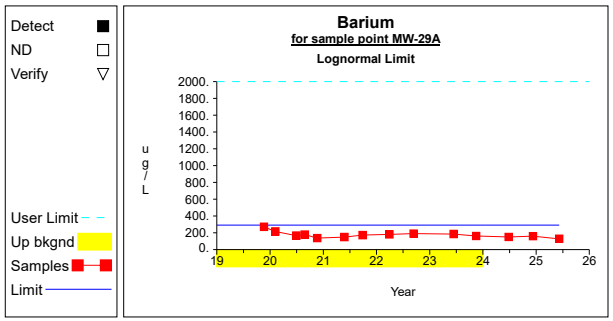
Graph 51



Graph 52

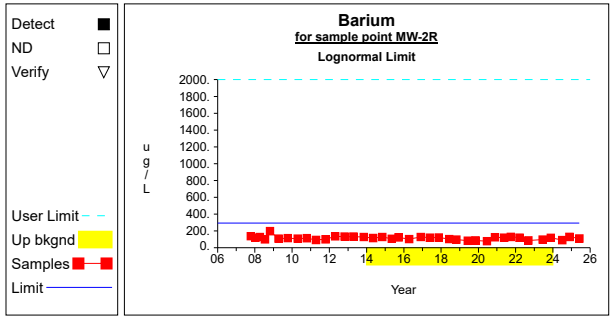


Graph 53

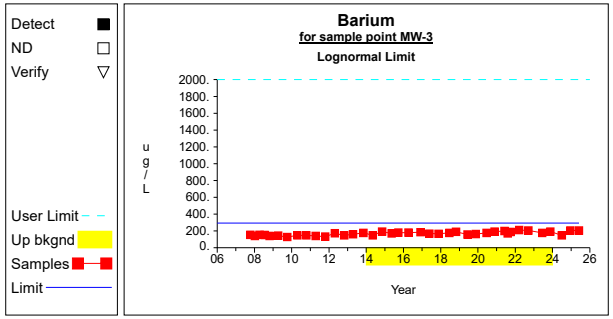


Graph 54

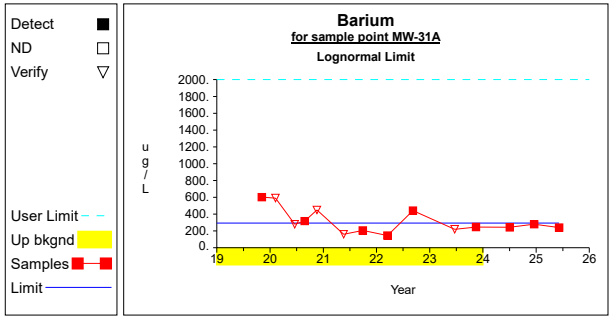
Up vs. Down Prediction Limits



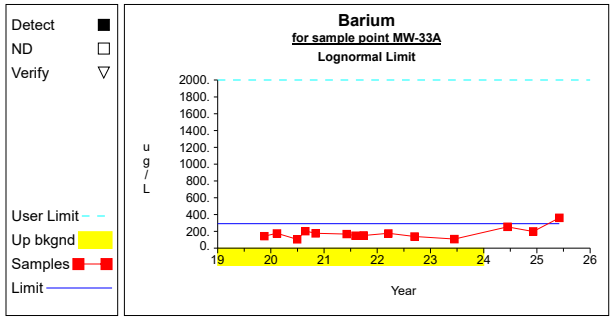
Graph 55



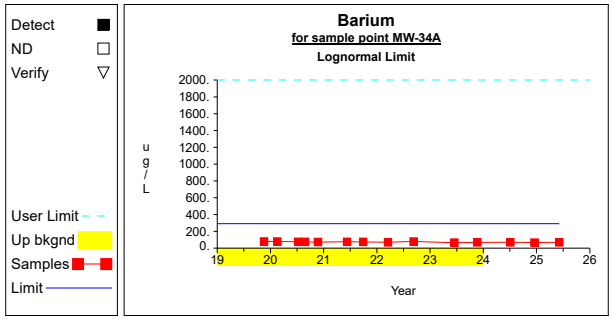
Graph 56



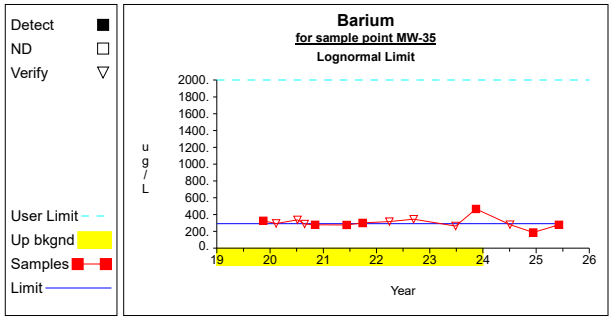
Graph 57



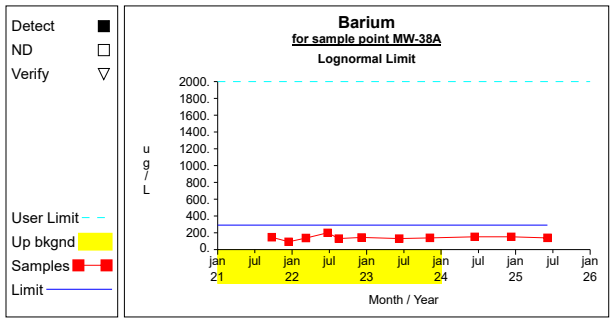
Graph 58



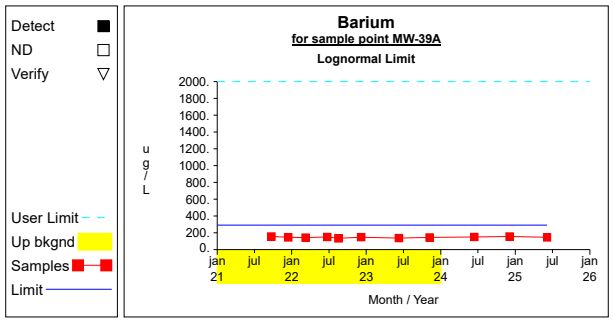
Graph 59



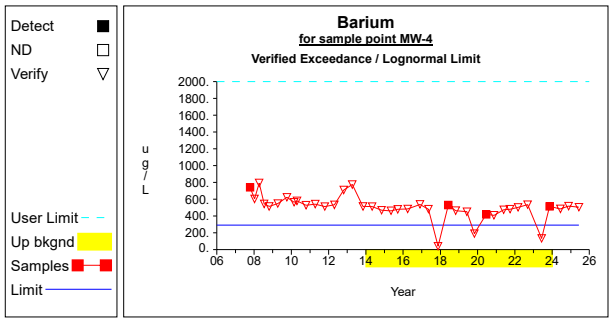
Graph 60



Graph 61

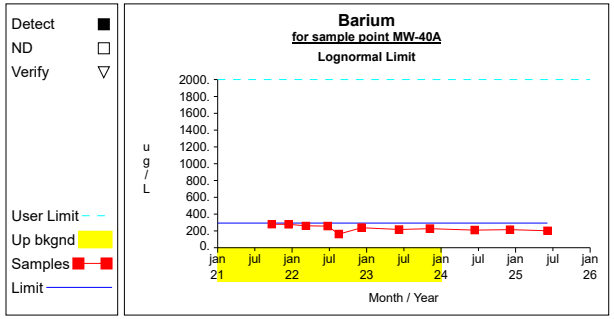


Graph 62

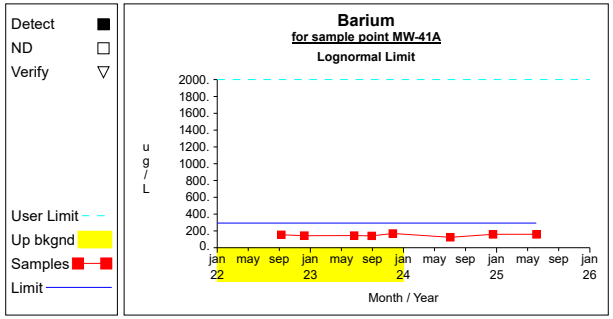


Graph 63

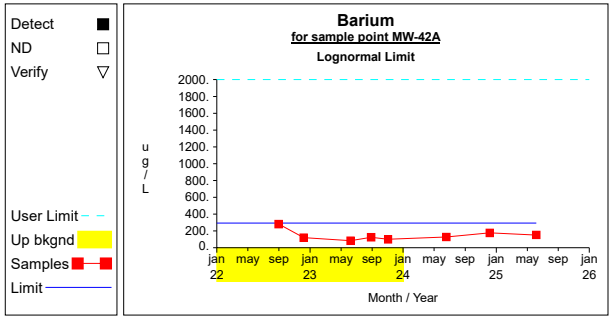
Up vs. Down Prediction Limits



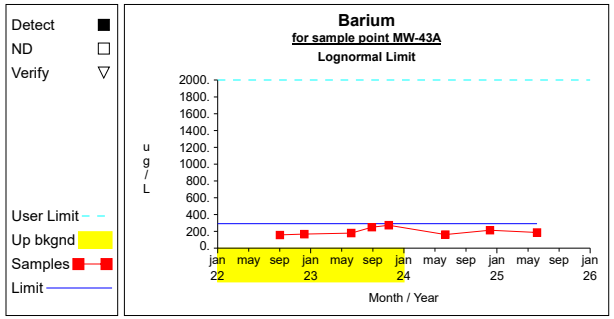
Graph 64



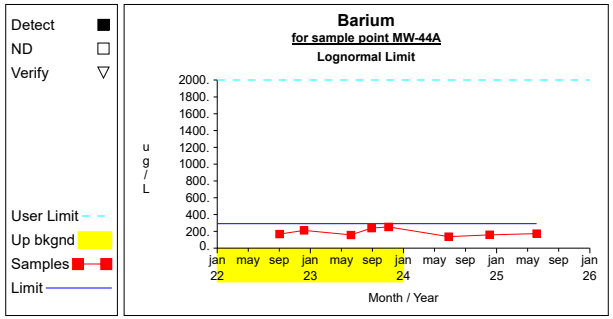
Graph 65



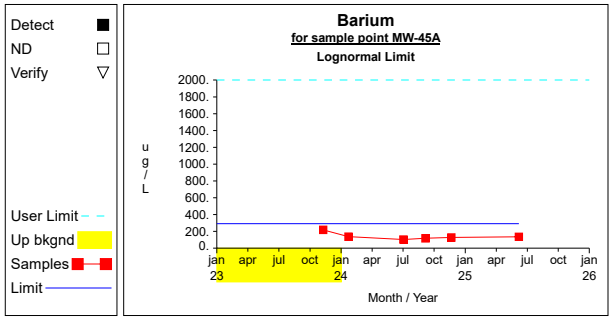
Graph 66



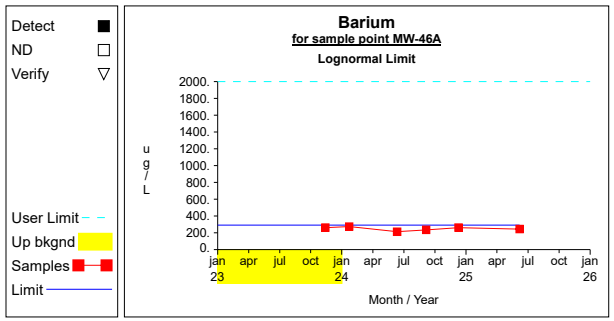
Graph 67



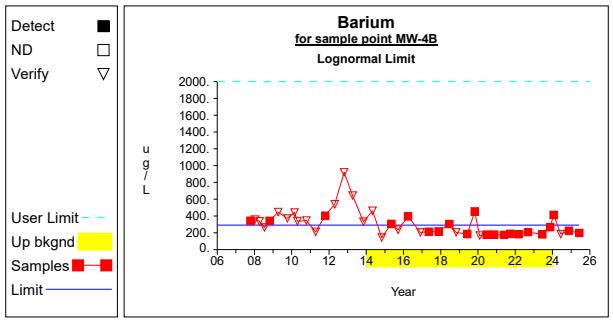
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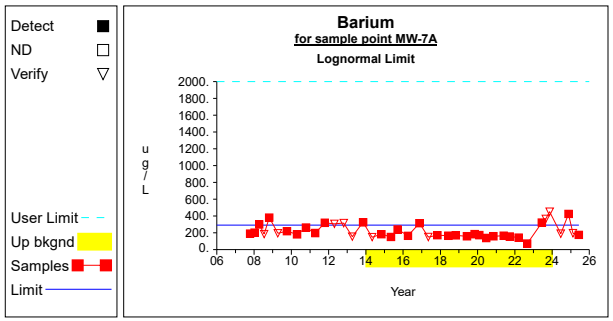
Graph 69



Graph 70

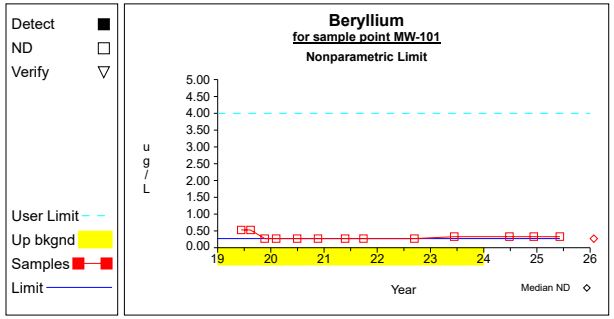


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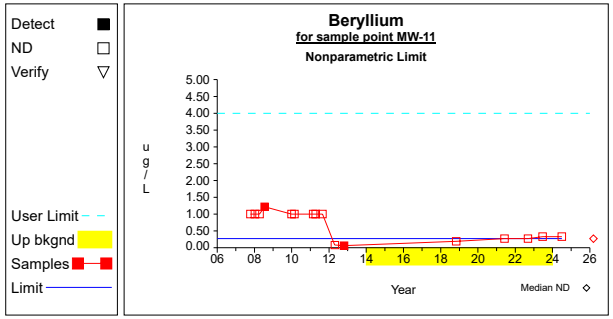


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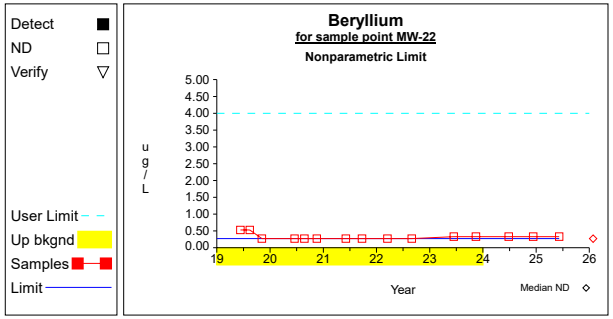
Up vs. Down Prediction Limits



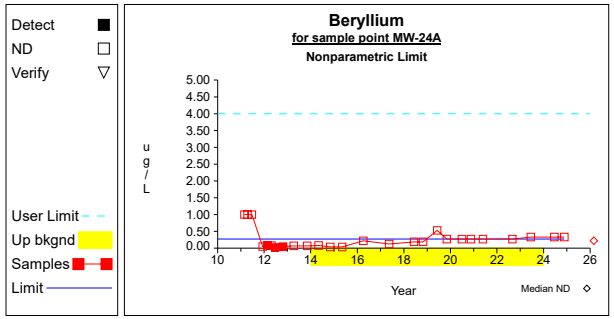
Graph 73



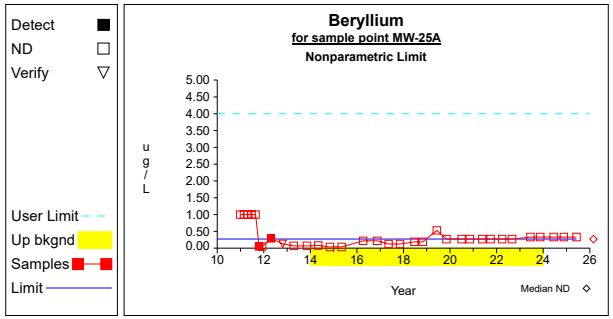
Graph 74



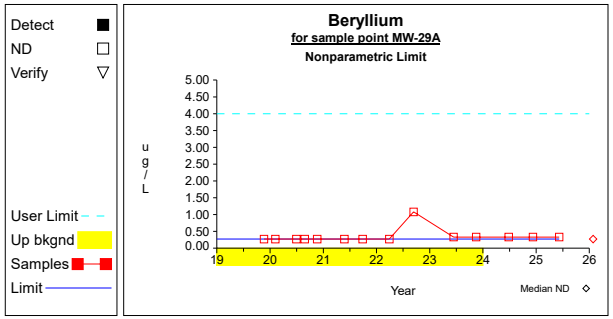
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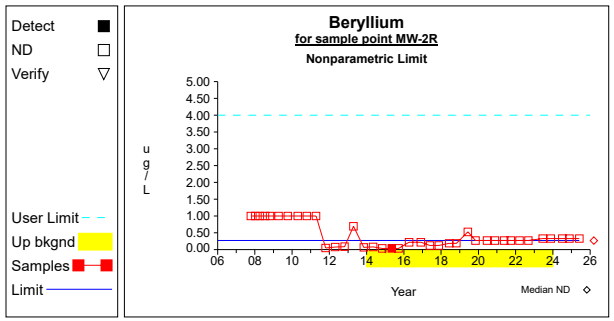
Graph 76



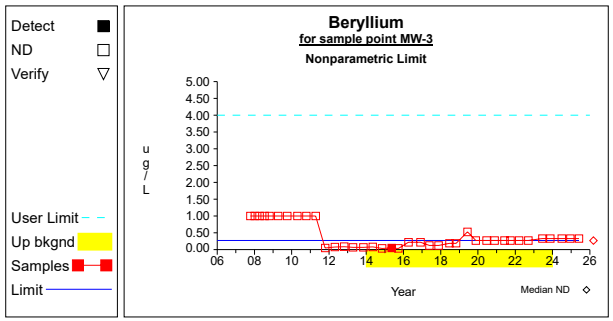
Graph 77



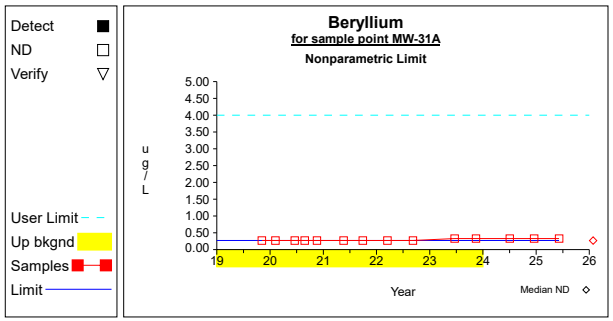
Graph 78



Graph 79

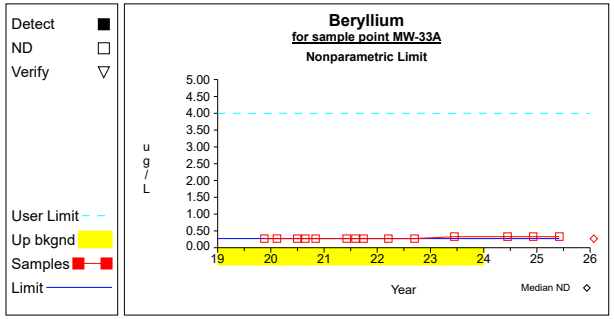


Graph 80

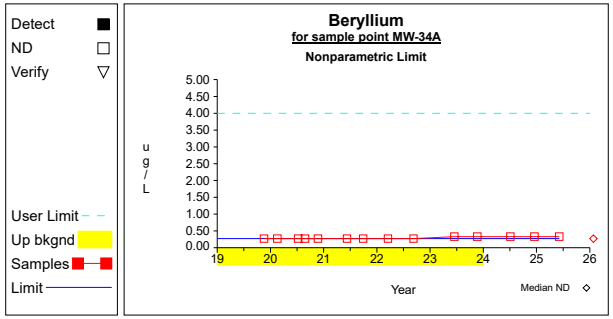


Graph 81

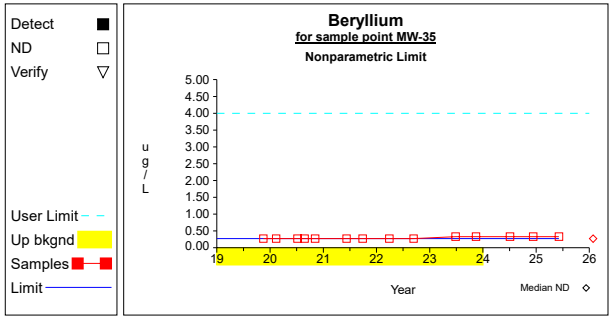
Up vs. Down Prediction Limits



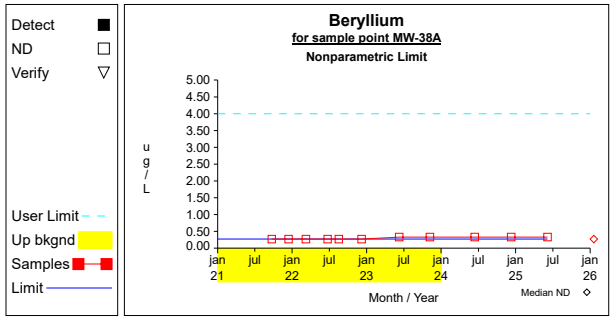
Graph 82



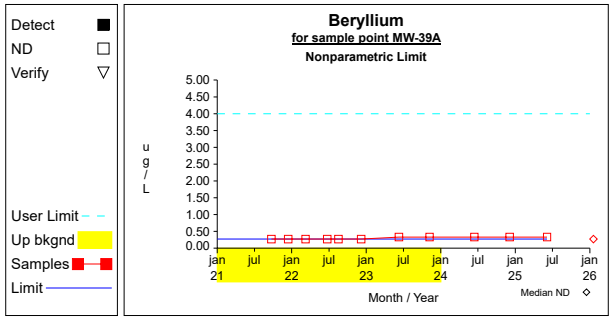
Graph 83



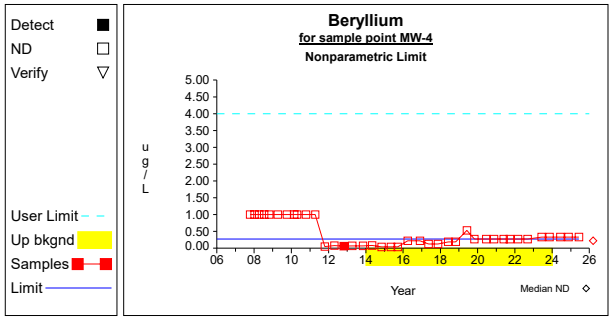
Graph 84



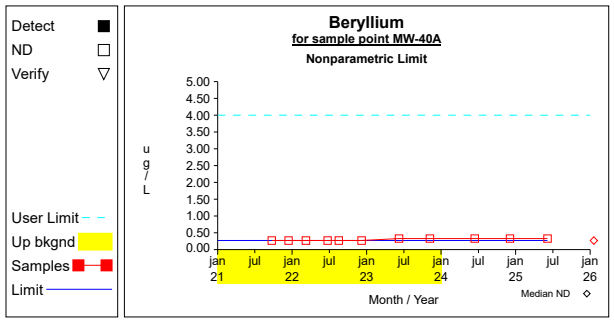
Graph 85



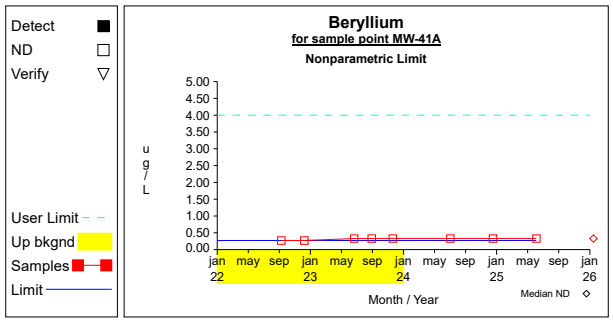
Graph 86



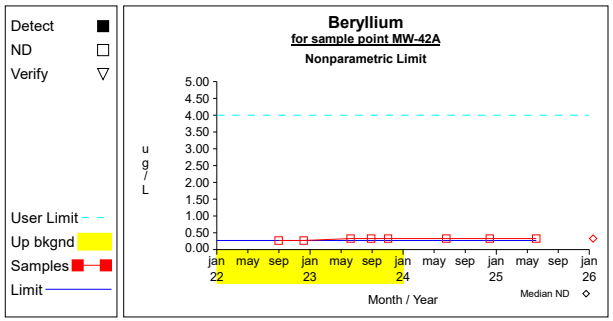
Graph 87



Graph 88

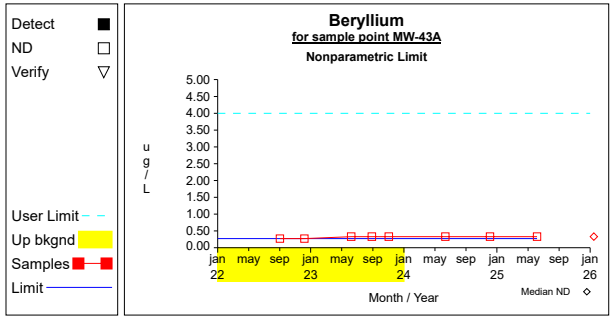


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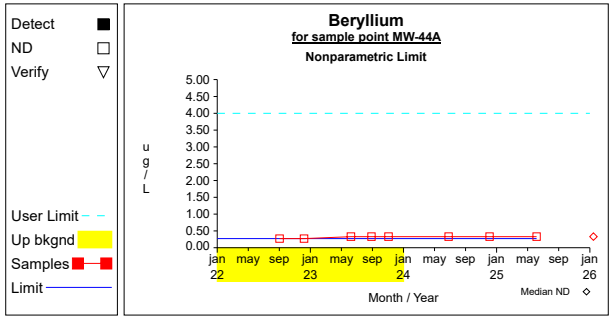


Graph 90

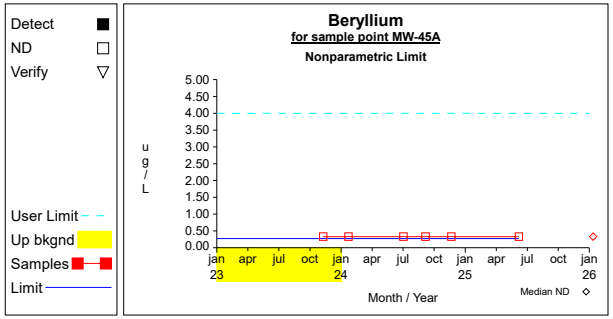
Up vs. Down Prediction Limits



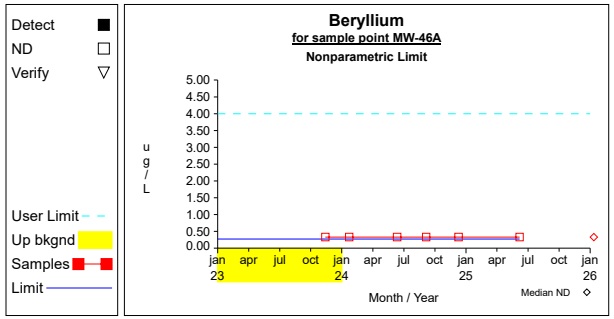
Graph 91



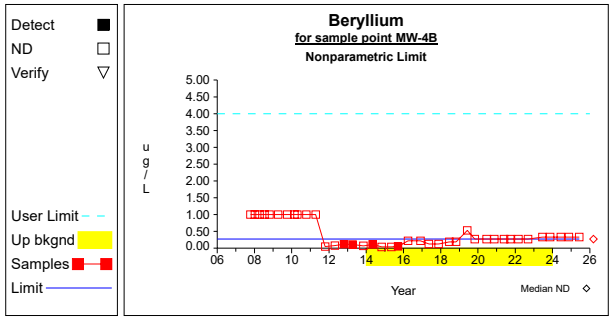
Graph 92



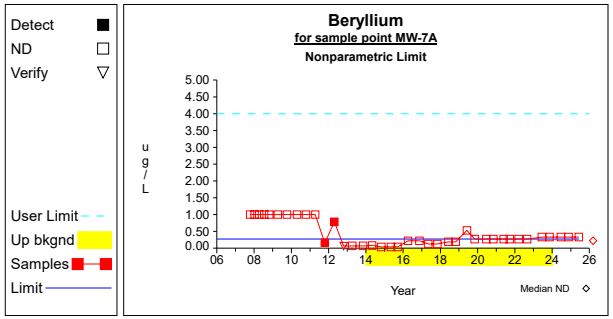
Graph 93



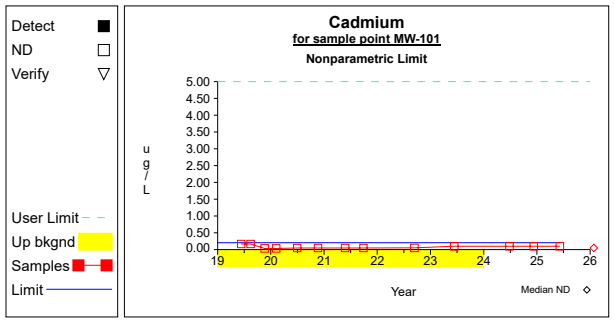
Graph 94



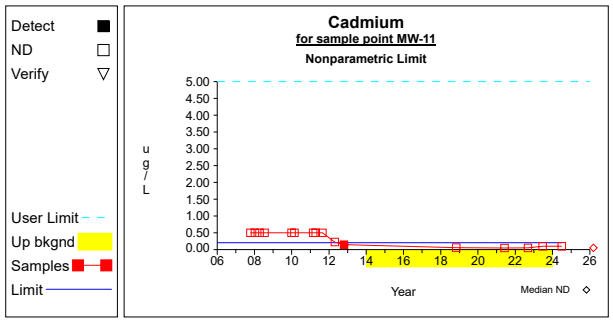
Graph 95



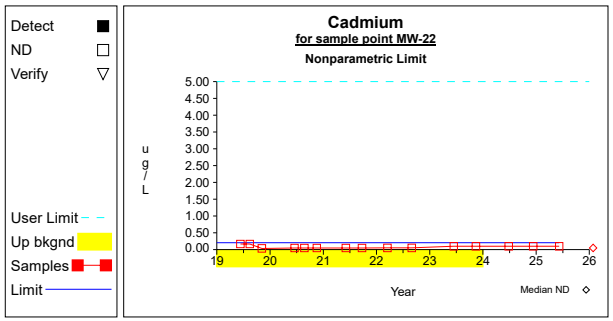
Graph 96



Graph 97

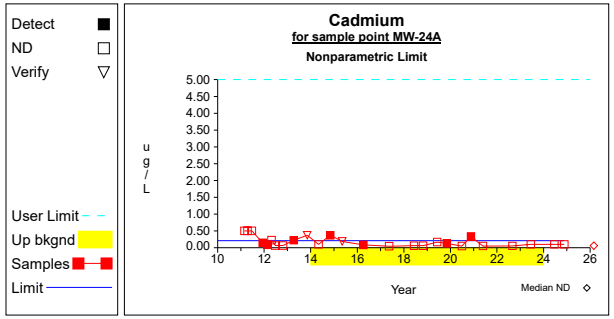


Graph 98

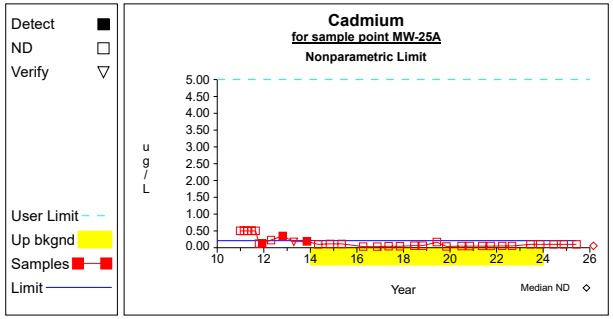


Graph 99

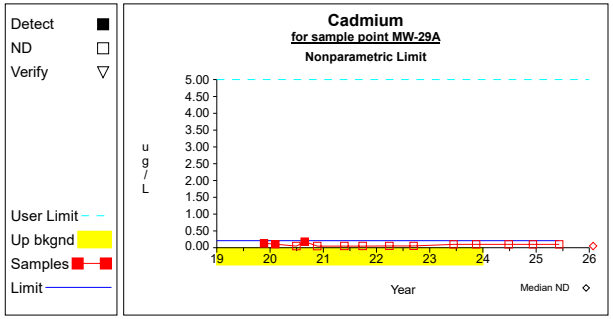
Up vs. Down Prediction Limits



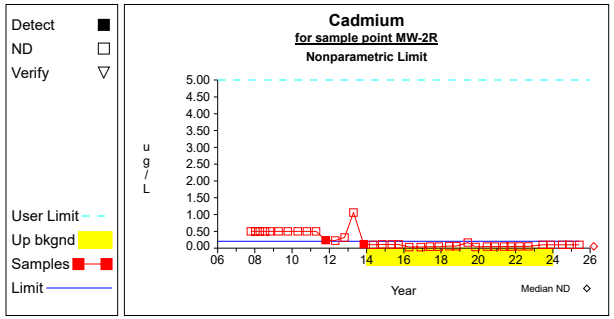
Graph 100



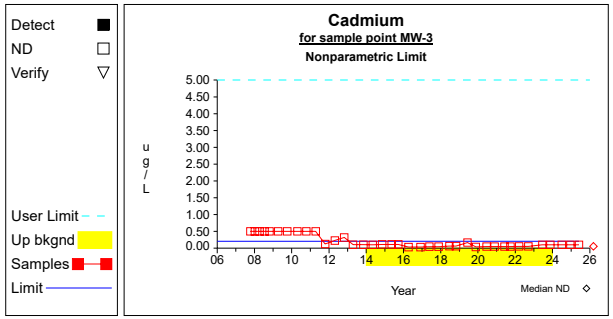
Graph 101



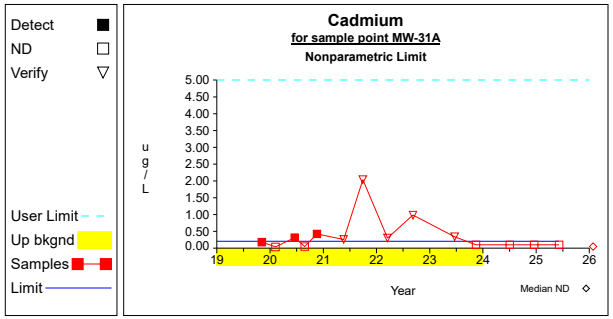
Graph 102



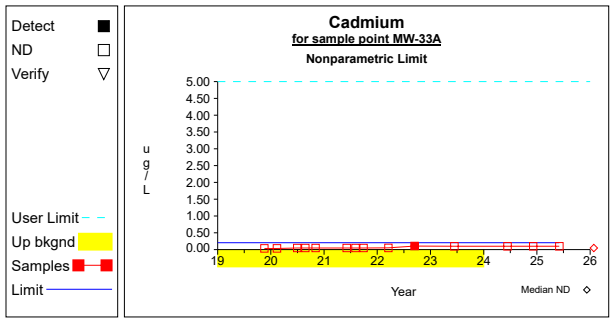
Graph 103



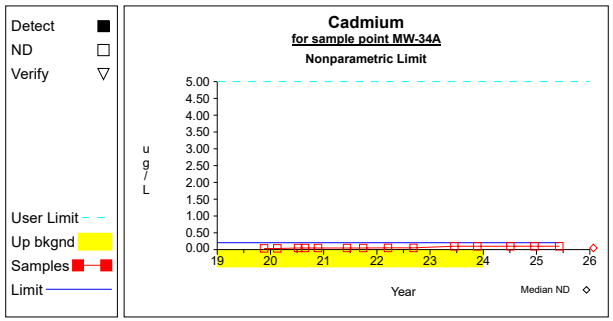
Graph 104



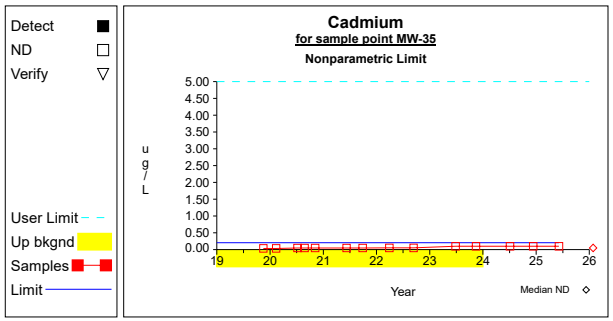
Graph 105



Graph 106

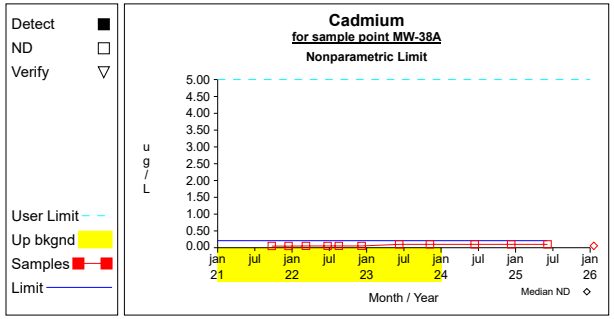


Graph 107

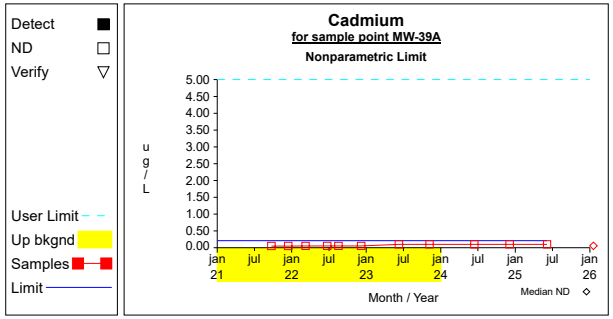


Graph 108

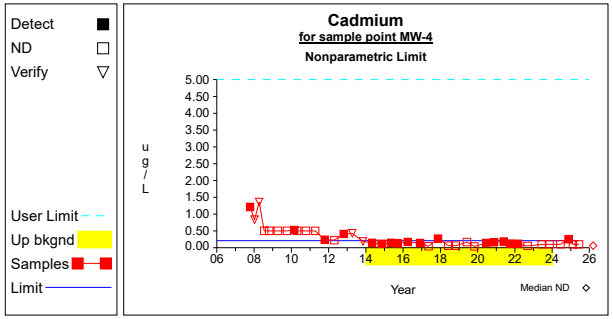
Up vs. Down Prediction Limits



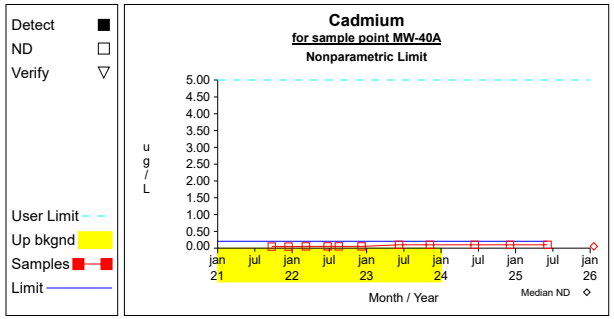
Graph 109



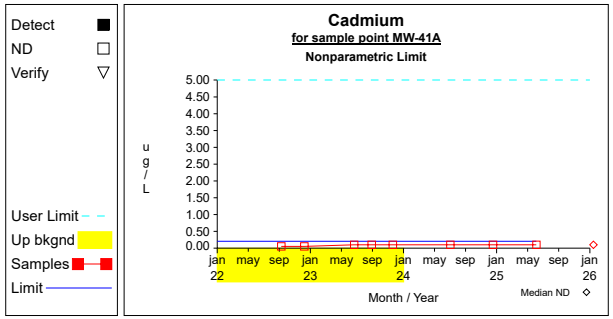
Graph 110



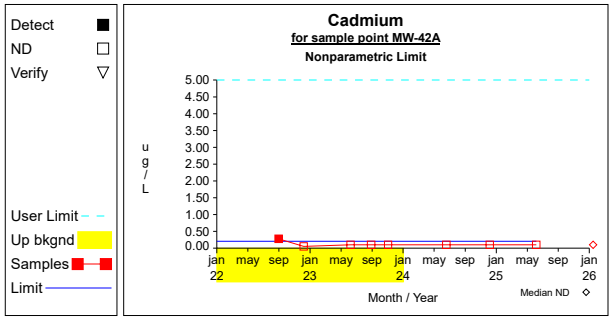
Graph 111



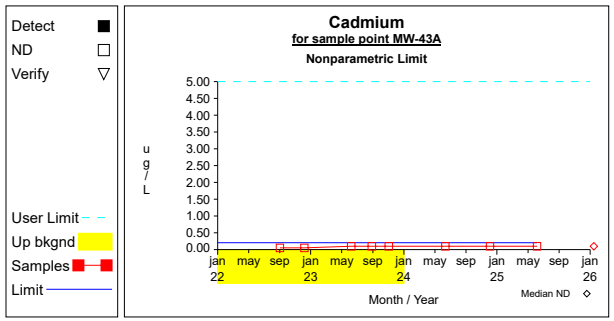
Graph 112



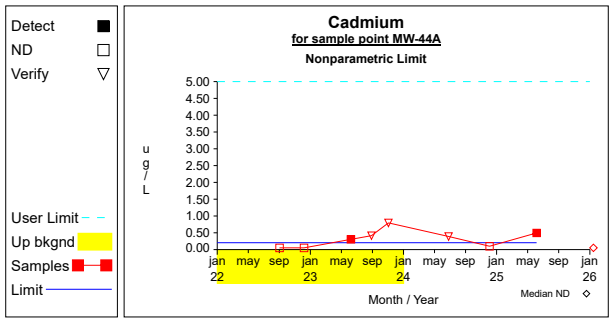
Graph 113



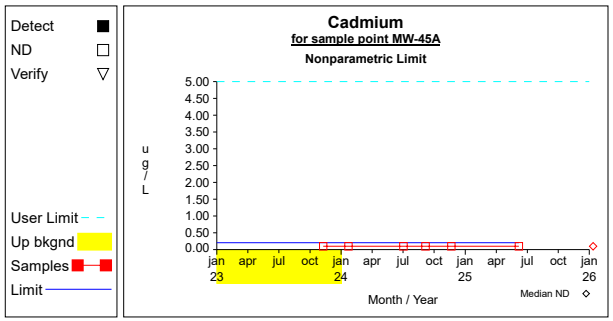
Graph 114



Graph 115

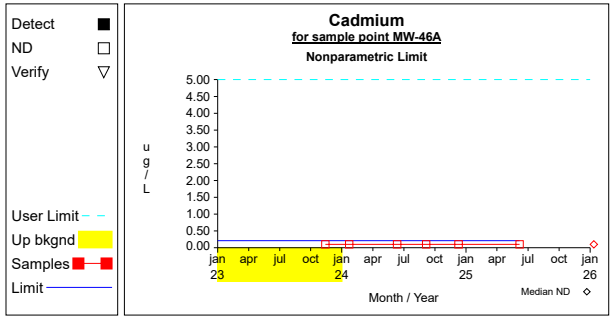


Graph 116

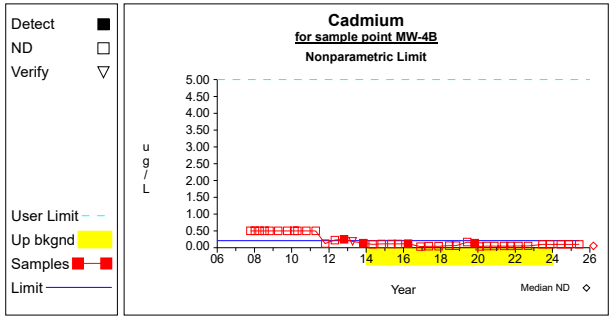


Graph 117

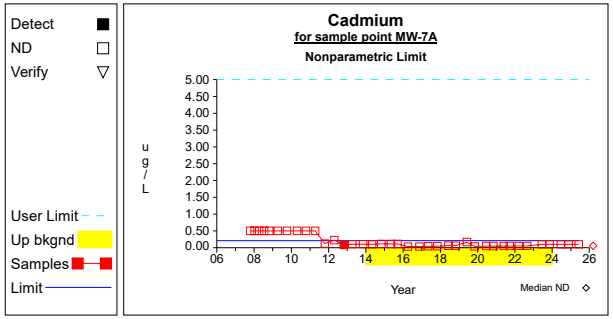
Up vs. Down Prediction Limits



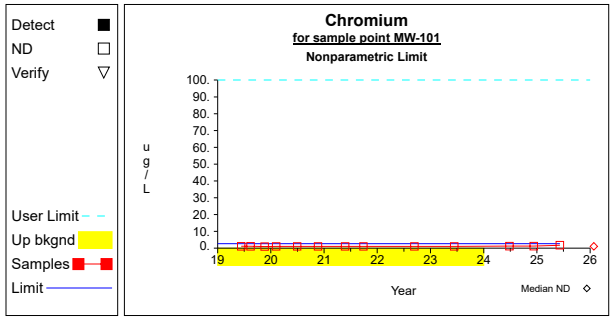
Graph 118



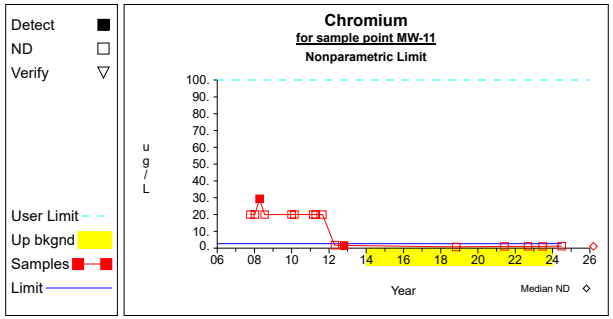
Graph 119



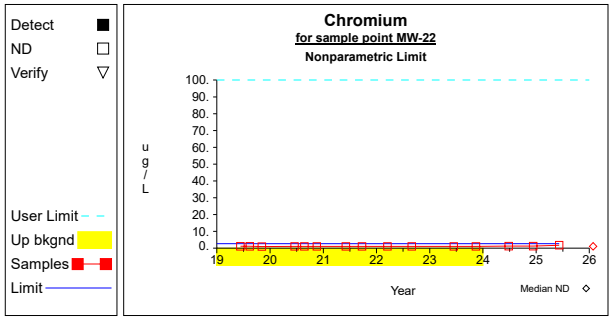
Graph 120



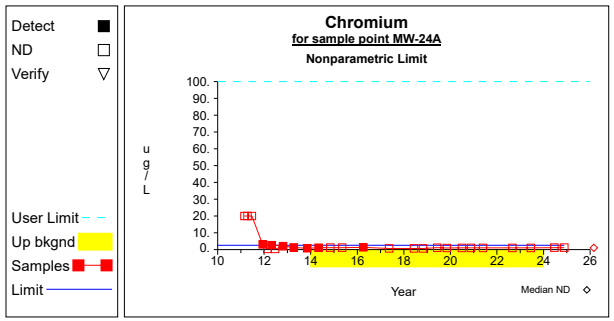
Graph 121



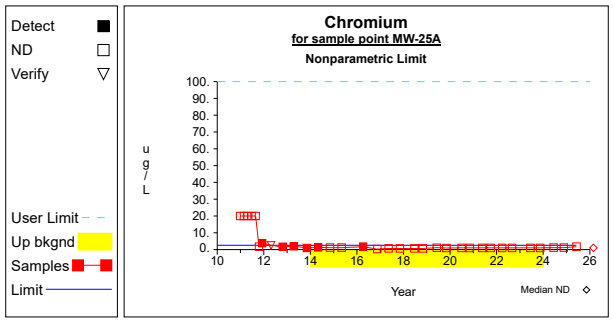
Graph 122



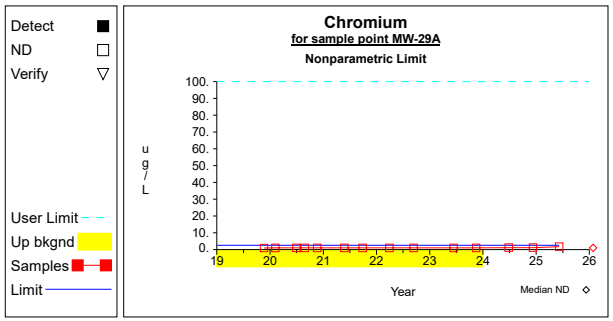
Graph 123



Graph 124

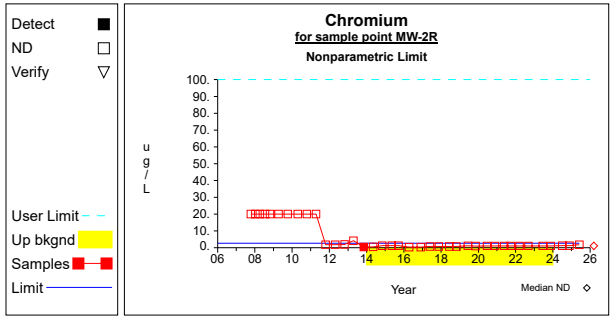


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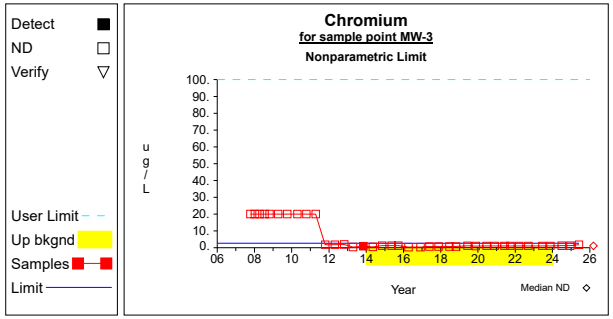


Graph 126

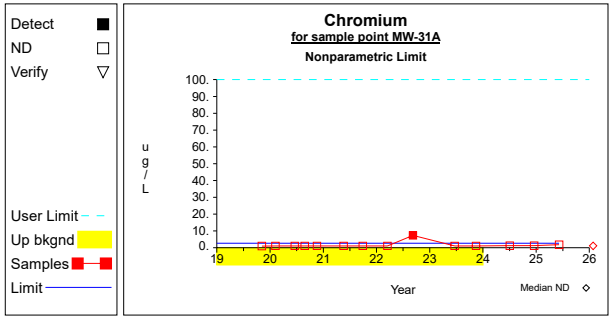
Up vs. Down Prediction Limits



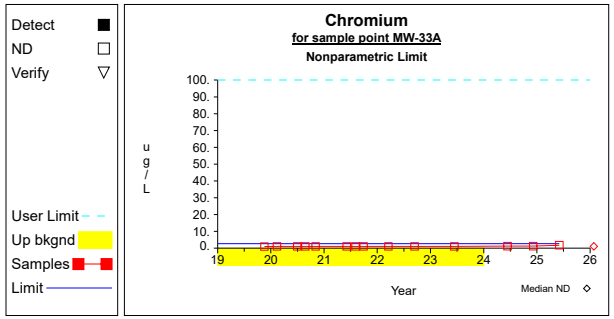
Graph 127



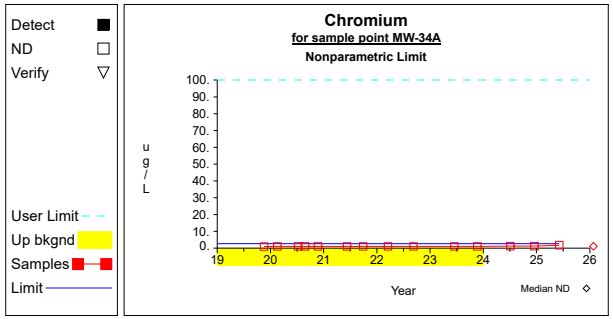
Graph 128



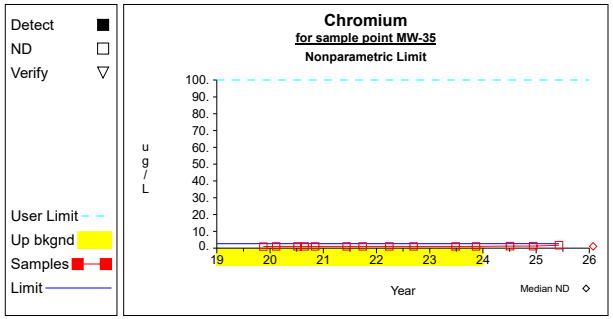
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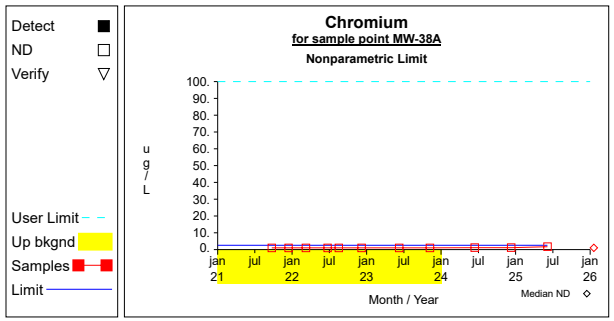
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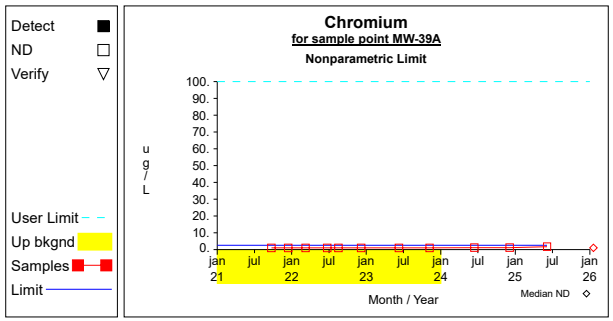
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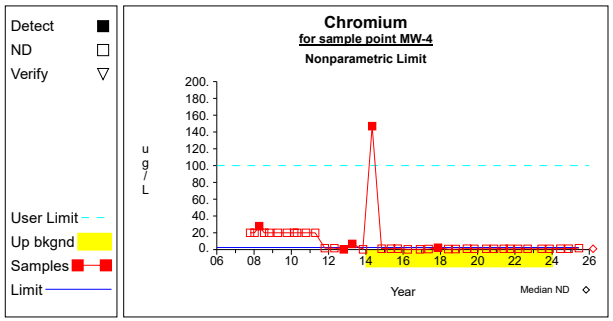
Graph 132



Graph 133

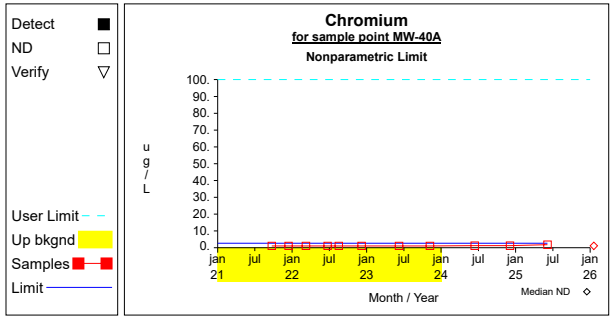


Graph 134

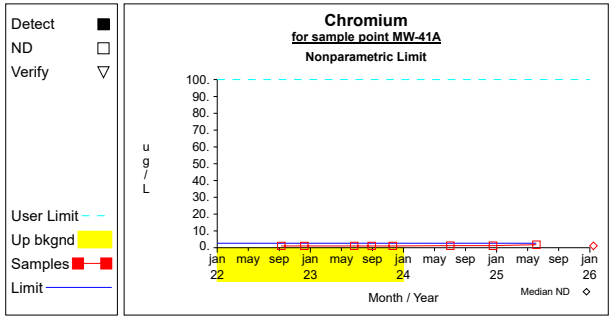


Graph 135

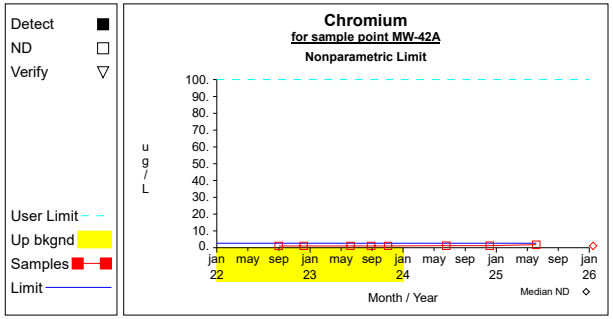
Up vs. Down Prediction Limits



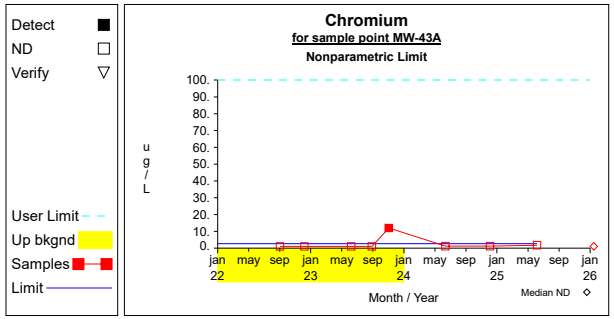
Graph 136



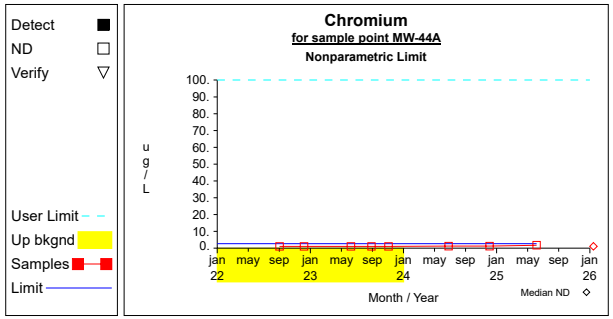
Graph 137



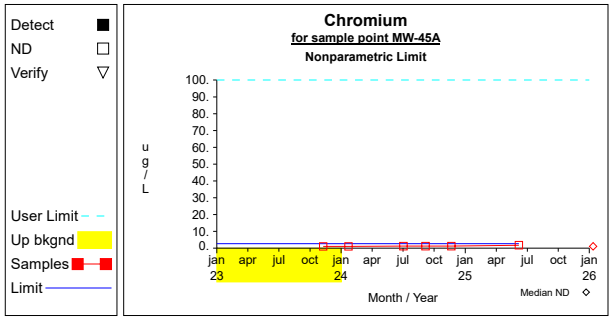
Graph 138



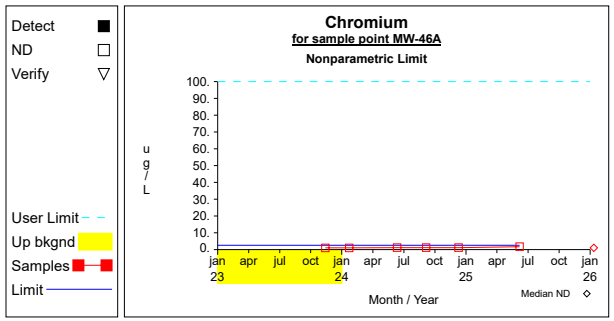
Graph 139



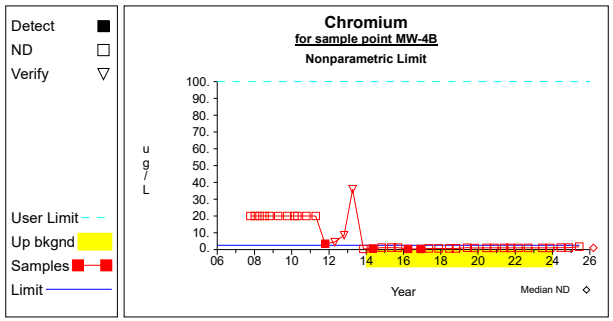
Graph 140



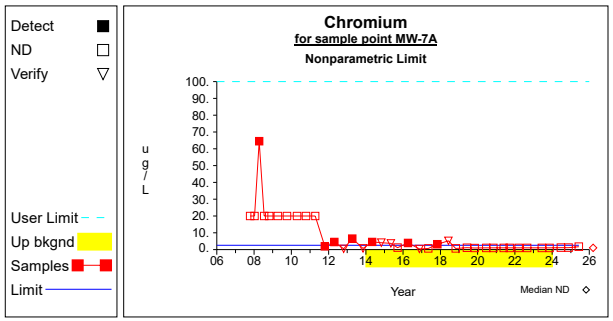
Graph 141



Graph 142

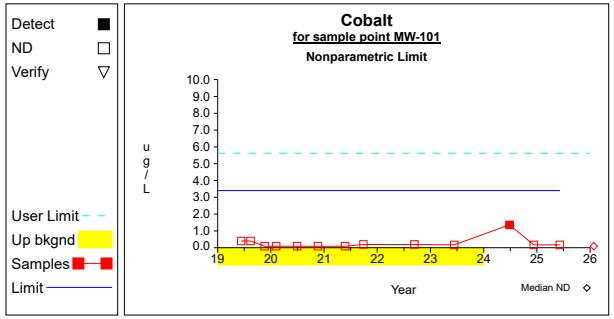


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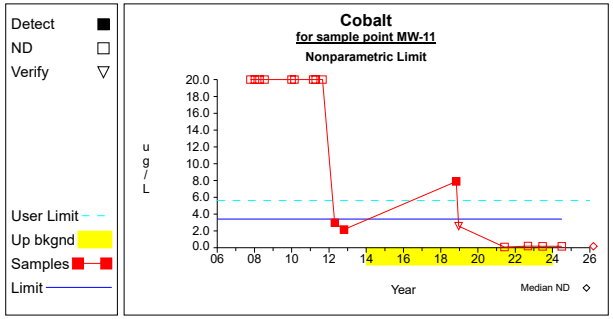


Graph 144

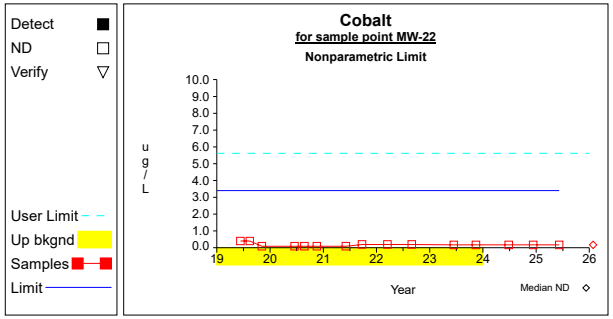
Up vs. Down Prediction Limits



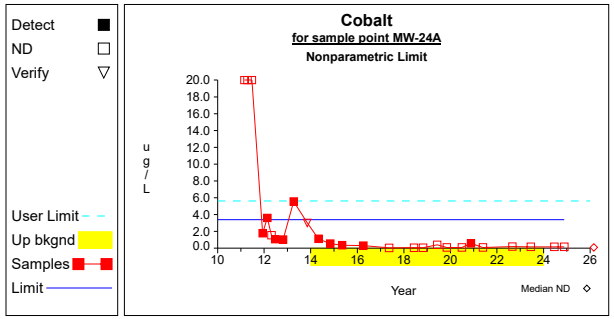
Graph 145



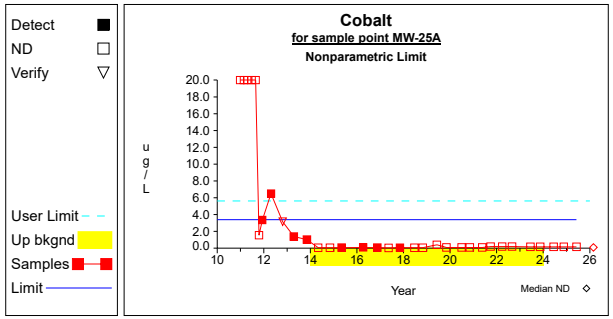
Graph 146



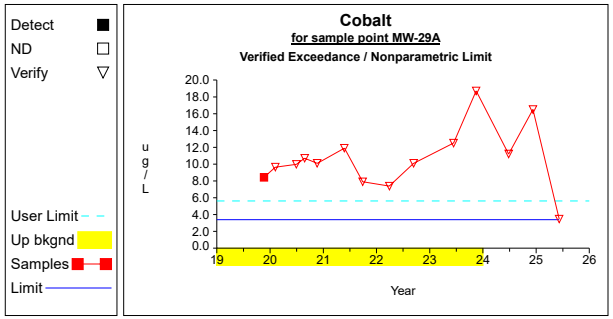
Graph 147



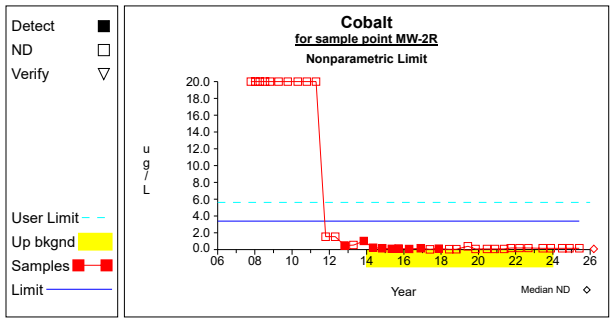
Graph 148



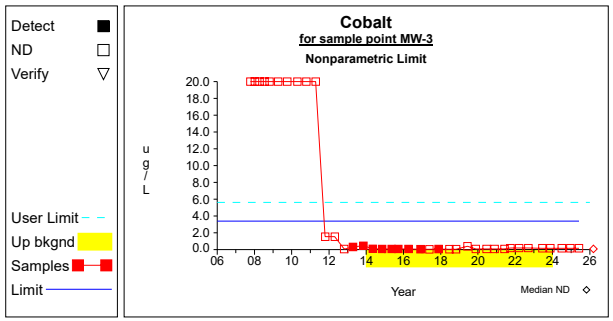
Graph 149



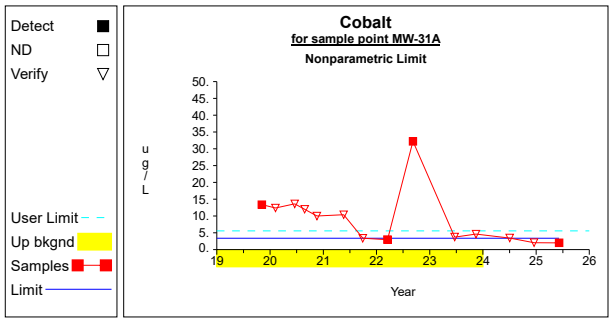
Graph 150



Graph 151

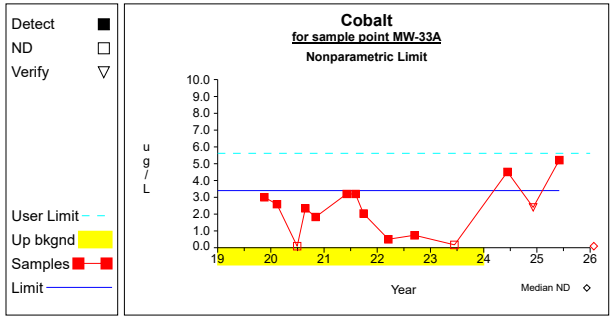


Graph 152

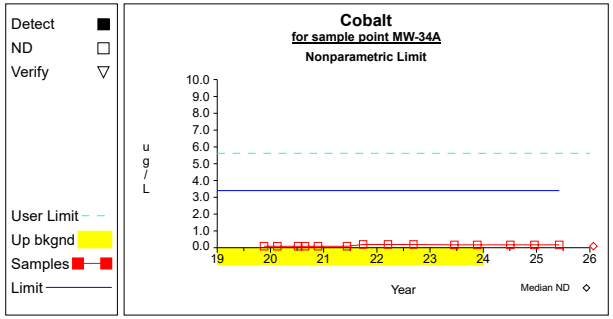


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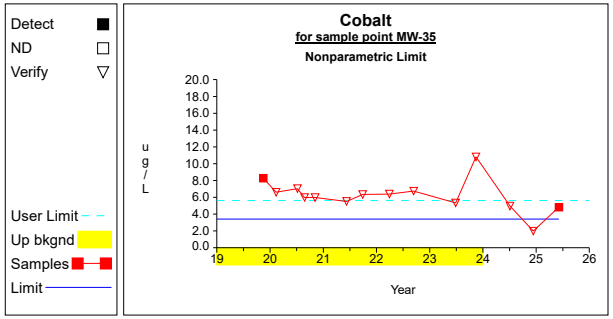
Up vs. Down Prediction Limits



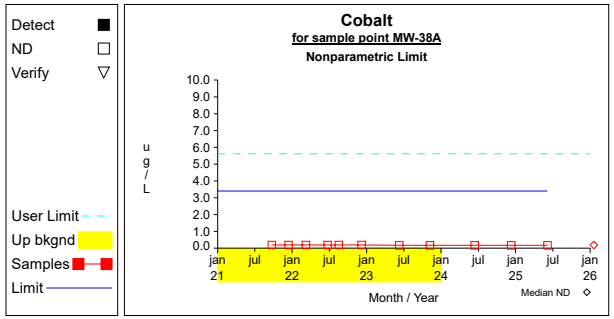
Graph 154



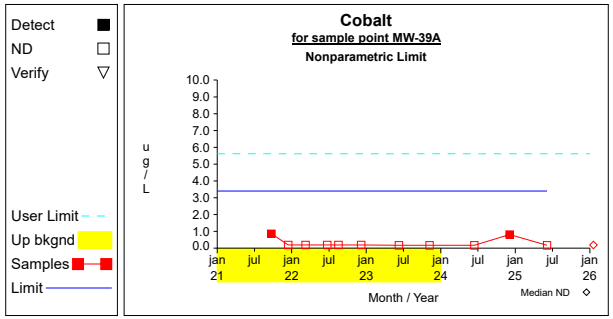
Graph 155



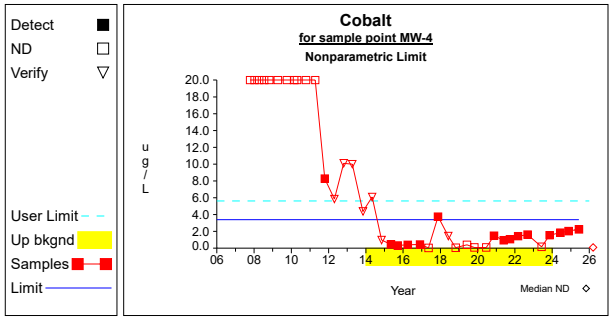
Graph 156



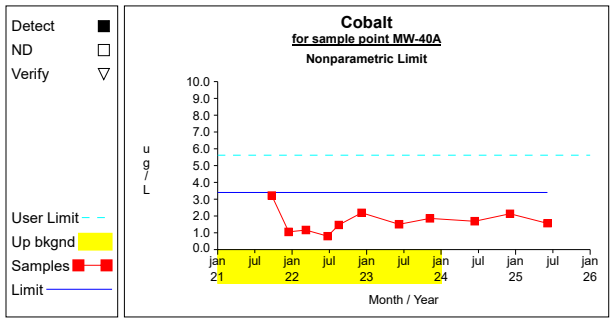
Graph 157



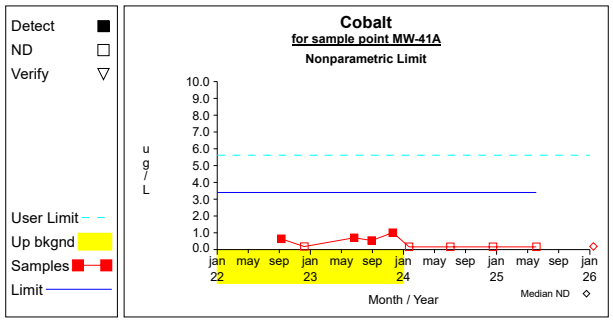
Graph 158



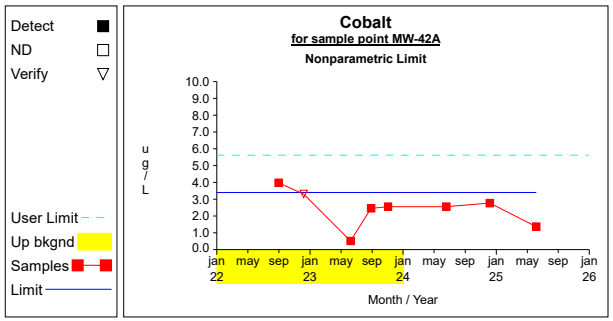
Graph 159



Graph 160

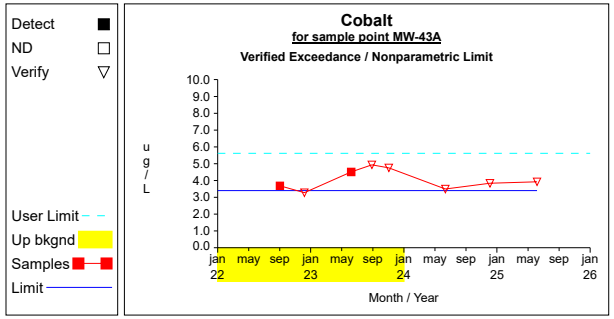


Graph 161

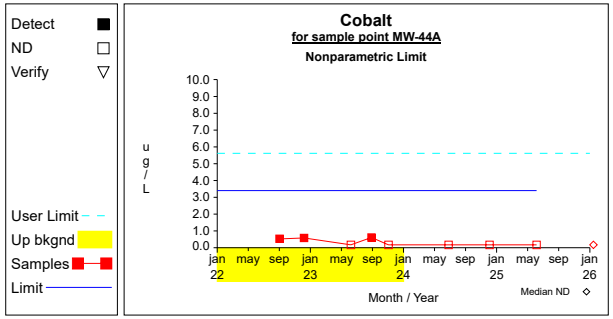


Graph 162

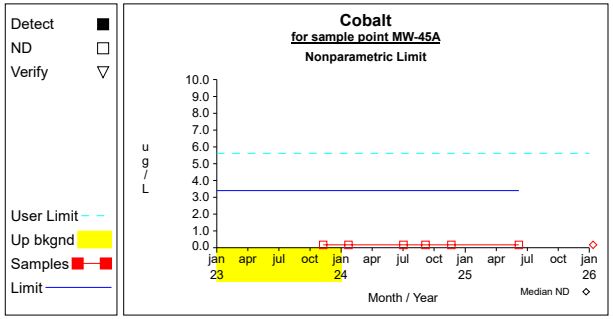
Up vs. Down Prediction Limits



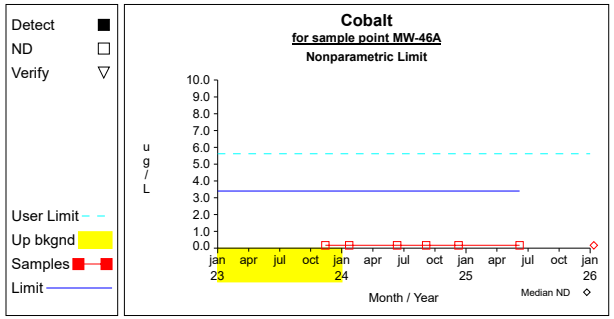
Graph 163



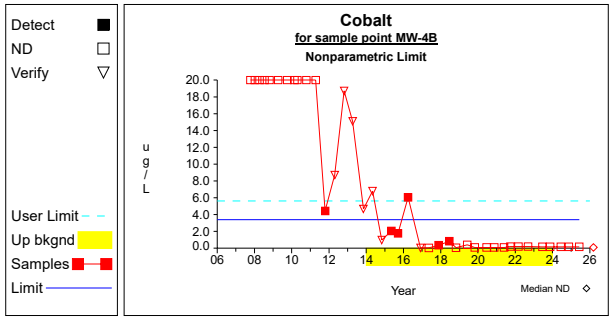
Graph 164



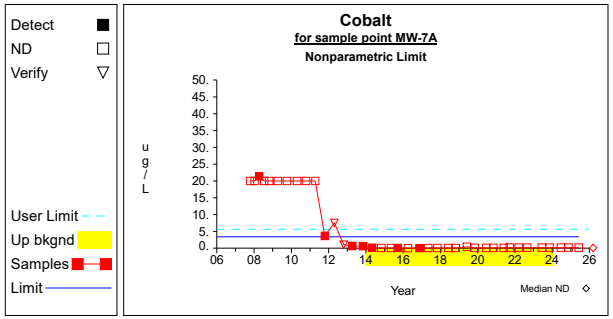
Graph 165



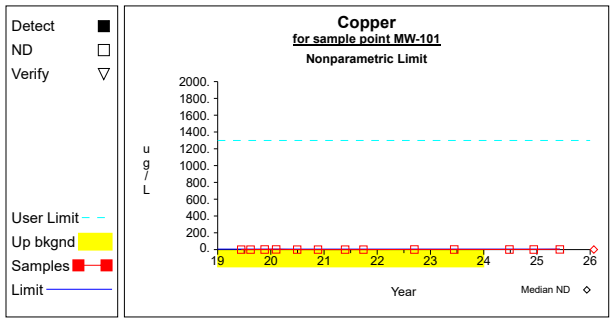
Graph 166



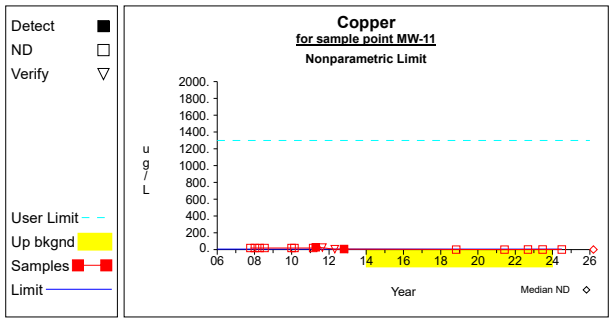
Graph 167



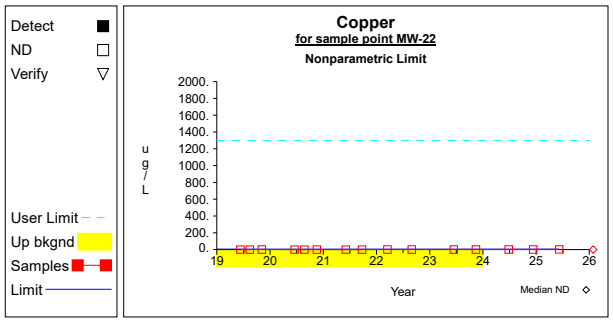
Graph 168



Graph 169

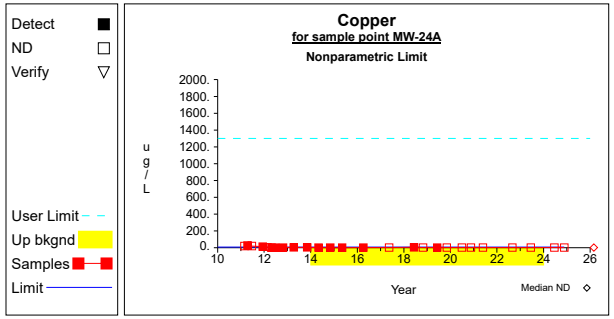


Graph 170

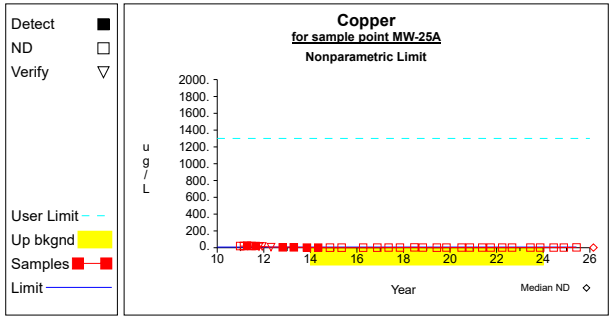


Graph 171

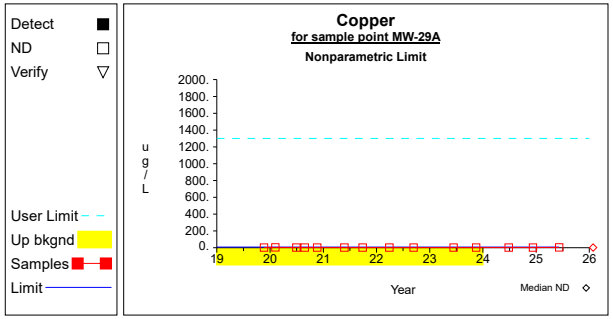
Up vs. Down Prediction Limits



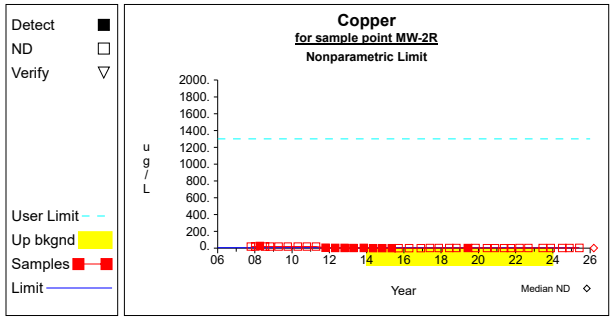
Graph 172



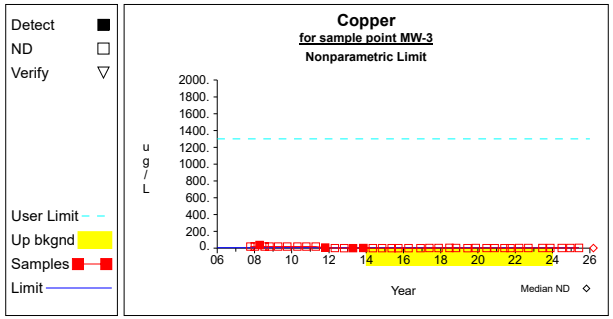
Graph 173



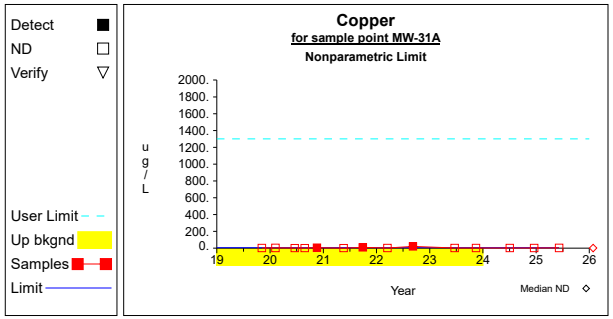
Graph 174



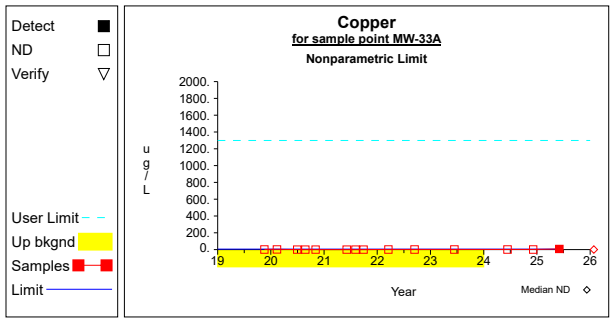
Graph 175



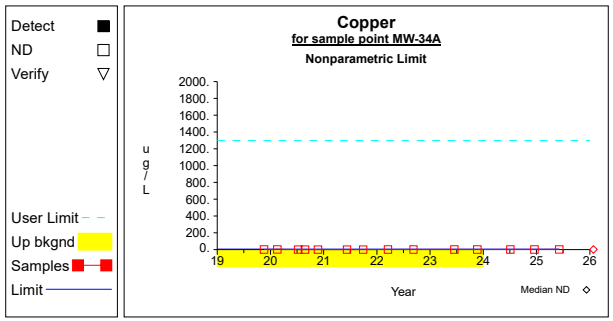
Graph 176



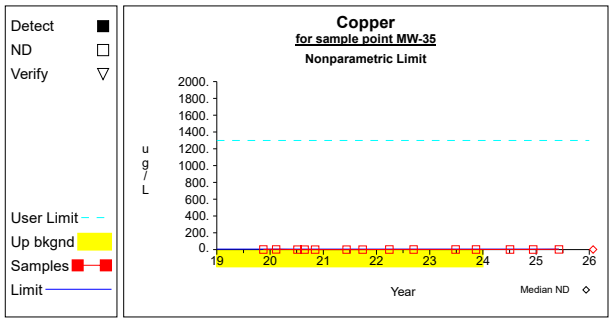
Graph 177



Graph 178

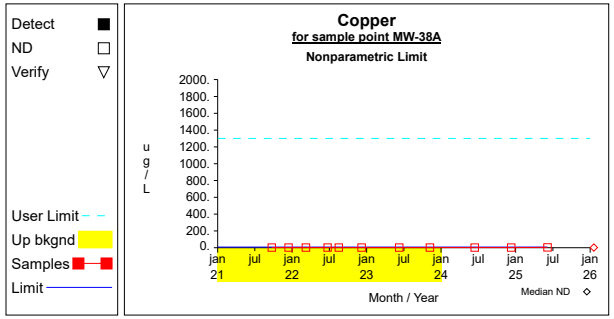


Graph 179

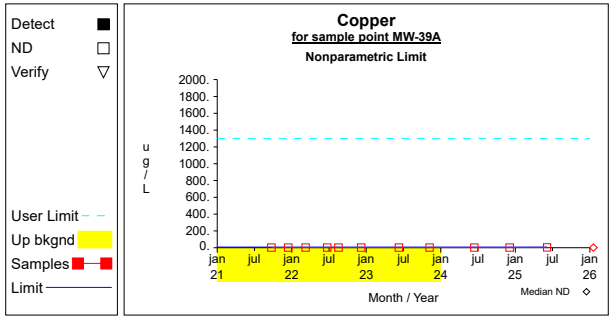


Graph 180

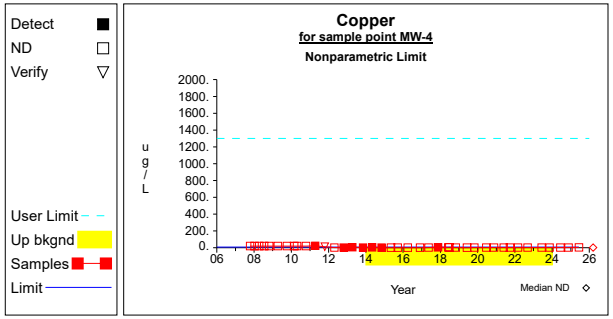
Up vs. Down Prediction Limits



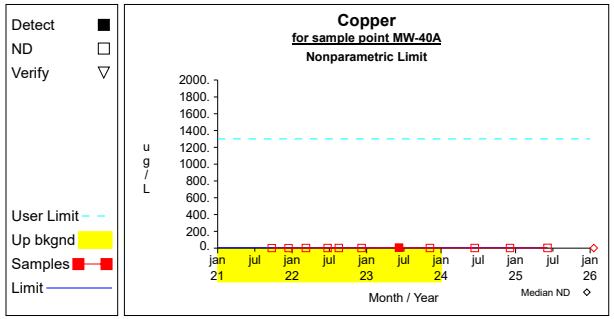
Graph 181



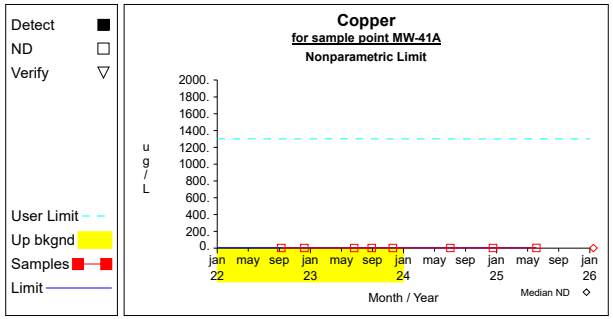
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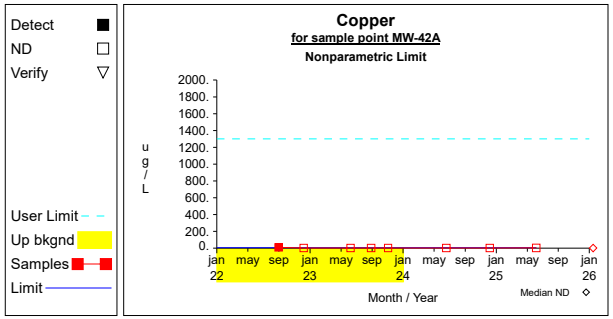
Graph 183



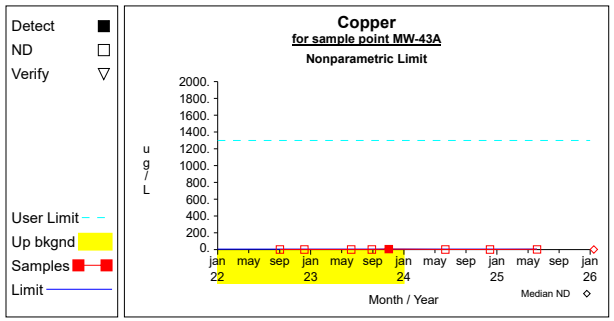
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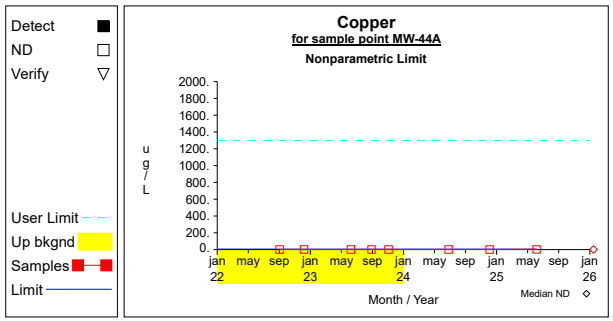
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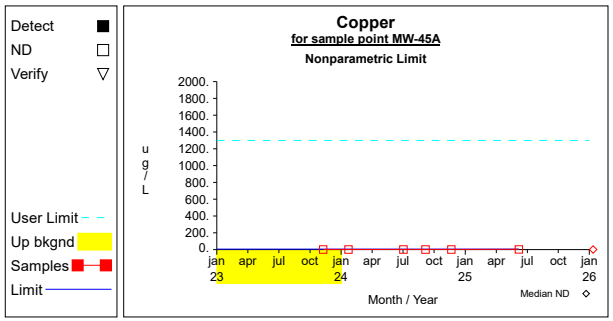
Graph 186



Graph 187

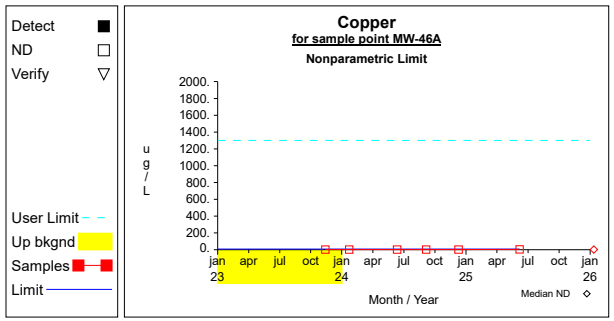


Graph 188

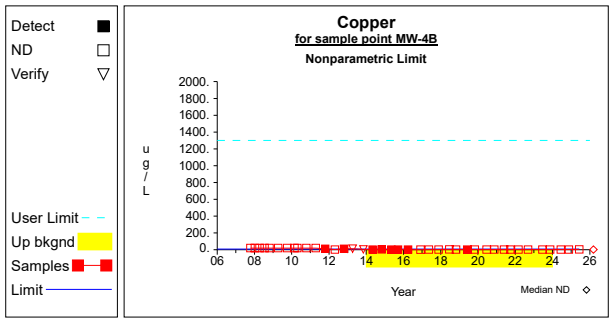


Graph 189

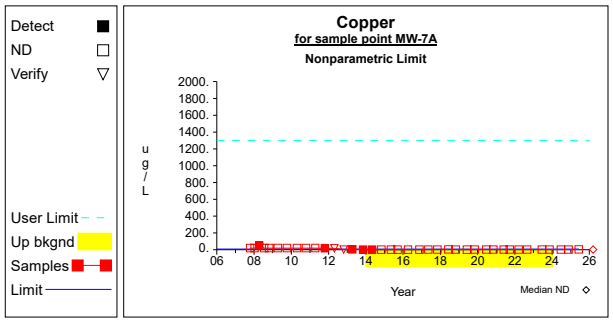
Up vs. Down Prediction Limits



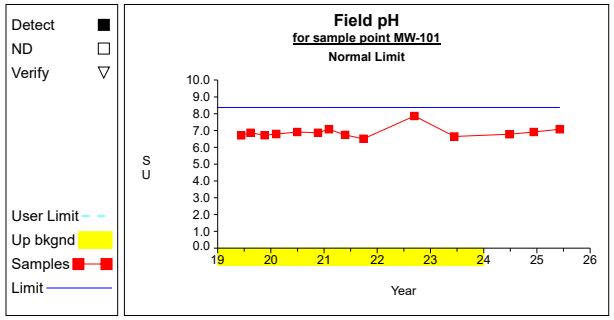
Graph 190



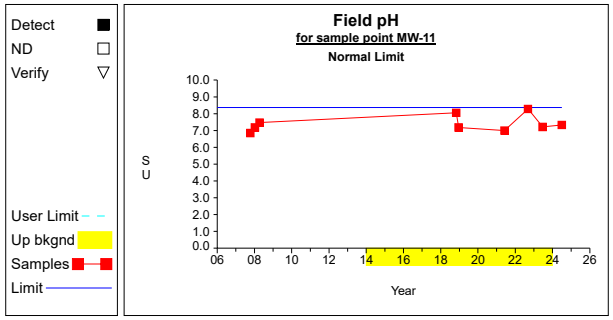
Graph 191



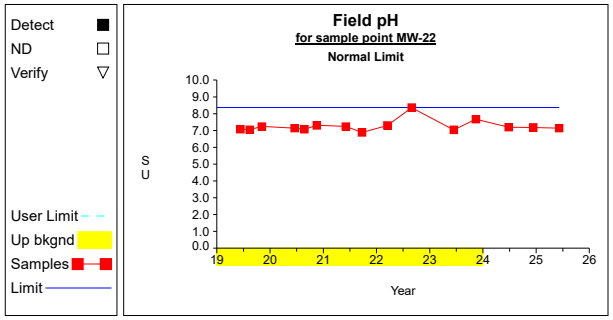
Graph 192



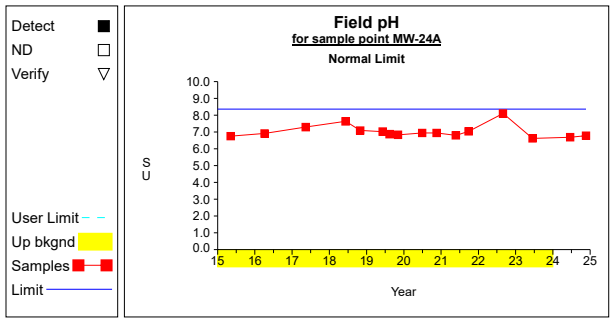
Graph 193



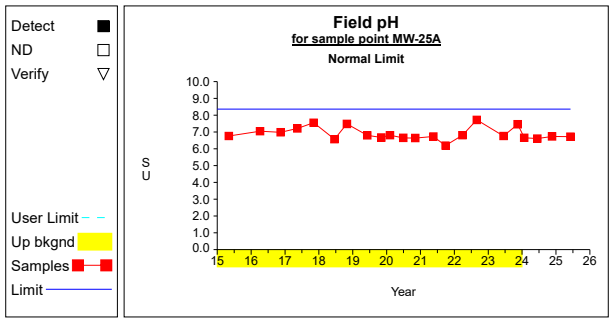
Graph 194



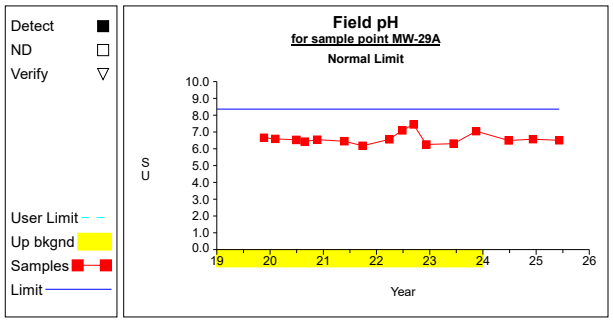
Graph 195



Graph 196

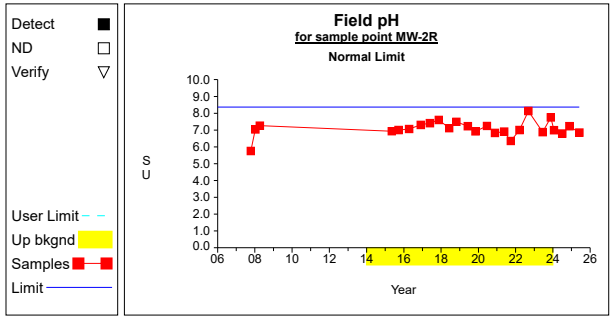


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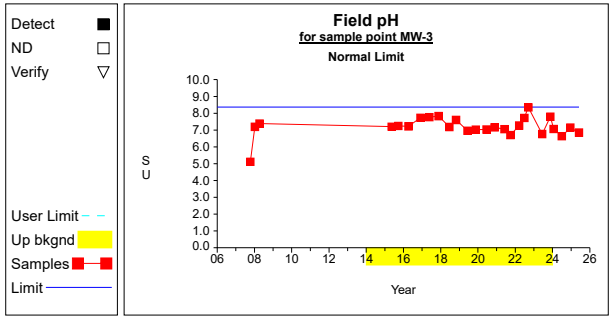


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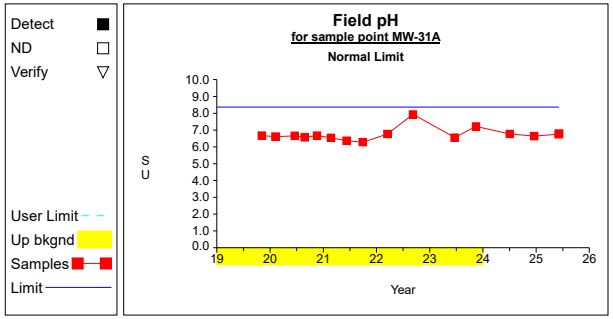
Up vs. Down Prediction Limits



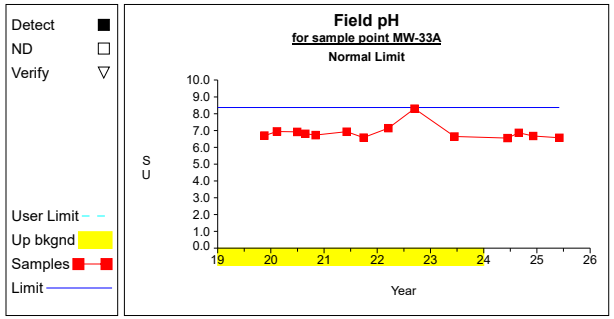
Graph 199



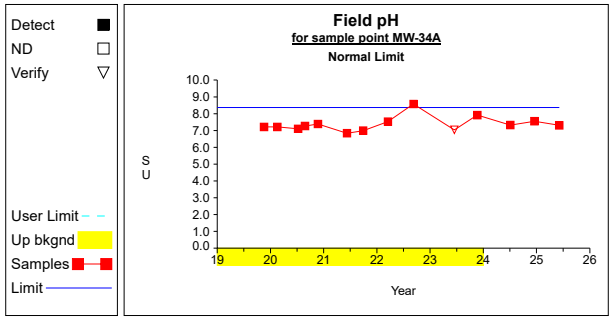
Graph 200



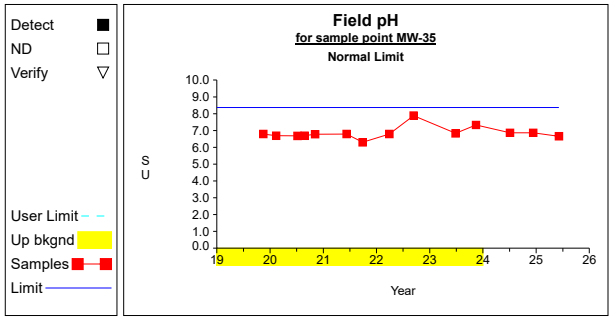
Graph 201



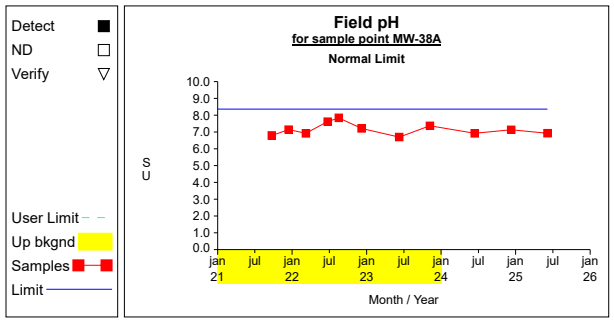
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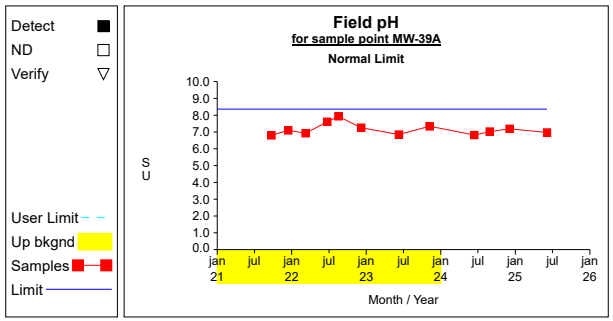
Graph 203



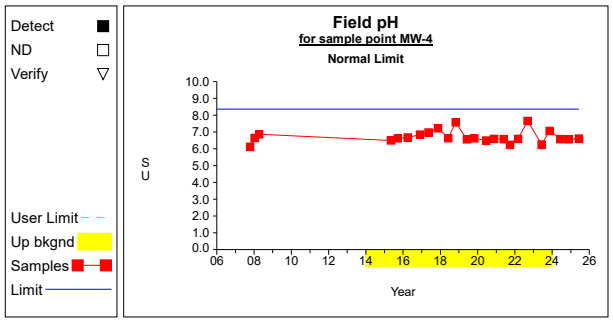
Graph 204



Graph 205

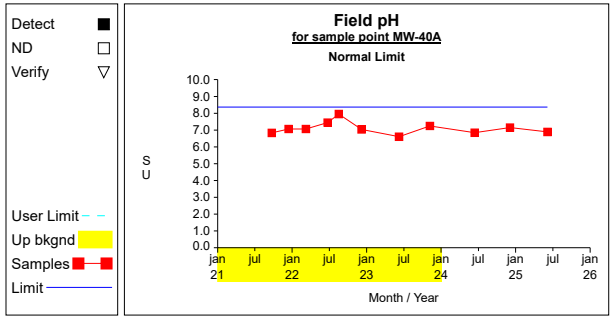


Graph 206

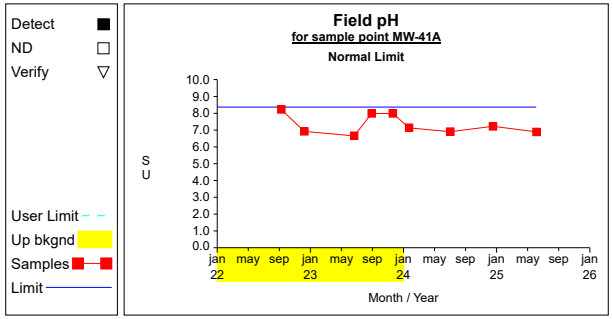


Graph 207

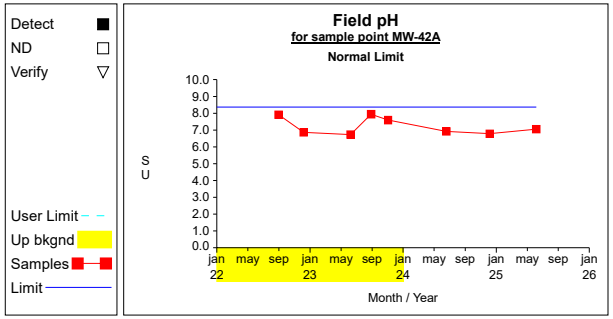
Up vs. Down Prediction Limits



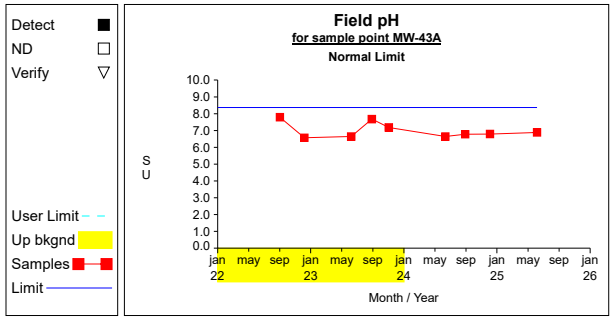
Graph 208



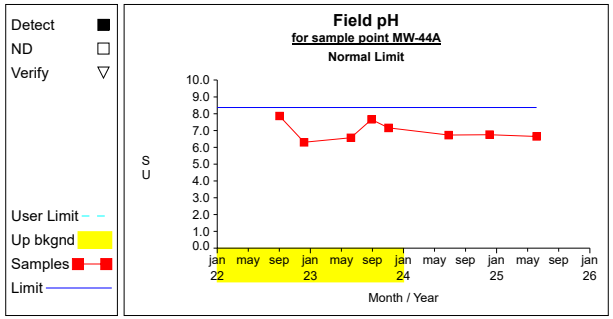
Graph 209



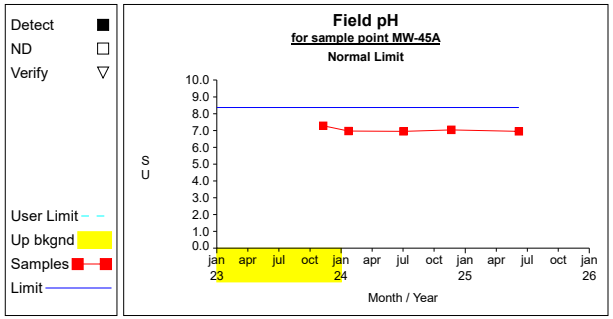
Graph 210



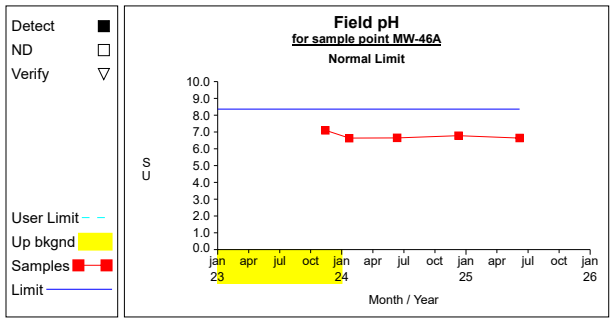
Graph 211



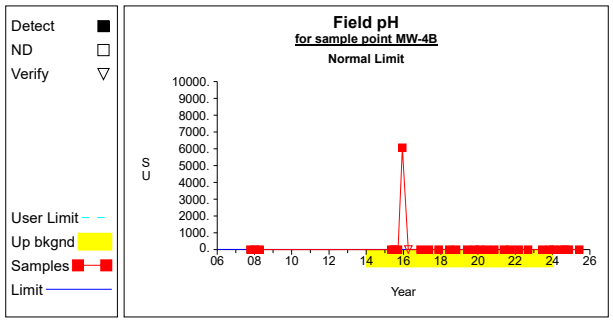
Graph 212



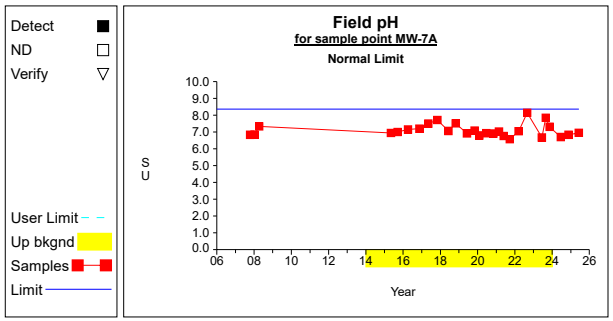
Graph 213



Graph 214

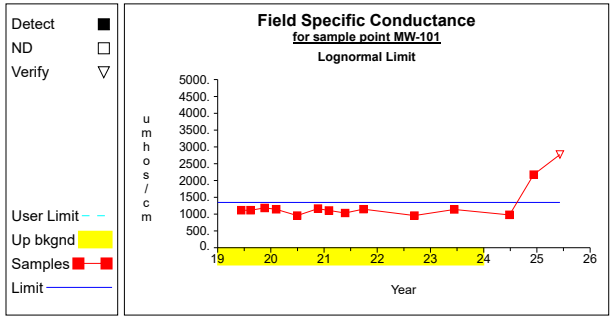


Graph 215

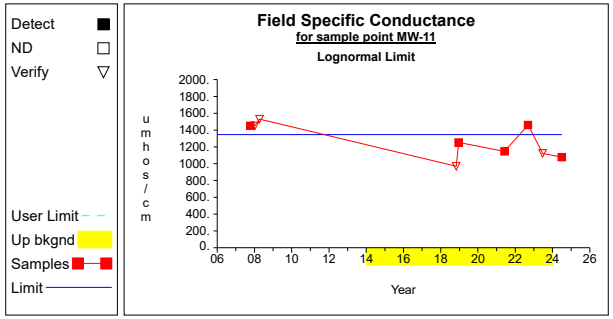


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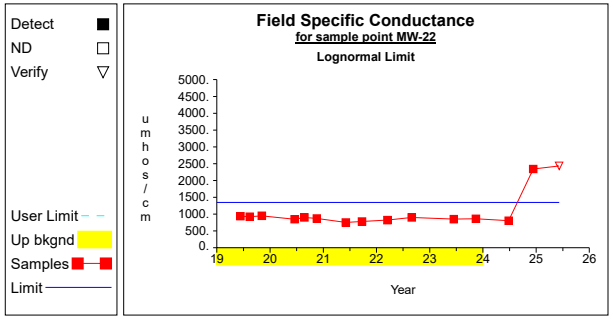
Up vs. Down Prediction Limits



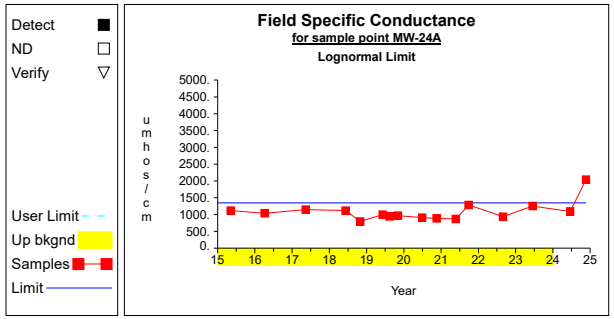
Graph 217



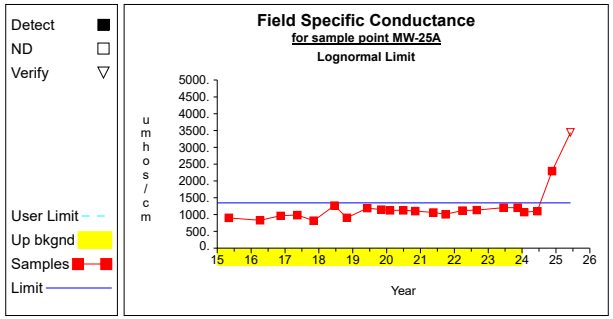
Graph 218



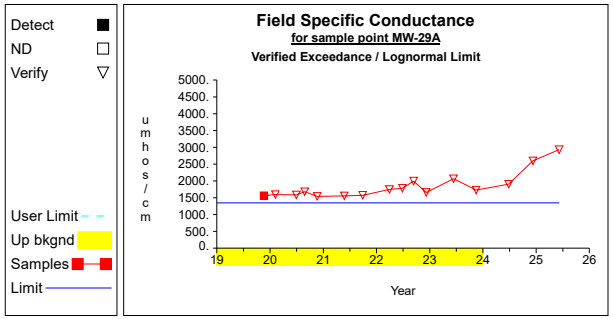
Graph 219



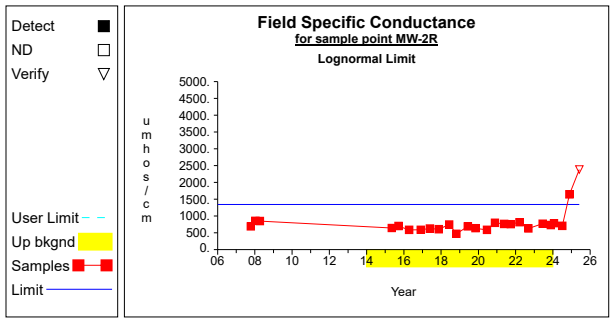
Graph 220



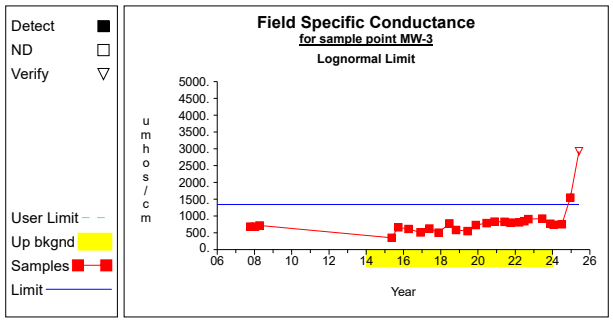
Graph 221



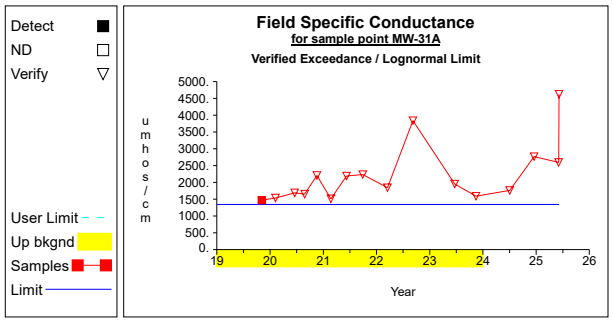
Graph 222



Graph 223

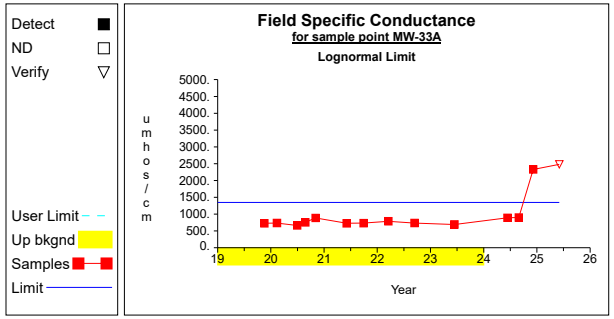


Graph 224

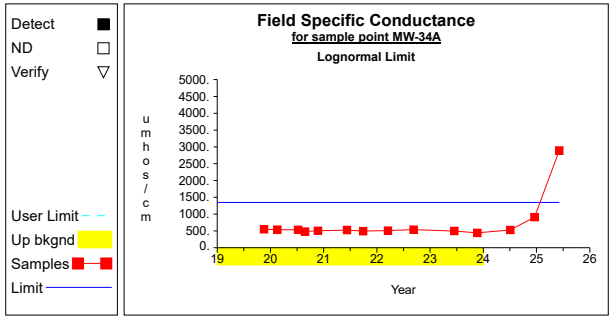


Graph 225

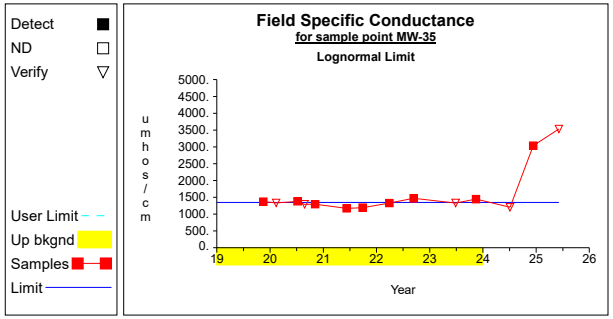
Up vs. Down Prediction Limits



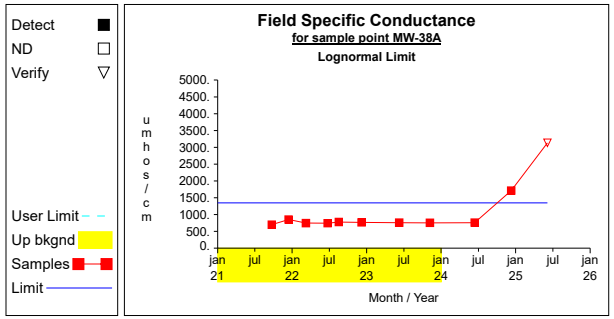
Graph 226



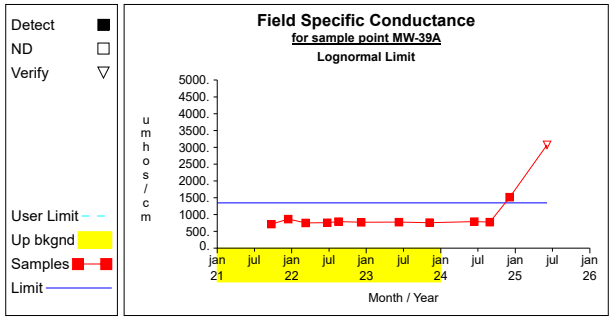
Graph 227



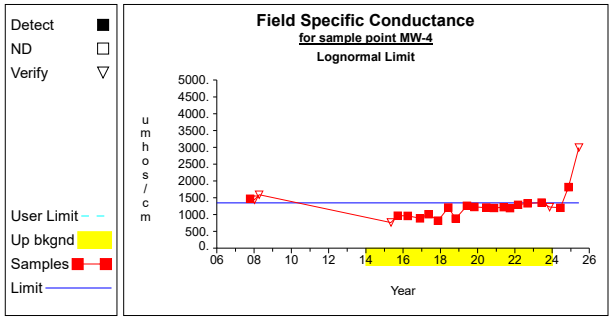
Graph 228



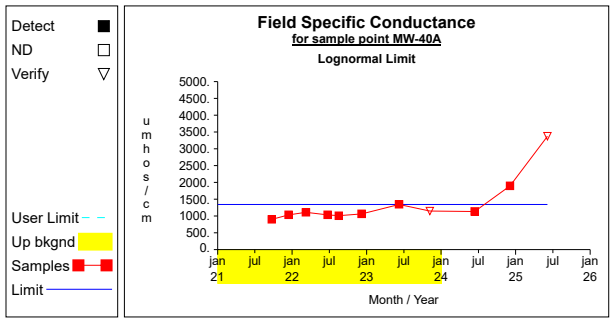
Graph 229



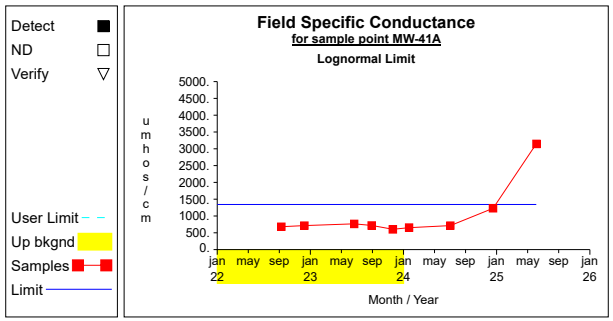
Graph 230



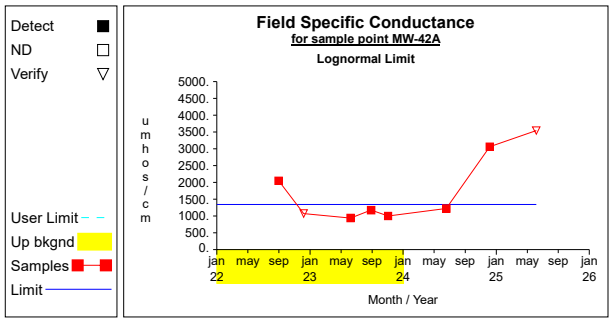
Graph 231



Graph 232

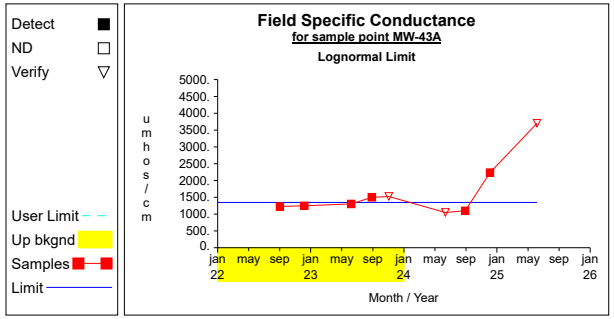


Graph 233

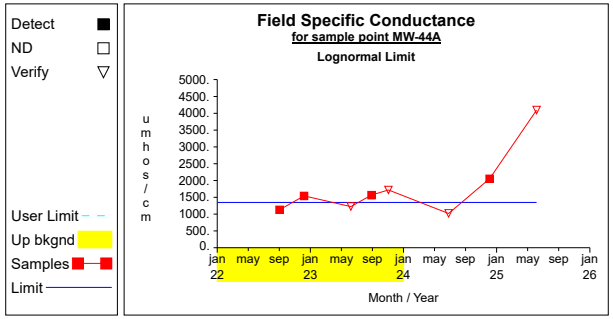


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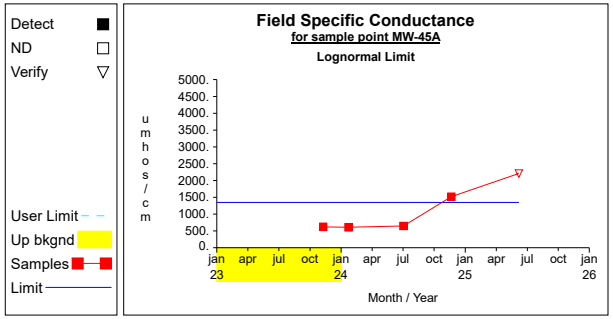
Up vs. Down Prediction Limits



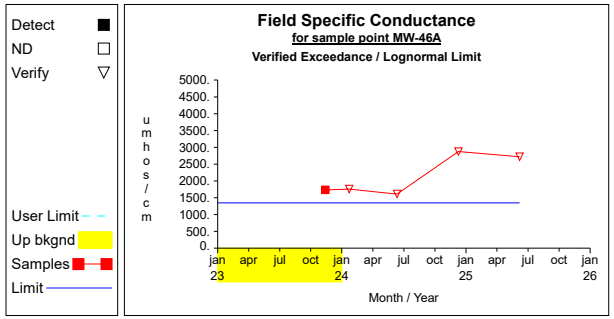
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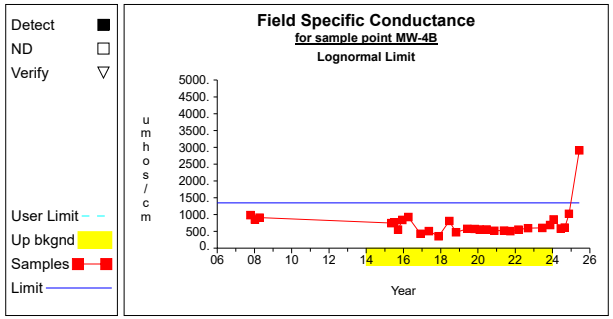
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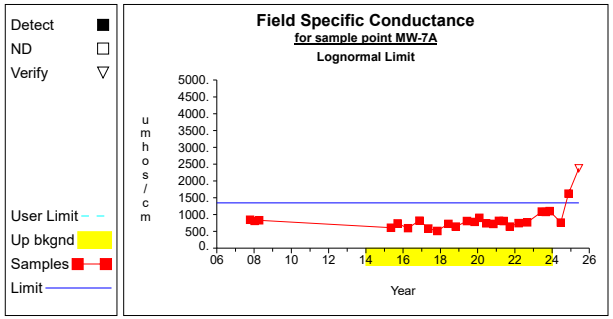
Graph 237



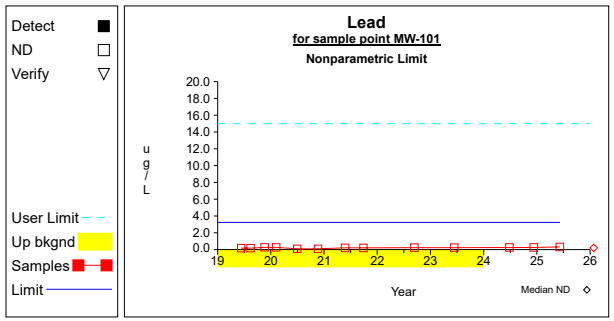
Graph 238



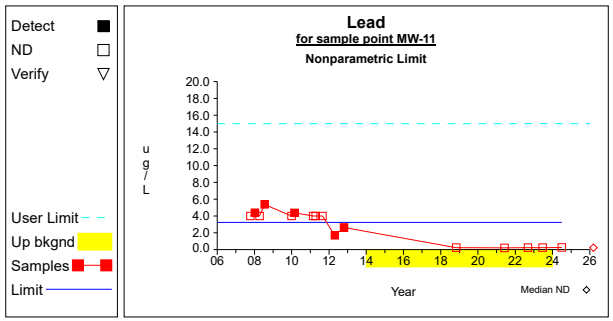
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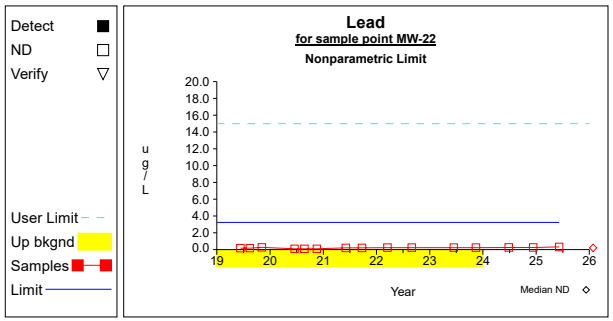
Graph 240



Graph 241

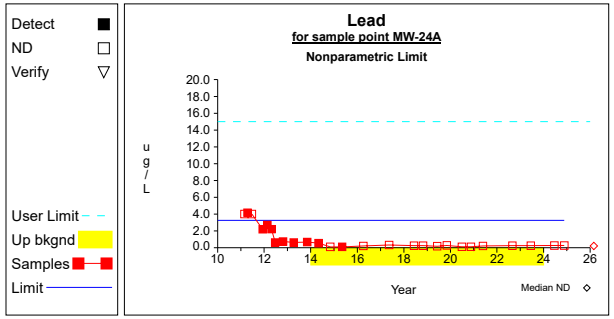


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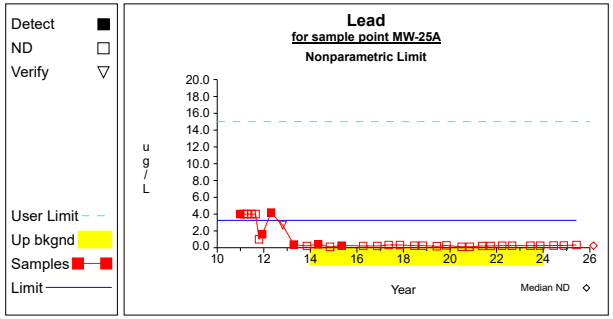


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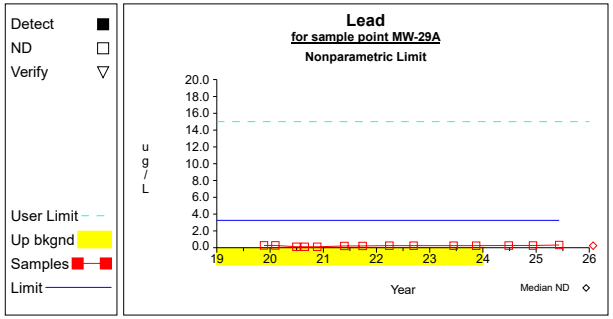
Up vs. Down Prediction Limits



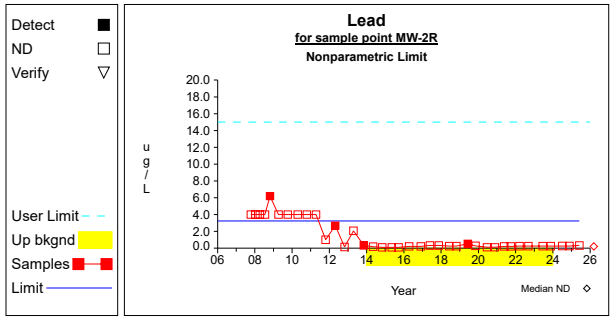
Graph 244



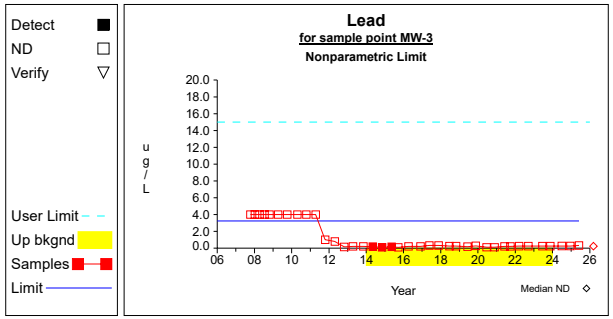
Graph 245



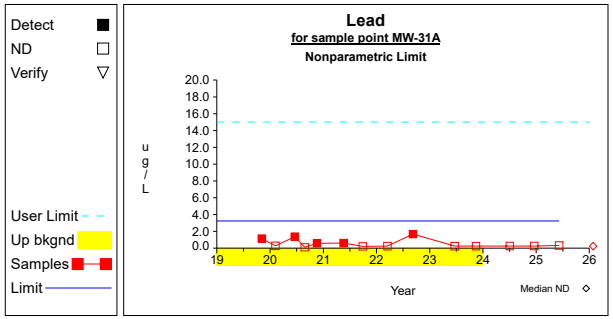
Graph 246



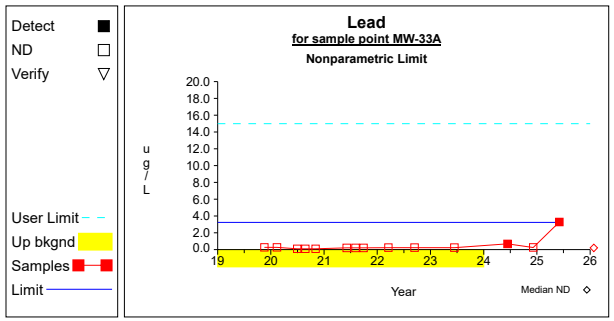
Graph 247



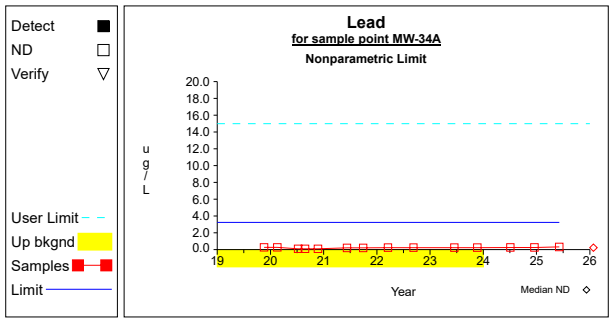
Graph 248



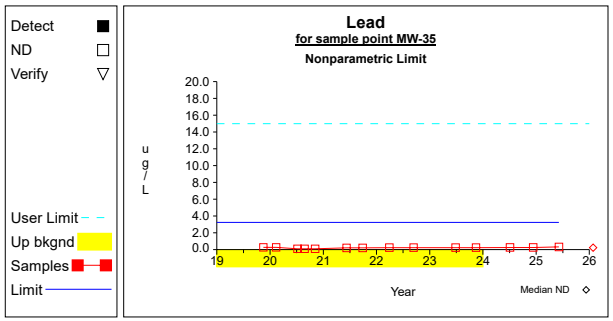
Graph 249



Graph 250

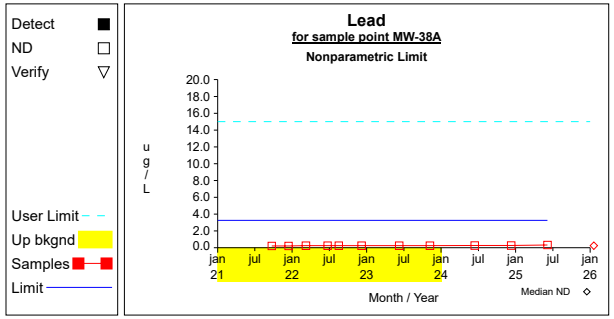


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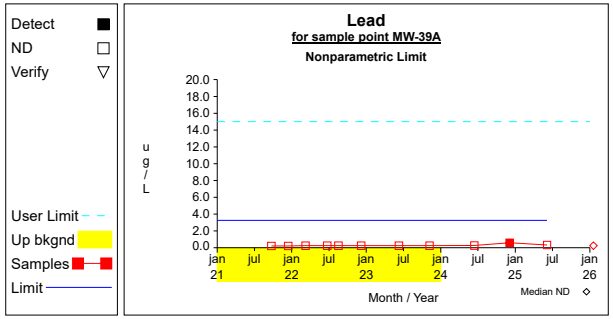


Graph 252

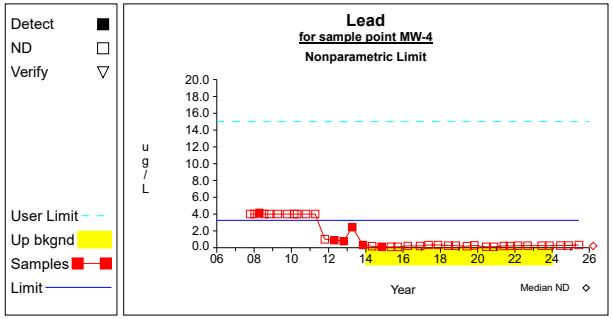
Up vs. Down Prediction Limits



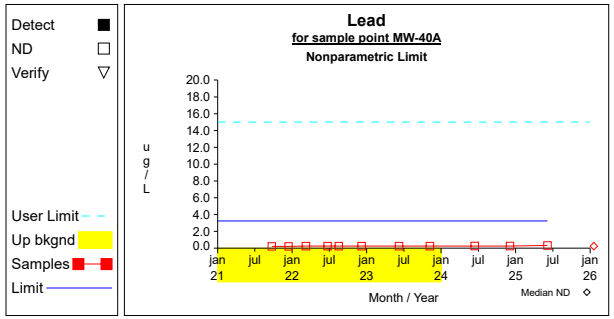
Graph 253



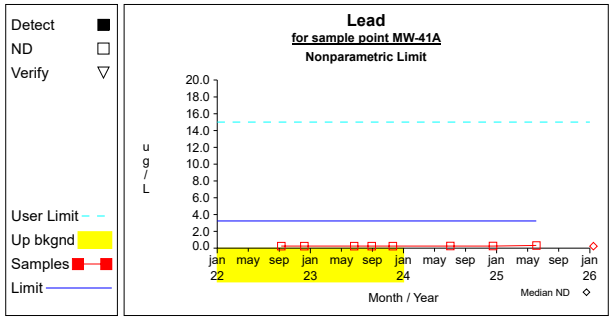
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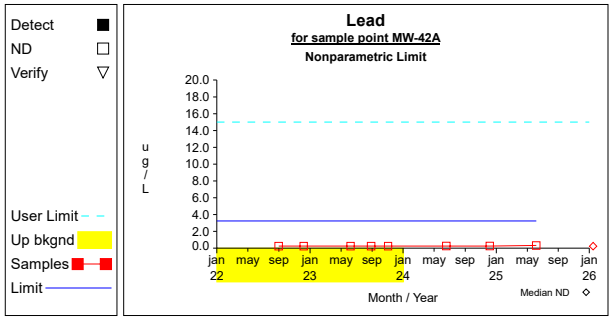
Graph 255



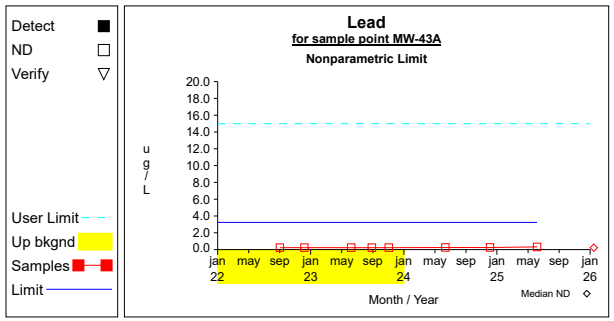
Graph 256



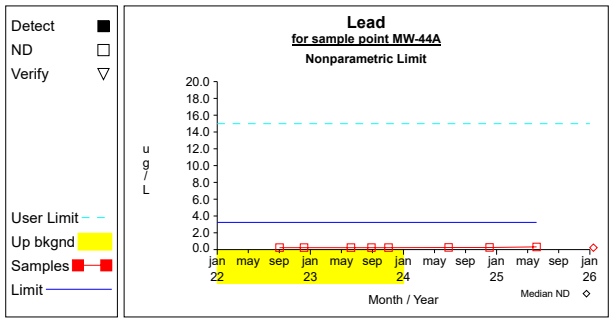
Graph 257



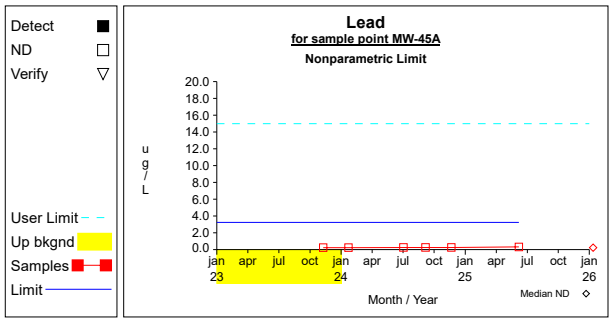
Graph 258



Graph 259

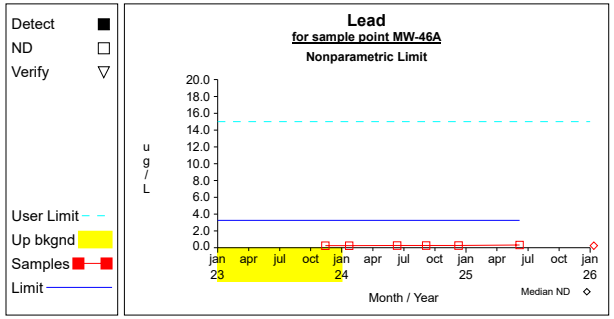


Graph 260

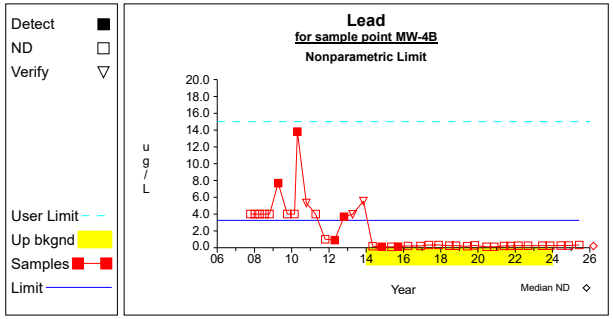


Graph 261

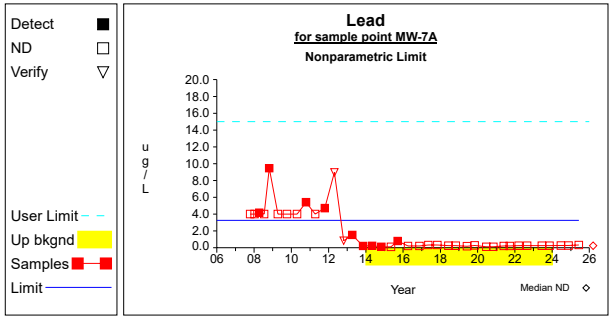
Up vs. Down Prediction Limits



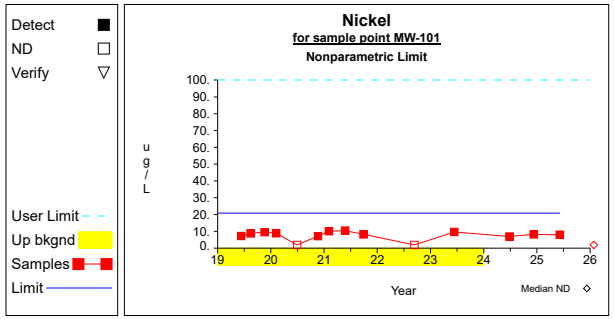
Graph 262



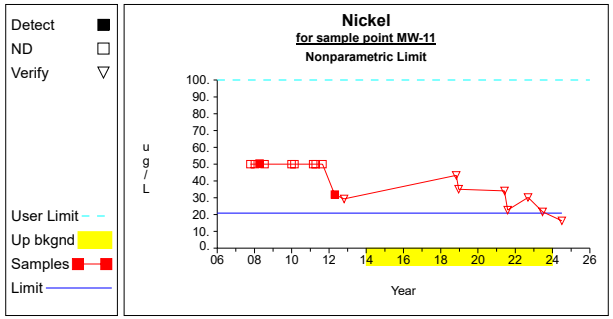
Graph 263



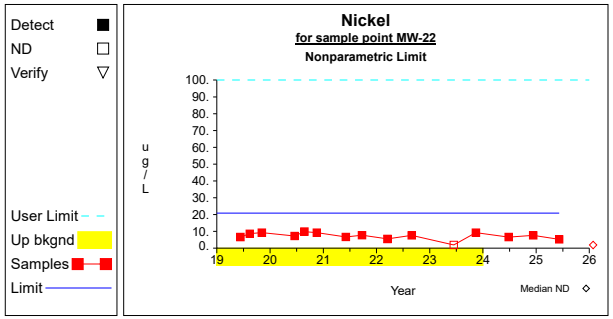
Graph 264



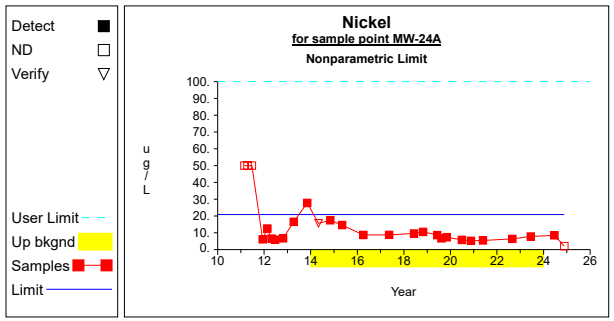
Graph 265



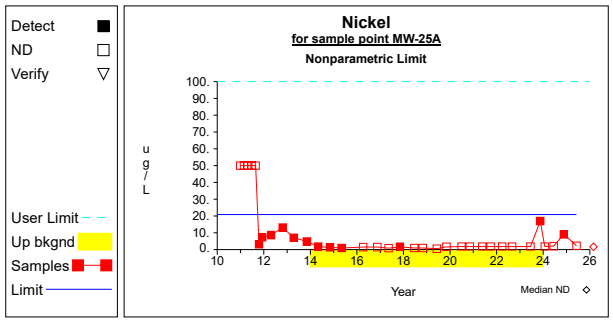
Graph 266



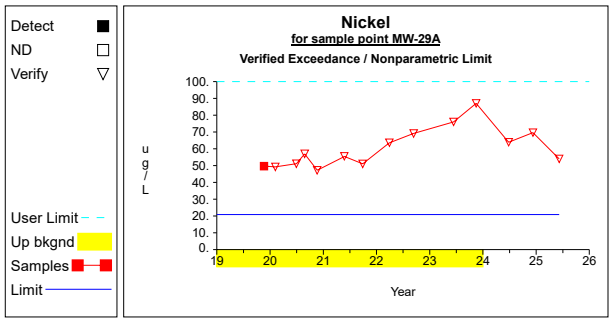
Graph 267



Graph 268

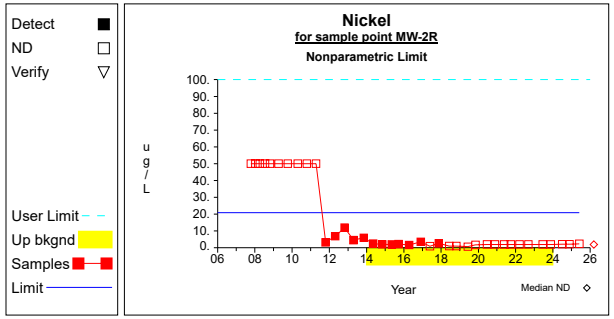


Graph 269

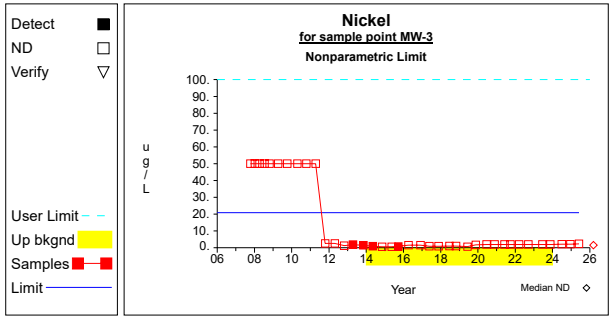


Graph 270

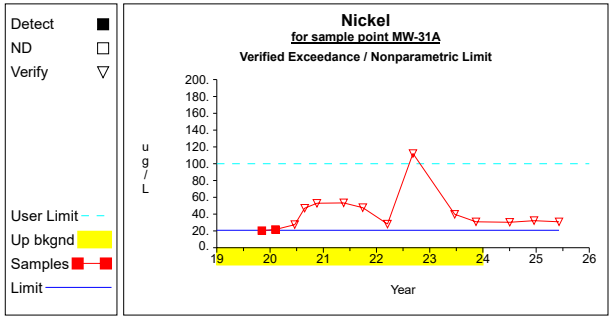
Up vs. Down Prediction Limits



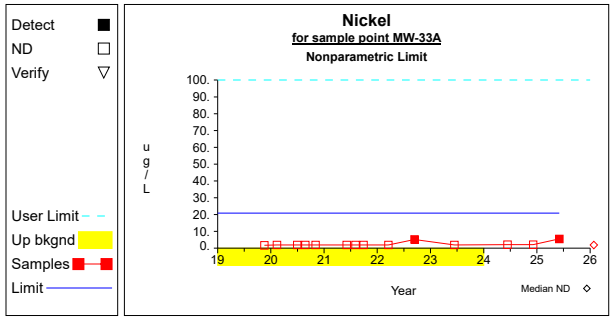
Graph 271



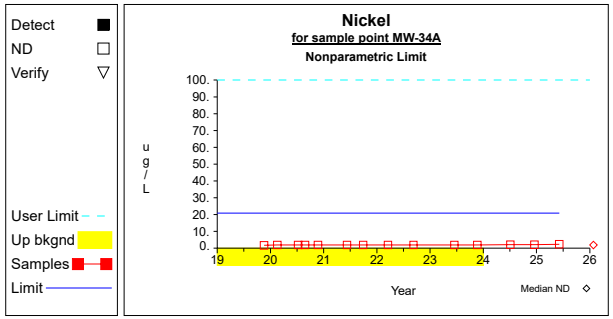
Graph 272



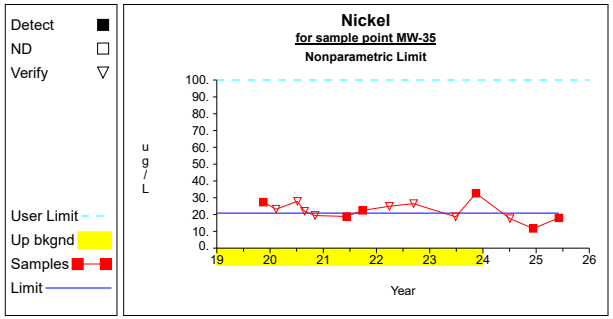
Graph 273



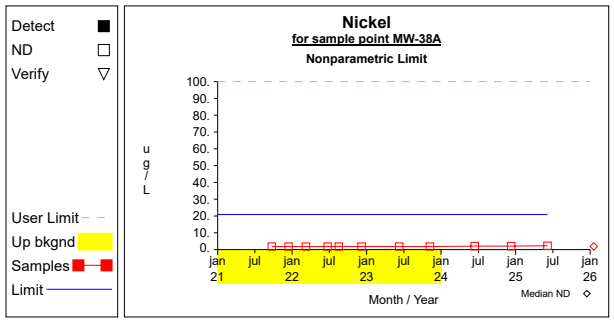
Graph 274



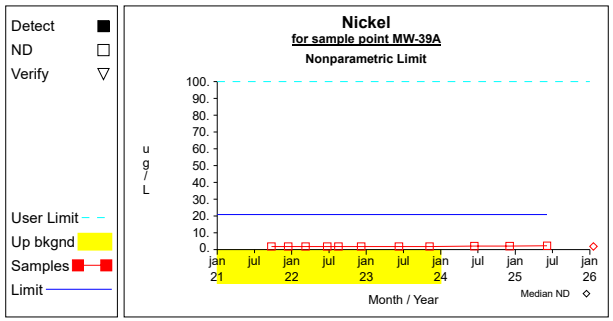
Graph 275



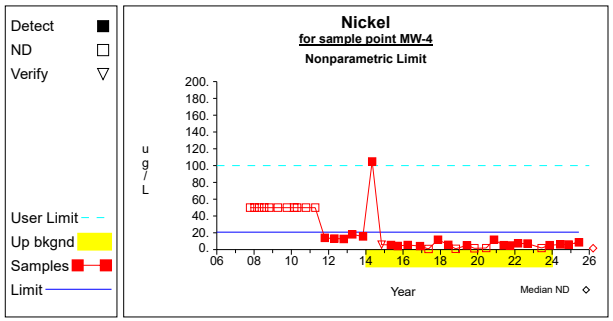
Graph 276



Graph 277

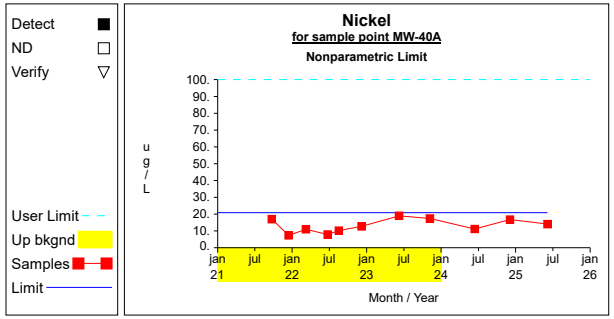


Graph 278

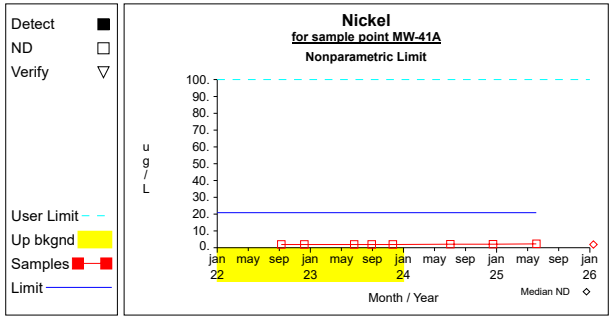


Graph 279

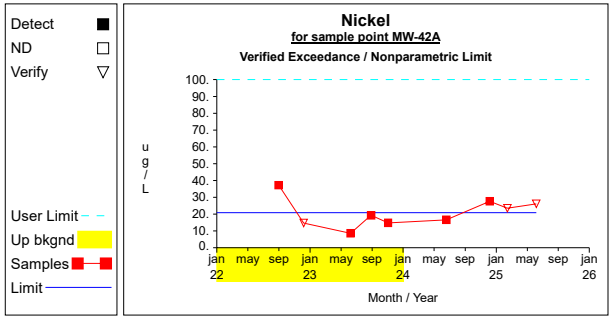
Up vs. Down Prediction Limits



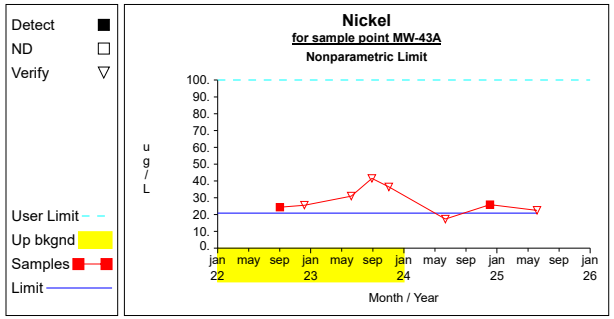
Graph 280



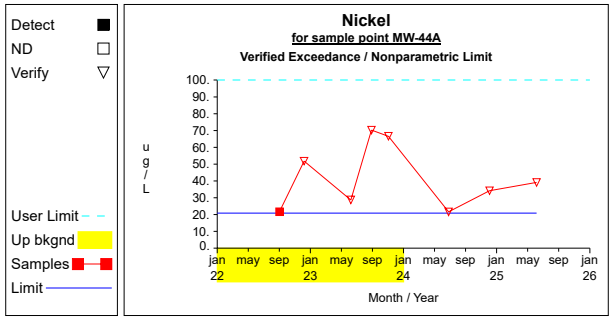
Graph 281



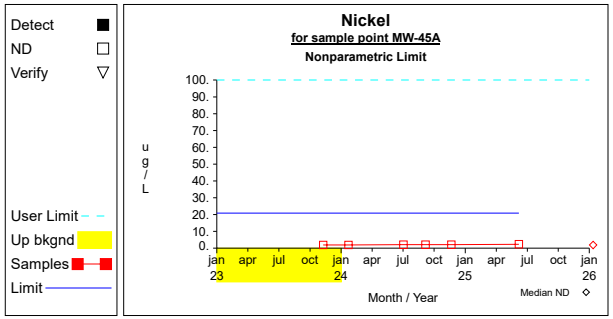
Graph 282



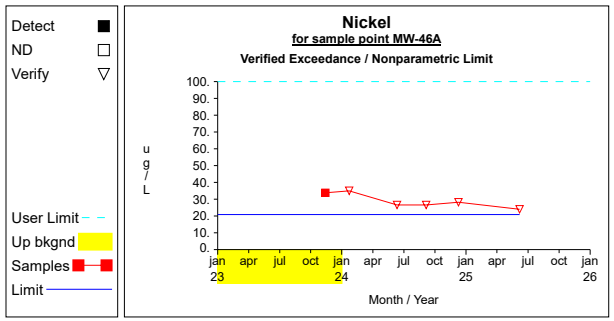
Graph 283



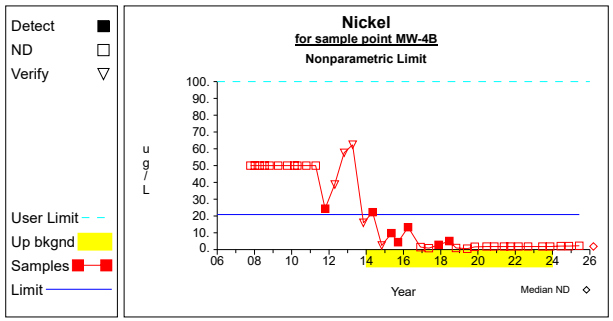
Graph 284



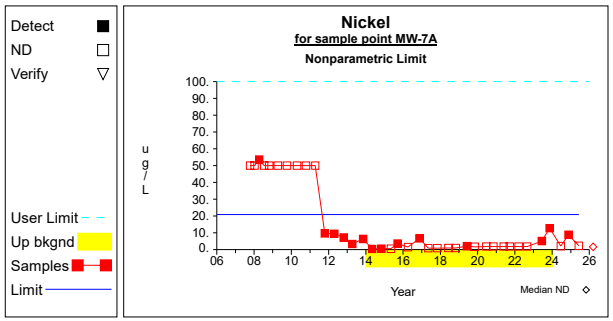
Graph 285



Graph 286

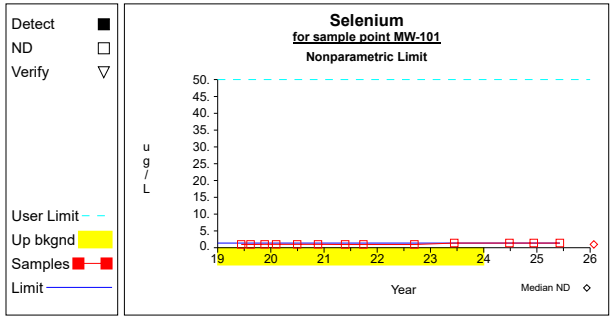


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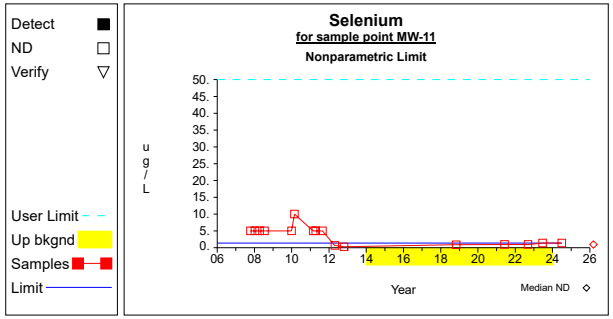


Graph 288

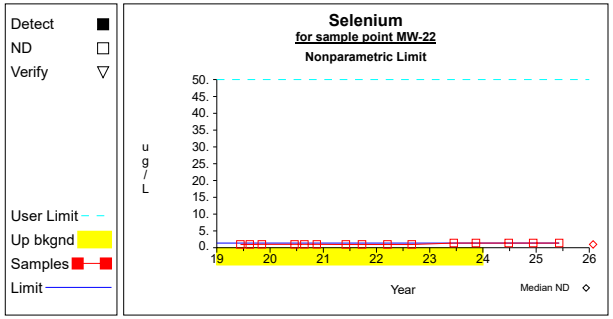
Up vs. Down Prediction Limits



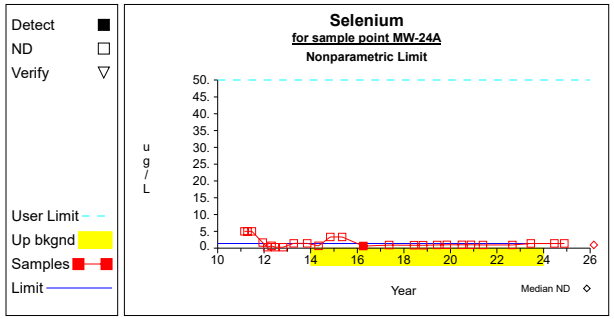
Graph 289



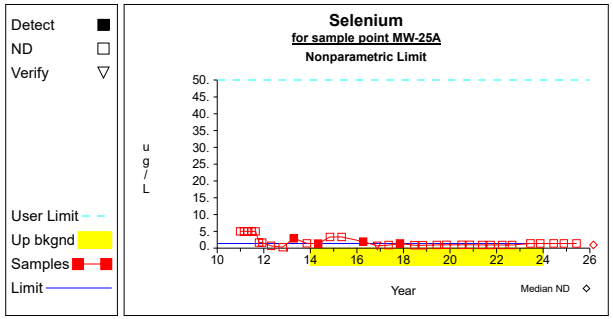
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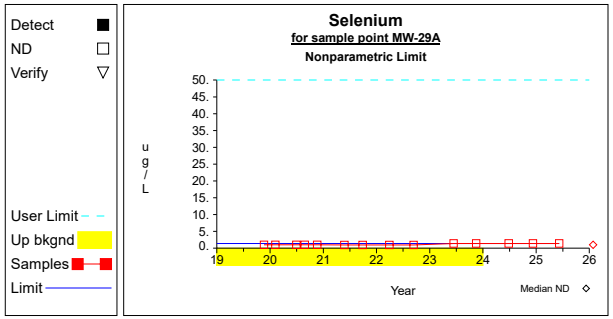
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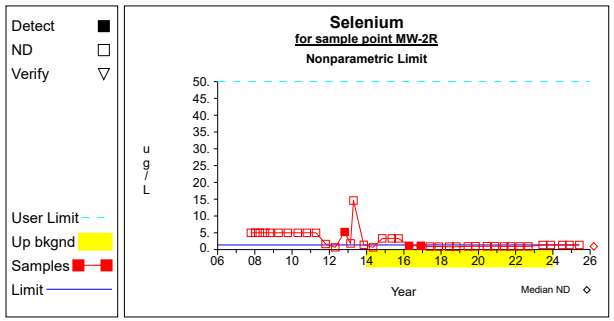
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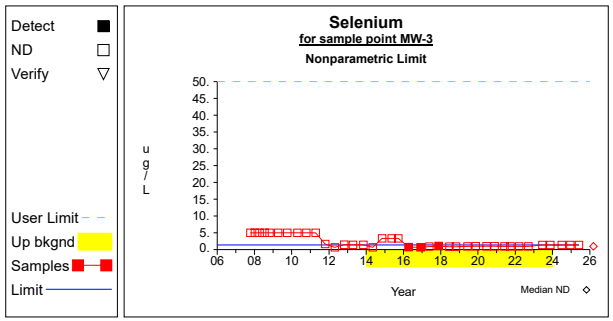
Graph 293



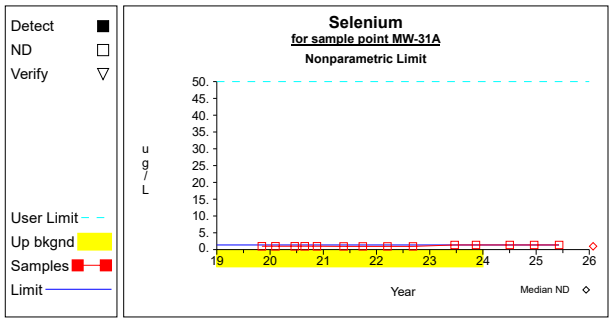
Graph 294



Graph 295

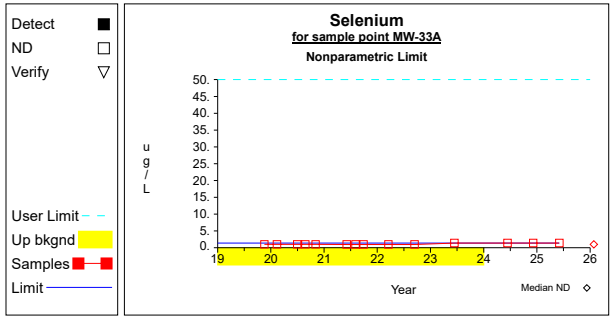


Graph 296

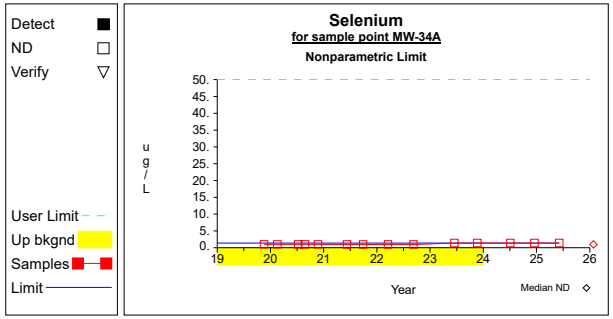


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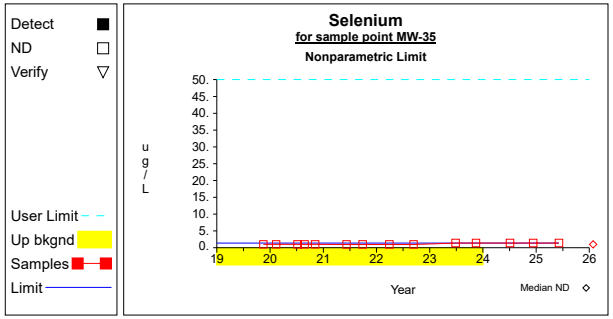
Up vs. Down Prediction Limits



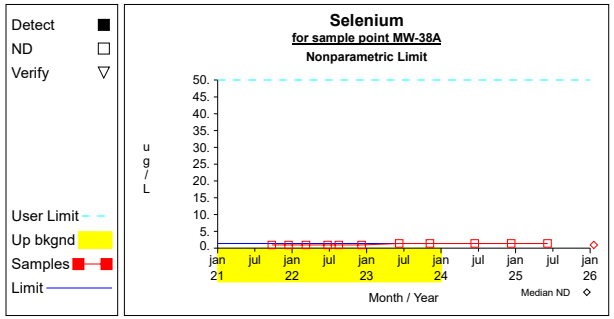
Graph 298



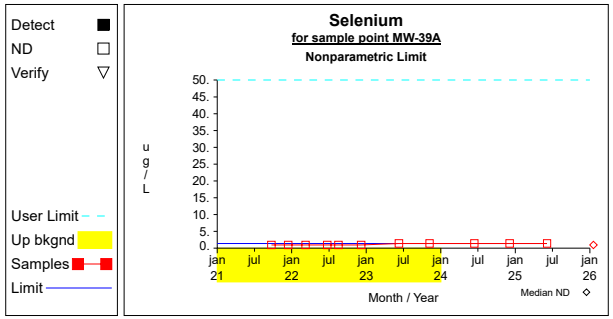
Graph 299



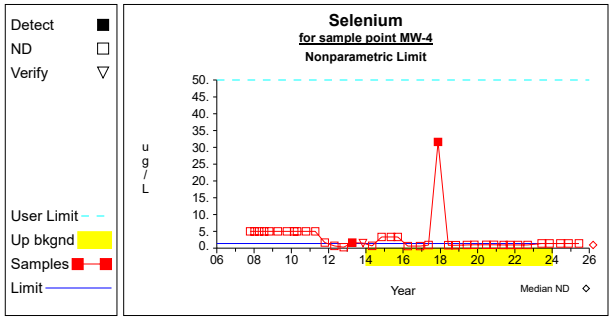
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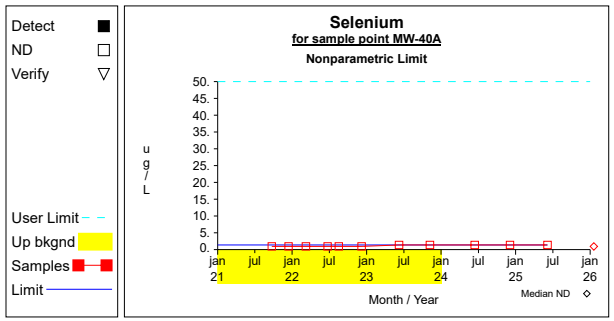
Graph 301



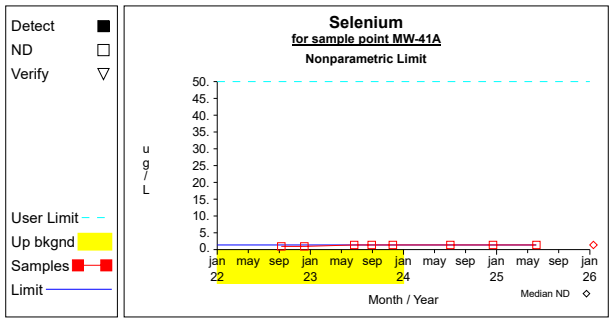
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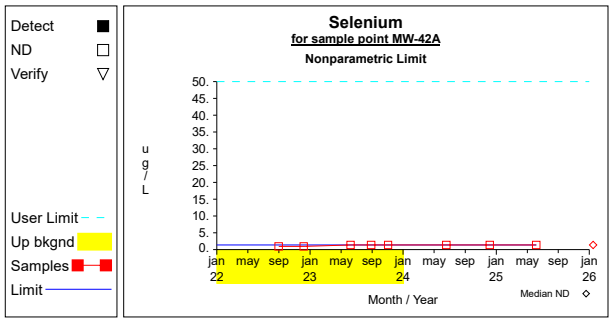
Graph 303



Graph 304

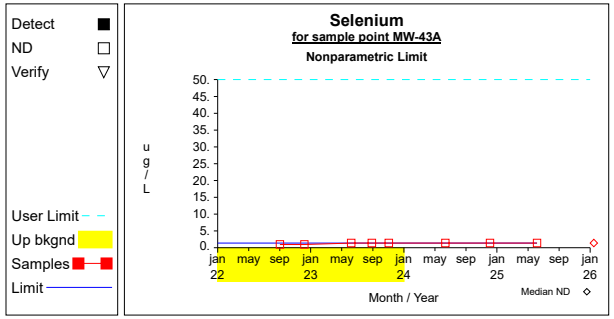


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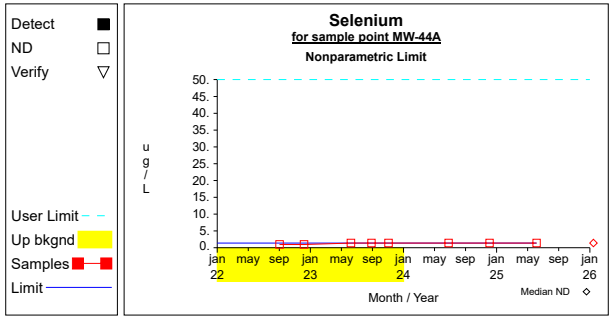


Graph 306

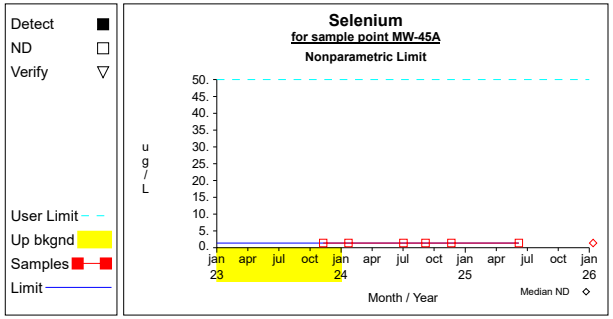
Up vs. Down Prediction Limits



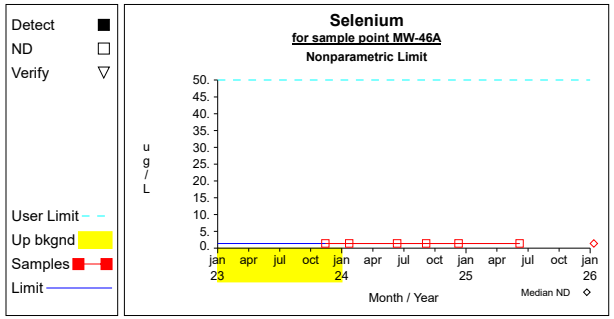
Graph 307



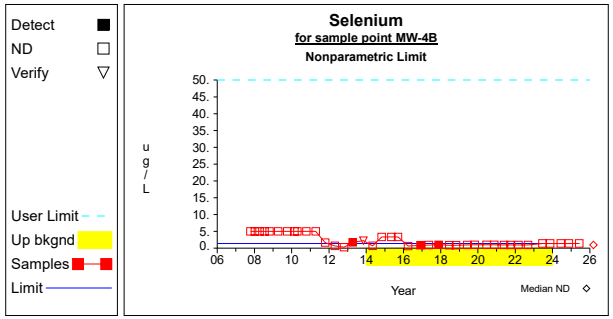
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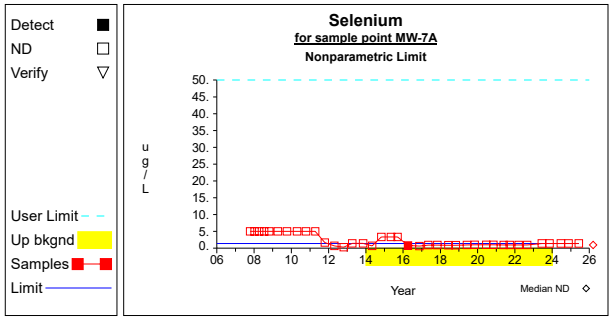
Graph 309



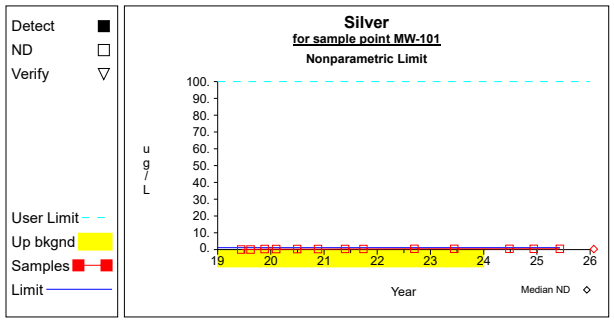
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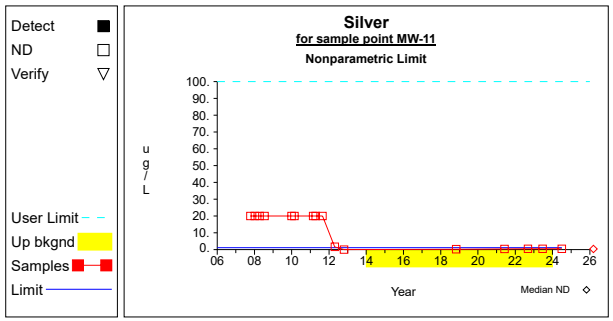
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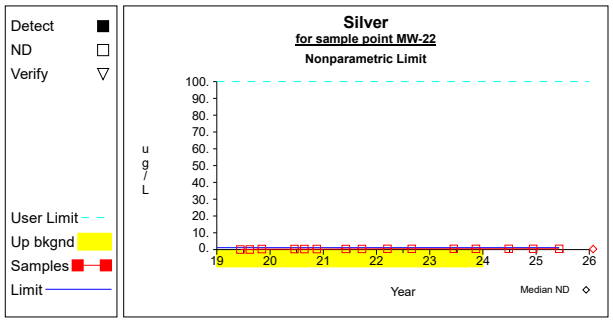
Graph 312



Graph 313

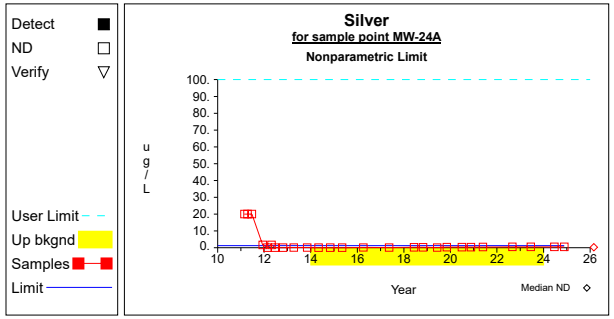


Graph 314

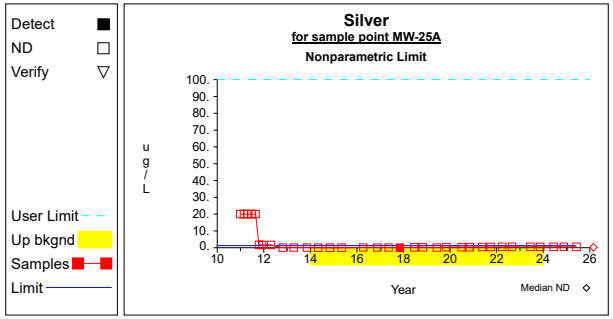


Graph 315

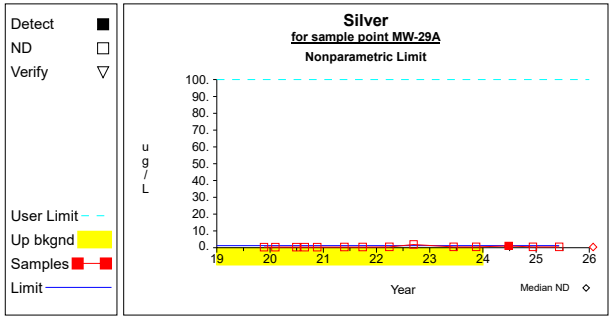
Up vs. Down Prediction Limits



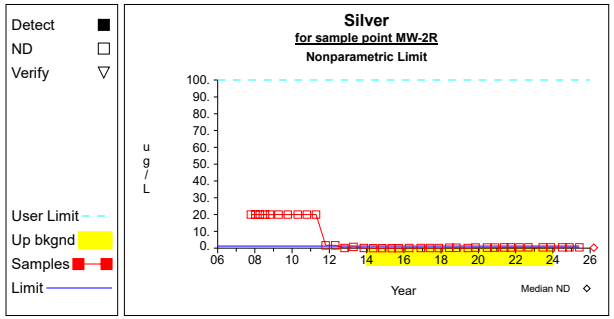
Graph 316



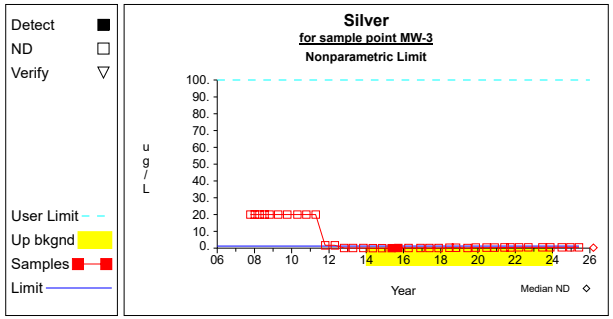
Graph 317



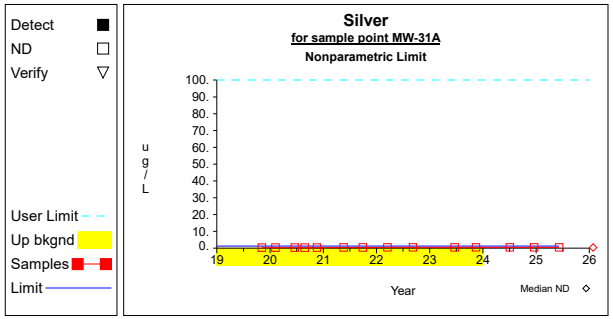
Graph 318



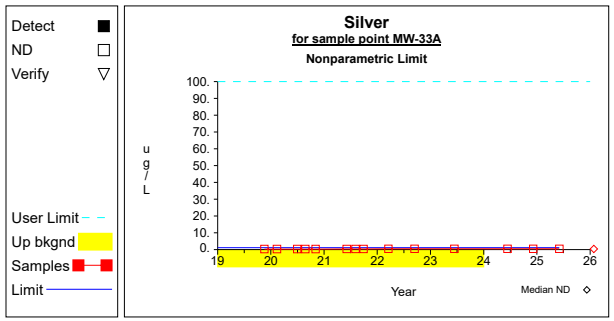
Graph 319



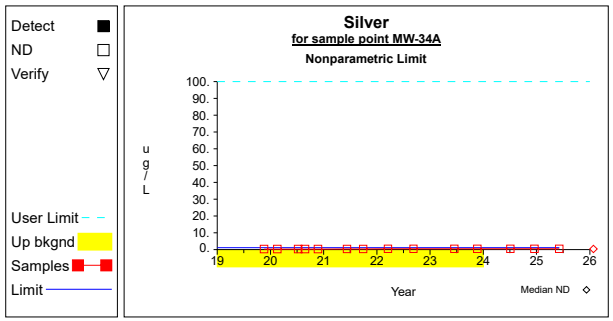
Graph 320



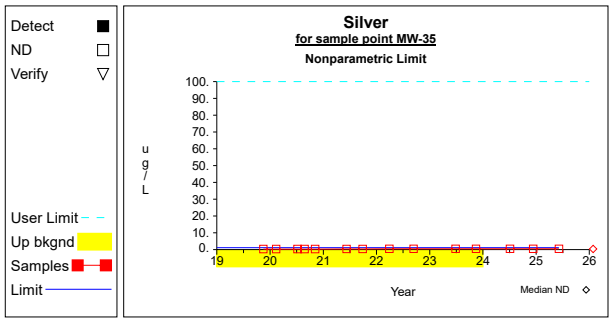
Graph 321



Graph 322

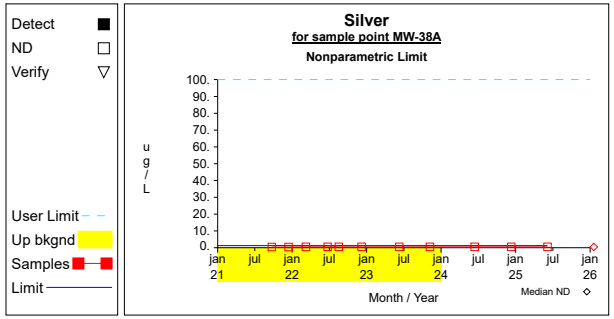


Graph 323

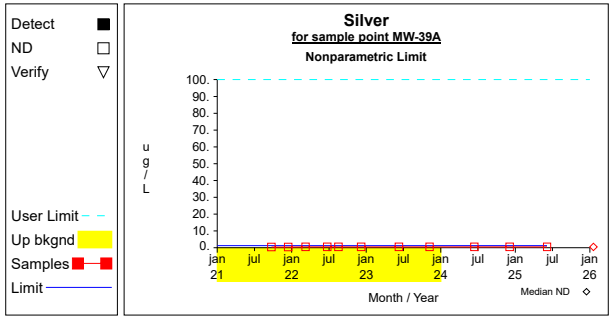


Graph 324

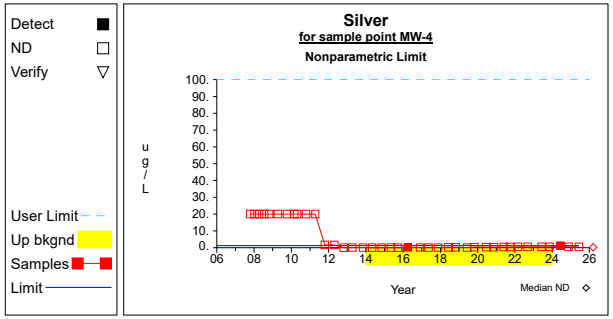
Up vs. Down Prediction Limits



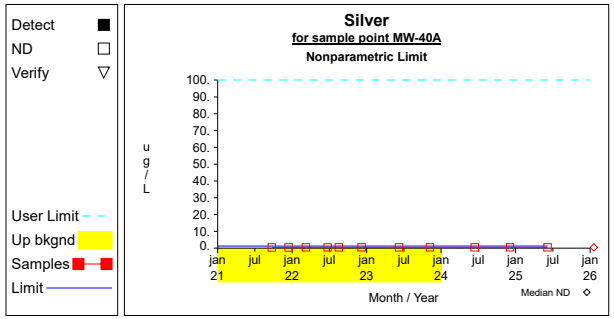
Graph 325



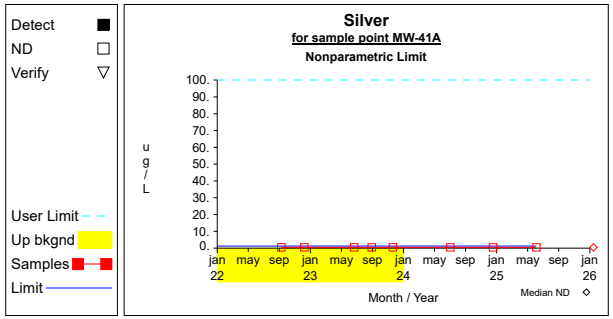
Graph 326



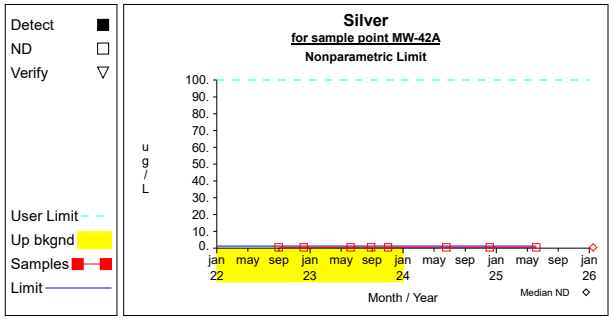
Graph 327



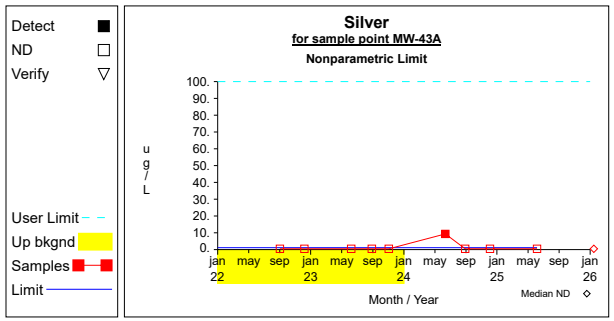
Graph 328



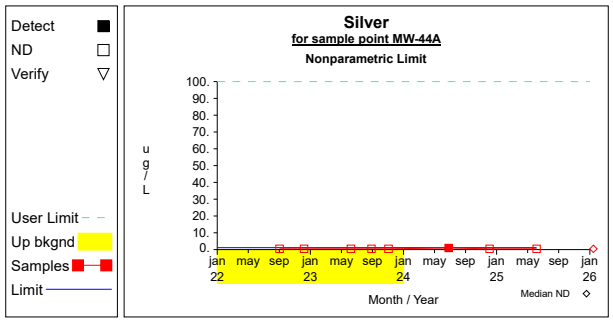
Graph 329



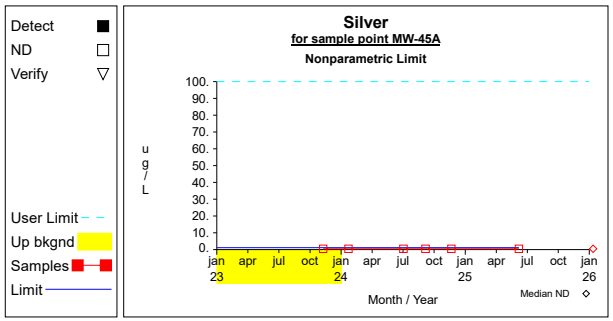
Graph 330



Graph 331

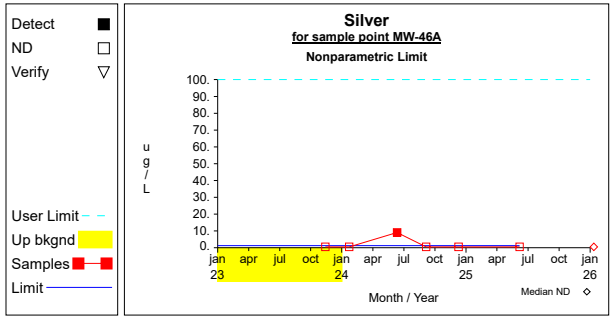


Graph 332

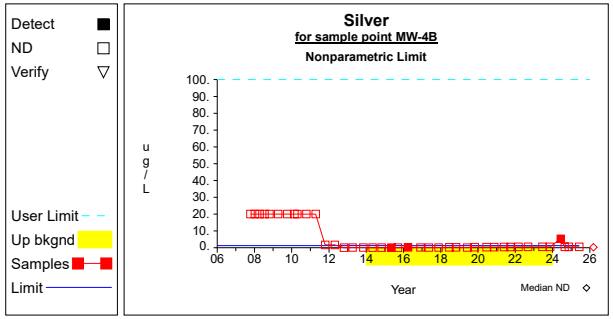


Graph 333

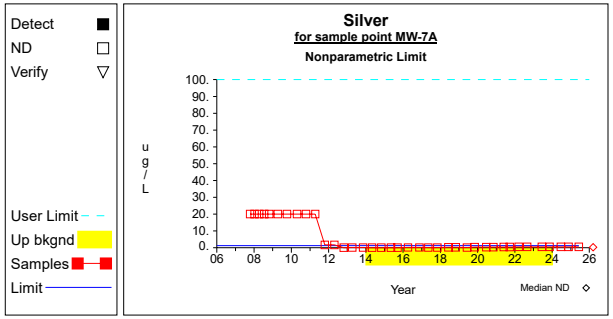
Up vs. Down Prediction Limits



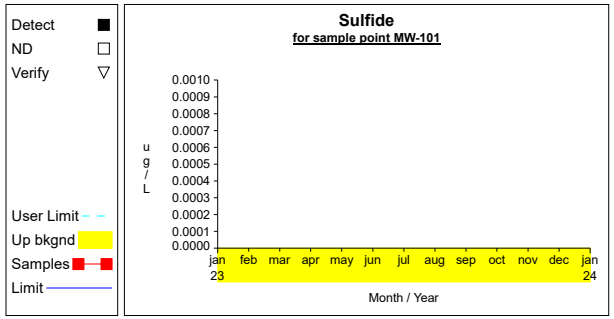
Graph 334



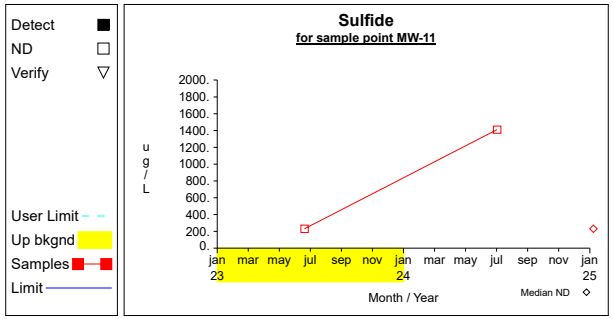
Graph 335



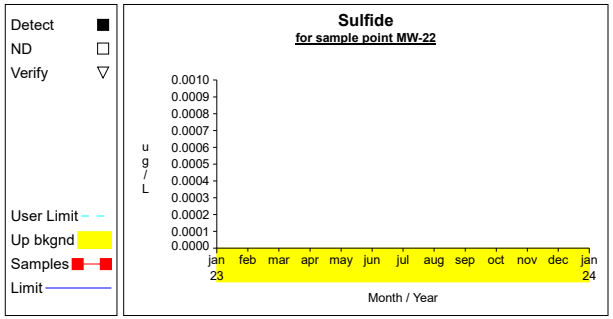
Graph 336



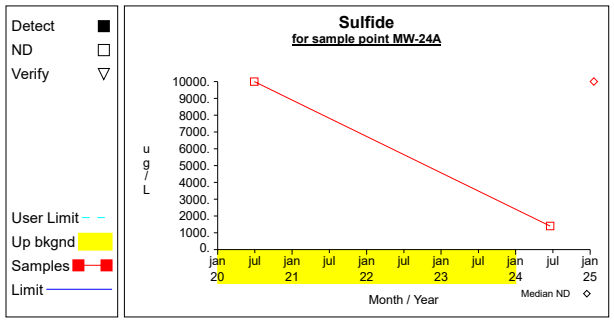
Graph 337



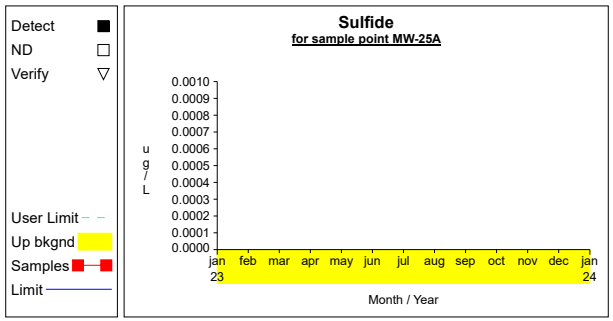
Graph 338



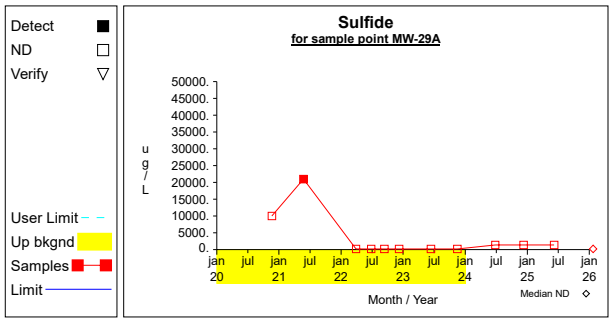
Graph 339



Graph 340

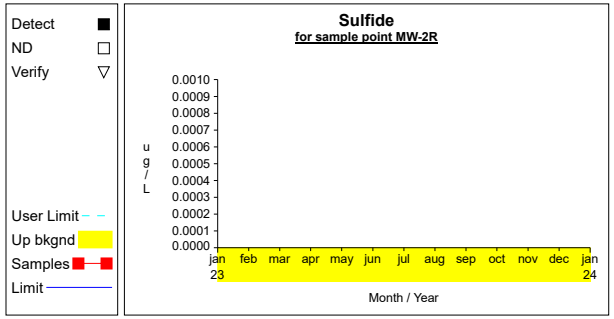


Graph 341

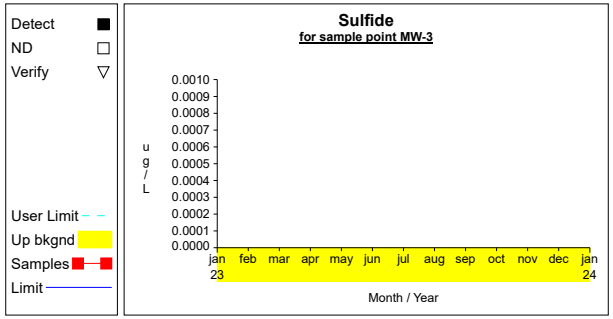


Graph 342

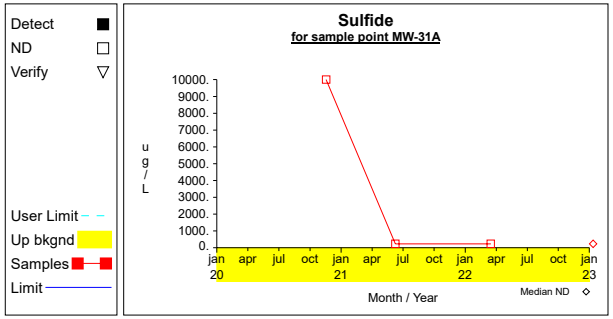
Up vs. Down Prediction Limits



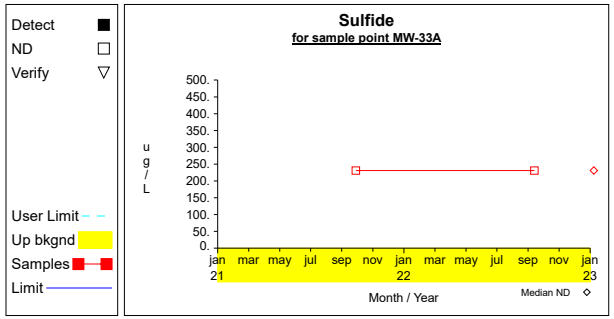
Graph 343



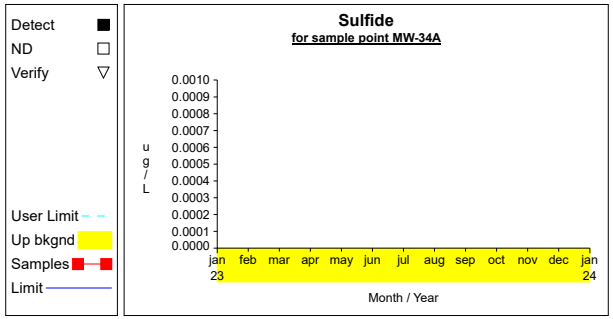
Graph 344



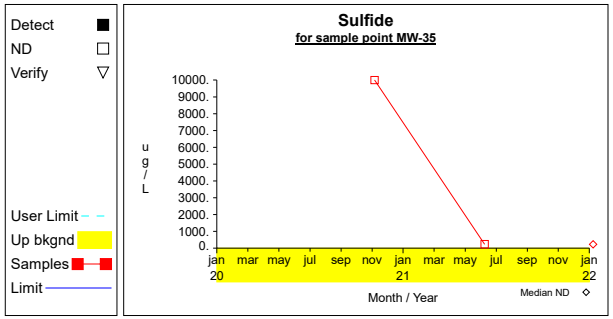
Graph 345



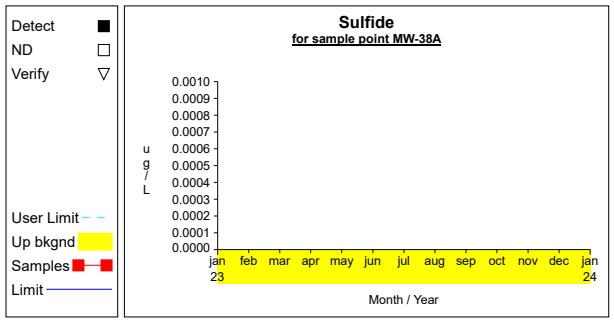
Graph 346



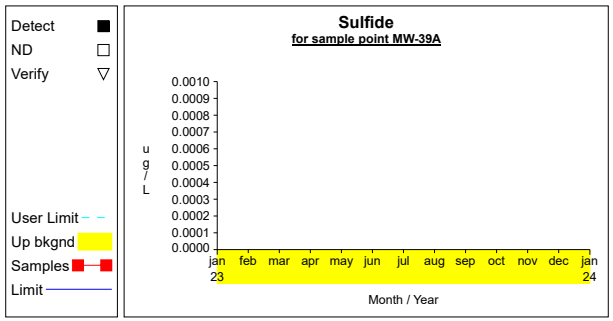
Graph 347



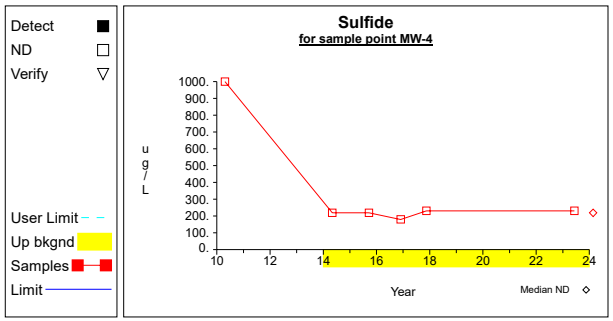
Graph 348



Graph 349

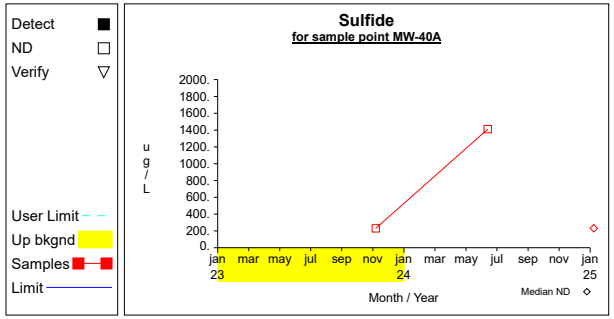


Graph 350

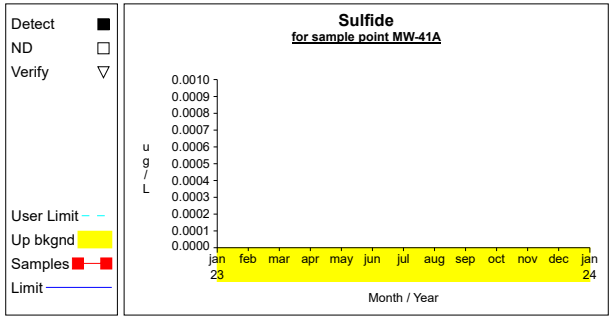


Graph 351

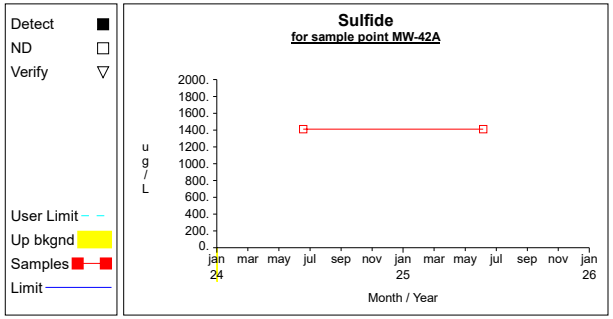
Up vs. Down Prediction Limits



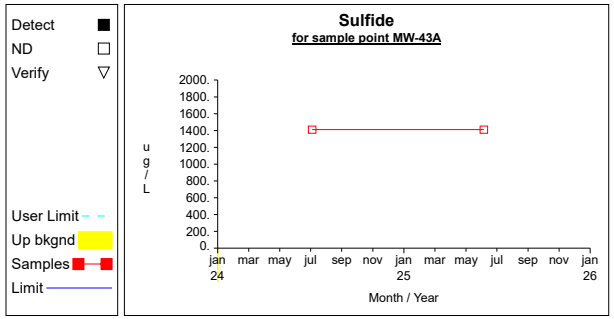
Graph 352



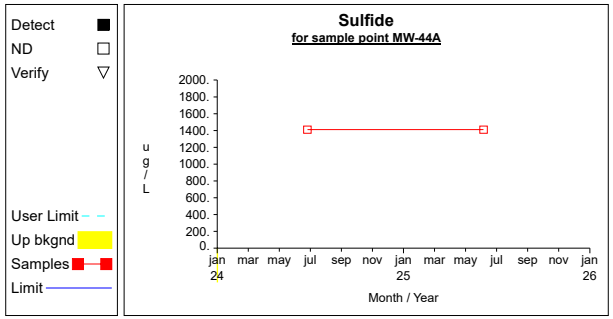
Graph 353



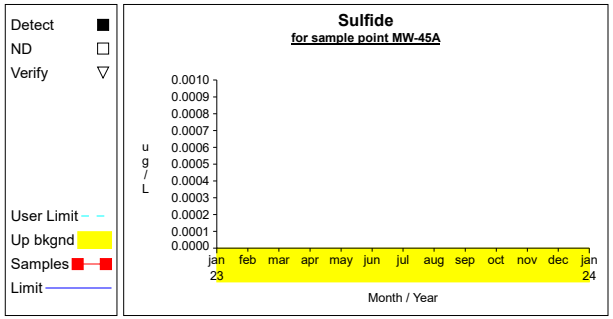
Graph 354



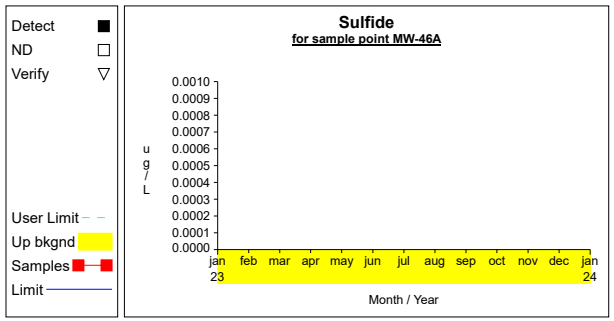
Graph 355



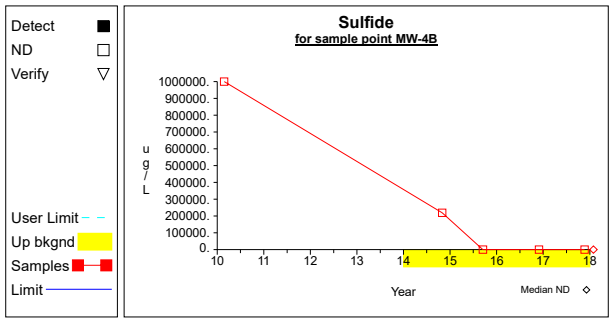
Graph 356



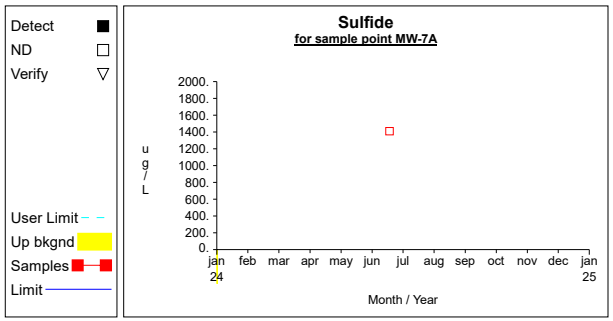
Graph 357



Graph 358

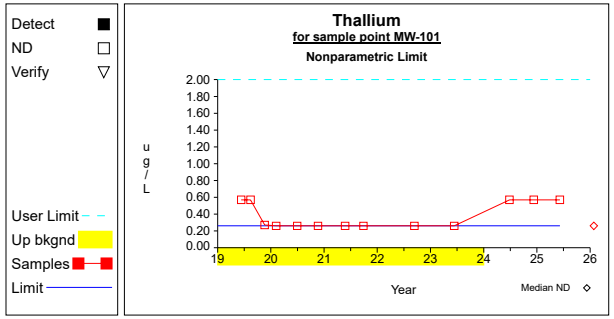


Graph 359

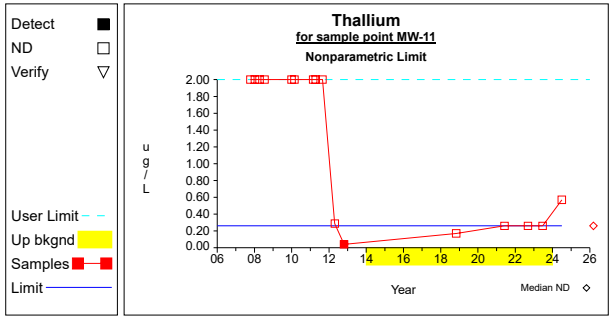


Graph 360

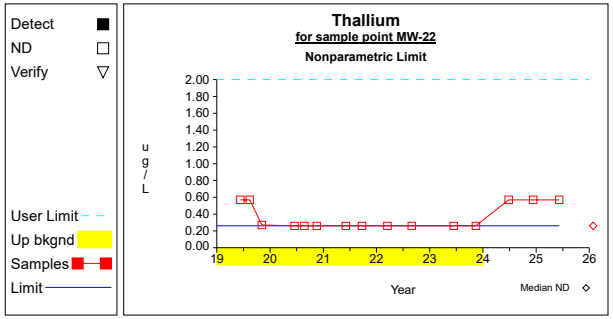
Up vs. Down Prediction Limits



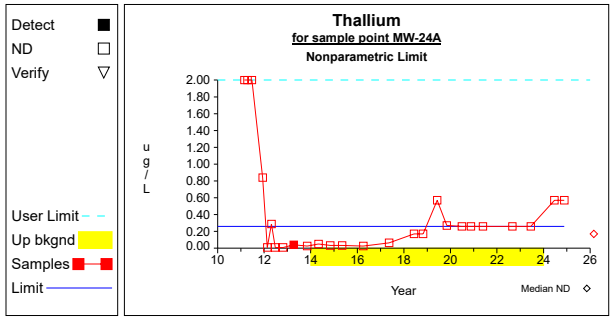
Graph 361



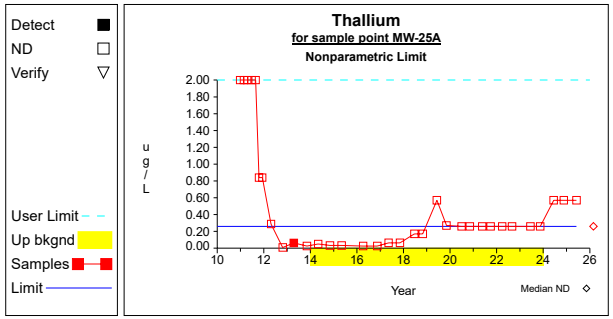
Graph 362



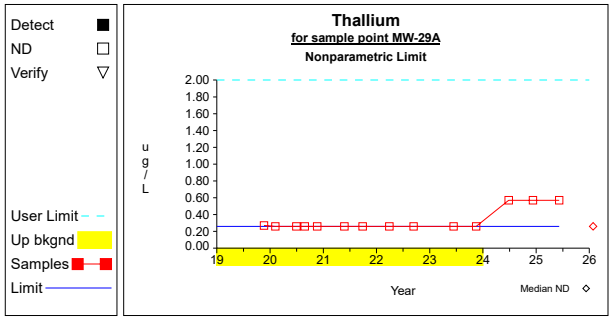
Graph 363



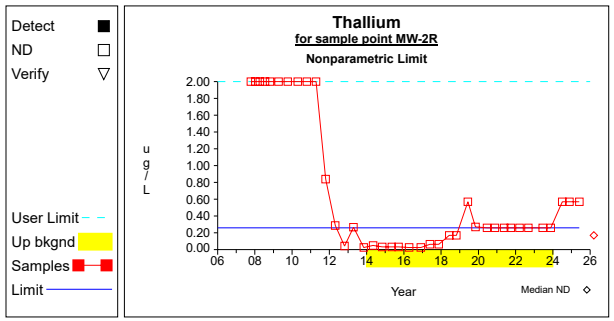
Graph 364



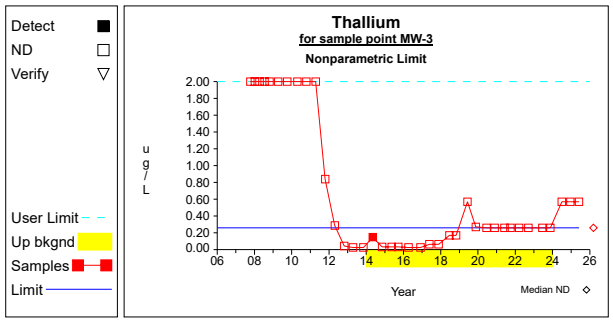
Graph 365



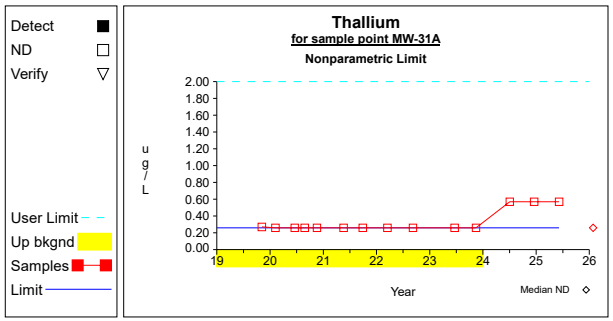
Graph 366



Graph 367

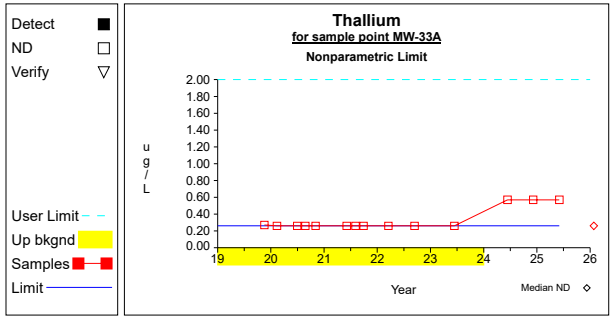


Graph 368

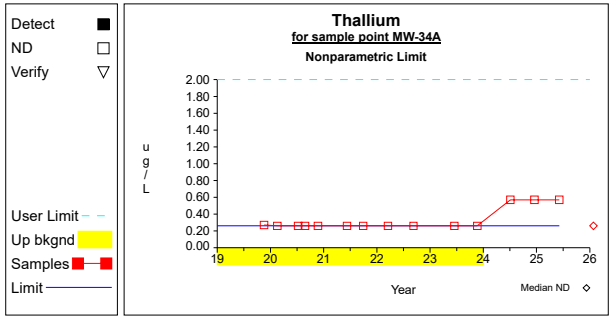


Graph 369

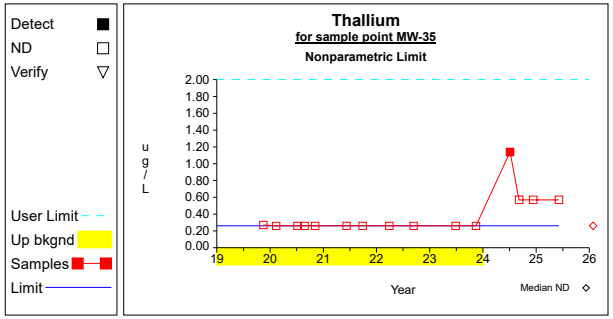
Up vs. Down Prediction Limits



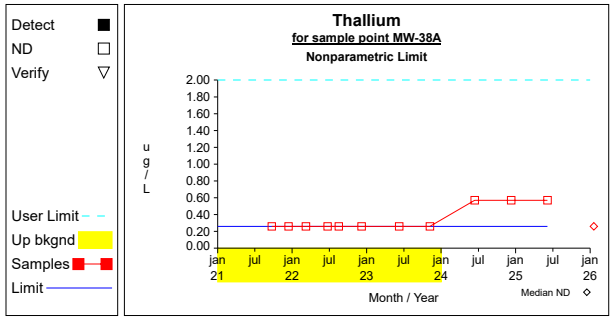
Graph 370



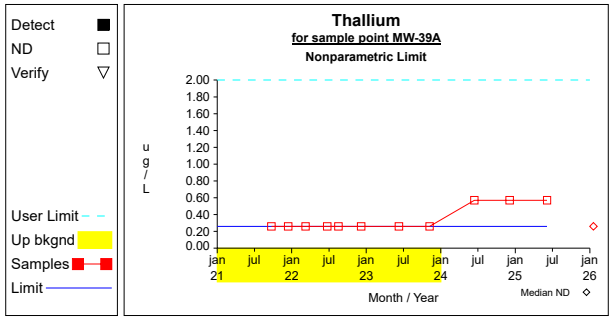
Graph 371



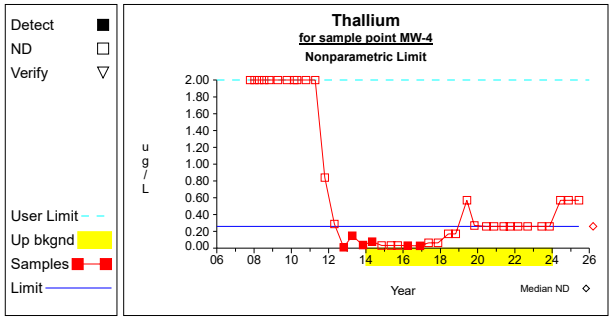
Graph 372



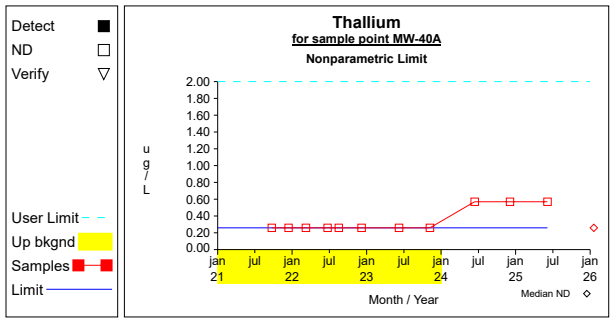
Graph 373



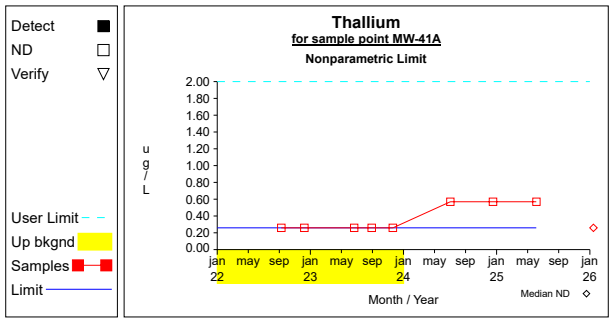
Graph 374



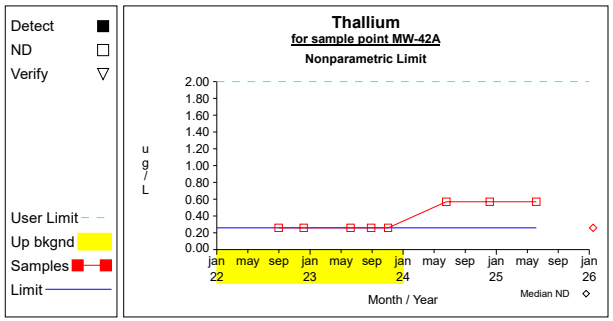
Graph 375



Graph 376

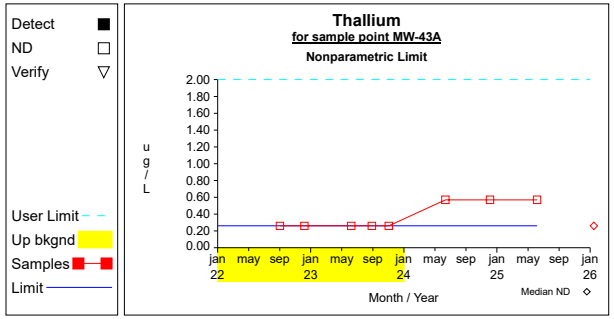


Graph 377

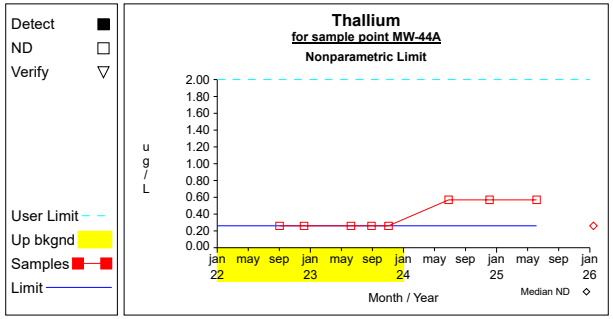


Graph 378

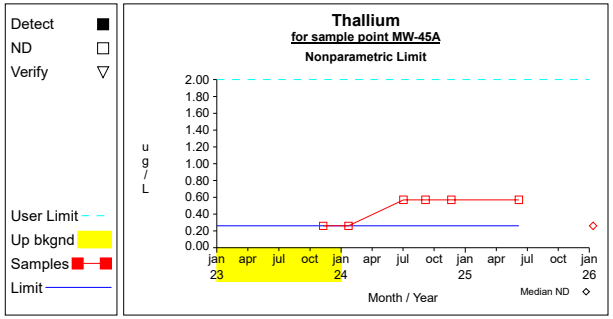
Up vs. Down Prediction Limits



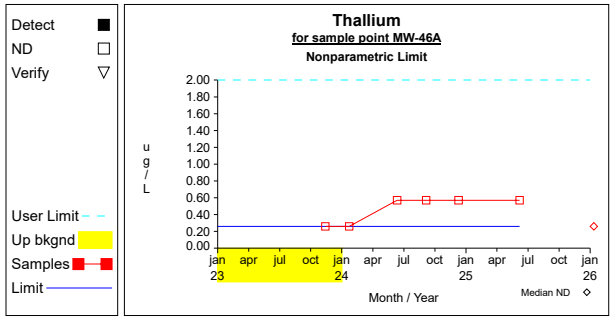
Graph 379



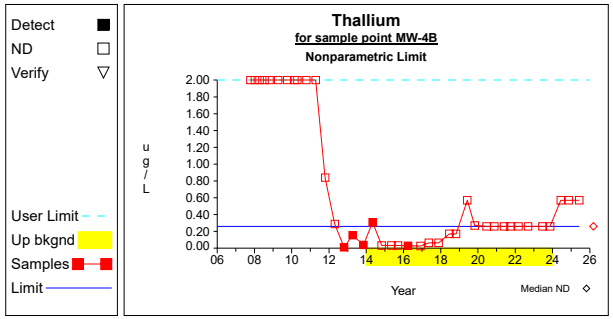
Graph 380



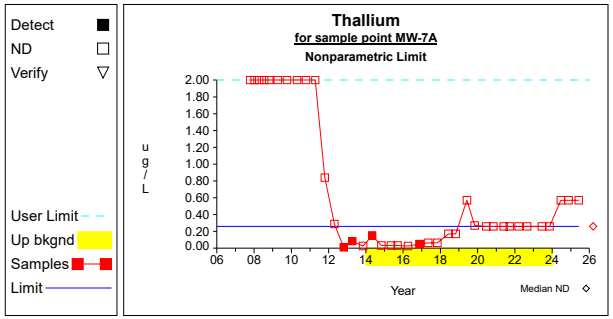
Graph 381



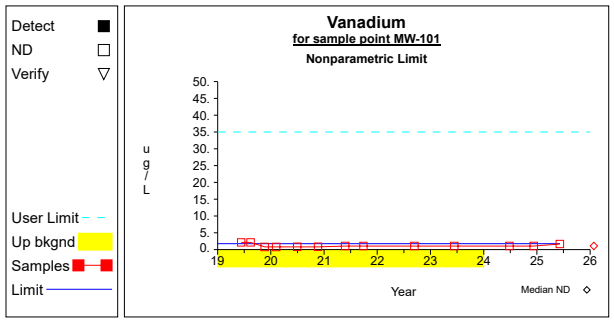
Graph 382



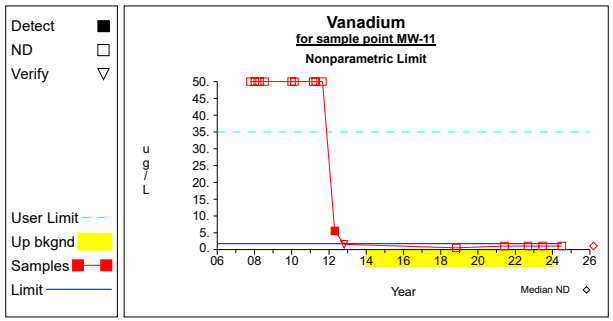
Graph 383



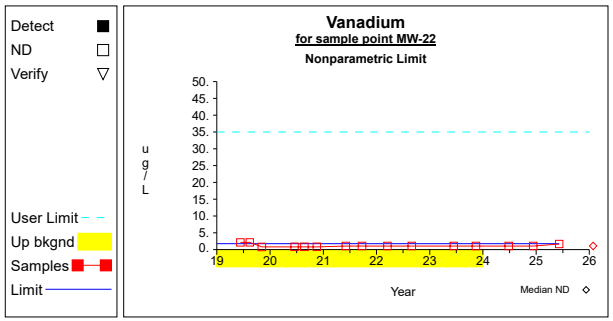
Graph 384



Graph 385

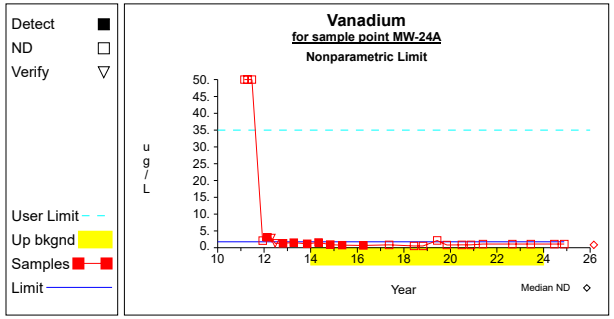


Graph 386

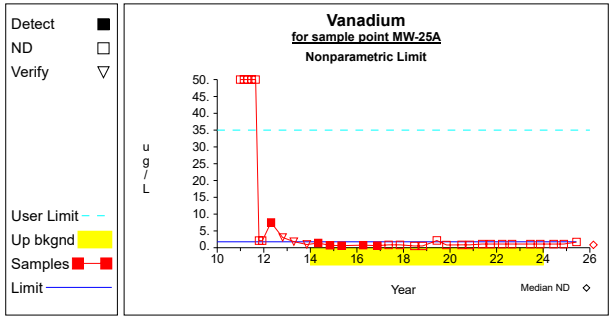


Graph 387

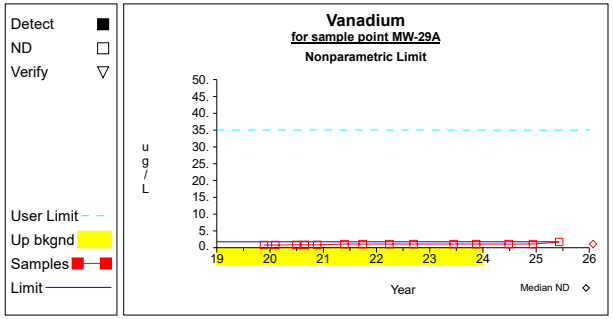
Up vs. Down Prediction Limits



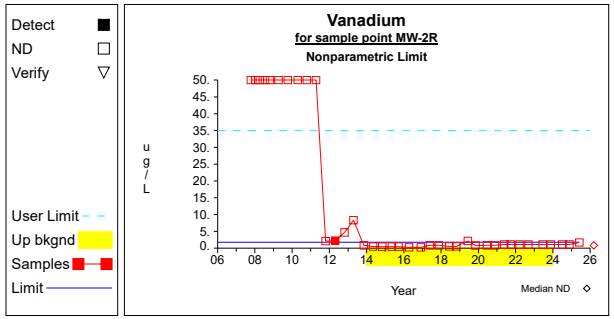
Graph 388



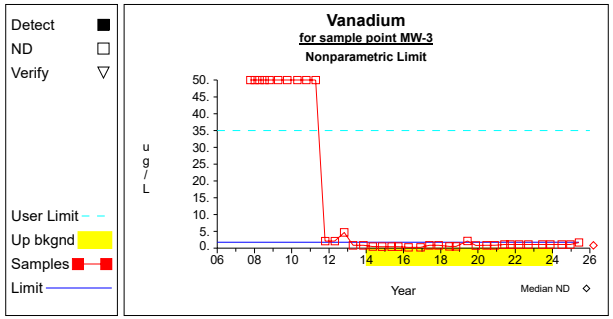
Graph 389



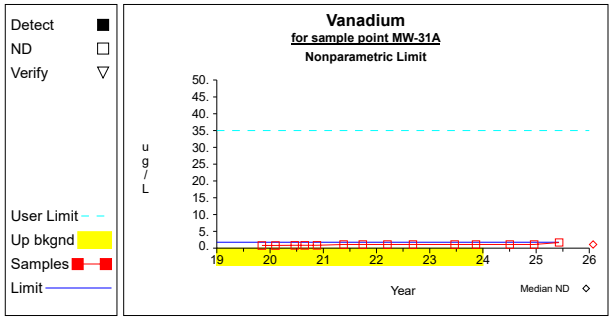
Graph 390



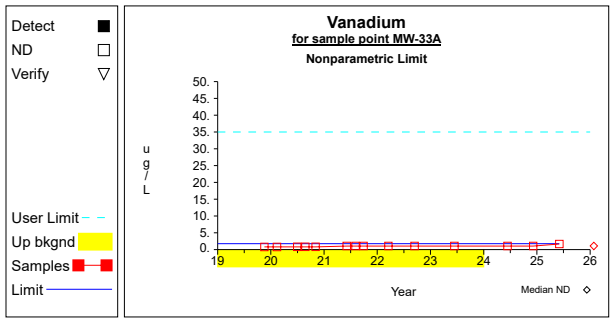
Graph 391



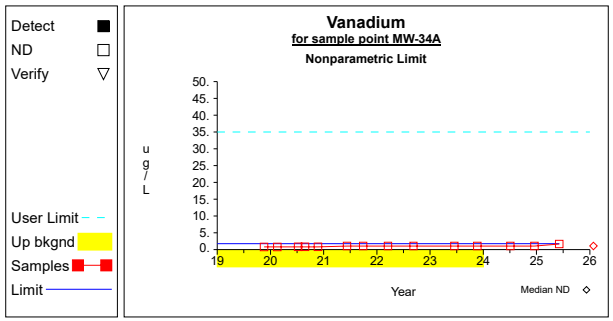
Graph 392



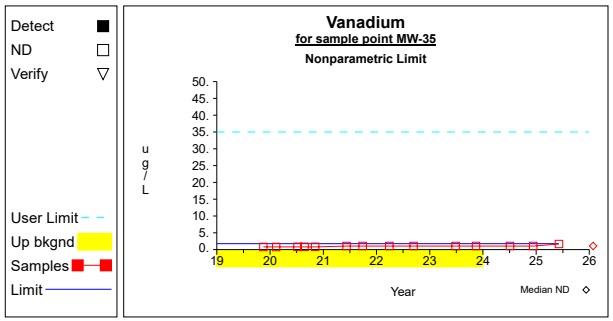
Graph 393



Graph 394

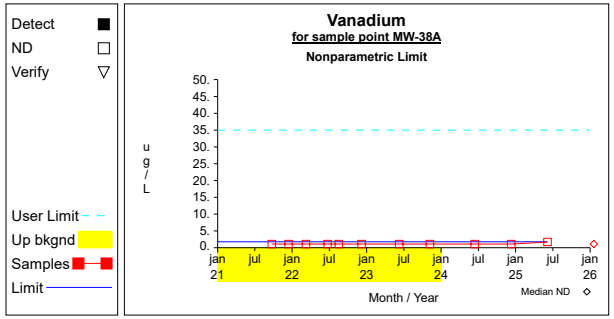


Graph 395

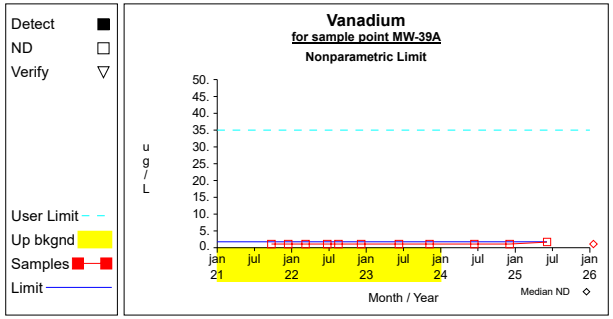


Graph 396

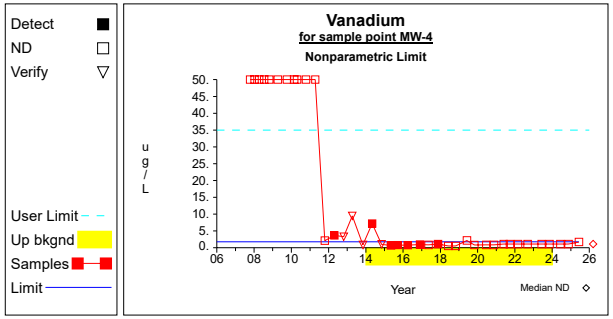
Up vs. Down Prediction Limits



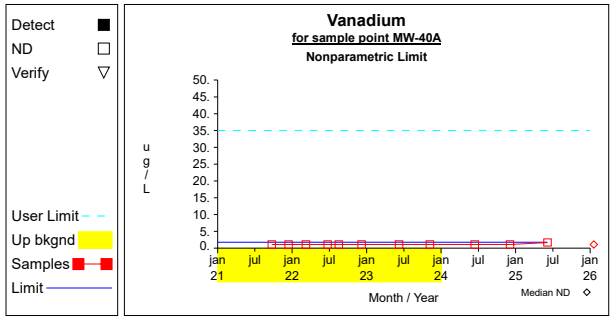
Graph 397



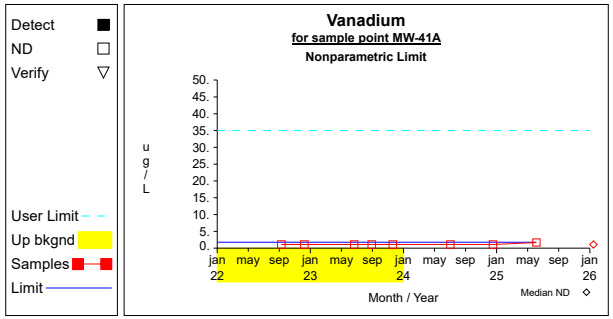
Graph 398



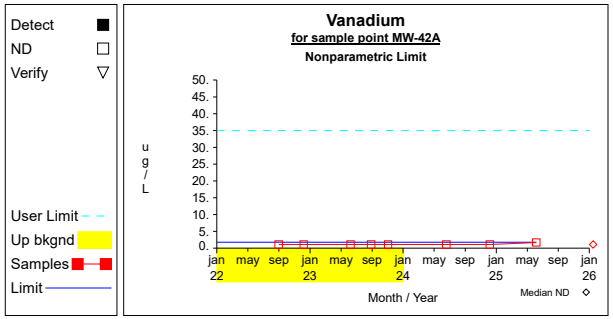
Graph 399



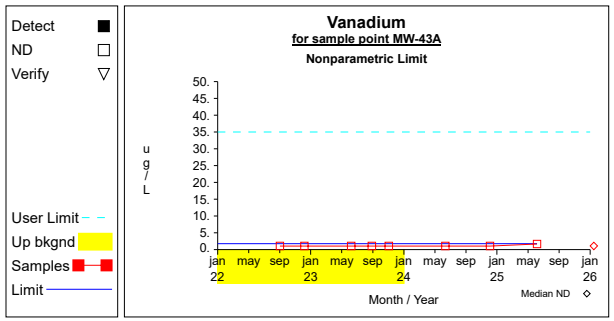
Graph 400



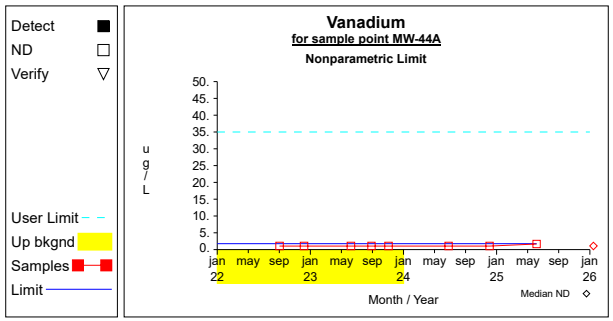
Graph 401



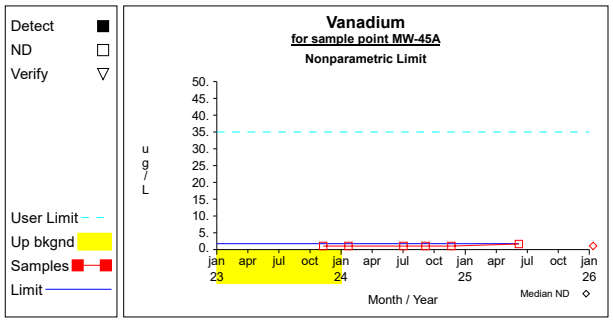
Graph 402



Graph 403

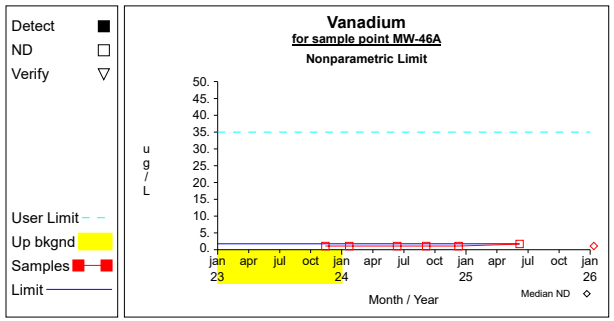


Graph 404

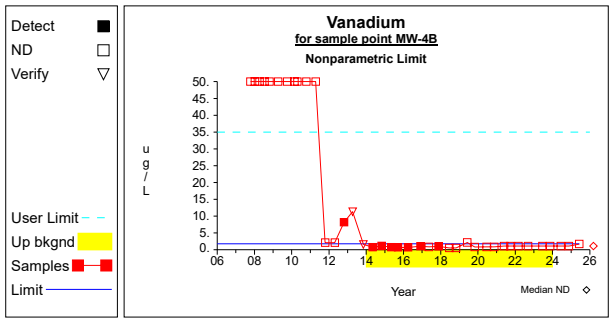


Graph 405

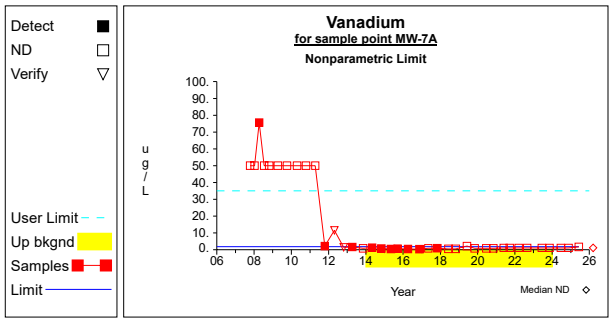
Up vs. Down Prediction Limits



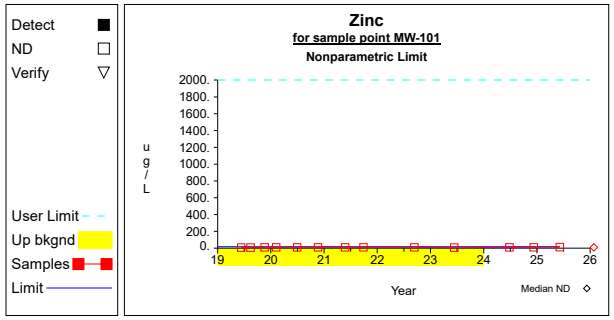
Graph 406



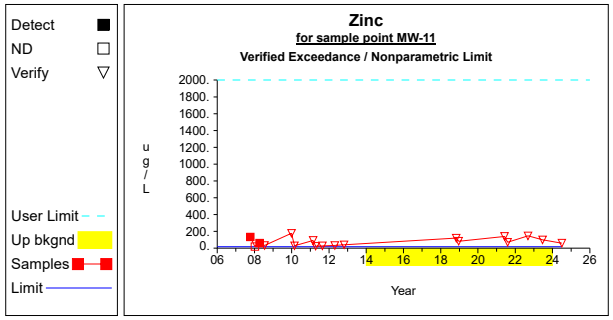
Graph 407



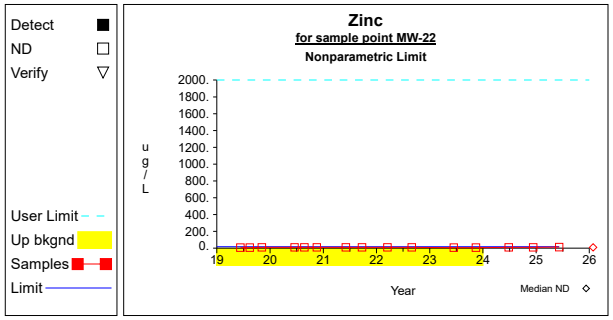
Graph 408



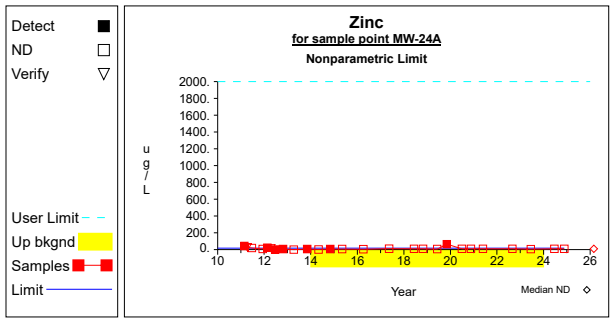
Graph 409



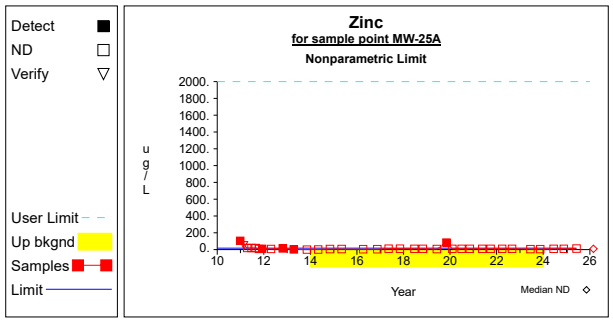
Graph 410



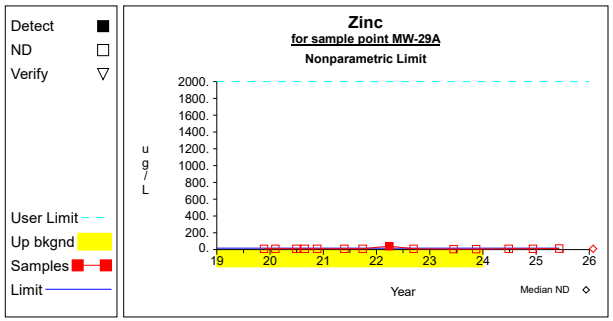
Graph 411



Graph 412

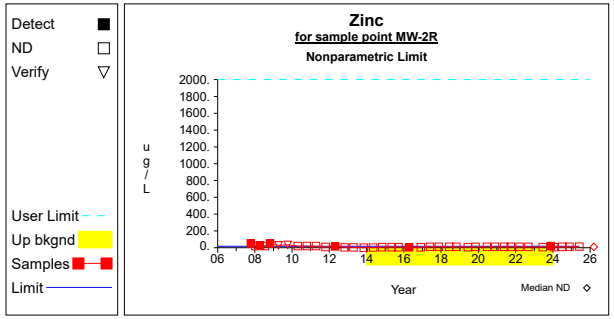


Graph 413

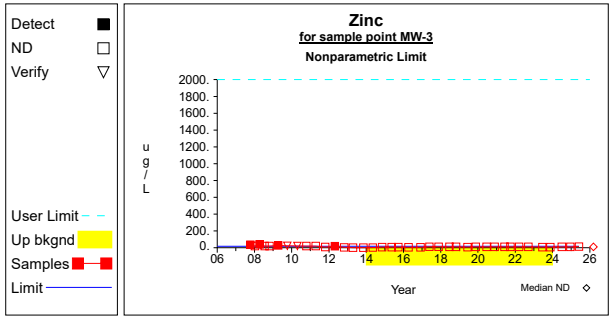


Graph 414

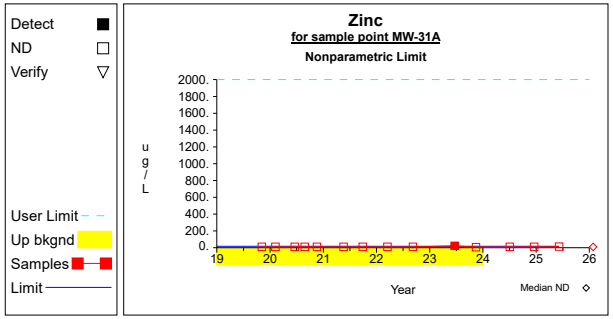
Up vs. Down Prediction Limits



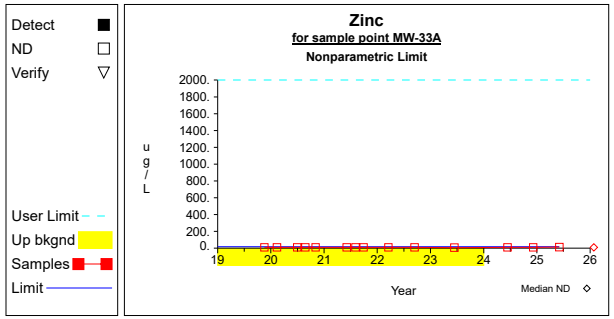
Graph 415



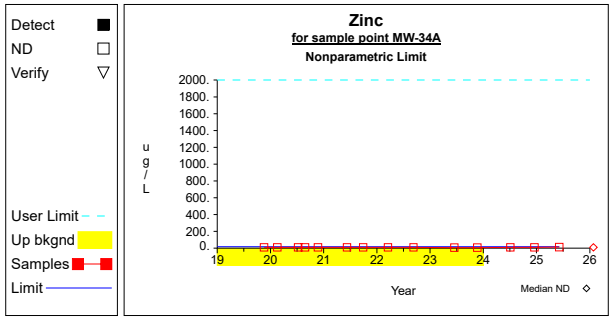
Graph 416



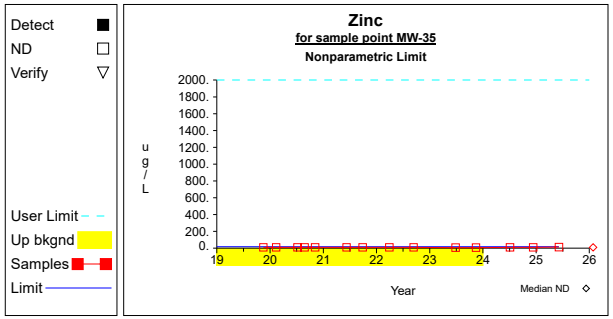
Graph 417



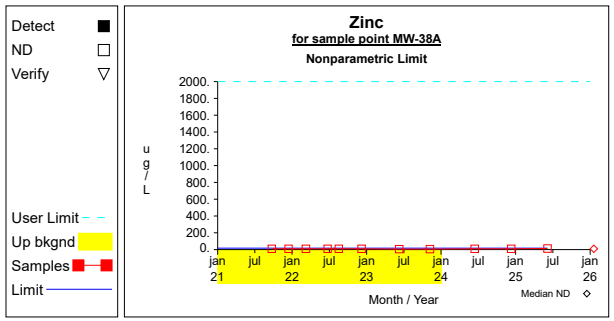
Graph 418



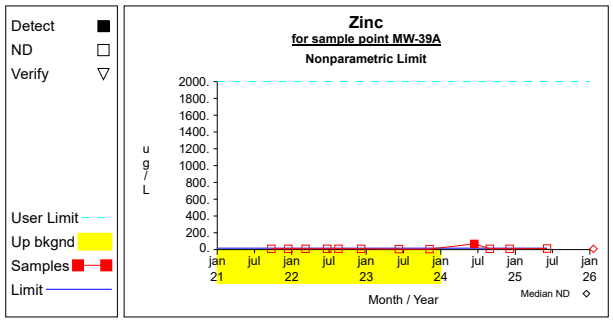
Graph 419



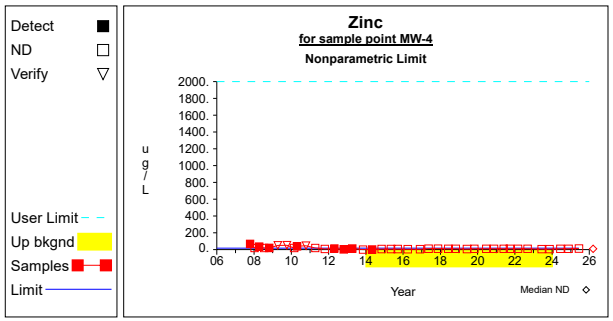
Graph 420



Graph 421

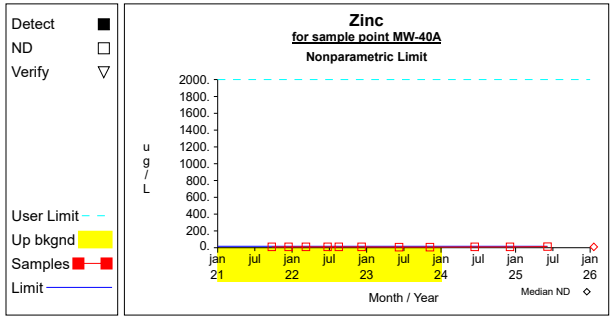


Graph 422

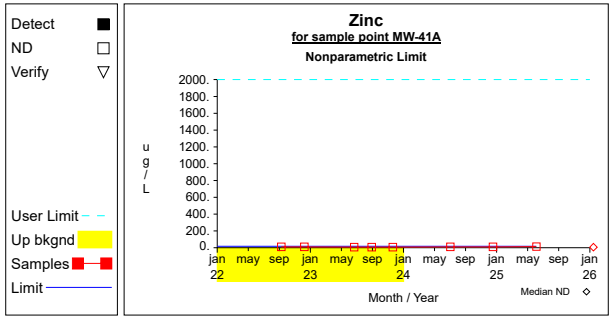


Graph 423

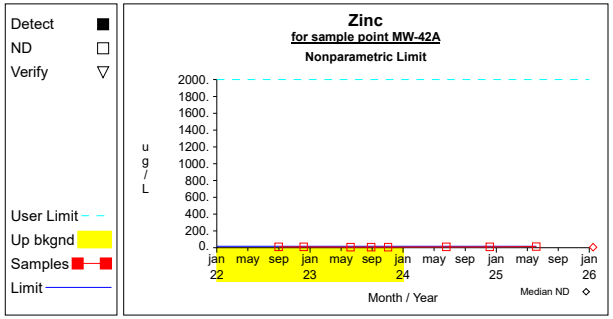
Up vs. Down Prediction Limits



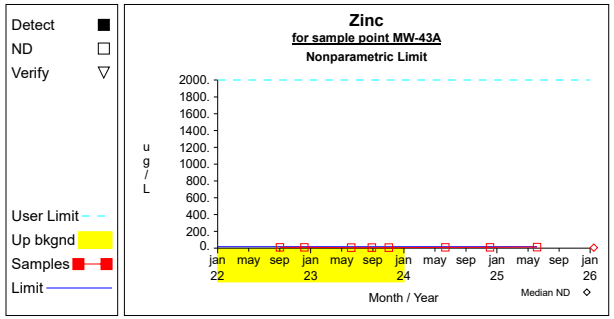
Graph 424



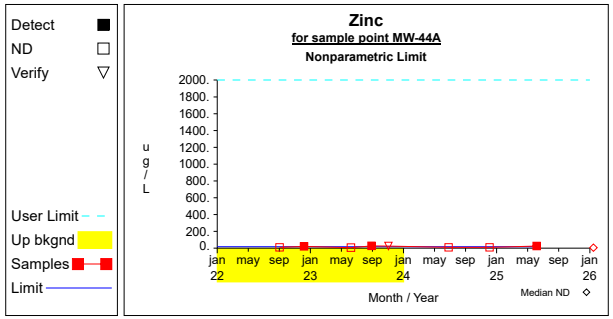
Graph 425



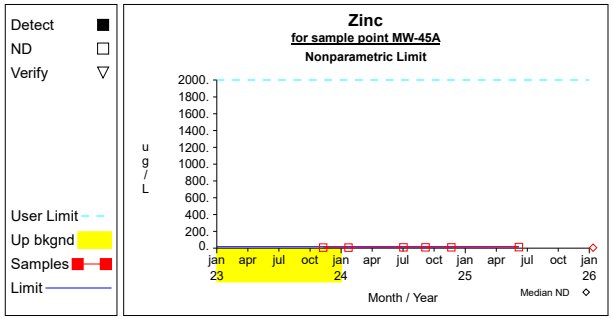
Graph 426



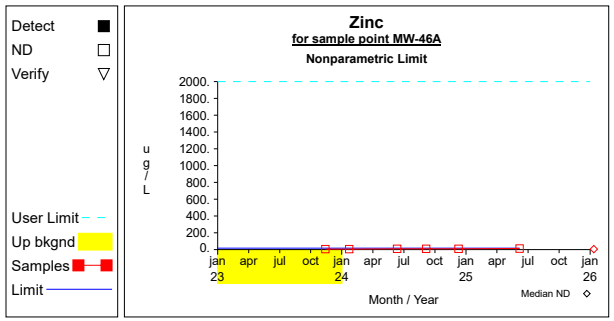
Graph 427



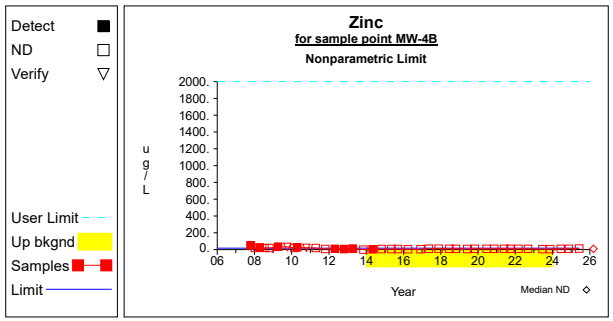
Graph 428



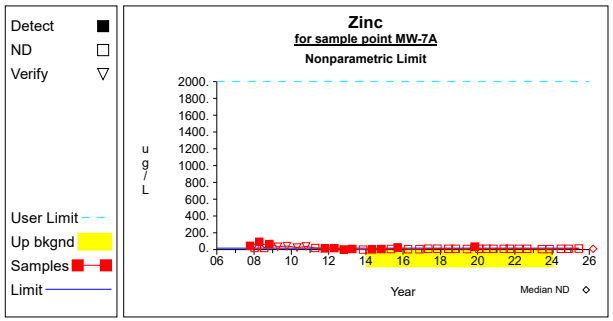
Graph 429



Graph 430



Graph 431



Graph 432

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

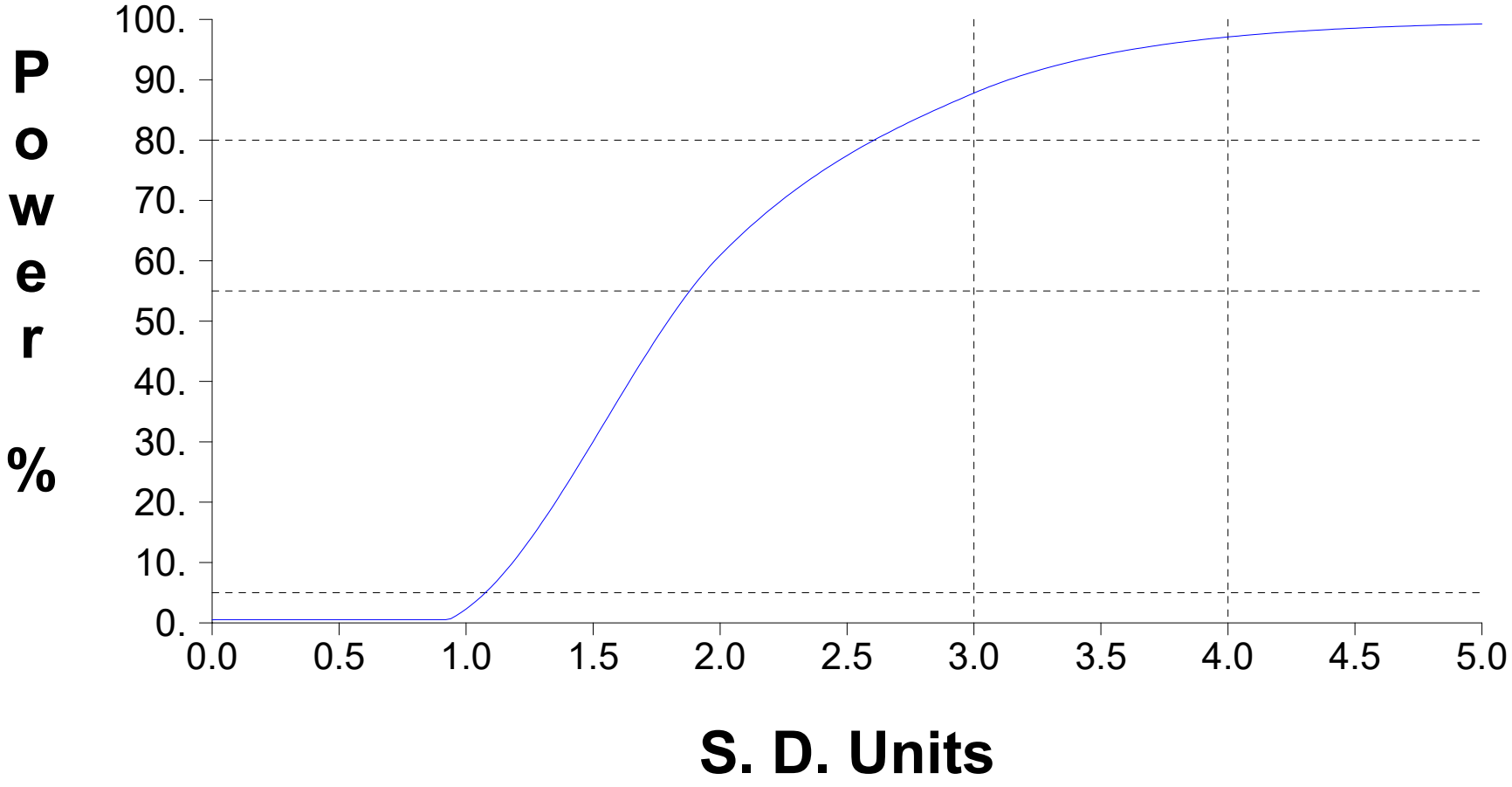


Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony	ug/L	MW-1	05/05/2014	ND	0.4000	0.6900	**
Antimony	ug/L	MW-1	11/07/2014	ND	0.1610	0.6900	**
Antimony	ug/L	MW-1	05/01/2015	ND	0.1610	0.6900	**
Antimony	ug/L	MW-1	09/16/2015	ND	0.1610	0.6900	**
Antimony	ug/L	MW-1	04/11/2016	ND	0.2370	0.6900	**
Antimony	ug/L	MW-1	11/11/2016	ND	0.2370	0.6900	**
Antimony	ug/L	MW-1	05/08/2017	ND	0.1850	0.6900	**
Antimony	ug/L	MW-1	11/16/2017	ND	0.1850	0.6900	**
Antimony	ug/L	MW-1	06/06/2018	ND	0.4200	0.6900	**
Antimony	ug/L	MW-1	10/28/2018	ND	0.4200	0.6900	**
Antimony	ug/L	MW-1	06/04/2019	ND	1.3200	0.6900	**
Antimony	ug/L	MW-1	11/01/2019	ND	0.5300	0.6900	**
Antimony	ug/L	MW-1	06/17/2020	ND	0.5100	0.6900	**
Antimony	ug/L	MW-1	11/03/2020	ND	0.5100	0.6900	**
Antimony	ug/L	MW-1	05/17/2021	ND	1.1000	0.6900	**
Antimony	ug/L	MW-1	09/22/2021	ND	1.1000	0.6900	**
Antimony	ug/L	MW-1	03/16/2022	ND	0.6900		
Antimony	ug/L	MW-1	08/31/2022	ND	0.6900		
Antimony	ug/L	MW-1	06/14/2023	ND	1.0000	0.6900	**
Antimony	ug/L	MW-1	11/09/2023	ND	1.0000	0.6900	**
Antimony	ug/L	MW-19	09/22/2021	ND	1.1000	0.6900	**
Antimony	ug/L	MW-19	12/14/2021	ND	1.1000	0.6900	**
Antimony	ug/L	MW-19	03/16/2022	ND	0.6900		
Antimony	ug/L	MW-19	06/27/2022	ND	0.6900		
Antimony	ug/L	MW-19	08/31/2022	ND	0.6900		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony	ug/L	MW-19	12/07/2022	ND	0.6900		
Antimony	ug/L	MW-19	06/14/2023	ND	1.0000	0.6900	**
Antimony	ug/L	MW-19	11/09/2023	ND	1.0000	0.6900	**
Antimony	ug/L	MW-1R	05/05/2014	ND	0.4000	0.6900	**
Antimony	ug/L	MW-1R	11/05/2014	ND	0.1610	0.6900	**
Antimony	ug/L	MW-1R	05/01/2015	ND	0.1610	0.6900	**
Antimony	ug/L	MW-1R	04/11/2016	ND	0.2370	0.6900	**
Antimony	ug/L	MW-1R	11/15/2016	ND	0.2370	0.6900	**
Antimony	ug/L	MW-1R	05/08/2017	ND	0.1850	0.6900	**
Antimony	ug/L	MW-1R	10/28/2018	ND	0.4200	0.6900	**
Antimony	ug/L	MW-37A	09/22/2021	ND	1.1000	0.6900	**
Antimony	ug/L	MW-37A	12/14/2021	ND	1.1000	0.6900	**
Antimony	ug/L	MW-37A	03/07/2022	ND	0.6900		
Antimony	ug/L	MW-37A	06/27/2022	ND	0.6900		
Antimony	ug/L	MW-37A	08/17/2022	ND	0.6900		
Antimony	ug/L	MW-37A	12/06/2022	ND	0.6900		
Antimony	ug/L	MW-37A	06/08/2023	ND	1.0000	0.6900	**
Arsenic	ug/L	MW-1	05/05/2014		0.3540		
Arsenic	ug/L	MW-1	11/07/2014	ND	0.9450	0.7500	**
Arsenic	ug/L	MW-1	05/01/2015	ND	0.9450	0.7500	**
Arsenic	ug/L	MW-1	09/16/2015	ND	0.9450	0.7500	**
Arsenic	ug/L	MW-1	04/11/2016	ND	0.6720	0.7500	**
Arsenic	ug/L	MW-1	11/11/2016	ND	0.6720	0.7500	**
Arsenic	ug/L	MW-1	05/08/2017	ND	0.5050	0.7500	**
Arsenic	ug/L	MW-1	11/16/2017		0.6620		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Arsenic	ug/L	MW-1	06/06/2018	ND	0.5700	0.7500	**
Arsenic	ug/L	MW-1	10/28/2018	ND	0.5700	0.7500	**
Arsenic	ug/L	MW-1	06/04/2019	ND	0.2320	0.7500	**
Arsenic	ug/L	MW-1	11/01/2019	ND	0.7500		
Arsenic	ug/L	MW-1	06/17/2020	ND	0.8800	0.7500	**
Arsenic	ug/L	MW-1	11/03/2020	ND	0.8800	0.7500	**
Arsenic	ug/L	MW-1	05/17/2021	ND	0.7500		
Arsenic	ug/L	MW-1	09/22/2021	ND	0.7500		
Arsenic	ug/L	MW-1	03/16/2022	ND	0.7500		
Arsenic	ug/L	MW-1	08/31/2022	ND	0.7500		
Arsenic	ug/L	MW-1	06/14/2023	ND	0.5300	0.7500	**
Arsenic	ug/L	MW-1	11/09/2023	ND	0.5300	0.7500	**
Arsenic	ug/L	MW-19	09/22/2021	ND	0.7500		
Arsenic	ug/L	MW-19	12/14/2021	ND	0.7500		
Arsenic	ug/L	MW-19	03/16/2022	ND	0.7500		
Arsenic	ug/L	MW-19	06/27/2022	ND	0.7500		
Arsenic	ug/L	MW-19	08/31/2022	ND	0.7500		
Arsenic	ug/L	MW-19	12/07/2022	ND	0.7500		
Arsenic	ug/L	MW-19	06/14/2023	ND	0.5300	0.7500	**
Arsenic	ug/L	MW-19	11/09/2023	ND	0.5300	0.7500	**
Arsenic	ug/L	MW-1R	05/05/2014	ND	0.3300	0.7500	**
Arsenic	ug/L	MW-1R	11/05/2014	ND	0.9450	0.7500	**
Arsenic	ug/L	MW-1R	05/01/2015	ND	0.9450	0.7500	**
Arsenic	ug/L	MW-1R	04/11/2016	ND	0.6720	0.7500	**
Arsenic	ug/L	MW-1R	11/15/2016	ND	0.6720	0.7500	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Arsenic	ug/L	MW-1R	05/08/2017	ND	0.5050	0.7500	**
Arsenic	ug/L	MW-1R	10/28/2018	ND	0.5700	0.7500	**
Arsenic	ug/L	MW-37A	09/22/2021	ND	0.7500		
Arsenic	ug/L	MW-37A	12/14/2021	ND	0.7500		
Arsenic	ug/L	MW-37A	03/07/2022		4.5700		
Arsenic	ug/L	MW-37A	06/27/2022	ND	0.7500		
Arsenic	ug/L	MW-37A	08/17/2022	ND	0.7500		
Arsenic	ug/L	MW-37A	12/06/2022	ND	0.7500		
Arsenic	ug/L	MW-37A	06/08/2023	ND	0.5300	0.7500	**
Barium	ug/L	MW-1	05/05/2014		124.0000		
Barium	ug/L	MW-1	11/07/2014		190.0000		
Barium	ug/L	MW-1	05/01/2015		104.0000		
Barium	ug/L	MW-1	09/16/2015		166.0000		
Barium	ug/L	MW-1	04/11/2016		93.8000		
Barium	ug/L	MW-1	11/11/2016		114.0000		
Barium	ug/L	MW-1	05/08/2017		95.1000		
Barium	ug/L	MW-1	11/16/2017		130.0000		
Barium	ug/L	MW-1	06/06/2018		119.0000		
Barium	ug/L	MW-1	10/28/2018		142.0000		
Barium	ug/L	MW-1	06/04/2019		93.8000		
Barium	ug/L	MW-1	11/01/2019		124.0000		
Barium	ug/L	MW-1	06/17/2020		94.9000		
Barium	ug/L	MW-1	11/03/2020		184.0000		
Barium	ug/L	MW-1	05/17/2021		146.0000		
Barium	ug/L	MW-1	09/22/2021		111.0000		

* - 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	ug/L	MW-1	03/16/2022		112.0000		
Barium	ug/L	MW-1	08/31/2022		112.0000		
Barium	ug/L	MW-1	06/14/2023		106.0000		
Barium	ug/L	MW-1	11/09/2023		282.0000		
Barium	ug/L	MW-19	09/22/2021		190.0000		
Barium	ug/L	MW-19	12/14/2021		100.0000		
Barium	ug/L	MW-19	03/16/2022		139.0000		
Barium	ug/L	MW-19	06/27/2022		72.3000		
Barium	ug/L	MW-19	08/31/2022		168.0000		
Barium	ug/L	MW-19	12/07/2022		152.0000		
Barium	ug/L	MW-19	06/14/2023		82.4000		
Barium	ug/L	MW-19	11/09/2023		84.1000		
Barium	ug/L	MW-1R	05/05/2014		93.5000		
Barium	ug/L	MW-1R	11/05/2014		136.0000		
Barium	ug/L	MW-1R	05/01/2015		81.4000		
Barium	ug/L	MW-1R	04/11/2016		86.4000		
Barium	ug/L	MW-1R	11/15/2016		74.2000		
Barium	ug/L	MW-1R	05/08/2017		58.7000		
Barium	ug/L	MW-1R	10/28/2018		95.6000		
Barium	ug/L	MW-37A	09/22/2021		202.0000		
Barium	ug/L	MW-37A	12/14/2021		137.0000		
Barium	ug/L	MW-37A	03/07/2022		273.0000		
Barium	ug/L	MW-37A	06/27/2022		144.0000		
Barium	ug/L	MW-37A	08/17/2022		122.0000		
Barium	ug/L	MW-37A	12/06/2022		247.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Barium	ug/L	MW-37A	06/08/2023		111.0000		
Beryllium	ug/L	MW-1	05/05/2014	ND	0.0800	0.2700	**
Beryllium	ug/L	MW-1	11/07/2014	ND	0.0390	0.2700	**
Beryllium	ug/L	MW-1	05/01/2015	ND	0.0390	0.2700	**
Beryllium	ug/L	MW-1	09/16/2015	ND	0.0390	0.2700	**
Beryllium	ug/L	MW-1	04/11/2016	ND	0.2210	0.2700	**
Beryllium	ug/L	MW-1	11/11/2016	ND	0.2210	0.2700	**
Beryllium	ug/L	MW-1	05/08/2017	ND	0.1250	0.2700	**
Beryllium	ug/L	MW-1	11/16/2017	ND	0.1250	0.2700	**
Beryllium	ug/L	MW-1	06/06/2018	ND	0.1900	0.2700	**
Beryllium	ug/L	MW-1	10/28/2018	ND	0.1900	0.2700	**
Beryllium	ug/L	MW-1	06/04/2019	ND	0.5300	0.2700	**
Beryllium	ug/L	MW-1	11/01/2019	ND	0.2700		
Beryllium	ug/L	MW-1	06/17/2020	ND	0.2700		
Beryllium	ug/L	MW-1	11/03/2020	ND	0.2700		
Beryllium	ug/L	MW-1	05/17/2021	ND	0.2700		
Beryllium	ug/L	MW-1	09/22/2021	ND	0.2700		
Beryllium	ug/L	MW-1	03/16/2022	ND	0.2700		
Beryllium	ug/L	MW-1	08/31/2022	ND	0.2700		
Beryllium	ug/L	MW-1	06/14/2023	ND	0.3300	0.2700	**
Beryllium	ug/L	MW-1	11/09/2023	ND	0.3300	0.2700	**
Beryllium	ug/L	MW-19	09/22/2021	ND	0.2700		
Beryllium	ug/L	MW-19	12/14/2021	ND	0.2700		
Beryllium	ug/L	MW-19	03/16/2022	ND	0.2700		
Beryllium	ug/L	MW-19	06/27/2022	ND	0.2700		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Beryllium	ug/L	MW-19	08/31/2022	ND	0.2700		
Beryllium	ug/L	MW-19	12/07/2022	ND	0.2700		
Beryllium	ug/L	MW-19	06/14/2023	ND	0.3300	0.2700	**
Beryllium	ug/L	MW-19	11/09/2023	ND	0.3300	0.2700	**
Beryllium	ug/L	MW-1R	05/05/2014	ND	0.0800	0.2700	**
Beryllium	ug/L	MW-1R	11/05/2014	ND	0.0390	0.2700	**
Beryllium	ug/L	MW-1R	05/01/2015	ND	0.0390	0.2700	**
Beryllium	ug/L	MW-1R	04/11/2016	ND	0.2210	0.2700	**
Beryllium	ug/L	MW-1R	11/15/2016	ND	0.2210	0.2700	**
Beryllium	ug/L	MW-1R	05/08/2017	ND	0.1250	0.2700	**
Beryllium	ug/L	MW-1R	10/28/2018	ND	0.1900	0.2700	**
Beryllium	ug/L	MW-37A	09/22/2021	ND	0.2700		
Beryllium	ug/L	MW-37A	12/14/2021	ND	0.2700		
Beryllium	ug/L	MW-37A	03/07/2022	ND	0.2700		
Beryllium	ug/L	MW-37A	06/27/2022	ND	0.2700		
Beryllium	ug/L	MW-37A	08/17/2022	ND	0.2700		
Beryllium	ug/L	MW-37A	12/06/2022	ND	0.2700		
Beryllium	ug/L	MW-37A	06/08/2023	ND	0.3300	0.2700	**
Cadmium	ug/L	MW-1	05/05/2014	ND	0.1000	0.0550	**
Cadmium	ug/L	MW-1	11/07/2014	ND	0.1120	0.0550	**
Cadmium	ug/L	MW-1	05/01/2015	ND	0.1120	0.0550	**
Cadmium	ug/L	MW-1	09/16/2015	ND	0.1120	0.0550	**
Cadmium	ug/L	MW-1	04/11/2016	ND	0.0351	0.0550	**
Cadmium	ug/L	MW-1	11/11/2016	ND	0.0351	0.0550	**
Cadmium	ug/L	MW-1	05/08/2017	ND	0.0441	0.0550	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cadmium	ug/L	MW-1	11/16/2017	ND	0.0441	0.0550	**
Cadmium	ug/L	MW-1	06/06/2018	ND	0.0600	0.0550	**
Cadmium	ug/L	MW-1	10/28/2018	ND	0.0600	0.0550	**
Cadmium	ug/L	MW-1	06/04/2019	ND	0.1670	0.0550	**
Cadmium	ug/L	MW-1	11/01/2019	ND	0.0390	0.0550	**
Cadmium	ug/L	MW-1	06/17/2020	ND	0.0490	0.0550	**
Cadmium	ug/L	MW-1	11/03/2020	ND	0.0490	0.0550	**
Cadmium	ug/L	MW-1	05/17/2021	ND	0.0510	0.0550	**
Cadmium	ug/L	MW-1	09/22/2021	ND	0.0510	0.0550	**
Cadmium	ug/L	MW-1	03/16/2022	ND	0.0550		
Cadmium	ug/L	MW-1	08/31/2022	ND	0.0550		
Cadmium	ug/L	MW-1	06/14/2023	ND	0.1000	0.0550	**
Cadmium	ug/L	MW-1	11/09/2023		0.2090		
Cadmium	ug/L	MW-19	09/22/2021	ND	0.0510	0.0550	**
Cadmium	ug/L	MW-19	12/14/2021	ND	0.0510	0.0550	**
Cadmium	ug/L	MW-19	03/16/2022		0.1200		
Cadmium	ug/L	MW-19	06/27/2022	ND	0.0550		
Cadmium	ug/L	MW-19	08/31/2022	ND	0.0550		
Cadmium	ug/L	MW-19	12/07/2022	ND	0.0550		
Cadmium	ug/L	MW-19	06/14/2023	ND	0.1000	0.0550	**
Cadmium	ug/L	MW-19	11/09/2023	ND	0.1000	0.0550	**
Cadmium	ug/L	MW-1R	05/05/2014	ND	0.1000	0.0550	**
Cadmium	ug/L	MW-1R	11/05/2014	ND	0.1120	0.0550	**
Cadmium	ug/L	MW-1R	05/01/2015	ND	0.1120	0.0550	**
Cadmium	ug/L	MW-1R	04/11/2016	ND	0.0351	0.0550	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cadmium	ug/L	MW-1R	11/15/2016	ND	0.0351	0.0550	**
Cadmium	ug/L	MW-1R	05/08/2017	ND	0.0441	0.0550	**
Cadmium	ug/L	MW-1R	10/28/2018	ND	0.0600	0.0550	**
Cadmium	ug/L	MW-37A	09/22/2021	ND	0.0510	0.0550	**
Cadmium	ug/L	MW-37A	12/14/2021	ND	0.0510	0.0550	**
Cadmium	ug/L	MW-37A	03/07/2022	ND	0.0550		
Cadmium	ug/L	MW-37A	06/27/2022	ND	0.0550		
Cadmium	ug/L	MW-37A	08/17/2022	ND	0.0550		
Cadmium	ug/L	MW-37A	12/06/2022	ND	0.0550		
Cadmium	ug/L	MW-37A	06/08/2023	ND	0.1000	0.0550	**
Chromium	ug/L	MW-1	05/05/2014		0.8160		
Chromium	ug/L	MW-1	11/07/2014	ND	1.2400	1.1000	**
Chromium	ug/L	MW-1	05/01/2015	ND	1.2400	1.1000	**
Chromium	ug/L	MW-1	09/16/2015	ND	1.2400	1.1000	**
Chromium	ug/L	MW-1	04/11/2016		0.8520		
Chromium	ug/L	MW-1	11/11/2016		0.4230		
Chromium	ug/L	MW-1	05/08/2017	ND	0.7290	1.1000	**
Chromium	ug/L	MW-1	11/16/2017	ND	0.7290	1.1000	**
Chromium	ug/L	MW-1	06/06/2018	ND	0.7600	1.1000	**
Chromium	ug/L	MW-1	10/28/2018	ND	0.7600	1.1000	**
Chromium	ug/L	MW-1	06/04/2019	ND	1.1400	1.1000	**
Chromium	ug/L	MW-1	11/01/2019	ND	0.9800	1.1000	**
Chromium	ug/L	MW-1	06/17/2020	ND	1.1000		
Chromium	ug/L	MW-1	11/03/2020	ND	1.1000		
Chromium	ug/L	MW-1	05/17/2021	ND	1.1000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Chromium	ug/L	MW-1	09/22/2021	ND	1.1000		
Chromium	ug/L	MW-1	03/16/2022	ND	1.1000		
Chromium	ug/L	MW-1	08/31/2022	ND	1.1000		
Chromium	ug/L	MW-1	06/14/2023	ND	1.1000		
Chromium	ug/L	MW-1	11/09/2023	ND	1.1000		
Chromium	ug/L	MW-19	09/22/2021	ND	1.1000		
Chromium	ug/L	MW-19	12/14/2021	ND	1.1000		
Chromium	ug/L	MW-19	03/16/2022	ND	1.1000		
Chromium	ug/L	MW-19	06/27/2022	ND	1.1000		
Chromium	ug/L	MW-19	08/31/2022	ND	1.1000		
Chromium	ug/L	MW-19	12/07/2022	ND	1.1000		
Chromium	ug/L	MW-19	06/14/2023	ND	1.1000		
Chromium	ug/L	MW-19	11/09/2023	ND	1.1000		
Chromium	ug/L	MW-1R	05/05/2014		2.2800		
Chromium	ug/L	MW-1R	11/05/2014		2.6300		
Chromium	ug/L	MW-1R	05/01/2015		1.9800		
Chromium	ug/L	MW-1R	04/11/2016		2.2000		
Chromium	ug/L	MW-1R	11/15/2016		1.6200		
Chromium	ug/L	MW-1R	05/08/2017	ND	0.7290	1.1000	**
Chromium	ug/L	MW-1R	10/28/2018	ND	0.7600	1.1000	**
Chromium	ug/L	MW-37A	09/22/2021	ND	1.1000		
Chromium	ug/L	MW-37A	12/14/2021	ND	1.1000		
Chromium	ug/L	MW-37A	03/07/2022	ND	1.1000		
Chromium	ug/L	MW-37A	06/27/2022	ND	1.1000		
Chromium	ug/L	MW-37A	08/17/2022	ND	1.1000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Chromium	ug/L	MW-37A	12/06/2022	ND	1.1000		
Chromium	ug/L	MW-37A	06/08/2023	ND	1.1000		
Cobalt	ug/L	MW-1	05/05/2014		0.2310		
Cobalt	ug/L	MW-1	11/07/2014		0.1680		
Cobalt	ug/L	MW-1	05/01/2015	ND	0.0528	0.1700	**
Cobalt	ug/L	MW-1	09/16/2015		0.1820		
Cobalt	ug/L	MW-1	04/11/2016		0.0520		
Cobalt	ug/L	MW-1	11/11/2016		0.0470		
Cobalt	ug/L	MW-1	05/08/2017	ND	0.0453	0.1700	**
Cobalt	ug/L	MW-1	11/16/2017		0.0830		
Cobalt	ug/L	MW-1	06/06/2018	ND	0.0610	0.1700	**
Cobalt	ug/L	MW-1	10/28/2018	ND	0.0610	0.1700	**
Cobalt	ug/L	MW-1	06/04/2019	ND	0.4020	0.1700	**
Cobalt	ug/L	MW-1	11/01/2019	ND	0.0910	0.1700	**
Cobalt	ug/L	MW-1	06/17/2020	ND	0.0910	0.1700	**
Cobalt	ug/L	MW-1	11/03/2020	ND	0.0910	0.1700	**
Cobalt	ug/L	MW-1	05/17/2021	ND	0.0910	0.1700	**
Cobalt	ug/L	MW-1	09/22/2021	ND	0.1900	0.1700	**
Cobalt	ug/L	MW-1	03/16/2022	ND	0.1900	0.1700	**
Cobalt	ug/L	MW-1	08/31/2022	ND	0.1900	0.1700	**
Cobalt	ug/L	MW-1	06/14/2023	ND	0.1700		
Cobalt	ug/L	MW-1	11/09/2023	ND	0.1700		
Cobalt	ug/L	MW-19	09/22/2021		1.4300		
Cobalt	ug/L	MW-19	12/14/2021		0.6240		
Cobalt	ug/L	MW-19	03/16/2022		3.4000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cobalt	ug/L	MW-19	06/27/2022	ND	0.1900	0.1700	**
Cobalt	ug/L	MW-19	08/31/2022	ND	0.1900	0.1700	**
Cobalt	ug/L	MW-19	12/07/2022	ND	0.1900	0.1700	**
Cobalt	ug/L	MW-19	06/14/2023	ND	0.1700		
Cobalt	ug/L	MW-19	11/09/2023	ND	0.1700		
Cobalt	ug/L	MW-1R	05/05/2014		0.1680		
Cobalt	ug/L	MW-1R	11/05/2014		0.0780		
Cobalt	ug/L	MW-1R	05/01/2015	ND	0.0528	0.1700	**
Cobalt	ug/L	MW-1R	04/11/2016		0.0280		
Cobalt	ug/L	MW-1R	11/15/2016		0.0970		
Cobalt	ug/L	MW-1R	05/08/2017	ND	0.0453	0.1700	**
Cobalt	ug/L	MW-1R	10/28/2018	ND	0.0610	0.1700	**
Cobalt	ug/L	MW-37A	09/22/2021		0.6810		
Cobalt	ug/L	MW-37A	12/14/2021	ND	0.1900	0.1700	**
Cobalt	ug/L	MW-37A	03/07/2022	ND	0.1900	0.1700	**
Cobalt	ug/L	MW-37A	06/27/2022	ND	0.1900	0.1700	**
Cobalt	ug/L	MW-37A	08/17/2022	ND	0.1900	0.1700	**
Cobalt	ug/L	MW-37A	12/06/2022	ND	0.1900	0.1700	**
Cobalt	ug/L	MW-37A	06/08/2023	ND	0.1700		
Copper	ug/L	MW-1	05/05/2014		1.0400		
Copper	ug/L	MW-1	11/07/2014		0.9060		
Copper	ug/L	MW-1	05/01/2015	ND	0.4850	1.6000	**
Copper	ug/L	MW-1	09/16/2015		0.5260		
Copper	ug/L	MW-1	04/11/2016	ND	1.2200	1.6000	**
Copper	ug/L	MW-1	11/11/2016	ND	1.2200	1.6000	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Copper	ug/L	MW-1	05/08/2017	ND	2.1900	1.6000	**
Copper	ug/L	MW-1	11/16/2017	ND	2.1900	1.6000	**
Copper	ug/L	MW-1	06/06/2018	ND	3.8000	1.6000	**
Copper	ug/L	MW-1	10/28/2018	ND	1.6000		
Copper	ug/L	MW-1	06/04/2019	ND	0.4970	1.6000	**
Copper	ug/L	MW-1	11/01/2019	ND	2.0000	1.6000	**
Copper	ug/L	MW-1	06/17/2020	ND	1.5000	1.6000	**
Copper	ug/L	MW-1	11/03/2020	ND	1.5000	1.6000	**
Copper	ug/L	MW-1	05/17/2021	ND	1.4000	1.6000	**
Copper	ug/L	MW-1	09/22/2021	ND	1.4000	1.6000	**
Copper	ug/L	MW-1	03/16/2022	ND	1.8000	1.6000	**
Copper	ug/L	MW-1	08/31/2022	ND	1.8000	1.6000	**
Copper	ug/L	MW-1	06/14/2023	ND	1.8000	1.6000	**
Copper	ug/L	MW-1	11/09/2023		5.2700		
Copper	ug/L	MW-19	09/22/2021	ND	1.4000	1.6000	**
Copper	ug/L	MW-19	12/14/2021	ND	1.4000	1.6000	**
Copper	ug/L	MW-19	03/16/2022		7.6400		
Copper	ug/L	MW-19	06/27/2022	ND	1.8000	1.6000	**
Copper	ug/L	MW-19	08/31/2022	ND	1.8000	1.6000	**
Copper	ug/L	MW-19	12/07/2022	ND	1.8000	1.6000	**
Copper	ug/L	MW-19	06/14/2023	ND	1.8000	1.6000	**
Copper	ug/L	MW-19	11/09/2023	ND	1.8000	1.6000	**
Copper	ug/L	MW-1R	05/05/2014	ND	0.5600	1.6000	**
Copper	ug/L	MW-1R	11/05/2014	ND	0.4850	1.6000	**
Copper	ug/L	MW-1R	05/01/2015	ND	0.4850	1.6000	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Copper	ug/L	MW-1R	04/11/2016	ND	1.2200	1.6000	**
Copper	ug/L	MW-1R	11/15/2016	ND	1.2200	1.6000	**
Copper	ug/L	MW-1R	05/08/2017	ND	2.1900	1.6000	**
Copper	ug/L	MW-1R	10/28/2018	ND	1.6000		
Copper	ug/L	MW-37A	09/22/2021	ND	1.4000	1.6000	**
Copper	ug/L	MW-37A	12/14/2021	ND	1.4000	1.6000	**
Copper	ug/L	MW-37A	03/07/2022	ND	1.8000	1.6000	**
Copper	ug/L	MW-37A	06/27/2022	ND	1.8000	1.6000	**
Copper	ug/L	MW-37A	08/17/2022	ND	1.8000	1.6000	**
Copper	ug/L	MW-37A	12/06/2022	ND	1.8000	1.6000	**
Copper	ug/L	MW-37A	06/08/2023	ND	1.8000	1.6000	**
Field pH	SU	MW-1	05/01/2015		6.9500		
Field pH	SU	MW-1	09/16/2015		6.8800		
Field pH	SU	MW-1	12/09/2015		6.7400		
Field pH	SU	MW-1	04/11/2016		7.2000		
Field pH	SU	MW-1	11/11/2016		7.1700		
Field pH	SU	MW-1	05/08/2017		7.4400		
Field pH	SU	MW-1	11/16/2017		7.5100		
Field pH	SU	MW-1	06/06/2018		6.9700		
Field pH	SU	MW-1	10/28/2018		7.3100		
Field pH	SU	MW-1	06/04/2019		6.9700		
Field pH	SU	MW-1	11/01/2019		6.9500		
Field pH	SU	MW-1	06/17/2020		6.6900		
Field pH	SU	MW-1	11/03/2020		6.7300		
Field pH	SU	MW-1	05/17/2021		6.6500		

* - 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	
Field pH	SU	MW-1	09/22/2021		6.1900		
Field pH	SU	MW-1	03/16/2022		7.1100		
Field pH	SU	MW-1	08/31/2022		8.0700		
Field pH	SU	MW-1	06/14/2023		6.5900		
Field pH	SU	MW-1	11/09/2023		6.9500		
Field pH	SU	MW-19	09/22/2021		6.8900		
Field pH	SU	MW-19	12/14/2021		7.2400		
Field pH	SU	MW-19	03/16/2022		7.7300		
Field pH	SU	MW-19	06/27/2022		7.9500		
Field pH	SU	MW-19	08/31/2022		8.2100		
Field pH	SU	MW-19	12/07/2022		7.4900		
Field pH	SU	MW-19	06/14/2023		7.2300		
Field pH	SU	MW-19	11/09/2023		7.5000		
Field pH	SU	MW-1R	05/01/2015		7.4200		
Field pH	SU	MW-1R	04/11/2016		7.4300		
Field pH	SU	MW-1R	11/15/2016		7.7000		
Field pH	SU	MW-1R	05/08/2017		7.9100		
Field pH	SU	MW-1R	10/28/2018		7.6600		
Field pH	SU	MW-37A	09/22/2021		6.3700		
Field pH	SU	MW-37A	12/14/2021		6.8000		
Field pH	SU	MW-37A	03/07/2022		6.8000		
Field pH	SU	MW-37A	06/27/2022		7.6100		
Field pH	SU	MW-37A	08/17/2022		7.7900		
Field pH	SU	MW-37A	12/06/2022		7.0100		
Field pH	SU	MW-37A	06/08/2023		6.8600		

* - 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	
Field Specific Conductance	umhos/cm	MW-1	05/01/2015		551.7000		
Field Specific Conductance	umhos/cm	MW-1	09/16/2015		1052.0000		
Field Specific Conductance	umhos/cm	MW-1	12/09/2015		1431.0000		
Field Specific Conductance	umhos/cm	MW-1	04/11/2016		508.0000		
Field Specific Conductance	umhos/cm	MW-1	11/11/2016		470.4000		
Field Specific Conductance	umhos/cm	MW-1	05/08/2017		463.2000		
Field Specific Conductance	umhos/cm	MW-1	11/16/2017		645.3000		
Field Specific Conductance	umhos/cm	MW-1	06/06/2018		649.9000		
Field Specific Conductance	umhos/cm	MW-1	10/28/2018		536.5000		
Field Specific Conductance	umhos/cm	MW-1	06/04/2019		558.4100		
Field Specific Conductance	umhos/cm	MW-1	11/01/2019		623.1200		
Field Specific Conductance	umhos/cm	MW-1	06/17/2020		559.3700		
Field Specific Conductance	umhos/cm	MW-1	11/03/2020		1056.6000		
Field Specific Conductance	umhos/cm	MW-1	05/17/2021		888.2900		
Field Specific Conductance	umhos/cm	MW-1	09/22/2021		504.9900		
Field Specific Conductance	umhos/cm	MW-1	03/16/2022		737.2900		
Field Specific Conductance	umhos/cm	MW-1	08/31/2022		563.2100		
Field Specific Conductance	umhos/cm	MW-1	06/14/2023		636.7100		
Field Specific Conductance	umhos/cm	MW-1	11/09/2023		1456.6000		
Field Specific Conductance	umhos/cm	MW-19	09/22/2021		567.4700		
Field Specific Conductance	umhos/cm	MW-19	12/14/2021		678.3300		
Field Specific Conductance	umhos/cm	MW-19	03/16/2022		591.6100		
Field Specific Conductance	umhos/cm	MW-19	06/27/2022		558.8100		
Field Specific Conductance	umhos/cm	MW-19	08/31/2022		632.5500		
Field Specific Conductance	umhos/cm	MW-19	12/07/2022		616.2300		

* - 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	
Field Specific Conductance	umhos/cm	MW-19	06/14/2023		665.7100		
Field Specific Conductance	umhos/cm	MW-19	11/09/2023		555.3300		
Field Specific Conductance	umhos/cm	MW-1R	05/01/2015		350.9000		
Field Specific Conductance	umhos/cm	MW-1R	04/11/2016		438.2000		
Field Specific Conductance	umhos/cm	MW-1R	11/15/2016		363.8000		
Field Specific Conductance	umhos/cm	MW-1R	05/08/2017		358.7000		
Field Specific Conductance	umhos/cm	MW-1R	10/28/2018		414.5000		
Field Specific Conductance	umhos/cm	MW-37A	09/22/2021		679.6700		
Field Specific Conductance	umhos/cm	MW-37A	12/14/2021		724.2600		
Field Specific Conductance	umhos/cm	MW-37A	03/07/2022		682.4500		
Field Specific Conductance	umhos/cm	MW-37A	06/27/2022		698.0400		
Field Specific Conductance	umhos/cm	MW-37A	08/17/2022		668.8600		
Field Specific Conductance	umhos/cm	MW-37A	12/06/2022		713.3200		
Field Specific Conductance	umhos/cm	MW-37A	06/08/2023		617.8900		
Lead	ug/L	MW-1	05/05/2014	ND	0.1800	0.2400	**
Lead	ug/L	MW-1	11/07/2014	ND	0.0967	0.2400	**
Lead	ug/L	MW-1	05/01/2015	ND	0.0967	0.2400	**
Lead	ug/L	MW-1	09/16/2015		0.3030		
Lead	ug/L	MW-1	04/11/2016	ND	0.2110	0.2400	**
Lead	ug/L	MW-1	11/11/2016	ND	0.2110	0.2400	**
Lead	ug/L	MW-1	05/08/2017	ND	0.3240	0.2400	**
Lead	ug/L	MW-1	11/16/2017	ND	0.3240	0.2400	**
Lead	ug/L	MW-1	06/06/2018	ND	0.2500	0.2400	**
Lead	ug/L	MW-1	10/28/2018	ND	0.2500	0.2400	**
Lead	ug/L	MW-1	06/04/2019	ND	0.1860	0.2400	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Lead	ug/L	MW-1	11/01/2019	ND	0.2700	0.2400	**
Lead	ug/L	MW-1	06/17/2020	ND	0.1100	0.2400	**
Lead	ug/L	MW-1	11/03/2020	ND	0.1100	0.2400	**
Lead	ug/L	MW-1	05/17/2021	ND	0.2100	0.2400	**
Lead	ug/L	MW-1	09/22/2021	ND	0.2100	0.2400	**
Lead	ug/L	MW-1	03/16/2022	ND	0.2400		
Lead	ug/L	MW-1	08/31/2022	ND	0.2400		
Lead	ug/L	MW-1	06/14/2023	ND	0.2400		
Lead	ug/L	MW-1	11/09/2023		0.9940		
Lead	ug/L	MW-19	09/22/2021		0.5810		
Lead	ug/L	MW-19	12/14/2021	ND	0.2100	0.2400	**
Lead	ug/L	MW-19	03/16/2022		3.2500		
Lead	ug/L	MW-19	06/27/2022	ND	0.2400		
Lead	ug/L	MW-19	08/31/2022	ND	0.2400		
Lead	ug/L	MW-19	12/07/2022	ND	0.2400		
Lead	ug/L	MW-19	06/14/2023	ND	0.2400		
Lead	ug/L	MW-19	11/09/2023	ND	0.2400		
Lead	ug/L	MW-1R	05/05/2014	ND	0.1800	0.2400	**
Lead	ug/L	MW-1R	11/05/2014		0.1360		
Lead	ug/L	MW-1R	05/01/2015	ND	0.0967	0.2400	**
Lead	ug/L	MW-1R	04/11/2016	ND	0.2110	0.2400	**
Lead	ug/L	MW-1R	11/15/2016	ND	0.2110	0.2400	**
Lead	ug/L	MW-1R	05/08/2017	ND	0.3240	0.2400	**
Lead	ug/L	MW-1R	10/28/2018	ND	0.2500	0.2400	**
Lead	ug/L	MW-37A	09/22/2021		1.0600		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Lead	ug/L	MW-37A	12/14/2021	ND	0.2100	0.2400	**
Lead	ug/L	MW-37A	03/07/2022	ND	0.2400		
Lead	ug/L	MW-37A	06/27/2022	ND	0.2400		
Lead	ug/L	MW-37A	08/17/2022	ND	0.2400		
Lead	ug/L	MW-37A	12/06/2022	ND	0.2400		
Lead	ug/L	MW-37A	06/08/2023	ND	0.2400		
Nickel	ug/L	MW-1	05/05/2014		4.0100		
Nickel	ug/L	MW-1	11/07/2014		6.2000		
Nickel	ug/L	MW-1	05/01/2015		1.4900		
Nickel	ug/L	MW-1	09/16/2015		5.8700		
Nickel	ug/L	MW-1	04/11/2016	ND	1.5300	1.9000	**
Nickel	ug/L	MW-1	11/11/2016	ND	1.5300	1.9000	**
Nickel	ug/L	MW-1	05/08/2017	ND	0.9290	1.9000	**
Nickel	ug/L	MW-1	11/16/2017		1.5300		
Nickel	ug/L	MW-1	06/06/2018	ND	1.0000	1.9000	**
Nickel	ug/L	MW-1	10/28/2018	ND	1.0000	1.9000	**
Nickel	ug/L	MW-1	06/04/2019	ND	0.6250	1.9000	**
Nickel	ug/L	MW-1	11/01/2019	ND	1.7000	1.9000	**
Nickel	ug/L	MW-1	06/17/2020	ND	1.9000		
Nickel	ug/L	MW-1	11/03/2020	ND	1.9000		
Nickel	ug/L	MW-1	05/17/2021	ND	1.9000		
Nickel	ug/L	MW-1	09/22/2021	ND	1.9000		
Nickel	ug/L	MW-1	03/16/2022	ND	1.9000		
Nickel	ug/L	MW-1	08/31/2022	ND	1.9000		
Nickel	ug/L	MW-1	06/14/2023	ND	1.9000		

* - 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	
Nickel	ug/L	MW-1	11/09/2023		20.9000		
Nickel	ug/L	MW-19	09/22/2021	ND	1.9000		
Nickel	ug/L	MW-19	12/14/2021	ND	1.9000		
Nickel	ug/L	MW-19	03/16/2022		6.5200		
Nickel	ug/L	MW-19	06/27/2022	ND	1.9000		
Nickel	ug/L	MW-19	08/31/2022	ND	1.9000		
Nickel	ug/L	MW-19	12/07/2022	ND	1.9000		
Nickel	ug/L	MW-19	06/14/2023	ND	1.9000		
Nickel	ug/L	MW-19	11/09/2023	ND	1.9000		
Nickel	ug/L	MW-1R	05/05/2014		0.4240		
Nickel	ug/L	MW-1R	11/05/2014	ND	0.5810	1.9000	**
Nickel	ug/L	MW-1R	05/01/2015	ND	0.5810	1.9000	**
Nickel	ug/L	MW-1R	04/11/2016	ND	1.5300	1.9000	**
Nickel	ug/L	MW-1R	11/15/2016	ND	1.5300	1.9000	**
Nickel	ug/L	MW-1R	05/08/2017	ND	0.9290	1.9000	**
Nickel	ug/L	MW-1R	10/28/2018	ND	1.0000	1.9000	**
Nickel	ug/L	MW-37A	09/22/2021	ND	1.9000		
Nickel	ug/L	MW-37A	12/14/2021	ND	1.9000		
Nickel	ug/L	MW-37A	03/07/2022	ND	1.9000		
Nickel	ug/L	MW-37A	06/27/2022	ND	1.9000		
Nickel	ug/L	MW-37A	08/17/2022	ND	1.9000		
Nickel	ug/L	MW-37A	12/06/2022	ND	1.9000		
Nickel	ug/L	MW-37A	06/08/2023	ND	1.9000		
Selenium	ug/L	MW-1	05/05/2014		1.1500		
Selenium	ug/L	MW-1	11/07/2014	ND	3.3400	0.9600	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Selenium	ug/L	MW-1	05/01/2015	ND	3.3400	0.9600	**
Selenium	ug/L	MW-1	09/16/2015	ND	3.3400	0.9600	**
Selenium	ug/L	MW-1	04/11/2016		1.4100		
Selenium	ug/L	MW-1	11/11/2016	ND	0.6300	0.9600	**
Selenium	ug/L	MW-1	05/08/2017	ND	0.9280	0.9600	**
Selenium	ug/L	MW-1	11/16/2017	ND	0.9280	0.9600	**
Selenium	ug/L	MW-1	06/06/2018	ND	0.9000	0.9600	**
Selenium	ug/L	MW-1	10/28/2018	ND	0.9000	0.9600	**
Selenium	ug/L	MW-1	06/04/2019	ND	0.9820	0.9600	**
Selenium	ug/L	MW-1	11/01/2019	ND	1.0000	0.9600	**
Selenium	ug/L	MW-1	06/17/2020	ND	1.0000	0.9600	**
Selenium	ug/L	MW-1	11/03/2020	ND	1.0000	0.9600	**
Selenium	ug/L	MW-1	05/17/2021	ND	0.9600		
Selenium	ug/L	MW-1	09/22/2021	ND	0.9600		
Selenium	ug/L	MW-1	03/16/2022	ND	0.9600		
Selenium	ug/L	MW-1	08/31/2022	ND	0.9600		
Selenium	ug/L	MW-1	06/14/2023	ND	1.4000	0.9600	**
Selenium	ug/L	MW-1	11/09/2023	ND	1.4000	0.9600	**
Selenium	ug/L	MW-19	09/22/2021	ND	0.9600		
Selenium	ug/L	MW-19	12/14/2021	ND	0.9600		
Selenium	ug/L	MW-19	03/16/2022	ND	0.9600		
Selenium	ug/L	MW-19	06/27/2022	ND	0.9600		
Selenium	ug/L	MW-19	08/31/2022	ND	0.9600		
Selenium	ug/L	MW-19	12/07/2022	ND	0.9600		
Selenium	ug/L	MW-19	06/14/2023	ND	1.4000	0.9600	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Selenium	ug/L	MW-19	11/09/2023	ND	1.4000	0.9600	**
Selenium	ug/L	MW-1R	05/05/2014		0.7310		
Selenium	ug/L	MW-1R	11/05/2014	ND	3.3400	0.9600	**
Selenium	ug/L	MW-1R	05/01/2015	ND	3.3400	0.9600	**
Selenium	ug/L	MW-1R	04/11/2016	ND	0.6300	0.9600	**
Selenium	ug/L	MW-1R	11/15/2016	ND	0.6300	0.9600	**
Selenium	ug/L	MW-1R	05/08/2017	ND	0.9280	0.9600	**
Selenium	ug/L	MW-1R	10/28/2018	ND	0.9000	0.9600	**
Selenium	ug/L	MW-37A	09/22/2021	ND	0.9600		
Selenium	ug/L	MW-37A	12/14/2021	ND	0.9600		
Selenium	ug/L	MW-37A	03/07/2022	ND	0.9600		
Selenium	ug/L	MW-37A	06/27/2022	ND	0.9600		
Selenium	ug/L	MW-37A	08/17/2022	ND	0.9600		
Selenium	ug/L	MW-37A	12/06/2022	ND	0.9600		
Selenium	ug/L	MW-37A	06/08/2023	ND	1.4000	0.9600	**
Silver	ug/L	MW-1	05/05/2014	ND	0.0330	0.3700	**
Silver	ug/L	MW-1	11/07/2014	ND	0.0420	0.3700	**
Silver	ug/L	MW-1	05/01/2015	ND	0.0420	0.3700	**
Silver	ug/L	MW-1	09/16/2015		0.1170		
Silver	ug/L	MW-1	04/11/2016	ND	0.1530	0.3700	**
Silver	ug/L	MW-1	11/11/2016	ND	0.1530	0.3700	**
Silver	ug/L	MW-1	05/08/2017	ND	0.1400	0.3700	**
Silver	ug/L	MW-1	11/16/2017	ND	0.1400	0.3700	**
Silver	ug/L	MW-1	06/06/2018	ND	0.3000	0.3700	**
Silver	ug/L	MW-1	10/28/2018	ND	0.3000	0.3700	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Silver	ug/L	MW-1	06/04/2019	ND	0.1150	0.3700	**
Silver	ug/L	MW-1	11/01/2019	ND	0.3700		
Silver	ug/L	MW-1	06/17/2020	ND	0.3700		
Silver	ug/L	MW-1	11/03/2020	ND	0.3700		
Silver	ug/L	MW-1	05/17/2021	ND	0.4200	0.3700	**
Silver	ug/L	MW-1	09/22/2021	ND	0.4200	0.3700	**
Silver	ug/L	MW-1	03/16/2022	ND	0.4900	0.3700	**
Silver	ug/L	MW-1	08/31/2022	ND	0.4900	0.3700	**
Silver	ug/L	MW-1	06/14/2023	ND	0.5000	0.3700	**
Silver	ug/L	MW-1	11/09/2023	ND	0.5000	0.3700	**
Silver	ug/L	MW-19	09/22/2021	ND	0.4200	0.3700	**
Silver	ug/L	MW-19	12/14/2021	ND	0.4200	0.3700	**
Silver	ug/L	MW-19	03/16/2022	ND	0.4900	0.3700	**
Silver	ug/L	MW-19	06/27/2022	ND	0.4900	0.3700	**
Silver	ug/L	MW-19	08/31/2022	ND	0.4900	0.3700	**
Silver	ug/L	MW-19	12/07/2022		1.2400		
Silver	ug/L	MW-19	06/14/2023	ND	0.5000	0.3700	**
Silver	ug/L	MW-19	11/09/2023	ND	0.5000	0.3700	**
Silver	ug/L	MW-1R	05/05/2014	ND	0.0330	0.3700	**
Silver	ug/L	MW-1R	11/05/2014	ND	0.0420	0.3700	**
Silver	ug/L	MW-1R	05/01/2015	ND	0.0420	0.3700	**
Silver	ug/L	MW-1R	04/11/2016	ND	0.1530	0.3700	**
Silver	ug/L	MW-1R	11/15/2016	ND	0.1530	0.3700	**
Silver	ug/L	MW-1R	05/08/2017	ND	0.1400	0.3700	**
Silver	ug/L	MW-1R	10/28/2018	ND	0.3000	0.3700	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Silver	ug/L	MW-37A	09/22/2021	ND	0.4200	0.3700	**
Silver	ug/L	MW-37A	12/14/2021	ND	0.4200	0.3700	**
Silver	ug/L	MW-37A	03/07/2022	ND	0.4900	0.3700	**
Silver	ug/L	MW-37A	06/27/2022	ND	0.4900	0.3700	**
Silver	ug/L	MW-37A	08/17/2022	ND	0.4900	0.3700	**
Silver	ug/L	MW-37A	12/06/2022	ND	0.4900	0.3700	**
Silver	ug/L	MW-37A	06/08/2023	ND	0.5000	0.3700	**
Sulfide	ug/L	MW-1	05/05/2014	ND	219.0000		
Sulfide	ug/L	MW-1	09/16/2015	ND	219.0000		
Sulfide	ug/L	MW-1	11/11/2016	ND	180.0000	219.0000	**
Sulfide	ug/L	MW-19	12/14/2021	ND	231.0000	219.0000	**
Thallium	ug/L	MW-1	05/05/2014	ND	0.0500	0.2600	**
Thallium	ug/L	MW-1	11/07/2014	ND	0.0325	0.2600	**
Thallium	ug/L	MW-1	05/01/2015	ND	0.0325	0.2600	**
Thallium	ug/L	MW-1	09/16/2015		0.0380		
Thallium	ug/L	MW-1	04/11/2016	ND	0.0255	0.2600	**
Thallium	ug/L	MW-1	11/11/2016	ND	0.0255	0.2600	**
Thallium	ug/L	MW-1	05/08/2017	ND	0.0644	0.2600	**
Thallium	ug/L	MW-1	11/16/2017	ND	0.0644	0.2600	**
Thallium	ug/L	MW-1	06/06/2018	ND	0.1700	0.2600	**
Thallium	ug/L	MW-1	10/28/2018	ND	0.1700	0.2600	**
Thallium	ug/L	MW-1	06/04/2019	ND	0.5700	0.2600	**
Thallium	ug/L	MW-1	11/01/2019	ND	0.2700	0.2600	**
Thallium	ug/L	MW-1	06/17/2020	ND	0.2600		
Thallium	ug/L	MW-1	11/03/2020	ND	0.2600		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Thallium	ug/L	MW-1	05/17/2021	ND	0.2600		
Thallium	ug/L	MW-1	09/22/2021	ND	0.2600		
Thallium	ug/L	MW-1	03/16/2022	ND	0.2600		
Thallium	ug/L	MW-1	08/31/2022	ND	0.2600		
Thallium	ug/L	MW-1	06/14/2023	ND	0.2600		
Thallium	ug/L	MW-1	11/09/2023	ND	0.2600		
Thallium	ug/L	MW-19	09/22/2021	ND	0.2600		
Thallium	ug/L	MW-19	12/14/2021	ND	0.2600		
Thallium	ug/L	MW-19	03/16/2022	ND	0.2600		
Thallium	ug/L	MW-19	06/27/2022	ND	0.2600		
Thallium	ug/L	MW-19	08/31/2022	ND	0.2600		
Thallium	ug/L	MW-19	12/07/2022	ND	0.2600		
Thallium	ug/L	MW-19	06/14/2023	ND	0.2600		
Thallium	ug/L	MW-19	11/09/2023	ND	0.2600		
Thallium	ug/L	MW-1R	05/05/2014	ND	0.0500	0.2600	**
Thallium	ug/L	MW-1R	11/05/2014	ND	0.0325	0.2600	**
Thallium	ug/L	MW-1R	05/01/2015	ND	0.0325	0.2600	**
Thallium	ug/L	MW-1R	04/11/2016	ND	0.0255	0.2600	**
Thallium	ug/L	MW-1R	11/15/2016	ND	0.0255	0.2600	**
Thallium	ug/L	MW-1R	05/08/2017	ND	0.0644	0.2600	**
Thallium	ug/L	MW-1R	10/28/2018	ND	0.1700	0.2600	**
Thallium	ug/L	MW-37A	09/22/2021	ND	0.2600		
Thallium	ug/L	MW-37A	12/14/2021	ND	0.2600		
Thallium	ug/L	MW-37A	03/07/2022	ND	0.2600		
Thallium	ug/L	MW-37A	06/27/2022	ND	0.2600		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Thallium	ug/L	MW-37A	08/17/2022	ND	0.2600		
Thallium	ug/L	MW-37A	12/06/2022	ND	0.2600		
Thallium	ug/L	MW-37A	06/08/2023	ND	0.2600		
Vanadium	ug/L	MW-1	05/05/2014		0.6760		
Vanadium	ug/L	MW-1	11/07/2014		0.5100		
Vanadium	ug/L	MW-1	05/01/2015	ND	0.4490	1.1000	**
Vanadium	ug/L	MW-1	09/16/2015		0.5420		
Vanadium	ug/L	MW-1	04/11/2016		0.4660		
Vanadium	ug/L	MW-1	11/11/2016		0.3940		
Vanadium	ug/L	MW-1	05/08/2017	ND	0.8400	1.1000	**
Vanadium	ug/L	MW-1	11/16/2017	ND	0.8400	1.1000	**
Vanadium	ug/L	MW-1	06/06/2018	ND	0.5200	1.1000	**
Vanadium	ug/L	MW-1	10/28/2018	ND	0.5200	1.1000	**
Vanadium	ug/L	MW-1	06/04/2019	ND	2.1500	1.1000	**
Vanadium	ug/L	MW-1	11/01/2019	ND	0.8200	1.1000	**
Vanadium	ug/L	MW-1	06/17/2020	ND	0.8500	1.1000	**
Vanadium	ug/L	MW-1	11/03/2020	ND	0.8500	1.1000	**
Vanadium	ug/L	MW-1	05/17/2021	ND	1.1000		
Vanadium	ug/L	MW-1	09/22/2021	ND	1.1000		
Vanadium	ug/L	MW-1	03/16/2022	ND	1.1000		
Vanadium	ug/L	MW-1	08/31/2022	ND	1.1000		
Vanadium	ug/L	MW-1	06/14/2023	ND	1.1000		
Vanadium	ug/L	MW-1	11/09/2023	ND	1.1000		
Vanadium	ug/L	MW-19	09/22/2021	ND	1.1000		
Vanadium	ug/L	MW-19	12/14/2021	ND	1.1000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Vanadium	ug/L	MW-19	03/16/2022	ND	1.1000		
Vanadium	ug/L	MW-19	06/27/2022	ND	1.1000		
Vanadium	ug/L	MW-19	08/31/2022	ND	1.1000		
Vanadium	ug/L	MW-19	12/07/2022	ND	1.1000		
Vanadium	ug/L	MW-19	06/14/2023	ND	1.1000		
Vanadium	ug/L	MW-19	11/09/2023	ND	1.1000		
Vanadium	ug/L	MW-1R	05/05/2014		1.0200		
Vanadium	ug/L	MW-1R	11/05/2014		1.1900		
Vanadium	ug/L	MW-1R	05/01/2015		1.0700		
Vanadium	ug/L	MW-1R	04/11/2016		1.3100		
Vanadium	ug/L	MW-1R	11/15/2016		1.7700		
Vanadium	ug/L	MW-1R	05/08/2017	ND	0.8400	1.1000	**
Vanadium	ug/L	MW-1R	10/28/2018	ND	0.5200	1.1000	**
Vanadium	ug/L	MW-37A	09/22/2021	ND	1.1000		
Vanadium	ug/L	MW-37A	12/14/2021	ND	1.1000		
Vanadium	ug/L	MW-37A	03/07/2022	ND	1.1000		
Vanadium	ug/L	MW-37A	06/27/2022	ND	1.1000		
Vanadium	ug/L	MW-37A	08/17/2022	ND	1.1000		
Vanadium	ug/L	MW-37A	12/06/2022	ND	1.1000		
Vanadium	ug/L	MW-37A	06/08/2023	ND	1.1000		
Zinc	ug/L	MW-1	05/05/2014	ND	2.0000	10.0000	**
Zinc	ug/L	MW-1	11/07/2014	ND	6.9500	10.0000	**
Zinc	ug/L	MW-1	05/01/2015	ND	6.9500	10.0000	**
Zinc	ug/L	MW-1	09/16/2015	ND	6.9500	10.0000	**
Zinc	ug/L	MW-1	04/11/2016	ND	5.2100	10.0000	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Zinc	ug/L	MW-1	11/11/2016	ND	5.2100	10.0000	**
Zinc	ug/L	MW-1	05/08/2017	ND	11.5000	10.0000	**
Zinc	ug/L	MW-1	11/16/2017	ND	11.5000	10.0000	**
Zinc	ug/L	MW-1	06/06/2018	ND	10.0000		
Zinc	ug/L	MW-1	10/28/2018	ND	10.0000		
Zinc	ug/L	MW-1	06/04/2019	ND	6.9200	10.0000	**
Zinc	ug/L	MW-1	11/01/2019	ND	10.0000		
Zinc	ug/L	MW-1	06/17/2020	ND	10.0000		
Zinc	ug/L	MW-1	11/03/2020	ND	10.0000		
Zinc	ug/L	MW-1	05/17/2021	ND	10.0000		
Zinc	ug/L	MW-1	09/22/2021	ND	10.0000		
Zinc	ug/L	MW-1	03/16/2022	ND	10.0000		
Zinc	ug/L	MW-1	08/31/2022	ND	10.0000		
Zinc	ug/L	MW-1	06/14/2023	ND	6.4000	10.0000	**
Zinc	ug/L	MW-1	11/09/2023	ND	6.4000	10.0000	**
Zinc	ug/L	MW-19	09/22/2021	ND	10.0000		
Zinc	ug/L	MW-19	12/14/2021	ND	10.0000		
Zinc	ug/L	MW-19	03/16/2022	ND	10.0000		
Zinc	ug/L	MW-19	06/27/2022	ND	10.0000		
Zinc	ug/L	MW-19	08/31/2022	ND	10.0000		
Zinc	ug/L	MW-19	12/07/2022	ND	10.0000		
Zinc	ug/L	MW-19	06/14/2023	ND	6.4000	10.0000	**
Zinc	ug/L	MW-19	11/09/2023	ND	6.4000	10.0000	**
Zinc	ug/L	MW-1R	05/05/2014	ND	2.0000	10.0000	**
Zinc	ug/L	MW-1R	11/05/2014	ND	6.9500	10.0000	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Zinc	ug/L	MW-1R	05/01/2015	ND	6.9500	10.0000	**
Zinc	ug/L	MW-1R	04/11/2016	ND	5.2100	10.0000	**
Zinc	ug/L	MW-1R	11/15/2016		18.6000		
Zinc	ug/L	MW-1R	05/08/2017	ND	11.5000	10.0000	**
Zinc	ug/L	MW-1R	10/28/2018	ND	10.0000		
Zinc	ug/L	MW-37A	09/22/2021	ND	10.0000		
Zinc	ug/L	MW-37A	12/14/2021	ND	10.0000		
Zinc	ug/L	MW-37A	03/07/2022	ND	10.0000		
Zinc	ug/L	MW-37A	06/27/2022	ND	10.0000		
Zinc	ug/L	MW-37A	08/17/2022	ND	10.0000		
Zinc	ug/L	MW-37A	12/06/2022	ND	10.0000		
Zinc	ug/L	MW-37A	06/08/2023	ND	6.4000	10.0000	**

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Antimony	ug/L	MW-101	06/06/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-11	07/01/2024	ND	1.0000		0.6900
Antimony	ug/L	MW-22	06/06/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-24A	11/21/2024	ND	1.0000		0.6900
Antimony	ug/L	MW-25A	06/05/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-29A	06/06/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-2R	06/02/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-3	06/02/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-31A	06/05/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-33A	06/02/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-34A	06/04/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-35	06/04/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-38A	06/04/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-39A	06/04/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-4	06/09/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-40A	06/04/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-41A	06/04/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-42A	06/05/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-43A	06/05/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-44A	06/05/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-45A	06/06/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-46A	06/06/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-4B	06/09/2025	ND	1.0000		0.6900

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**** - Current value passed - awaiting one more verification.
***** - Insufficient background data to compute prediction limit.
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Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Antimony	ug/L	MW-7A	06/06/2025	ND	1.0000		0.6900
Arsenic	ug/L	MW-101	06/06/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-11	07/01/2024	ND	0.5300		4.5700
Arsenic	ug/L	MW-22	06/06/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-24A	11/21/2024	ND	0.5300		4.5700
Arsenic	ug/L	MW-25A	06/05/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-29A	06/06/2025	ND	0.5300	**	4.5700
Arsenic	ug/L	MW-2R	06/02/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-3	06/02/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-31A	06/05/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-33A	06/02/2025		9.8600	***	4.5700
Arsenic	ug/L	MW-34A	06/04/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-35	06/04/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-38A	06/04/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-39A	06/04/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-4	06/09/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-40A	06/04/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-41A	06/04/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-42A	06/05/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-43A	06/05/2025		7.2800	***	4.5700
Arsenic	ug/L	MW-44A	06/05/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-45A	06/06/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-46A	06/06/2025	ND	0.5300		4.5700

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Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Arsenic	ug/L	MW-4B	06/09/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-7A	06/06/2025	ND	0.5300		4.5700
Barium	ug/L	MW-101	06/06/2025		171.0000		292.8570
Barium	ug/L	MW-11	07/01/2024		14.3000		292.8570
Barium	ug/L	MW-22	06/06/2025		155.0000		292.8570
Barium	ug/L	MW-24A	11/21/2024		117.0000		292.8570
Barium	ug/L	MW-25A	06/05/2025		191.0000		292.8570
Barium	ug/L	MW-29A	06/06/2025		130.0000		292.8570
Barium	ug/L	MW-2R	06/02/2025		110.0000		292.8570
Barium	ug/L	MW-3	06/02/2025		205.0000		292.8570
Barium	ug/L	MW-31A	06/05/2025		240.0000		292.8570
Barium	ug/L	MW-33A	06/02/2025		361.0000	*	292.8570
Barium	ug/L	MW-34A	06/04/2025		70.5000		292.8570
Barium	ug/L	MW-35	06/04/2025		279.0000		292.8570
Barium	ug/L	MW-38A	06/04/2025		140.0000		292.8570
Barium	ug/L	MW-39A	06/04/2025		146.0000		292.8570
Barium	ug/L	MW-4	06/09/2025		505.0000	***	292.8570
Barium	ug/L	MW-40A	06/04/2025		202.0000		292.8570
Barium	ug/L	MW-41A	06/04/2025		159.0000		292.8570
Barium	ug/L	MW-42A	06/05/2025		152.0000		292.8570
Barium	ug/L	MW-43A	06/05/2025		186.0000		292.8570
Barium	ug/L	MW-44A	06/05/2025		173.0000		292.8570
Barium	ug/L	MW-45A	06/06/2025		136.0000		292.8570

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**** - Current value passed - awaiting one more verification.
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Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Barium	ug/L	MW-46A	06/06/2025		245.0000		292.8570
Barium	ug/L	MW-4B	06/09/2025		199.0000		292.8570
Barium	ug/L	MW-7A	06/06/2025		176.0000		292.8570
Beryllium	ug/L	MW-101	06/06/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-11	07/01/2024	ND	0.3300		0.2700
Beryllium	ug/L	MW-22	06/06/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-24A	11/21/2024	ND	0.3300		0.2700
Beryllium	ug/L	MW-25A	06/05/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-29A	06/06/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-2R	06/02/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-3	06/02/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-31A	06/05/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-33A	06/02/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-34A	06/04/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-35	06/04/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-38A	06/04/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-39A	06/04/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-4	06/09/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-40A	06/04/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-41A	06/04/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-42A	06/05/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-43A	06/05/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-44A	06/05/2025	ND	0.3300		0.2700

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Beryllium	ug/L	MW-45A	06/06/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-46A	06/06/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-4B	06/09/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-7A	06/06/2025	ND	0.3300		0.2700
Cadmium	ug/L	MW-101	06/06/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-11	07/01/2024	ND	0.1000		0.2090
Cadmium	ug/L	MW-22	06/06/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-24A	11/21/2024	ND	0.1000		0.2090
Cadmium	ug/L	MW-25A	06/05/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-29A	06/06/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-2R	06/02/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-3	06/02/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-31A	06/05/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-33A	06/02/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-34A	06/04/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-35	06/04/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-38A	06/04/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-39A	06/04/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-4	06/09/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-40A	06/04/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-41A	06/04/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-42A	06/05/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-43A	06/05/2025	ND	0.1000		0.2090

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*** - Current value failed - exceedance verified.
**** - Current value passed - awaiting one more verification.
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Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Cadmium	ug/L	MW-44A	06/05/2025		0.4990	*	0.2090
Cadmium	ug/L	MW-45A	06/06/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-46A	06/06/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-4B	06/09/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-7A	06/06/2025	ND	0.1000		0.2090
Chromium	ug/L	MW-101	06/06/2025	ND	1.8000		2.6300
Chromium	ug/L	MW-11	07/01/2024	ND	1.2000		2.6300
Chromium	ug/L	MW-22	06/06/2025	ND	1.8000		2.6300
Chromium	ug/L	MW-24A	11/21/2024	ND	1.2000		2.6300
Chromium	ug/L	MW-25A	06/05/2025	ND	1.8000		2.6300
Chromium	ug/L	MW-29A	06/06/2025	ND	1.8000		2.6300
Chromium	ug/L	MW-2R	06/02/2025	ND	1.8000		2.6300
Chromium	ug/L	MW-3	06/02/2025	ND	1.8000		2.6300
Chromium	ug/L	MW-31A	06/05/2025	ND	1.8000		2.6300
Chromium	ug/L	MW-33A	06/02/2025	ND	1.8000		2.6300
Chromium	ug/L	MW-34A	06/04/2025	ND	1.8000		2.6300
Chromium	ug/L	MW-35	06/04/2025	ND	1.8000		2.6300
Chromium	ug/L	MW-38A	06/04/2025	ND	1.8000		2.6300
Chromium	ug/L	MW-39A	06/04/2025	ND	1.8000		2.6300
Chromium	ug/L	MW-4	06/09/2025	ND	1.8000		2.6300
Chromium	ug/L	MW-40A	06/04/2025	ND	1.8000		2.6300
Chromium	ug/L	MW-41A	06/04/2025	ND	1.8000		2.6300
Chromium	ug/L	MW-42A	06/05/2025	ND	1.8000		2.6300

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Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Chromium	ug/L	MW-43A	06/05/2025	ND	1.8000		2.6300
Chromium	ug/L	MW-44A	06/05/2025	ND	1.8000		2.6300
Chromium	ug/L	MW-45A	06/06/2025	ND	1.8000		2.6300
Chromium	ug/L	MW-46A	06/06/2025	ND	1.8000		2.6300
Chromium	ug/L	MW-4B	06/09/2025	ND	1.8000		2.6300
Chromium	ug/L	MW-7A	06/06/2025	ND	1.8000		2.6300
Cobalt	ug/L	MW-101	06/06/2025	ND	0.1700		3.4000
Cobalt	ug/L	MW-11	07/01/2024	ND	0.1700		3.4000
Cobalt	ug/L	MW-22	06/06/2025	ND	0.1700		3.4000
Cobalt	ug/L	MW-24A	11/21/2024	ND	0.1700		3.4000
Cobalt	ug/L	MW-25A	06/05/2025	ND	0.1700		3.4000
Cobalt	ug/L	MW-29A	06/06/2025		3.4700	***	3.4000
Cobalt	ug/L	MW-2R	06/02/2025	ND	0.1700		3.4000
Cobalt	ug/L	MW-3	06/02/2025	ND	0.1700		3.4000
Cobalt	ug/L	MW-31A	06/05/2025		2.0400		3.4000
Cobalt	ug/L	MW-33A	06/02/2025		5.2100	*	3.4000
Cobalt	ug/L	MW-34A	06/04/2025	ND	0.1700		3.4000
Cobalt	ug/L	MW-35	06/04/2025		4.8200	*	3.4000
Cobalt	ug/L	MW-38A	06/04/2025	ND	0.1700		3.4000
Cobalt	ug/L	MW-39A	06/04/2025	ND	0.1700		3.4000
Cobalt	ug/L	MW-4	06/09/2025		2.2500		3.4000
Cobalt	ug/L	MW-40A	06/04/2025		1.5700		3.4000
Cobalt	ug/L	MW-41A	06/04/2025	ND	0.1700		3.4000

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Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Cobalt	ug/L	MW-42A	06/05/2025		1.3700		3.4000
Cobalt	ug/L	MW-43A	06/05/2025		3.9200	***	3.4000
Cobalt	ug/L	MW-44A	06/05/2025	ND	0.1700		3.4000
Cobalt	ug/L	MW-45A	06/06/2025	ND	0.1700		3.4000
Cobalt	ug/L	MW-46A	06/06/2025	ND	0.1700		3.4000
Cobalt	ug/L	MW-4B	06/09/2025	ND	0.1700		3.4000
Cobalt	ug/L	MW-7A	06/06/2025	ND	0.1700		3.4000
Copper	ug/L	MW-101	06/06/2025	ND	3.2000		7.6400
Copper	ug/L	MW-11	07/01/2024	ND	1.8000		7.6400
Copper	ug/L	MW-22	06/06/2025	ND	3.2000		7.6400
Copper	ug/L	MW-24A	11/21/2024	ND	1.8000		7.6400
Copper	ug/L	MW-25A	06/05/2025	ND	3.2000		7.6400
Copper	ug/L	MW-29A	06/06/2025	ND	3.2000		7.6400
Copper	ug/L	MW-2R	06/02/2025	ND	3.2000		7.6400
Copper	ug/L	MW-3	06/02/2025	ND	3.2000		7.6400
Copper	ug/L	MW-31A	06/05/2025	ND	3.2000		7.6400
Copper	ug/L	MW-33A	06/02/2025		8.9600	*	7.6400
Copper	ug/L	MW-34A	06/04/2025	ND	3.2000		7.6400
Copper	ug/L	MW-35	06/04/2025	ND	3.2000		7.6400
Copper	ug/L	MW-38A	06/04/2025	ND	3.2000		7.6400
Copper	ug/L	MW-39A	06/04/2025	ND	3.2000		7.6400
Copper	ug/L	MW-4	06/09/2025	ND	3.2000		7.6400
Copper	ug/L	MW-40A	06/04/2025	ND	3.2000		7.6400

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Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Copper	ug/L	MW-41A	06/04/2025	ND	3.2000		7.6400
Copper	ug/L	MW-42A	06/05/2025	ND	3.2000		7.6400
Copper	ug/L	MW-43A	06/05/2025	ND	3.2000		7.6400
Copper	ug/L	MW-44A	06/05/2025	ND	3.2000		7.6400
Copper	ug/L	MW-45A	06/06/2025	ND	3.2000		7.6400
Copper	ug/L	MW-46A	06/06/2025	ND	3.2000		7.6400
Copper	ug/L	MW-4B	06/09/2025	ND	3.2000		7.6400
Copper	ug/L	MW-7A	06/06/2025	ND	3.2000		7.6400
Field pH	SU	MW-101	06/06/2025		7.0800		8.3663
Field pH	SU	MW-11	07/01/2024		7.3300		8.3663
Field pH	SU	MW-22	06/06/2025		7.1400		8.3663
Field pH	SU	MW-24A	11/21/2024		6.7800		8.3663
Field pH	SU	MW-25A	06/05/2025		6.7200		8.3663
Field pH	SU	MW-29A	06/06/2025		6.5100		8.3663
Field pH	SU	MW-2R	06/02/2025		6.8500		8.3663
Field pH	SU	MW-3	06/02/2025		6.8500		8.3663
Field pH	SU	MW-31A	06/05/2025		6.7900		8.3663
Field pH	SU	MW-33A	06/02/2025		6.5700		8.3663
Field pH	SU	MW-34A	06/04/2025		7.3100		8.3663
Field pH	SU	MW-35	06/04/2025		6.6600		8.3663
Field pH	SU	MW-38A	06/04/2025		6.9300		8.3663
Field pH	SU	MW-39A	06/04/2025		6.9700		8.3663
Field pH	SU	MW-4	06/09/2025		6.6000		8.3663

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Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Field pH	SU	MW-40A	06/04/2025		6.8900		8.3663
Field pH	SU	MW-41A	06/04/2025		6.8900		8.3663
Field pH	SU	MW-42A	06/05/2025		7.0500		8.3663
Field pH	SU	MW-43A	06/05/2025		6.8900		8.3663
Field pH	SU	MW-44A	06/05/2025		6.6500		8.3663
Field pH	SU	MW-45A	06/06/2025		6.9500		8.3663
Field pH	SU	MW-46A	06/06/2025		6.6400		8.3663
Field pH	SU	MW-4B	06/09/2025		6.8700		8.3663
Field pH	SU	MW-7A	06/06/2025		6.9500		8.3663
Field Specific Conductance	umhos/cm	MW-101	06/06/2025		2771.0000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-11	07/01/2024		1077.6000		1345.9956
Field Specific Conductance	umhos/cm	MW-22	06/06/2025		2432.7000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-24A	11/21/2024		2038.4000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-25A	06/05/2025		3443.7000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-29A	06/06/2025		2930.3000	***	1345.9956
Field Specific Conductance	umhos/cm	MW-2R	06/02/2025		2383.0000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-3	06/02/2025		2928.3000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-31A	06/05/2025		4623.2000	***	1345.9956
Field Specific Conductance	umhos/cm	MW-33A	06/02/2025		2479.3000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-34A	06/04/2025		2891.3000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-35	06/04/2025		3531.4000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-38A	06/04/2025		3135.5000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-39A	06/04/2025		3071.4000	*	1345.9956

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Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Field Specific Conductance	umhos/cm	MW-4	06/09/2025		2993.7000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-40A	06/04/2025		3371.9000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-41A	06/04/2025		3147.0000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-42A	06/05/2025		3541.1000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-43A	06/05/2025		3701.8000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-44A	06/05/2025		4093.3000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-45A	06/06/2025		2205.0000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-46A	06/06/2025		2719.6000	***	1345.9956
Field Specific Conductance	umhos/cm	MW-4B	06/09/2025		2913.7000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-7A	06/06/2025		2375.1000	*	1345.9956
Lead	ug/L	MW-101	06/06/2025	ND	0.3300		3.2500
Lead	ug/L	MW-11	07/01/2024	ND	0.2600		3.2500
Lead	ug/L	MW-22	06/06/2025	ND	0.3300		3.2500
Lead	ug/L	MW-24A	11/21/2024	ND	0.2600		3.2500
Lead	ug/L	MW-25A	06/05/2025	ND	0.3300		3.2500
Lead	ug/L	MW-29A	06/06/2025	ND	0.3300		3.2500
Lead	ug/L	MW-2R	06/02/2025	ND	0.3300		3.2500
Lead	ug/L	MW-3	06/02/2025	ND	0.3300		3.2500
Lead	ug/L	MW-31A	06/05/2025	ND	0.3300		3.2500
Lead	ug/L	MW-33A	06/02/2025		3.2900	*	3.2500
Lead	ug/L	MW-34A	06/04/2025	ND	0.3300		3.2500
Lead	ug/L	MW-35	06/04/2025	ND	0.3300		3.2500
Lead	ug/L	MW-38A	06/04/2025	ND	0.3300		3.2500

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Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Lead	ug/L	MW-39A	06/04/2025	ND	0.3300		3.2500
Lead	ug/L	MW-4	06/09/2025	ND	0.3300		3.2500
Lead	ug/L	MW-40A	06/04/2025	ND	0.3300		3.2500
Lead	ug/L	MW-41A	06/04/2025	ND	0.3300		3.2500
Lead	ug/L	MW-42A	06/05/2025	ND	0.3300		3.2500
Lead	ug/L	MW-43A	06/05/2025	ND	0.3300		3.2500
Lead	ug/L	MW-44A	06/05/2025	ND	0.3300		3.2500
Lead	ug/L	MW-45A	06/06/2025	ND	0.3300		3.2500
Lead	ug/L	MW-46A	06/06/2025	ND	0.3300		3.2500
Lead	ug/L	MW-4B	06/09/2025	ND	0.3300		3.2500
Lead	ug/L	MW-7A	06/06/2025	ND	0.3300		3.2500
Nickel	ug/L	MW-101	06/06/2025		7.9300		20.9000
Nickel	ug/L	MW-11	07/01/2024		16.3000	**	20.9000
Nickel	ug/L	MW-22	06/06/2025		5.2400		20.9000
Nickel	ug/L	MW-24A	11/21/2024	ND	2.1000		20.9000
Nickel	ug/L	MW-25A	06/05/2025	ND	2.3000		20.9000
Nickel	ug/L	MW-29A	06/06/2025		54.0000	***	20.9000
Nickel	ug/L	MW-2R	06/02/2025	ND	2.3000		20.9000
Nickel	ug/L	MW-3	06/02/2025	ND	2.3000		20.9000
Nickel	ug/L	MW-31A	06/05/2025		30.8000	***	20.9000
Nickel	ug/L	MW-33A	06/02/2025		5.5300		20.9000
Nickel	ug/L	MW-34A	06/04/2025	ND	2.3000		20.9000
Nickel	ug/L	MW-35	06/04/2025		18.0000		20.9000

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Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Nickel	ug/L	MW-38A	06/04/2025	ND	2.3000		20.9000
Nickel	ug/L	MW-39A	06/04/2025	ND	2.3000		20.9000
Nickel	ug/L	MW-4	06/09/2025		8.8200		20.9000
Nickel	ug/L	MW-40A	06/04/2025		14.1000		20.9000
Nickel	ug/L	MW-41A	06/04/2025	ND	2.3000		20.9000
Nickel	ug/L	MW-42A	06/05/2025		26.1000	***	20.9000
Nickel	ug/L	MW-43A	06/05/2025		22.5000	*	20.9000
Nickel	ug/L	MW-44A	06/05/2025		39.1000	***	20.9000
Nickel	ug/L	MW-45A	06/06/2025	ND	2.3000		20.9000
Nickel	ug/L	MW-46A	06/06/2025		24.0000	***	20.9000
Nickel	ug/L	MW-4B	06/09/2025	ND	2.3000		20.9000
Nickel	ug/L	MW-7A	06/06/2025	ND	2.3000		20.9000
Selenium	ug/L	MW-101	06/06/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-11	07/01/2024	ND	1.4000		1.4100
Selenium	ug/L	MW-22	06/06/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-24A	11/21/2024	ND	1.4000		1.4100
Selenium	ug/L	MW-25A	06/05/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-29A	06/06/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-2R	06/02/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-3	06/02/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-31A	06/05/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-33A	06/02/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-34A	06/04/2025	ND	1.4000		1.4100

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Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Selenium	ug/L	MW-35	06/04/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-38A	06/04/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-39A	06/04/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-4	06/09/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-40A	06/04/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-41A	06/04/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-42A	06/05/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-43A	06/05/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-44A	06/05/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-45A	06/06/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-46A	06/06/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-4B	06/09/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-7A	06/06/2025	ND	1.4000		1.4100
Silver	ug/L	MW-101	06/06/2025	ND	0.5000		1.2400
Silver	ug/L	MW-11	07/01/2024	ND	0.5000		1.2400
Silver	ug/L	MW-22	06/06/2025	ND	0.5000		1.2400
Silver	ug/L	MW-24A	11/21/2024	ND	0.5000		1.2400
Silver	ug/L	MW-25A	06/05/2025	ND	0.5000		1.2400
Silver	ug/L	MW-29A	06/06/2025	ND	0.5000		1.2400
Silver	ug/L	MW-2R	06/02/2025	ND	0.5000		1.2400
Silver	ug/L	MW-3	06/02/2025	ND	0.5000		1.2400
Silver	ug/L	MW-31A	06/05/2025	ND	0.5000		1.2400
Silver	ug/L	MW-33A	06/02/2025	ND	0.5000		1.2400

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Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Silver	ug/L	MW-34A	06/04/2025	ND	0.5000		1.2400
Silver	ug/L	MW-35	06/04/2025	ND	0.5000		1.2400
Silver	ug/L	MW-38A	06/04/2025	ND	0.5000		1.2400
Silver	ug/L	MW-39A	06/04/2025	ND	0.5000		1.2400
Silver	ug/L	MW-4	06/09/2025	ND	0.5000		1.2400
Silver	ug/L	MW-40A	06/04/2025	ND	0.5000		1.2400
Silver	ug/L	MW-41A	06/04/2025	ND	0.5000		1.2400
Silver	ug/L	MW-42A	06/05/2025	ND	0.5000		1.2400
Silver	ug/L	MW-43A	06/05/2025	ND	0.5000		1.2400
Silver	ug/L	MW-44A	06/05/2025	ND	0.5000		1.2400
Silver	ug/L	MW-45A	06/06/2025	ND	0.5000		1.2400
Silver	ug/L	MW-46A	06/06/2025	ND	0.5000		1.2400
Silver	ug/L	MW-4B	06/09/2025	ND	0.5000		1.2400
Silver	ug/L	MW-7A	06/06/2025	ND	0.5000		1.2400
Sulfide	ug/L	MW-11	07/01/2024	ND	1410.0000		*****
Sulfide	ug/L	MW-24A	06/18/2024	ND	1410.0000		*****
Sulfide	ug/L	MW-29A	06/06/2025	ND	1410.0000		*****
Sulfide	ug/L	MW-31A	03/15/2022	ND	231.0000		*****
Sulfide	ug/L	MW-33A	09/13/2022	ND	231.0000		*****
Sulfide	ug/L	MW-35	06/08/2021	ND	231.0000		*****
Sulfide	ug/L	MW-4	06/08/2023	ND	231.0000		*****
Sulfide	ug/L	MW-40A	06/13/2024	ND	1410.0000		*****
Sulfide	ug/L	MW-42A	06/05/2025	ND	1410.0000		*****

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Sulfide	ug/L	MW-43A	06/05/2025	ND	1410.0000		*****
Sulfide	ug/L	MW-44A	06/05/2025	ND	1410.0000		*****
Sulfide	ug/L	MW-4B	11/21/2017	ND	231.0000		*****
Sulfide	ug/L	MW-7A	06/18/2024	ND	1410.0000		*****
Thallium	ug/L	MW-101	06/06/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-11	07/01/2024	ND	0.5700		0.2600
Thallium	ug/L	MW-22	06/06/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-24A	11/21/2024	ND	0.5700		0.2600
Thallium	ug/L	MW-25A	06/05/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-29A	06/06/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-2R	06/02/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-3	06/02/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-31A	06/05/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-33A	06/02/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-34A	06/04/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-35	06/04/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-38A	06/04/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-39A	06/04/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-4	06/09/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-40A	06/04/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-41A	06/04/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-42A	06/05/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-43A	06/05/2025	ND	0.5700		0.2600

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Thallium	ug/L	MW-44A	06/05/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-45A	06/06/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-46A	06/06/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-4B	06/09/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-7A	06/06/2025	ND	0.5700		0.2600
Vanadium	ug/L	MW-101	06/06/2025	ND	1.7000		1.7700
Vanadium	ug/L	MW-11	07/01/2024	ND	1.1000		1.7700
Vanadium	ug/L	MW-22	06/06/2025	ND	1.7000		1.7700
Vanadium	ug/L	MW-24A	11/21/2024	ND	1.1000		1.7700
Vanadium	ug/L	MW-25A	06/05/2025	ND	1.7000		1.7700
Vanadium	ug/L	MW-29A	06/06/2025	ND	1.7000		1.7700
Vanadium	ug/L	MW-2R	06/02/2025	ND	1.7000		1.7700
Vanadium	ug/L	MW-3	06/02/2025	ND	1.7000		1.7700
Vanadium	ug/L	MW-31A	06/05/2025	ND	1.7000		1.7700
Vanadium	ug/L	MW-33A	06/02/2025	ND	1.7000		1.7700
Vanadium	ug/L	MW-34A	06/04/2025	ND	1.7000		1.7700
Vanadium	ug/L	MW-35	06/04/2025	ND	1.7000		1.7700
Vanadium	ug/L	MW-38A	06/04/2025	ND	1.7000		1.7700
Vanadium	ug/L	MW-39A	06/04/2025	ND	1.7000		1.7700
Vanadium	ug/L	MW-4	06/09/2025	ND	1.7000		1.7700
Vanadium	ug/L	MW-40A	06/04/2025	ND	1.7000		1.7700
Vanadium	ug/L	MW-41A	06/04/2025	ND	1.7000		1.7700
Vanadium	ug/L	MW-42A	06/05/2025	ND	1.7000		1.7700

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Vanadium	ug/L	MW-43A	06/05/2025	ND	1.7000		1.7700
Vanadium	ug/L	MW-44A	06/05/2025	ND	1.7000		1.7700
Vanadium	ug/L	MW-45A	06/06/2025	ND	1.7000		1.7700
Vanadium	ug/L	MW-46A	06/06/2025	ND	1.7000		1.7700
Vanadium	ug/L	MW-4B	06/09/2025	ND	1.7000		1.7700
Vanadium	ug/L	MW-7A	06/06/2025	ND	1.7000		1.7700
Zinc	ug/L	MW-101	06/06/2025	ND	13.0000		18.6000
Zinc	ug/L	MW-11	07/01/2024		60.0000	***	18.6000
Zinc	ug/L	MW-22	06/06/2025	ND	13.0000		18.6000
Zinc	ug/L	MW-24A	11/21/2024	ND	9.7000		18.6000
Zinc	ug/L	MW-25A	06/05/2025	ND	13.0000		18.6000
Zinc	ug/L	MW-29A	06/06/2025	ND	13.0000		18.6000
Zinc	ug/L	MW-2R	06/02/2025	ND	13.0000		18.6000
Zinc	ug/L	MW-3	06/02/2025	ND	13.0000		18.6000
Zinc	ug/L	MW-31A	06/05/2025	ND	13.0000		18.6000
Zinc	ug/L	MW-33A	06/02/2025	ND	13.0000		18.6000
Zinc	ug/L	MW-34A	06/04/2025	ND	13.0000		18.6000
Zinc	ug/L	MW-35	06/04/2025	ND	13.0000		18.6000
Zinc	ug/L	MW-38A	06/04/2025	ND	13.0000		18.6000
Zinc	ug/L	MW-39A	06/04/2025	ND	13.0000		18.6000
Zinc	ug/L	MW-4	06/09/2025	ND	13.0000		18.6000
Zinc	ug/L	MW-40A	06/04/2025	ND	13.0000		18.6000
Zinc	ug/L	MW-41A	06/04/2025	ND	13.0000		18.6000

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Zinc	ug/L	MW-42A	06/05/2025	ND	13.0000		18.6000
Zinc	ug/L	MW-43A	06/05/2025	ND	13.0000		18.6000
Zinc	ug/L	MW-44A	06/05/2025		26.5000	*	18.6000
Zinc	ug/L	MW-45A	06/06/2025	ND	13.0000		18.6000
Zinc	ug/L	MW-46A	06/06/2025	ND	13.0000		18.6000
Zinc	ug/L	MW-4B	06/09/2025	ND	13.0000		18.6000
Zinc	ug/L	MW-7A	06/06/2025	ND	13.0000		18.6000

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

Table 3

Detection Frequencies in Upgradient and Downgradient Wells

Constituent	Detect	Upgradient N	Proportion	Detect	Downgradient N	Proportion
Antimony	0	42	0.000	32	443	0.072
Arsenic	3	42	0.071	111	444	0.250
Barium	42	42	1.000	450	450	1.000
Beryllium	0	42	0.000	18	442	0.041
Cadmium	2	42	0.048	61	444	0.137
Chromium	8	42	0.190	45	442	0.102
Cobalt	14	42	0.333	177	444	0.399
Copper	5	42	0.119	73	443	0.165
Field pH	39	39	1.000	359	359	1.000
Field Specific Conductance	39	39	1.000	359	359	1.000
Lead	6	42	0.143	63	442	0.143
Nickel	8	42	0.190	222	448	0.496
Selenium	3	42	0.071	20	443	0.045
Silver	2	42	0.048	12	444	0.027
Sulfide	0	4	0.000	1	42	0.024
Thallium	1	42	0.024	20	443	0.045
Vanadium	10	42	0.238	55	442	0.124
Zinc	1	42	0.024	89	448	0.199

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
Antimony	0	42	0.000	6.281	6.281					2.326	non-norm
Arsenic	3	42	0.071	8.368	8.615					2.326	non-norm
Barium	42	42	1.000	2.556	0.998					2.326	lognor
Beryllium	0	42	0.000	6.281	6.281					2.326	non-norm
Cadmium	2	42	0.048	17.593	17.593					2.326	non-norm
Chromium	8	42	0.190	6.174	6.697					2.326	non-norm
Cobalt	14	42	0.333	6.291	6.371					2.326	non-norm
Copper	5	42	0.119	7.159	6.304					2.326	non-norm
Field pH	39	39	1.000	0.502	0.863					2.326	normal
Field Specific Conductance	39	39	1.000	2.386	1.927					2.326	lognor
Lead	6	42	0.143	10.663	9.323					2.326	non-norm
Nickel	8	42	0.190	7.375	6.427					2.326	non-norm
Selenium	3	42	0.071	7.902	7.846					2.326	non-norm
Silver	2	42	0.048	17.593	17.593					2.326	non-norm
Sulfide	0	4	0.000	0.495	0.495					2.326	normal
Thallium	1	42	0.024	17.593	17.593					2.326	non-norm
Vanadium	10	42	0.238	6.291	6.002					2.326	non-norm
Zinc	1	42	0.024	6.281	6.281					2.326	non-norm

* - 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 4

Shapiro-Wilk Multiple Group Test of Normality

Constituent	Model Type
Antimony	nonpar
Arsenic	nonpar
Barium	lognor
Beryllium	nonpar
Cadmium	nonpar
Chromium	nonpar
Cobalt	nonpar
Copper	nonpar
Field pH	normal
Field Specific Conductance	lognor
Lead	nonpar
Nickel	nonpar
Selenium	nonpar
Silver	nonpar
Sulfide	too few
Thallium	nonpar
Vanadium	nonpar
Zinc	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	ug/L	0	42					0.6900	nonpar	***	0.99
Arsenic	ug/L	3	42					4.5700	nonpar		0.99
Barium	ug/L	42	42	4.8086	0.3556	0.0100	2.4494	292.8570	lognor		
Beryllium	ug/L	0	42					0.2700	nonpar	***	0.99
Cadmium	ug/L	2	42					0.2090	nonpar		0.99
Chromium	ug/L	8	42					2.6300	nonpar		0.99
Cobalt	ug/L	14	42					3.4000	nonpar		0.99
Copper	ug/L	5	42					7.6400	nonpar		0.99
Field pH	SU	39	39	7.1967	0.4756	0.0100	2.4594	8.3663	normal		
Field Specific Conductance	umhos/cm	39	39	6.4289	0.3155	0.0100	2.4594	1345.9956	lognor		
Lead	ug/L	6	42					3.2500	nonpar		0.99
Nickel	ug/L	8	42					20.9000	nonpar		0.99
Selenium	ug/L	3	42					1.4100	nonpar		0.99
Silver	ug/L	2	42					1.2400	nonpar		0.99
Sulfide	ug/L	0	4							*	
Thallium	ug/L	1	42					0.2600	nonpar	***	0.99
Vanadium	ug/L	10	42					1.7700	nonpar		0.99
Zinc	ug/L	1	42					18.6000	nonpar		0.99

Conf = confidence level for passing initial test or one of two verification resamples 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

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 7

Censored Data Outliers Test
for datasets with 75% or more NDs

Constituent	Units	Well	Date	Result	Detects	N	% >= PQL	% >= MDL	Manual RL	Median	>= Med	>= 2x	>= 3x
Arsenic	ug/L	MW-1	05/05/2014	0.3540	2	20	10	20	no	0.7500		no	
Arsenic	ug/L	MW-1	11/16/2017	0.6620	2	20	10	20	no	0.7500		no	
Arsenic	ug/L	MW-37A	03/07/2022	4.5700	1	7	14	43	no	0.7500	yes		
Cadmium	ug/L	MW-1	11/09/2023	0.2090	1	20	5	5	no	0.0550	yes		
Cadmium	ug/L	MW-19	03/16/2022	0.1200	1	8	13	13	no	0.0550	yes		
Chromium	ug/L	MW-1	05/05/2014	0.8160	3	20	15	30	no	1.1000		no	
Chromium	ug/L	MW-1	04/11/2016	0.8520	3	20	15	30	no	1.1000		no	
Chromium	ug/L	MW-1	11/11/2016	0.4230	3	20	15	30	no	1.1000		no	
Cobalt	ug/L	MW-37A	09/22/2021	0.6810	1	7	14	57	no	0.1900		yes	
Copper	ug/L	MW-1	05/05/2014	1.0400	4	20	20	25	no	1.5000		no	
Copper	ug/L	MW-1	11/07/2014	0.9060	4	20	20	25	no	1.5000		no	
Copper	ug/L	MW-1	09/16/2015	0.5260	4	20	20	25	no	1.5000		no	
Copper	ug/L	MW-1	11/09/2023	5.2700	4	20	20	25	no	1.5000		yes	
Copper	ug/L	MW-19	03/16/2022	7.6400	1	8	13	25	no	1.8000	yes		
Lead	ug/L	MW-1	09/16/2015	0.3030	2	20	10	15	no	0.2110		no	
Lead	ug/L	MW-1	11/09/2023	0.9940	2	20	10	15	no	0.2110		yes	
Lead	ug/L	MW-19	09/22/2021	0.5810	2	8	25	38	no	0.2400		yes	
Lead	ug/L	MW-19	03/16/2022	3.2500	2	8	25	38	no	0.2400		yes	
Lead	ug/L	MW-1R	11/05/2014	0.1360	1	7	14	14	no	0.2110	no		
Lead	ug/L	MW-37A	09/22/2021	1.0600	1	7	14	43	no	0.2400	yes		
Nickel	ug/L	MW-19	03/16/2022	6.5200	1	8	13	38	no	1.9000	yes		
Nickel	ug/L	MW-1R	05/05/2014	0.4240	1	7	14	14	no	0.9290	no		
Selenium	ug/L	MW-1	05/05/2014	1.1500	2	20	10	10	no	0.9600		no	

* Failed test - potential outlier.
Potential outliers are not removed from statistical analyses.
>= Med - indicates if the result is greater than or equal to the median PQL value.
>= 2x - indicates if the result is greater than or equal to 2 x the median PQL value.
>= 3x - indicates if the result is greater than or equal to 3 x the median PQL value.

Table 7

Censored Data Outliers Test
for datasets with 75% or more NDs

Constituent	
Arsenic	
Arsenic	
Arsenic	*
Cadmium	*
Cadmium	*
Chromium	
Chromium	
Chromium	
Cobalt	*
Copper	
Copper	
Copper	
Copper	*
Copper	*
Lead	
Lead	*
Lead	*
Lead	*
Lead	
Lead	*
Nickel	*
Nickel	
Selenium	

* Failed test - potential outlier.
Potential outliers are not removed from statistical analyses.
>= Med - indicates if the result is greater than or equal to the median PQL value.
>= 2x - indicates if the result is greater than or equal to 2 x the median PQL value.
>= 3x - indicates if the result is greater than or equal to 3 x the median PQL value.

Table 7

Censored Data Outliers Test
for datasets with 75% or more NDs

Constituent	Units	Well	Date	Result	Detects	N	% >= PQL	% >= MDL	Manual RL	Median	>= Med	>= 2x	>= 3x
Selenium	ug/L	MW-1	04/11/2016	1.4100	2	20	10	10	no	0.9600		no	
Selenium	ug/L	MW-1R	05/05/2014	0.7310	1	7	14	29	no	0.9000	no		
Silver	ug/L	MW-1	09/16/2015	0.1170	1	20	5	10	no	0.3000	no		
Silver	ug/L	MW-19	12/07/2022	1.2400	1	8	13	13	no	0.4900	yes		
Thallium	ug/L	MW-1	09/16/2015	0.0380	1	20	5	5	no	0.2600	no		
Vanadium	ug/L	MW-1	05/05/2014	0.6760	5	20	25	40	no	0.8500		no	
Vanadium	ug/L	MW-1	11/07/2014	0.5100	5	20	25	40	no	0.8500		no	
Vanadium	ug/L	MW-1	09/16/2015	0.5420	5	20	25	40	no	0.8500		no	
Vanadium	ug/L	MW-1	04/11/2016	0.4660	5	20	25	40	no	0.8500		no	
Vanadium	ug/L	MW-1	11/11/2016	0.3940	5	20	25	40	no	0.8500		no	
Zinc	ug/L	MW-1R	11/15/2016	18.6000	1	7	14	14	no	6.9500	yes		

* Failed test - potential outlier.
Potential outliers are not removed from statistical analyses.
>= Med - indicates if the result is greater than or equal to the median PQL value.
>= 2x - indicates if the result is greater than or equal to 2 x the median PQL value.
>= 3x - indicates if the result is greater than or equal to 3 x the median PQL value.

Table 7

Censored Data Outliers Test
for datasets with 75% or more NDs

Constituent	
Selenium	
Selenium	
Silver	
Silver	*
Thallium	
Vanadium	
Vanadium	
Vanadium	
Vanadium	
Vanadium	
Zinc	*

* Failed test - potential outlier.
Potential outliers are not removed from statistical analyses.
>= Med - indicates if the result is greater than or equal to the median PQL value.
>= 2x - indicates if the result is greater than or equal to 2 x the median PQL value.
>= 3x - indicates if the result is greater than or equal to 3 x the median PQL value.

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Arsenic	ug/L	MW-29A	11/20/2019	ND	0.7500		4.5700
Arsenic	ug/L	MW-29A	02/06/2020		2.2800		4.5700
Arsenic	ug/L	MW-29A	06/30/2020		3.4000		4.5700
Arsenic	ug/L	MW-29A	08/26/2020		6.8400	*	4.5700
Arsenic	ug/L	MW-29A	11/20/2020		4.5900	*	4.5700
Arsenic	ug/L	MW-29A	05/24/2021		4.0900		4.5700
Arsenic	ug/L	MW-29A	09/28/2021		6.0900	*	4.5700
Arsenic	ug/L	MW-29A	03/29/2022		5.5700	*	4.5700
Arsenic	ug/L	MW-29A	09/12/2022		10.2000	*	4.5700
Arsenic	ug/L	MW-29A	06/12/2023		4.3700		4.5700
Arsenic	ug/L	MW-29A	11/15/2023		6.4900	*	4.5700
Arsenic	ug/L	MW-29A	06/26/2024		4.5400		4.5700
Arsenic	ug/L	MW-29A	12/09/2024		6.7500	*	4.5700
Arsenic	ug/L	MW-29A	06/06/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-33A	11/18/2019		42.4000	*	4.5700
Arsenic	ug/L	MW-33A	02/12/2020		80.9000	*	4.5700
Arsenic	ug/L	MW-33A	06/30/2020		5.2300	*	4.5700
Arsenic	ug/L	MW-33A	08/25/2020		65.8000	*	4.5700
Arsenic	ug/L	MW-33A	11/03/2020		17.9000	*	4.5700
Arsenic	ug/L	MW-33A	06/03/2021		35.3000	*	4.5700
Arsenic	ug/L	MW-33A	08/03/2021		52.7000	*	4.5700
Arsenic	ug/L	MW-33A	09/29/2021		18.4000	*	4.5700
Arsenic	ug/L	MW-33A	03/16/2022		11.3000	*	4.5700

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*** - Manual exclusion.
ND = Not Detected, Result = detection limit.

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Arsenic	ug/L	MW-33A	09/13/2022		13.8000	*	4.5700
Arsenic	ug/L	MW-33A	06/13/2023	ND	0.5300		4.5700
Arsenic	ug/L	MW-33A	06/12/2024		24.3000	*	4.5700
Arsenic	ug/L	MW-33A	08/29/2024		51.8000	*	4.5700
Arsenic	ug/L	MW-33A	12/05/2024		112.0000	*	4.5700
Arsenic	ug/L	MW-33A	06/02/2025		9.8600	*	4.5700
Arsenic	ug/L	MW-43A	09/01/2022		8.0600	*	4.5700
Arsenic	ug/L	MW-43A	12/06/2022		7.3400	*	4.5700
Arsenic	ug/L	MW-43A	06/07/2023		8.2800	*	4.5700
Arsenic	ug/L	MW-43A	08/28/2023		8.8500	*	4.5700
Arsenic	ug/L	MW-43A	11/02/2023		9.8100	*	4.5700
Arsenic	ug/L	MW-43A	06/11/2024		6.2800	*	4.5700
Arsenic	ug/L	MW-43A	12/03/2024		6.3200	*	4.5700
Arsenic	ug/L	MW-43A	06/05/2025		7.2800	*	4.5700
Barium	ug/L	MW-33A	11/18/2019		144.0000		292.8570
Barium	ug/L	MW-33A	02/12/2020		176.0000		292.8570
Barium	ug/L	MW-33A	06/30/2020		105.0000		292.8570
Barium	ug/L	MW-33A	08/25/2020		203.0000		292.8570
Barium	ug/L	MW-33A	11/03/2020		177.0000		292.8570
Barium	ug/L	MW-33A	06/03/2021		168.0000		292.8570
Barium	ug/L	MW-33A	08/03/2021		149.0000		292.8570
Barium	ug/L	MW-33A	09/29/2021		152.0000		292.8570
Barium	ug/L	MW-33A	03/16/2022		176.0000		292.8570

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*** - Manual exclusion.
ND = Not Detected, Result = detection limit.

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Barium	ug/L	MW-33A	09/13/2022		138.0000		292.8570
Barium	ug/L	MW-33A	06/13/2023		108.0000		292.8570
Barium	ug/L	MW-33A	06/12/2024		255.0000		292.8570
Barium	ug/L	MW-33A	12/05/2024		199.0000		292.8570
Barium	ug/L	MW-33A	06/02/2025		361.0000	*	292.8570
Barium	ug/L	MW-4	10/13/2007		742.0000	*	292.8570
Barium	ug/L	MW-4	01/09/2008		603.0000	*	292.8570
Barium	ug/L	MW-4	04/08/2008		793.0000	*	292.8570
Barium	ug/L	MW-4	07/16/2008		544.0000	*	292.8570
Barium	ug/L	MW-4	10/23/2008		514.0000	*	292.8570
Barium	ug/L	MW-4	04/09/2009		549.0000	*	292.8570
Barium	ug/L	MW-4	10/05/2009		623.0000	*	292.8570
Barium	ug/L	MW-4	02/25/2010		564.0000	*	292.8570
Barium	ug/L	MW-4	04/21/2010		580.0000	*	292.8570
Barium	ug/L	MW-4	10/14/2010		529.0000	*	292.8570
Barium	ug/L	MW-4	04/13/2011		542.0000	*	292.8570
Barium	ug/L	MW-4	10/18/2011		513.0000	*	292.8570
Barium	ug/L	MW-4	04/24/2012		533.0000	*	292.8570
Barium	ug/L	MW-4	10/24/2012		710.0000	*	292.8570
Barium	ug/L	MW-4	04/08/2013		774.0000	*	292.8570
Barium	ug/L	MW-4	11/05/2013		514.0000	*	292.8570
Barium	ug/L	MW-4	05/02/2014		513.0000	*	292.8570
Barium	ug/L	MW-4	11/04/2014		469.0000	*	292.8570

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Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Barium	ug/L	MW-4	05/06/2015		463.0000	*	292.8570
Barium	ug/L	MW-4	09/18/2015		479.0000	*	292.8570
Barium	ug/L	MW-4	03/31/2016		484.0000	*	292.8570
Barium	ug/L	MW-4	11/28/2016		539.0000	*	292.8570
Barium	ug/L	MW-4	05/11/2017		482.0000	*	292.8570
Barium	ug/L	MW-4	11/16/2017		40.6000		292.8570
Barium	ug/L	MW-4	06/04/2018		530.0000	*	292.8570
Barium	ug/L	MW-4	10/29/2018		464.0000	*	292.8570
Barium	ug/L	MW-4	06/04/2019		451.0000	*	292.8570
Barium	ug/L	MW-4	10/30/2019		191.0000		292.8570
Barium	ug/L	MW-4	06/17/2020		421.0000	*	292.8570
Barium	ug/L	MW-4	11/17/2020		409.0000	*	292.8570
Barium	ug/L	MW-4	05/25/2021		475.0000	*	292.8570
Barium	ug/L	MW-4	09/28/2021		482.0000	*	292.8570
Barium	ug/L	MW-4	03/02/2022		503.0000	*	292.8570
Barium	ug/L	MW-4	09/07/2022		536.0000	*	292.8570
Barium	ug/L	MW-4	06/08/2023		134.0000		292.8570
Barium	ug/L	MW-4	11/13/2023		514.0000	*	292.8570
Barium	ug/L	MW-4	06/11/2024		485.0000	*	292.8570
Barium	ug/L	MW-4	11/19/2024		518.0000	*	292.8570
Barium	ug/L	MW-4	06/09/2025		505.0000	*	292.8570
Cadmium	ug/L	MW-44A	09/01/2022	ND	0.0550		0.2090
Cadmium	ug/L	MW-44A	12/06/2022	ND	0.0550		0.2090

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Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Cadmium	ug/L	MW-44A	06/07/2023		0.3060	*	0.2090
Cadmium	ug/L	MW-44A	08/28/2023		0.4160	*	0.2090
Cadmium	ug/L	MW-44A	11/02/2023		0.7950	*	0.2090
Cadmium	ug/L	MW-44A	06/26/2024		0.3890	*	0.2090
Cadmium	ug/L	MW-44A	12/03/2024	ND	0.1000		0.2090
Cadmium	ug/L	MW-44A	06/05/2025		0.4990	*	0.2090
Cobalt	ug/L	MW-29A	11/20/2019		8.4300	*	3.4000
Cobalt	ug/L	MW-29A	02/06/2020		9.6400	*	3.4000
Cobalt	ug/L	MW-29A	06/30/2020		9.9800	*	3.4000
Cobalt	ug/L	MW-29A	08/26/2020		10.7000	*	3.4000
Cobalt	ug/L	MW-29A	11/20/2020		10.1000	*	3.4000
Cobalt	ug/L	MW-29A	05/24/2021		11.9000	*	3.4000
Cobalt	ug/L	MW-29A	09/28/2021		7.9000	*	3.4000
Cobalt	ug/L	MW-29A	03/29/2022		7.3800	*	3.4000
Cobalt	ug/L	MW-29A	09/12/2022		10.1000	*	3.4000
Cobalt	ug/L	MW-29A	06/12/2023		12.5000	*	3.4000
Cobalt	ug/L	MW-29A	11/15/2023		18.7000	*	3.4000
Cobalt	ug/L	MW-29A	06/26/2024		11.2000	*	3.4000
Cobalt	ug/L	MW-29A	12/09/2024		16.5000	*	3.4000
Cobalt	ug/L	MW-29A	06/06/2025		3.4700	*	3.4000
Cobalt	ug/L	MW-33A	11/18/2019		3.0000		3.4000
Cobalt	ug/L	MW-33A	02/12/2020		2.5900		3.4000
Cobalt	ug/L	MW-33A	06/30/2020	ND	0.0910		3.4000

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Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Cobalt	ug/L	MW-33A	08/25/2020		2.3400		3.4000
Cobalt	ug/L	MW-33A	11/03/2020		1.8300		3.4000
Cobalt	ug/L	MW-33A	06/03/2021		3.2000		3.4000
Cobalt	ug/L	MW-33A	08/03/2021		3.2000		3.4000
Cobalt	ug/L	MW-33A	09/29/2021		2.0300		3.4000
Cobalt	ug/L	MW-33A	03/16/2022		0.5030		3.4000
Cobalt	ug/L	MW-33A	09/13/2022		0.7430		3.4000
Cobalt	ug/L	MW-33A	06/13/2023	ND	0.1700		3.4000
Cobalt	ug/L	MW-33A	06/12/2024		4.5100	*	3.4000
Cobalt	ug/L	MW-33A	12/05/2024		2.4000		3.4000
Cobalt	ug/L	MW-33A	06/02/2025		5.2100	*	3.4000
Cobalt	ug/L	MW-35	11/15/2019		8.2700	*	3.4000
Cobalt	ug/L	MW-35	02/12/2020		6.6000	*	3.4000
Cobalt	ug/L	MW-35	07/06/2020		7.0300	*	3.4000
Cobalt	ug/L	MW-35	08/25/2020		5.9800	*	3.4000
Cobalt	ug/L	MW-35	11/05/2020		5.9700	*	3.4000
Cobalt	ug/L	MW-35	06/08/2021		5.5100	*	3.4000
Cobalt	ug/L	MW-35	09/28/2021		6.3300	*	3.4000
Cobalt	ug/L	MW-35	03/29/2022		6.3900	*	3.4000
Cobalt	ug/L	MW-35	09/12/2022		6.7400	*	3.4000
Cobalt	ug/L	MW-35	06/27/2023		5.3300	*	3.4000
Cobalt	ug/L	MW-35	11/14/2023		10.8000	*	3.4000
Cobalt	ug/L	MW-35	07/03/2024		4.9600	*	3.4000

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Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Cobalt	ug/L	MW-35	12/11/2024		1.9800		3.4000
Cobalt	ug/L	MW-35	06/04/2025		4.8200	*	3.4000
Cobalt	ug/L	MW-43A	09/01/2022		3.6800	*	3.4000
Cobalt	ug/L	MW-43A	12/06/2022		3.2700		3.4000
Cobalt	ug/L	MW-43A	06/07/2023		4.5100	*	3.4000
Cobalt	ug/L	MW-43A	08/28/2023		4.9300	*	3.4000
Cobalt	ug/L	MW-43A	11/02/2023		4.7500	*	3.4000
Cobalt	ug/L	MW-43A	06/11/2024		3.4900	*	3.4000
Cobalt	ug/L	MW-43A	12/03/2024		3.8300	*	3.4000
Cobalt	ug/L	MW-43A	06/05/2025		3.9200	*	3.4000
Copper	ug/L	MW-33A	11/18/2019	ND	2.0000		7.6400
Copper	ug/L	MW-33A	02/12/2020	ND	3.2000		7.6400
Copper	ug/L	MW-33A	06/30/2020	ND	1.5000		7.6400
Copper	ug/L	MW-33A	08/25/2020	ND	1.5000		7.6400
Copper	ug/L	MW-33A	11/03/2020	ND	1.5000		7.6400
Copper	ug/L	MW-33A	06/03/2021	ND	1.4000		7.6400
Copper	ug/L	MW-33A	08/03/2021	ND	1.4000		7.6400
Copper	ug/L	MW-33A	09/29/2021	ND	1.4000		7.6400
Copper	ug/L	MW-33A	03/16/2022	ND	1.8000		7.6400
Copper	ug/L	MW-33A	09/13/2022	ND	1.8000		7.6400
Copper	ug/L	MW-33A	06/13/2023	ND	1.8000		7.6400
Copper	ug/L	MW-33A	06/12/2024	ND	1.8000		7.6400
Copper	ug/L	MW-33A	12/05/2024	ND	1.8000		7.6400

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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	ug/L	MW-33A	06/02/2025		8.9600	*	7.6400
Field Specific Conductance	umhos/cm	MW-101	06/10/2019		1115.7000		1345.9956
Field Specific Conductance	umhos/cm	MW-101	08/14/2019		1114.7000		1345.9956
Field Specific Conductance	umhos/cm	MW-101	11/20/2019		1183.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-101	02/06/2020		1145.1000		1345.9956
Field Specific Conductance	umhos/cm	MW-101	06/30/2020		956.0100		1345.9956
Field Specific Conductance	umhos/cm	MW-101	11/20/2020		1162.3000		1345.9956
Field Specific Conductance	umhos/cm	MW-101	02/03/2021		1109.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-101	05/24/2021		1034.2000		1345.9956
Field Specific Conductance	umhos/cm	MW-101	09/28/2021		1147.2000		1345.9956
Field Specific Conductance	umhos/cm	MW-101	09/12/2022		957.1300		1345.9956
Field Specific Conductance	umhos/cm	MW-101	06/12/2023		1139.1000		1345.9956
Field Specific Conductance	umhos/cm	MW-101	06/26/2024		975.9900		1345.9956
Field Specific Conductance	umhos/cm	MW-101	12/09/2024		2176.1000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-101	06/06/2025		2771.0000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-22	06/10/2019		938.0400		1345.9956
Field Specific Conductance	umhos/cm	MW-22	08/13/2019		920.1200		1345.9956
Field Specific Conductance	umhos/cm	MW-22	11/05/2019		949.4100		1345.9956
Field Specific Conductance	umhos/cm	MW-22	06/17/2020		848.0400		1345.9956
Field Specific Conductance	umhos/cm	MW-22	08/24/2020		901.3100		1345.9956
Field Specific Conductance	umhos/cm	MW-22	11/17/2020		870.6900		1345.9956
Field Specific Conductance	umhos/cm	MW-22	06/03/2021		749.2300		1345.9956
Field Specific Conductance	umhos/cm	MW-22	09/23/2021		777.6300		1345.9956

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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
Field Specific Conductance	umhos/cm	MW-22	03/15/2022		821.2400		1345.9956
Field Specific Conductance	umhos/cm	MW-22	08/30/2022		901.9200		1345.9956
Field Specific Conductance	umhos/cm	MW-22	06/13/2023		850.6700		1345.9956
Field Specific Conductance	umhos/cm	MW-22	11/13/2023		862.5100		1345.9956
Field Specific Conductance	umhos/cm	MW-22	06/26/2024		803.4800		1345.9956
Field Specific Conductance	umhos/cm	MW-22	12/11/2024		2340.1000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-22	06/06/2025		2432.7000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-24A	05/07/2015		1120.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-24A	04/04/2016		1040.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-24A	05/12/2017		1147.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-24A	06/07/2018		1120.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-24A	10/29/2018		793.3200		1345.9956
Field Specific Conductance	umhos/cm	MW-24A	06/05/2019		996.2500		1345.9956
Field Specific Conductance	umhos/cm	MW-24A	08/13/2019		944.6600		1345.9956
Field Specific Conductance	umhos/cm	MW-24A	11/04/2019		969.1300		1345.9956
Field Specific Conductance	umhos/cm	MW-24A	06/29/2020		911.6900		1345.9956
Field Specific Conductance	umhos/cm	MW-24A	11/18/2020		886.0500		1345.9956
Field Specific Conductance	umhos/cm	MW-24A	05/24/2021		870.5900		1345.9956
Field Specific Conductance	umhos/cm	MW-24A	09/28/2021		1287.3900		1345.9956
Field Specific Conductance	umhos/cm	MW-24A	08/30/2022		938.8400		1345.9956
Field Specific Conductance	umhos/cm	MW-24A	06/14/2023		1253.2000		1345.9956
Field Specific Conductance	umhos/cm	MW-24A	06/18/2024		1092.6000		1345.9956
Field Specific Conductance	umhos/cm	MW-24A	11/21/2024		2038.4000	*	1345.9956

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ND = Not Detected, Result = detection limit.

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Field Specific Conductance	umhos/cm	MW-25A	05/04/2015		900.7000		1345.9956
Field Specific Conductance	umhos/cm	MW-25A	04/06/2016		829.8000		1345.9956
Field Specific Conductance	umhos/cm	MW-25A	11/15/2016		963.5000		1345.9956
Field Specific Conductance	umhos/cm	MW-25A	05/11/2017		986.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-25A	11/06/2017		817.4000		1345.9956
Field Specific Conductance	umhos/cm	MW-25A	06/18/2018		1265.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-25A	10/30/2018		905.1000		1345.9956
Field Specific Conductance	umhos/cm	MW-25A	06/06/2019		1191.5000		1345.9956
Field Specific Conductance	umhos/cm	MW-25A	11/04/2019		1146.6000		1345.9956
Field Specific Conductance	umhos/cm	MW-25A	02/06/2020		1125.7000		1345.9956
Field Specific Conductance	umhos/cm	MW-25A	06/30/2020		1126.3000		1345.9956
Field Specific Conductance	umhos/cm	MW-25A	11/05/2020		1105.2000		1345.9956
Field Specific Conductance	umhos/cm	MW-25A	05/19/2021		1060.3000		1345.9956
Field Specific Conductance	umhos/cm	MW-25A	09/28/2021		1007.5000		1345.9956
Field Specific Conductance	umhos/cm	MW-25A	03/29/2022		1120.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-25A	08/30/2022		1133.9000		1345.9956
Field Specific Conductance	umhos/cm	MW-25A	06/15/2023		1203.6000		1345.9956
Field Specific Conductance	umhos/cm	MW-25A	11/15/2023		1203.2000		1345.9956
Field Specific Conductance	umhos/cm	MW-25A	01/25/2024		1072.3000		1345.9956
Field Specific Conductance	umhos/cm	MW-25A	06/13/2024		1099.6000		1345.9956
Field Specific Conductance	umhos/cm	MW-25A	11/21/2024		2293.8000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-25A	06/05/2025		3443.7000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-29A	11/20/2019		1559.2000	*	1345.9956

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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
Field Specific Conductance	umhos/cm	MW-29A	02/06/2020		1595.7000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-29A	06/30/2020		1584.9000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-29A	08/26/2020		1681.4000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-29A	11/20/2020		1541.8000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-29A	05/24/2021		1556.8000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-29A	09/28/2021		1573.5000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-29A	03/29/2022		1748.0000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-29A	06/27/2022		1781.9000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-29A	09/12/2022		1996.7000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-29A	12/07/2022		1660.1000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-29A	06/12/2023		2066.8000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-29A	11/15/2023		1728.3000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-29A	06/26/2024		1905.0000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-29A	12/09/2024		2598.1000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-29A	06/06/2025		2930.3000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-2R	10/12/2007		694.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-2R	01/09/2008		859.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-2R	04/08/2008		850.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-2R	05/07/2015		644.4000		1345.9956
Field Specific Conductance	umhos/cm	MW-2R	09/18/2015		702.8000		1345.9956
Field Specific Conductance	umhos/cm	MW-2R	04/12/2016		588.5000		1345.9956
Field Specific Conductance	umhos/cm	MW-2R	11/30/2016		594.1000		1345.9956
Field Specific Conductance	umhos/cm	MW-2R	05/24/2017		628.7000		1345.9956

* - 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
Field Specific Conductance	umhos/cm	MW-2R	11/17/2017		609.1000		1345.9956
Field Specific Conductance	umhos/cm	MW-2R	06/07/2018		747.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-2R	10/28/2018		475.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-2R	06/07/2019		690.7800		1345.9956
Field Specific Conductance	umhos/cm	MW-2R	11/04/2019		638.0800		1345.9956
Field Specific Conductance	umhos/cm	MW-2R	06/18/2020		588.3100		1345.9956
Field Specific Conductance	umhos/cm	MW-2R	11/23/2020		798.8700		1345.9956
Field Specific Conductance	umhos/cm	MW-2R	05/19/2021		766.1400		1345.9956
Field Specific Conductance	umhos/cm	MW-2R	09/29/2021		760.7900		1345.9956
Field Specific Conductance	umhos/cm	MW-2R	03/16/2022		816.5200		1345.9956
Field Specific Conductance	umhos/cm	MW-2R	09/07/2022		632.9700		1345.9956
Field Specific Conductance	umhos/cm	MW-2R	06/14/2023		772.9800		1345.9956
Field Specific Conductance	umhos/cm	MW-2R	11/20/2023		730.9300		1345.9956
Field Specific Conductance	umhos/cm	MW-2R	01/23/2024		787.9500		1345.9956
Field Specific Conductance	umhos/cm	MW-2R	07/01/2024		708.7200		1345.9956
Field Specific Conductance	umhos/cm	MW-2R	11/21/2024		1647.7000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-2R	06/02/2025		2383.0000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-3	10/12/2007		688.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-3	01/09/2008		682.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-3	04/08/2008		721.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-3	05/11/2015		353.9000		1345.9956
Field Specific Conductance	umhos/cm	MW-3	09/22/2015		664.1000		1345.9956
Field Specific Conductance	umhos/cm	MW-3	04/07/2016		618.0000		1345.9956

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*** - Manual exclusion.
ND = Not Detected, Result = detection limit.

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Field Specific Conductance	umhos/cm	MW-3	11/30/2016		512.6000		1345.9956
Field Specific Conductance	umhos/cm	MW-3	05/22/2017		629.7000		1345.9956
Field Specific Conductance	umhos/cm	MW-3	11/21/2017		506.5000		1345.9956
Field Specific Conductance	umhos/cm	MW-3	06/18/2018		778.7000		1345.9956
Field Specific Conductance	umhos/cm	MW-3	10/28/2018		583.6000		1345.9956
Field Specific Conductance	umhos/cm	MW-3	06/07/2019		552.6000		1345.9956
Field Specific Conductance	umhos/cm	MW-3	11/18/2019		730.9800		1345.9956
Field Specific Conductance	umhos/cm	MW-3	06/18/2020		791.5000		1345.9956
Field Specific Conductance	umhos/cm	MW-3	11/23/2020		834.6500		1345.9956
Field Specific Conductance	umhos/cm	MW-3	06/03/2021		825.5800		1345.9956
Field Specific Conductance	umhos/cm	MW-3	09/29/2021		802.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-3	03/16/2022		812.1700		1345.9956
Field Specific Conductance	umhos/cm	MW-3	06/27/2022		847.5600		1345.9956
Field Specific Conductance	umhos/cm	MW-3	09/13/2022		908.9500		1345.9956
Field Specific Conductance	umhos/cm	MW-3	06/13/2023		922.7700		1345.9956
Field Specific Conductance	umhos/cm	MW-3	11/20/2023		772.8300		1345.9956
Field Specific Conductance	umhos/cm	MW-3	01/25/2024		739.9600		1345.9956
Field Specific Conductance	umhos/cm	MW-3	07/01/2024		756.2200		1345.9956
Field Specific Conductance	umhos/cm	MW-3	12/17/2024		1547.4000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-3	06/02/2025		2928.3000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-31A	11/05/2019		1475.1000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-31A	02/07/2020		1537.4000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-31A	06/18/2020		1689.7000	*	1345.9956

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*** - Manual exclusion.
ND = Not Detected, Result = detection limit.

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Field Specific Conductance	umhos/cm	MW-31A	08/26/2020		1650.0000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-31A	11/18/2020		2207.9000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-31A	02/23/2021		1512.1000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-31A	06/08/2021		2191.5000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-31A	09/29/2021		2232.7000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-31A	03/15/2022		1842.6000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-31A	09/07/2022		3837.9000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-31A	06/20/2023		1952.9000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-31A	11/14/2023		1591.8000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-31A	07/01/2024		1760.6000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-31A	12/17/2024		2765.5000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-31A	06/02/2025		2594.1000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-31A	06/05/2025		4623.2000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-33A	11/18/2019		728.3000		1345.9956
Field Specific Conductance	umhos/cm	MW-33A	02/12/2020		736.3900		1345.9956
Field Specific Conductance	umhos/cm	MW-33A	06/30/2020		662.3600		1345.9956
Field Specific Conductance	umhos/cm	MW-33A	08/25/2020		754.5600		1345.9956
Field Specific Conductance	umhos/cm	MW-33A	11/03/2020		886.7800		1345.9956
Field Specific Conductance	umhos/cm	MW-33A	06/03/2021		727.3400		1345.9956
Field Specific Conductance	umhos/cm	MW-33A	09/29/2021		730.0200		1345.9956
Field Specific Conductance	umhos/cm	MW-33A	03/16/2022		787.1300		1345.9956
Field Specific Conductance	umhos/cm	MW-33A	09/13/2022		736.4700		1345.9956
Field Specific Conductance	umhos/cm	MW-33A	06/13/2023		691.8400		1345.9956

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ND = Not Detected, Result = detection limit.

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Field Specific Conductance	umhos/cm	MW-33A	06/12/2024		890.3400		1345.9956
Field Specific Conductance	umhos/cm	MW-33A	08/29/2024		897.0400		1345.9956
Field Specific Conductance	umhos/cm	MW-33A	12/05/2024		2328.7000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-33A	06/02/2025		2479.3000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-34A	11/18/2019		548.6000		1345.9956
Field Specific Conductance	umhos/cm	MW-34A	02/17/2020		536.7100		1345.9956
Field Specific Conductance	umhos/cm	MW-34A	07/07/2020		533.4500		1345.9956
Field Specific Conductance	umhos/cm	MW-34A	08/25/2020		482.7800		1345.9956
Field Specific Conductance	umhos/cm	MW-34A	11/23/2020		507.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-34A	06/08/2021		524.5300		1345.9956
Field Specific Conductance	umhos/cm	MW-34A	09/29/2021		493.6500		1345.9956
Field Specific Conductance	umhos/cm	MW-34A	03/16/2022		508.5300		1345.9956
Field Specific Conductance	umhos/cm	MW-34A	09/08/2022		538.7100		1345.9956
Field Specific Conductance	umhos/cm	MW-34A	06/15/2023		497.7600		1345.9956
Field Specific Conductance	umhos/cm	MW-34A	11/20/2023		441.7700		1345.9956
Field Specific Conductance	umhos/cm	MW-34A	07/03/2024		527.2900		1345.9956
Field Specific Conductance	umhos/cm	MW-34A	12/17/2024		909.9400		1345.9956
Field Specific Conductance	umhos/cm	MW-34A	06/04/2025		2891.3000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-35	11/15/2019		1368.0000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-35	02/12/2020		1332.5000		1345.9956
Field Specific Conductance	umhos/cm	MW-35	07/06/2020		1379.2000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-35	08/25/2020		1292.2000		1345.9956
Field Specific Conductance	umhos/cm	MW-35	11/05/2020		1294.5000		1345.9956

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*** - Manual exclusion.
ND = Not Detected, Result = detection limit.

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Field Specific Conductance	umhos/cm	MW-35	06/08/2021		1171.5000		1345.9956
Field Specific Conductance	umhos/cm	MW-35	09/28/2021		1189.9000		1345.9956
Field Specific Conductance	umhos/cm	MW-35	03/29/2022		1328.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-35	09/12/2022		1469.3000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-35	06/27/2023		1330.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-35	11/14/2023		1446.1000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-35	07/03/2024		1201.3000		1345.9956
Field Specific Conductance	umhos/cm	MW-35	12/11/2024		3035.9000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-35	06/04/2025		3531.4000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-38A	09/23/2021		698.2900		1345.9956
Field Specific Conductance	umhos/cm	MW-38A	12/14/2021		852.2700		1345.9956
Field Specific Conductance	umhos/cm	MW-38A	03/07/2022		747.5000		1345.9956
Field Specific Conductance	umhos/cm	MW-38A	06/23/2022		745.0200		1345.9956
Field Specific Conductance	umhos/cm	MW-38A	08/17/2022		780.3600		1345.9956
Field Specific Conductance	umhos/cm	MW-38A	12/06/2022		767.3800		1345.9956
Field Specific Conductance	umhos/cm	MW-38A	06/08/2023		757.8700		1345.9956
Field Specific Conductance	umhos/cm	MW-38A	11/06/2023		754.4400		1345.9956
Field Specific Conductance	umhos/cm	MW-38A	06/13/2024		760.9400		1345.9956
Field Specific Conductance	umhos/cm	MW-38A	12/09/2024		1714.9000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-38A	06/04/2025		3135.5000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-39A	09/23/2021		714.7400		1345.9956
Field Specific Conductance	umhos/cm	MW-39A	12/14/2021		864.6900		1345.9956
Field Specific Conductance	umhos/cm	MW-39A	03/07/2022		751.5800		1345.9956

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ND = Not Detected, Result = detection limit.

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Field Specific Conductance	umhos/cm	MW-39A	06/23/2022		757.3000		1345.9956
Field Specific Conductance	umhos/cm	MW-39A	08/17/2022		791.2100		1345.9956
Field Specific Conductance	umhos/cm	MW-39A	12/06/2022		772.3200		1345.9956
Field Specific Conductance	umhos/cm	MW-39A	06/08/2023		773.6700		1345.9956
Field Specific Conductance	umhos/cm	MW-39A	11/06/2023		758.9200		1345.9956
Field Specific Conductance	umhos/cm	MW-39A	06/13/2024		790.3700		1345.9956
Field Specific Conductance	umhos/cm	MW-39A	08/29/2024		773.4100		1345.9956
Field Specific Conductance	umhos/cm	MW-39A	12/03/2024		1517.5000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-39A	06/04/2025		3071.4000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-4	10/13/2007		1470.0000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-4	01/09/2008		1440.0000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-4	04/08/2008		1590.0000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-4	05/06/2015		763.6000		1345.9956
Field Specific Conductance	umhos/cm	MW-4	09/18/2015		965.2000		1345.9956
Field Specific Conductance	umhos/cm	MW-4	03/31/2016		961.9000		1345.9956
Field Specific Conductance	umhos/cm	MW-4	11/28/2016		890.1000		1345.9956
Field Specific Conductance	umhos/cm	MW-4	05/11/2017		1011.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-4	11/16/2017		818.3000		1345.9956
Field Specific Conductance	umhos/cm	MW-4	06/04/2018		1206.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-4	10/29/2018		882.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-4	06/04/2019		1260.5000		1345.9956
Field Specific Conductance	umhos/cm	MW-4	10/30/2019		1225.7000		1345.9956
Field Specific Conductance	umhos/cm	MW-4	06/17/2020		1208.8000		1345.9956

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ND = Not Detected, Result = detection limit.

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Field Specific Conductance	umhos/cm	MW-4	11/17/2020		1196.1000		1345.9956
Field Specific Conductance	umhos/cm	MW-4	05/25/2021		1220.4000		1345.9956
Field Specific Conductance	umhos/cm	MW-4	09/28/2021		1190.2000		1345.9956
Field Specific Conductance	umhos/cm	MW-4	03/02/2022		1292.5000		1345.9956
Field Specific Conductance	umhos/cm	MW-4	09/07/2022		1334.6000		1345.9956
Field Specific Conductance	umhos/cm	MW-4	06/08/2023		1354.7000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-4	11/13/2023		1222.2000		1345.9956
Field Specific Conductance	umhos/cm	MW-4	06/11/2024		1201.3000		1345.9956
Field Specific Conductance	umhos/cm	MW-4	11/19/2024		1817.4000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-4	06/09/2025		2993.7000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-40A	09/23/2021		900.5000		1345.9956
Field Specific Conductance	umhos/cm	MW-40A	12/14/2021		1037.1000		1345.9956
Field Specific Conductance	umhos/cm	MW-40A	03/07/2022		1110.3000		1345.9956
Field Specific Conductance	umhos/cm	MW-40A	06/23/2022		1036.8000		1345.9956
Field Specific Conductance	umhos/cm	MW-40A	08/17/2022		1010.1000		1345.9956
Field Specific Conductance	umhos/cm	MW-40A	12/06/2022		1065.3000		1345.9956
Field Specific Conductance	umhos/cm	MW-40A	06/07/2023		1347.9000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-40A	11/06/2023		1148.3000		1345.9956
Field Specific Conductance	umhos/cm	MW-40A	06/13/2024		1134.5000		1345.9956
Field Specific Conductance	umhos/cm	MW-40A	12/03/2024		1896.1000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-40A	06/04/2025		3371.9000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-41A	09/08/2022		681.9400		1345.9956
Field Specific Conductance	umhos/cm	MW-41A	12/07/2022		716.0500		1345.9956

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ND = Not Detected, Result = detection limit.

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Field Specific Conductance	umhos/cm	MW-41A	06/21/2023		767.4300		1345.9956
Field Specific Conductance	umhos/cm	MW-41A	08/29/2023		718.8000		1345.9956
Field Specific Conductance	umhos/cm	MW-41A	11/20/2023		605.3100		1345.9956
Field Specific Conductance	umhos/cm	MW-41A	01/23/2024		657.8700		1345.9956
Field Specific Conductance	umhos/cm	MW-41A	07/01/2024		714.7300		1345.9956
Field Specific Conductance	umhos/cm	MW-41A	12/17/2024		1232.7000		1345.9956
Field Specific Conductance	umhos/cm	MW-41A	06/04/2025		3147.0000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-42A	08/31/2022		2048.5000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-42A	12/06/2022		1073.8000		1345.9956
Field Specific Conductance	umhos/cm	MW-42A	06/07/2023		940.2100		1345.9956
Field Specific Conductance	umhos/cm	MW-42A	08/28/2023		1173.9000		1345.9956
Field Specific Conductance	umhos/cm	MW-42A	11/02/2023		1001.3000		1345.9956
Field Specific Conductance	umhos/cm	MW-42A	06/18/2024		1221.8000		1345.9956
Field Specific Conductance	umhos/cm	MW-42A	12/05/2024		3061.3000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-42A	06/05/2025		3541.1000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-43A	09/01/2022		1227.3000		1345.9956
Field Specific Conductance	umhos/cm	MW-43A	12/06/2022		1248.4000		1345.9956
Field Specific Conductance	umhos/cm	MW-43A	06/07/2023		1300.8000		1345.9956
Field Specific Conductance	umhos/cm	MW-43A	08/28/2023		1499.6000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-43A	11/02/2023		1525.8000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-43A	06/11/2024		1050.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-43A	08/29/2024		1099.1000		1345.9956
Field Specific Conductance	umhos/cm	MW-43A	12/03/2024		2233.7000	*	1345.9956

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*** - Manual exclusion.
ND = Not Detected, Result = detection limit.

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Field Specific Conductance	umhos/cm	MW-43A	06/05/2025		3701.8000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-44A	09/01/2022		1128.2000		1345.9956
Field Specific Conductance	umhos/cm	MW-44A	12/06/2022		1540.8000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-44A	06/07/2023		1224.3000		1345.9956
Field Specific Conductance	umhos/cm	MW-44A	08/28/2023		1562.2000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-44A	11/02/2023		1717.4000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-44A	06/26/2024		1021.9000		1345.9956
Field Specific Conductance	umhos/cm	MW-44A	12/03/2024		2050.2000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-44A	06/05/2025		4093.3000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-45A	11/09/2023		619.0700		1345.9956
Field Specific Conductance	umhos/cm	MW-45A	01/23/2024		608.9800		1345.9956
Field Specific Conductance	umhos/cm	MW-45A	07/01/2024		649.0800		1345.9956
Field Specific Conductance	umhos/cm	MW-45A	11/21/2024		1515.9000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-45A	06/06/2025		2205.0000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-46A	11/13/2023		1733.4000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-46A	01/23/2024		1760.1000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-46A	06/11/2024		1613.0000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-46A	12/09/2024		2875.5000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-46A	06/06/2025		2719.6000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-4B	10/13/2007		986.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-4B	01/09/2008		854.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-4B	04/08/2008		910.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-4B	05/06/2015		747.3000		1345.9956

* - 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
Field Specific Conductance	umhos/cm	MW-4B	07/01/2015		767.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-4B	09/15/2015		553.4000		1345.9956
Field Specific Conductance	umhos/cm	MW-4B	12/09/2015		843.8000		1345.9956
Field Specific Conductance	umhos/cm	MW-4B	04/04/2016		925.4000		1345.9956
Field Specific Conductance	umhos/cm	MW-4B	11/29/2016		428.3000		1345.9956
Field Specific Conductance	umhos/cm	MW-4B	05/11/2017		507.9000		1345.9956
Field Specific Conductance	umhos/cm	MW-4B	11/21/2017		354.3000		1345.9956
Field Specific Conductance	umhos/cm	MW-4B	06/15/2018		808.6000		1345.9956
Field Specific Conductance	umhos/cm	MW-4B	10/29/2018		475.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-4B	06/04/2019		576.0200		1345.9956
Field Specific Conductance	umhos/cm	MW-4B	10/30/2019		573.6300		1345.9956
Field Specific Conductance	umhos/cm	MW-4B	02/03/2020		556.2500		1345.9956
Field Specific Conductance	umhos/cm	MW-4B	06/17/2020		556.4600		1345.9956
Field Specific Conductance	umhos/cm	MW-4B	11/18/2020		519.3200		1345.9956
Field Specific Conductance	umhos/cm	MW-4B	05/25/2021		526.3500		1345.9956
Field Specific Conductance	umhos/cm	MW-4B	09/28/2021		508.4500		1345.9956
Field Specific Conductance	umhos/cm	MW-4B	03/02/2022		553.7500		1345.9956
Field Specific Conductance	umhos/cm	MW-4B	09/08/2022		597.8800		1345.9956
Field Specific Conductance	umhos/cm	MW-4B	06/15/2023		605.0300		1345.9956
Field Specific Conductance	umhos/cm	MW-4B	11/15/2023		689.2900		1345.9956
Field Specific Conductance	umhos/cm	MW-4B	01/25/2024		853.4400		1345.9956
Field Specific Conductance	umhos/cm	MW-4B	06/11/2024		583.8900		1345.9956
Field Specific Conductance	umhos/cm	MW-4B	08/27/2024		613.2100		1345.9956

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

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Field Specific Conductance	umhos/cm	MW-4B	11/19/2024		1024.3000		1345.9956
Field Specific Conductance	umhos/cm	MW-4B	06/09/2025		2913.7000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-7A	10/13/2007		845.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-7A	01/09/2008		812.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-7A	04/08/2008		830.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-7A	05/04/2015		608.2000		1345.9956
Field Specific Conductance	umhos/cm	MW-7A	09/14/2015		736.1000		1345.9956
Field Specific Conductance	umhos/cm	MW-7A	04/04/2016		596.3000		1345.9956
Field Specific Conductance	umhos/cm	MW-7A	11/16/2016		820.7000		1345.9956
Field Specific Conductance	umhos/cm	MW-7A	05/08/2017		584.2000		1345.9956
Field Specific Conductance	umhos/cm	MW-7A	11/01/2017		511.5000		1345.9956
Field Specific Conductance	umhos/cm	MW-7A	06/06/2018		725.4000		1345.9956
Field Specific Conductance	umhos/cm	MW-7A	10/30/2018		641.9000		1345.9956
Field Specific Conductance	umhos/cm	MW-7A	06/04/2019		805.7800		1345.9956
Field Specific Conductance	umhos/cm	MW-7A	11/04/2019		781.0800		1345.9956
Field Specific Conductance	umhos/cm	MW-7A	02/03/2020		903.0000		1345.9956
Field Specific Conductance	umhos/cm	MW-7A	06/17/2020		740.0900		1345.9956
Field Specific Conductance	umhos/cm	MW-7A	11/05/2020		723.9200		1345.9956
Field Specific Conductance	umhos/cm	MW-7A	02/23/2021		816.3400		1345.9956
Field Specific Conductance	umhos/cm	MW-7A	05/25/2021		806.1400		1345.9956
Field Specific Conductance	umhos/cm	MW-7A	09/23/2021		643.6600		1345.9956
Field Specific Conductance	umhos/cm	MW-7A	03/15/2022		748.4000		1345.9956
Field Specific Conductance	umhos/cm	MW-7A	08/31/2022		766.7600		1345.9956

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** - 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
Field Specific Conductance	umhos/cm	MW-7A	06/13/2023		1089.7000		1345.9956
Field Specific Conductance	umhos/cm	MW-7A	08/29/2023		1076.4000		1345.9956
Field Specific Conductance	umhos/cm	MW-7A	11/13/2023		1103.6000		1345.9956
Field Specific Conductance	umhos/cm	MW-7A	06/18/2024		765.1900		1345.9956
Field Specific Conductance	umhos/cm	MW-7A	11/19/2024		1625.4000	*	1345.9956
Field Specific Conductance	umhos/cm	MW-7A	06/06/2025		2375.1000	*	1345.9956
Lead	ug/L	MW-33A	11/18/2019	ND	0.2700		3.2500
Lead	ug/L	MW-33A	02/12/2020	ND	0.2700		3.2500
Lead	ug/L	MW-33A	06/30/2020	ND	0.1100		3.2500
Lead	ug/L	MW-33A	08/25/2020	ND	0.1100		3.2500
Lead	ug/L	MW-33A	11/03/2020	ND	0.1100		3.2500
Lead	ug/L	MW-33A	06/03/2021	ND	0.2100		3.2500
Lead	ug/L	MW-33A	08/03/2021	ND	0.2100		3.2500
Lead	ug/L	MW-33A	09/29/2021	ND	0.2100		3.2500
Lead	ug/L	MW-33A	03/16/2022	ND	0.2400		3.2500
Lead	ug/L	MW-33A	09/13/2022	ND	0.2400		3.2500
Lead	ug/L	MW-33A	06/13/2023	ND	0.2400		3.2500
Lead	ug/L	MW-33A	06/12/2024		0.6920		3.2500
Lead	ug/L	MW-33A	12/05/2024	ND	0.2600		3.2500
Lead	ug/L	MW-33A	06/02/2025		3.2900	*	3.2500
Nickel	ug/L	MW-11	10/12/2007	ND	50.0000		20.9000
Nickel	ug/L	MW-11	01/09/2008	ND	50.0000		20.9000
Nickel	ug/L	MW-11	04/08/2008		50.3000	*	20.9000

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ND = Not Detected, Result = detection limit.

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Nickel	ug/L	MW-11	07/16/2008	ND	50.0000		20.9000
Nickel	ug/L	MW-11	12/28/2009	ND	50.0000		20.9000
Nickel	ug/L	MW-11	02/25/2010	ND	50.0000		20.9000
Nickel	ug/L	MW-11	02/25/2011	ND	50.0000		20.9000
Nickel	ug/L	MW-11	04/13/2011	ND	50.0000		20.9000
Nickel	ug/L	MW-11	08/25/2011	ND	50.0000		20.9000
Nickel	ug/L	MW-11	04/24/2012		31.9000	*	20.9000
Nickel	ug/L	MW-11	10/24/2012		29.3000	*	20.9000
Nickel	ug/L	MW-11	10/31/2018		43.3000	*	20.9000
Nickel	ug/L	MW-11	12/17/2018		35.1000	*	20.9000
Nickel	ug/L	MW-11	06/03/2021		34.1000	*	20.9000
Nickel	ug/L	MW-11	08/03/2021		22.6000	*	20.9000
Nickel	ug/L	MW-11	09/07/2022		30.2000	*	20.9000
Nickel	ug/L	MW-11	06/20/2023		21.6000	*	20.9000
Nickel	ug/L	MW-11	07/01/2024		16.3000		20.9000
Nickel	ug/L	MW-29A	11/20/2019		49.7000	*	20.9000
Nickel	ug/L	MW-29A	02/06/2020		49.2000	*	20.9000
Nickel	ug/L	MW-29A	06/30/2020		51.1000	*	20.9000
Nickel	ug/L	MW-29A	08/26/2020		57.0000	*	20.9000
Nickel	ug/L	MW-29A	11/20/2020		47.2000	*	20.9000
Nickel	ug/L	MW-29A	05/24/2021		55.5000	*	20.9000
Nickel	ug/L	MW-29A	09/28/2021		51.0000	*	20.9000
Nickel	ug/L	MW-29A	03/29/2022		63.6000	*	20.9000

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*** - Manual exclusion.
ND = Not Detected, Result = detection limit.

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Nickel	ug/L	MW-29A	09/12/2022		69.1000	*	20.9000
Nickel	ug/L	MW-29A	06/12/2023		76.0000	*	20.9000
Nickel	ug/L	MW-29A	11/15/2023		87.0000	*	20.9000
Nickel	ug/L	MW-29A	06/26/2024		63.9000	*	20.9000
Nickel	ug/L	MW-29A	12/09/2024		69.6000	*	20.9000
Nickel	ug/L	MW-29A	06/06/2025		54.0000	*	20.9000
Nickel	ug/L	MW-31A	11/05/2019		20.4000		20.9000
Nickel	ug/L	MW-31A	02/07/2020		21.6000	*	20.9000
Nickel	ug/L	MW-31A	06/18/2020		27.5000	*	20.9000
Nickel	ug/L	MW-31A	08/26/2020		47.0000	*	20.9000
Nickel	ug/L	MW-31A	11/18/2020		52.8000	*	20.9000
Nickel	ug/L	MW-31A	05/19/2021		53.4000	*	20.9000
Nickel	ug/L	MW-31A	09/29/2021		47.7000	*	20.9000
Nickel	ug/L	MW-31A	03/15/2022		28.1000	*	20.9000
Nickel	ug/L	MW-31A	09/07/2022		112.0000	*	20.9000
Nickel	ug/L	MW-31A	06/20/2023		39.7000	*	20.9000
Nickel	ug/L	MW-31A	11/14/2023		30.8000	*	20.9000
Nickel	ug/L	MW-31A	07/01/2024		30.3000	*	20.9000
Nickel	ug/L	MW-31A	12/17/2024		32.3000	*	20.9000
Nickel	ug/L	MW-31A	06/05/2025		30.8000	*	20.9000
Nickel	ug/L	MW-42A	08/31/2022		37.2000	*	20.9000
Nickel	ug/L	MW-42A	12/06/2022		14.7000		20.9000
Nickel	ug/L	MW-42A	06/07/2023		8.6200		20.9000

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ND = Not Detected, Result = detection limit.

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Nickel	ug/L	MW-42A	08/28/2023		19.3000		20.9000
Nickel	ug/L	MW-42A	11/02/2023		14.8000		20.9000
Nickel	ug/L	MW-42A	06/18/2024		16.6000		20.9000
Nickel	ug/L	MW-42A	12/05/2024		27.6000	*	20.9000
Nickel	ug/L	MW-42A	02/14/2025		23.5000	*	20.9000
Nickel	ug/L	MW-42A	06/05/2025		26.1000	*	20.9000
Nickel	ug/L	MW-43A	09/01/2022		24.4000	*	20.9000
Nickel	ug/L	MW-43A	12/06/2022		25.6000	*	20.9000
Nickel	ug/L	MW-43A	06/07/2023		31.0000	*	20.9000
Nickel	ug/L	MW-43A	08/28/2023		41.5000	*	20.9000
Nickel	ug/L	MW-43A	11/02/2023		36.4000	*	20.9000
Nickel	ug/L	MW-43A	06/11/2024		17.3000		20.9000
Nickel	ug/L	MW-43A	12/03/2024		25.9000	*	20.9000
Nickel	ug/L	MW-43A	06/05/2025		22.5000	*	20.9000
Nickel	ug/L	MW-44A	09/01/2022		21.7000	*	20.9000
Nickel	ug/L	MW-44A	12/06/2022		51.8000	*	20.9000
Nickel	ug/L	MW-44A	06/07/2023		28.7000	*	20.9000
Nickel	ug/L	MW-44A	08/28/2023		70.2000	*	20.9000
Nickel	ug/L	MW-44A	11/02/2023		66.6000	*	20.9000
Nickel	ug/L	MW-44A	06/26/2024		21.6000	*	20.9000
Nickel	ug/L	MW-44A	12/03/2024		34.2000	*	20.9000
Nickel	ug/L	MW-44A	06/05/2025		39.1000	*	20.9000
Nickel	ug/L	MW-46A	11/13/2023		33.8000	*	20.9000

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

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Nickel	ug/L	MW-46A	01/23/2024		35.0000	*	20.9000
Nickel	ug/L	MW-46A	06/11/2024		26.6000	*	20.9000
Nickel	ug/L	MW-46A	09/05/2024		26.6000	*	20.9000
Nickel	ug/L	MW-46A	12/09/2024		28.2000	*	20.9000
Nickel	ug/L	MW-46A	06/06/2025		24.0000	*	20.9000
Zinc	ug/L	MW-11	10/12/2007		134.0000	*	18.6000
Zinc	ug/L	MW-11	01/09/2008	ND	20.0000		18.6000
Zinc	ug/L	MW-11	04/08/2008		61.6000	*	18.6000
Zinc	ug/L	MW-11	07/16/2008		31.8000	*	18.6000
Zinc	ug/L	MW-11	12/28/2009		177.0000	*	18.6000
Zinc	ug/L	MW-11	02/25/2010		28.8000	*	18.6000
Zinc	ug/L	MW-11	02/25/2011		92.9000	*	18.6000
Zinc	ug/L	MW-11	04/13/2011		23.5000	*	18.6000
Zinc	ug/L	MW-11	08/25/2011		28.3000	*	18.6000
Zinc	ug/L	MW-11	04/24/2012		32.1000	*	18.6000
Zinc	ug/L	MW-11	10/24/2012		40.7000	*	18.6000
Zinc	ug/L	MW-11	10/31/2018		119.0000	*	18.6000
Zinc	ug/L	MW-11	12/17/2018		82.8000	*	18.6000
Zinc	ug/L	MW-11	06/03/2021		140.0000	*	18.6000
Zinc	ug/L	MW-11	08/03/2021		70.1000	*	18.6000
Zinc	ug/L	MW-11	09/07/2022		146.0000	*	18.6000
Zinc	ug/L	MW-11	06/20/2023		98.5000	*	18.6000
Zinc	ug/L	MW-11	07/01/2024		60.0000	*	18.6000

* - 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
Zinc	ug/L	MW-44A	09/01/2022	ND	10.0000		18.6000
Zinc	ug/L	MW-44A	12/06/2022		21.3000	*	18.6000
Zinc	ug/L	MW-44A	06/07/2023	ND	6.4000		18.6000
Zinc	ug/L	MW-44A	08/28/2023		27.3000	*	18.6000
Zinc	ug/L	MW-44A	11/02/2023		26.0000	*	18.6000
Zinc	ug/L	MW-44A	06/26/2024	ND	9.7000		18.6000
Zinc	ug/L	MW-44A	12/03/2024	ND	9.7000		18.6000
Zinc	ug/L	MW-44A	06/05/2025		26.5000	*	18.6000

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

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

Step	Equation	Description
1	PL = median(X) = **0.69**	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **4.57**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

Worksheet 1 - Upgradient vs. Downgradient Comparisons
Barium (ug/L)
Lognormal Prediction Limit

Step	Equation	Description
1	$Y = \log_e(X)$	Transform to natural logarithmic scale.
2	$\overline{Y}$ = **sum[Y]** / **N** = **201.961** / **42** = **4.809**	Compute mean on a natural log scale.
3	$S_Y = ((\mathbf{sum[Y^2]} - \mathbf{sum[Y]}^2/\mathbf{N}) / (\mathbf{N}-1))^{½}$ $= ((\mathbf{976.334} - \mathbf{40788.208}/\mathbf{42}) / (\mathbf{42}-1))^{½}$ = **0.356**	Compute sd on a natural log scale.
4	alpha = min[$(1-.95^{1/\mathbf{K}})^{1/3}$, .01] = min[$(1-.95^{1/\mathbf{432}})^{1/3}$, .01] = **0.01**	Adjusted per comparison false positive rate. Pass initial or 1 of 2 resamples.
5	$PL = \exp[\overline{\mathbf{Y}} + \mathbf{tS_Y}(1+1/\mathbf{N})^{½}]$ $= \exp[\mathbf{4.809}$ $+ (\mathbf{2.421}*\mathbf{0.356})(1+1/\mathbf{42})^{½}]$ = **292.857**	One-sided lognormal prediction limit (t is Student's t on N-1 degrees of freedom and 1-alpha confidence level).

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

Step	Equation	Description
1	PL = median(X) = **0.27**	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **0.209**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **2.63**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **3.4**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **7.64**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

Worksheet 1 - Upgradient vs. Downgradient Comparisons
Field pH (SU)
Normal Prediction Limit

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **280.67** / **39** = **7.197**	Compute upgradient mean.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2028.483** - **78775.649**/**39**) / (**39**-1))^{½} = **0.476**	Compute upgradient sd.
3	alpha = min[(1-.95$^{1/\mathbf{K}}$)$^{1/3}$, .01] = min[(1-.95$^{1/\mathbf{432}}$)$^{1/3}$, .01] = **0.01**	Adjusted per comparison false positive rate. Pass initial or 1 of 2 resamples.
4	PL = $\overline{\mathbf{X}}$ + **tS**(1+1/**N**)^{½} = **7.197** + (**2.428*****0.476**)(1+1/**39**)^{½} = **8.366**	One-sided normal prediction limit (t is Student's t on N-1 degrees of freedom and 1-alpha confidence level).

Worksheet 1 - Upgradient vs. Downgradient Comparisons
Field Specific Conductance (umhos/cm)
Lognormal Prediction Limit

Step	Equation	Description
1	$Y = \log_e(X)$	Transform to natural logarithmic scale.
2	$\overline{Y}$ = **sum[Y]** / **N** = **250.727** / **39** = **6.429**	Compute mean on a natural log scale.
3	$S_Y = ((\mathbf{sum[Y^2]} - \mathbf{sum[Y]}^2/\mathbf{N}) / (\mathbf{N}-1))^{½}$ $= ((\mathbf{1615.677} - \mathbf{62863.858}/\mathbf{39}) / (\mathbf{39}-1))^{½}$ = **0.316**	Compute sd on a natural log scale.
4	alpha = min[$(1-.95^{1/\mathbf{K}})^{1/3}$, .01] = min[$(1-.95^{1/\mathbf{432}})^{1/3}$, .01] = **0.01**	Adjusted per comparison false positive rate. Pass initial or 1 of 2 resamples.
5	$PL = \exp[\overline{\mathbf{Y}} + \mathbf{tS_Y}(1+1/\mathbf{N})^{½}]$ $= \exp[\mathbf{6.429}$ $+ (\mathbf{2.428}*\mathbf{0.316})(1+1/\mathbf{39})^{½}]$ = **1345.996**	One-sided lognormal prediction limit (t is Student's t on N-1 degrees of freedom and 1-alpha confidence level).

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

Step	Equation	Description
1	PL = max(X) = **3.25**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **20.9**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **1.41**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **1.24**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **0.26**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

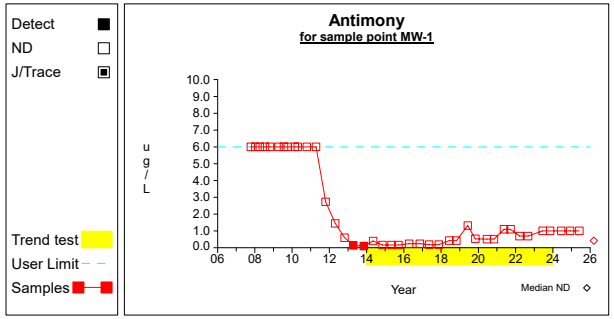
Worksheet 1 - Upgradient vs. Downgradient Comparisons
Vanadium (ug/L)
Nonparametric Prediction Limit

Step	Equation	Description
1	PL = max(X) = **1.77**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

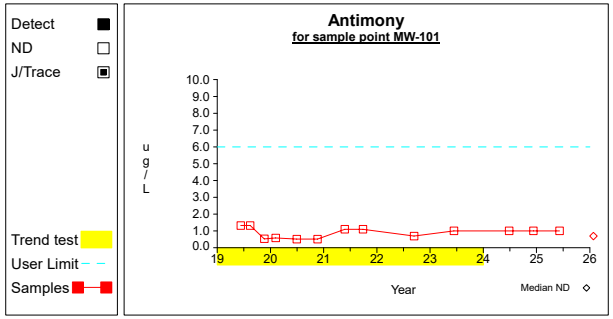
Worksheet 1 - Upgradient vs. Downgradient Comparisons
Zinc (ug/L)
Nonparametric Prediction Limit

Step	Equation	Description
1	PL = max(X) = **18.6**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

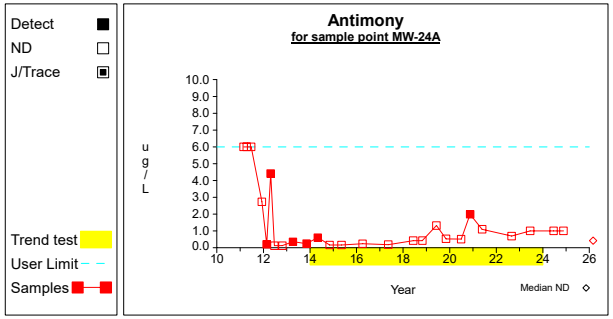
Time Series



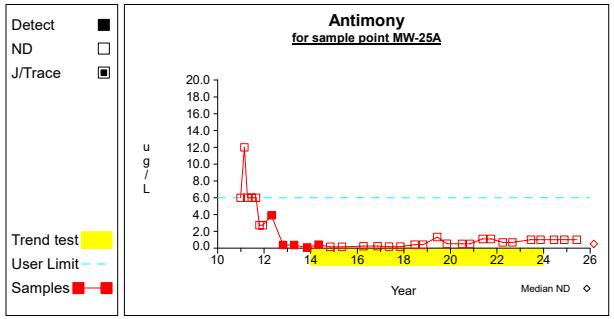
Graph 1



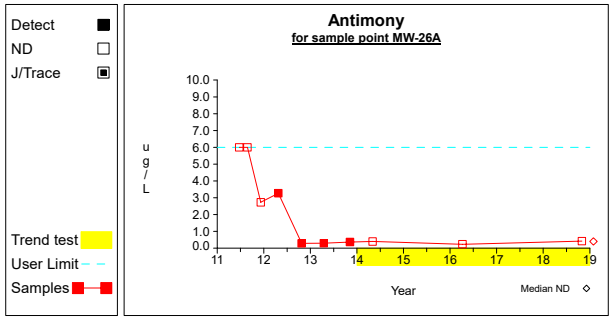
Graph 2



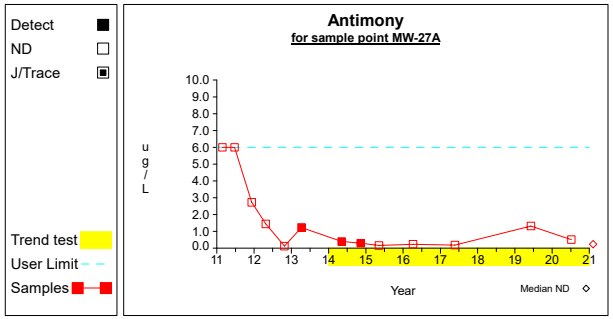
Graph 3



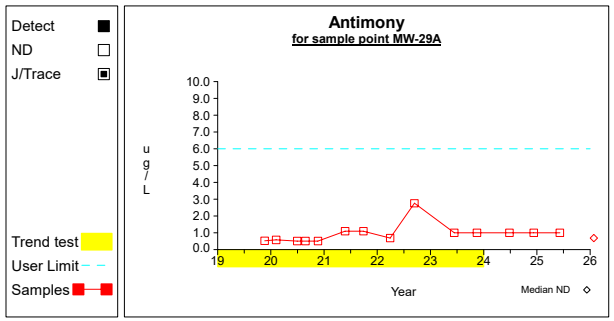
Graph 4



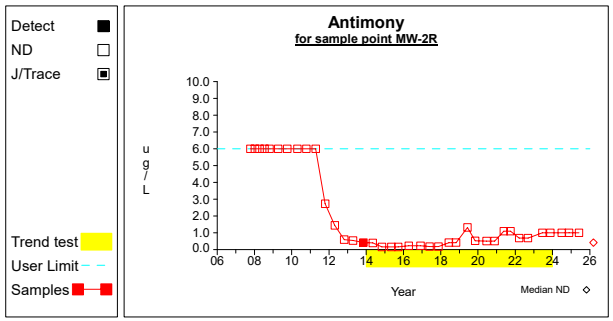
Graph 5



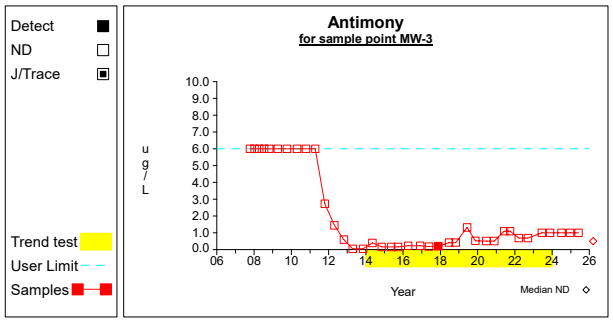
Graph 6



Graph 7

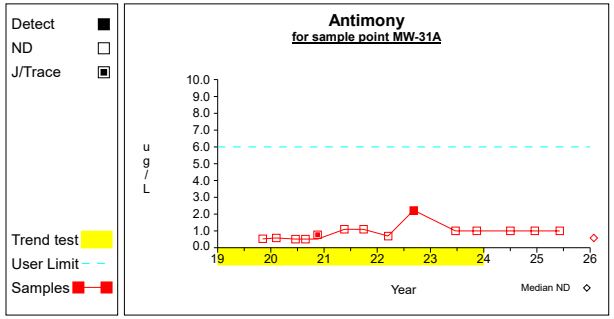


Graph 8

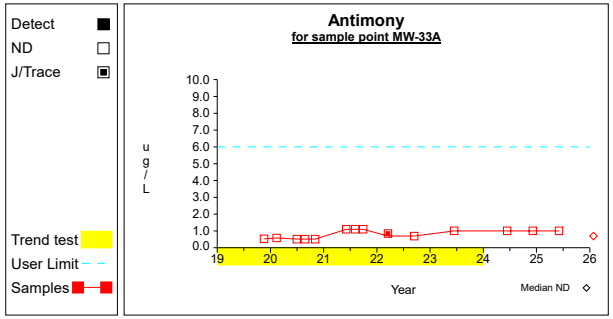


Graph 9

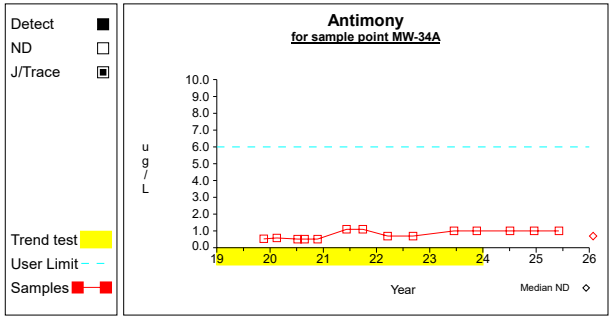
Time Series



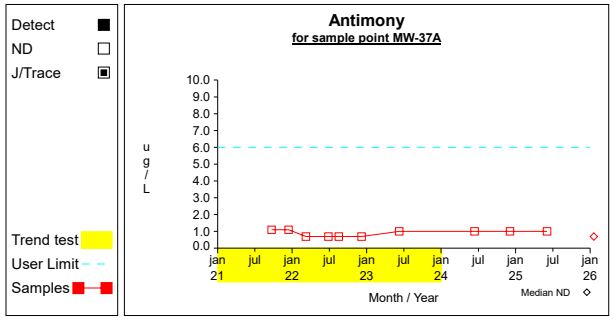
Graph 10



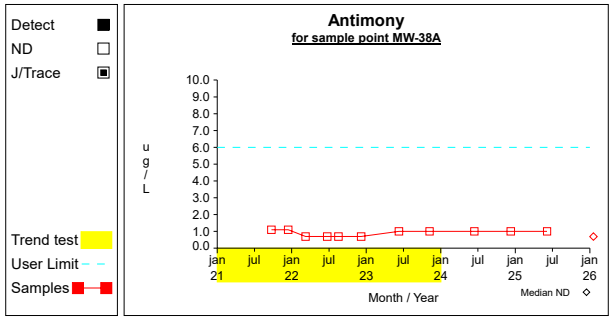
Graph 11



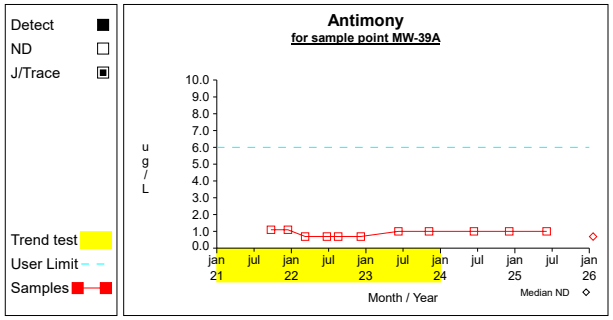
Graph 12



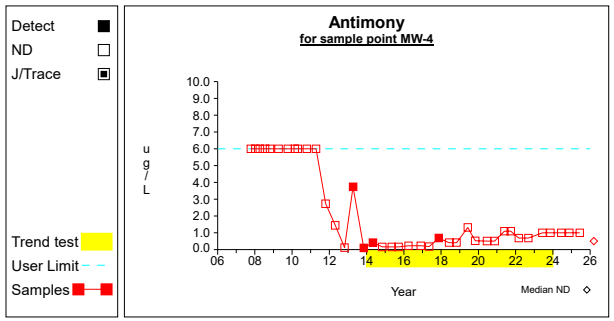
Graph 13



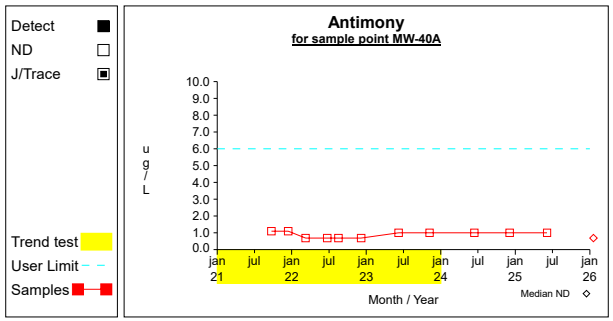
Graph 14



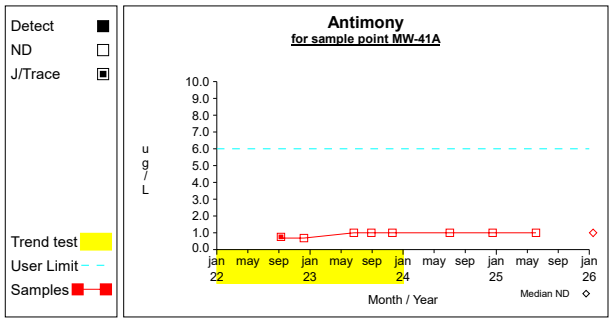
Graph 15



Graph 16

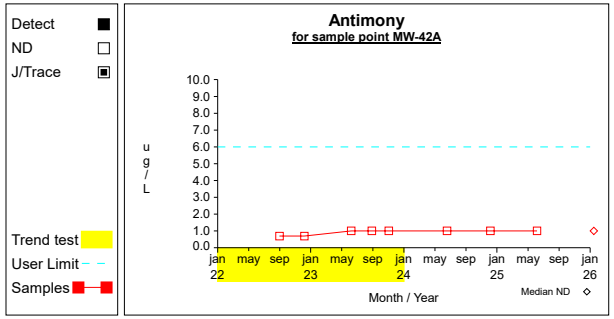


Graph 17

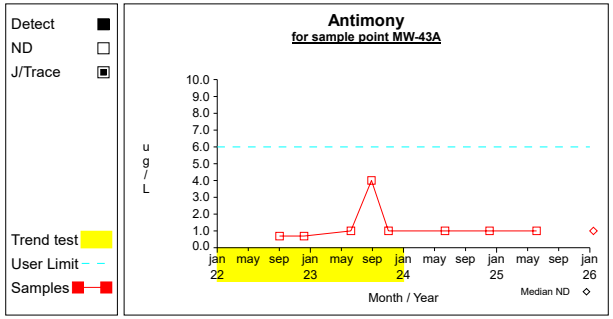


Graph 18

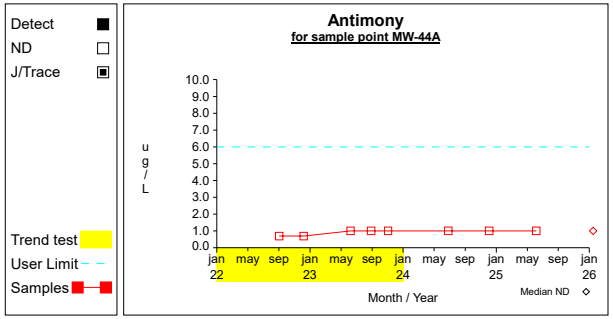
Time Series



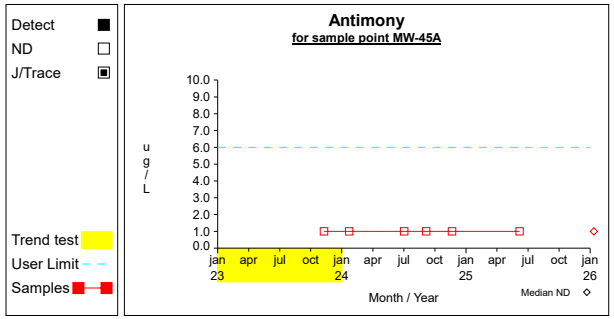
Graph 19



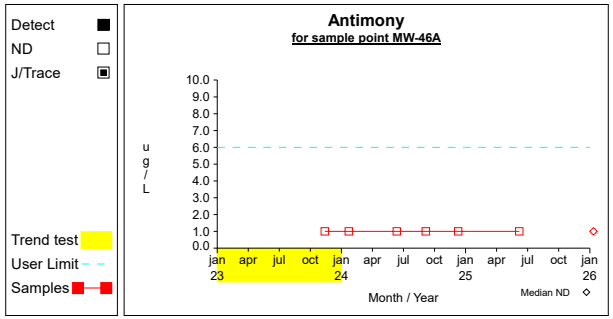
Graph 20



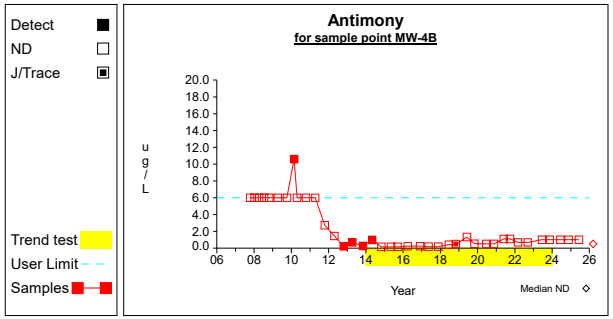
Graph 21



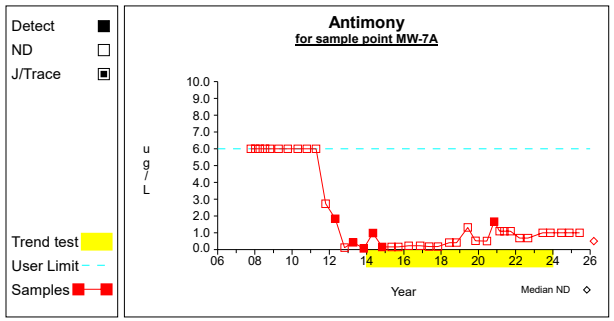
Graph 22



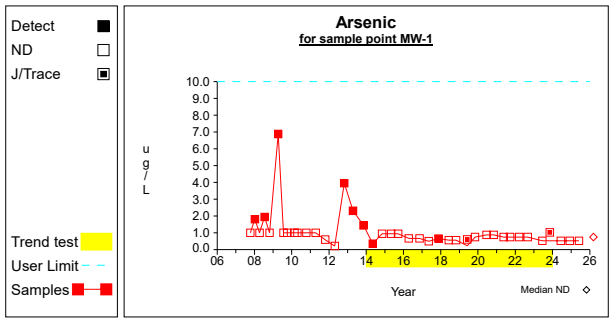
Graph 23



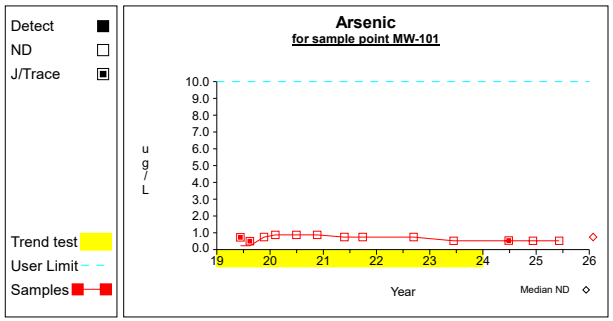
Graph 24



Graph 25

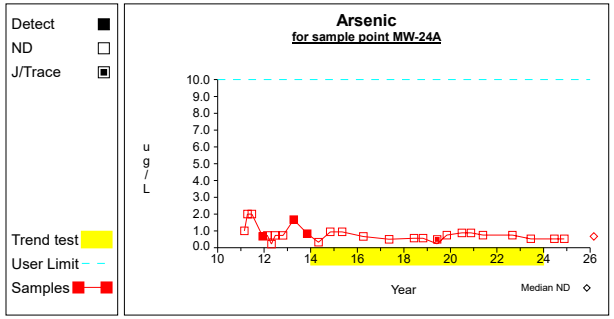


Graph 26

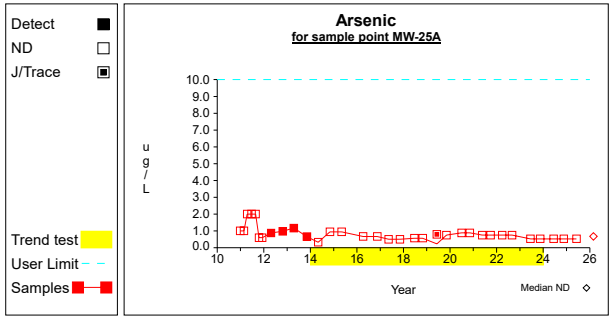


Graph 27

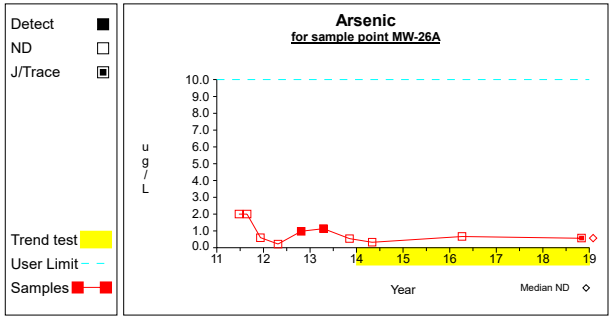
Time Series



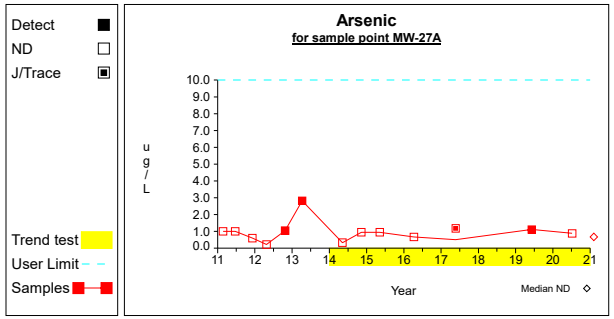
Graph 28



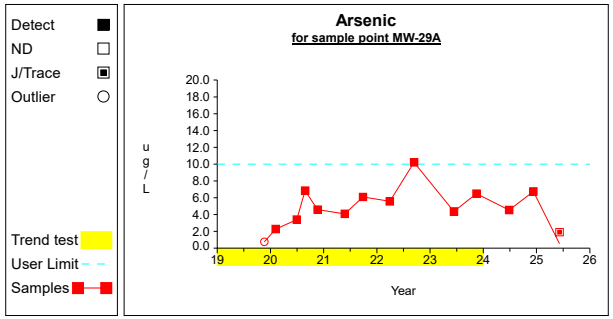
Graph 29



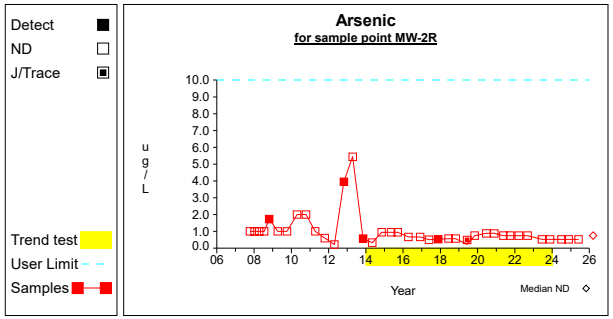
Graph 30



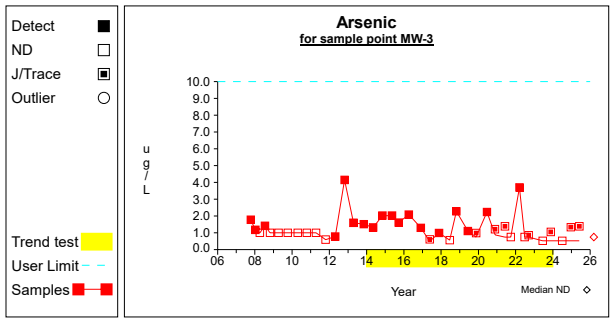
Graph 31



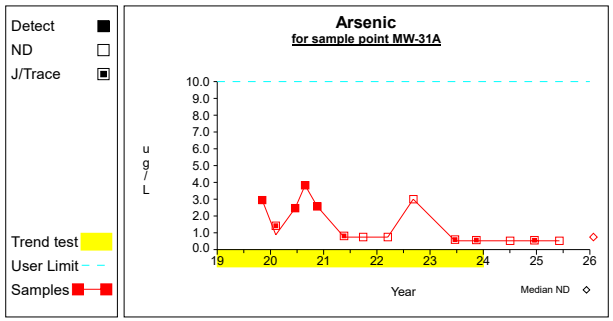
Graph 32



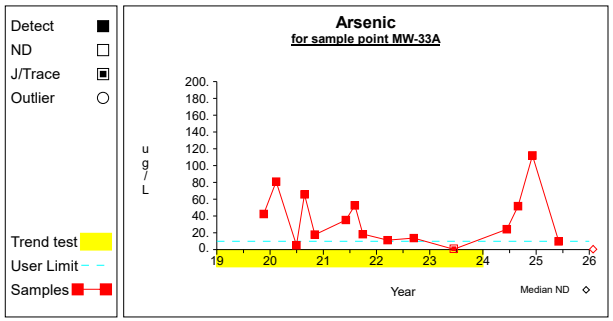
Graph 33



Graph 34

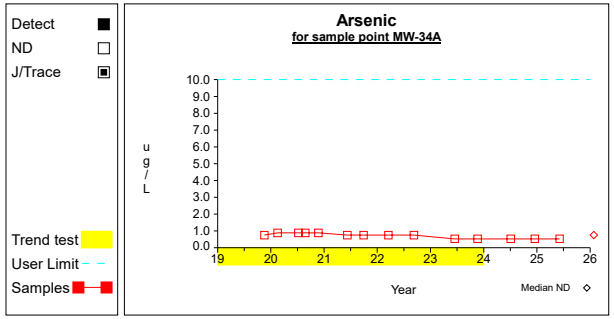


Graph 35

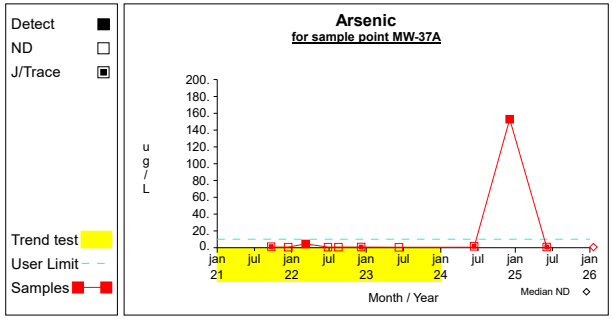


Graph 36

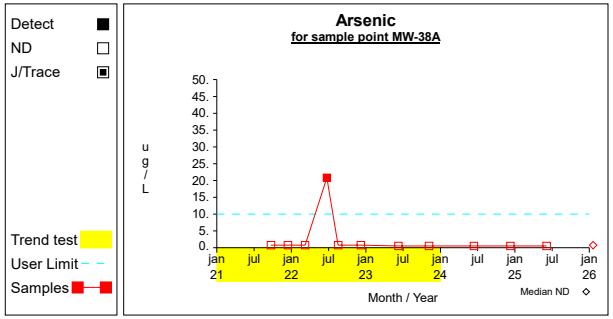
Time Series



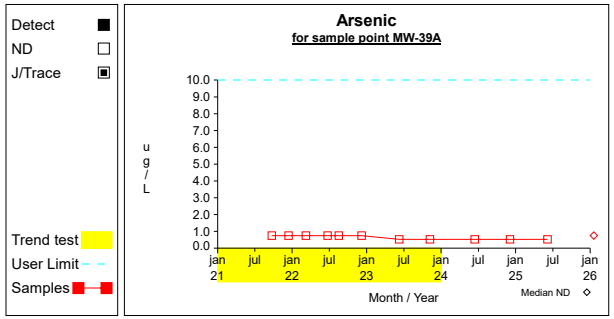
Graph 37



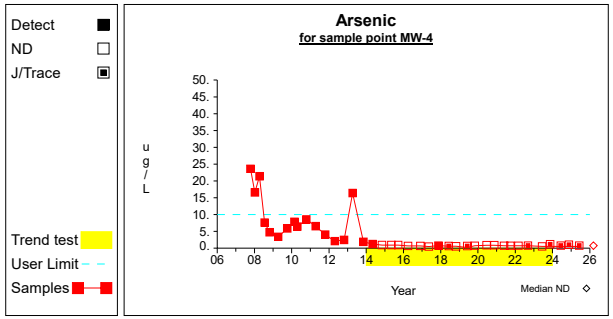
Graph 38



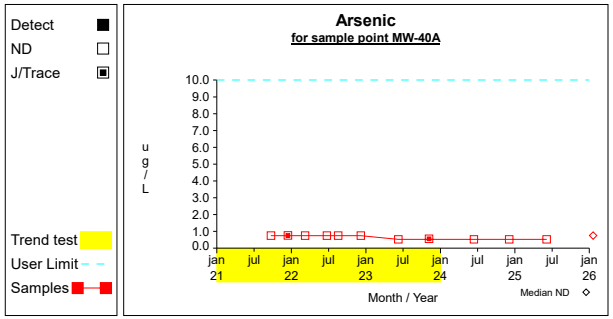
Graph 39



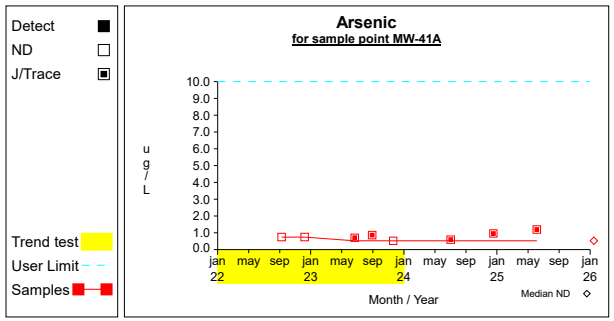
Graph 40



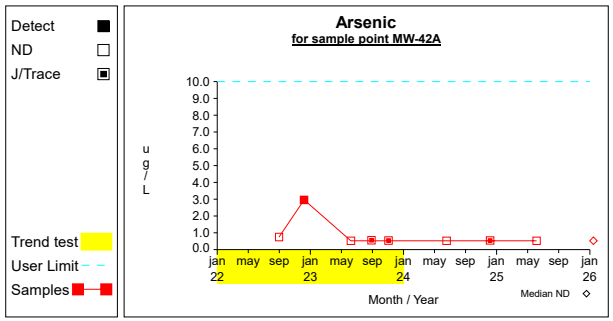
Graph 41



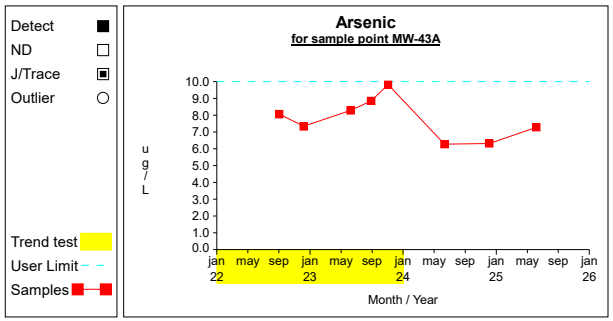
Graph 42



Graph 43

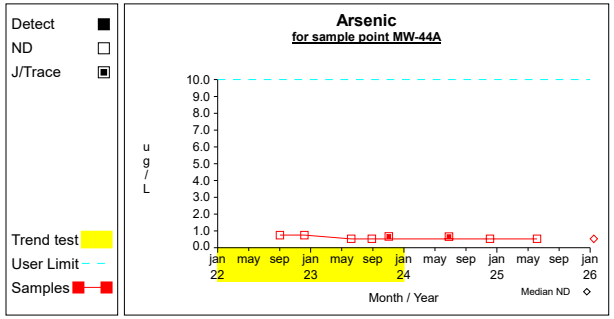


Graph 44

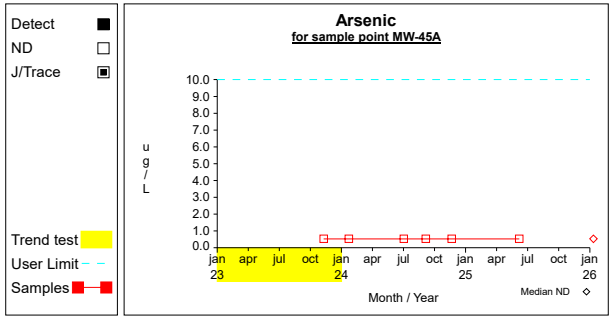


Graph 45

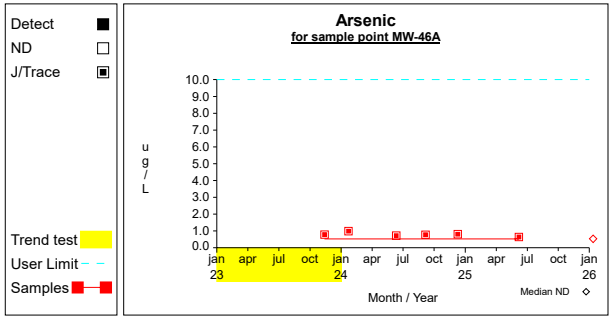
Time Series



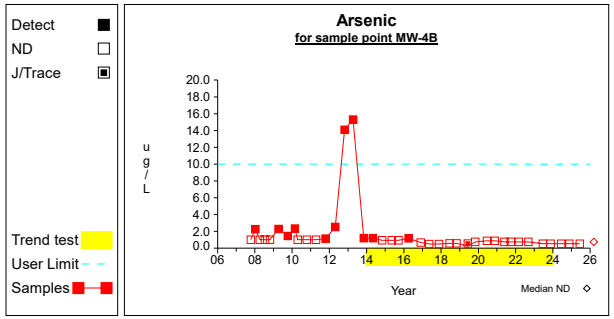
Graph 46



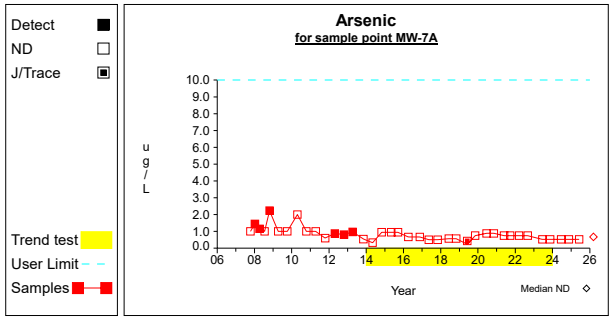
Graph 47



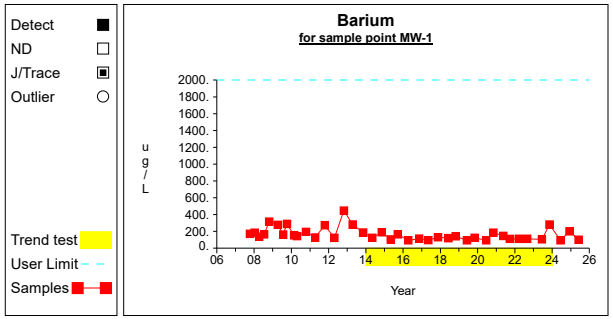
Graph 48



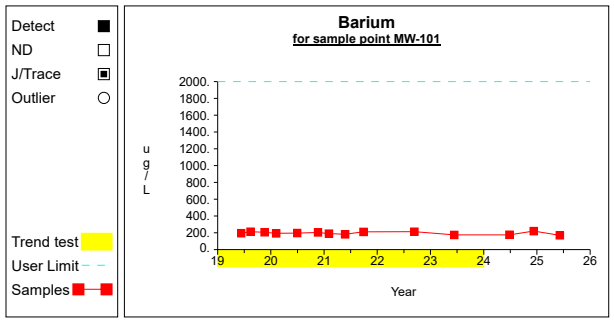
Graph 49



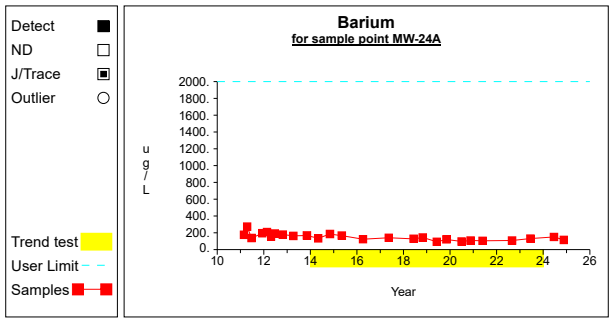
Graph 50



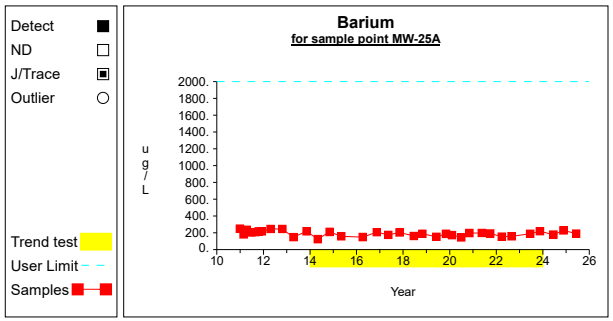
Graph 51



Graph 52

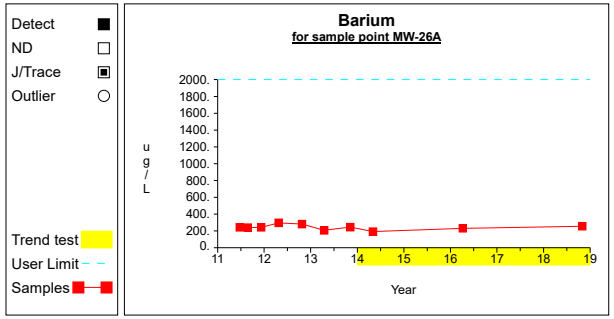


Graph 53

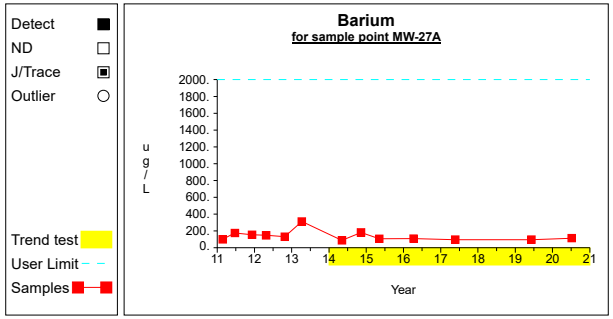


Graph 54

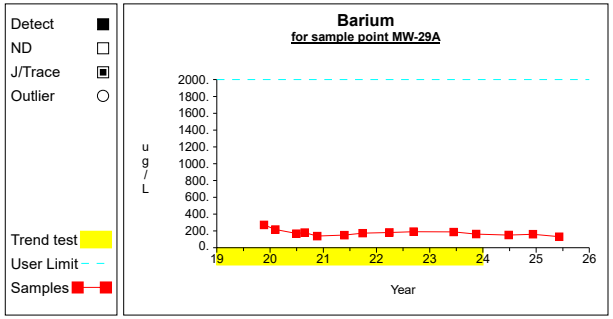
Time Series



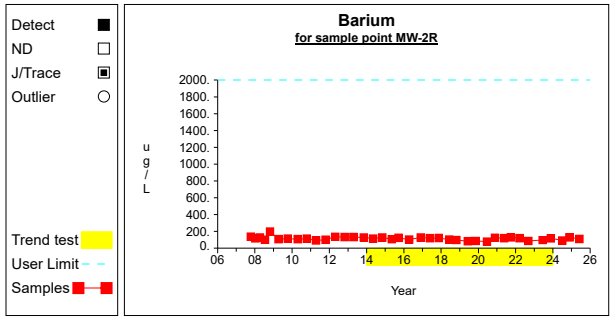
Graph 55



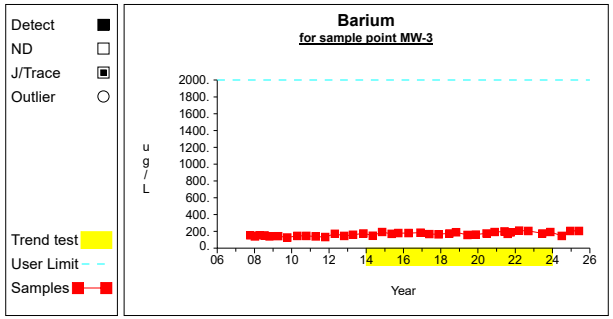
Graph 56



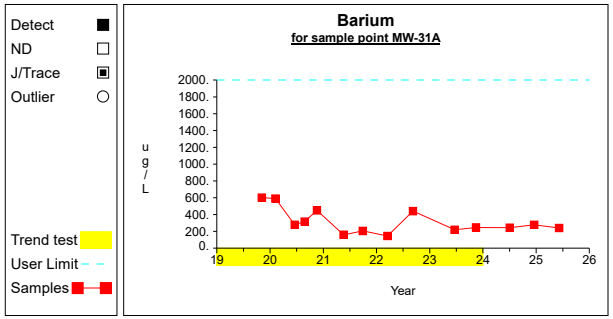
Graph 57



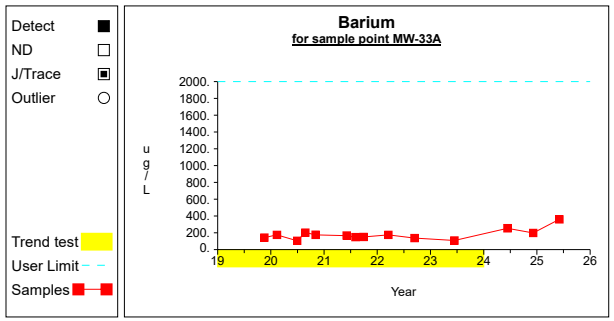
Graph 58



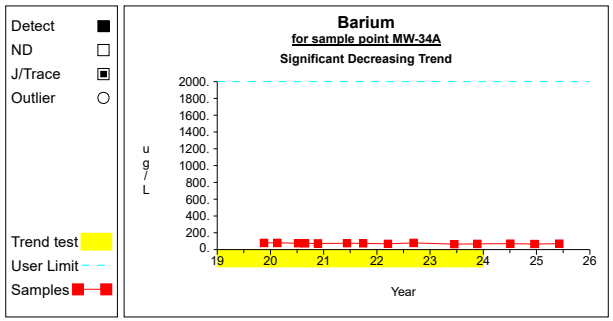
Graph 59



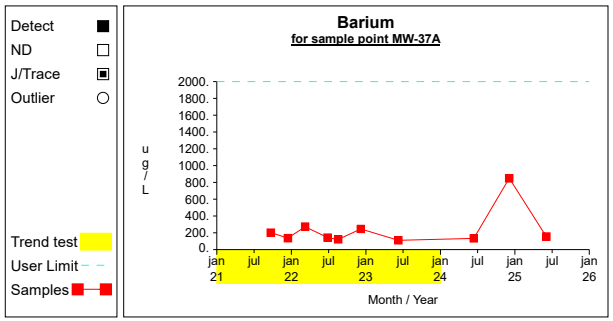
Graph 60



Graph 61

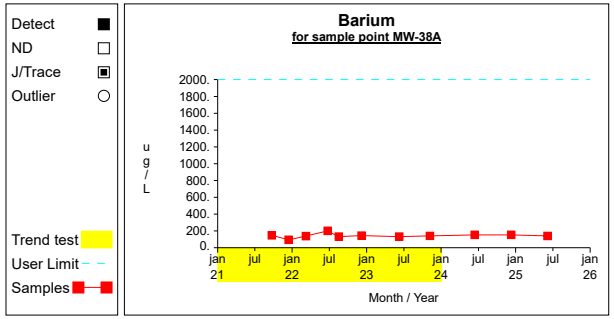


Graph 62

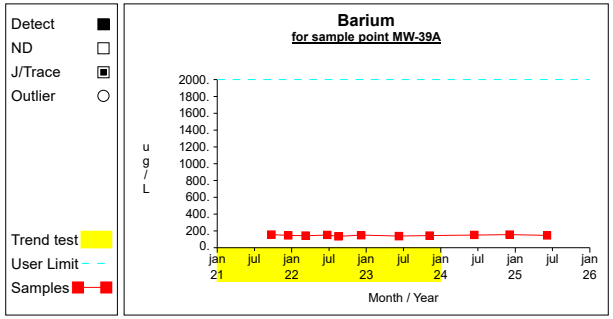


Graph 63

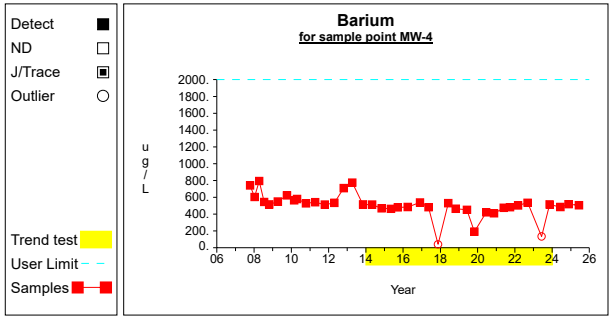
Time Series



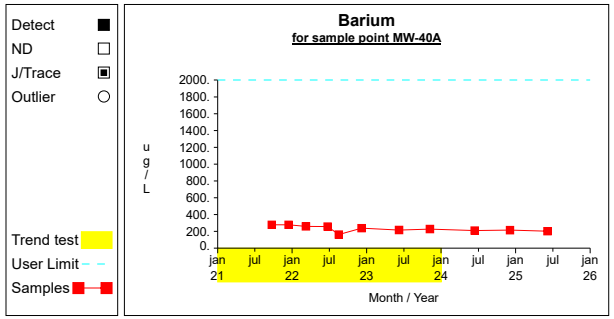
Graph 64



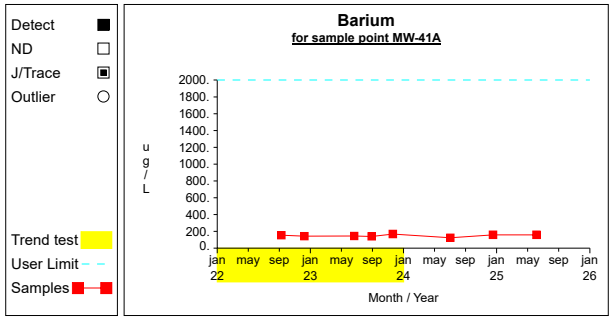
Graph 65



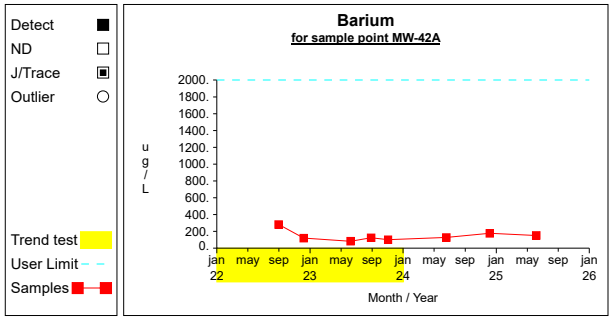
Graph 66



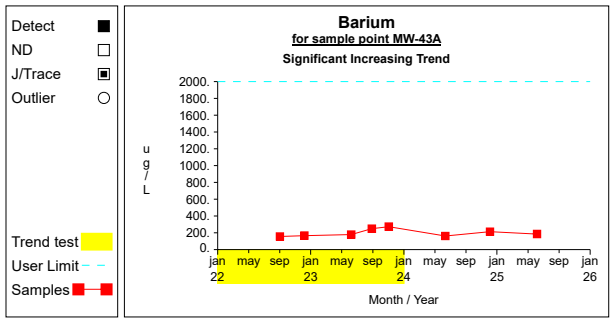
Graph 67



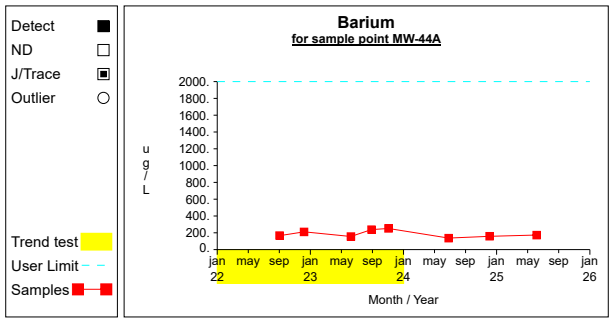
Graph 68



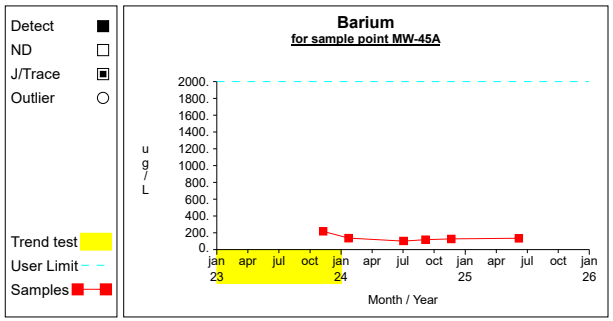
Graph 69



Graph 70

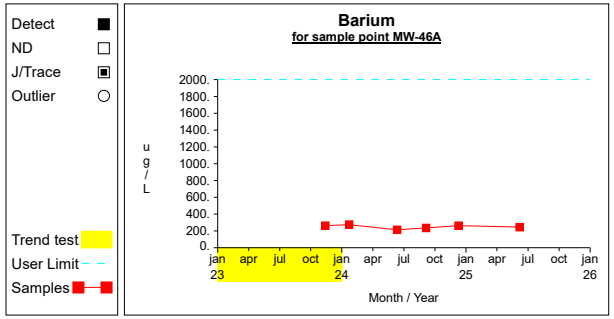


Graph 71

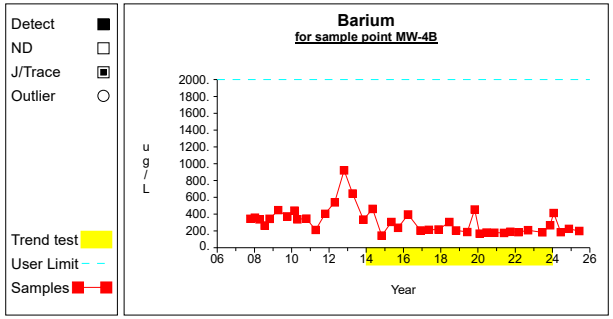


Graph 72

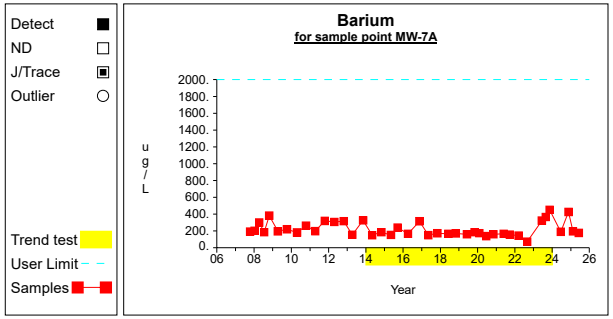
Time Series



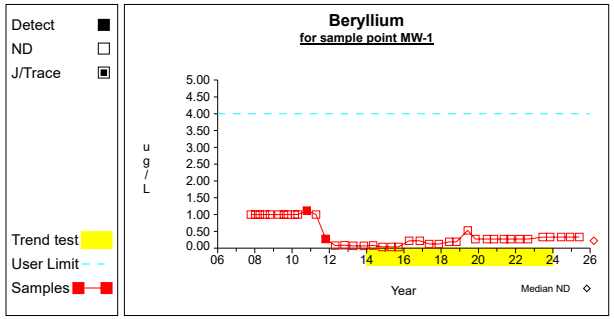
Graph 73



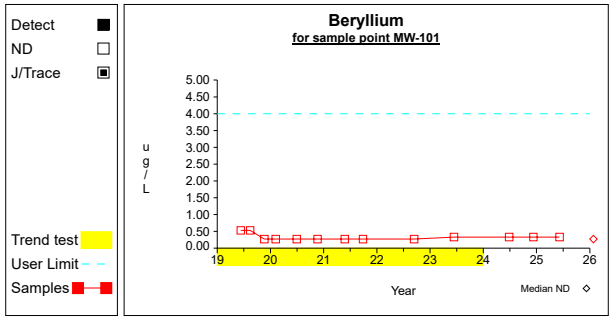
Graph 74



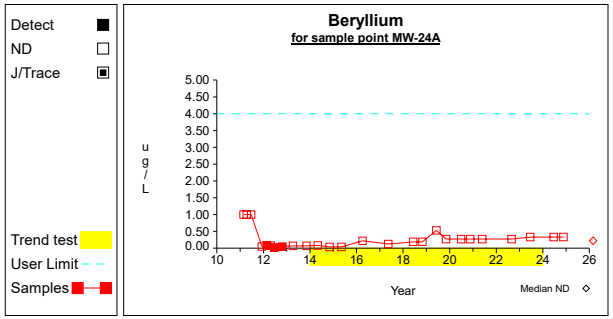
Graph 75



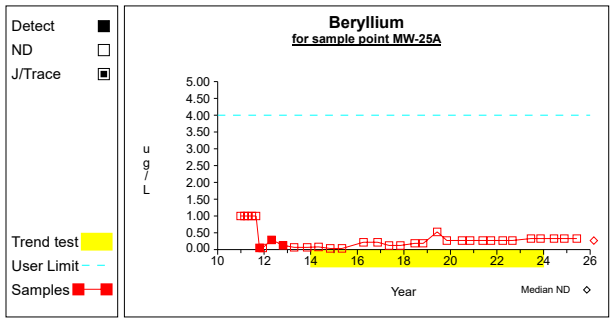
Graph 76



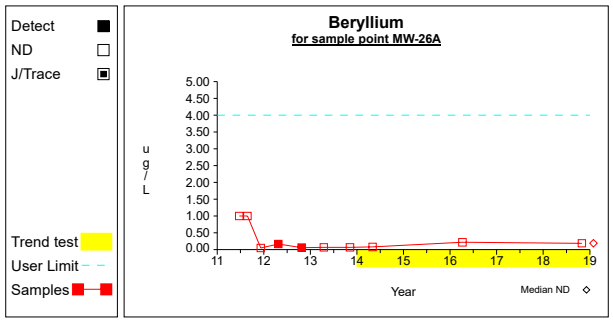
Graph 77



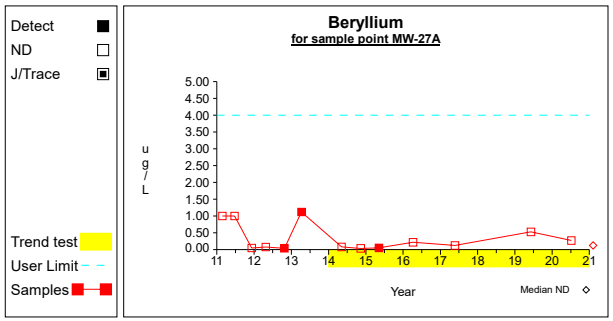
Graph 78



Graph 79

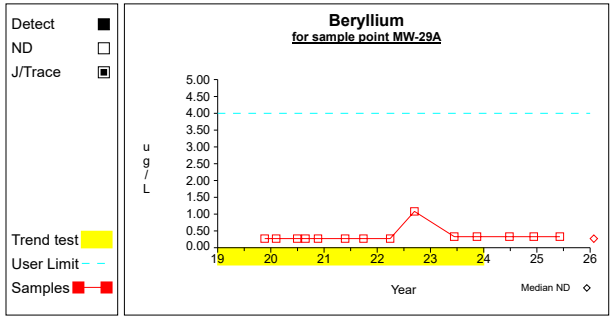


Graph 80

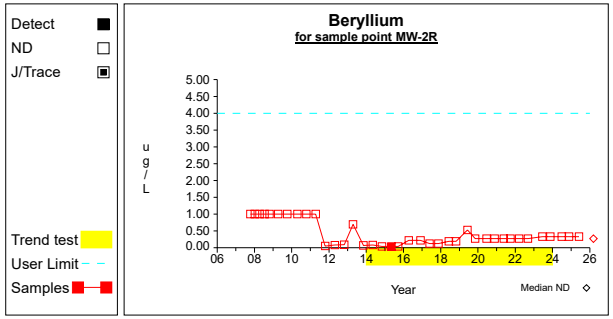


Graph 81

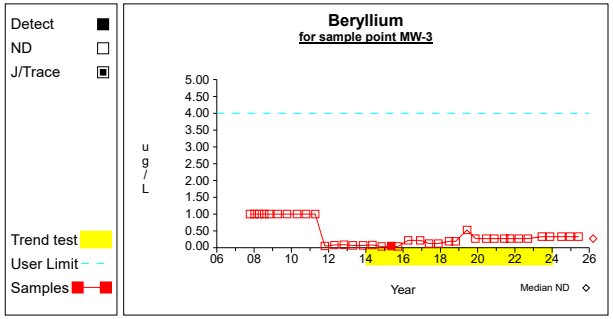
Time Series



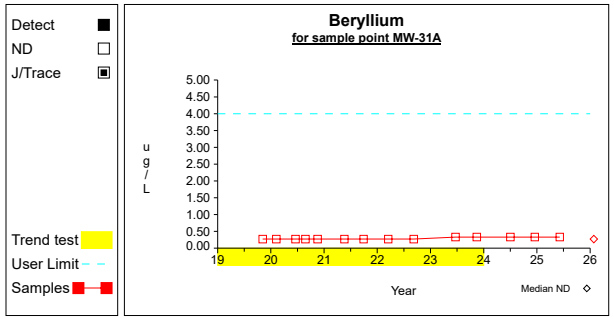
Graph 82



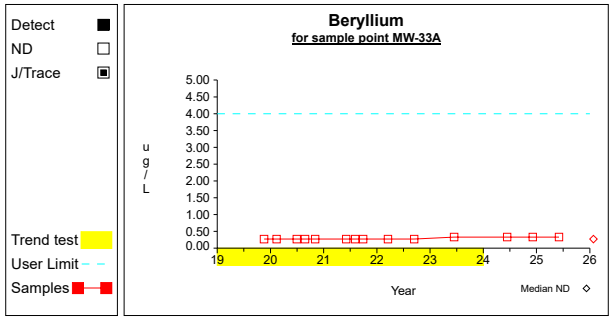
Graph 83



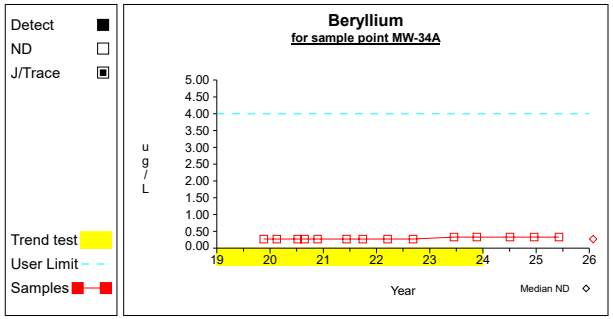
Graph 84



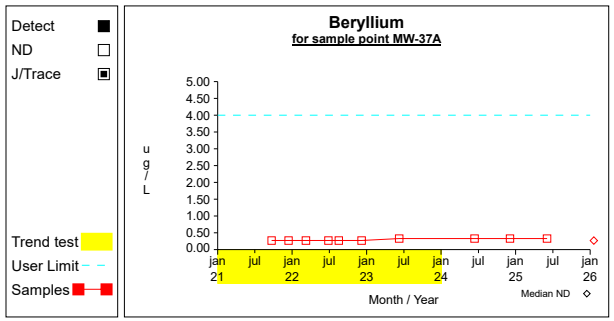
Graph 85



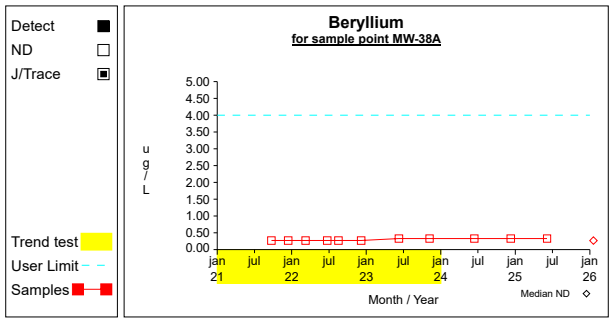
Graph 86



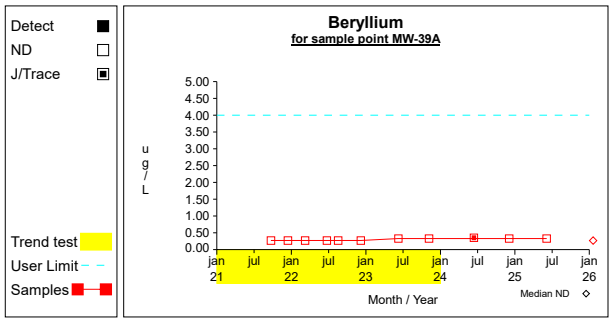
Graph 87



Graph 88

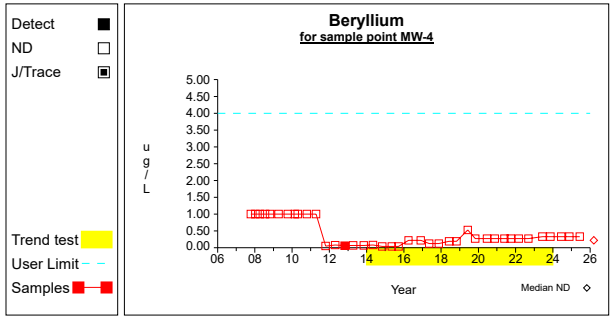


Graph 89

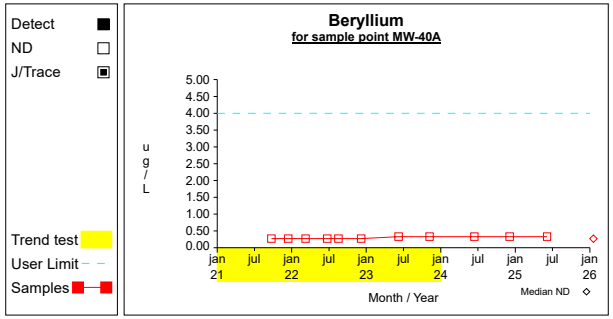


Graph 90

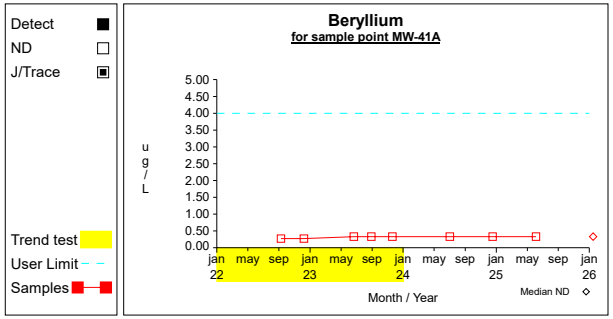
Time Series



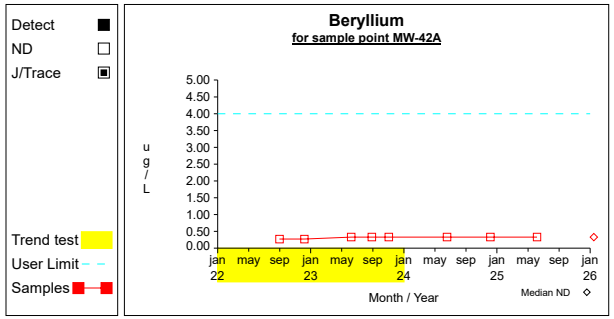
Graph 91



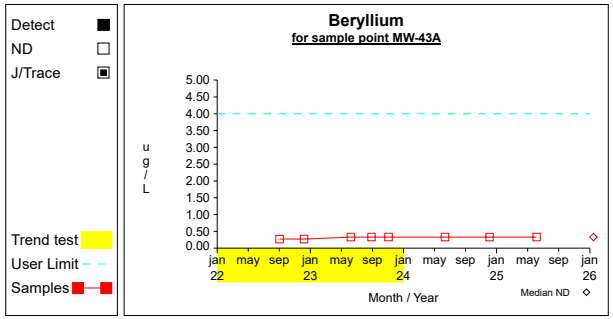
Graph 92



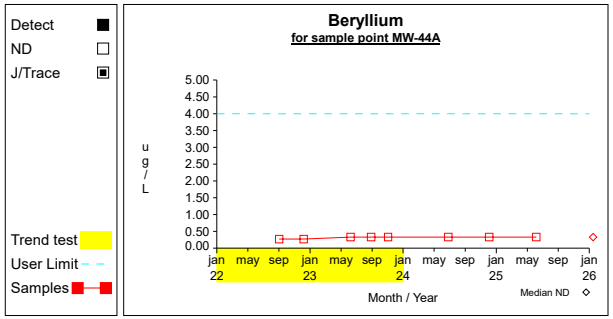
Graph 93



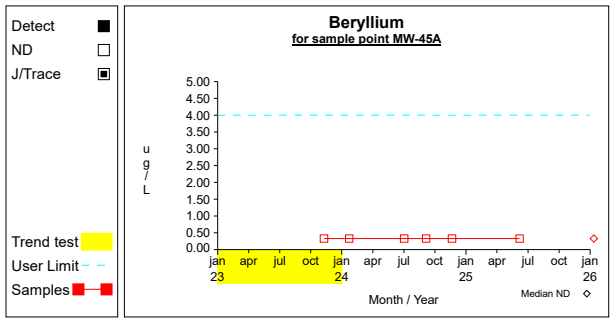
Graph 94



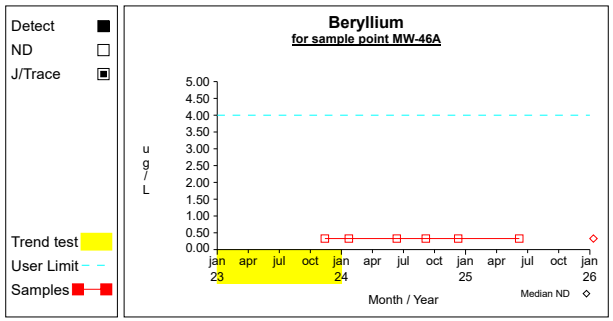
Graph 95



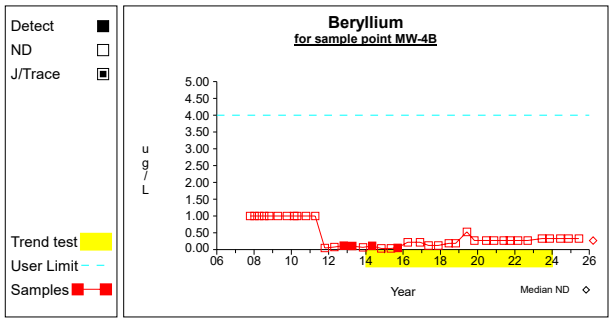
Graph 96



Graph 97

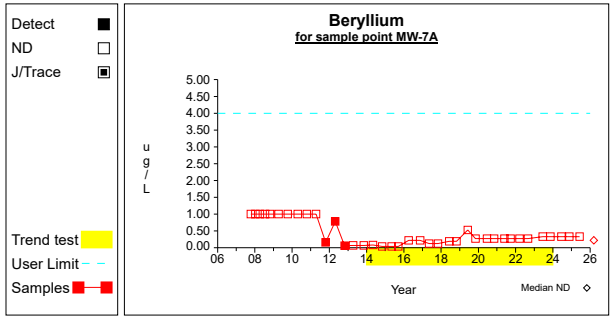


Graph 98

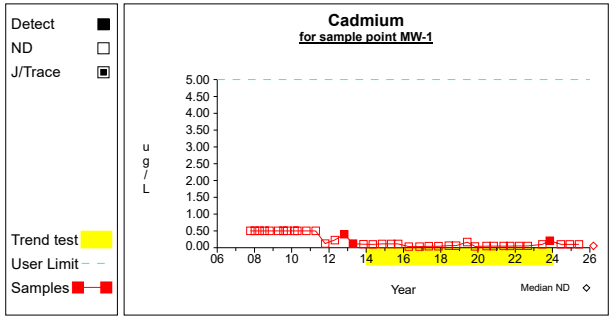


Graph 99

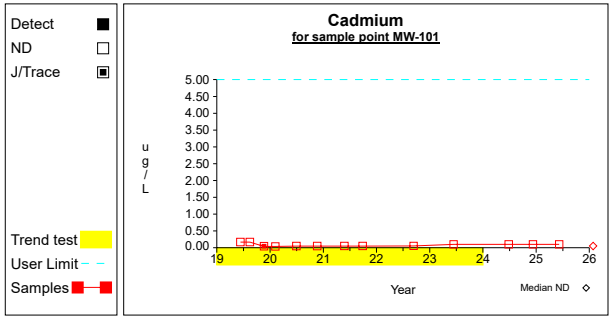
Time Series



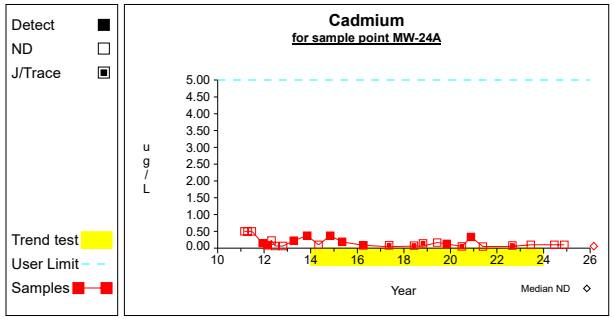
Graph 100



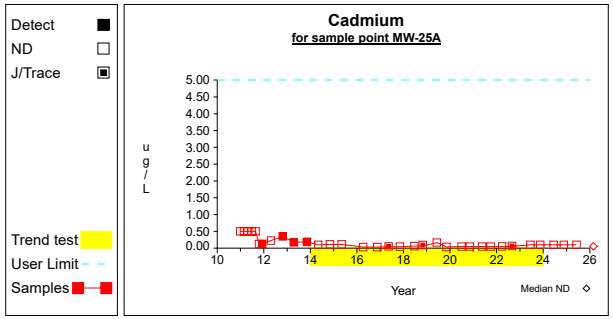
Graph 101



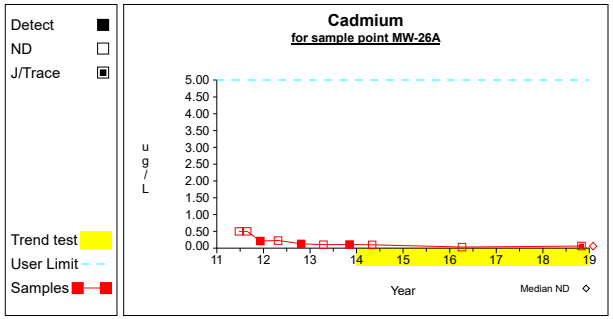
Graph 102



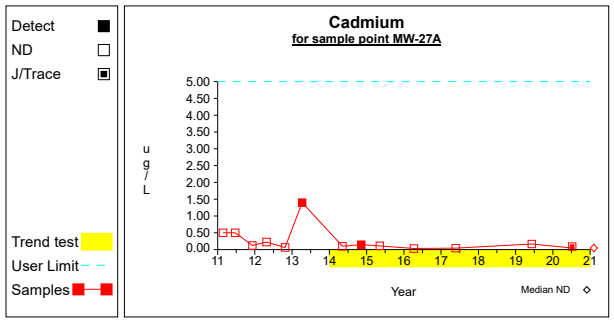
Graph 103



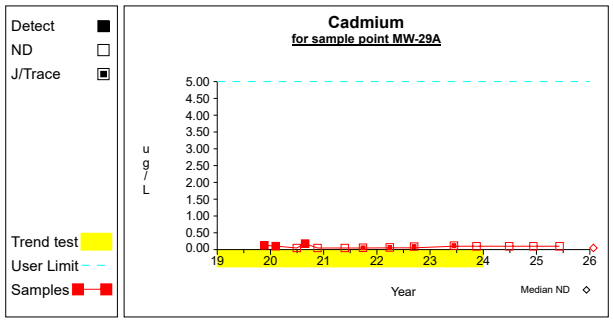
Graph 104



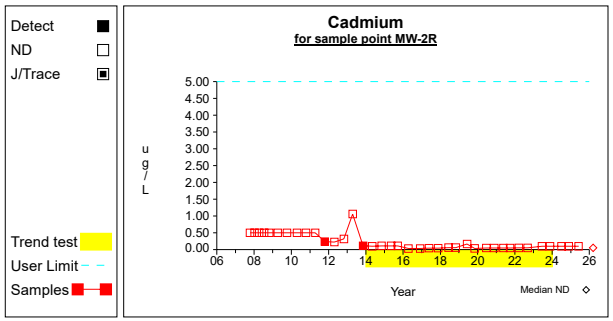
Graph 105



Graph 106

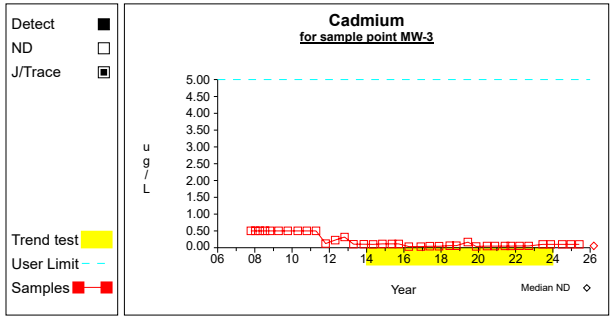


Graph 107

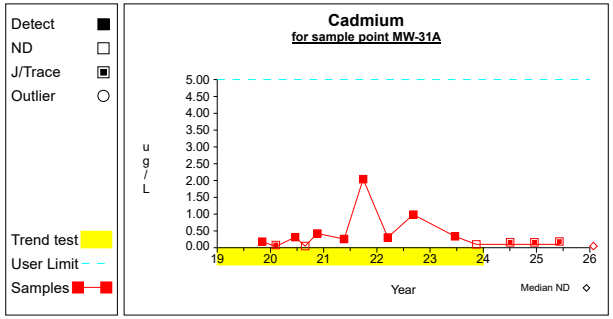


Graph 108

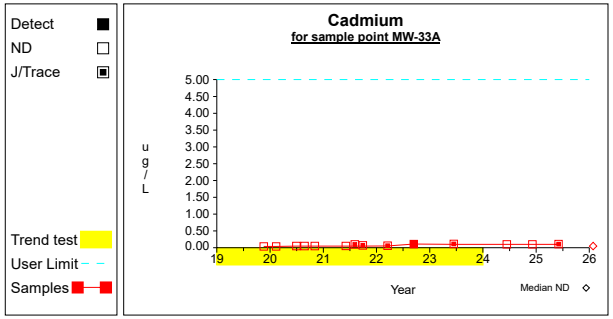
Time Series



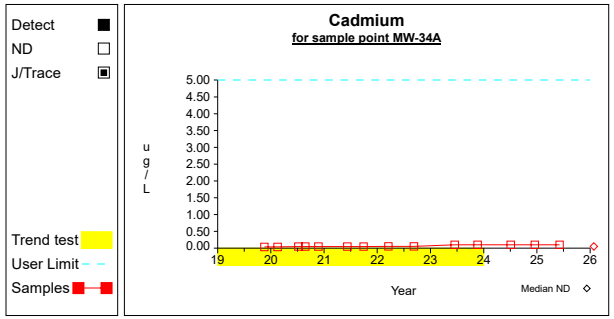
Graph 109



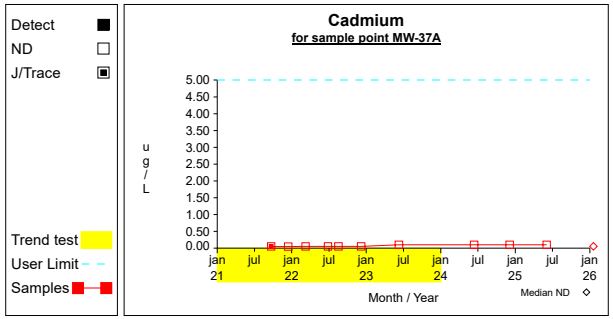
Graph 110



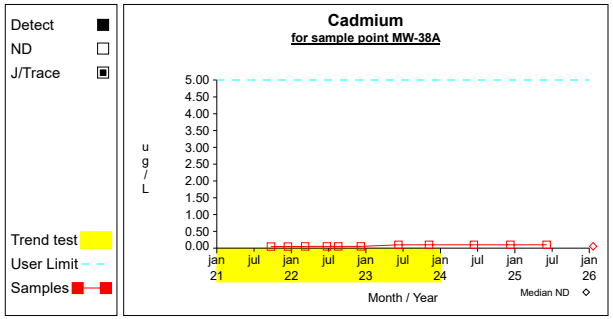
Graph 111



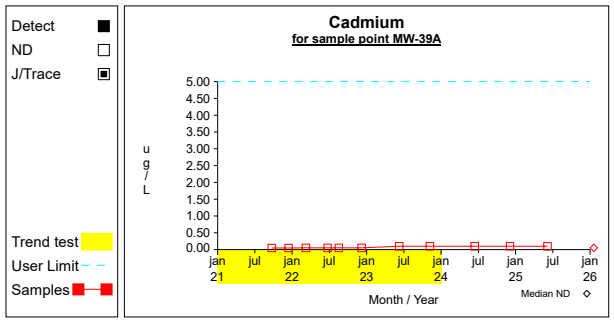
Graph 112



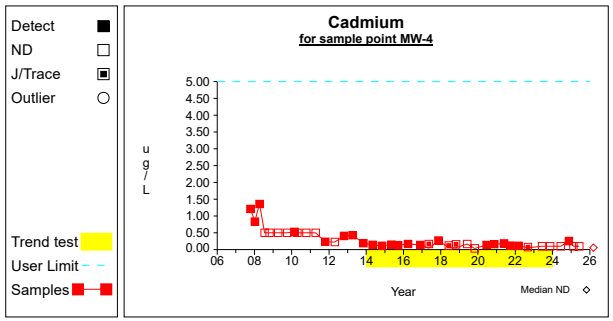
Graph 113



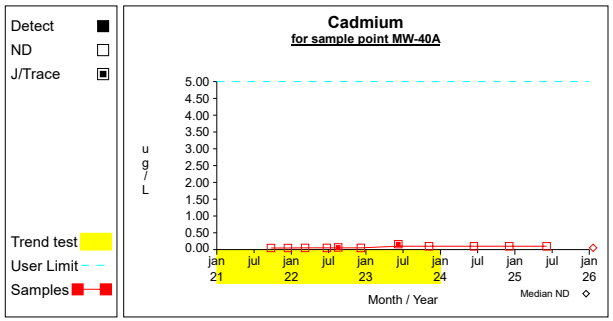
Graph 114



Graph 115

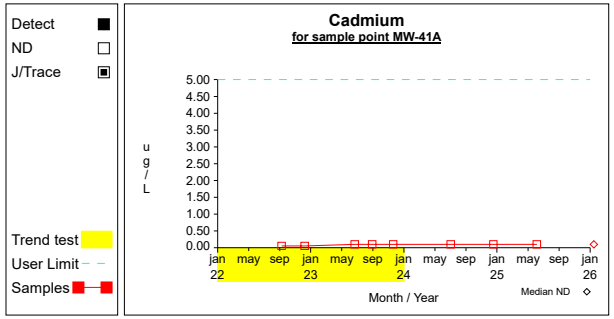


Graph 116

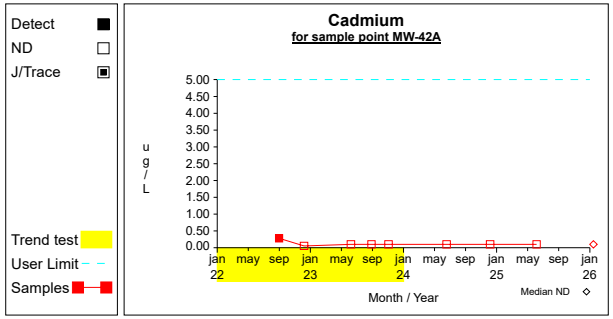


Graph 117

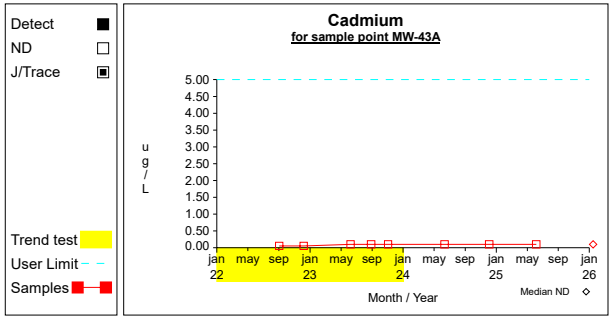
Time Series



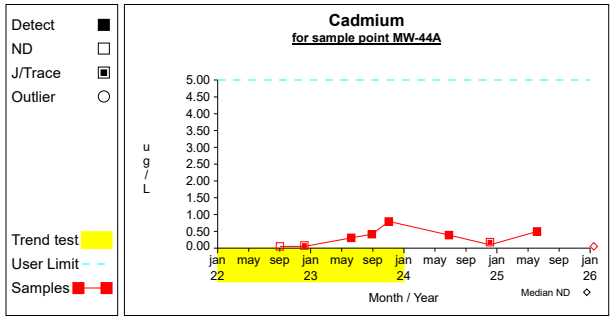
Graph 118



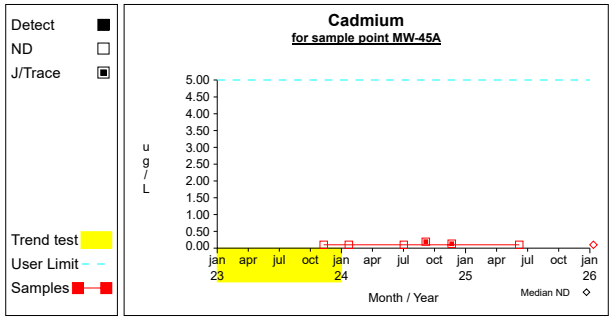
Graph 119



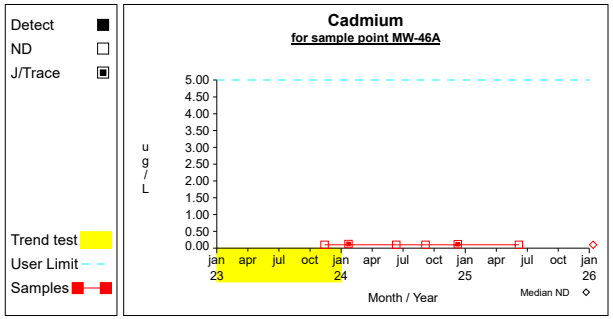
Graph 120



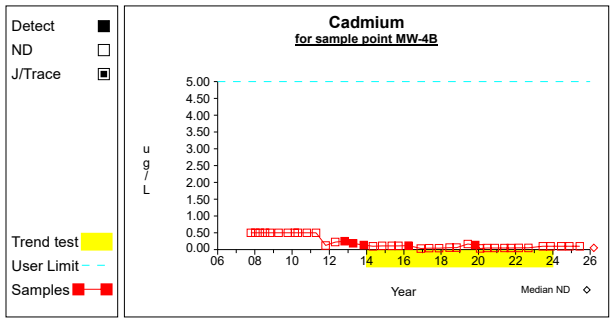
Graph 121



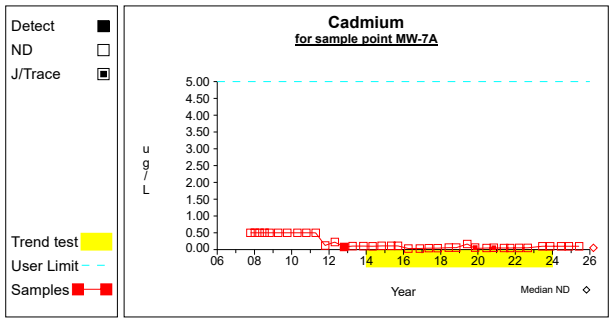
Graph 122



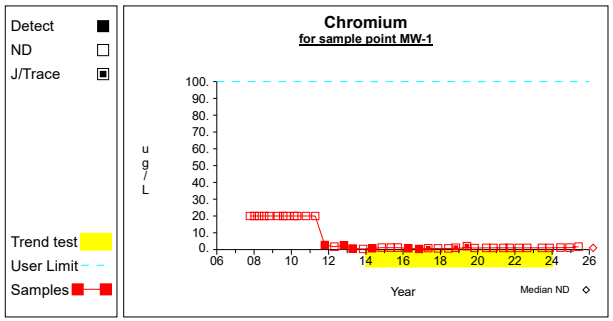
Graph 123



Graph 124

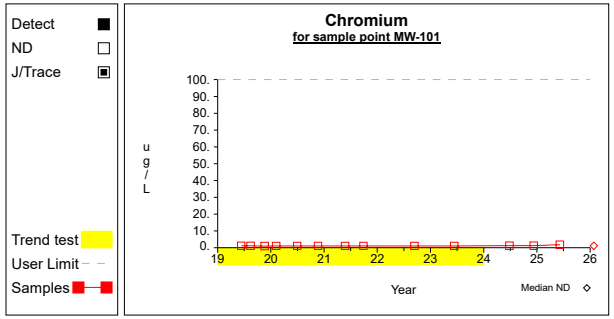


Graph 125

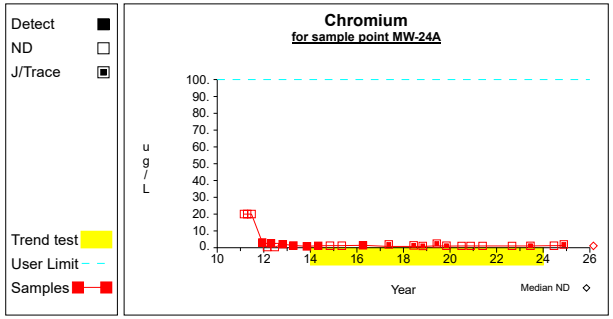


Graph 126

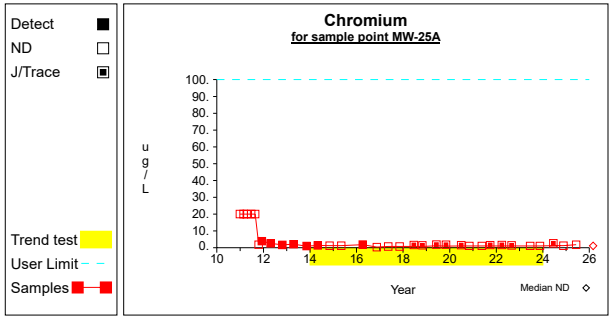
Time Series



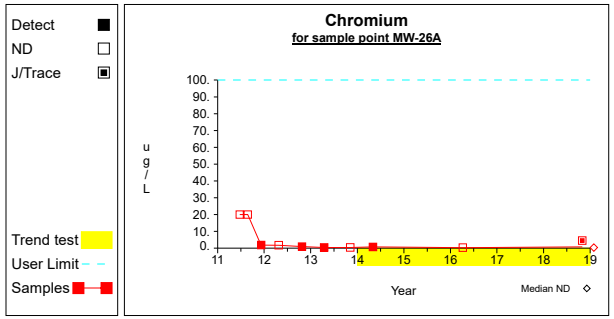
Graph 127



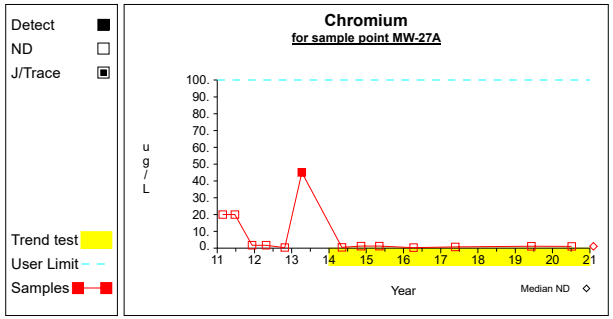
Graph 128



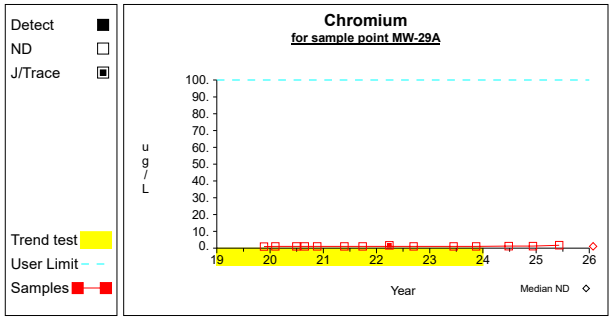
Graph 129



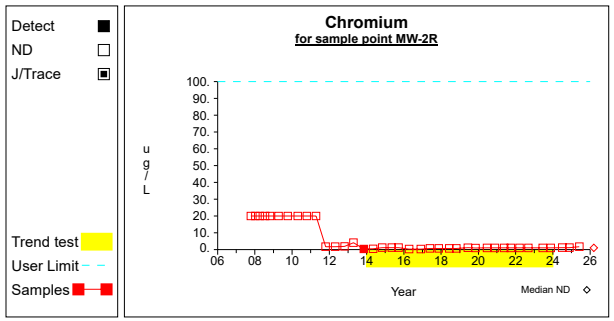
Graph 130



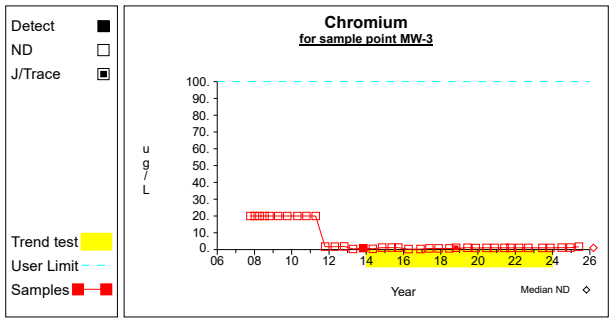
Graph 131



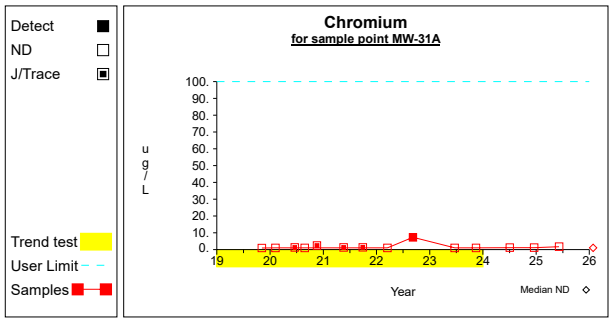
Graph 132



Graph 133

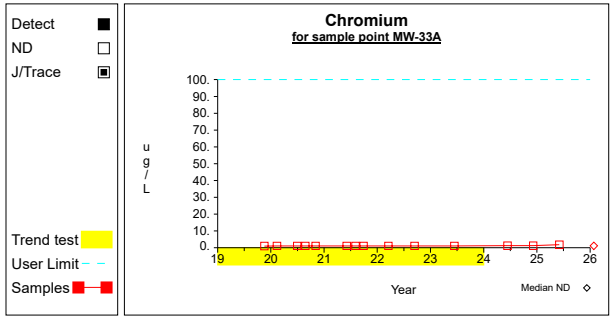


Graph 134

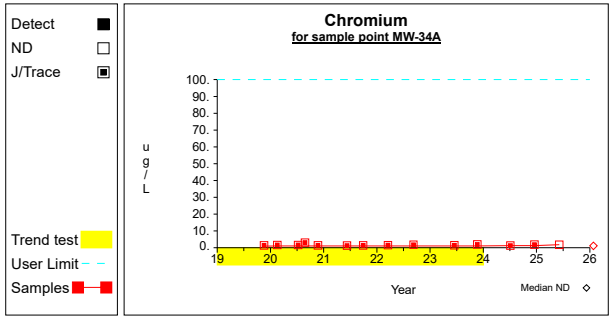


Graph 135

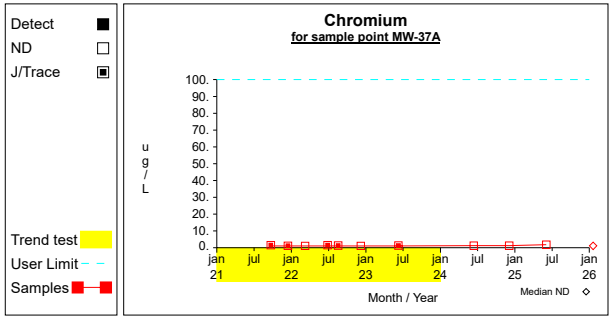
Time Series



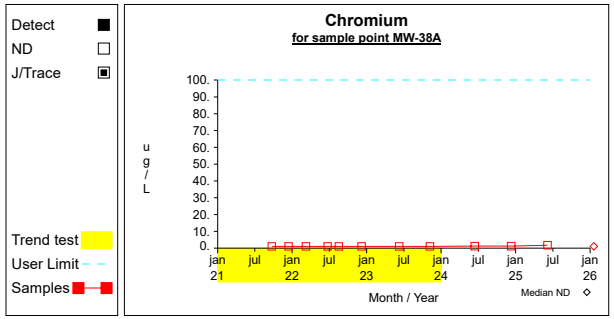
Graph 136



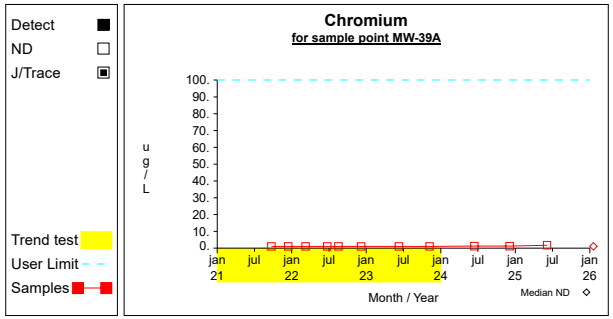
Graph 137



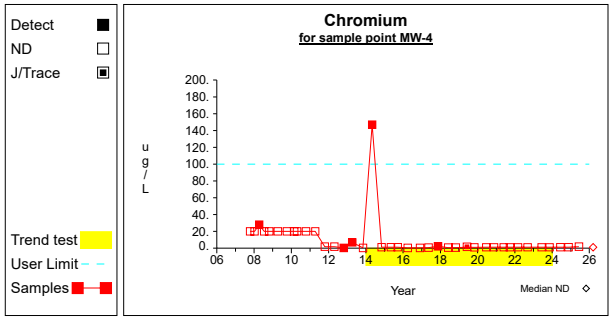
Graph 138



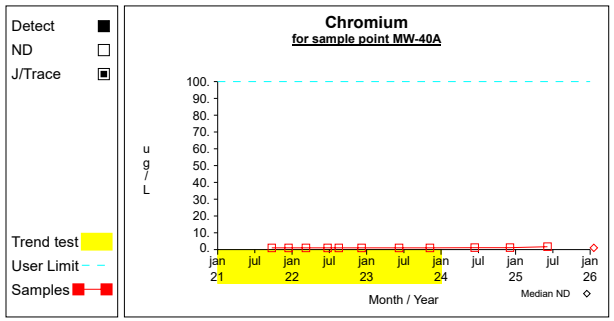
Graph 139



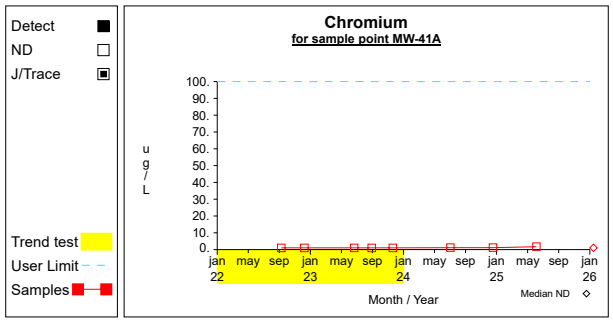
Graph 140



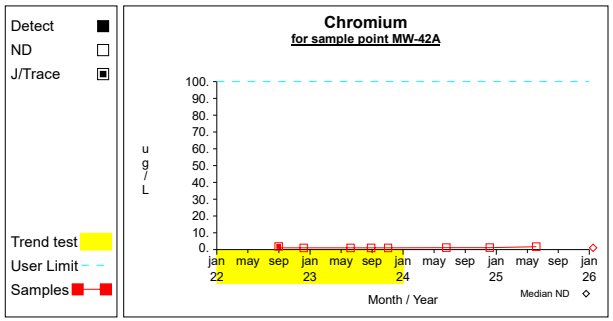
Graph 141



Graph 142

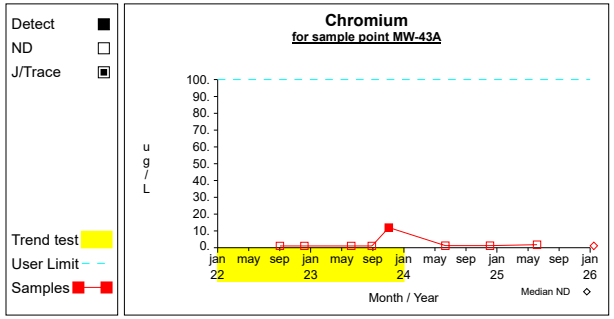


Graph 143

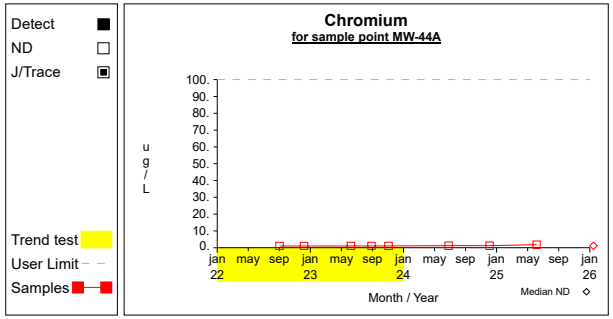


Graph 144

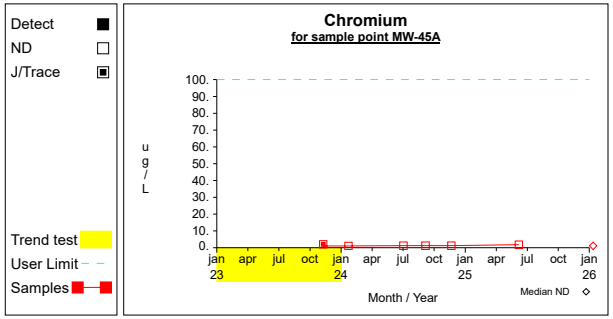
Time Series



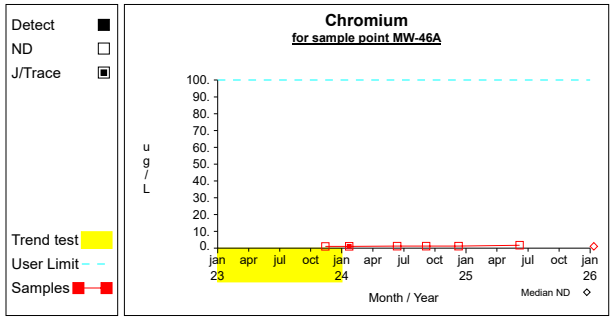
Graph 145



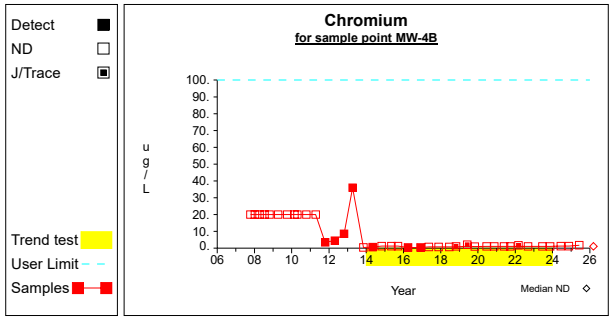
Graph 146



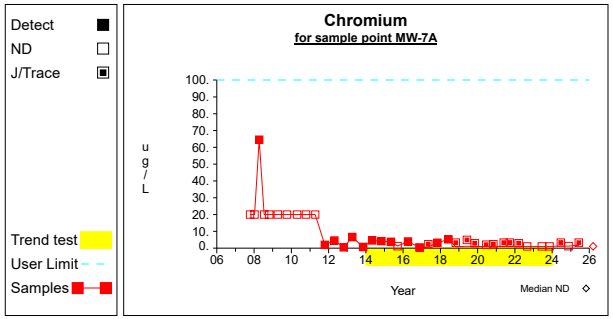
Graph 147



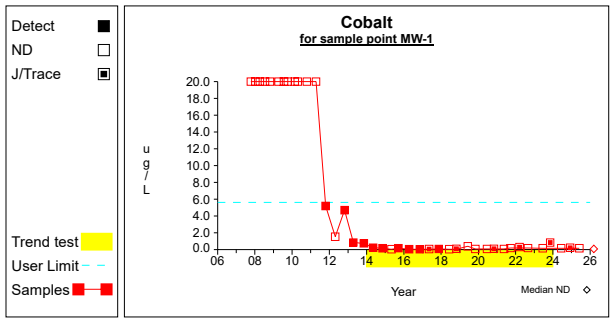
Graph 148



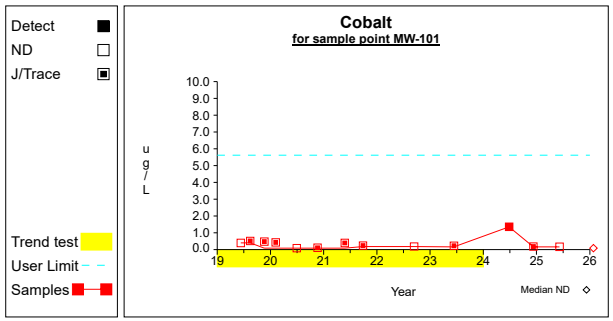
Graph 149



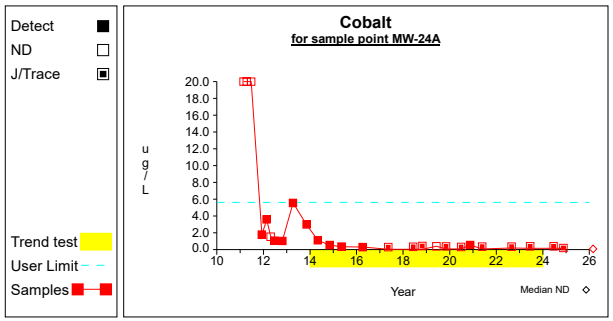
Graph 150



Graph 151

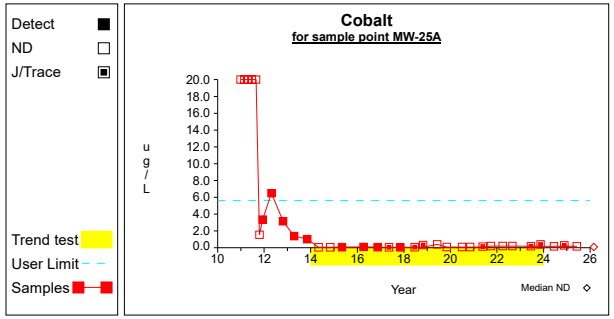


Graph 152

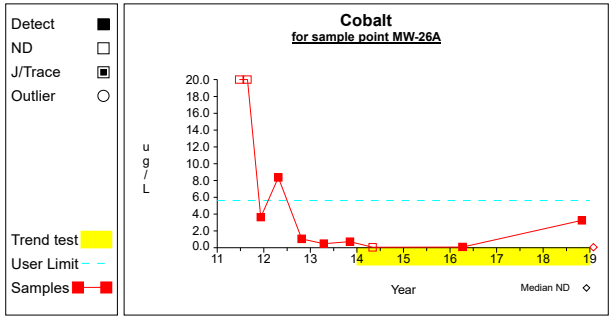


Graph 153

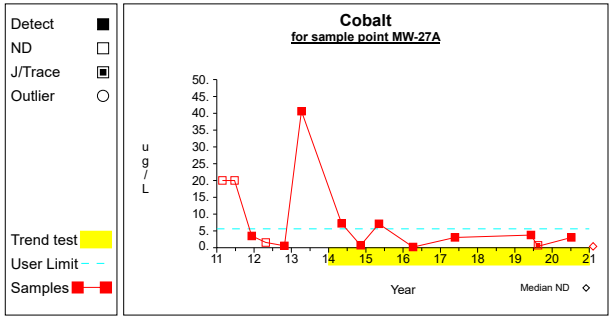
Time Series



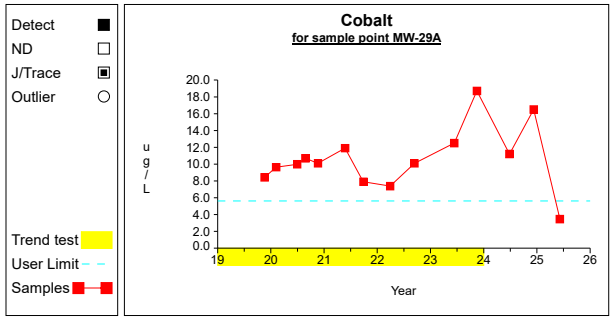
Graph 154



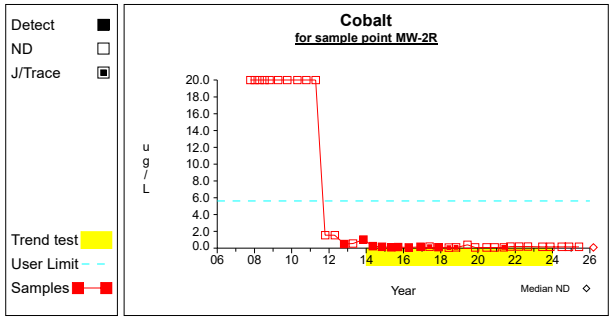
Graph 155



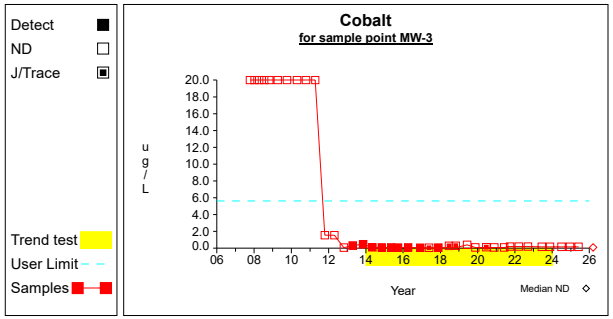
Graph 156



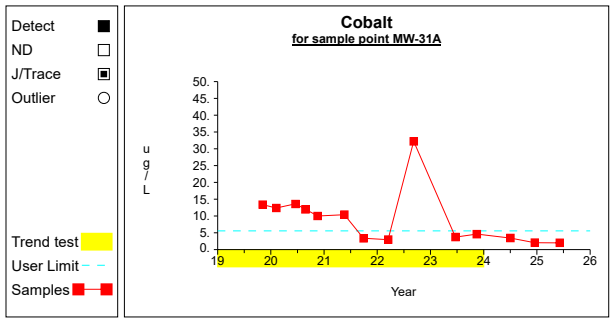
Graph 157



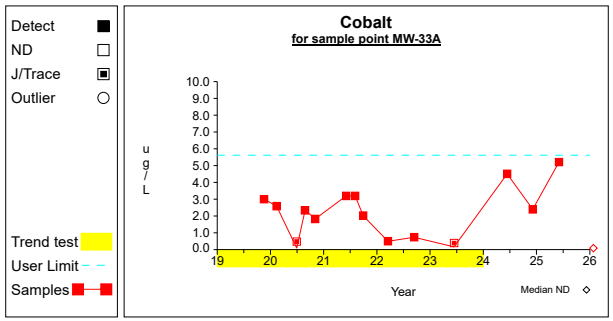
Graph 158



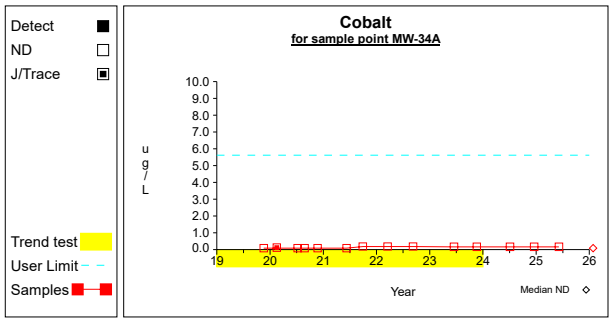
Graph 159



Graph 160

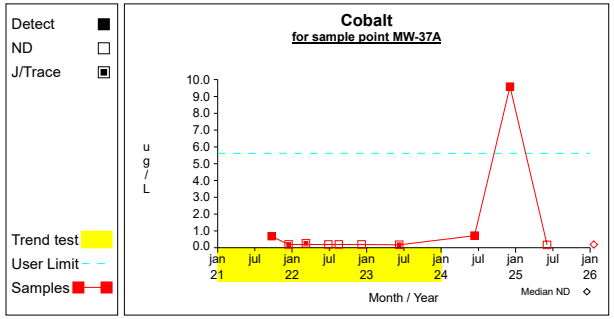


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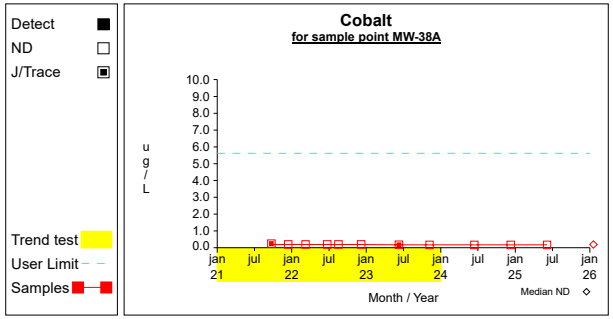


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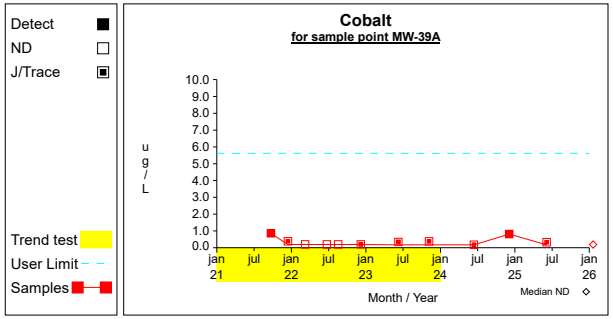
Time Series



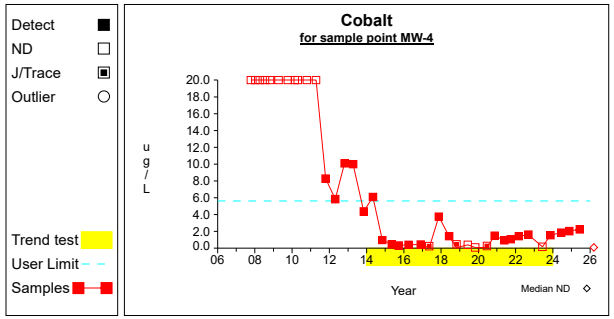
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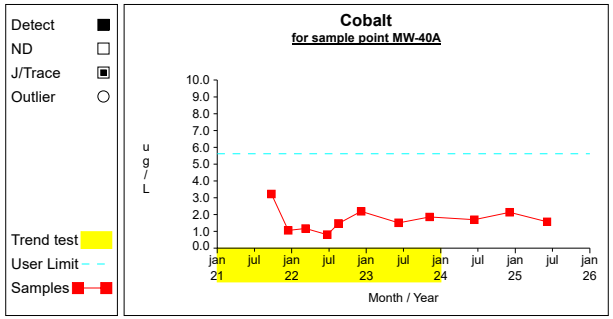
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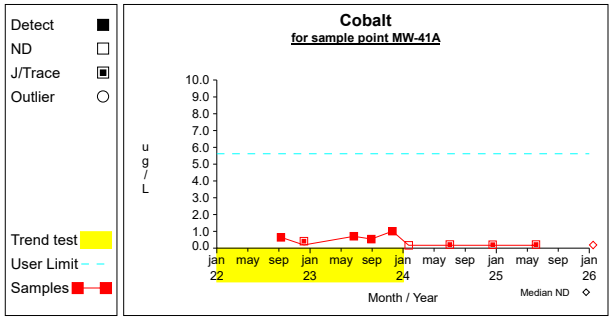
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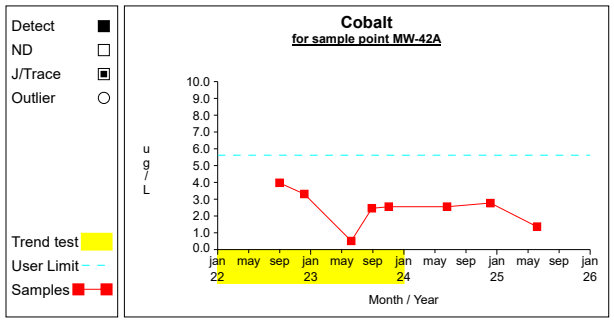
Graph 166



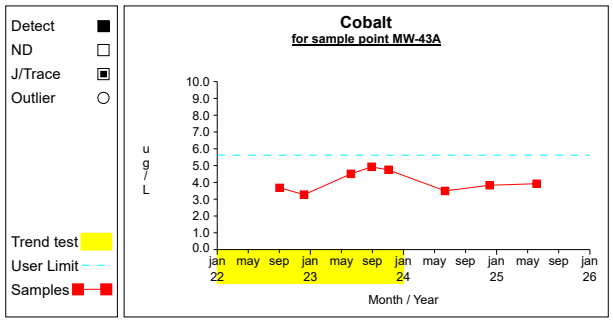
Graph 167



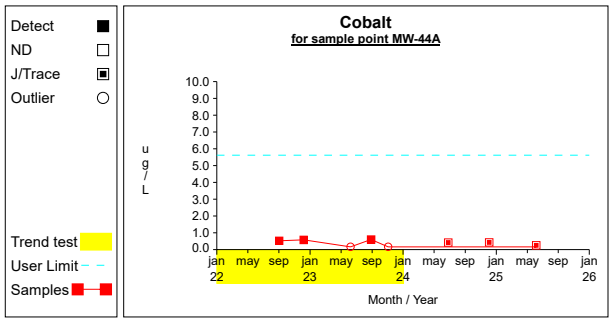
Graph 168



Graph 169

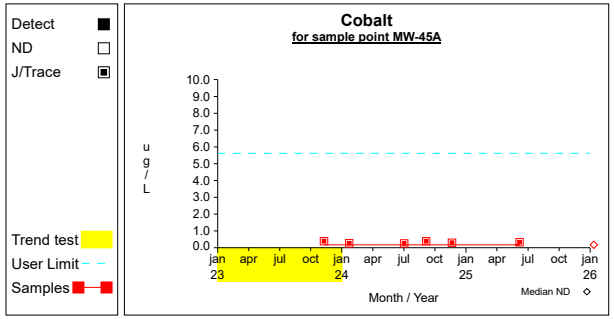


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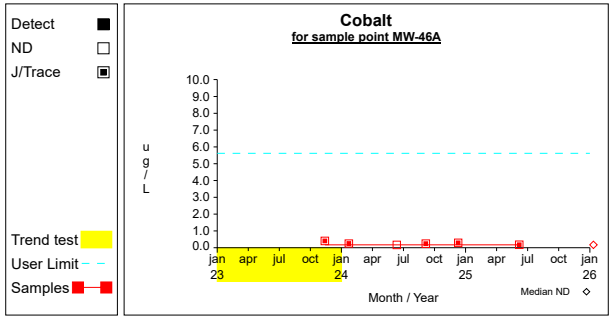


Graph 171

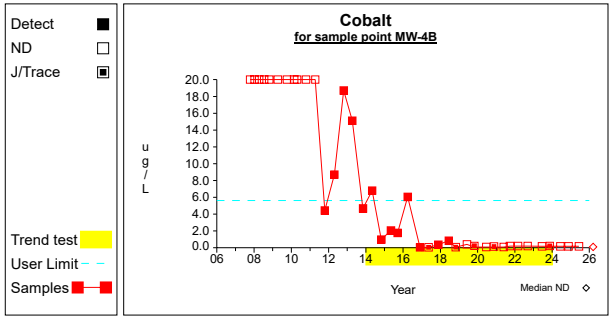
Time Series



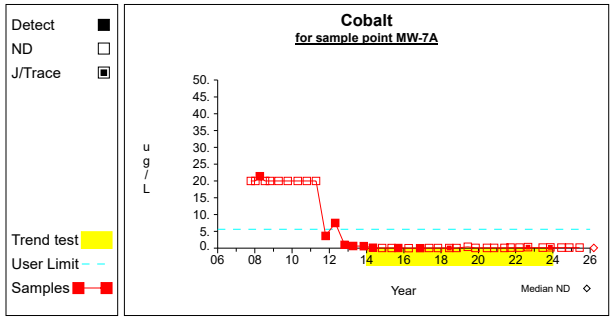
Graph 172



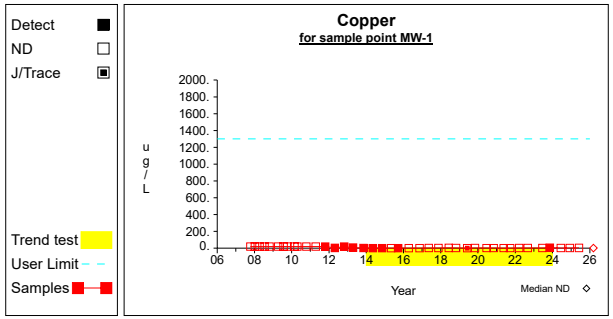
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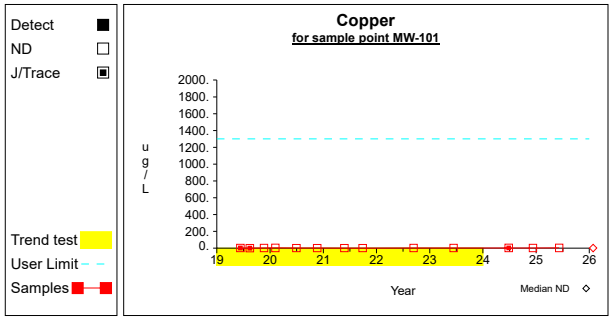
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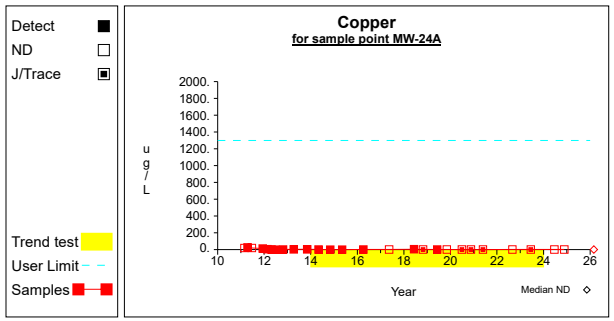
Graph 175



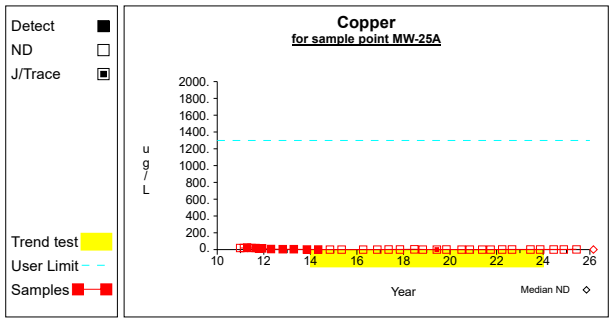
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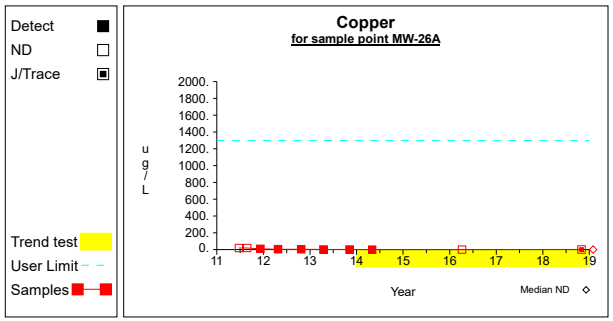
Graph 177



Graph 178

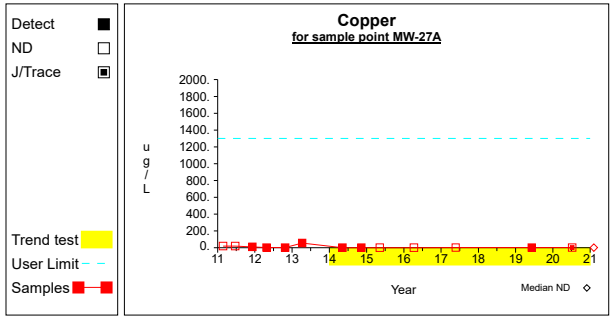


Graph 179

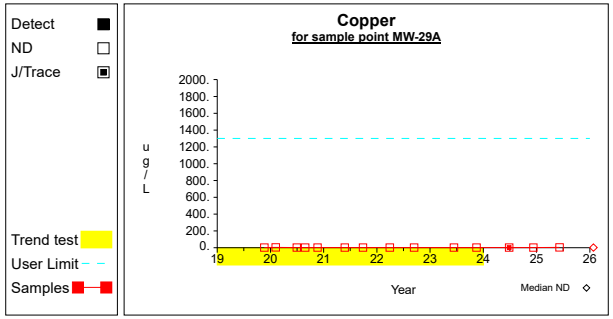


Graph 180

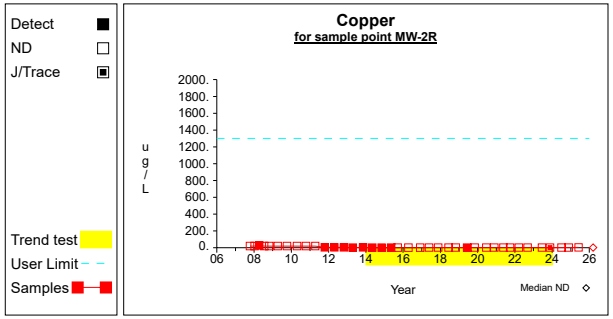
Time Series



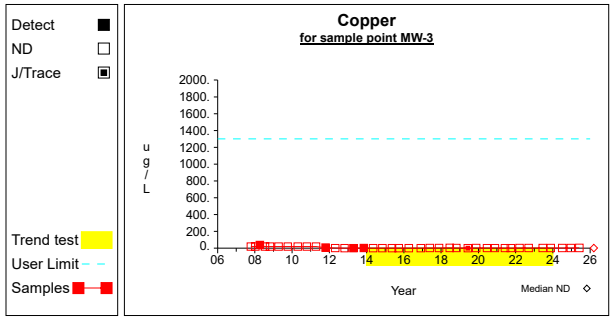
Graph 181



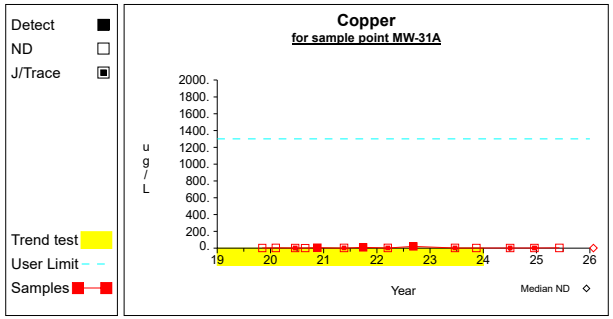
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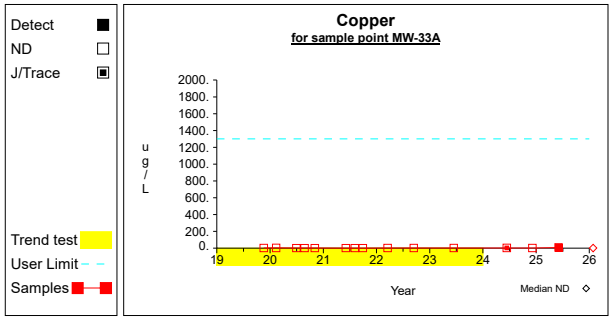
Graph 183



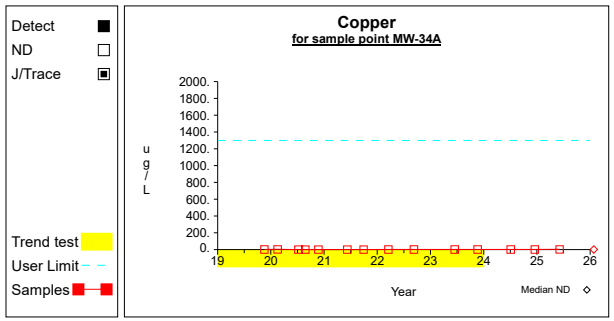
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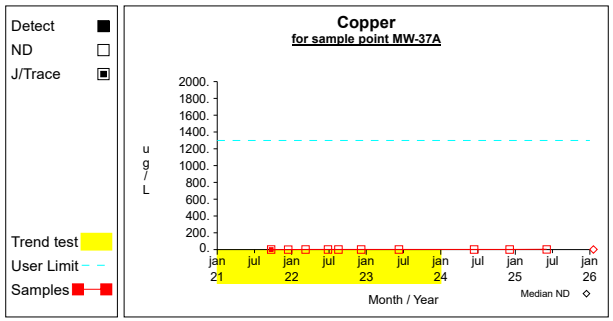
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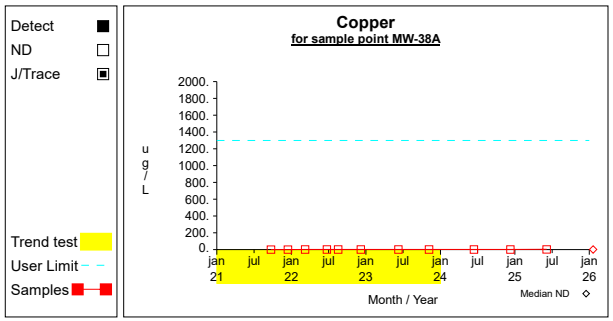
Graph 186



Graph 187

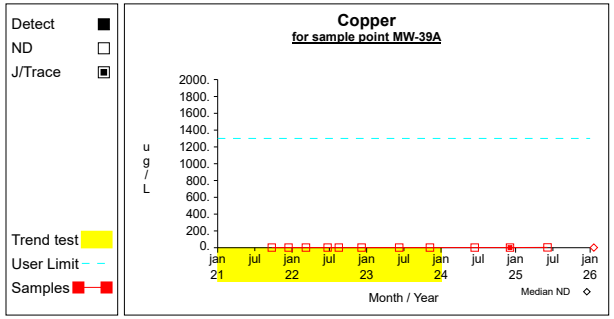


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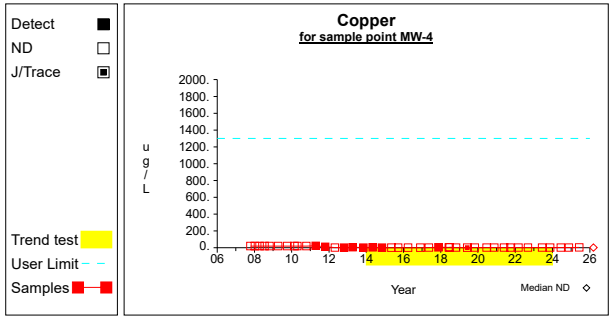


Graph 189

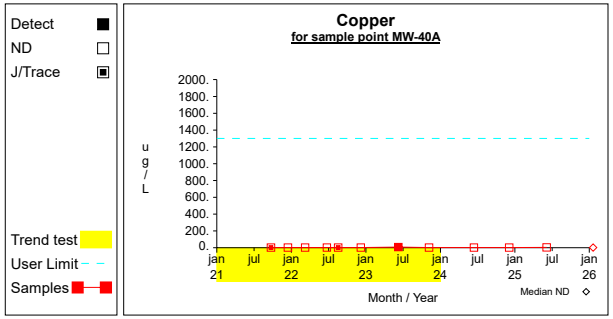
Time Series



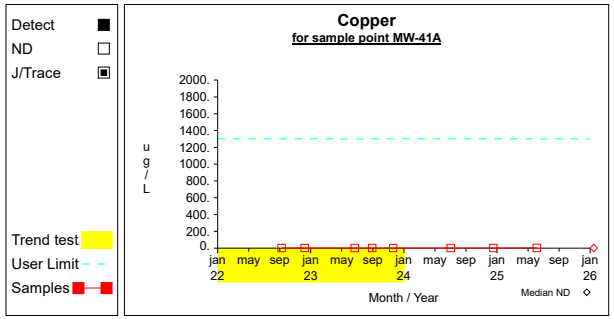
Graph 190



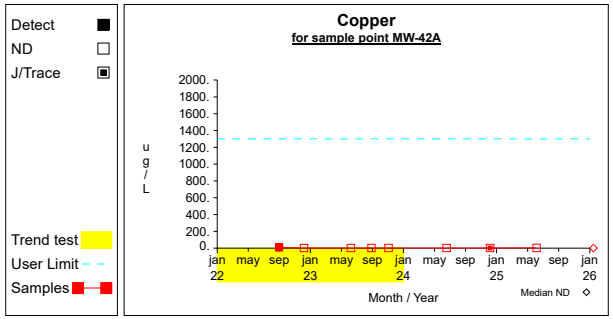
Graph 191



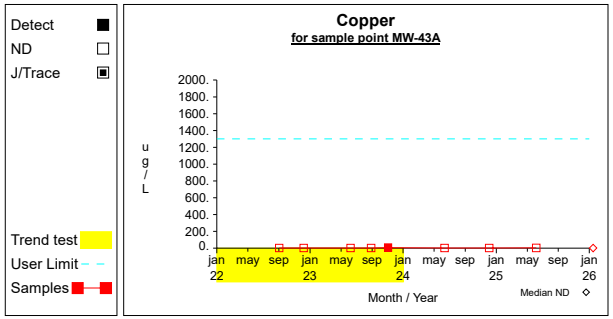
Graph 192



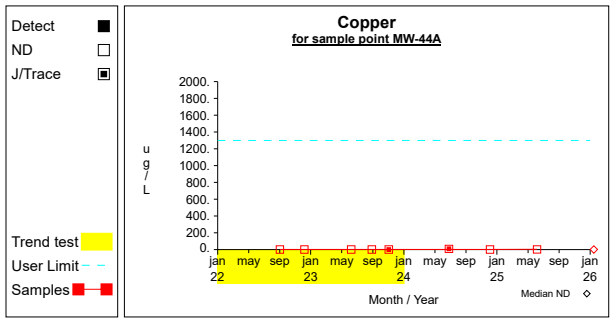
Graph 193



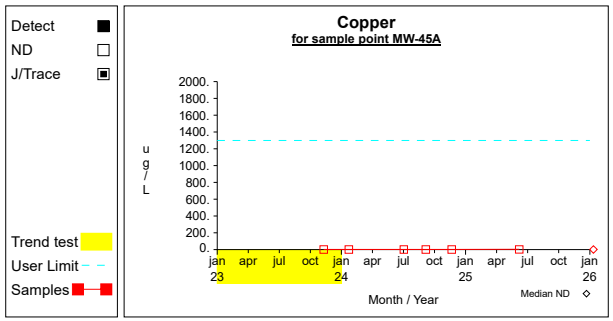
Graph 194



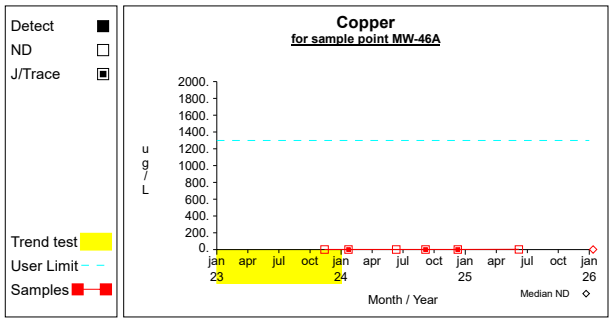
Graph 195



Graph 196

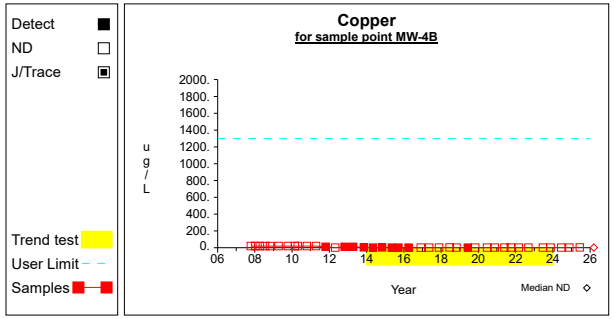


Graph 197

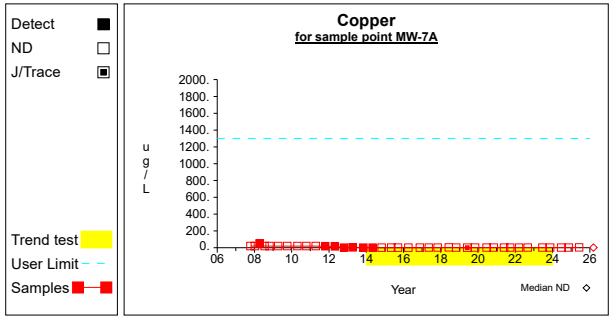


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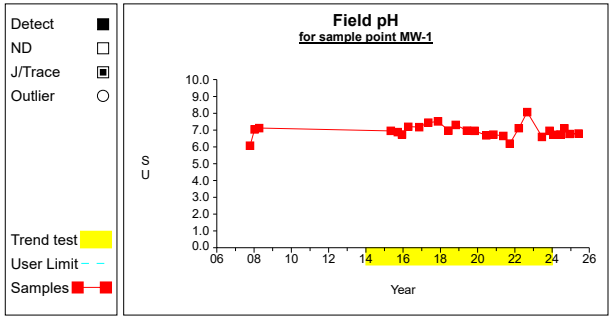
Time Series



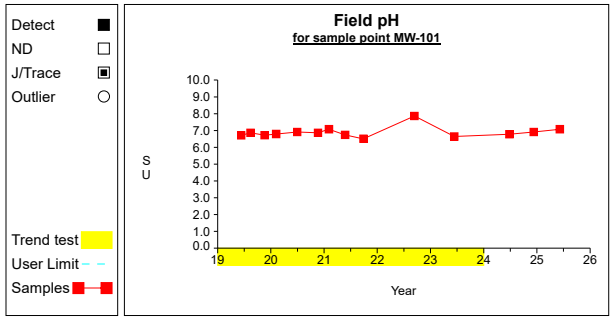
Graph 199



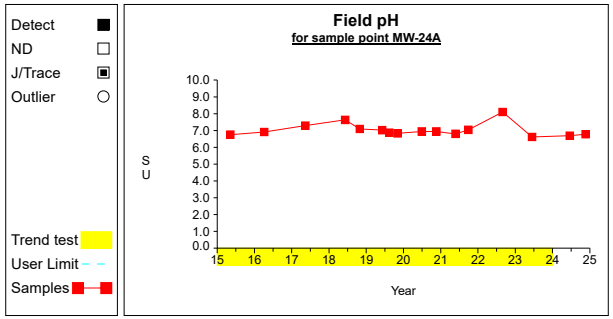
Graph 200



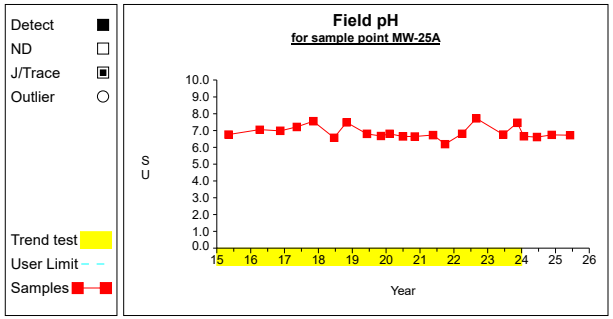
Graph 201



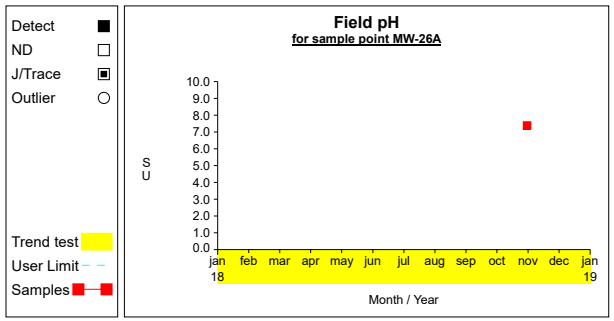
Graph 202



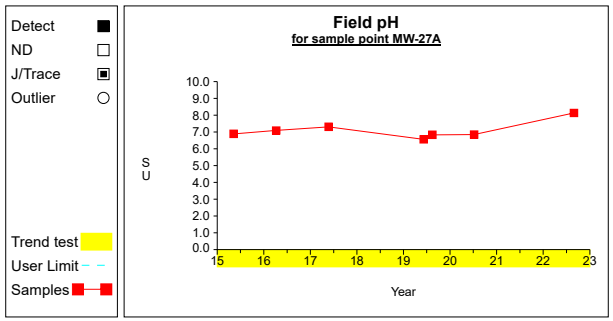
Graph 203



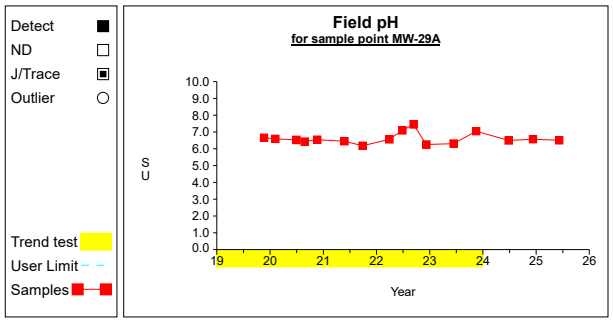
Graph 204



Graph 205

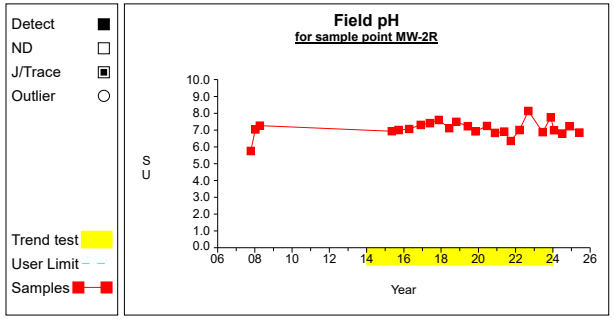


Graph 206

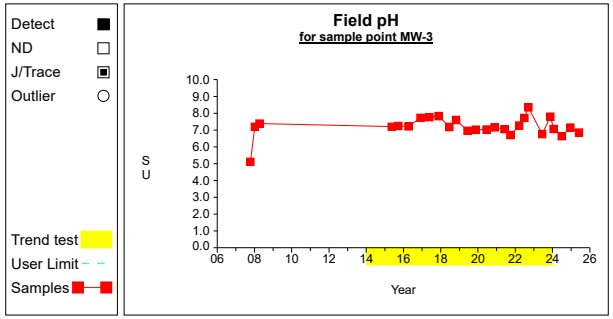


Graph 207

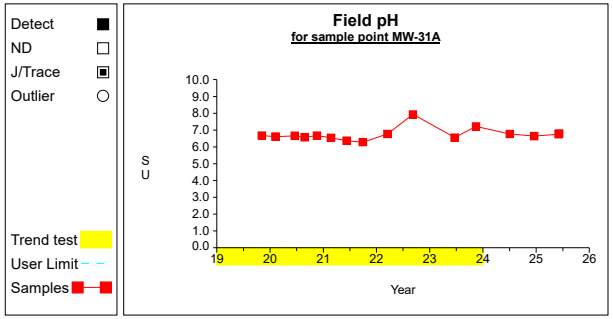
Time Series



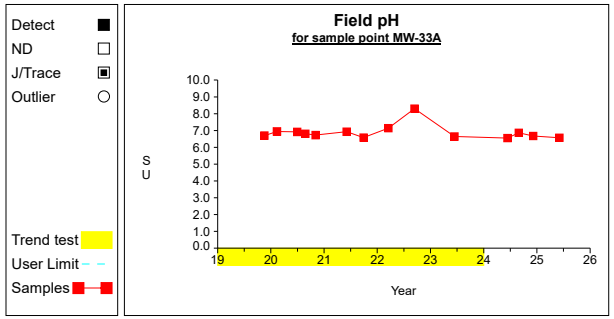
Graph 208



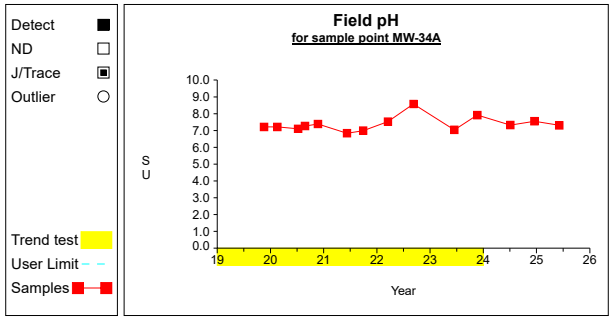
Graph 209



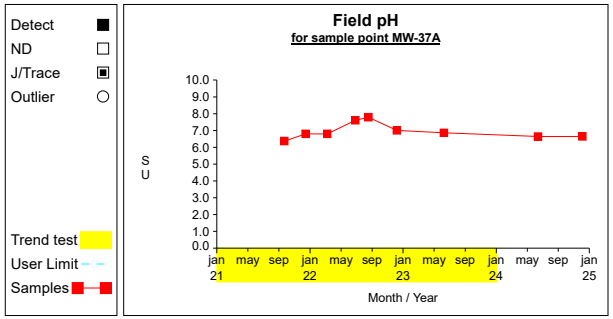
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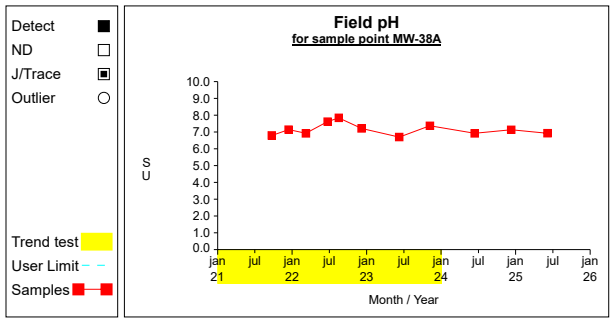
Graph 211



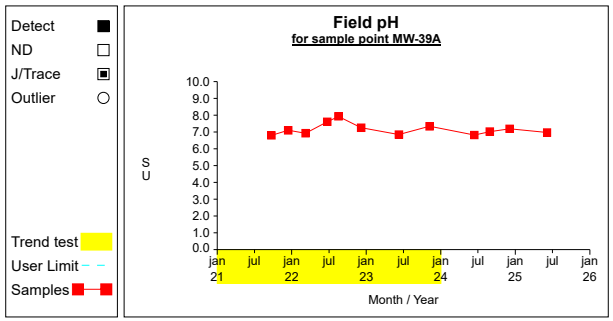
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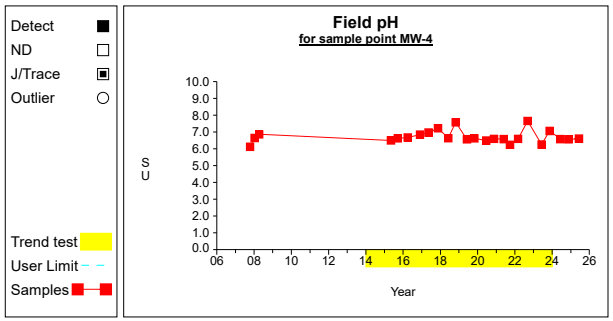
Graph 213



Graph 214

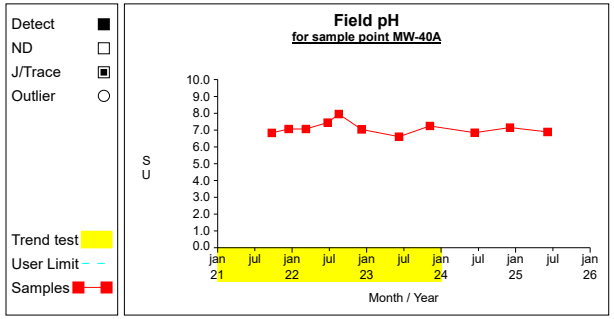


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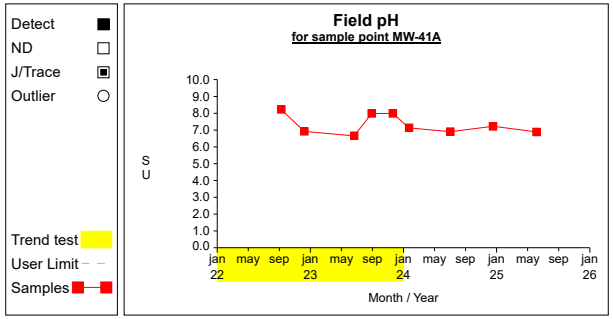


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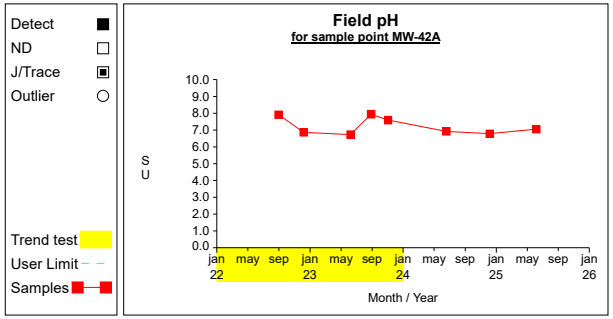
Time Series



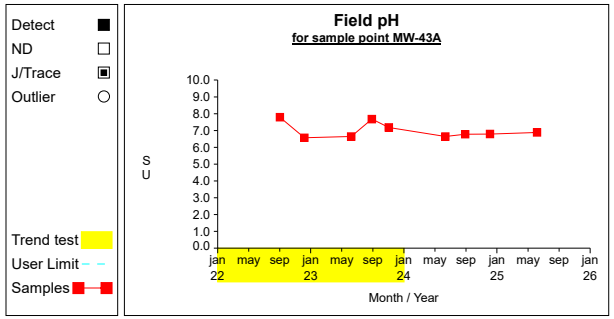
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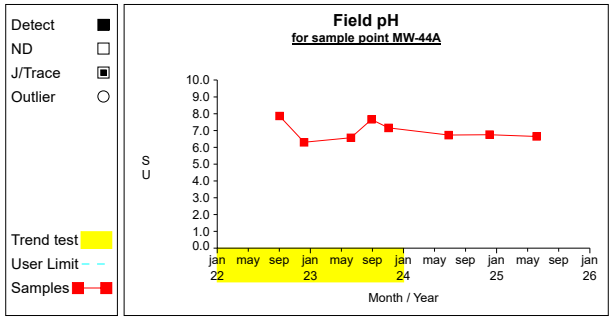
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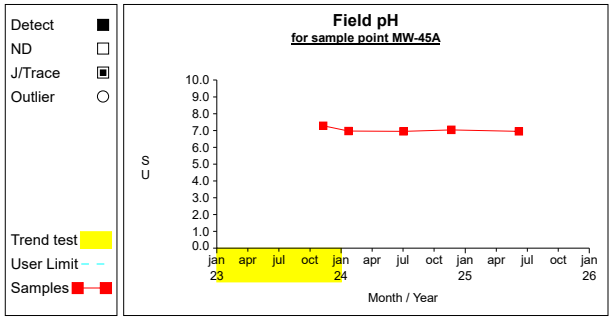
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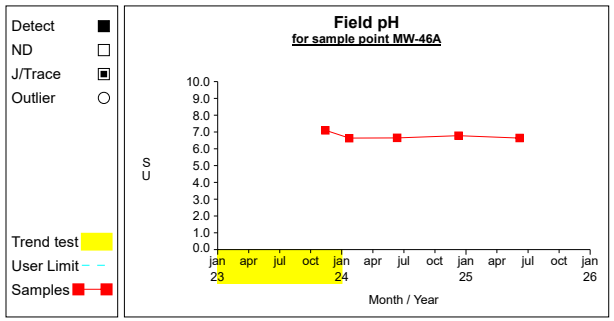
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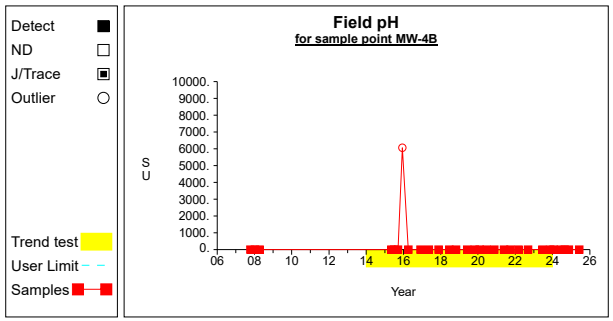
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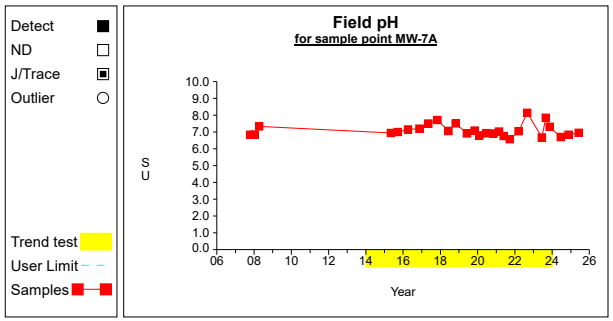
Graph 222



Graph 223

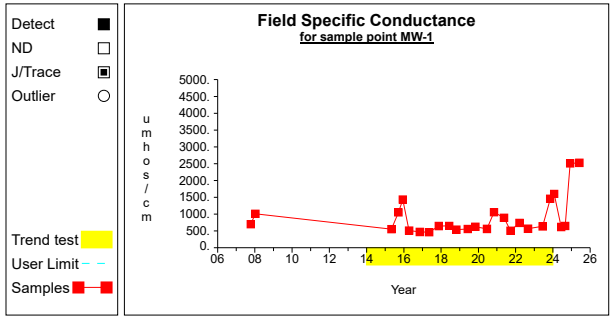


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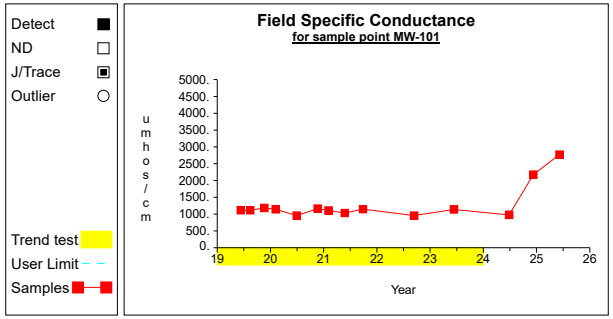


Graph 225

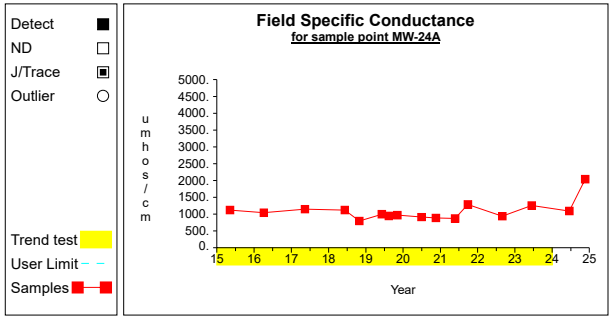
Time Series



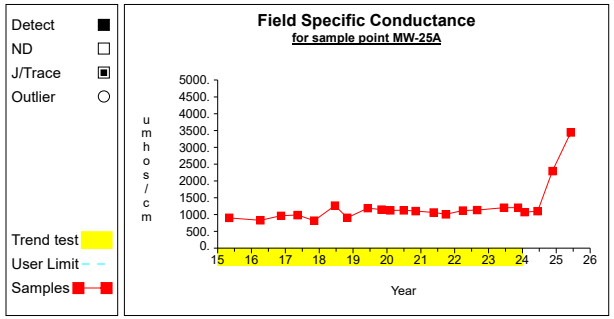
Graph 226



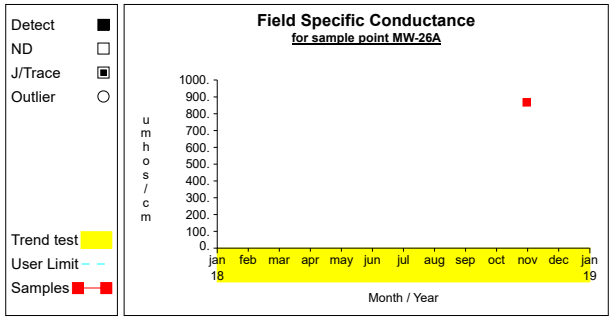
Graph 227



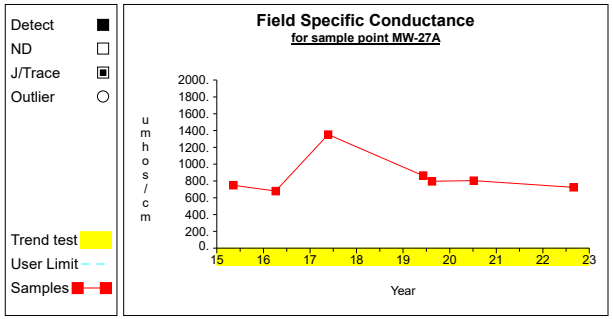
Graph 228



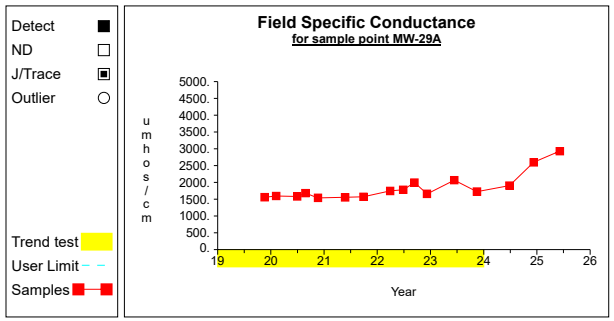
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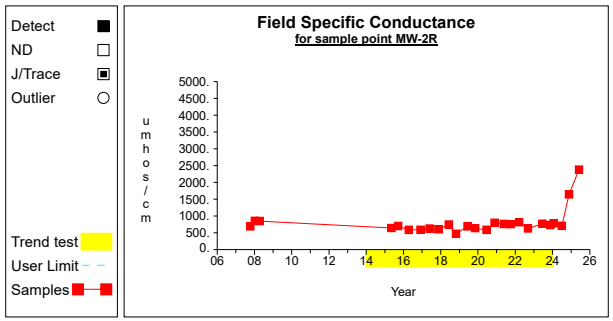
Graph 230



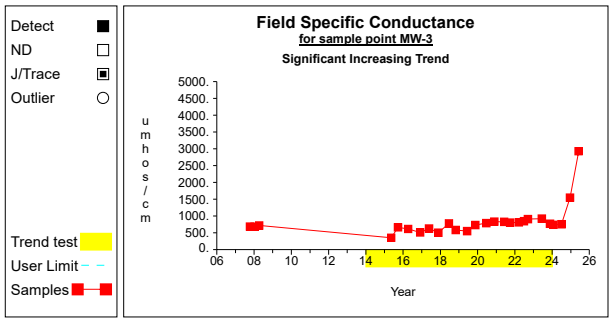
Graph 231



Graph 232

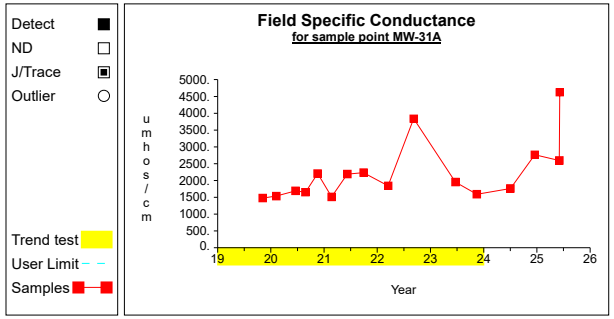


Graph 233

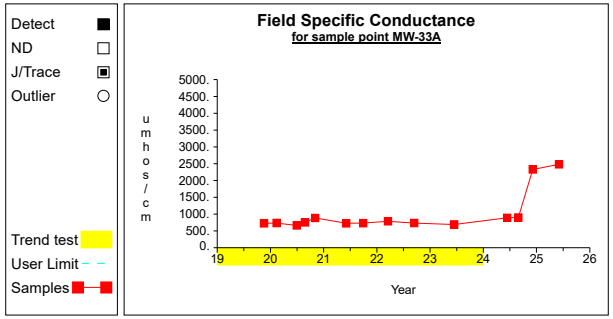


Graph 234

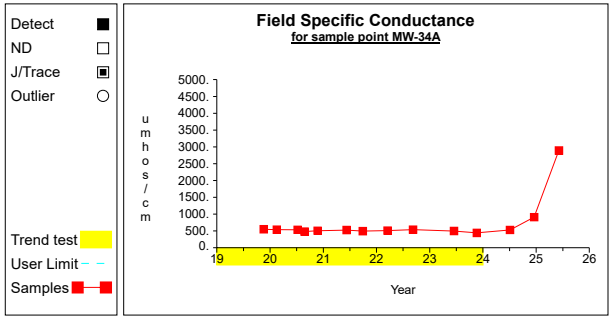
Time Series



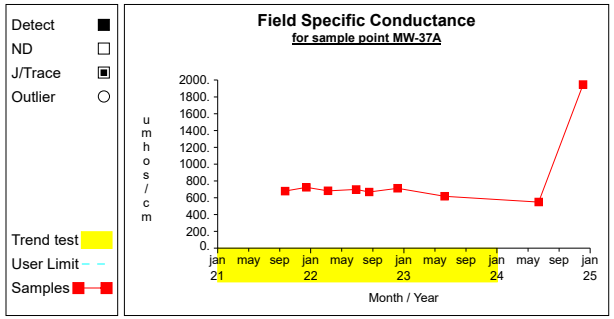
Graph 235



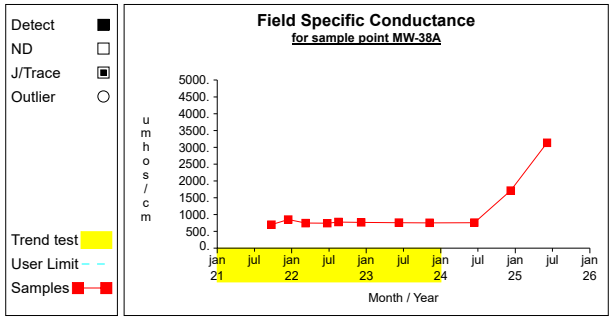
Graph 236



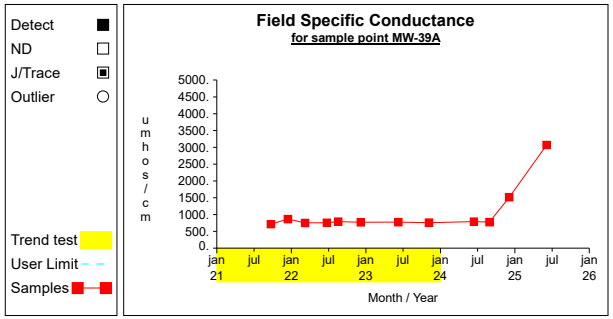
Graph 237



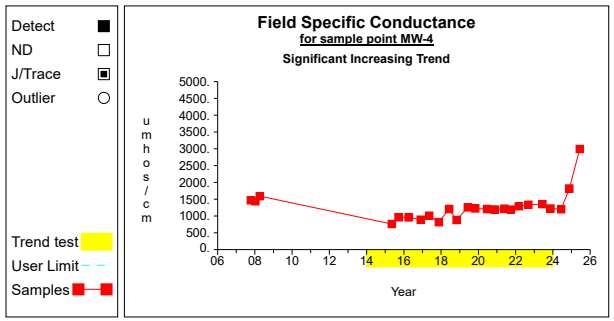
Graph 238



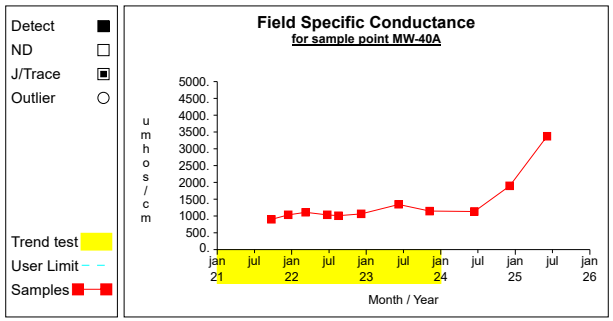
Graph 239



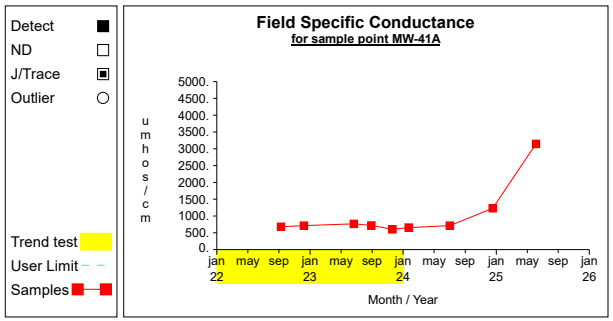
Graph 240



Graph 241

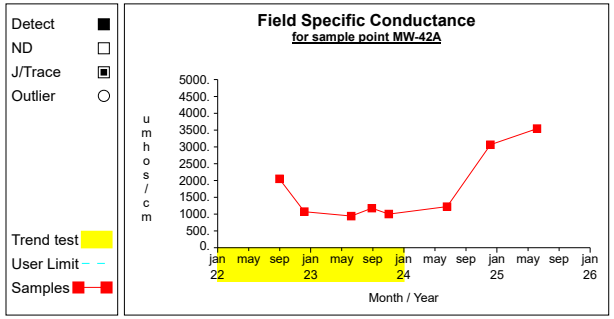


Graph 242

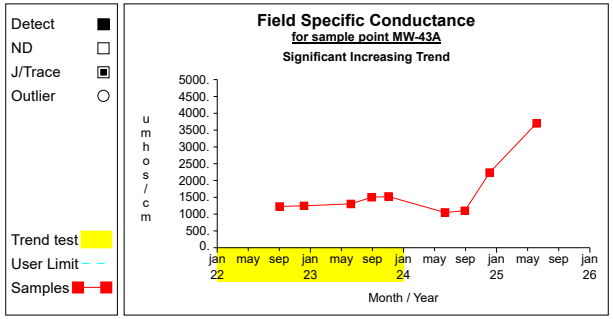


Graph 243

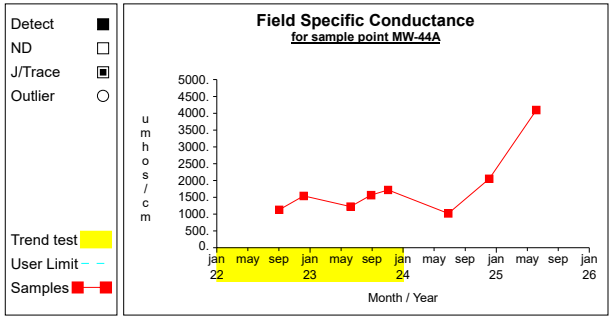
Time Series



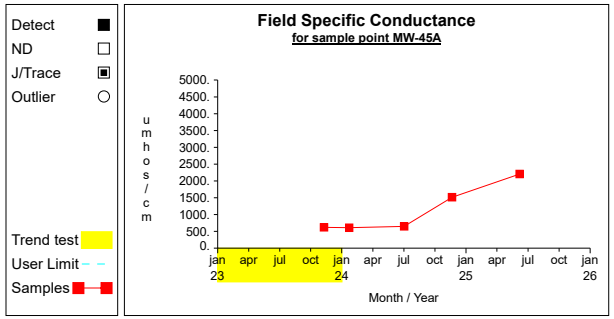
Graph 244



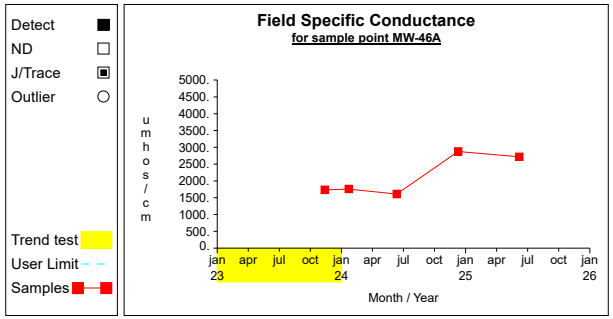
Graph 245



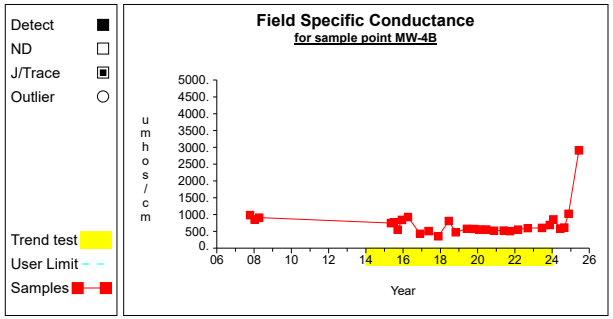
Graph 246



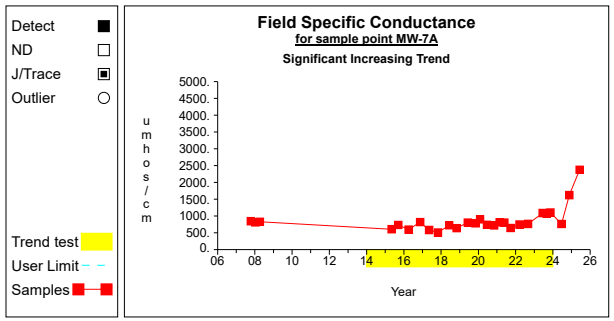
Graph 247



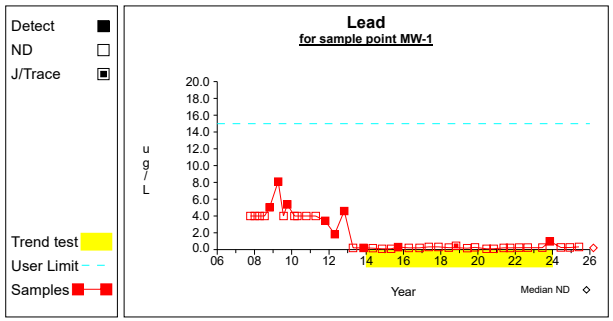
Graph 248



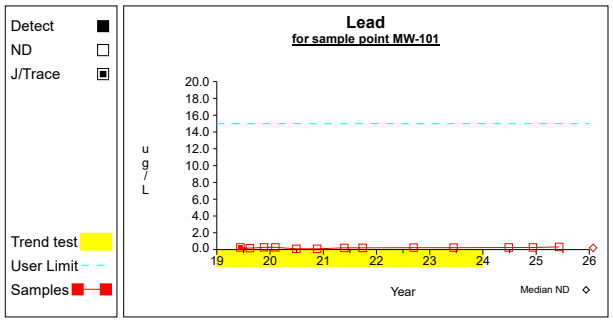
Graph 249



Graph 250

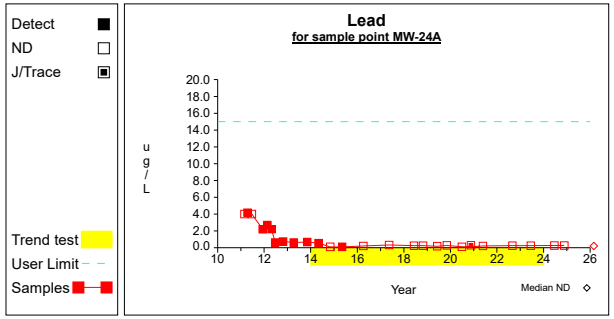


Graph 251

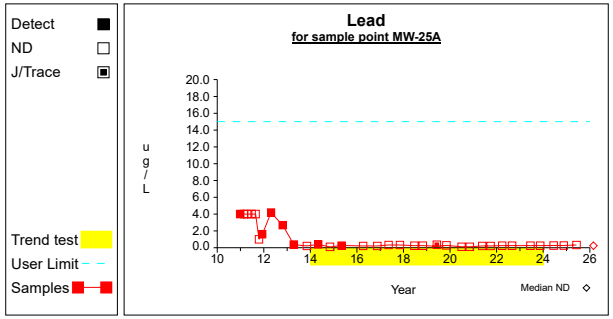


Graph 252

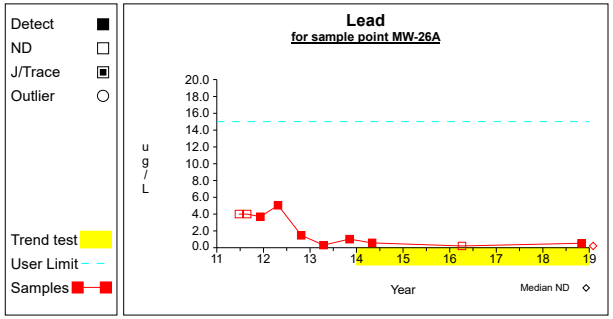
Time Series



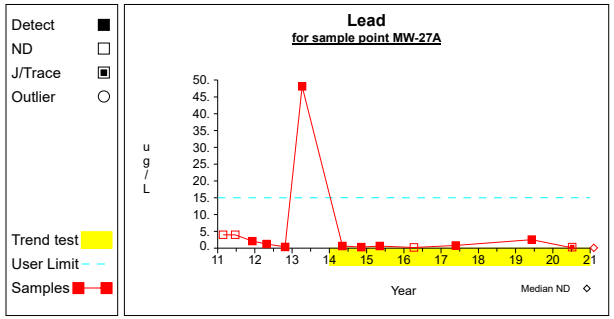
Graph 253



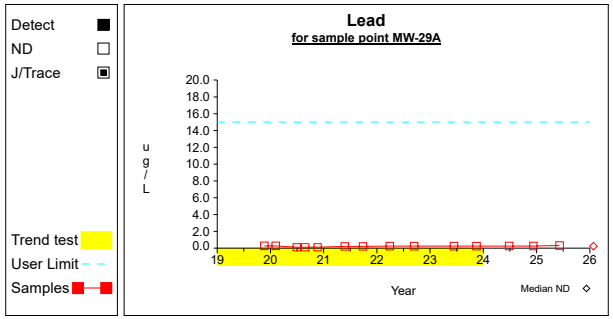
Graph 254



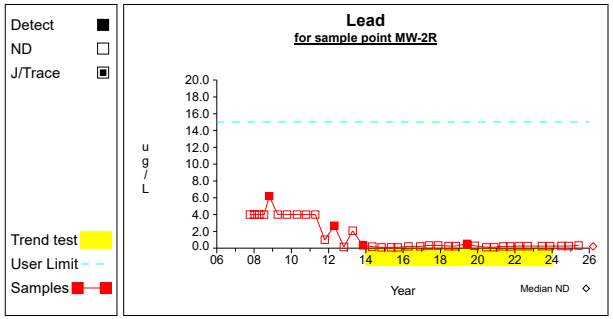
Graph 255



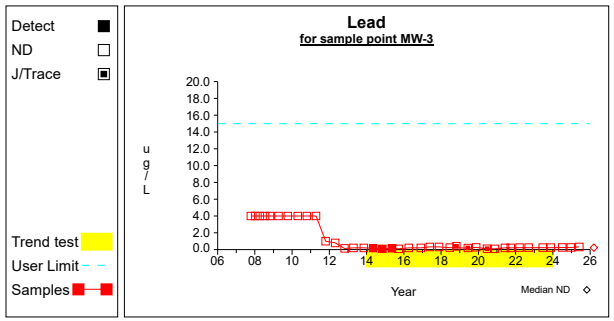
Graph 256



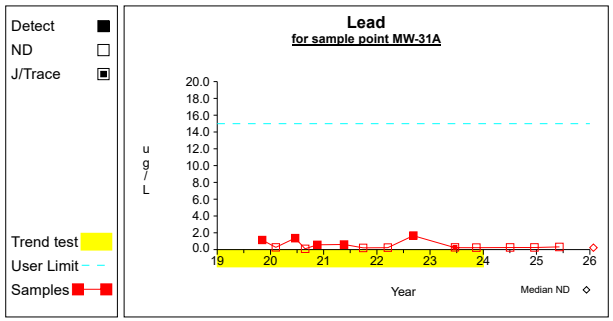
Graph 257



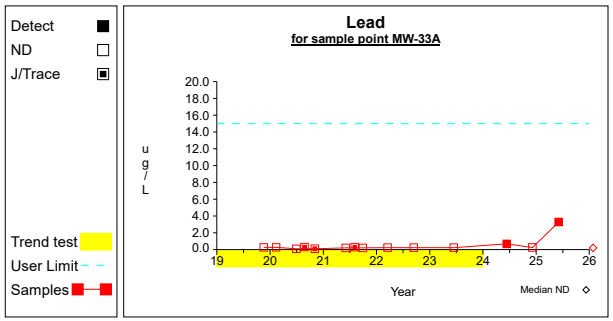
Graph 258



Graph 259

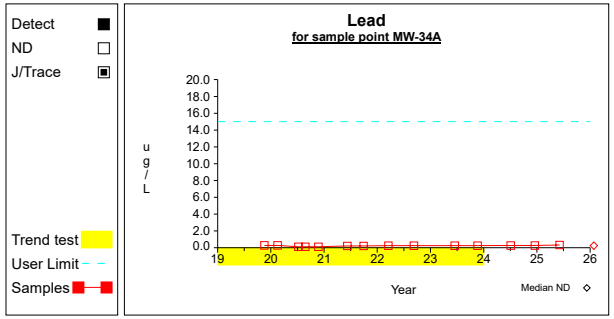


Graph 260

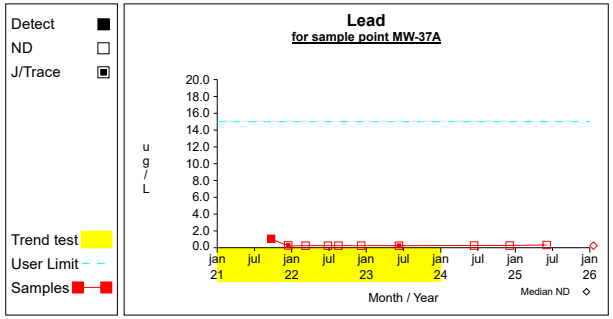


Graph 261

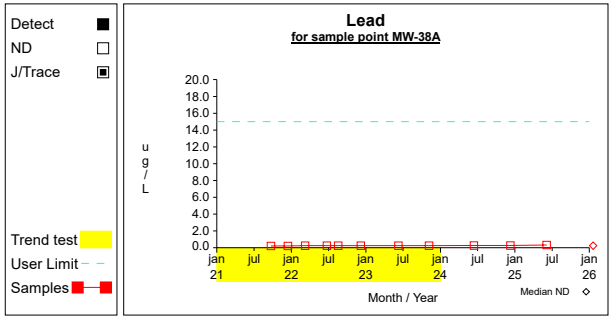
Time Series



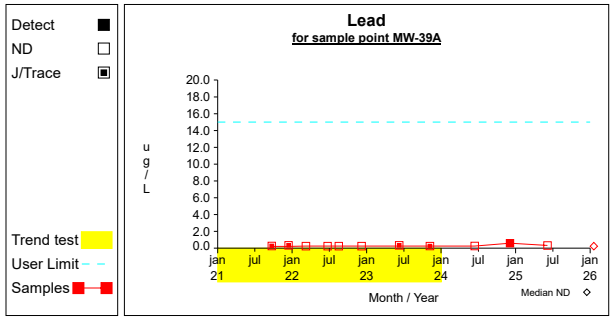
Graph 262



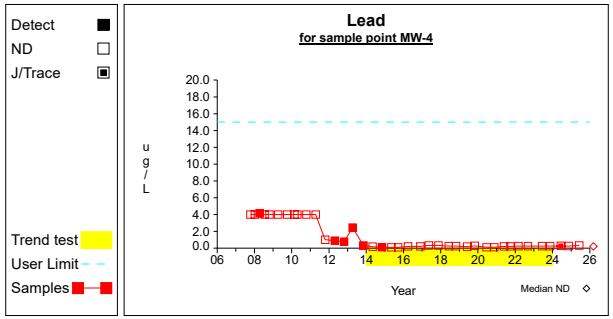
Graph 263



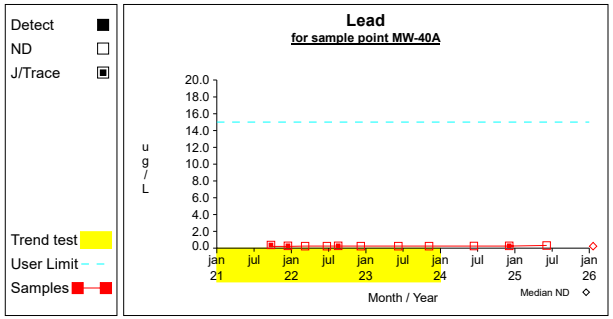
Graph 264



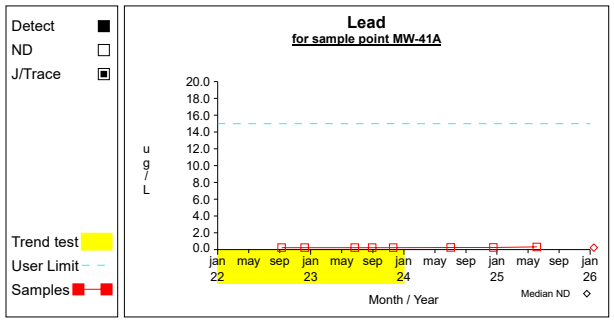
Graph 265



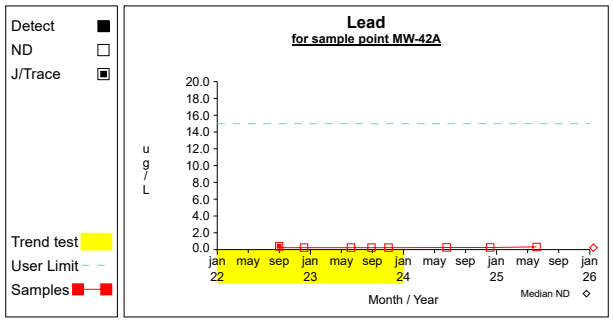
Graph 266



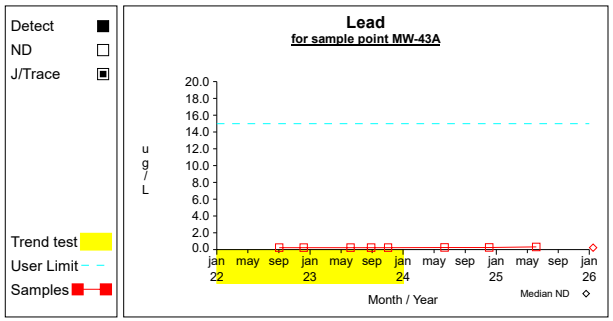
Graph 267



Graph 268

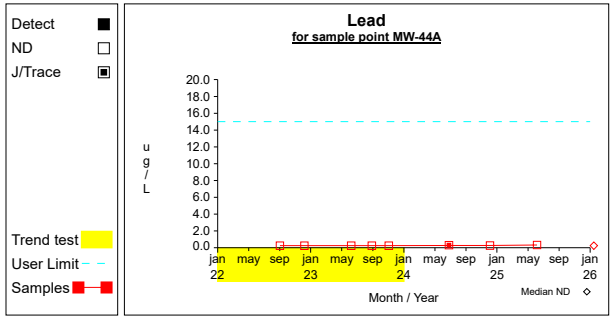


Graph 269

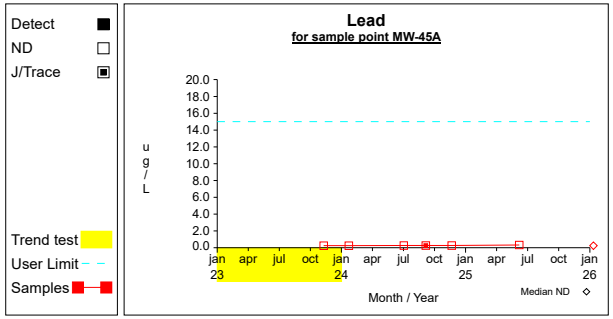


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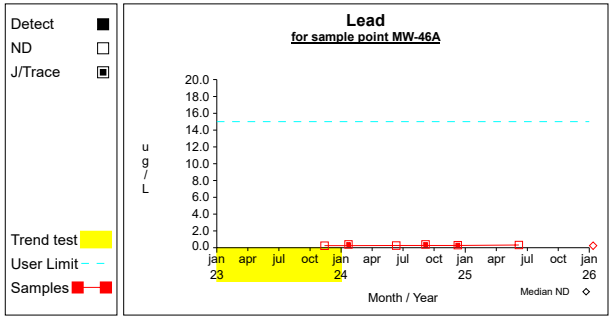
Time Series



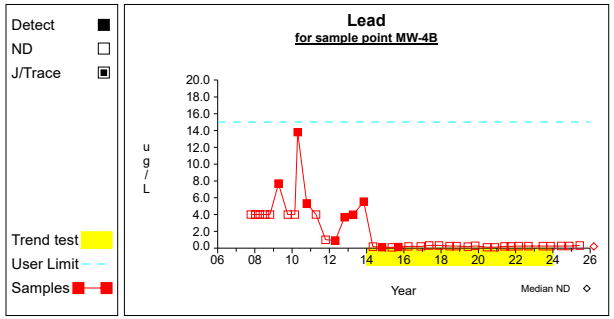
Graph 271



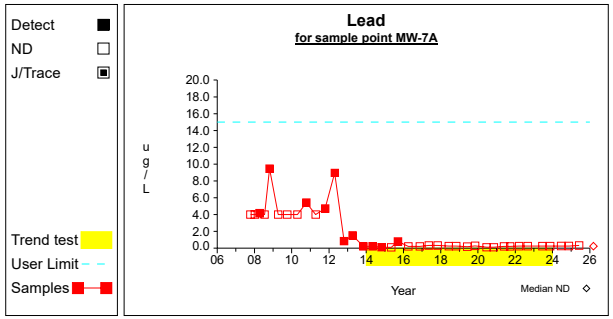
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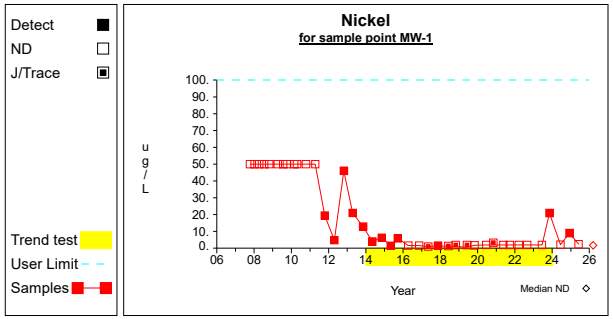
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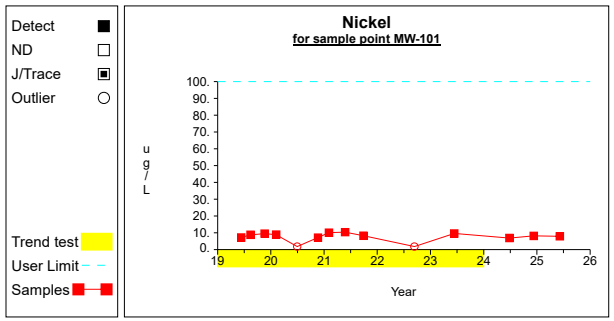
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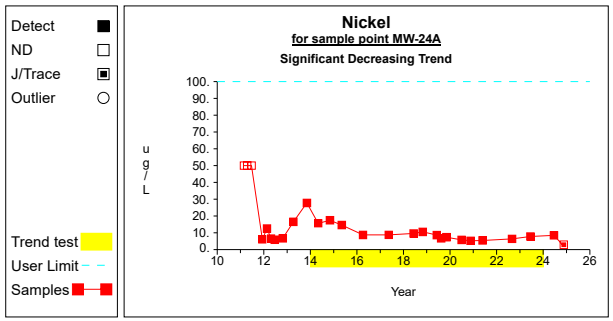
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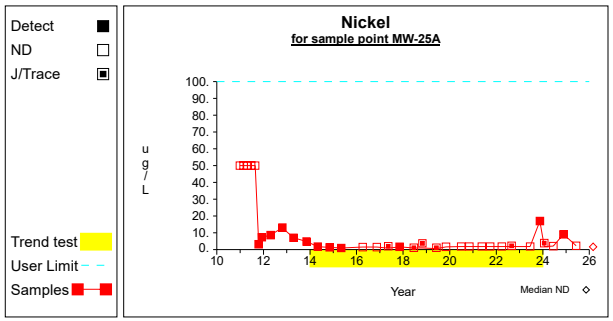
Graph 276



Graph 277

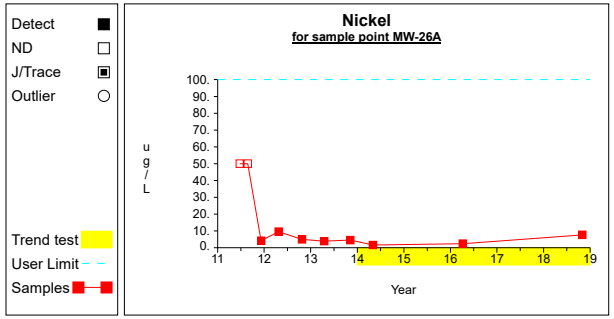


Graph 278

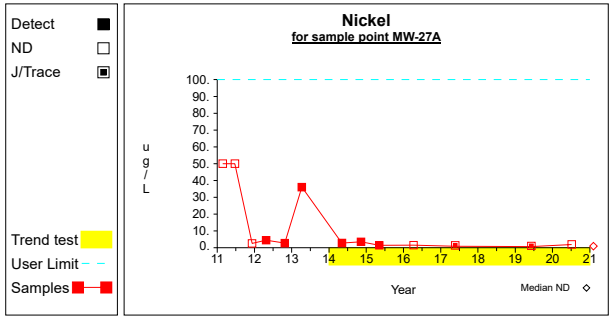


Graph 279

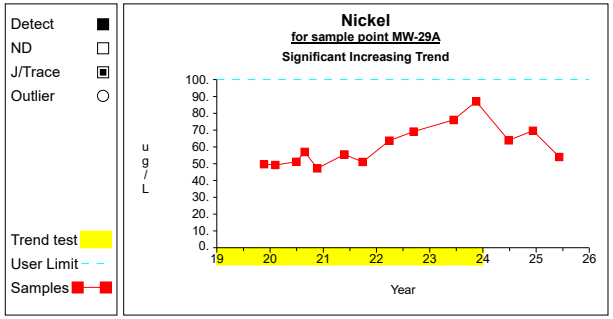
Time Series



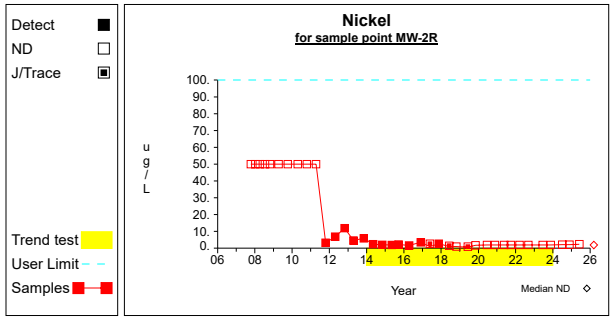
Graph 280



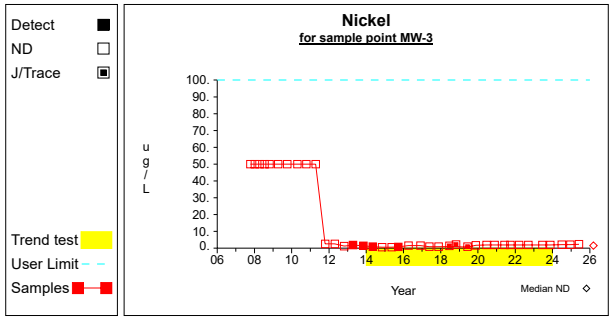
Graph 281



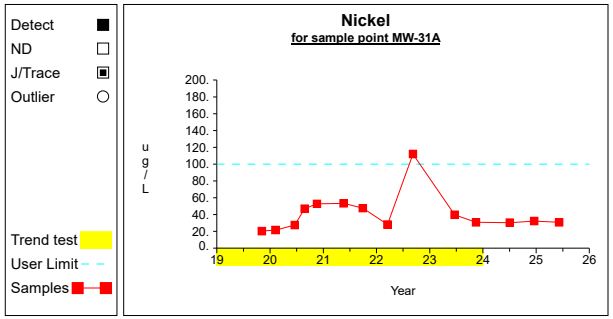
Graph 282



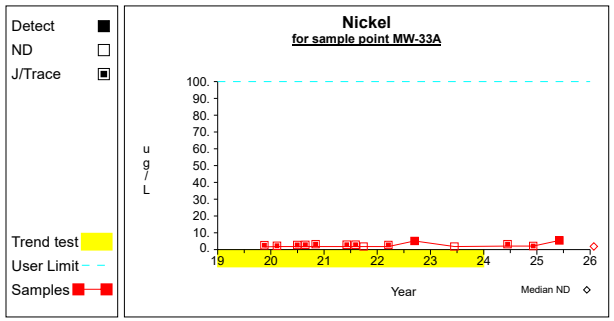
Graph 283



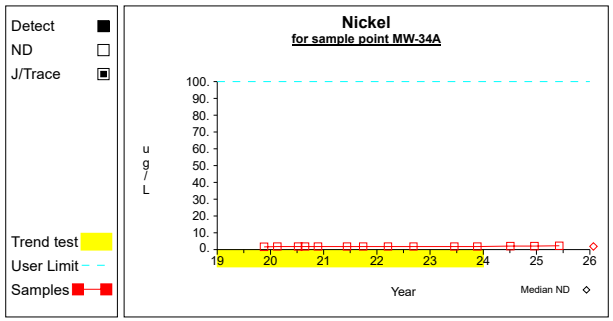
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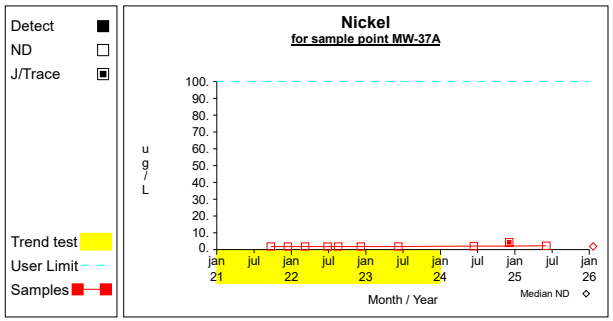
Graph 285



Graph 286

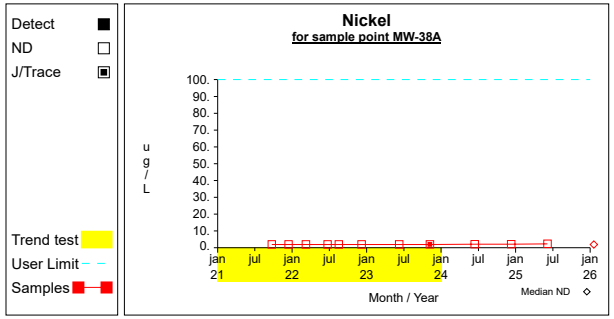


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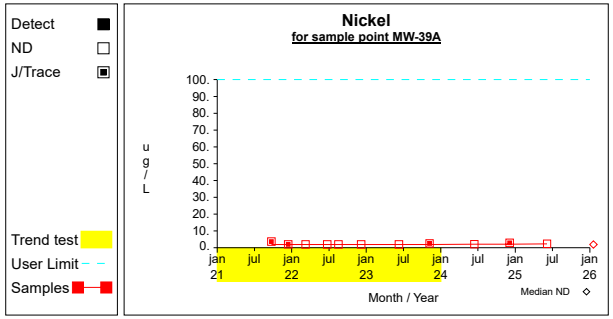


Graph 288

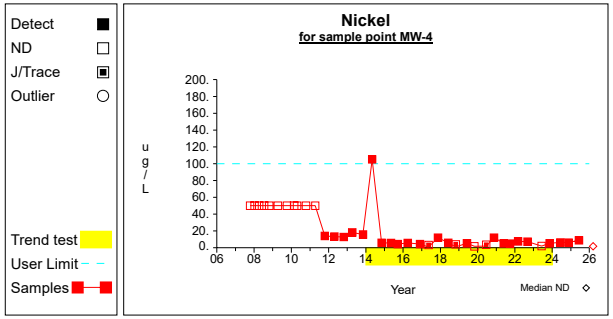
Time Series



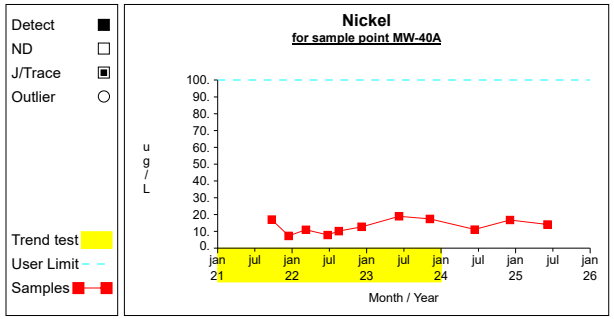
Graph 289



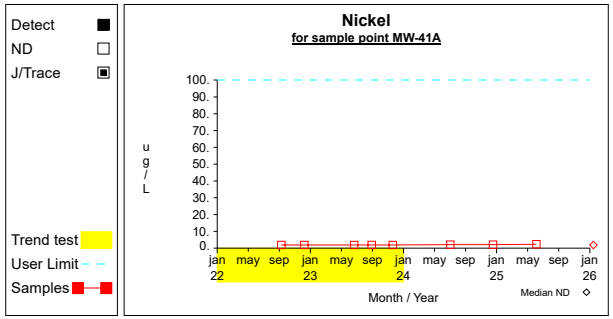
Graph 290



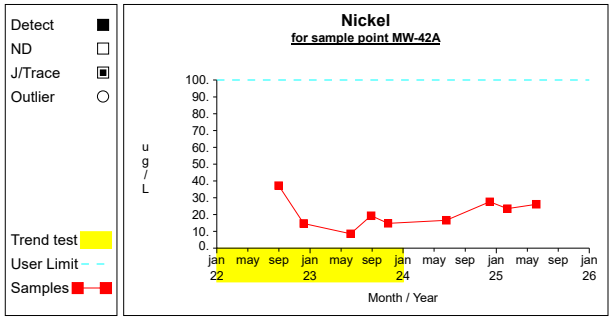
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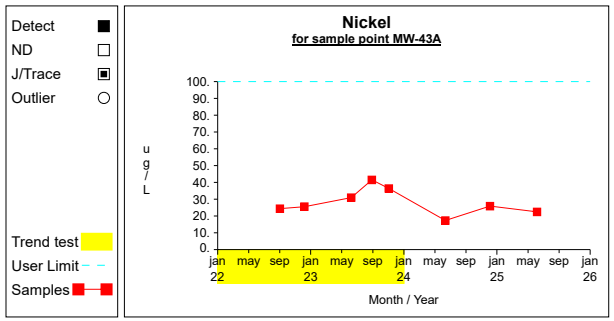
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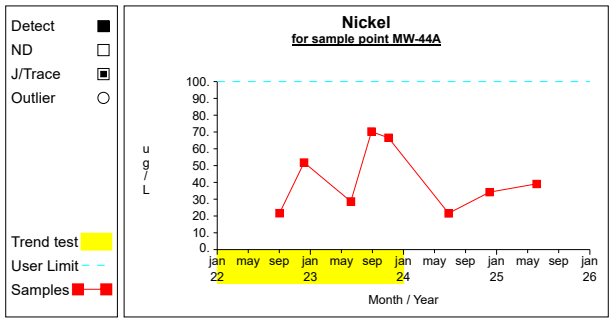
Graph 293



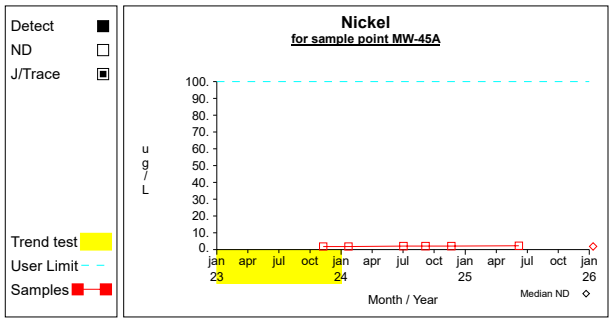
Graph 294



Graph 295

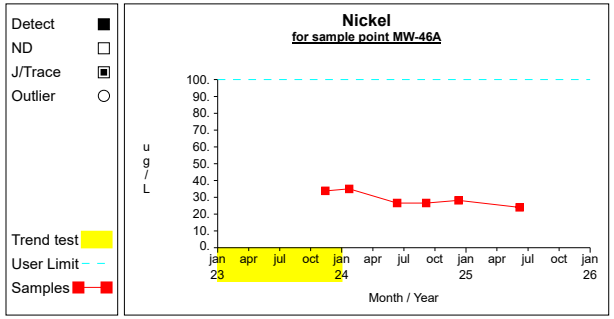


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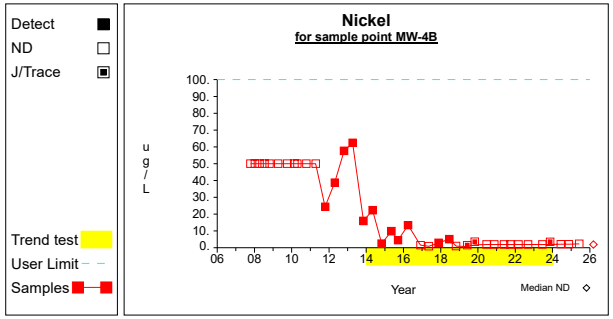


Graph 297

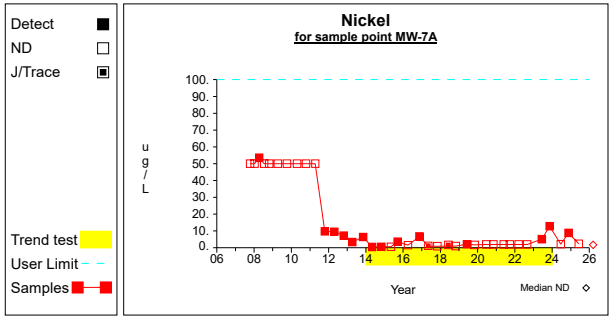
Time Series



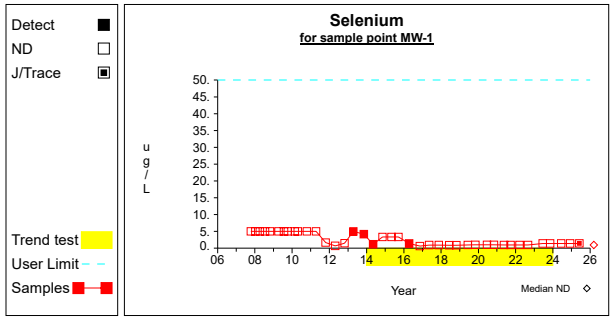
Graph 298



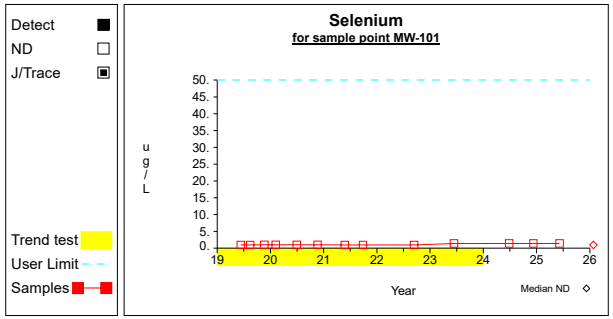
Graph 299



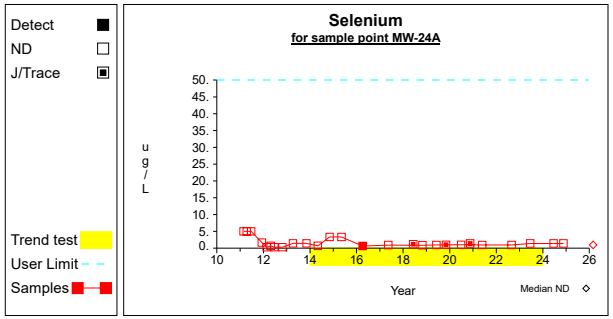
Graph 300



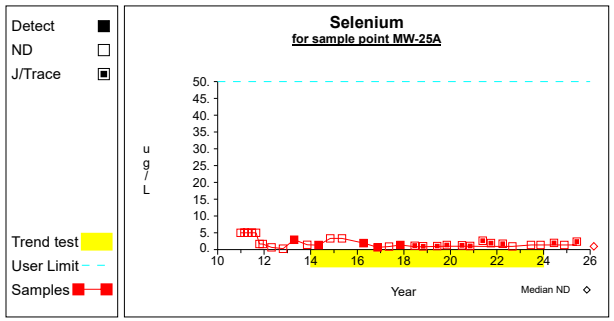
Graph 301



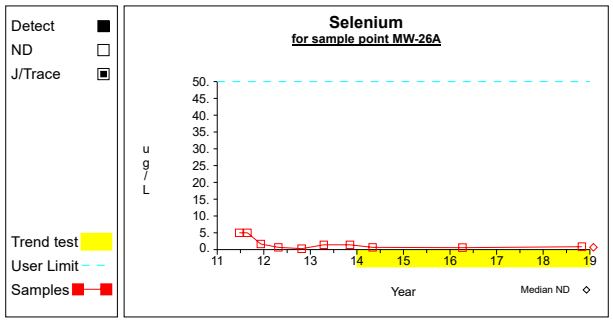
Graph 302



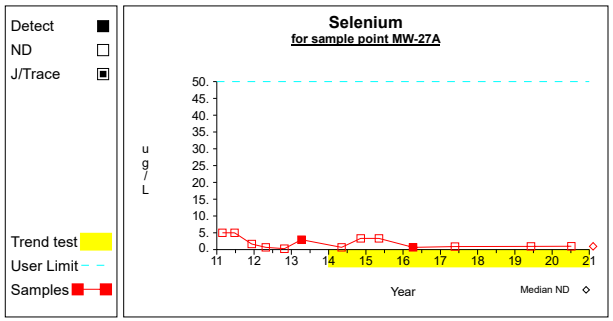
Graph 303



Graph 304

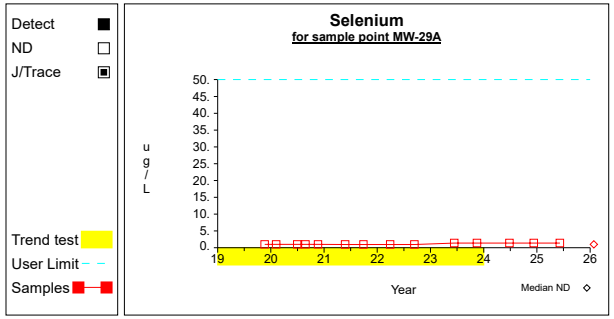


Graph 305

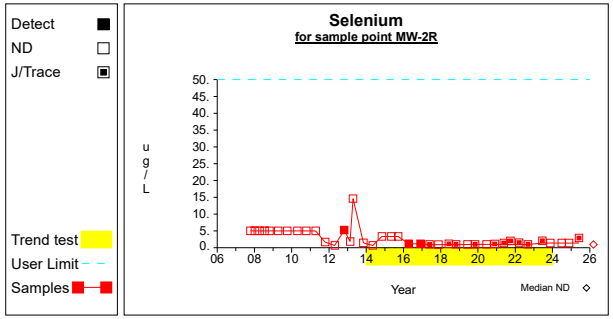


Graph 306

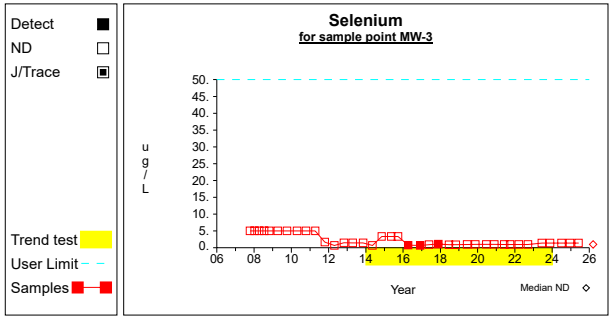
Time Series



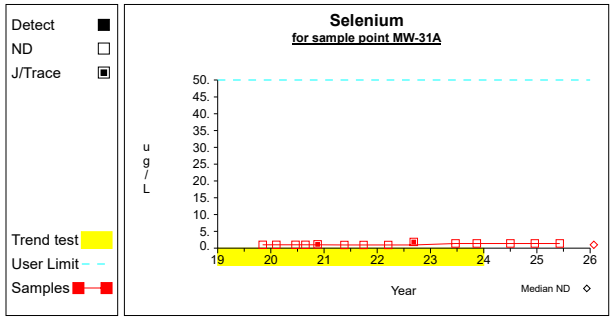
Graph 307



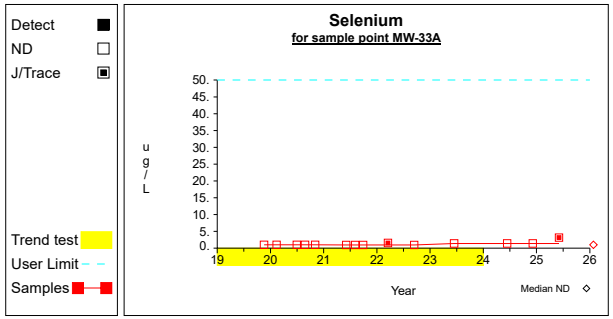
Graph 308



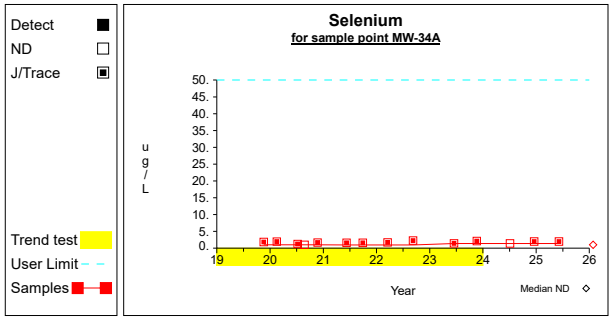
Graph 309



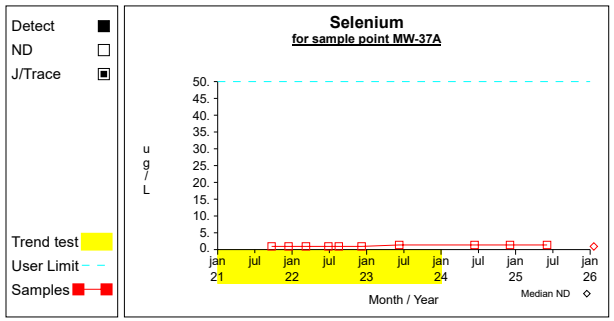
Graph 310



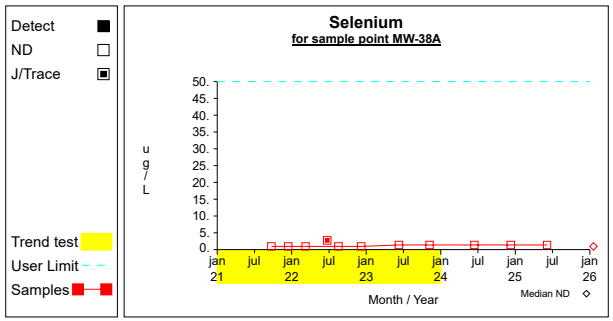
Graph 311



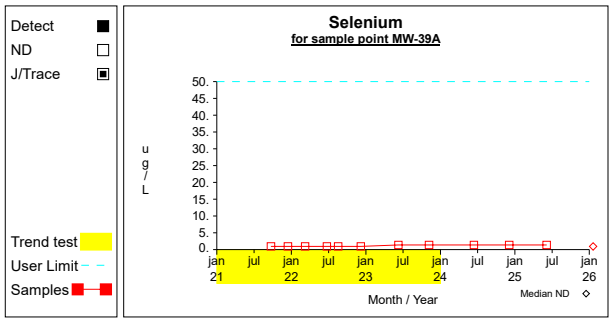
Graph 312



Graph 313

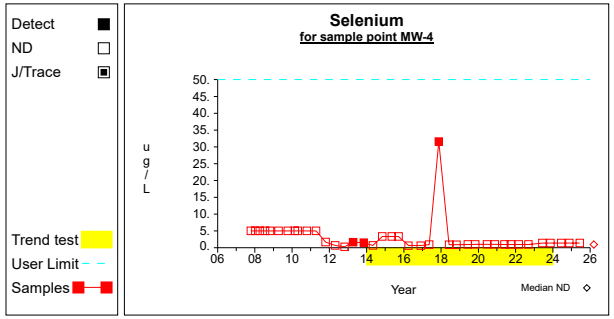


Graph 314

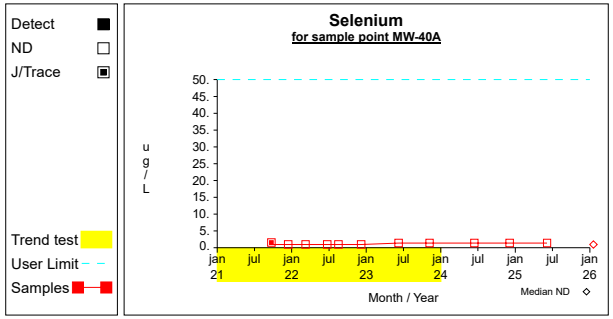


Graph 315

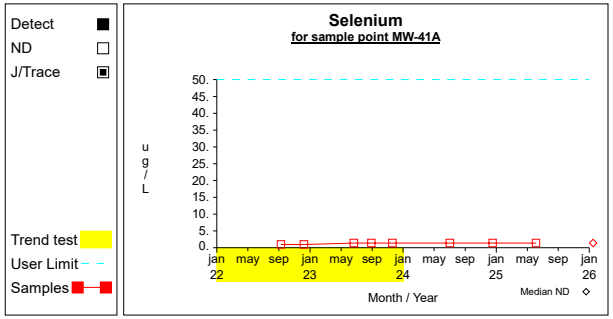
Time Series



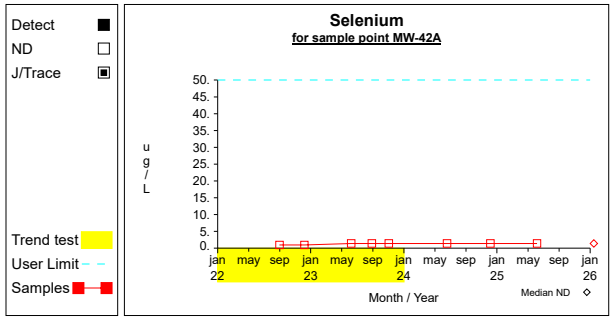
Graph 316



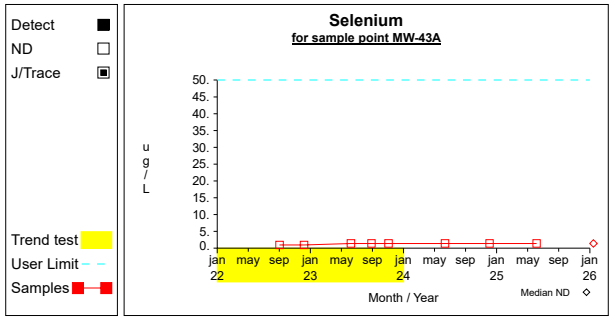
Graph 317



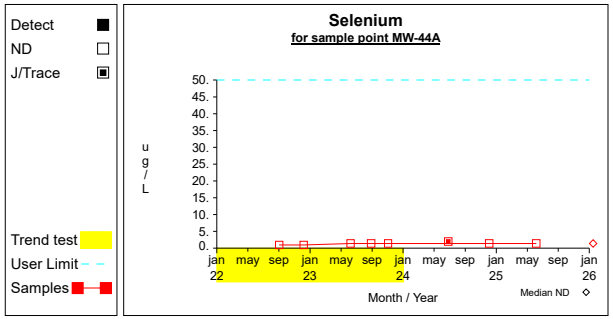
Graph 318



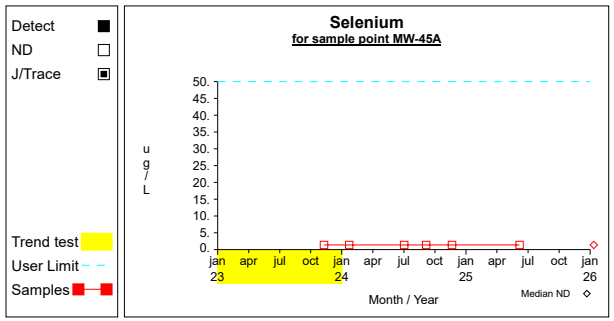
Graph 319



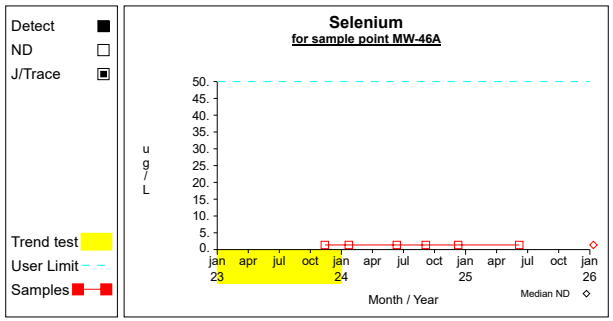
Graph 320



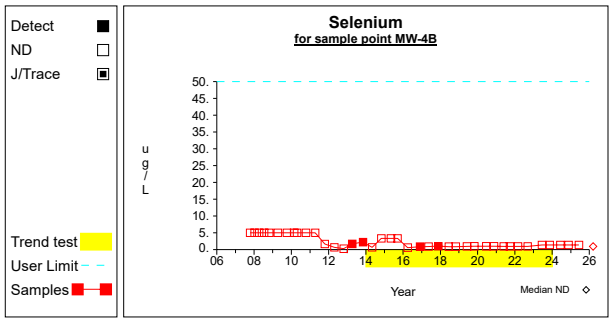
Graph 321



Graph 322

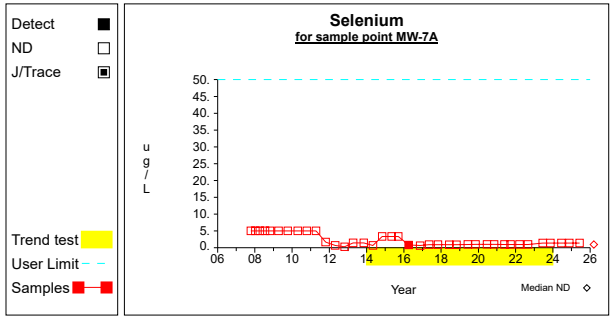


Graph 323

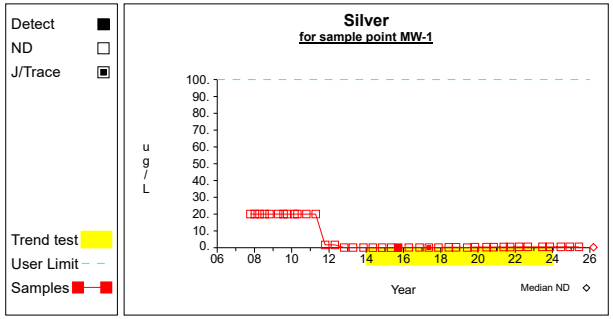


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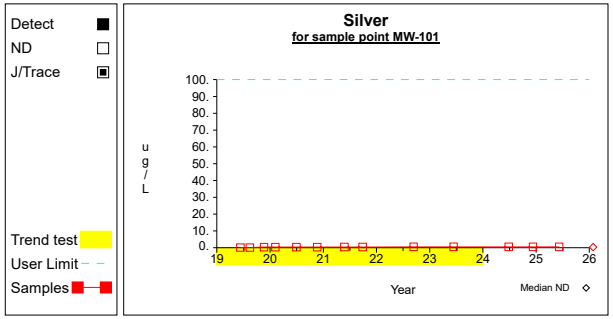
Time Series



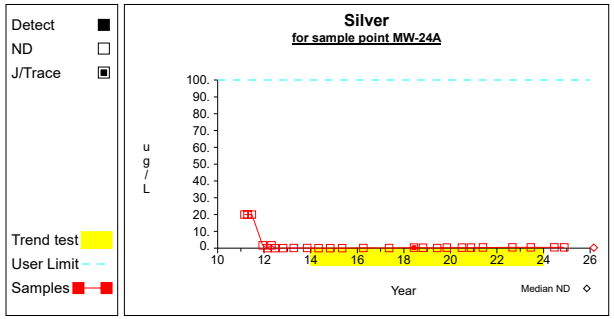
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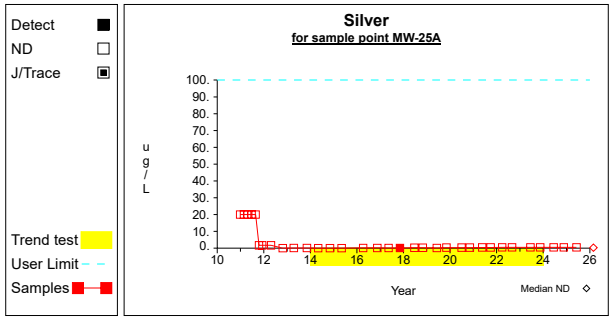
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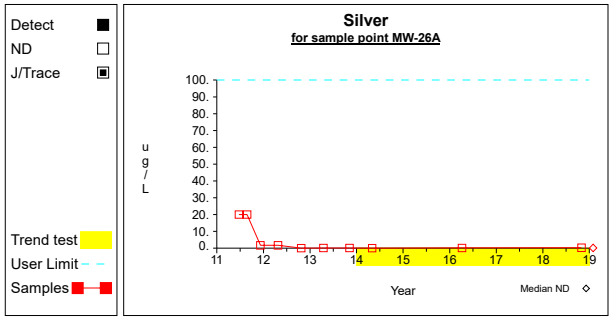
Graph 327



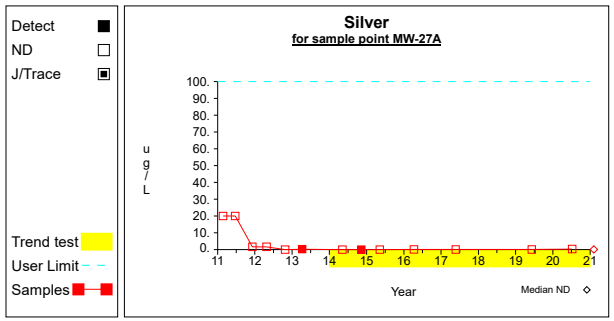
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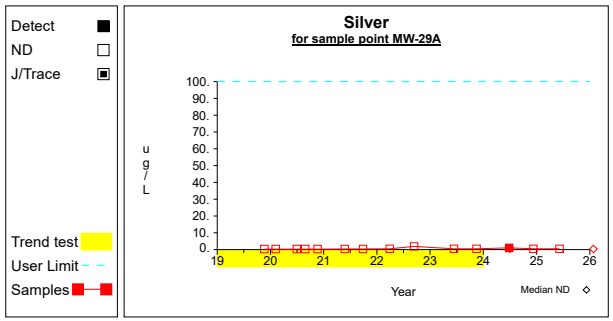
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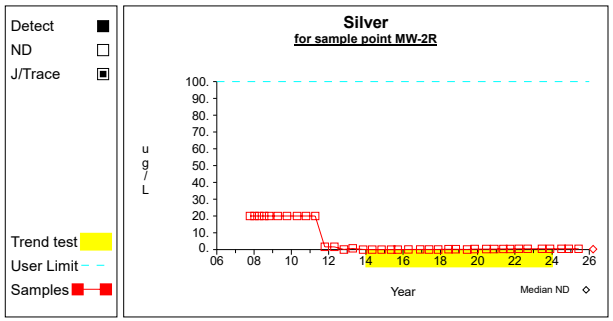
Graph 330



Graph 331

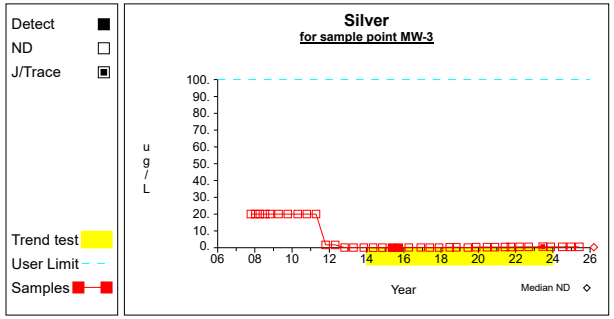


Graph 332

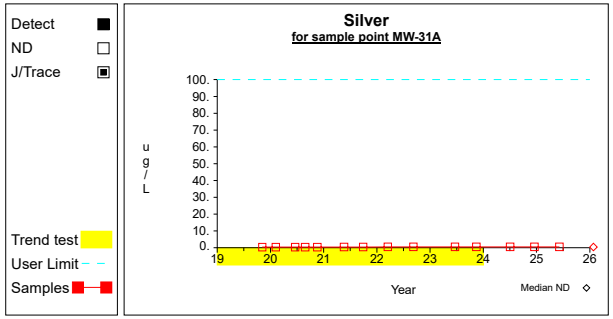


Graph 333

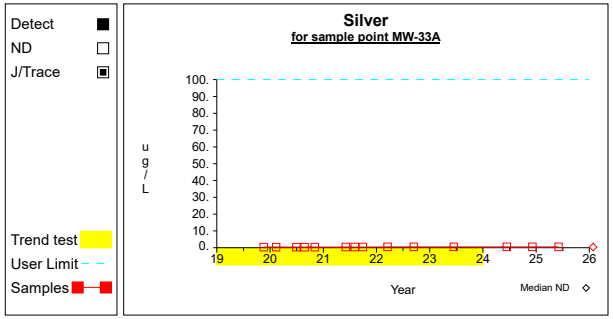
Time Series



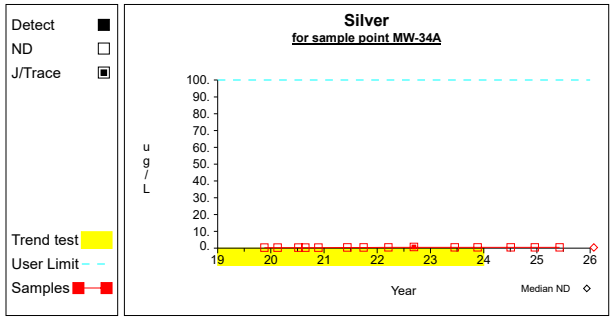
Graph 334



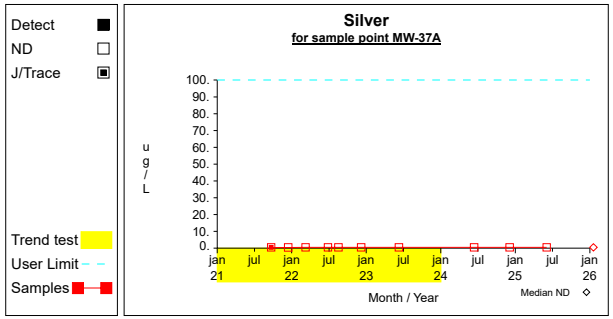
Graph 335



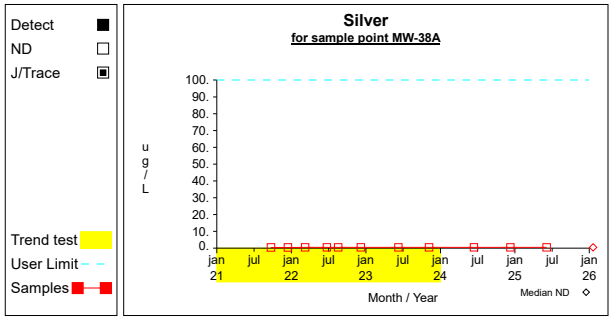
Graph 336



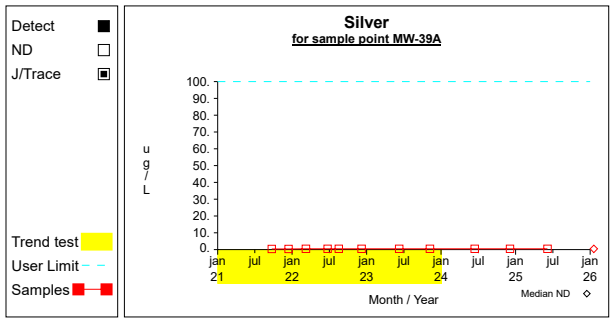
Graph 337



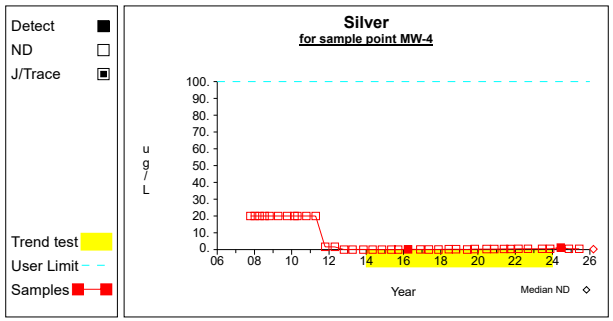
Graph 338



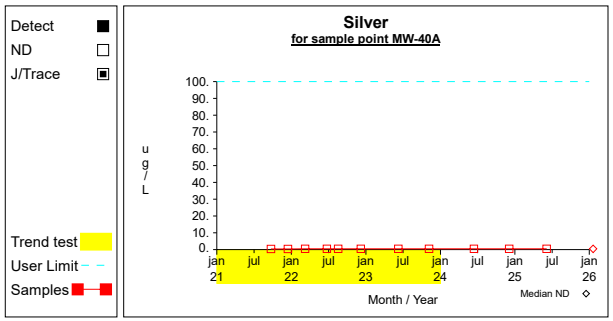
Graph 339



Graph 340

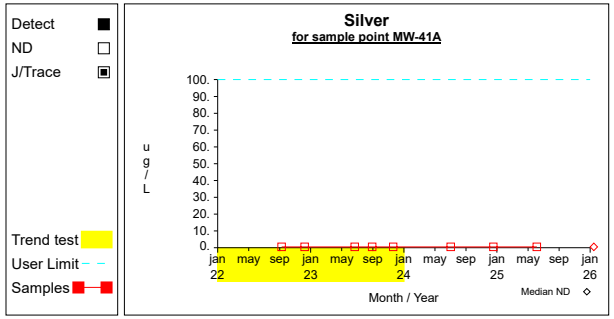


Graph 341

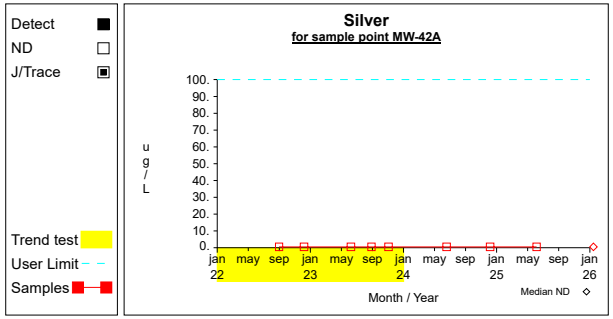


Graph 342

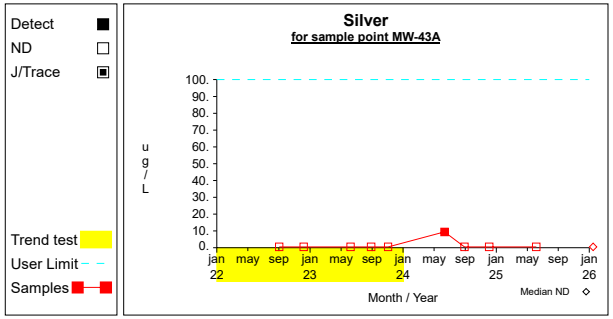
Time Series



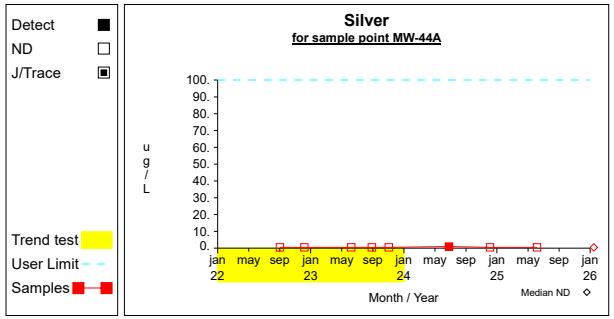
Graph 343



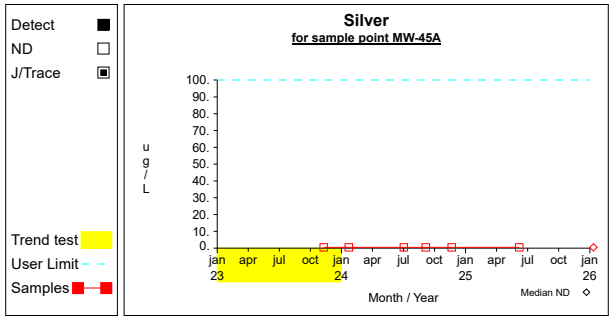
Graph 344



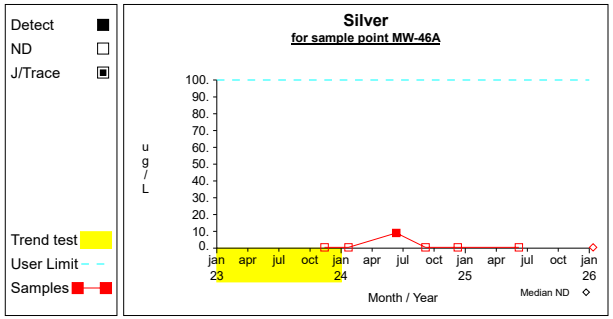
Graph 345



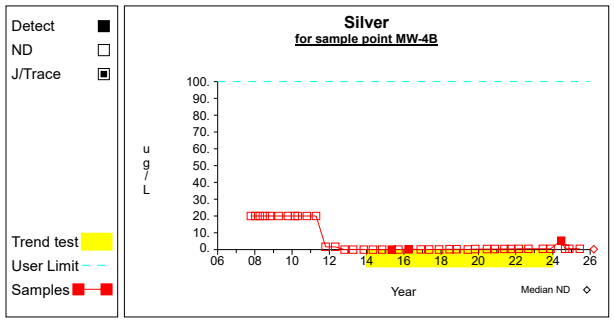
Graph 346



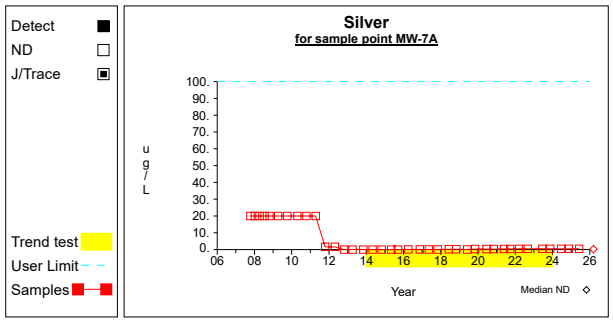
Graph 347



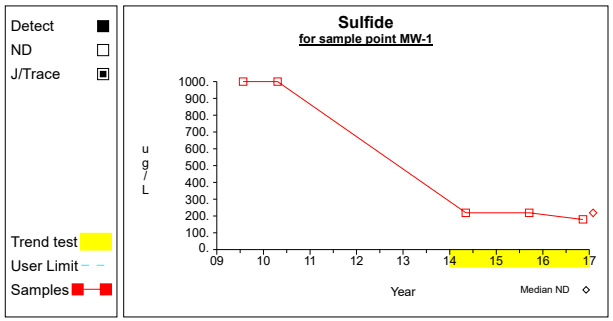
Graph 348



Graph 349

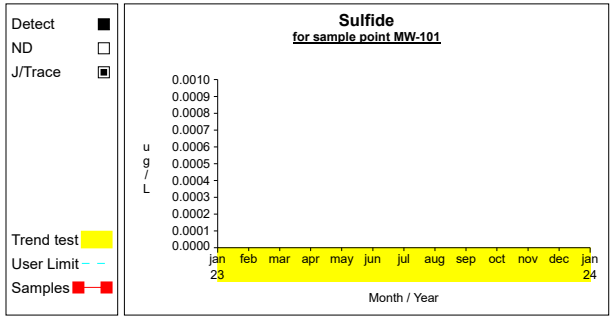


Graph 350

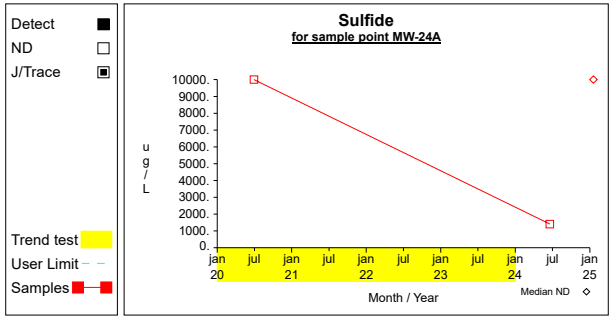


Graph 351

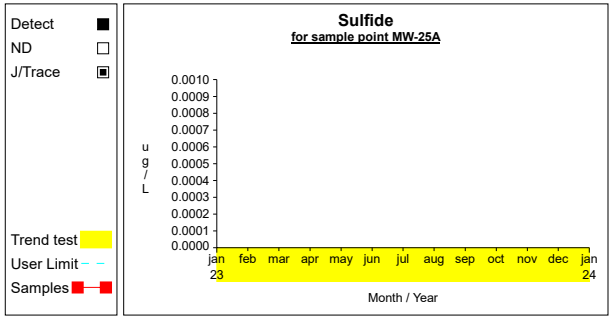
Time Series



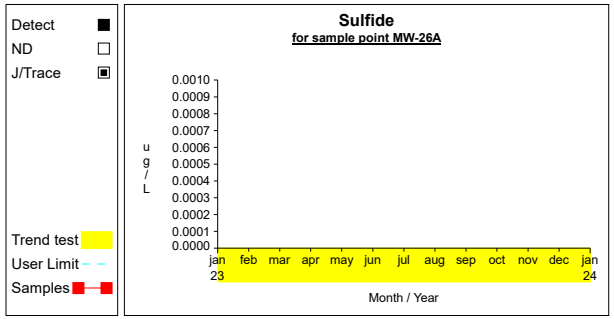
Graph 352



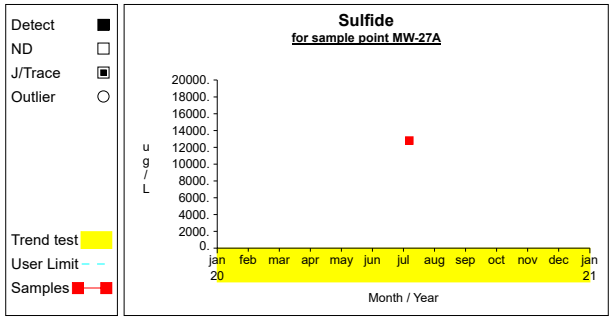
Graph 353



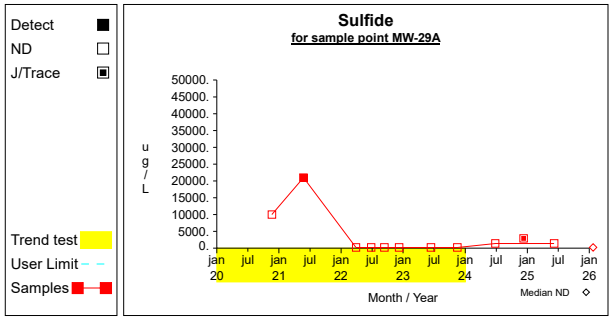
Graph 354



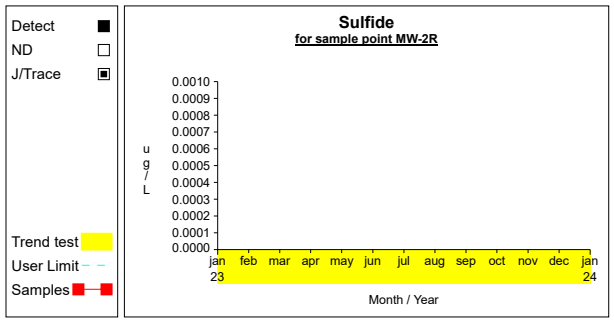
Graph 355



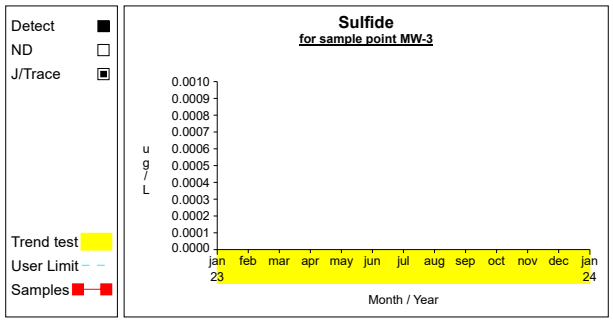
Graph 356



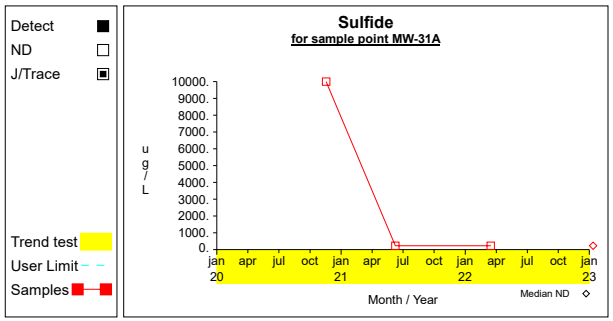
Graph 357



Graph 358

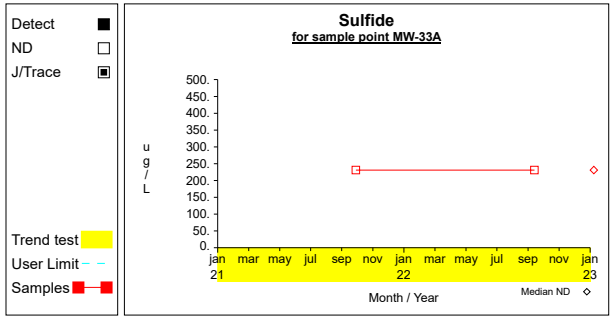


Graph 359

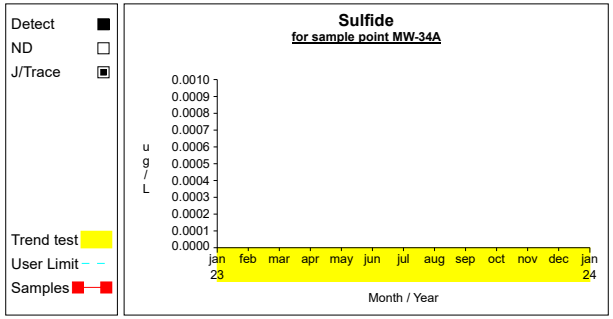


Graph 360

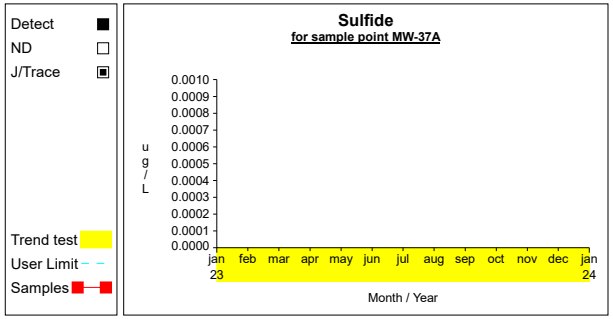
Time Series



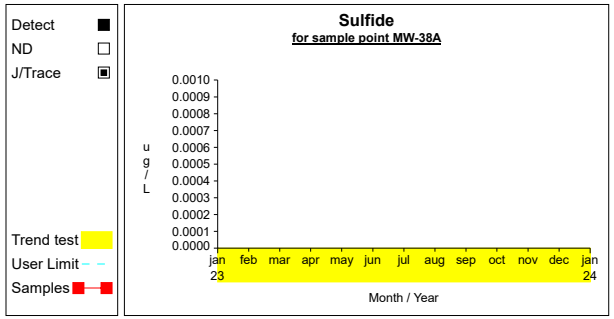
Graph 361



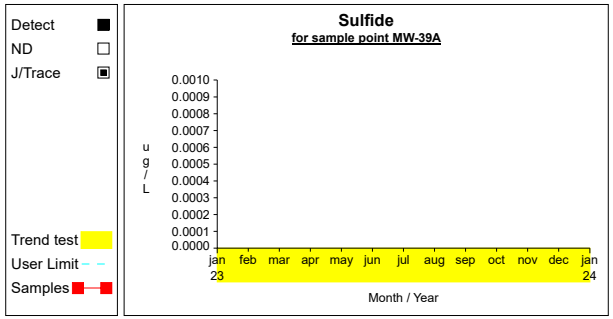
Graph 362



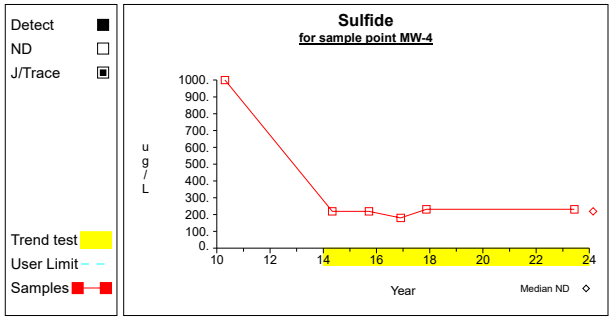
Graph 363



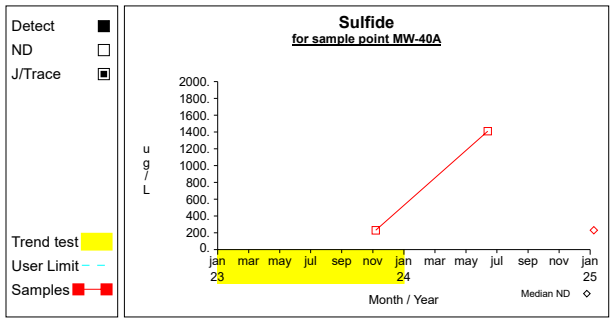
Graph 364



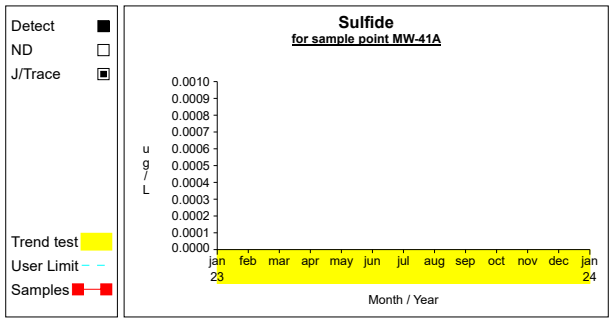
Graph 365



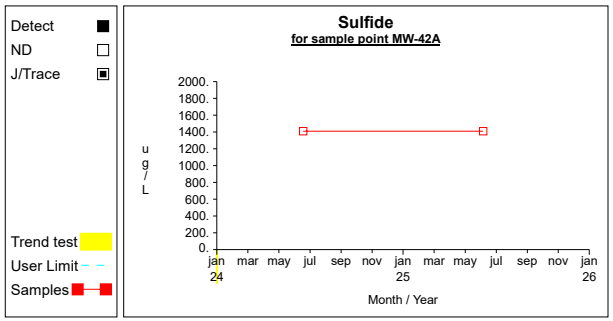
Graph 366



Graph 367

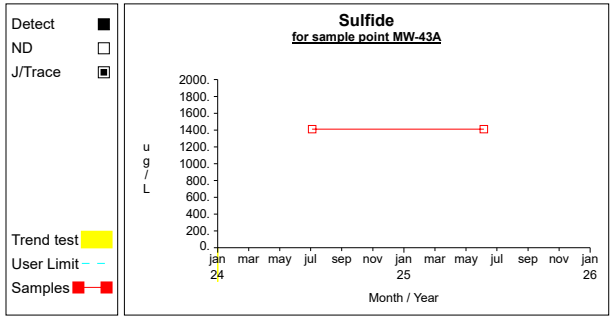


Graph 368

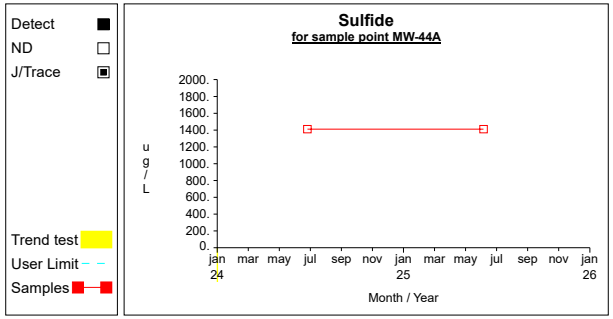


Graph 369

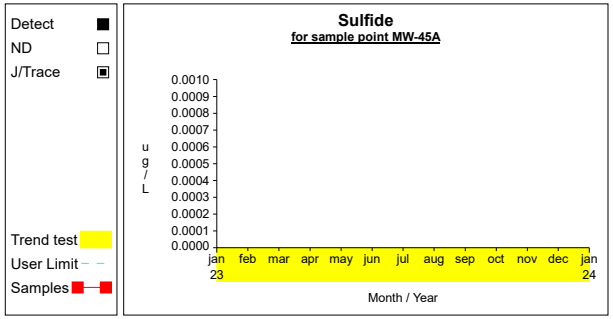
Time Series



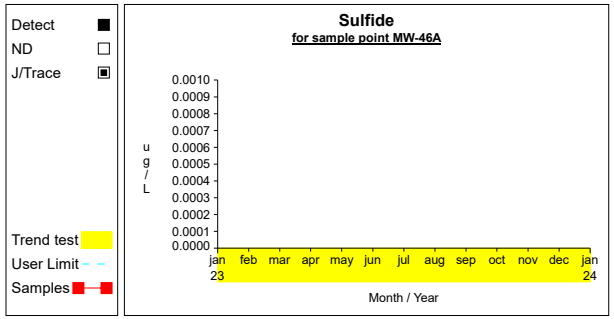
Graph 370



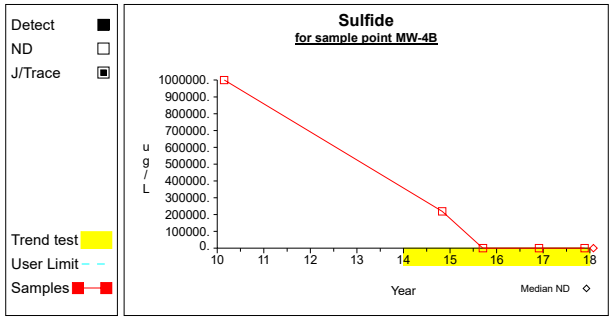
Graph 371



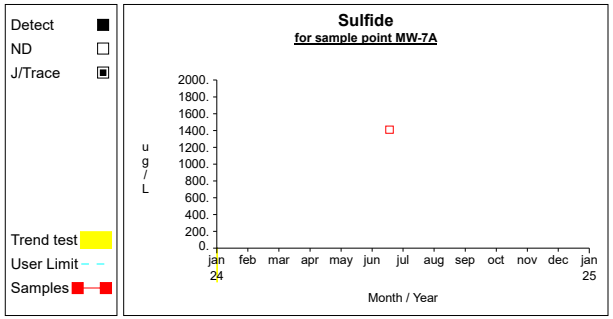
Graph 372



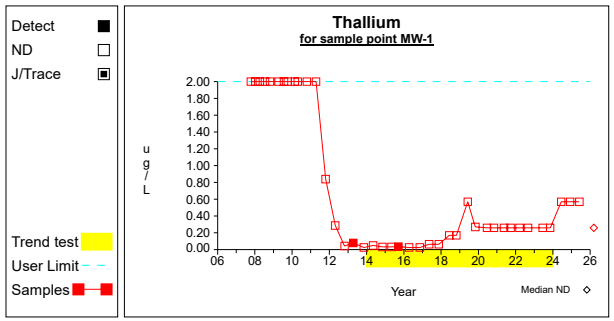
Graph 373



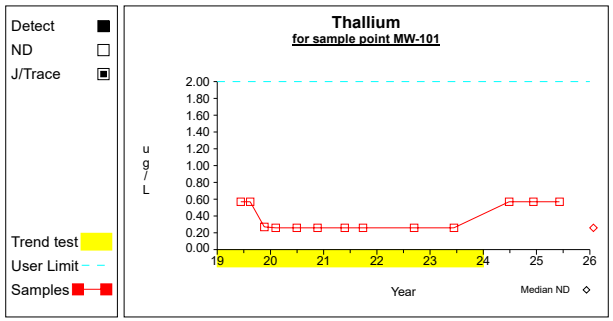
Graph 374



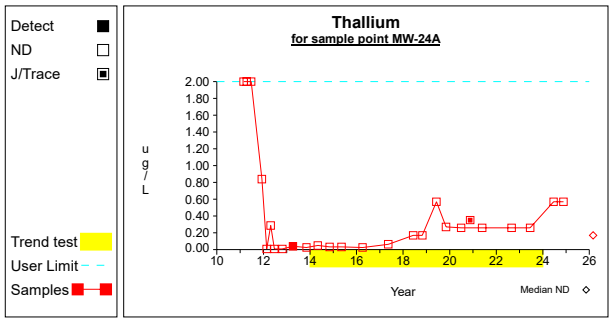
Graph 375



Graph 376

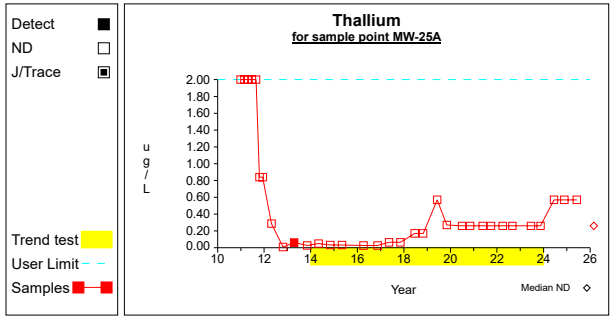


Graph 377

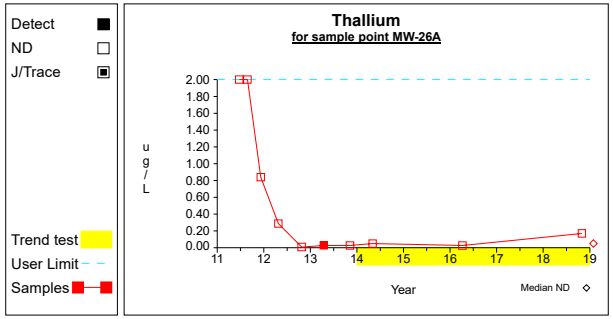


Graph 378

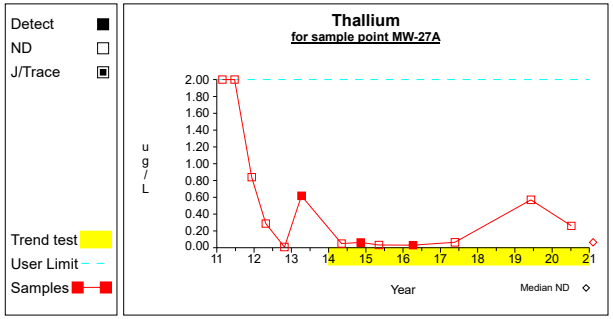
Time Series



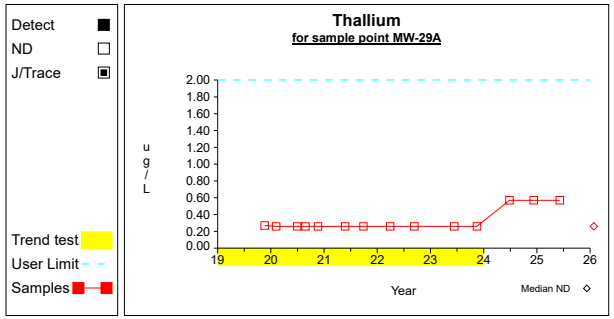
Graph 379



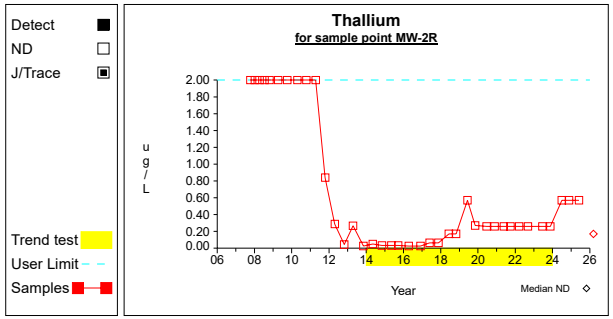
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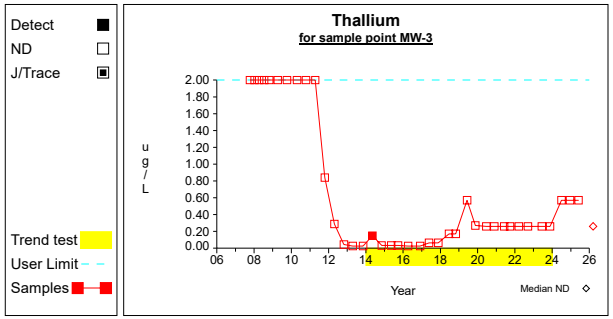
Graph 381



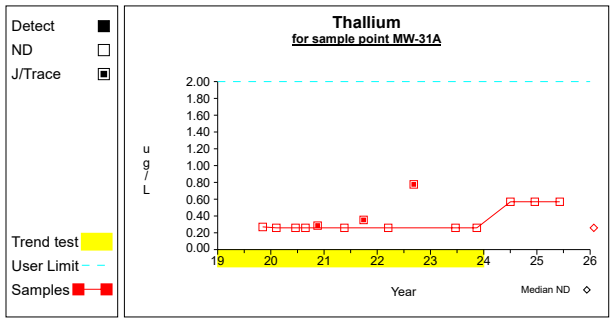
Graph 382



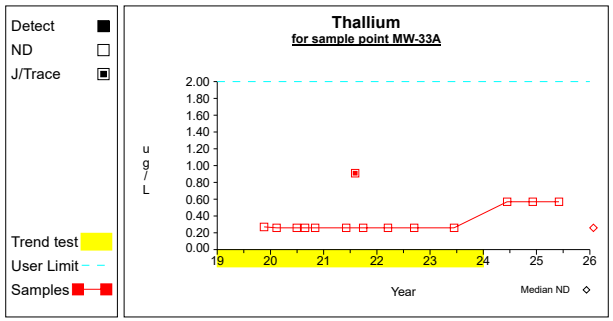
Graph 383



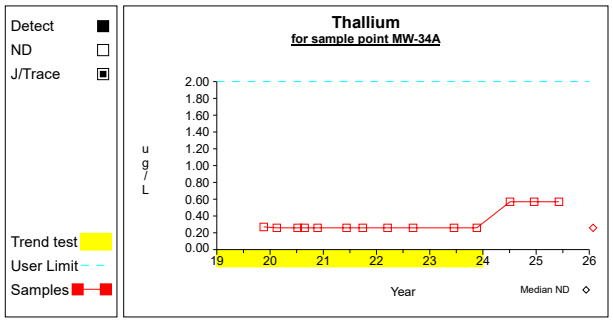
Graph 384



Graph 385

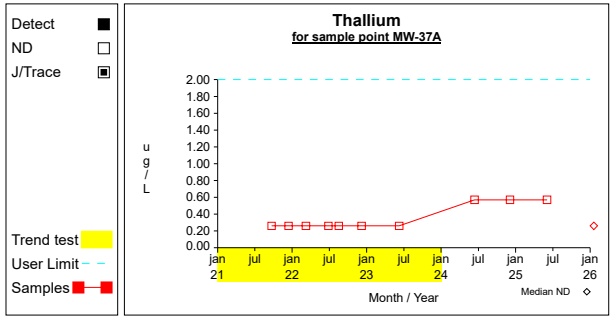


Graph 386

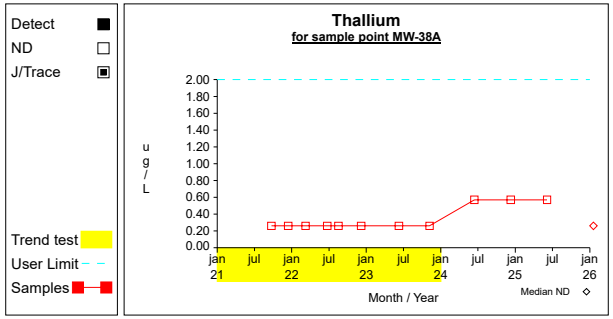


Graph 387

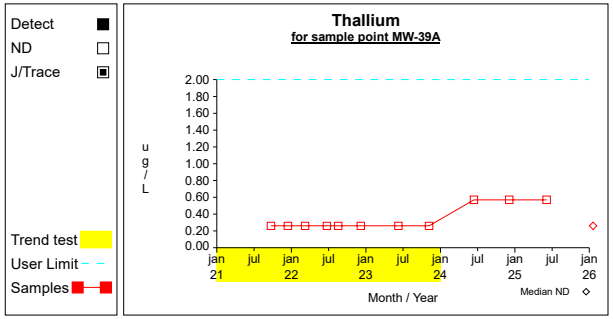
Time Series



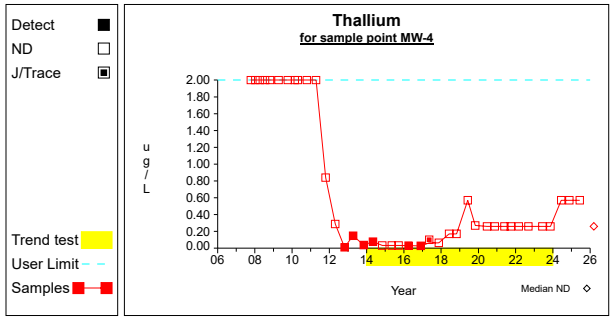
Graph 388



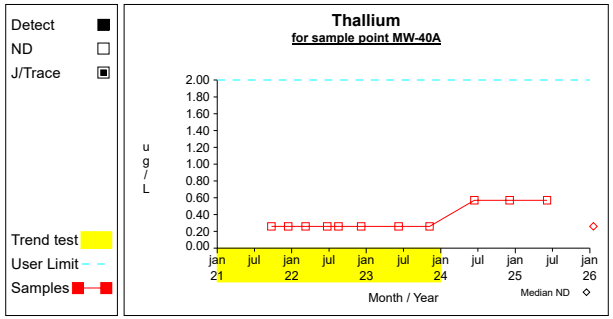
Graph 389



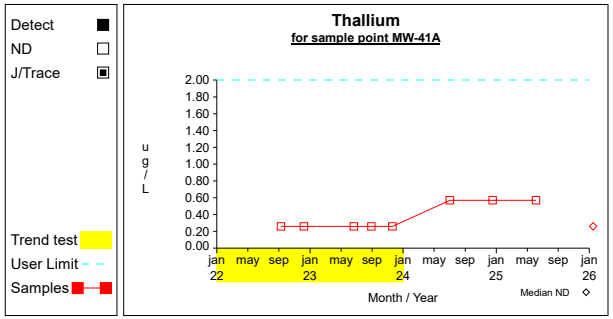
Graph 390



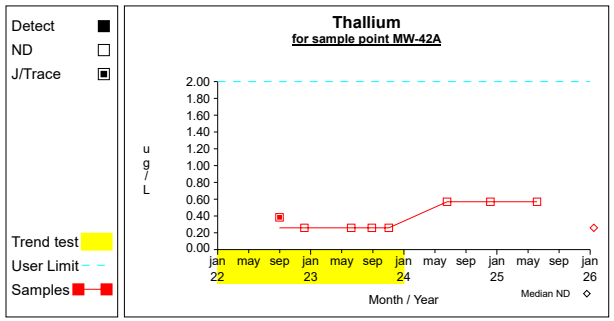
Graph 391



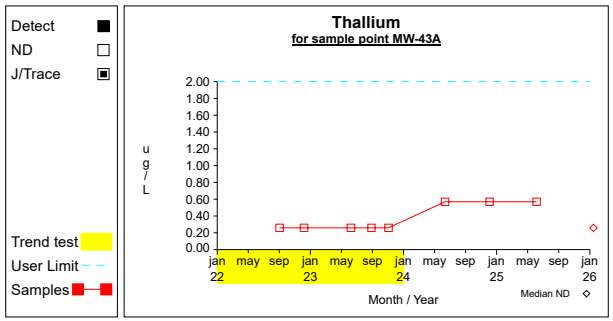
Graph 392



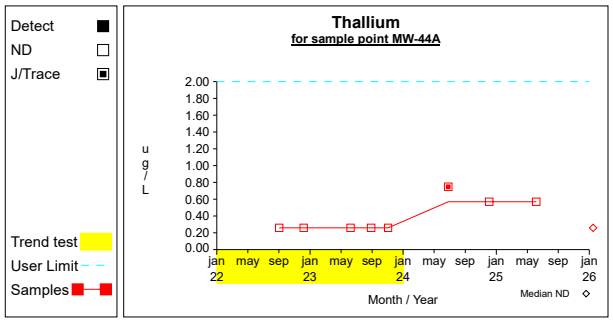
Graph 393



Graph 394

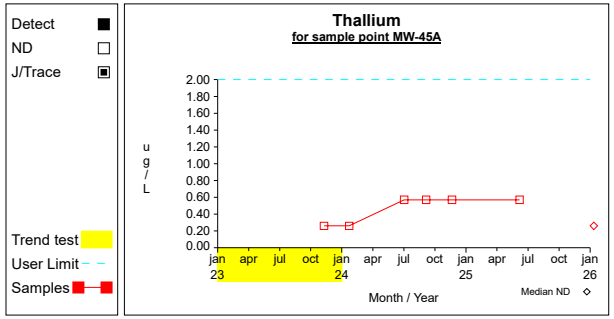


Graph 395

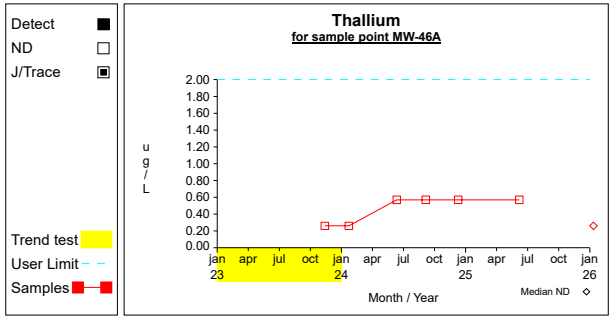


Graph 396

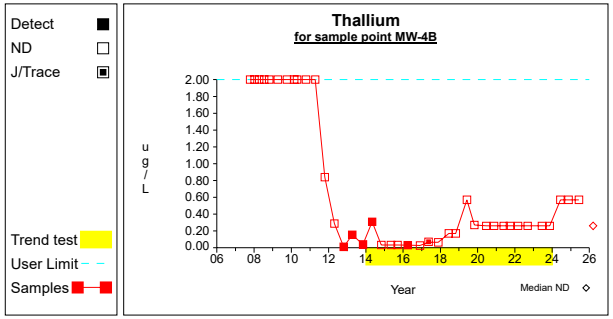
Time Series



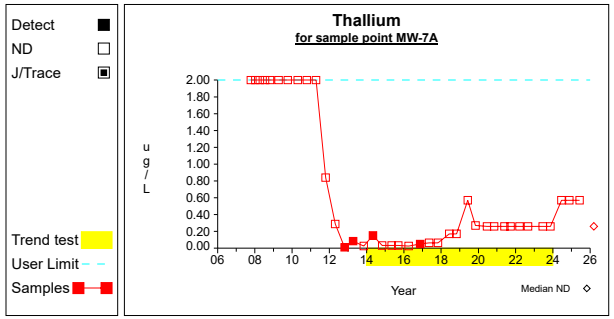
Graph 397



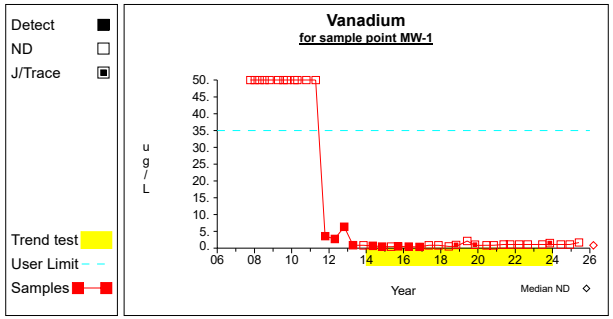
Graph 398



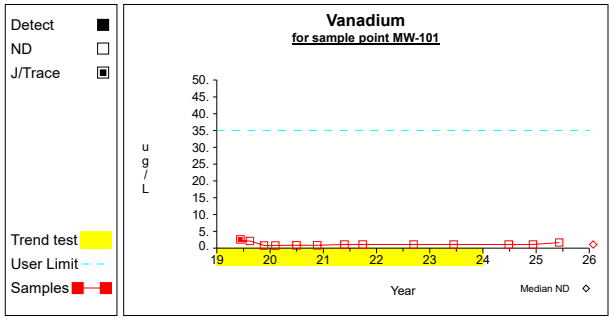
Graph 399



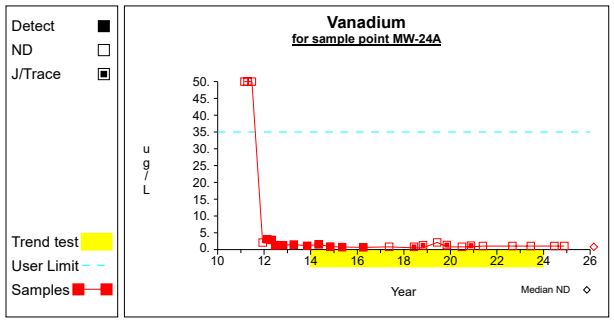
Graph 400



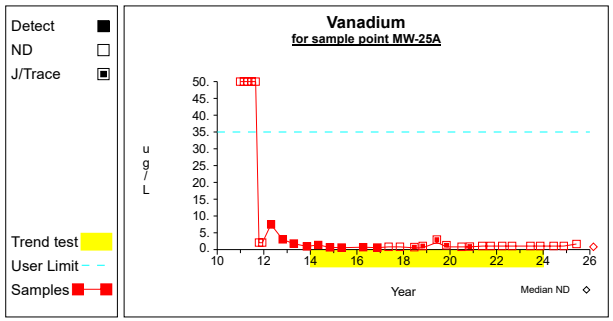
Graph 401



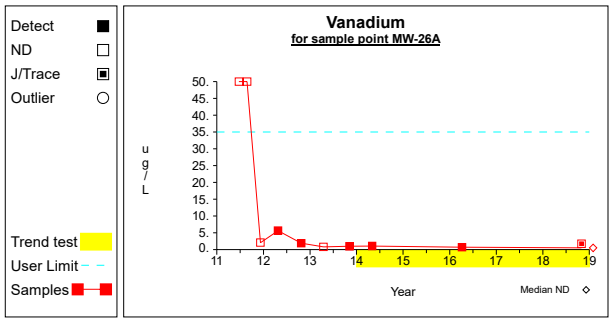
Graph 402



Graph 403

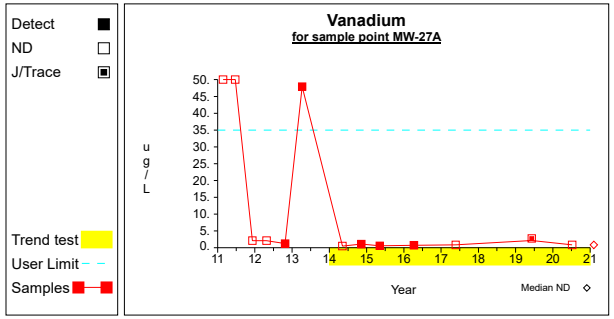


Graph 404

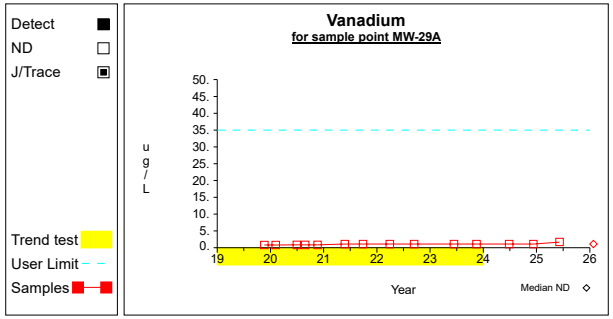


Graph 405

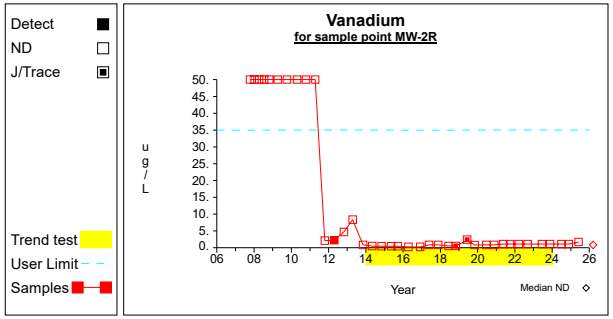
Time Series



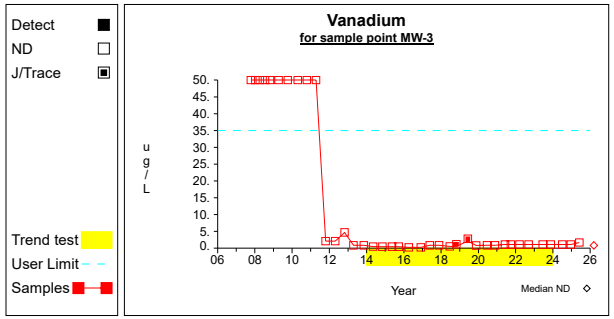
Graph 406



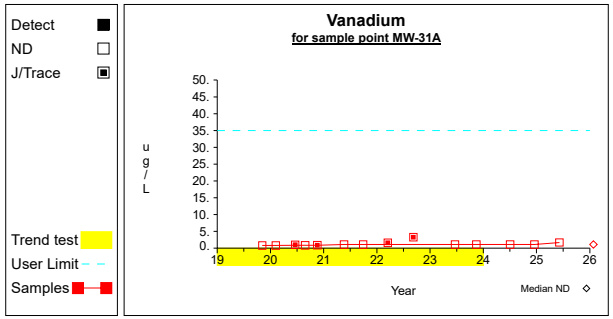
Graph 407



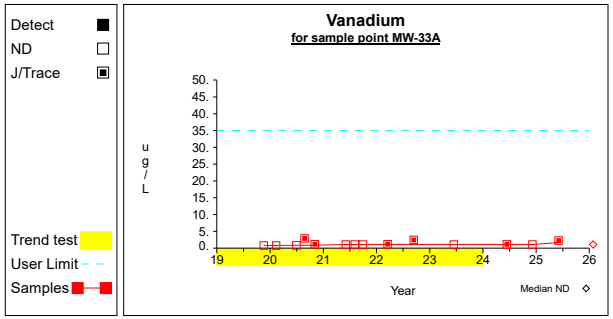
Graph 408



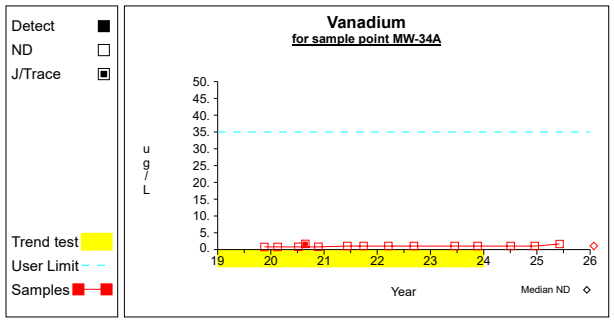
Graph 409



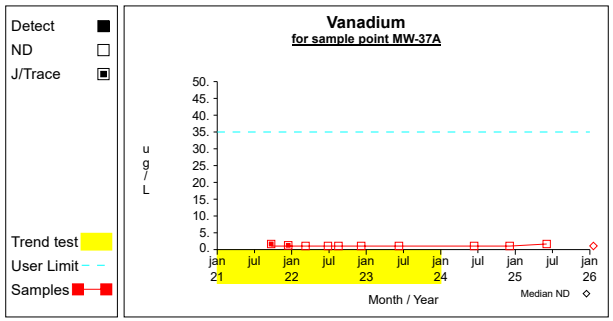
Graph 410



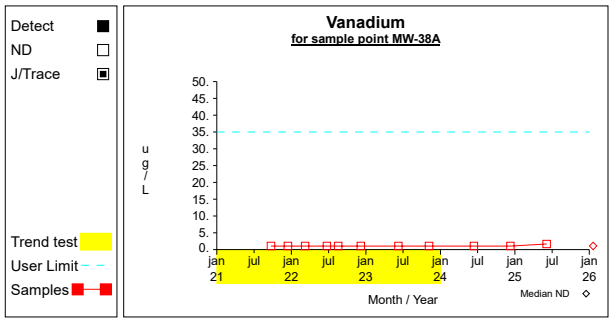
Graph 411



Graph 412

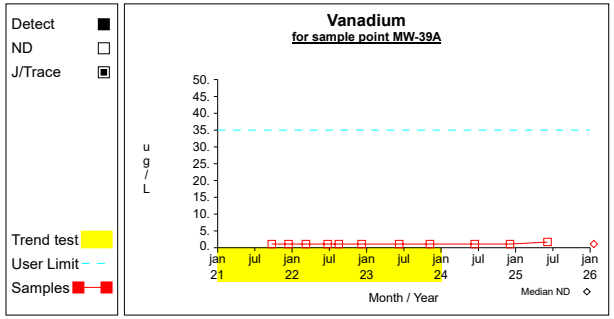


Graph 413

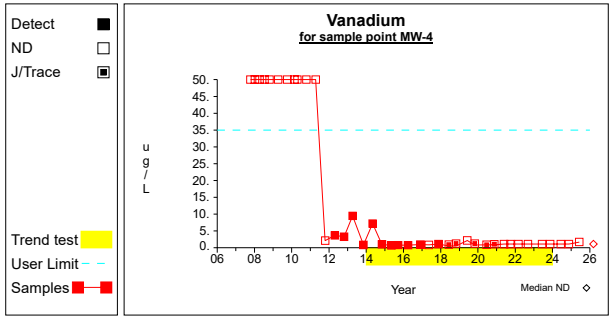


Graph 414

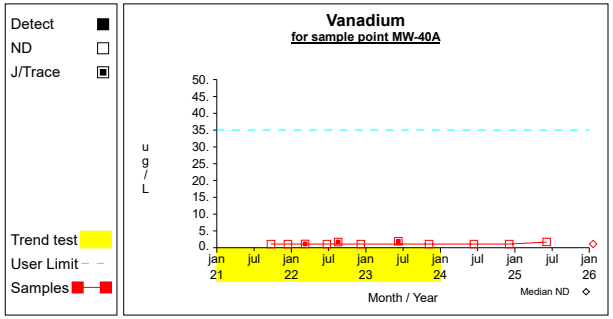
Time Series



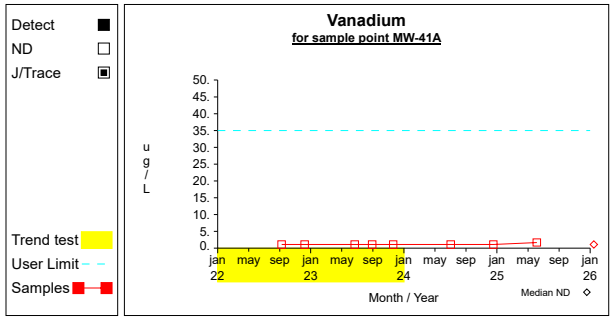
Graph 415



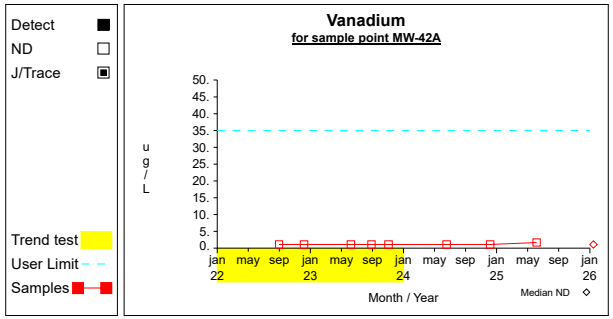
Graph 416



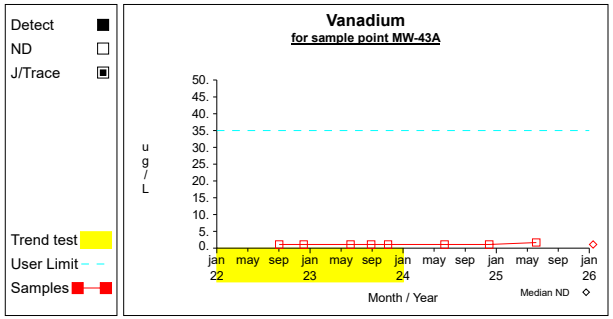
Graph 417



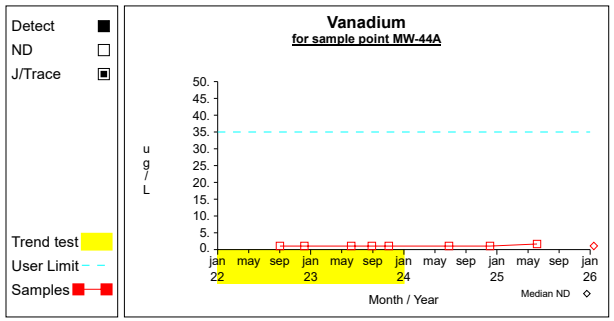
Graph 418



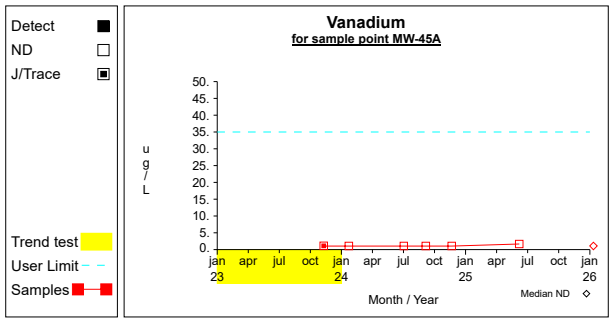
Graph 419



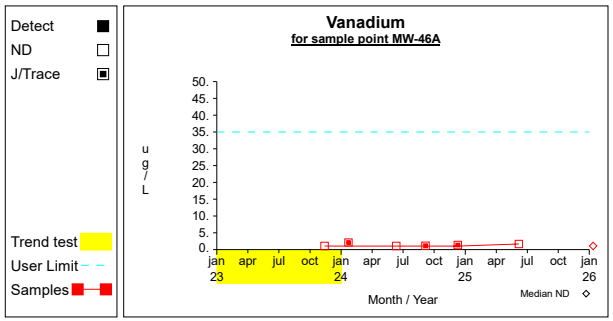
Graph 420



Graph 421

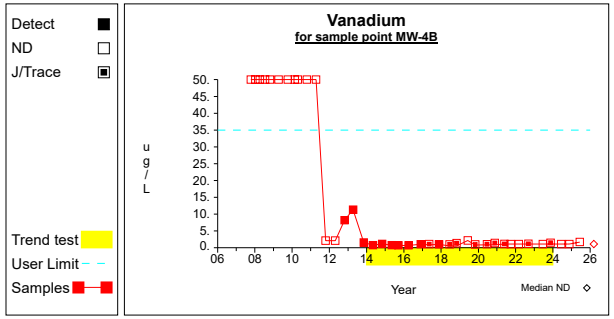


Graph 422

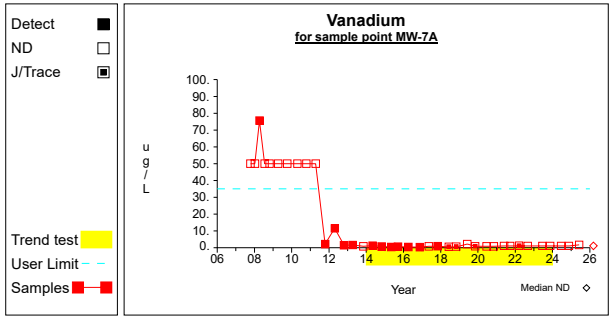


Graph 423

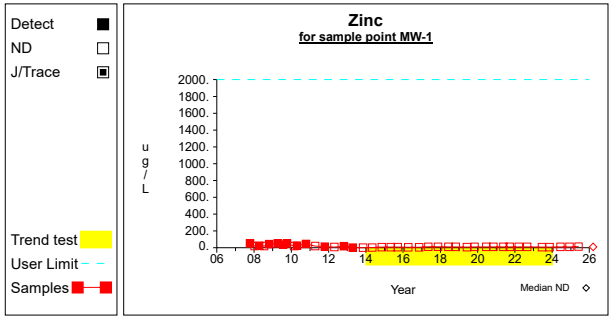
Time Series



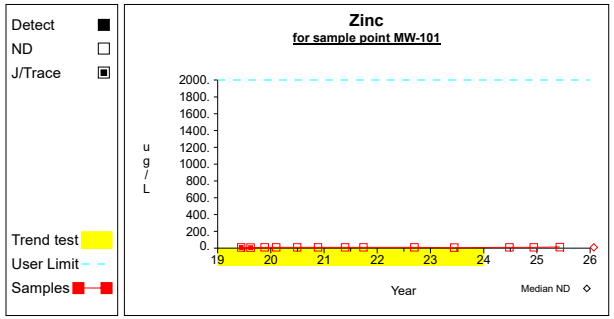
Graph 424



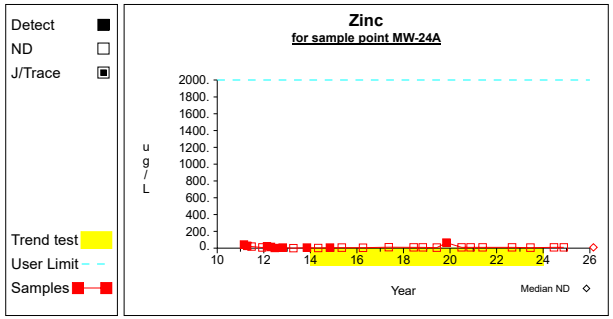
Graph 425



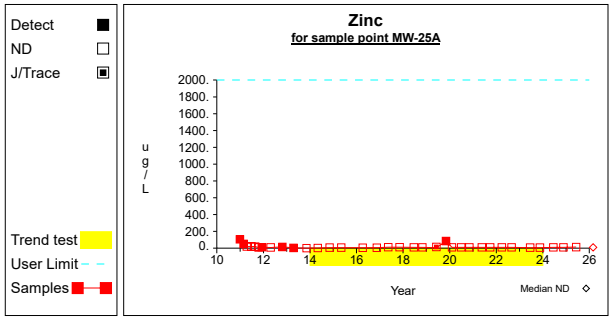
Graph 426



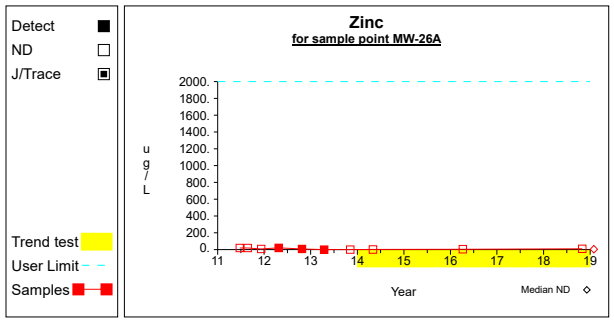
Graph 427



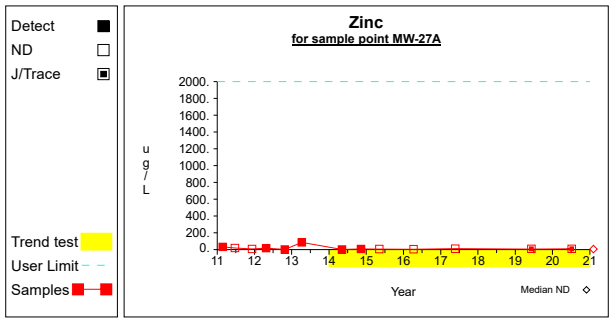
Graph 428



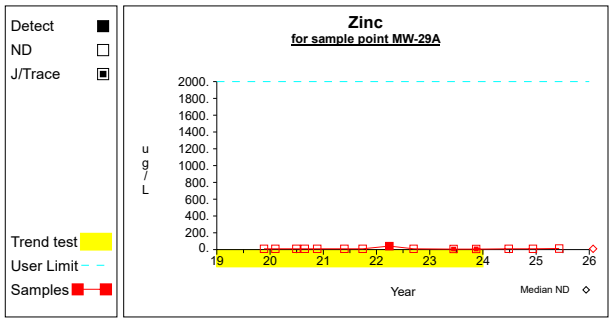
Graph 429



Graph 430

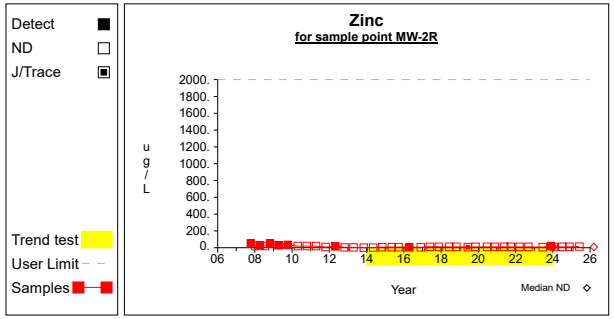


Graph 431

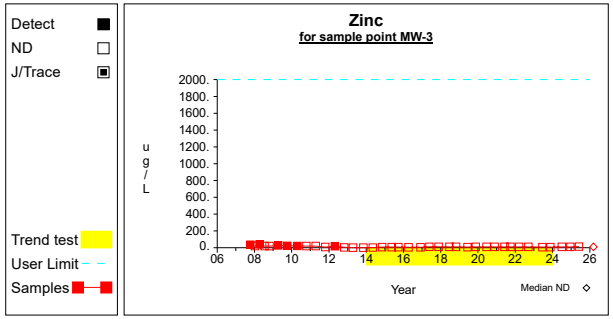


Graph 432

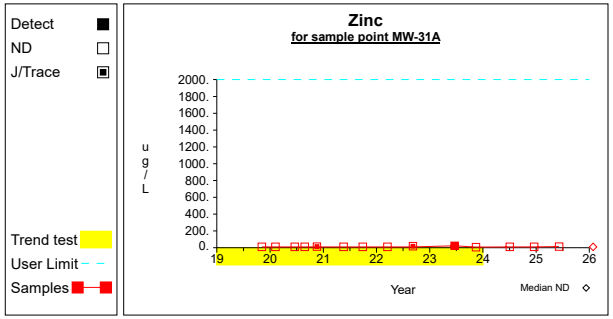
Time Series



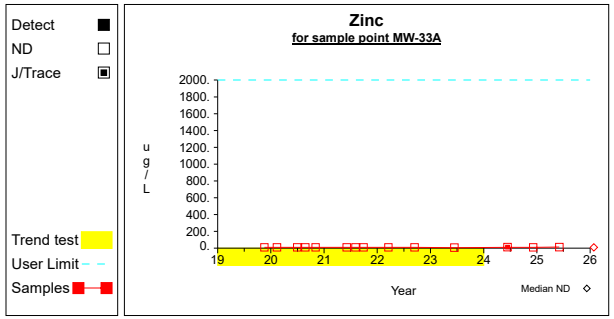
Graph 433



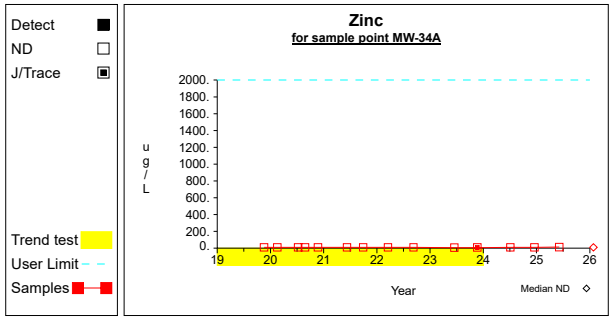
Graph 434



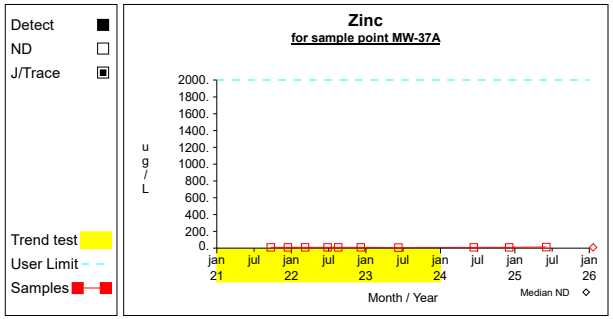
Graph 435



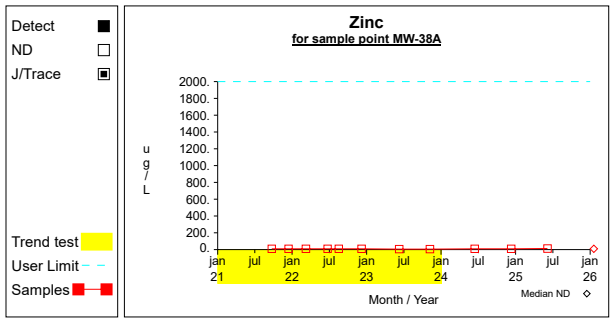
Graph 436



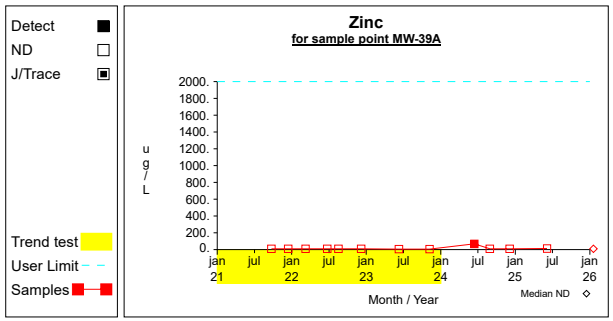
Graph 437



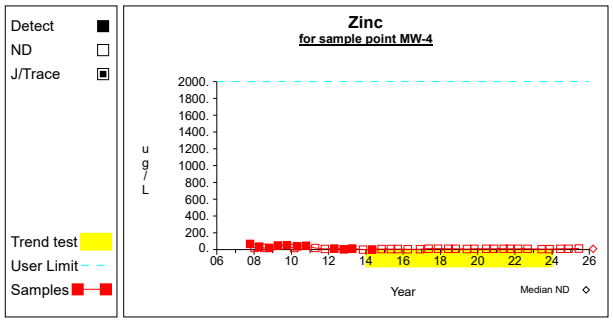
Graph 438



Graph 439

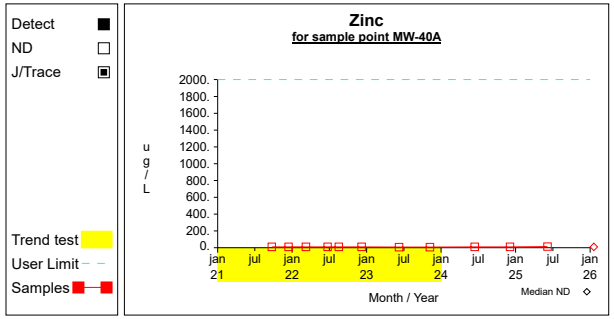


Graph 440

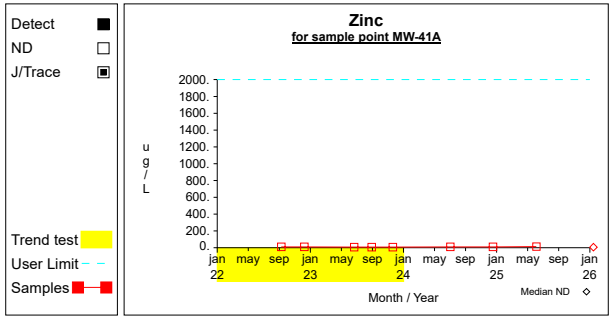


Graph 441

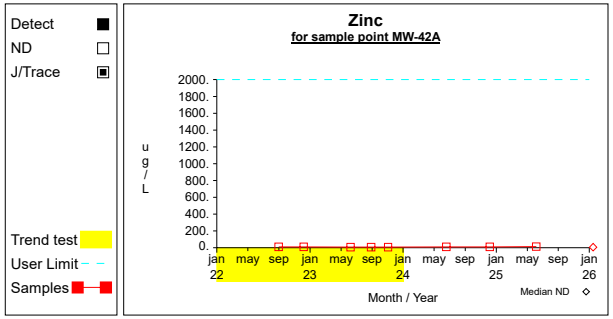
Time Series



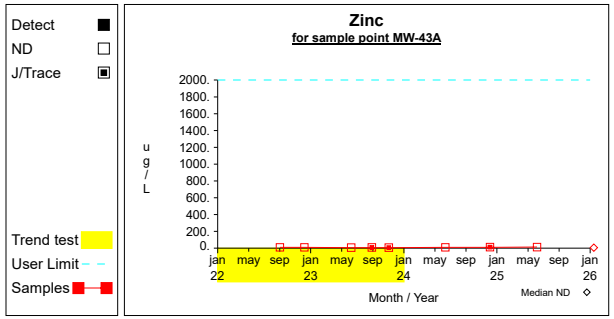
Graph 442



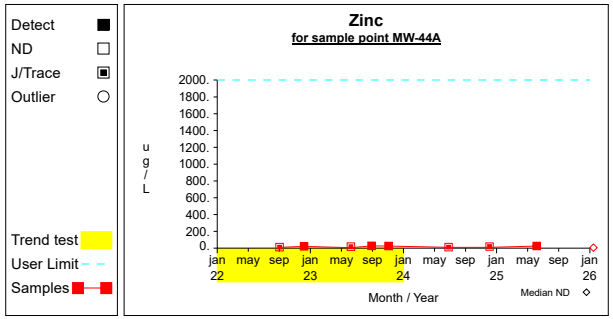
Graph 443



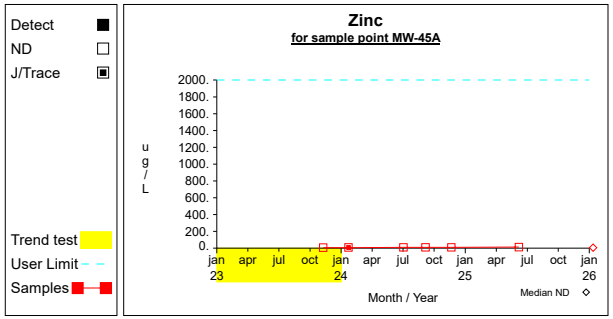
Graph 444



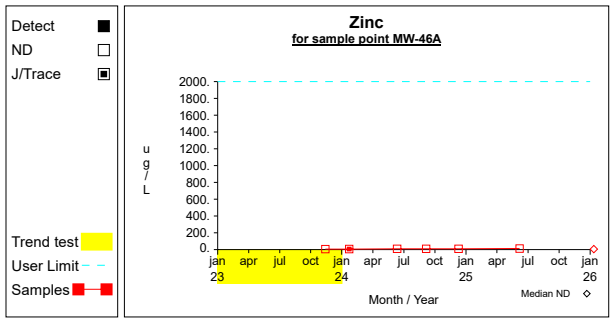
Graph 445



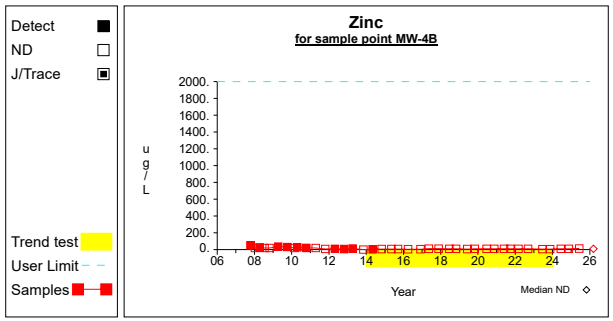
Graph 446



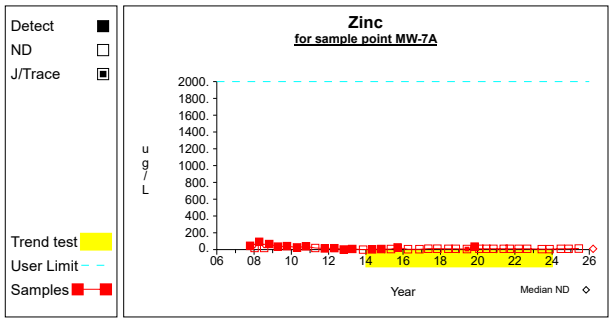
Graph 447



Graph 448



Graph 449



Graph 450

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,1,2,2-tetrachloroethane	MW-1	10/26/2012		.21	.10	ug/L
1,2-dibromo-3-chloropropane	MW-1	10/26/2012		1.17	.12	ug/L
1,2-dichlorobenzene	MW-1	10/26/2012		.480	.140	ug/L
1,2-dichlorobenzene	MW-1	4/15/2013		.185	.140	ug/L
1,2-dichloroethane	MW-1	10/26/2012		.18	.18	ug/L
1,4-dichlorobenzene	MW-1	10/26/2012		3.09	.20	ug/L
1,4-dichlorobenzene	MW-1	4/15/2013		1.52	.20	ug/L
2-butanone	MW-1	4/24/2012		.650	.470	ug/L
2-butanone	MW-1	10/26/2012		.800	.470	ug/L
2-butanone	MW-1	4/15/2013		.709	.470	ug/L
4,4'-dde	MW-1	9/16/2015		.00427	.00239	ug/L
4,4'-dde	MW-1	12/09/2015		.00671	.00233	ug/L
4,4'-ddt	MW-1	9/16/2015		.00632	.00432	ug/L
4,4'-ddt	MW-1	12/09/2015		.00947	.00422	ug/L
Acetone	MW-1	10/18/2011		2.07	1.79	ug/L
Acetone	MW-1	4/15/2013		1.94	1.79	ug/L
Acetone	MW-1	11/16/2017		1.98	1.79	ug/L
Acetonitrile	MW-1	11/11/2016		166	126	ug/L
Alpha-bhc	MW-1	9/16/2015		.00287	.00193	ug/L
Benzene	MW-1	4/01/1991		1.000	1.000	ug/L
Benzene	MW-1	10/18/2011		.170	.110	ug/L
Benzene	MW-1	10/26/2012		.650	.110	ug/L
Benzene	MW-1	4/15/2013		.287	.110	ug/L
Beta-bhc	MW-1	5/05/2014		.00594	.00511	ug/L
Bis(2-ethylhexyl)phthalate	MW-1	11/11/2016		.679	.429	ug/L
Bromomethane	MW-1	10/26/2012		.26	.22	ug/L
Carbon disulfide	MW-1	10/26/2012		.17	.15	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Chlorobenzene	MW-1	10/23/2008		1.82	1.00	ug/L
Chlorobenzene	MW-1	4/08/2009		1.33	1.00	ug/L
Chlorobenzene	MW-1	10/05/2009		1.06	1.00	ug/L
Chlorobenzene	MW-1	10/18/2011		1.63	.19	ug/L
Chlorobenzene	MW-1	4/24/2012		.43	.19	ug/L
Chlorobenzene	MW-1	10/26/2012		9.15	.19	ug/L
Chlorobenzene	MW-1	4/15/2013		4.66	.19	ug/L
Chlorobenzene	MW-1	11/07/2014		1.42	.19	ug/L
Chlorobenzene	MW-1	11/09/2023		2.89	.40	ug/L
Chlorobenzene	MW-1	1/25/2024		4.64	.40	ug/L
Chloroethane	MW-1	10/26/2012		.57	.15	ug/L
Delta-bhc	MW-1	9/16/2015		.00458	.00261	ug/L
Dichloromethane	MW-1	10/18/2011		.280	.170	ug/L
Dichloromethane	MW-1	10/26/2012		.260	.170	ug/L
Dichloromethane	MW-1	5/05/2014		.228	.170	ug/L
Dichloromethane	MW-1	11/11/2016		.925	.170	ug/L
Dichloromethane	MW-1	11/16/2017		.286	.170	ug/L
Dieldrin	MW-1	9/16/2015		.00683	.00227	ug/L
Diethyl phthalate	MW-1	5/05/2014		.361	.274	ug/L
Diethyl phthalate	MW-1	11/07/2014		1.060	.289	ug/L
Diethyl phthalate	MW-1	12/22/2014		.348	.263	ug/L
Diethyl phthalate	MW-1	9/16/2015		.453	.274	ug/L
Di-n-octyl phthalate	MW-1	5/05/2014		.255	.242	ug/L
Di-n-octyl phthalate	MW-1	5/01/2015		1.080	.235	ug/L
Di-n-octyl phthalate	MW-1	11/11/2016		1.790	.253	ug/L
Endosulfan ii	MW-1	5/05/2014		.00375	.00202	ug/L
Endosulfan ii	MW-1	11/07/2014		.00589	.00218	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
Endosulfan sulfate	MW-1	9/16/2015		.00544	.00284	ug/L
Endosulfan sulfate	MW-1	12/09/2015		.00772	.00278	ug/L
Endrin	MW-1	9/16/2015		.00247	.00216	ug/L
Gamma-bhc (lindane)	MW-1	9/16/2015		.00267	.00216	ug/L
Heptachlor	MW-1	9/16/2015		.00335	.00295	ug/L
Heptachlor	MW-1	12/09/2015		.00490	.00289	ug/L
Methoxychlor	MW-1	5/05/2014		.01710	.00223	ug/L
Methoxychlor	MW-1	12/22/2014		.00889	.00228	ug/L
Methoxychlor	MW-1	5/01/2015		.01170	.00214	ug/L
Styrene	MW-1	10/26/2012		.11	.10	ug/L
Xylenes	MW-1	10/26/2012		.32	.13	ug/L
1,2-dibromo-3-chloropropane	MW-24A	2/21/2012		.12	.12	ug/L
1,4-dichlorobenzene	MW-24A	4/08/2013		.246	.200	ug/L
2-butanone	MW-24A	12/07/2011		1.29	.47	ug/L
2-butanone	MW-24A	4/24/2012		2.96	.47	ug/L
Acetone	MW-24A	2/21/2012		1.89	1.79	ug/L
Acetone	MW-24A	4/24/2012		3.97	1.79	ug/L
Acetone	MW-24A	4/04/2016		1.94	1.79	ug/L
Bromomethane	MW-24A	2/21/2012		.30	.22	ug/L
Carbon disulfide	MW-24A	10/24/2012		.160	.150	ug/L
Carbon disulfide	MW-24A	11/03/2014		.451	.150	ug/L
Chloroethane	MW-24A	12/07/2011		.45	.15	ug/L
Dichloromethane	MW-24A	2/21/2012		.63	.17	ug/L
Toluene	MW-24A	4/08/2013		.184	.150	ug/L
2-butanone	MW-25A	10/18/2011		.97	.47	ug/L
2-butanone	MW-25A	4/24/2012		1.51	.47	ug/L
Acetone	MW-25A	4/24/2012		2.55	1.79	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Acetone	MW-25A	11/06/2017		2.39	1.79	ug/L
Benzene	MW-25A	12/07/2011		.11	.11	ug/L
Carbon disulfide	MW-25A	11/03/2014		.751	.150	ug/L
Chloroethane	MW-25A	10/18/2011		.27	.15	ug/L
Chloroethane	MW-25A	12/07/2011		.19	.15	ug/L
Dichloromethane	MW-25A	10/18/2011		.210	.170	ug/L
Dichloromethane	MW-25A	4/15/2013		.179	.170	ug/L
Dichloromethane	MW-25A	11/15/2016		.608	.170	ug/L
Dichloromethane	MW-25A	11/06/2017		.494	.170	ug/L
Toluene	MW-25A	11/15/2023		2.86	.43	ug/L
Tribromomethane	MW-25A	4/15/2013		.215	.140	ug/L
Acetone	MW-2R	11/30/2016		2.01	1.79	ug/L
Bromomethane	MW-2R	5/07/2015		.313	.220	ug/L
Bromomethane	MW-2R	11/30/2016		.404	.220	ug/L
Carbon disulfide	MW-2R	11/04/2014		1.97	.15	ug/L
Dichloromethane	MW-2R	10/26/2012		.250	.170	ug/L
Dichloromethane	MW-2R	11/06/2013		.361	.170	ug/L
Dichloromethane	MW-2R	11/30/2016		1.050	.170	ug/L
Dichloromethane	MW-2R	11/17/2017		.293	.170	ug/L
Toluene	MW-2R	11/20/2023		1.42	.43	ug/L
Acetone	MW-3	11/30/2016		2.41	1.79	ug/L
Benzene	MW-3	11/06/2014		.613	.110	ug/L
Bromomethane	MW-3	11/30/2016		.487	.220	ug/L
Bromomethane	MW-3	11/21/2017		.676	.220	ug/L
Carbon disulfide	MW-3	11/06/2014		1.08	.15	ug/L
Chloromethane	MW-3	11/30/2016		.366	.310	ug/L
Dichloromethane	MW-3	4/24/2012		.380	.170	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
Dichloromethane	MW-3	10/26/2012		.380	.170	ug/L
Dichloromethane	MW-3	11/06/2013		.352	.170	ug/L
Dichloromethane	MW-3	11/30/2016		.803	.170	ug/L
Toluene	MW-3	11/06/2014		.58	.15	ug/L
Toluene	MW-3	11/20/2023		1.20	.43	ug/L
1,1-dichloroethane	MW-31A	11/05/2019		1.26	.22	ug/L
1,1-dichloroethane	MW-31A	8/26/2020		1.40	.22	ug/L
1,1-dichloroethane	MW-31A	6/20/2023		1.23	.22	ug/L
Acetone	MW-31A	6/18/2020		11.8	3.1	ug/L
Endosulfan i	MW-31A	11/18/2020		.05310	.00244	ug/L
Endosulfan i	MW-31A	9/29/2021		.05800	.01200	ug/L
2-butanone	MW-33A	6/02/2025		10.6	2.1	ug/L
Acetone	MW-33A	6/12/2024		37.7	3.1	ug/L
Acetone	MW-33A	6/02/2025		240.0	3.1	ug/L
Benzene	MW-33A	11/03/2020		.614	.220	ug/L
Benzene	MW-33A	12/05/2024		2.450	.220	ug/L
Chlorobenzene	MW-33A	11/03/2020		1.27	.40	ug/L
Chlorobenzene	MW-33A	12/05/2024		2.37	.40	ug/L
Chloroethane	MW-34A	2/17/2020		4.44	.79	ug/L
Acetone	MW-37A	6/12/2024		18.1	3.1	ug/L
Benzene	MW-37A	12/03/2024		6.01	.22	ug/L
1,1,1-trichloroethane	MW-4	9/05/1990		1.0	1.0	ug/L
1,1,1-trichloroethane	MW-4	11/19/1990		4.8	1.0	ug/L
1,1,1-trichloroethane	MW-4	6/18/1991		4.0	1.0	ug/L
1,1,1-trichloroethane	MW-4	10/03/1991		7.1	1.0	ug/L
1,1,1-trichloroethane	MW-4	1/22/1992		5.5	1.0	ug/L
1,1,1-trichloroethane	MW-4	4/27/1992		5.6	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,1,1-trichloroethane	MW-4	10/16/1992		3.2	1.0	ug/L
1,1,1-trichloroethane	MW-4	1/05/1993		13.7	1.0	ug/L
1,1,1-trichloroethane	MW-4	4/21/1994		1.8	1.0	ug/L
1,1,1-trichloroethane	MW-4	1/25/1995		1.1	1.0	ug/L
1,1,1-trichloroethane	MW-4	10/27/1995		1.5	1.0	ug/L
1,1,1-trichloroethane	MW-4	1/01/1996		1.2	1.0	ug/L
1,1-dichloroethane	MW-4	10/13/2007		2.940	1.000	ug/L
1,1-dichloroethane	MW-4	1/09/2008		2.240	1.000	ug/L
1,1-dichloroethane	MW-4	4/08/2008		1.500	1.000	ug/L
1,1-dichloroethane	MW-4	7/16/2008		1.180	1.000	ug/L
1,1-dichloroethane	MW-4	2/25/2010		1.670	1.000	ug/L
1,1-dichloroethane	MW-4	4/21/2010		1.010	1.000	ug/L
1,1-dichloroethane	MW-4	10/18/2011		.580	.210	ug/L
1,1-dichloroethane	MW-4	4/24/2012		.560	.210	ug/L
1,1-dichloroethane	MW-4	10/24/2012		.340	.210	ug/L
1,1-dichloroethane	MW-4	4/08/2013		.812	.210	ug/L
1,1-dichloroethane	MW-4	3/31/2016		.320	.210	ug/L
1,1-dichloroethylene	MW-4	9/05/1990		1.0	1.0	ug/L
1,1-dichloroethylene	MW-4	10/03/1991		1.2	1.0	ug/L
1,1-dichloroethylene	MW-4	4/27/1992		1.3	1.0	ug/L
1,1-dichloroethylene	MW-4	10/16/1992		1.2	1.0	ug/L
1,1-dichloroethylene	MW-4	10/05/1993		51.2	1.0	ug/L
1,1-dichloroethylene	MW-4	4/21/1994		1.0	1.0	ug/L
1,2-dichlorobenzene	MW-4	4/08/2013		.38	.14	ug/L
1,2-dichloroethane	MW-4	9/05/1990		1.000	1.000	ug/L
1,2-dichloroethane	MW-4	11/19/1990		1.500	1.000	ug/L
1,2-dichloroethane	MW-4	4/25/1991		1.700	1.000	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,2-dichloroethane	MW-4	4/27/1992		1.500	1.000	ug/L
1,2-dichloroethane	MW-4	10/16/1992		4.500	1.000	ug/L
1,2-dichloroethane	MW-4	4/21/1994		3.000	1.000	ug/L
1,2-dichloroethane	MW-4	1/25/1995		2.200	1.000	ug/L
1,2-dichloroethane	MW-4	4/24/1995		2.200	1.000	ug/L
1,2-dichloroethane	MW-4	10/27/1995		3.900	1.000	ug/L
1,2-dichloroethane	MW-4	1/01/1996		3.100	1.000	ug/L
1,2-dichloroethane	MW-4	4/01/1996		3.100	1.000	ug/L
1,2-dichloroethane	MW-4	7/01/1996		2.200	.400	ug/L
1,2-dichloroethane	MW-4	10/01/1996		3.200	.400	ug/L
1,2-dichloroethane	MW-4	1/16/1997		3.000	.400	ug/L
1,2-dichloroethane	MW-4	2/01/1997		3.000	.400	ug/L
1,2-dichloroethane	MW-4	4/01/1997		3.000	.400	ug/L
1,2-dichloroethane	MW-4	7/01/1997		3.200	.800	ug/L
1,2-dichloroethane	MW-4	10/27/1997		3.300	.400	ug/L
1,2-dichloroethane	MW-4	1/01/1998		3.400	.400	ug/L
1,2-dichloroethane	MW-4	4/01/1998		32.600	.400	ug/L
1,2-dichloroethane	MW-4	2/18/1999		2.200	.800	ug/L
1,2-dichloroethane	MW-4	5/25/1999		2.100	.400	ug/L
1,2-dichloroethane	MW-4	10/21/1999		1.600	.400	ug/L
1,2-dichloroethane	MW-4	4/27/2000		1.100	.400	ug/L
1,2-dichloroethane	MW-4	10/27/2000		1.300	.400	ug/L
1,2-dichloroethane	MW-4	4/25/2001		1.400	.400	ug/L
1,2-dichloroethane	MW-4	11/09/2001		.800	.400	ug/L
1,2-dichloroethane	MW-4	10/18/2002		1.000	.400	ug/L
1,2-dichloroethane	MW-4	5/19/2004		.900	.400	ug/L
1,2-dichloroethane	MW-4	4/14/2005		.510	.400	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,2-dichloroethane	MW-4	4/08/2013		.208	.180	ug/L
1,2-dichloropropane	MW-4	10/13/2007		1.21	1.00	ug/L
1,4-dichlorobenzene	MW-4	9/05/1990		1.20	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/25/1991		1.10	1.00	ug/L
1,4-dichlorobenzene	MW-4	10/03/1991		2.00	1.00	ug/L
1,4-dichlorobenzene	MW-4	1/22/1992		2.60	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/21/1994		3.10	1.00	ug/L
1,4-dichlorobenzene	MW-4	1/25/1995		3.30	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/24/1995		2.70	1.00	ug/L
1,4-dichlorobenzene	MW-4	10/27/1995		4.50	1.00	ug/L
1,4-dichlorobenzene	MW-4	1/01/1996		3.00	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/01/1996		4.80	1.00	ug/L
1,4-dichlorobenzene	MW-4	7/01/1996		2.80	1.00	ug/L
1,4-dichlorobenzene	MW-4	10/01/1996		7.30	1.00	ug/L
1,4-dichlorobenzene	MW-4	1/16/1997		4.90	1.00	ug/L
1,4-dichlorobenzene	MW-4	2/01/1997		5.00	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/01/1997		5.20	1.00	ug/L
1,4-dichlorobenzene	MW-4	10/27/1997		4.50	1.00	ug/L
1,4-dichlorobenzene	MW-4	1/01/1998		4.50	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/01/1998		4.90	1.00	ug/L
1,4-dichlorobenzene	MW-4	7/01/1998		4.70	1.00	ug/L
1,4-dichlorobenzene	MW-4	10/01/1998		2.20	1.00	ug/L
1,4-dichlorobenzene	MW-4	5/25/1999		3.40	1.00	ug/L
1,4-dichlorobenzene	MW-4	10/21/1999		2.90	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/27/2000		2.40	1.00	ug/L
1,4-dichlorobenzene	MW-4	10/27/2000		3.20	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/25/2001		2.70	1.00	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,4-dichlorobenzene	MW-4	11/09/2001		3.10	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/23/2003		4.40	1.00	ug/L
1,4-dichlorobenzene	MW-4	5/19/2004		3.44	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/14/2005		4.19	1.00	ug/L
1,4-dichlorobenzene	MW-4	10/14/2005		4.50	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/11/2006		1.43	1.00	ug/L
1,4-dichlorobenzene	MW-4	10/10/2006		4.49	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/30/2007		4.07	1.00	ug/L
1,4-dichlorobenzene	MW-4	10/13/2007		3.41	1.00	ug/L
1,4-dichlorobenzene	MW-4	1/09/2008		2.66	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/08/2008		4.37	1.00	ug/L
1,4-dichlorobenzene	MW-4	7/16/2008		2.14	1.00	ug/L
1,4-dichlorobenzene	MW-4	10/23/2008		2.54	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/09/2009		2.93	1.00	ug/L
1,4-dichlorobenzene	MW-4	10/05/2009		3.35	1.00	ug/L
1,4-dichlorobenzene	MW-4	2/25/2010		4.88	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/21/2010		3.12	1.00	ug/L
1,4-dichlorobenzene	MW-4	10/14/2010		3.77	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/13/2011		3.68	1.00	ug/L
1,4-dichlorobenzene	MW-4	10/18/2011		3.83	.20	ug/L
1,4-dichlorobenzene	MW-4	4/24/2012		4.33	.20	ug/L
1,4-dichlorobenzene	MW-4	10/24/2012		2.62	.20	ug/L
1,4-dichlorobenzene	MW-4	4/08/2013		4.84	.20	ug/L
1,4-dichlorobenzene	MW-4	11/05/2013		1.72	.20	ug/L
1,4-dichlorobenzene	MW-4	11/16/2017		.55	.20	ug/L
2-butanone	MW-4	4/08/2013		.816	.470	ug/L
Benzene	MW-4	9/05/1990		7.600	1.000	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Benzene	MW-4	11/19/1990		2.800	1.000	ug/L
Benzene	MW-4	4/25/1991		9.200	1.000	ug/L
Benzene	MW-4	6/18/1991		5.900	1.000	ug/L
Benzene	MW-4	10/03/1991		3.100	1.000	ug/L
Benzene	MW-4	1/22/1992		5.700	1.000	ug/L
Benzene	MW-4	4/27/1992		7.200	1.000	ug/L
Benzene	MW-4	10/16/1992		16.800	1.000	ug/L
Benzene	MW-4	2/01/1994		10.500	1.000	ug/L
Benzene	MW-4	4/21/1994		11.500	1.000	ug/L
Benzene	MW-4	7/12/1994		4.300	1.000	ug/L
Benzene	MW-4	10/10/1994		9.600	1.000	ug/L
Benzene	MW-4	1/25/1995		10.200	1.000	ug/L
Benzene	MW-4	4/24/1995		8.800	1.000	ug/L
Benzene	MW-4	7/27/1995		11.600	1.000	ug/L
Benzene	MW-4	10/27/1995		13.300	1.000	ug/L
Benzene	MW-4	1/01/1996		10.900	1.000	ug/L
Benzene	MW-4	4/01/1996		12.900	1.000	ug/L
Benzene	MW-4	7/01/1996		9.100	1.000	ug/L
Benzene	MW-4	10/01/1996		16.000	1.000	ug/L
Benzene	MW-4	1/16/1997		10.900	.500	ug/L
Benzene	MW-4	2/01/1997		12.100	.500	ug/L
Benzene	MW-4	4/01/1997		11.400	.500	ug/L
Benzene	MW-4	7/01/1997		9.600	.500	ug/L
Benzene	MW-4	10/27/1997		10.900	.500	ug/L
Benzene	MW-4	1/01/1998		9.800	.500	ug/L
Benzene	MW-4	4/01/1998		8.900	.500	ug/L
Benzene	MW-4	7/01/1998		7.400	.500	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Benzene	MW-4	10/01/1998		4.500	.500	ug/L
Benzene	MW-4	2/18/1999		4.500	.500	ug/L
Benzene	MW-4	5/25/1999		4.500	.500	ug/L
Benzene	MW-4	10/21/1999		3.300	.500	ug/L
Benzene	MW-4	4/27/2000		2.800	.500	ug/L
Benzene	MW-4	10/27/2000		2.800	.500	ug/L
Benzene	MW-4	4/25/2001		1.400	.500	ug/L
Benzene	MW-4	11/09/2001		2.400	.500	ug/L
Benzene	MW-4	5/15/2002		2.000	.500	ug/L
Benzene	MW-4	10/18/2002		1.500	.500	ug/L
Benzene	MW-4	4/23/2003		3.000	.500	ug/L
Benzene	MW-4	10/22/2003		3.540	.500	ug/L
Benzene	MW-4	5/19/2004		3.500	.500	ug/L
Benzene	MW-4	4/14/2005		2.460	.500	ug/L
Benzene	MW-4	10/14/2005		2.870	.500	ug/L
Benzene	MW-4	4/11/2006		.870	.500	ug/L
Benzene	MW-4	10/10/2006		3.630	.500	ug/L
Benzene	MW-4	4/30/2007		2.820	.500	ug/L
Benzene	MW-4	10/13/2007		2.290	.500	ug/L
Benzene	MW-4	1/09/2008		1.450	.500	ug/L
Benzene	MW-4	4/08/2008		1.630	.500	ug/L
Benzene	MW-4	7/16/2008		.580	.500	ug/L
Benzene	MW-4	10/23/2008		.610	.500	ug/L
Benzene	MW-4	4/09/2009		.650	.500	ug/L
Benzene	MW-4	10/05/2009		.920	.500	ug/L
Benzene	MW-4	2/25/2010		2.010	.500	ug/L
Benzene	MW-4	4/21/2010		1.070	.500	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Benzene	MW-4	10/14/2010		1.700	.500	ug/L
Benzene	MW-4	4/13/2011		1.300	.500	ug/L
Benzene	MW-4	10/18/2011		.950	.110	ug/L
Benzene	MW-4	4/24/2012		1.080	.110	ug/L
Benzene	MW-4	10/24/2012		.480	.110	ug/L
Benzene	MW-4	4/08/2013		1.480	.110	ug/L
Benzene	MW-4	11/05/2013		.459	.110	ug/L
Benzene	MW-4	5/02/2014		.480	.110	ug/L
Benzene	MW-4	3/31/2016		.269	.110	ug/L
Benzene	MW-4	11/28/2016		.138	.110	ug/L
Benzene	MW-4	11/16/2017		.156	.110	ug/L
Carbon tetrachloride	MW-4	9/05/1990		1.0	.5	ug/L
Carbon tetrachloride	MW-4	4/27/1992		1.0	1.0	ug/L
Carbon tetrachloride	MW-4	10/16/1992		1.0	1.0	ug/L
Carbon tetrachloride	MW-4	4/21/1994		1.0	1.0	ug/L
Chlorobenzene	MW-4	10/13/2007		3.430	1.000	ug/L
Chlorobenzene	MW-4	1/09/2008		1.950	1.000	ug/L
Chlorobenzene	MW-4	4/08/2008		2.930	1.000	ug/L
Chlorobenzene	MW-4	7/16/2008		1.040	1.000	ug/L
Chlorobenzene	MW-4	10/23/2008		1.030	1.000	ug/L
Chlorobenzene	MW-4	4/09/2009		1.210	1.000	ug/L
Chlorobenzene	MW-4	10/05/2009		2.010	1.000	ug/L
Chlorobenzene	MW-4	2/25/2010		3.950	1.000	ug/L
Chlorobenzene	MW-4	4/21/2010		1.980	1.000	ug/L
Chlorobenzene	MW-4	10/14/2010		2.190	1.000	ug/L
Chlorobenzene	MW-4	4/13/2011		2.050	1.000	ug/L
Chlorobenzene	MW-4	10/18/2011		1.620	.190	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Chlorobenzene	MW-4	4/24/2012		2.200	.190	ug/L
Chlorobenzene	MW-4	10/24/2012		1.080	.190	ug/L
Chlorobenzene	MW-4	4/08/2013		2.460	.190	ug/L
Chlorobenzene	MW-4	11/04/2014		.236	.190	ug/L
Chlorobenzene	MW-4	11/16/2017		.205	.190	ug/L
Chloroethane	MW-4	10/18/2011		.82	.15	ug/L
Chloroethane	MW-4	4/24/2012		.53	.15	ug/L
Chloroethane	MW-4	4/08/2013		1.01	.15	ug/L
Cis-1,2-dichloroethylene	MW-4	10/18/2011		.370	.130	ug/L
Cis-1,2-dichloroethylene	MW-4	4/24/2012		.190	.130	ug/L
Cis-1,2-dichloroethylene	MW-4	10/24/2012		.210	.130	ug/L
Cis-1,2-dichloroethylene	MW-4	4/08/2013		.302	.130	ug/L
Dichloromethane	MW-4	11/28/2016		.355	.170	ug/L
Dichloromethane	MW-4	11/16/2017		.226	.170	ug/L
Diethyl phthalate	MW-4	5/02/2014		.504	.280	ug/L
Diethyl phthalate	MW-4	6/26/2014		.735	.277	ug/L
Di-n-octyl phthalate	MW-4	11/28/2016		1.380	.253	ug/L
Endosulfan sulfate	MW-4	11/16/2017		.00282	.00272	ug/L
Endrin aldehyde	MW-4	11/16/2017		.00884	.00793	ug/L
Tetrachloroethylene	MW-4	1/09/2008		1.160	1.000	ug/L
Tetrachloroethylene	MW-4	10/18/2011		.390	.180	ug/L
Tetrachloroethylene	MW-4	4/24/2012		.360	.180	ug/L
Tetrachloroethylene	MW-4	10/24/2012		.250	.180	ug/L
Tetrachloroethylene	MW-4	4/08/2013		.265	.180	ug/L
Tetrachloroethylene	MW-4	11/05/2013		.766	.180	ug/L
Tetrachloroethylene	MW-4	5/02/2014		.531	.180	ug/L
Tetrachloroethylene	MW-4	11/04/2014		.507	.180	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
Tetrachloroethylene	MW-4	5/06/2015		.648	.180	ug/L
Tetrachloroethylene	MW-4	9/18/2015		.453	.180	ug/L
Tetrachloroethylene	MW-4	3/31/2016		.532	.180	ug/L
Tetrachloroethylene	MW-4	11/28/2016		.598	.180	ug/L
Tetrachloroethylene	MW-4	11/16/2017		.491	.180	ug/L
Toluene	MW-4	4/08/2013		.319	.150	ug/L
Toluene	MW-4	11/13/2023		2.090	.430	ug/L
Trans-1,2-dichloroethylene	MW-4	4/08/2013		.23	.21	ug/L
Trichloroethylene	MW-4	9/05/1990		3.60	1.00	ug/L
Trichloroethylene	MW-4	11/19/1990		5.70	1.00	ug/L
Trichloroethylene	MW-4	4/25/1991		2.60	1.00	ug/L
Trichloroethylene	MW-4	6/18/1991		4.30	1.00	ug/L
Trichloroethylene	MW-4	10/03/1991		20.30	1.00	ug/L
Trichloroethylene	MW-4	1/22/1992		26.40	1.00	ug/L
Trichloroethylene	MW-4	4/27/1992		28.90	1.00	ug/L
Trichloroethylene	MW-4	7/15/1992		26.90	1.00	ug/L
Trichloroethylene	MW-4	10/16/1992		30.50	1.00	ug/L
Trichloroethylene	MW-4	1/05/1993		26.80	1.00	ug/L
Trichloroethylene	MW-4	5/10/1993		29.60	1.00	ug/L
Trichloroethylene	MW-4	10/05/1993		12.90	1.00	ug/L
Trichloroethylene	MW-4	2/01/1994		11.30	1.00	ug/L
Trichloroethylene	MW-4	4/21/1994		11.90	1.00	ug/L
Trichloroethylene	MW-4	7/12/1994		8.00	1.00	ug/L
Trichloroethylene	MW-4	10/10/1994		9.40	1.00	ug/L
Trichloroethylene	MW-4	1/25/1995		7.80	1.00	ug/L
Trichloroethylene	MW-4	4/24/1995		6.90	1.00	ug/L
Trichloroethylene	MW-4	7/27/1995		8.50	5.00	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Trichloroethylene	MW-4	10/27/1995		11.90	1.00	ug/L
Trichloroethylene	MW-4	1/01/1996		9.10	1.00	ug/L
Trichloroethylene	MW-4	4/01/1996		9.40	1.00	ug/L
Trichloroethylene	MW-4	7/01/1996		5.60	1.00	ug/L
Trichloroethylene	MW-4	10/01/1996		7.10	1.00	ug/L
Trichloroethylene	MW-4	1/16/1997		7.90	1.00	ug/L
Trichloroethylene	MW-4	2/01/1997		6.60	1.00	ug/L
Trichloroethylene	MW-4	4/01/1997		6.90	1.00	ug/L
Trichloroethylene	MW-4	7/01/1997		7.20	1.00	ug/L
Trichloroethylene	MW-4	10/27/1997		9.30	1.00	ug/L
Trichloroethylene	MW-4	1/01/1998		8.00	1.00	ug/L
Trichloroethylene	MW-4	4/01/1998		5.00	1.00	ug/L
Trichloroethylene	MW-4	7/01/1998		9.60	1.00	ug/L
Trichloroethylene	MW-4	10/01/1998		6.60	1.00	ug/L
Trichloroethylene	MW-4	2/18/1999		5.90	1.00	ug/L
Trichloroethylene	MW-4	5/25/1999		5.10	1.00	ug/L
Trichloroethylene	MW-4	10/21/1999		4.80	1.00	ug/L
Trichloroethylene	MW-4	4/27/2000		2.10	1.00	ug/L
Trichloroethylene	MW-4	10/27/2000		4.00	1.00	ug/L
Trichloroethylene	MW-4	4/25/2001		4.00	1.00	ug/L
Trichloroethylene	MW-4	11/09/2001		3.00	1.00	ug/L
Trichloroethylene	MW-4	10/18/2002		3.00	1.00	ug/L
Trichloroethylene	MW-4	4/23/2003		1.30	1.00	ug/L
Trichloroethylene	MW-4	4/11/2006		1.16	1.00	ug/L
Vinyl chloride	MW-4	1/01/1996		12.200	.300	ug/L
Vinyl chloride	MW-4	4/01/1996		10.200	2.000	ug/L
Vinyl chloride	MW-4	7/01/1996		9.000	.300	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Vinyl chloride	MW-4	10/01/1996		13.000	2.000	ug/L
Vinyl chloride	MW-4	1/16/1997		10.800	1.000	ug/L
Vinyl chloride	MW-4	2/01/1997		9.000	1.000	ug/L
Vinyl chloride	MW-4	4/01/1997		9.400	1.000	ug/L
Vinyl chloride	MW-4	7/01/1997		8.200	.300	ug/L
Vinyl chloride	MW-4	10/27/1997		14.500	.300	ug/L
Vinyl chloride	MW-4	1/01/1998		12.400	.300	ug/L
Vinyl chloride	MW-4	4/01/1998		9.300	.300	ug/L
Vinyl chloride	MW-4	7/01/1998		11.300	.300	ug/L
Vinyl chloride	MW-4	2/18/1999		5.900	.300	ug/L
Vinyl chloride	MW-4	5/25/1999		8.400	.300	ug/L
Vinyl chloride	MW-4	10/21/1999		5.200	.300	ug/L
Vinyl chloride	MW-4	4/27/2000		3.500	.300	ug/L
Vinyl chloride	MW-4	10/27/2000		3.800	.300	ug/L
Vinyl chloride	MW-4	4/25/2001		3.400	.300	ug/L
Vinyl chloride	MW-4	11/09/2001		2.600	.300	ug/L
Vinyl chloride	MW-4	4/23/2003		2.040	.470	ug/L
Vinyl chloride	MW-4	5/19/2004		1.340	.470	ug/L
Vinyl chloride	MW-4	4/14/2005		1.100	.470	ug/L
Vinyl chloride	MW-4	10/14/2005		1.110	.470	ug/L
Vinyl chloride	MW-4	4/30/2007		1.290	1.000	ug/L
Vinyl chloride	MW-4	10/18/2011		.320	.100	ug/L
Vinyl chloride	MW-4	4/24/2012		.260	.100	ug/L
Vinyl chloride	MW-4	10/24/2012		.170	.100	ug/L
Vinyl chloride	MW-4	4/08/2013		.524	.100	ug/L
Benzene	MW-40A	9/23/2021		.543	.220	ug/L
Benzene	MW-40A	12/14/2021		.768	.220	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Benzene	MW-40A	12/06/2022		.994	.220	ug/L
Benzene	MW-40A	11/06/2023		.521	.220	ug/L
Benzene	MW-42A	12/06/2022		.539	.220	ug/L
1,1,1-trichloroethane	MW-4B	4/01/1992		7.4	1.0	ug/L
1,1,1-trichloroethane	MW-4B	7/16/1992		4.1	1.0	ug/L
1,1,1-trichloroethane	MW-4B	10/16/1992		3.1	1.0	ug/L
1,1,1-trichloroethane	MW-4B	1/05/1993		3.9	1.0	ug/L
1,1,1-trichloroethane	MW-4B	5/10/1993		3.6	1.0	ug/L
1,1,1-trichloroethane	MW-4B	7/14/1993		5.7	1.0	ug/L
1,1,1-trichloroethane	MW-4B	10/05/1993		4.5	1.0	ug/L
1,1,1-trichloroethane	MW-4B	4/21/1994		3.7	1.0	ug/L
1,1,1-trichloroethane	MW-4B	7/12/1994		2.4	1.0	ug/L
1,1-dichloroethane	MW-4B	4/09/2009		1.28	1.00	ug/L
1,1-dichloroethane	MW-4B	10/05/2009		1.81	1.00	ug/L
1,1-dichloroethane	MW-4B	10/18/2011		1.87	.21	ug/L
1,1-dichloroethane	MW-4B	4/24/2012		1.97	.21	ug/L
1,1-dichloroethane	MW-4B	10/24/2012		1.94	.21	ug/L
1,1-dichloroethane	MW-4B	4/08/2013		2.28	.21	ug/L
1,1-dichloroethane	MW-4B	5/02/2014		1.52	.21	ug/L
1,1-dichloroethane	MW-4B	3/31/2016		.58	.21	ug/L
1,1-dichloroethylene	MW-4B	7/14/1993		20.1	1.0	ug/L
1,1-dichloroethylene	MW-4B	4/21/1994		1.0	1.0	ug/L
1,2-dichlorobenzene	MW-4B	4/08/2013		.292	.140	ug/L
1,2-dichloroethane	MW-4B	7/16/1992		2.100	1.000	ug/L
1,2-dichloroethane	MW-4B	4/21/1994		1.000	1.000	ug/L
1,2-dichloroethane	MW-4B	10/27/1995		2.900	1.000	ug/L
1,2-dichloroethane	MW-4B	4/01/1996		1.600	1.000	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,2-dichloroethane	MW-4B	10/01/1996		1.400	.400	ug/L
1,2-dichloroethane	MW-4B	1/16/1997		1.300	.400	ug/L
1,2-dichloroethane	MW-4B	2/01/1997		1.000	.400	ug/L
1,2-dichloroethane	MW-4B	10/27/1997		.840	.400	ug/L
1,2-dichloroethane	MW-4B	1/01/1998		.790	.400	ug/L
1,2-dichloroethane	MW-4B	4/01/1998		9.900	.400	ug/L
1,2-dichloroethane	MW-4B	5/25/1999		.410	.400	ug/L
1,2-dichloroethane	MW-4B	10/21/1999		.460	.400	ug/L
1,2-dichloroethane	MW-4B	4/27/2000		.780	.400	ug/L
1,2-dichloroethane	MW-4B	10/23/2003		.970	.400	ug/L
1,2-dichloroethane	MW-4B	5/19/2004		.410	.400	ug/L
1,2-dichloroethane	MW-4B	4/24/2012		.180	.180	ug/L
1,2-dichloroethane	MW-4B	4/08/2013		.204	.180	ug/L
1,4-dichlorobenzene	MW-4B	4/21/1994		1.00	1.00	ug/L
1,4-dichlorobenzene	MW-4B	10/27/1995		2.10	1.00	ug/L
1,4-dichlorobenzene	MW-4B	4/01/1996		1.10	1.00	ug/L
1,4-dichlorobenzene	MW-4B	10/01/1996		2.60	1.00	ug/L
1,4-dichlorobenzene	MW-4B	1/16/1997		1.50	1.00	ug/L
1,4-dichlorobenzene	MW-4B	10/27/1997		1.10	1.00	ug/L
1,4-dichlorobenzene	MW-4B	4/27/2000		1.20	1.00	ug/L
1,4-dichlorobenzene	MW-4B	10/23/2003		2.85	1.00	ug/L
1,4-dichlorobenzene	MW-4B	10/01/2005		1.30	1.00	ug/L
1,4-dichlorobenzene	MW-4B	4/09/2009		1.17	1.00	ug/L
1,4-dichlorobenzene	MW-4B	10/05/2009		1.57	1.00	ug/L
1,4-dichlorobenzene	MW-4B	10/18/2011		2.31	.20	ug/L
1,4-dichlorobenzene	MW-4B	4/24/2012		2.55	.20	ug/L
1,4-dichlorobenzene	MW-4B	10/24/2012		3.78	.20	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,4-dichlorobenzene	MW-4B	4/08/2013		3.36	.20	ug/L
2,4-dinitrophenol	MW-4B	11/21/2017		2.34	1.46	ug/L
2-butanone	MW-4B	4/24/2012		.540	.470	ug/L
2-butanone	MW-4B	4/08/2013		.635	.470	ug/L
Acetone	MW-4B	4/24/2012		2.04	1.79	ug/L
Acetone	MW-4B	10/24/2012		2.04	1.79	ug/L
Benzene	MW-4B	4/01/1992		5.700	1.000	ug/L
Benzene	MW-4B	7/16/1992		12.800	1.000	ug/L
Benzene	MW-4B	10/16/1992		15.000	1.000	ug/L
Benzene	MW-4B	1/05/1993		12.900	10.000	ug/L
Benzene	MW-4B	5/10/1993		6.800	1.000	ug/L
Benzene	MW-4B	7/14/1993		2.600	1.000	ug/L
Benzene	MW-4B	2/01/1994		6.200	1.000	ug/L
Benzene	MW-4B	4/21/1994		3.700	1.000	ug/L
Benzene	MW-4B	7/12/1994		12.200	1.000	ug/L
Benzene	MW-4B	10/10/1994		13.300	1.000	ug/L
Benzene	MW-4B	4/24/1995		16.700	1.000	ug/L
Benzene	MW-4B	7/27/1995		12.200	1.000	ug/L
Benzene	MW-4B	10/27/1995		13.700	1.000	ug/L
Benzene	MW-4B	1/01/1996		10.700	1.000	ug/L
Benzene	MW-4B	4/01/1996		7.400	1.000	ug/L
Benzene	MW-4B	10/01/1996		10.000	1.000	ug/L
Benzene	MW-4B	1/16/1997		7.500	.500	ug/L
Benzene	MW-4B	2/01/1997		6.200	.500	ug/L
Benzene	MW-4B	4/01/1997		1.600	.500	ug/L
Benzene	MW-4B	7/01/1997		6.400	.500	ug/L
Benzene	MW-4B	10/27/1997		5.700	.500	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Benzene	MW-4B	1/01/1998		5.100	.500	ug/L
Benzene	MW-4B	4/01/1998		1.300	.500	ug/L
Benzene	MW-4B	7/01/1998		.680	.500	ug/L
Benzene	MW-4B	10/01/1998		4.800	.500	ug/L
Benzene	MW-4B	2/18/1999		5.100	.500	ug/L
Benzene	MW-4B	5/25/1999		2.000	.500	ug/L
Benzene	MW-4B	10/21/1999		3.000	.500	ug/L
Benzene	MW-4B	4/27/2000		4.500	.500	ug/L
Benzene	MW-4B	10/27/2000		2.200	.500	ug/L
Benzene	MW-4B	10/22/2002		.600	.500	ug/L
Benzene	MW-4B	4/23/2003		1.700	.500	ug/L
Benzene	MW-4B	10/23/2003		4.610	.500	ug/L
Benzene	MW-4B	5/19/2004		1.350	.500	ug/L
Benzene	MW-4B	10/04/2004		.710	.500	ug/L
Benzene	MW-4B	4/01/2005		1.170	.500	ug/L
Benzene	MW-4B	10/01/2005		2.130	.500	ug/L
Benzene	MW-4B	10/10/2006		.630	.500	ug/L
Benzene	MW-4B	10/23/2008		.500	.500	ug/L
Benzene	MW-4B	10/05/2009		1.040	.500	ug/L
Benzene	MW-4B	2/25/2010		.560	.500	ug/L
Benzene	MW-4B	10/18/2011		.890	.110	ug/L
Benzene	MW-4B	4/24/2012		.980	.110	ug/L
Benzene	MW-4B	10/24/2012		1.250	.110	ug/L
Benzene	MW-4B	4/08/2013		1.150	.110	ug/L
Benzene	MW-4B	11/05/2013		.313	.110	ug/L
Benzene	MW-4B	5/02/2014		.724	.110	ug/L
Benzene	MW-4B	5/06/2015		.481	.110	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Benzene	MW-4B	3/31/2016		.496	.110	ug/L
Benzo (a) pyrene	MW-4B	10/31/2014		.535	.278	ug/L
Benzo (b) fluoranthene	MW-4B	10/31/2014		.514	.344	ug/L
Benzo (g,h,i) perylene	MW-4B	10/31/2014		.394	.256	ug/L
Benzo (k) fluoranthene	MW-4B	10/31/2014		.723	.222	ug/L
Bromomethane	MW-4B	11/21/2017		.549	.220	ug/L
Butyl benzyl phthalate	MW-4B	10/31/2014		.466	.378	ug/L
Carbon tetrachloride	MW-4B	4/21/1994		1	1	ug/L
Chlorobenzene	MW-4B	4/09/2009		1.060	1.000	ug/L
Chlorobenzene	MW-4B	10/05/2009		1.910	1.000	ug/L
Chlorobenzene	MW-4B	10/18/2011		2.510	.190	ug/L
Chlorobenzene	MW-4B	4/24/2012		2.870	.190	ug/L
Chlorobenzene	MW-4B	10/24/2012		3.660	.190	ug/L
Chlorobenzene	MW-4B	4/08/2013		3.200	.190	ug/L
Chlorobenzene	MW-4B	5/06/2015		1.290	.190	ug/L
Chlorobenzene	MW-4B	11/21/2017		.254	.190	ug/L
Chloroethane	MW-4B	10/18/2011		.450	.150	ug/L
Chloroethane	MW-4B	4/24/2012		.400	.150	ug/L
Chloroethane	MW-4B	4/08/2013		.487	.150	ug/L
Dibenzo (a,h) anthracene	MW-4B	10/31/2014		.364	.278	ug/L
Dichloromethane	MW-4B	10/24/2012		.280	.170	ug/L
Dichloromethane	MW-4B	4/08/2013		.171	.170	ug/L
Dichloromethane	MW-4B	5/02/2014		.380	.170	ug/L
Dichloromethane	MW-4B	10/31/2014		1.600	.170	ug/L
Dichloromethane	MW-4B	11/29/2016		.197	.170	ug/L
Di-n-octyl phthalate	MW-4B	10/31/2014		1.360	.256	ug/L
Di-n-octyl phthalate	MW-4B	11/29/2016		1.430	.253	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
Endosulfan i	MW-4B	9/15/2015		.00257	.00222	ug/L
Endosulfan i	MW-4B	12/09/2015		.01490	.00227	ug/L
Indeno (1,2,3-cd) pyrene	MW-4B	10/31/2014		.403	.267	ug/L
Pentachlorophenol	MW-4B	11/21/2017		1.700	.261	ug/L
Tetrachloroethylene	MW-4B	10/18/2011		.29	.18	ug/L
Toluene	MW-4B	4/24/2012		.210	.150	ug/L
Toluene	MW-4B	4/08/2013		.394	.150	ug/L
Trichloroethylene	MW-4B	4/01/1992		18.6	1.0	ug/L
Trichloroethylene	MW-4B	7/16/1992		24.4	1.0	ug/L
Trichloroethylene	MW-4B	10/16/1992		26.5	1.0	ug/L
Trichloroethylene	MW-4B	1/05/1993		26.2	1.0	ug/L
Trichloroethylene	MW-4B	5/10/1993		20.3	1.0	ug/L
Trichloroethylene	MW-4B	7/14/1993		7.0	1.0	ug/L
Trichloroethylene	MW-4B	10/05/1993		2.3	1.0	ug/L
Trichloroethylene	MW-4B	2/01/1994		9.4	1.0	ug/L
Trichloroethylene	MW-4B	4/21/1994		8.6	1.0	ug/L
Trichloroethylene	MW-4B	7/12/1994		15.3	1.0	ug/L
Trichloroethylene	MW-4B	10/10/1994		13.2	1.0	ug/L
Trichloroethylene	MW-4B	10/27/1995		2.0	1.0	ug/L
Trichloroethylene	MW-4B	4/01/1996		2.0	1.0	ug/L
Trichloroethylene	MW-4B	1/16/1997		2.0	1.0	ug/L
Trichloroethylene	MW-4B	2/01/1997		1.5	1.0	ug/L
Trichloroethylene	MW-4B	4/01/1997		2.1	1.0	ug/L
Trichloroethylene	MW-4B	10/27/1997		1.4	1.0	ug/L
Trichloroethylene	MW-4B	1/01/1998		1.2	1.0	ug/L
Trichloroethylene	MW-4B	4/01/1998		1.4	1.0	ug/L
Trichloroethylene	MW-4B	7/01/1998		1.7	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Trichloroethylene	MW-4B	5/25/1999		1.2	1.0	ug/L
Vinyl chloride	MW-4B	4/01/1996		1.900	2.000	ug/L
Vinyl chloride	MW-4B	1/16/1997		1.500	1.000	ug/L
Vinyl chloride	MW-4B	2/01/1997		1.400	1.000	ug/L
Vinyl chloride	MW-4B	7/01/1997		.840	.300	ug/L
Vinyl chloride	MW-4B	10/27/1997		1.100	.300	ug/L
Vinyl chloride	MW-4B	1/01/1998		.980	.300	ug/L
Vinyl chloride	MW-4B	4/01/1998		.480	.300	ug/L
Vinyl chloride	MW-4B	10/01/1998		.440	.300	ug/L
Vinyl chloride	MW-4B	5/25/1999		.930	.300	ug/L
Vinyl chloride	MW-4B	10/21/1999		.450	.300	ug/L
Vinyl chloride	MW-4B	10/23/2003		.550	.470	ug/L
Vinyl chloride	MW-4B	10/18/2011		.170	.100	ug/L
Vinyl chloride	MW-4B	4/24/2012		.270	.100	ug/L
Vinyl chloride	MW-4B	10/24/2012		.280	.100	ug/L
Vinyl chloride	MW-4B	4/08/2013		.284	.100	ug/L
1,2-dichlorobenzene	MW-7A	4/08/2013		.15	.14	ug/L
1,4-dichlorobenzene	MW-7A	4/08/2013		.236	.200	ug/L
2-butanone	MW-7A	4/24/2012		1.27	.47	ug/L
Acetone	MW-7A	4/04/2016		2.04	1.79	ug/L
Acetone	MW-7A	11/01/2017		2.20	1.79	ug/L
Carbon disulfide	MW-7A	10/24/2012		.150	.150	ug/L
Carbon disulfide	MW-7A	10/31/2014		.642	.150	ug/L
Chloroethane	MW-7A	10/18/2011		.21	.15	ug/L
Dichloromethane	MW-7A	10/24/2012		.250	.170	ug/L
Dichloromethane	MW-7A	11/16/2016		.301	.170	ug/L
Dichloromethane	MW-7A	11/01/2017		.780	.170	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
Toluene	MW-7A	11/13/2023		2.00	.43	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 9

Analytical Data Summary for MW-1

Constituents	Units	10/12/2007 10/13/2007	1/9/2008	4/8/2008	7/16/2008	10/23/2008	4/8/2009 4/13/2009	7/24/2009	10/5/2009
Antimony	ug/L	<6.0000	<6.0000	<6.0000	<6.0000	<6.0000	<6.0000	<6.0000	<6.0000
Arsenic	ug/L	<1.000	1.810	<1.000	1.950	<1.000	6.880	<1.000	<1.000
Barium	ug/L	170.0	185.0	137.0	165.0	317.0	279.0	163.0	290.0
Beryllium	ug/L	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000
Cadmium	ug/L	<.5000	<.5000	<.5000	<.5000	<.5000	<.5000	<.5000	<.5000
Chromium	ug/L	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000
Cobalt	ug/L	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000
Copper	ug/L	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000
Cyanide	ug/L							<10.00	
Lead	ug/L	<4.0000	<4.0000	<4.0000	<4.0000	5.0400	8.1000	<4.0000	5.3800
Mercury	ug/L							<.2000	
Nickel	ug/L	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000
Selenium	ug/L	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000
Silver	ug/L	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000
Total suspended solids	mg/L								
Turbidity, field	NTU								
Vanadium	ug/L	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000
Zinc	ug/L	51.200	<20.000	22.600	<20.000	42.900	51.200	36.600	50.800

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

Table 9

Analytical Data Summary for MW-1

Constituents	2/25/2010	4/21/2010	10/14/2010	4/13/2011	10/18/2011	4/24/2012	10/24/2012 10/26/2012	4/8/2013 4/16/2013
Antimony	<6.0000	<6.0000	<6.0000	<6.0000	<2.7300	<1.4500	<.6000	.1360
Arsenic	<1.000	<1.000	<1.000	<1.000	<.600	<.216	3.950	2.310
Barium	153.0	144.0	195.0	128.0	273.0	123.0	448.0	282.0
Beryllium	<1.0000	<1.0000	1.1200	<1.0000	.2760	<.0790	<.0890	<.0696
Cadmium	<.5000	<.5000	<.5000	<.5000	<.1240	<.2290	.4000	.1200
Chromium	<20.000	<20.000	<20.000	<20.000	2.800	<1.810	2.550	.643
Cobalt	<20.0000	<20.0000	<20.0000	<20.0000	5.1900	<1.5500	4.7000	.8570
Copper	<20.000	<20.000	<20.000	<20.000	19.000	3.940	18.200	7.010
Cyanide		<10.00						
Lead	<4.0000	<4.0000	<4.0000	<4.0000	3.4400	1.8400	4.6000	<.2070
Mercury		<.2000						
Nickel	<50.000	<50.000	<50.000	<50.000	19.400	4.800	46.000	21.000
Selenium	<5.000	<5.000	<5.000	<5.000	<1.690	<.700	<1.480	4.980
Silver	<20.0000	<20.0000	<20.0000	<20.0000	<1.7000	<1.7000	<.1350	<.0789
Thallium	<2.0000	<2.0000	<2.0000	<2.0000	<.8400	<.2880	<.0435	.0796
Total suspended solids								
Turbidity, field								
Vanadium	<50.000	<50.000	<50.000	<50.000	3.590	2.740	6.350	.904
Zinc	<20.000	24.000	44.900	<20.000	13.900	<9.110	18.000	1.710

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

Table 9

Analytical Data Summary for MW-1

Constituents	11/5/2013 11/7/2013	5/1/2014 5/8/2014	10/31/2014 11/10/2014	12/19/2014 12/22/2014	5/1/2015 5/12/2015	9/14/2015 9/22/2015	12/9/2015	3/24/2016 4/13/2016
Antimony	.0993	<.4000	<.1610		<.1610	<.1610		<.2370
Arsenic	1.450	.354	<.945		<.945	<.945		<.672
Barium	186.0	124.0	190.0		104.0	166.0		93.8
Beryllium	<.0696	<.0800	<.0390		<.0390	<.0390		<.2210
Cadmium	<.1060	<.1000	<.1120		<.1120	<.1120		<.0351
Chromium	<.418	.816	<1.240		<1.240	<1.240		.852
Cobalt	.7450	.2310	.1680		<.0528	.1820		.0520
Copper	2.250	1.040	.906		<.485	.526		<1.220
Cyanide		<3.10				<3.04		
Lead	.2120	<.1800	<.0967		<.0967	.3030		<.2110
Mercury		<.0710				<.0926		
Nickel	12.900	4.010	6.200		1.490	5.870		<1.530
Selenium	4.170	1.150	<3.340		<3.340	<3.340		1.410
Silver	<.0789	<.0330	<.0420		<.0420	.1170		<.1530
Thallium	<.0267	<.0500	<.0325		<.0325	.0380		<.0255
Total suspended solids			2.170		<1.200	<3.200	3.380	<.581
Turbidity, field			2.8350	1.9810	.3323	3.4630	7.8000	.0104
Vanadium	<.833	.676	.510		<.449	.542		.466
Zinc	<.625	<2.000	<6.950		<6.950	<6.950		<5.210

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

Table 9

Analytical Data Summary for MW-1

Constituents	11/11/2016 11/30/2016	5/5/2017 5/25/2017	11/1/2017 11/22/2017	6/4/2018 6/27/2018	10/28/2018 10/31/2018	6/4/2019 6/13/2019	10/30/2019 11/20/2019
Antimony	<.2370	<.1850	<.1850	<.4200	<.4200	<1.3200	<.5300
Arsenic	<.672	<.505	.662	<.570	<.570	<.232 .604J	<.750
Barium	114.0	95.1	130.0	119.0	142.0	93.8	124.0
Beryllium	<.2210	<.1250	<.1250	<.1900	<.1900	<.5300	<.2700
Cadmium	<.0351	<.0441	<.0441	<.0600	<.0600	<.1670	<.0390
Chromium	.423	<.729 .870J	<.729	<.760	<.760 1.150J	<1.140 2.080J	<.980
Cobalt	.0470	<.0453 .0650J	.0830	<.0610	<.0610 .0960J	<.4020	<.0910
Copper	<1.220	<2.190	<2.190	<3.800 *	<1.600	<.497 .991J	<2.000
Cyanide	<3.52						
Lead	<.2110	<.3240	<.3240	<.2500	<.2500 .4590J	<.1860	<.2700
Mercury	<.1420						
Nickel	<1.530	<.929 .971J	1.530	<1.000 1.320J	<1.000 1.840J	<.625 1.880J	<1.700
Selenium	<.630	<.928	<.928	<.900	<.900	<.982	<1.000
Silver	<.1530	<.1400 .1420J	<.1400	<.3000	<.3000	<.1150	<.3700
Thallium	<.0255	<.0644	<.0644	<.1700	<.1700	<.5700	<.2700
Total suspended solids	.875	<.581 1.750J	6.870	<.638	2.880	<.638	<.638
Turbidity, field	.1540	6.9930	1.6980	1.7410	6.9230		.4400
Vanadium	.394	<.840	<.840	<.520	<.520 .973J	<2.150	<.820 1.040J
Zinc	<5.210	<11.500	<11.500	<10.000	<10.000	<6.920	<10.000

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

Table 9

Analytical Data Summary for MW-1

Constituents	6/16/2020 7/7/2020	11/3/2020 11/23/2020	5/17/2021 6/8/2021	9/21/2021 9/29/2021	3/2/2022 3/29/2022	8/16/2022 9/13/2022	6/6/2023 6/27/2023
Antimony	<.5100	<.5100	<1.1000	<1.1000	<.6900	<.6900	<1.0000
Arsenic	<.880	<.880	<.750	<.750	<.750	<.750	<.530
Barium	94.9	184.0	146.0	111.0	112.0	112.0	106.0
Beryllium	<.2700	<.2700	<.2700	<.2700	<.2700	<.2700	<.3300
Cadmium	<.0490	<.0490	<.0510	<.0510	<.0550	<.0550	<.1000
Chromium	<1.100	<1.100	<1.100	<1.100	<1.100	<1.100	<1.100
Cobalt	<.0910	<.0910 .1050J	<.0910	<.1900	<.1900 .3170J	<.1900	<.1700
Copper	<1.500	<1.500	<1.400	<1.400	<1.800	<1.800	<1.800
Cyanide							
Lead	<.1100	<.1100	<.2100	<.2100	<.2400	<.2400	<.2400
Mercury							
Nickel	<1.900	<1.900 3.250J	<1.900	<1.900	<1.900	<1.900	<1.900
Selenium	<1.000	<1.000	<.960	<.960	<.960	<.960	<1.400
Silver	<.3700	<.3700	<.4200	<.4200	<.4900	<.4900	<.5000
Thallium	<.2600	<.2600	<.2600	<.2600	<.2600	<.2600	<.2600
Total suspended solids	<.638 1.250J	<1.700	<.638 1.500J	<.638 .750J	<.638	<.638	<.638
Turbidity, field	.6400	1.0100	1.3700	3.4400	10.9700	.0000	.5700
Vanadium	<.850	<.850	<1.100	<1.100	<1.100	<1.100	<1.100
Zinc	<10.000	<10.000	<10.000	<10.000	<10.000	<10.000	<6.400

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

Table 9

Analytical Data Summary for MW-1

Constituents	11/1/2023 11/20/2023	1/23/2024 1/25/2024	6/11/2024 7/3/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	<1.0000		<1.0000	<1.0000	<1.0000
Arsenic	<.530 1.030J		<.530	<.530	<.530
Barium	282.0		94.7	201.0	100.0
Beryllium	<.3300		<.3300	<.3300	<.3300
Cadmium	.2090		<.1000	<.1000	<.1000
Chromium	<1.100		<1.200	<1.200	<1.800
Cobalt	<.1700 .8440J		<.1700	<.1700 .2250J	<.1700
Copper	5.270		<1.800	<1.800	<3.200
Cyanide					
Lead	.9940		<.2600	<.2600	<.3300
Mercury					
Nickel	20.900		<2.100	9.010	<2.300
Selenium	<1.400		<1.400	<1.400	<1.400 1.430J
Silver	<.5000		<.5000	<.5000	<.5000
Thallium	<.2600		<.5700	<.5700	<.5700
Total suspended solids	276.000		<1.390	3.860	2.130
Turbidity, field	146.7200	.5800	1.7300	10.6000	1.5900
Vanadium	<1.100 1.530J		<1.100	<1.100	<1.700
Zinc	<6.400		<9.700	<9.700	<13.000

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

Table 9

Analytical Data Summary for MW-101

Constituents	Units	6/4/2019 6/13/2019	8/13/2019 8/15/2019	10/30/2019 11/20/2019	2/3/2020 2/17/2020	6/16/2020 7/7/2020	11/3/2020 11/23/2020
Antimony	ug/L	<1.32	<1.32	<.53	<.58	<.51	<.51
Arsenic	ug/L	<.232 .735J	<.232 .506J	<.750	<.880	<.880	<.880
Barium	ug/L	196	213	207	194	198	205
Beryllium	ug/L	<.53	<.53	<.27	<.27	<.27	<.27
Cadmium	ug/L	<.167	<.167	<.039 .045J	<.039	<.049	<.049
Chromium	ug/L	<1.14	<1.14	<.98	<1.10	<1.10	<1.10
Cobalt	ug/L	<.402	<.402 .521J	<.091 .480J	<.091 .434J	<.091	<.091 .113J
Copper	ug/L	<.497 1.670J	<.497 .898J	<2.000	<3.200	<1.500	<1.500
Lead	ug/L	<.186 .261J	<.186	<.270	<.270	<.110	<.110
Nickel	ug/L	7.24	8.82	9.54	8.93	<1.90 4.61J	7.15
Selenium	ug/L	<.982	<.982	<1.000	<1.000	<1.000	<1.000
Silver	ug/L	<.115	<.115	<.370	<.370	<.370	<.370
Thallium	ug/L	<.57	<.57	<.27	<.26	<.26	<.26
Total suspended solids	mg/L	<.638 1.630J	<.638 1.250J	<.638 1.630J	3.250	<.638 1.630J	2.630
Turbidity, field	NTU	.75	3.94	2.85	1.38	1.98	1.27
Vanadium	ug/L	<2.15 2.61J	<2.15	<.82	<.82	<.85	<.85
Zinc	ug/L	<6.92 8.28J	<6.92 7.30J	<10.00	<10.00	<10.00	<10.00

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

Table 9

Analytical Data Summary for MW-101

Constituents	2/3/2021 2/24/2021	5/17/2021 6/8/2021	9/21/2021 9/29/2021	8/16/2022 9/13/2022	6/6/2023 6/27/2023	6/11/2024 7/3/2024	11/19/2024 12/18/2024
Antimony		<1.10	<1.10	<.69	<1.00	<1.00	<1.00
Arsenic		<.750	<.750	<.750	<.530	<.530 .541J	<.530
Barium	191	183	212	214	175	177	221
Beryllium		<.27	<.27	<.27	<.33	<.33	<.33
Cadmium		<.051	<.051	<.055	<.100	<.100	<.100
Chromium		<1.10	<1.10	<1.10	<1.10	<1.20	<1.20
Cobalt		<.091 .399J	<.190 .241J	<.190	<.170 .232J	1.360	<.170 .189J
Copper		<1.400	<1.400	<1.800	<1.800	<1.800 3.570J	<1.800
Lead		<.210	<.210	<.240	<.240	<.260	<.260
Nickel	10.10	10.40	8.31	<1.90 3.73J	9.62	6.92	8.19
Selenium		<.960	<.960	<.960	<1.400	<1.400	<1.400
Silver		<.420	<.420	<.490	<.500	<.500	<.500
Thallium		<.26	<.26	<.26	<.26	<.57	<.57
Total suspended solids	1.880	27.600	3.130	2.000	<1.700	<1.390 1.750J	<1.530
Turbidity, field	1.63	480.28	6.14	5.49	1.73	4.32	3.35
Vanadium		<1.10	<1.10	<1.10	<1.10	<1.10	<1.10
Zinc		<10.00	<10.00	<10.00	<6.40	<9.70	<9.70

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

Table 9

Analytical Data Summary for MW-101

Constituents	6/2/2025 6/9/2025
Antimony	<1.00
Arsenic	<.530
Barium	171
Beryllium	<.33
Cadmium	<.100
Chromium	<1.80
Cobalt	<.170
Copper	<3.200
Lead	<.330
Nickel	7.93
Selenium	<1.400
Silver	<.500
Thallium	<.57
Total suspended solids	<1.310 1.630J
Turbidity, field	2.17
Vanadium	<1.70
Zinc	<13.00

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

Table 9

Analytical Data Summary for MW-24A

Constituents	Units	2/25/2011	4/13/2011	6/22/2011	12/7/2011	2/21/2012	4/24/2012	6/21/2012	10/24/2012 10/26/2012
Antimony	ug/L	<6.000	<6.000	<6.000	<2.730	.200	4.410	<.120	<.120
Arsenic	ug/L	<1.000	<2.000	<2.000	.679	<.730	<.216	<.730	<.730
Barium	ug/L	177.0	274.0	139.0	196.0	210.0	156.0	192.0	180.0
Beryllium	ug/L	<1.0000	<1.0000	<1.0000	<.0510	.0900	<.0790	.0200	.0500
Cadmium	ug/L	<.5000	<.5000	<.5000	.1470	.0900	<.2290	<.0640	<.0640
Chromium	ug/L	<20.000	<20.000	<20.000	3.150	<.390	2.690	<.390	2.080
Cobalt	ug/L	<20.0000	<20.0000	<20.0000	1.7900	3.6000	<1.5500	1.0700	1.0300
Copper	ug/L	<20.00	26.60	<20.00	13.70	5.19	2.55	1.45	2.88
Cyanide	ug/L								
Lead	ug/L	<4.0000	4.1700	<4.0000	2.1900	2.7000	2.2100	.6300	.7300
Mercury	ug/L								
Nickel	ug/L	<50.00	<50.00	<50.00	6.15	12.60	6.60	5.89	6.70
Selenium	ug/L	<5.000	<5.000	<5.000	<1.690	<.297	<.700	<.297	<.297
Silver	ug/L	<20.0000	<20.0000	<20.0000	<1.7000	<.0270	<1.7000	<.0270	<.0270
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<.8400	<.0087	<.2880	<.0087	<.0087
Total suspended solids	mg/L								
Turbidity, field	NTU								
Vanadium	ug/L	<50.000	<50.000	<50.000	<2.100	3.090	2.900	1.300	1.340
Zinc	ug/L	43.500	28.100	<20.000	<9.110	22.900	15.300	1.840	7.620

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

Table 9

Analytical Data Summary for MW-24A

Constituents	4/8/2013 4/16/2013	11/5/2013 11/7/2013	5/1/2014 5/8/2014	10/31/2014 11/10/2014	5/1/2015 5/12/2015	3/24/2016 4/13/2016	5/5/2017 5/25/2017	6/4/2018 6/27/2018
Antimony	.356	.243	.602	<.161	<.161	<.237	<.185	<.420
Arsenic	1.670	.836	<.330	<.945	<.945	<.672	<.505	<.570
Barium	164.0	169.0	135.0	187.0	168.0	124.0	142.0	130.0
Beryllium	<.0696	<.0696	<.0800	<.0390	<.0390	<.2210	<.1250	<.1900
Cadmium	.2240	.3710	<.1000	.3720	.1880	.0840	<.0441 .0850J	<.0600 .0770J
Chromium	1.300	.824	1.170	<1.240	<1.240	1.420	<.729 1.910J	<.760 1.350J
Cobalt	5.5600	3.0000	1.1200	.5490	.3510	.3060	<.0453 .3030J	<.0610 .3390J
Copper	3.34	4.18	2.74	1.25	1.25	2.27	<2.19	5.26
Cyanide								
Lead	.6310	.6710	.5520	<.0967	.1030	<.2110	<.3240	<.2500
Mercury								
Nickel	16.50	27.80	15.70	17.50	14.60	8.78	8.80	9.67
Selenium	<1.460	<1.460	<.700	<3.340	<3.340	.653	<.928	<.900 1.170J
Silver	<.0789	<.0789	<.0330	<.0420	<.0420	<.1530	<.1400	<.3000 .3400J
Thallium	.0402	<.0267	<.0500	<.0325	<.0325	<.0255	<.0644	<.1700
Total suspended solids				<1.410	<1.200	<.581	<.581	<.887
Turbidity, field				2.4670	.0270	.0912	1.3300	.3474
Vanadium	1.520	1.180	1.580	.923	.759	.674	<.840	<.520 .848J
Zinc	<.625	7.480	<2.000	7.530	<6.950	<5.210	<11.500	<10.000

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

Table 9

Analytical Data Summary for MW-24A

Constituents	10/28/2018 10/31/2018	6/4/2019 6/13/2019	8/13/2019 8/15/2019	10/30/2019 11/20/2019	6/16/2020 7/7/2020	11/3/2020 11/23/2020
Antimony	<.420	<1.320		<.530	<.510	1.990
Arsenic	<.570	<.232 .498J		<.750	<.880	<.880
Barium	145.0	94.1		122.0	97.8	108.0
Beryllium	<.1900	<.5300		<.2700	<.2700	<.2700
Cadmium	<.0600 .1440J	<.1670		.1280	<.0490 .0530J	.3330
Chromium	<.760 1.080J	<1.140 2.530J		<.980 1.240J	<1.100	<1.100
Cobalt	<.0610 .4400J	<.4020		<.0910 .3830J	<.0910 .3200J	.5700
Copper	<1.60 1.68J	2.12		<2.00	<1.50 1.79J	<1.50 1.80J
Cyanide					<5.0	
Lead	<.2500	<.1860		<.2700	<.1100	<.1100 .2950J
Mercury					<.100000	
Nickel	10.60	8.67	6.78	7.39	5.83	5.28
Selenium	<.900	<.982		<1.000 1.030J	<1.000	<1.000 1.390J
Silver	<.3000	<.1150		<.3700	<.3700	<.3700
Thallium	<.1700	<.5700		<.2700	<.2600	<.2600 .3520J
Total suspended solids	<.638 1.630J	<.638	<.638	1.880	<.638	<.638 1.130J
Turbidity, field	1.3390	5.0100	15.6100	.4500	1.0600	.0300
Vanadium	<.520 1.300J	<2.150		<.820 1.370J	<.850	<.850 1.230J
Zinc	<10.000	<6.920		65.400	<10.000	<10.000

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

Table 9

Analytical Data Summary for MW-24A

Constituents	5/17/2021 6/8/2021	8/16/2022 9/13/2022	6/6/2023 6/27/2023	6/11/2024 7/3/2024	11/19/2024 12/18/2024
Antimony	<1.100	<.690	<1.000	<1.000	<1.000
Arsenic	<.750	<.750	<.530	<.530	<.530
Barium	105.0	109.0	132.0	152.0	117.0
Beryllium	<.2700	<.2700	<.3300	<.3300	<.3300
Cadmium	<.0510	<.0550 .0800J	<.1000	<.1000	<.1000
Chromium	<1.100	<1.100	<1.100 1.180J	<1.200	<1.200 1.910J
Cobalt	<.0910 .3630J	<.1900 .3610J	<.1700 .4110J	<.1700 .4070J	<.1700 .2040J
Copper	<1.40 1.78J	<1.80	<1.80 2.82J	<1.80	<1.80
Cyanide				<3.5	
Lead	<.2100	<.2400	<.2400	<.2600	<.2600
Mercury				<.110000	
Nickel	5.49	6.42	7.85	8.53	<2.10 2.95J
Selenium	<.960	<.960	<1.400	<1.400	<1.400
Silver	<.4200	<.4900	<.5000	<.5000	<.5000
Thallium	<.2600	<.2600	<.2600	<.5700	<.5700
Total suspended solids	<.638 .875J	<.638	<.638 1.130J	<1.390	<1.480
Turbidity, field	2.3100	.4900	1.7000	4.6900	1.3400
Vanadium	<1.100	<1.100	<1.100	<1.100	<1.100
Zinc	<10.000	<10.000	<6.400	<9.700	<9.700

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

Table 9

Analytical Data Summary for MW-25A

Constituents	Units	12/27/2010	2/25/2011	4/13/2011	6/22/2011	8/25/2011	10/18/2011	12/7/2011	4/24/2012
Antimony	ug/L	<6.0000	<12.0000	<6.0000	<6.0000	<6.0000	<2.7300	<2.7300	3.9000
Arsenic	ug/L	<1.000	<1.000	<2.000	<2.000	<2.000	<.600	<.600	.877
Barium	ug/L	250	181	235	206	208	217	218	246
Beryllium	ug/L	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	.0540	<.0510	.2900
Cadmium	ug/L	<.5000	<.5000	<.5000	<.5000	<.5000	<.1240	.1300	<.2290
Chromium	ug/L	<20.000	<20.000	<20.000	<20.000	<20.000	<1.810	3.880	2.600
Cobalt	ug/L	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<1.5500	3.3600	6.4900
Copper	ug/L	<20.000	<20.000	24.900	<20.000	20.400	13.400	15.000	6.560
Lead	ug/L	4.0000	<4.0000	<4.0000	<4.0000	<4.0000	<1.0000	1.6100	4.1800
Nickel	ug/L	<50.000	<50.000	<50.000	<50.000	<50.000	3.210	7.370	8.700
Selenium	ug/L	<5.000	<5.000	<5.000	<5.000	<5.000	<1.690	<1.690	<.700
Silver	ug/L	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<1.7000	<1.7000	<1.7000
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<.8400	<.8400	<.2880
Total suspended solids	mg/L								
Turbidity, field	NTU								
Vanadium	ug/L	<50.000	<50.000	<50.000	<50.000	<50.000	<2.100	<2.100	7.510
Zinc	ug/L	106.000	51.100	<20.000	<20.000	<20.000	<9.110	11.100	<9.110

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

Table 9

Analytical Data Summary for MW-25A

Constituents	10/24/2012 10/26/2012	4/8/2013 4/16/2013	11/5/2013 11/7/2013	5/1/2014 5/8/2014	10/31/2014 11/10/2014	5/1/2015 5/12/2015	3/24/2016 4/13/2016	11/11/2016 11/30/2016
Antimony	.3900	.3740	.0911	.4150	<.1610	<.1610	<.2370	<.2370
Arsenic	.980	1.170	.662	<.330	<.945	<.945	<.672	<.672
Barium	246	149	218	126	212	160	150	208
Beryllium	.1300	<.0696	<.0696	<.0800	<.0390	<.0390	<.2210	<.2210
Cadmium	.3500	.1750	.1890	<.1000	<.1120	<.1120	<.0351	<.0351
Chromium	1.680	2.060	.990	1.380	<1.240	<1.240	1.820	<.355
Cobalt	3.1500	1.3800	1.0200	<.0540	<.0528	.0730	.0940	.0750
Copper	5.850	5.520	1.900	1.660	<.485	<.485	<1.220	<1.220
Lead	2.6900	.3770	<.2070	.3950	<.0967	.2520	<.2110	<.2110
Nickel	13.100	7.100	4.860	1.800	1.400	.972	<1.530	<1.530
Selenium	<.297	2.960	<1.460	1.360	<3.340	<3.340	1.970	.696
Silver	<.0270	<.0789	<.0789	<.0330	<.0420	<.0420	<.1530	<.1530
Thallium	<.0087	.0629	<.0267	<.0500	<.0325	<.0325	<.0255	<.0255
Total suspended solids					<1.410	<1.200	<.581	1.630
Turbidity, field					.3307	2.5710	.1175	.0964
Vanadium	3.050	1.800	.972	1.390	.710	.622	.750	.599
Zinc	14.900	4.110	<.625	<2.000	<6.950	<6.950	<5.210	<5.210

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

Table 9

Analytical Data Summary for MW-25A

Constituents	5/5/2017 5/25/2017	11/1/2017 11/22/2017	6/4/2018 6/27/2018	10/28/2018 10/31/2018	6/4/2019 6/13/2019	10/30/2019 11/20/2019
Antimony	<.1850	<.1850	<.4200	<.4200	<1.3200	<.5300
Arsenic	<.505	<.505	<.570	<.570	<.232 .796J	<.750
Barium	176	205	163	190	153	188
Beryllium	<.1250	<.1250	<.1900	<.1900	<.5300	<.2700
Cadmium	<.0441 .0540J	<.0441	<.0600	<.0600 .0940J	<.1670	<.0390
Chromium	<.729	<.729	<.760 1.590J	<.760 1.420J	<1.140 1.840J	<.980 1.810J
Cobalt	<.0453 .0600J	.0580	<.0610 .0740J	<.0610 .3200J	<.4020	<.0910
Copper	<2.190	<2.190	<3.800 *	<1.600	<.497 1.310J	<2.000
Lead	<.3240	<.3240	<.2500	<.2500	<.1860 .3570J	<.2700
Nickel	<.929 2.060J	1.720	<1.000 1.170J	<1.000 3.800J	<.625 1.130J	<1.700
Selenium	<.928	1.400	<.900 1.190J	<.900 .994J	<.982 1.070J	<1.000 1.360J
Silver	<.1400	.1460	<.3000	<.3000	<.1150	<.3700
Thallium	<.0644	<.0644	<.1700	<.1700	<.5700	<.2700
Total suspended solids	<.581 .625J	1.130	<.638	3.130	4.130	<.638 .875J
Turbidity, field	2.0550	1.0350	1.5560	3.1780	2.7300	.9400
Vanadium	<.840	<.840	<.520 .763J	<.520 1.090J	<2.150 3.000J	<.820 1.320J
Zinc	<11.500	<11.500	<10.000	<10.000	<6.920 14.700J	85.200

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

Table 9

Analytical Data Summary for MW-25A

Constituents	2/3/2020 2/17/2020	6/16/2020 7/7/2020	11/3/2020 11/23/2020	5/17/2021 6/8/2021	9/21/2021 9/29/2021	3/2/2022 3/29/2022
Antimony		<.5100	<.5100	<1.1000	<1.1000	<.6900
Arsenic		<.880	<.880	<.750	<.750	<.750
Barium	174	147	197	199	192	154
Beryllium		<.2700	<.2700	<.2700	<.2700	<.2700
Cadmium		<.0490	<.0490	<.0510	<.0510	<.0550
Chromium		<1.100 1.520J	<1.100	<1.100	<1.100 1.580J	<1.100 1.650J
Cobalt		<.0910	<.0910	<.0910 .1350J	<.1900	<.1900
Copper		<1.500	<1.500	<1.400	<1.400	<1.800
Lead		<.1100	<.1100	<.2100	<.2100	<.2400
Nickel		<1.900	<1.900	<1.900	<1.900	<1.900
Selenium		<1.000 1.300J	<1.000 1.080J	<.960 2.690J	<.960 1.960J	<.960 1.760J
Silver		<.3700	<.3700	<.4200	<.4200	<.4900
Thallium		<.2600	<.2600	<.2600	<.2600	<.2600
Total suspended solids	<.638	<.638 .750J	<.638	<.638	<.638	<.638 1.380J
Turbidity, field	.0000	.7600	.6500	.8900	3.9700	2.2400
Vanadium		<.850	<.850 .948J	<1.100	<1.100	<1.100
Zinc	<10.000	<10.000	<10.000	<10.000	<10.000	<10.000

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

Table 9

Analytical Data Summary for MW-25A

Constituents	8/16/2022 9/13/2022	6/6/2023 6/27/2023	11/1/2023 11/20/2023	1/23/2024 1/25/2024	6/11/2024 7/3/2024	11/19/2024 12/18/2024
Antimony	<.6900	<1.0000	<1.0000		<1.0000	<1.0000
Arsenic	<.750	<.530	<.530		<.530	<.530
Barium	159	189	219		178	229
Beryllium	<.2700	<.3300	<.3300		<.3300	<.3300
Cadmium	<.0550 .0640J	<.1000	<.1000		<.1000	<.1000
Chromium	<1.100 1.360J	<1.100	<1.100		<1.200 2.640J	<1.200
Cobalt	<.1900	<.1700 .1760J	<.1700 .3910J		<.1700	<.1700 .2760J
Copper	<1.800	<1.800	<1.800		<1.800	<1.800
Lead	<.2400	<.2400	<.2400		<.2600	<.2600
Nickel	<1.900 2.260J	<1.900	17.000	<1.900 3.930J	<2.100	9.120
Selenium	<.960	<1.400	<1.400		<1.400 2.020J	<1.400
Silver	<.4900	<.5000	<.5000		<.5000	<.5000
Thallium	<.2600	<.2600	<.2600		<.5700	<.5700
Total suspended solids	<.638 1.130J	<.638	<.638	<.638	<1.390	<1.480
Turbidity, field	.9400	.9500	.6900	.4300	2.8200	3.3800
Vanadium	<1.100	<1.100	<1.100		<1.100	<1.100
Zinc	<10.000	<6.400	<6.400		<9.700	<9.700

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

Table 9

Analytical Data Summary for MW-25A

Constituents	6/2/2025 6/9/2025
Antimony	<1.0000
Arsenic	<.530
Barium	191
Beryllium	<.3300
Cadmium	<.1000
Chromium	<1.800
Cobalt	<.1700
Copper	<3.200
Lead	<.3300
Nickel	<2.300
Selenium	<1.400 2.400J
Silver	<.5000
Thallium	<.5700
Total suspended solids	<1.310
Turbidity, field	1.5600
Vanadium	<1.700
Zinc	<13.000

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

Table 9

Analytical Data Summary for MW-29A

Constituents	Units	10/30/2019 11/20/2019	2/3/2020 2/17/2020	6/16/2020 7/7/2020	8/24/2020 8/26/2020	11/3/2020 11/23/2020	5/17/2021 6/8/2021	9/21/2021 9/29/2021
Antimony	ug/L	<.53	<.58	<.51	<.51	<.51	<1.10	<1.10
Arsenic	ug/L	<.75 1.74J	2.28	3.40	6.84	4.59	4.09	6.09
Barium	ug/L	272	217	168	180	138	150	173
Beryllium	ug/L	<.27	<.27	<.27	<.27	<.27	<.27	<.27
Cadmium	ug/L	.131	.104	<.049	.180	<.049	<.051	<.051 .059J
Chromium	ug/L	<.98	<1.10	<1.10	<1.10	<1.10	<1.10	<1.10
Cobalt	ug/L	8.43	9.64	9.98	10.70	10.10	11.90	7.90
Copper	ug/L	<2.00	<3.20	<1.50	<1.50	<1.50	<1.40	<1.40
Cyanide	ug/L					<5.0	<5.3	
Lead	ug/L	<.27	<.27	<.11	<.11	<.11	<.21	<.21
Mercury	ug/L					<.100000	<.150000	
Nickel	ug/L	49.7	49.2	51.1	57.0	47.2	55.5	51.0
Selenium	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<.96	<.96
Silver	ug/L	<.37	<.37	<.37	<.37	<.37	<.42	<.42
Thallium	ug/L	<.27	<.26	<.26	<.26	<.26	<.26	<.26
Total suspended solids	mg/L	<1.28 3.25J	5.00	6.25	10.40	4.80	5.38	7.50
Turbidity, field	NTU	1.33	4.47	22.71	63.02	45.29	56.29	43.58
Vanadium	ug/L	<.82	<.82	<.85	<.85	<.85	<1.10	<1.10
Zinc	ug/L	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00

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

Table 9

Analytical Data Summary for MW-29A

Constituents	3/2/2022 3/29/2022	6/22/2022 6/27/2022	8/16/2022 9/13/2022	12/6/2022 12/7/2022	6/6/2023 6/27/2023	11/1/2023 11/20/2023	6/11/2024 7/3/2024	11/19/2024 12/18/2024
Antimony	<.69		<2.76		<1.00	<1.00	<1.00	<1.00
Arsenic	5.57		10.20		4.37	6.49	4.54	6.75
Barium	182		191		187	163	151	161
Beryllium	<.27		<1.08		<.33	<.33	<.33	<.33
Cadmium	<.055 .066J		<.055 .092J		<.100 .120J	<.100	<.100	<.100
Chromium	<1.10 1.67J		<1.10		<1.10	<1.10	<1.20	<1.20
Cobalt	7.38		10.10		12.50	18.70	11.20	16.50
Copper	<1.80		<1.80		<1.80	<1.80	<1.80 1.82J	<1.80
Cyanide	<4.3							
Lead	<.24		<.24		<.24	<.24	<.26	<.26
Mercury	<.110000							
Nickel	63.6		69.1		76.0	87.0	63.9	69.6
Selenium	<.96		<.96		<1.40	<1.40	<1.40	<1.40
Silver	<.49		<1.96		<.50	<.50	1.10	<.50
Thallium	<.26		<.26		<.26	<.26	<.57	<.57
Total suspended solids	<1.70 4.33J		14.30		3.87	4.00	7.00	13.70
Turbidity, field	48.96	74.41	5.11	21.07	59.78	15.27	55.13	32.22
Vanadium	<1.10		<1.10		<1.10	<1.10	<1.10	<1.10
Zinc	42.10		<10.00		<6.40 7.90J	<6.40 8.31J	<9.70	<9.70

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

Table 9

Analytical Data Summary for MW-29A

Constituents	6/2/2025 6/9/2025
Antimony	<1.00
Arsenic	<.53 1.91J
Barium	130
Beryllium	<.33
Cadmium	<.100
Chromium	<1.80
Cobalt	3.47
Copper	<3.20
Cyanide	
Lead	<.33
Mercury	
Nickel	54.0
Selenium	<1.40
Silver	<.50
Thallium	<.57
Total suspended solids	2.25
Turbidity, field	12.60
Vanadium	<1.70
Zinc	<13.00

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

Table 9

Analytical Data Summary for MW-2R

Constituents	Units	10/12/2007 10/13/2007	1/9/2008	4/8/2008	7/16/2008	10/23/2008	4/8/2009 4/13/2009	10/5/2009	4/21/2010
Antimony	ug/L	<6.000	<6.000	<6.000	<6.000	<6.000	<6.000	<6.000	<6.000
Arsenic	ug/L	<1.000	<1.000	<1.000	<1.000	1.730	<1.000	<1.000	<2.000
Barium	ug/L	137.0	118.0	127.0	101.0	197.0	108.0	114.0	108.0
Beryllium	ug/L	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000
Cadmium	ug/L	<.5000	<.5000	<.5000	<.5000	<.5000	<.5000	<.5000	<.5000
Chromium	ug/L	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000
Cobalt	ug/L	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000
Copper	ug/L	<20.000	<20.000	26.900	<20.000	<20.000	<20.000	<20.000	<20.000
Lead	ug/L	<4.0000	<4.0000	<4.0000	<4.0000	6.2000	<4.0000	<4.0000	<4.0000
Nickel	ug/L	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000
Selenium	ug/L	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000
Silver	ug/L	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000
Total suspended solids	mg/L								
Turbidity, field	NTU								
Vanadium	ug/L	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000
Zinc	ug/L	52.300	<20.000	27.200	<20.000	52.700	28.700	34.600	<20.000

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

Table 9

Analytical Data Summary for MW-2R

Constituents	10/14/2010	4/13/2011	10/18/2011	4/24/2012	10/24/2012 10/26/2012	2/20/2013	4/8/2013 4/16/2013	11/5/2013 11/7/2013
Antimony	<6.000	<6.000	<2.730	<1.450	<.600		<.541	.422
Arsenic	<2.000	<1.000	<.600	<.216	3.950		<5.440	.571
Barium	113.0	93.2	101.0	136.0	133.0		132.0	128.0
Beryllium	<1.0000	<1.0000	<.0510	<.0790	<.0890		<.6960	<.0696
Cadmium	<.5000	<.5000	.2400	<.2290	<.3200		<1.0600	.1160
Chromium	<20.000	<20.000	<1.810	<1.810	<1.950		<4.180	.448
Cobalt	<20.0000	<20.0000	<1.5500	<1.5500	.5000		<.5540	1.0300
Copper	<20.000	<20.000	5.580	4.100	3.750		2.390	3.360
Lead	<4.0000	<4.0000	<1.0000	2.6800	<.1450		<2.0700	.3460
Nickel	<50.000	<50.000	3.210	6.820	11.900		4.570	5.910
Selenium	<5.000	<5.000	<1.690	<.700	5.250	<1.830	<14.600	<1.460
Silver	<20.0000	<20.0000	<1.7000	<1.7000	<.1350		<.7890	<.0789
Thallium	<2.0000	<2.0000	<.8400	<.2880	<.0435		<.2670	<.0267
Total suspended solids								
Turbidity, field								
Vanadium	<50.000	<50.000	<2.100	2.250	<4.700		<8.330	<.833
Zinc	<20.000	<20.000	<9.110	17.100	<4.600		<3.130	<.625

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

Table 9

Analytical Data Summary for MW-2R

Constituents	5/1/2014 5/8/2014	10/31/2014 11/10/2014	5/1/2015 5/12/2015	9/14/2015 9/22/2015	3/24/2016 4/13/2016	11/11/2016 11/30/2016	5/5/2017 5/25/2017	11/1/2017 11/22/2017
Antimony	<.400	<.161	<.161	<.161	<.237	<.237	<.185	<.185
Arsenic	<.330	<.945	<.945	<.945	<.672	<.672	<.505	.533
Barium	115.0	127.0	107.0	123.0	103.0	128.0	119.0	121.0
Beryllium	<.0800	<.0390	.0390	<.0390	<.2210	<.2210	<.1250	<.1250
Cadmium	<.1000	<.1120	<.1120	<.1120	<.0351	<.0351	<.0441	<.0441
Chromium	<.500	<1.240	<1.240	<1.240	<.355	<.355	<.729	<.729
Cobalt	.2380	.1620	.0990	.1410	.0930	.1630	<.0453 .1760J	.1140
Copper	1.020	.669	.825	<.485	<1.220	<1.220	<2.190	<2.190
Lead	<.1800	<.0967	<.0967	<.0967	<.2110	<.2110	<.3240	<.3240
Nickel	2.420	2.040	1.900	2.160	1.600	3.510	<.929 2.640J	2.680
Selenium	<.700	<3.340	<3.340	<3.340	1.150	1.180	<.928 .986J	<.928
Silver	<.0330	<.0420	<.0420	<.0420	<.1530	<.1530	<.1400	<.1400
Thallium	<.0500	<.0325	<.0325	<.0325	<.0255	<.0255	<.0644	<.0644
Total suspended solids		1.500	<1.200	1.380	2.130	2.130	<.581 1.750J	1.000
Turbidity, field		.8694	.1373	3.2990	1.7520	1.4730	2.2420	.9645
Vanadium	<.500	<.449	<.449	<.449	<.255	<.255	<.840	<.840
Zinc	<2.000	<6.950	<6.950	<6.950	5.350	<5.210	<11.500	<11.500

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

Table 9

Analytical Data Summary for MW-2R

Constituents	6/4/2018 6/27/2018	10/28/2018 10/31/2018	6/4/2019 6/13/2019	10/30/2019 11/20/2019	6/16/2020 7/7/2020	11/3/2020 11/23/2020
Antimony	<.420	<.420	<1.320	<.530	<.510	<.510
Arsenic	<.570	<.570	<.232 .486J	<.750	<.880	<.880
Barium	103.0	97.5	82.8	86.2	79.0	124.0
Beryllium	<.1900	<.1900	<.5300	<.2700	<.2700	<.2700
Cadmium	<.0600	<.0600	<.1670	<.0390	<.0490	<.0490
Chromium	<.760	<.760	<1.140	<.980	<1.100	<1.100
Cobalt	<.0610 .0670J	<.0610 .0950J	<.4020	<.0910	<.0910	<.0910
Copper	<1.600	<1.600	2.250	<2.000	<1.500	<1.500
Lead	<.2500	<.2500	.5200	<.2700	<.1100	<.1100
Nickel	<1.000 1.470J	<1.000	<.625 .921J	<1.700	<1.900	<1.900
Selenium	<.900 1.170J	<.900 .989J	<.982	<1.000 1.010J	<1.000	<1.000 1.140J
Silver	<.3000	<.3000	<.1150	<.3700	<.3700	<.3700
Thallium	<.1700	<.1700	<.5700	<.2700	<.2600	<.2600
Total suspended solids	<1.020	<.638 1.380J	<.638 .875J	<.638 1.250J	<.638	<.638
Turbidity, field	2.3440	4.2830	13.4900	1.6700	.4700	.0000
Vanadium	<.520	<.520 .534J	<2.150 2.400J	<.820	<.850	<.850
Zinc	<10.000	<10.000	<6.920 7.240J	<10.000	<10.000	<10.000

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

Table 9

Analytical Data Summary for MW-2R

Constituents	5/17/2021 6/8/2021	9/21/2021 9/29/2021	3/2/2022 3/29/2022	8/16/2022 9/13/2022	6/6/2023 6/27/2023	11/1/2023 11/20/2023
Antimony	<1.100	<1.100	<.690	<.690	<1.000	<1.000
Arsenic	<.750	<.750	<.750	<.750	<.530	<.530
Barium	120.0	129.0	120.0	86.6	96.7	118.0
Beryllium	<.2700	<.2700	<.2700	<.2700	<.3300	<.3300
Cadmium	<.0510	<.0510	<.0550	<.0550	<.1000	<.1000
Chromium	<1.100	<1.100	<1.100	<1.100	<1.100	<1.100
Cobalt	<.0910 .1070J	<.1900	<.1900	<.1900	<.1700	<.1700
Copper	<1.400	<1.400	<1.800	<1.800	<1.800	<1.800 2.660J
Lead	<.2100	<.2100	<.2400	<.2400	<.2400	<.2400
Nickel	<1.900	<1.900	<1.900	<1.900	<1.900	<1.900
Selenium	<.960 1.400J	<.960 2.040J	<.960 1.510J	<.960 1.000J	<1.400 2.080J	<1.400
Silver	<.4200	<.4200	<.4900	<.4900	<.5000	<.5000
Thallium	<.2600	<.2600	<.2600	<.2600	<.2600	<.2600
Total suspended solids	<.638 .875J	<.638 .750J	<.638 .750J	<.638	<.638 1.500J	<.638 1.380J
Turbidity, field	.5200	4.1600	5.1600	6.3300	.7900	.3800
Vanadium	<1.100	<1.100	<1.100	<1.100	<1.100	<1.100
Zinc	<10.000	<10.000	<10.000	<10.000	<6.400	21.000

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

Table 9

Analytical Data Summary for MW-2R

Constituents	1/23/2024 1/25/2024	6/11/2024 7/3/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony		<1.000	<1.000	<1.000
Arsenic		<.530	<.530	<.530
Barium		91.0	129.0	110.0
Beryllium		<.3300	<.3300	<.3300
Cadmium		<.1000	<.1000	<.1000
Chromium		<1.200	<1.200	<1.800
Cobalt		<.1700	<.1700	<.1700
Copper		<1.800	<1.800	<3.200
Lead		<.2600	<.2600	<.3300
Nickel		<2.100	<2.100	<2.300
Selenium		<1.400	<1.400	<1.400 2.890J
Silver		<.5000	<.5000	<.5000
Thallium		<.5700	<.5700	<.5700
Total suspended solids	<.638 1.750J	<1.390	2.630	<1.310
Turbidity, field	.0000	1.3700	1.3500	1.5600
Vanadium		<1.100	<1.100	<1.700
Zinc	<6.400 8.480J	<9.700	<9.700	<13.000

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

Table 9

Analytical Data Summary for MW-3

Constituents	Units	10/12/2007 10/13/2007	1/9/2008	4/8/2008	7/16/2008	10/23/2008	4/8/2009 4/13/2009	10/5/2009	4/21/2010
Antimony	ug/L	<6.0000	<6.0000	<6.0000	<6.0000	<6.0000	<6.0000	<6.0000	<6.0000
Arsenic	ug/L	1.780	1.180	<1.000	1.420	<1.000	<1.000	<1.000	<1.000
Barium	ug/L	153	140	154	151	140	143	128	147
Beryllium	ug/L	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000
Cadmium	ug/L	<.5000	<.5000	<.5000	<.5000	<.5000	<.5000	<.5000	<.5000
Chromium	ug/L	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000
Cobalt	ug/L	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000
Copper	ug/L	<20.000	<20.000	38.500	<20.000	<20.000	<20.000	<20.000	<20.000
Lead	ug/L	<4.0000	<4.0000	<4.0000	<4.0000	<4.0000	<4.0000	<4.0000	<4.0000
Nickel	ug/L	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000
Selenium	ug/L	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000
Silver	ug/L	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000
Total suspended solids	mg/L								
Turbidity, field	NTU								
Vanadium	ug/L	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000
Zinc	ug/L	35.900	<20.000	40.300	<20.000	<20.000	27.400	23.000	21.200

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

Table 9

Analytical Data Summary for MW-3

Constituents	10/14/2010	4/13/2011	10/18/2011	4/24/2012	10/24/2012 10/26/2012	4/8/2013 4/16/2013	11/5/2013 11/7/2013	5/1/2014 5/8/2014
Antimony	<6.0000	<6.0000	<2.7300	<1.4500	<.6000	<.0541	<.0541	<.4000
Arsenic	<1.000	<1.000	<.600	.782	4.150	1.600	1.520	1.320
Barium	146	140	132	172	147	160	176	148
Beryllium	<1.0000	<1.0000	<.0510	<.0790	<.0890	<.0696	<.0696	<.0800
Cadmium	<.5000	<.5000	<.1240	<.2290	<.3200	<.1060	<.1060	<.1000
Chromium	<20.000	<20.000	<1.810	<1.810	<1.950	<.418	.920	<.500
Cobalt	<20.0000	<20.0000	<1.5500	<1.5500	<.0750	.3240	.4730	.1070
Copper	<20.000	<20.000	6.600	<1.510	<.600	1.100	1.600	<.560
Lead	<4.0000	<4.0000	<1.0000	<.8040	<.1450	<.2070	<.2070	.1820
Nickel	<50.000	<50.000	<2.580	<2.580	<1.200	1.840	1.440	.931
Selenium	<5.000	<5.000	<1.690	<.700	<1.480	<1.460	<1.460	<.700
Silver	<20.0000	<20.0000	<1.7000	<1.7000	<.1350	<.0789	<.0789	<.0330
Thallium	<2.0000	<2.0000	<.8400	<.2880	<.0435	<.0267	<.0267	.1490
Total suspended solids								
Turbidity, field								
Vanadium	<50.000	<50.000	<2.100	<2.100	<4.700	<.833	<.833	<.500
Zinc	<20.000	<20.000	<9.110	17.400	<4.600	<.625	<.625	<2.000

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

Table 9

Analytical Data Summary for MW-3

Constituents	10/31/2014 11/10/2014	5/1/2015 5/12/2015	9/14/2015 9/22/2015	3/24/2016 4/13/2016	11/11/2016 11/30/2016	5/5/2017 5/25/2017	11/1/2017 11/22/2017
Antimony	<.1610	<.1610	<.1610	<.2370	<.2370	<.1850	.2070
Arsenic	2.030	2.030	1.610	2.090	1.300	<.505 .610J	.992
Barium	193	170	180	180	184	168	166
Beryllium	<.0390	.0490	<.0390	<.2210	<.2210	<.1250	<.1250
Cadmium	<.1120	<.1120	<.1120	<.0351	<.0351	<.0441	<.0441
Chromium	<1.240	<1.240	<1.240	<.355	<.355	<.729	<.729
Cobalt	.0830	.0820	.0790	.0910	.0510	<.0453 .0490J	.0680
Copper	<.485	<.485	<.485	<1.220	<1.220	<2.190	<2.190
Lead	.0970	.1720	<.0967	<.2110	<.2110	<.3240	<.3240
Nickel	<.581	<.581	.788	<1.530	<1.530	<.929	<.929
Selenium	<3.340	<3.340	<3.340	.785	.674	<.928	1.090
Silver	<.0420	.0600	.0910	<.1530	<.1530	<.1400	<.1400
Thallium	<.0325	<.0325	<.0325	<.0255	<.0255	<.0644	<.0644
Total suspended solids	9.170	7.670	5.630	6.500	3.250	2.000	5.630
Turbidity, field	8.3890	12.2000	9.0940	10.0200	7.0280	.5395	2.9880
Vanadium	<.449	<.449	<.449	<.255	<.255	<.840	<.840
Zinc	<6.950	<6.950	<6.950	<5.210	<5.210	<11.500	<11.500

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

Table 9

Analytical Data Summary for MW-3

Constituents	6/4/2018 6/27/2018	10/28/2018 10/31/2018	6/4/2019 6/13/2019	10/30/2019 11/20/2019	6/16/2020 7/7/2020	11/3/2020 11/23/2020
Antimony	<.4200	<.4200	<1.3200	<.5300	<.5100	<.5100
Arsenic	<.570	2.280	1.110	<.750 .988J	2.240	<.880 1.220J
Barium	176	189	158	163	176	193
Beryllium	<.1900	<.1900	<.5300	<.2700	<.2700	<.2700
Cadmium	<.0600	<.0600	<.1670	<.0390	<.0490	<.0490
Chromium	<.760	<.760 1.120J	<1.140	<.980	<1.100	<1.100
Cobalt	<.0610 .2830J	<.0610 .2890J	<.4020	<.0910	<.0910 .1140J	<.0910
Copper	<3.800 *	<1.600	<.497 .686J	<2.000	<1.500	<1.500
Lead	<.2500	<.2500 .4080J	<.1860 .2060J	<.2700	<.1100 .1220J	<.1100
Nickel	<1.000 1.390J	<1.000 2.150J	<.625 .888J	<1.700	<1.900	<1.900
Selenium	<.900	<.900	<.982	<1.000	<1.000	<1.000
Silver	<.3000	<.3000	<.1150	<.3700	<.3700	<.3700
Thallium	<.1700	<.1700	<.5700	<.2700	<.2600	<.2600
Total suspended solids	<.638 1.380J	11.000	3.630	4.130	9.500	3.380
Turbidity, field	7.0420	5.2410	18.7300	2.0100	21.0100	17.4100
Vanadium	<.520	<.520 1.180J	<2.150 2.780J	<.820	<.850	<.850
Zinc	<10.000	<10.000	<6.920	<10.000	<10.000	<10.000

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

Table 9

Analytical Data Summary for MW-3

Constituents	5/17/2021 6/8/2021	8/2/2021 8/3/2021	9/21/2021 9/29/2021	3/2/2022 3/29/2022	6/22/2022 6/27/2022	8/16/2022 9/13/2022	6/6/2023 6/27/2023
Antimony	<1.1000		<1.1000	<.6900		<.6900	<1.0000
Arsenic	<.750 1.390J		<.750	3.700	<.750	<.750 .858J	<.530
Barium	199	171	188	210		205	176
Beryllium	<.2700		<.2700	<.2700		<.2700	<.3300
Cadmium	<.0510		<.0510	<.0550		<.0550	<.1000
Chromium	<1.100		<1.100	<1.100		<1.100	<1.100
Cobalt	<.0910		<.1900	<.1900		<.1900	<.1700
Copper	<1.400		<1.400	<1.800		<1.800	<1.800
Lead	<.2100		<.2100	<.2400		<.2400	<.2400
Nickel	<1.900		<1.900	<1.900		<1.900	<1.900
Selenium	<.960		<.960	<.960		<.960	<1.400
Silver	<.4200		<.4200	<.4900		<.4900	<.5000 .7020J
Thallium	<.2600		<.2600	<.2600		<.2600	<.2600
Total suspended solids	4.130	3.750	3.130	14.300	5.880	3.250	2.630
Turbidity, field	7.4700	4.6900	4.3600	28.3800	10.8200	35.6400	6.3600
Vanadium	<1.100		<1.100	<1.100		<1.100	<1.100
Zinc	<10.000		<10.000	<10.000		<10.000	<6.400

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

Table 9

Analytical Data Summary for MW-3

Constituents	11/1/2023 11/20/2023	1/23/2024 1/25/2024	6/11/2024 7/3/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	<1.0000		<1.0000	<1.0000	<1.0000
Arsenic	<.530 1.060J		<.530	<.530 1.340J	<.530 1.390J
Barium	193		146	205	205
Beryllium	<.3300		<.3300	<.3300	<.3300
Cadmium	<.1000		<.1000	<.1000	<.1000
Chromium	<1.100		<1.200	<1.200	<1.800
Cobalt	<.1700		<.1700	<.1700	<.1700
Copper	<1.800		<1.800	<1.800	<3.200
Lead	<.2400		<.2600	<.2600	<.3300
Nickel	<1.900		<2.100	<2.100	<2.300
Selenium	<1.400		<1.400	<1.400	<1.400
Silver	<.5000		<.5000	<.5000	<.5000
Thallium	<.2600		<.5700	<.5700	<.5700
Total suspended solids	2.880		2.380	5.000	3.870
Turbidity, field	3.0900	1.3400	4.1900	14.7800	17.7800
Vanadium	<1.100		<1.100	<1.100	<1.700
Zinc	<6.400		<9.700	<9.700	<13.000

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

Table 9

Analytical Data Summary for MW-31A

Constituents	Units	10/30/2019 11/20/2019	2/3/2020 2/17/2020	6/16/2020 7/7/2020	8/24/2020 8/26/2020	11/3/2020 11/23/2020	2/3/2021 2/24/2021	5/17/2021 6/8/2021
Antimony	ug/L	<.530	<.580	<.510	<.510	<.510 .771J		<1.100
Arsenic	ug/L	2.950	<.880 1.420J	2.470	3.830	2.570		<.750 .821J
Barium	ug/L	602	591	279	317	449		160
Beryllium	ug/L	<.27	<.27	<.27	<.27	<.27		<.27
Cadmium	ug/L	.179	<.039 .080J	.316	<.049	.424		.260
Chromium	ug/L	<.98	<1.10	<1.10 1.34J	<1.10	<1.10 2.50J		<1.10 1.31J
Cobalt	ug/L	13.40	12.40	13.60	12.00	10.00		10.40
Copper	ug/L	<2.00	<3.20	<1.50 1.84J	<1.50	5.01		<1.40 3.47J
Cyanide	ug/L					<5.0		<5.3
Lead	ug/L	1.150	<.270	1.370	<.110	.583		.609
Mercury	ug/L					<.100000		<.150000
Nickel	ug/L	20.4	21.6	27.5	47.0	52.8		53.4
Selenium	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00 1.13J		<.96
Silver	ug/L	<.37	<.37	<.37	<.37	<.37		<.42
Thallium	ug/L	<.270	<.260	<.260	<.260	<.260 .286J		<.260
Total suspended solids	mg/L	9.000	2.630	19.000	10.400	7.250		1.880
Turbidity, field	NTU	2.06	.26	1.79	26.27	8.36	12.41	4.53 *
Vanadium	ug/L	<.820	<.820	<.850 .997J	<.850	<.850 .873J		<1.100
Zinc	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0 13.8J		<10.0

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

Table 9

Analytical Data Summary for MW-31A

Constituents	8/2/2021 8/3/2021	9/21/2021 9/29/2021	3/2/2022 3/29/2022	8/16/2022 9/13/2022	6/6/2023 6/27/2023	11/1/2023 11/20/2023	6/11/2024 7/3/2024
Antimony		<1.100	<.690	2.220	<1.000	<1.000	<1.000
Arsenic		<.750	<.750	<3.000	<.530 .602J	<.530 .571J	<.530
Barium		205	145	441	220	247	243
Beryllium		<.27	<.27	<.27	<.33	<.33	<.33
Cadmium		2.040	.302	.984	.340	<.100	<.100 .160J
Chromium		<1.10 1.39J	<1.10	7.31	<1.10	<1.10	<1.20
Cobalt		3.37	3.01	32.20	3.75	4.62	3.48
Copper		9.84	<1.80 3.31J	21.30	<1.80 3.61J	<1.80	<1.80 1.91J
Cyanide			<4.3				
Lead		<.210	<.240	1.680	<.240 .283J	<.240	<.260
Mercury			<.110000				
Nickel		47.7	28.1	112.0	39.7	30.8	30.3
Selenium		<.96	<.96	<.96 1.86J	<1.40	<1.40	<1.40
Silver		<.42	<.49	<.49	<.50	<.50	<.50
Thallium		<.260 .355J	<.260	<.260 .777J	<.260	<.260	<.570
Total suspended solids		<.638 1.630J	<.638	5.000	6.070	<.638 1.250J	2.250
Turbidity, field	4.29	5.51	.86	74.50	4.71	4.04	2.38
Vanadium		<1.100	<1.100 1.620J	<1.100 3.260J	<1.100	<1.100	<1.100
Zinc		<10.0	<10.0	<10.0 18.1J	23.5	<6.4	<9.7

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

Table 9

Analytical Data Summary for MW-31A

Constituents	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	<1.000	<1.000
Arsenic	<.530 .562J	<.530
Barium	279	240
Beryllium	<.33	<.33
Cadmium	<.100 .161J	<.100 .186J
Chromium	<1.20	<1.80
Cobalt	2.09	2.04
Copper	<1.80 2.60J	<3.20
Cyanide		
Lead	<.260	<.330
Mercury		
Nickel	32.3	30.8
Selenium	<1.40	<1.40
Silver	<.50	<.50
Thallium	<.570	<.570
Total suspended solids	<3.700	<1.310
Turbidity, field	5.30	8.14
Vanadium	<1.100	<1.700
Zinc	<9.7	<13.0

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

Table 9

Analytical Data Summary for MW-33A

Constituents	Units	10/30/2019 11/20/2019	2/3/2020 2/17/2020	6/16/2020 7/7/2020	8/24/2020 8/26/2020	11/3/2020 11/23/2020	5/17/2021 6/8/2021	8/2/2021 8/3/2021
Antimony	ug/L	<.530	<.580	<.510	<.510	<.510	<1.100	<1.100
Arsenic	ug/L	42.40	80.90	5.23	65.80	17.90	35.30	52.70
Barium	ug/L	144	176	105	203	177	168	149
Beryllium	ug/L	<.27	<.27	<.27	<.27	<.27	<.27	<.27
Cadmium	ug/L	<.039	<.039	<.049	<.049	<.049	<.051	<.051 .098J
Chromium	ug/L	<.98	<1.10	<1.10	<1.10	<1.10	<1.10	<1.10
Cobalt	ug/L	3.000	2.590	<.091 .478J	2.340	1.830	3.200	3.200
Copper	ug/L	<2.00	<3.20	<1.50	<1.50	<1.50	<1.40	<1.40
Cyanide	ug/L							
Lead	ug/L	<.270	<.270	<.110	<.110 .316J	<.110 .116J	<.210	<.210 .303J
Mercury	ug/L							
Nickel	ug/L	<1.70 2.65J	<1.90 2.37J	<1.90 2.79J	<1.90 2.89J	<1.90 3.32J	<1.90 2.95J	<1.90 2.95J
Selenium	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<.96	<.96
Silver	ug/L	<.37	<.37	<.37	<.37	<.37	<.42	<.42
Thallium	ug/L	<.27	<.26	<.26	<.26	<.26	<.26	<.26 .91J
Total suspended solids	mg/L	47.00	52.00	5.25	74.00	8.75	50.30	29.90
Turbidity, field	NTU	97.42	17.14	22.42	506.36	82.50	8.74	33.68
Vanadium	ug/L	<.82	<.82	<.85	<.85 2.91J	<.85 1.16J	<1.10	<1.10
Zinc	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0

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

Table 9

Analytical Data Summary for MW-33A

Constituents	9/21/2021 9/29/2021	3/2/2022 3/29/2022	8/16/2022 9/13/2022	6/6/2023 6/27/2023	6/11/2024 7/3/2024	8/27/2024 9/5/2024	11/19/2024 12/18/2024
Antimony	<1.100	<.690 .846J	<.690	<1.000	<1.000		<1.000
Arsenic	18.40	11.30	13.80	<.53 1.16J	24.30	51.80	112.00
Barium	152	176	138	108	255		199
Beryllium	<.27	<.27	<.27	<.33	<.33		<.33
Cadmium	<.051 .068J	<.055 .062J	.108	<.100 .113J	<.100		<.100
Chromium	<1.10	<1.10	<1.10	<1.10	<1.20		<1.20
Cobalt	2.030	.503	.743	<.170 .396J	4.510		2.400
Copper	<1.40	<1.80	<1.80	<1.80	<1.80 4.25J		<1.80
Cyanide	<5.0 5.3J		<4.3				
Lead	<.210	<.240	<.240	<.240	.692		<.260
Mercury	<.00 .15J		<.11				
Nickel	<1.90	<1.90 2.82J	5.16	<1.90	<2.10 3.31J		<2.10 2.15J
Selenium	<.96	<.96 1.56J	<.96	<1.40	<1.40		<1.40
Silver	<.42	<.49	<.49	<.50	<.50		<.50
Thallium	<.26	<.26	<.26	<.26	<.57		<.57
Total suspended solids	8.33	7.62	14.80	4.50	59.00	52.00	43.00
Turbidity, field		28.51	11.49	5.19	51.45	6.21	13.51
Vanadium	<1.10	<1.10 1.15J	<1.10 2.48J	<1.10	<1.10 1.11J		<1.10
Zinc	<10.0	<10.0	<10.0	<6.4	<9.7 12.9J		<9.7

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

Table 9

Analytical Data Summary for MW-33A

Constituents	6/2/2025 6/9/2025
Antimony	<1.000
Arsenic	9.86
Barium	361
Beryllium	<.33
Cadmium	<.100 .107J
Chromium	<1.80
Cobalt	5.210
Copper	8.96
Cyanide	
Lead	3.290
Mercury	
Nickel	5.53
Selenium	<1.40 3.17J
Silver	<.50
Thallium	<.57
Total suspended solids	53.00
Turbidity, field	51.33
Vanadium	<1.70 2.29J
Zinc	<13.0

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

Table 9

Analytical Data Summary for MW-34A

Constituents	Units	10/30/2019 11/20/2019	2/3/2020 2/17/2020	6/16/2020 7/7/2020	8/24/2020 8/26/2020	11/3/2020 11/23/2020	5/17/2021 6/8/2021	9/21/2021 9/29/2021
Antimony	ug/L	<.53	<.58	<.51	<.51	<.51	<1.10	<1.10
Arsenic	ug/L	<.75	<.88	<.88	<.88	<.88	<.75	<.75
Barium	ug/L	80.4	80.0	76.3	75.2	73.6	76.9	74.9
Beryllium	ug/L	<.27	<.27	<.27	<.27	<.27	<.27	<.27
Cadmium	ug/L	<.039	<.039	<.049	<.049	<.049	<.051	<.051
Chromium	ug/L	<.98 1.37J	<1.10 1.66J	<1.10 1.63J	<1.10 3.06J	<1.10 1.36J	<1.10 1.29J	<1.10 1.41J
Cobalt	ug/L	<.091	<.091 .122J	<.091	<.091	<.091	<.091	<.190
Copper	ug/L	<2.0	<3.2	<1.5	<1.5	<1.5	<1.4	<1.4
Lead	ug/L	<.27	<.27	<.11	<.11	<.11	<.21	<.21
Nickel	ug/L	<1.7	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9
Selenium	ug/L	<1.00 1.85J	<1.00 1.95J	<1.00 1.23J	<1.00	<1.00 1.69J	<.96 1.59J	<.96 1.59J
Silver	ug/L	<.370	<.370	<.370	<.370	<.370	<.420	<.420
Thallium	ug/L	<.27	<.26	<.26	<.26	<.26	<.26	<.26
Total suspended solids	mg/L	1.880	4.500	3.130	<.638 1.630J	<.638 1.250J	2.750	2.000
Turbidity, field	NTU	1.46	6.78	5.06	5.97	5.00	2.73	10.46
Vanadium	ug/L	<.82	<.82	<.85	<.85 1.72J	<.85	<1.10	<1.10
Zinc	ug/L	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00

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

Table 9

Analytical Data Summary for MW-34A

Constituents	3/2/2022 3/29/2022	8/16/2022 9/13/2022	6/6/2023 6/27/2023	11/1/2023 11/20/2023	6/11/2024 7/3/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	<.69	<.69	<1.00	<1.00	<1.00	<1.00	<1.00
Arsenic	<.75	<.75	<.53	<.53	<.53	<.53	<.53
Barium	69.7	79.5	65.5	69.3	70.1	67.5	70.5
Beryllium	<.27	<.27	<.33	<.33	<.33	<.33	<.33
Cadmium	<.055	<.055	<.100	<.100	<.100	<.100	<.100
Chromium	<1.10 1.56J	<1.10 1.81J	<1.10 1.48J	<1.10 1.96J	<1.20 1.31J	<1.20 1.88J	<1.80
Cobalt	<.190	<.190	<.170	<.170	<.170	<.170	<.170
Copper	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<3.2
Lead	<.24	<.24	<.24	<.24	<.26	<.26	<.33
Nickel	<1.9	<1.9	<1.9	<1.9	<2.1	<2.1	<2.3
Selenium	<.96 1.74J	<.96 2.27J	<1.40 1.46J	<1.40 2.12J	<1.40	<1.40 2.01J	<1.40 1.99J
Silver	<.490	<.490 .747J	<.500	<.500	<.500	<.500	<.500
Thallium	<.26	<.26	<.26	<.26	<.57	<.57	<.57
Total suspended solids	2.880	<2.220	2.500	2.250	<1.390	6.000	11.600
Turbidity, field	8.91	12.61	2.00	4.28	5.88	8.37	24.16
Vanadium	<1.10	<1.10	<1.10	<1.10	<1.10	<1.10	<1.70
Zinc	<10.00	<10.00	<6.40	<6.40 8.31J	<9.70	<9.70	<13.00

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

Table 9

Analytical Data Summary for MW-37A

Constituents	Units	9/21/2021 9/29/2021	12/14/2021	3/2/2022 3/29/2022	6/22/2022 6/27/2022	8/16/2022 9/13/2022	12/6/2022 12/7/2022	6/6/2023 6/27/2023
Antimony	ug/L	<1.10	<1.10	<.69	<.69	<.69	<.69	<1.00
Arsenic	ug/L	<.750 1.380J	<.750	4.570	<.750	<.750	<.750 .910J	<.530
Barium	ug/L	202	137	273	144	122	247	111
Beryllium	ug/L	<.27	<.27	<.27	<.27	<.27	<.27	<.33
Cadmium	ug/L	<.051 .052J	<.051	<.055	<.055	<.055	<.055	<.100
Chromium	ug/L	<1.10 1.50J	<1.10 1.16J	<1.10	<1.10 1.57J	<1.10 1.33J	<1.10	<1.10 1.33J
Cobalt	ug/L	.681	<.190 .194J	<.190 .263J	<.190	<.190	<.190	<.170 .179J
Copper	ug/L	<1.4 2.5J	<1.4	<1.8	<1.8	<1.8	<1.8	<1.8
Lead	ug/L	1.060	<.210 .275J	<.240	<.240	<.240	<.240	<.240 .244J
Nickel	ug/L	<1.90	<1.90	<1.90	<1.90	<1.90	<1.90	<1.90
Selenium	ug/L	<.96	<.96	<.96	<.96	<.96	<.96	<1.40
Silver	ug/L	<.420 .503J	<.420	<.490	<.490	<.490	<.490	<.500
Thallium	ug/L	<.26	<.26	<.26	<.26	<.26	<.26	<.26
Total suspended solids	mg/L	159.000	45.600	17.300	31.300	<.638 1.000J	4.880	26.500
Turbidity, field	NTU	97.89	47.38	16.61	9.81	.00	10.27	26.51
Vanadium	ug/L	<1.10 1.67J	<1.10 1.30J	<1.10	<1.10	<1.10	<1.10	<1.10
Zinc	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<6.4

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

Table 9

Analytical Data Summary for MW-37A

Constituents	6/11/2024 7/3/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	<1.00	<1.00	<1.00
Arsenic	<.530 1.620J	153.000	<.530 .826J
Barium	134	849	156
Beryllium	<.33	<.33	<.33
Cadmium	<.100	<.100	<.100
Chromium	<1.20	<1.20	<1.80
Cobalt	.714	9.580	<.170
Copper	<1.8	<1.8	<3.2
Lead	<.260	<.260	<.330
Nickel	<2.10	<2.10 4.39J	<2.30
Selenium	<1.40	<1.40	<1.40
Silver	<.500	<.500	<.500
Thallium	<.57	<.57	<.57
Total suspended solids	4.620	18.000	6.500
Turbidity, field	11.39	1.87	9.71
Vanadium	<1.10	<1.10	<1.70
Zinc	<9.7	<9.7	<13.0

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

Table 9

Analytical Data Summary for MW-38A

Constituents	Units	9/21/2021 9/29/2021	12/14/2021	3/2/2022 3/29/2022	6/22/2022 6/27/2022	8/16/2022 9/13/2022	12/6/2022 12/7/2022	6/6/2023 6/27/2023
Antimony	ug/L	<1.10	<1.10	<.69	<.69	<.69	<.69	<1.00
Arsenic	ug/L	<.75	<.75	<.75	20.80	<.75	<.75	<.53
Barium	ug/L	148.0	94.3	139.0	200.0	133.0	145.0	133.0
Beryllium	ug/L	<.27	<.27	<.27	<.27	<.27	<.27	<.33
Cadmium	ug/L	<.051	<.051	<.055	<.055	<.055	<.055	<.100
Chromium	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
Cobalt	ug/L	<.190 .249J	<.190	<.190	<.190	<.190	<.190	<.170 .181J
Copper	ug/L	<1.4	<1.4	<1.8	<1.8	<1.8	<1.8	<1.8
Lead	ug/L	<.21	<.21	<.24	<.24	<.24	<.24	<.24
Nickel	ug/L	<1.90	<1.90	<1.90	<1.90	<1.90	<1.90	<1.90
Selenium	ug/L	<.96	<.96	<.96	<.96 2.77J	<.96	<.96	<1.40
Silver	ug/L	<.42	<.42	<.49	<.49	<.49	<.49	<.50
Thallium	ug/L	<.26	<.26	<.26	<.26	<.26	<.26	<.26
Total suspended solids	mg/L	8.630	14.300	<1.700 2.670J	<.638 .875J	<.638	<.638 1.130J	9.120
Turbidity, field	NTU	11.36	29.12	2.49	.08	3.12	.00	6.34
Vanadium	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
Zinc	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<6.4

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

Table 9

Analytical Data Summary for MW-38A

Constituents	11/1/2023 11/20/2023	6/11/2024 7/3/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	<1.00	<1.00	<1.00	<1.00
Arsenic	<.53	<.53	<.53	<.53
Barium	141.0	153.0	153.0	140.0
Beryllium	<.33	<.33	<.33	<.33
Cadmium	<.100	<.100	<.100	<.100
Chromium	<1.1	<1.2	<1.2	<1.8
Cobalt	<.170	<.170	<.170	<.170
Copper	<1.8	<1.8	<1.8	<3.2
Lead	<.24	<.26	<.26	<.33
Nickel	<1.90 2.01J	<2.10	<2.10	<2.30
Selenium	<1.40	<1.40	<1.40	<1.40
Silver	<.50	<.50	<.50	<.50
Thallium	<.26	<.57	<.57	<.57
Total suspended solids	3.500	3.130	3.000	6.250
Turbidity, field	1.10	1.62	15.68	7.35
Vanadium	<1.1	<1.1	<1.1	<1.7
Zinc	<6.4	<9.7	<9.7	<13.0

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

Table 9

Analytical Data Summary for MW-39A

Constituents	Units	9/21/2021 9/29/2021	12/14/2021	3/2/2022 3/29/2022	6/22/2022 6/27/2022	8/16/2022 9/13/2022	12/6/2022 12/7/2022	6/6/2023 6/27/2023
Antimony	ug/L	<1.10	<1.10	<.69	<.69	<.69	<.69	<1.00
Arsenic	ug/L	<.75	<.75	<.75	<.75	<.75	<.75	<.53
Barium	ug/L	156	146	144	152	136	149	138
Beryllium	ug/L	<.270	<.270	<.270	<.270	<.270	<.270	<.330
Cadmium	ug/L	<.051	<.051	<.055	<.055	<.055	<.055	<.100
Chromium	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
Cobalt	ug/L	.857	<.190 .382J	<.190	<.190	<.190	<.190 .199J	<.170 .345J
Copper	ug/L	<1.40	<1.40	<1.80	<1.80	<1.80	<1.80	<1.80
Lead	ug/L	<.210 .259J	<.210 .343J	<.240	<.240	<.240	<.240	<.240 .339J
Nickel	ug/L	<1.90 3.68J	<1.90 2.01J	<1.90	<1.90	<1.90	<1.90	<1.90
Selenium	ug/L	<.96	<.96	<.96	<.96	<.96	<.96	<1.40
Silver	ug/L	<.42	<.42	<.49	<.49	<.49	<.49	<.50
Thallium	ug/L	<.26	<.26	<.26	<.26	<.26	<.26	<.26
Total suspended solids	mg/L	54.600	45.200	<1.700 3.670J	5.630	<.638 .750J	13.300	43.700
Turbidity, field	NTU	102.71	70.75	10.72	10.22	.51	20.65	71.92
Vanadium	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
Zinc	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<6.4

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

Table 9

Analytical Data Summary for MW-39A

Constituents	11/1/2023 11/20/2023	6/11/2024 7/3/2024	8/27/2024 9/5/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	<1.00	<1.00		<1.00	<1.00
Arsenic	<.53	<.53		<.53	<.53
Barium	145	152		156	146
Beryllium	<.330	<.330 .353J		<.330	<.330
Cadmium	<.100	<.100		<.100	<.100
Chromium	<1.1	<1.2		<1.2	<1.8
Cobalt	<.170 .376J	<.170 .175J		.812	<.170 .329J
Copper	<1.80	<1.80		<1.80 2.08J	<3.20
Lead	<.240 .252J	<.260		.589	<.330
Nickel	<1.90 2.54J	<2.10		<2.10 2.86J	<2.30
Selenium	<1.40	<1.40		<1.40	<1.40
Silver	<.50	<.50		<.50	<.50
Thallium	<.26	<.57		<.57	<.57
Total suspended solids	52.000	14.300	34.600	116.000	27.500
Turbidity, field	71.35	25.54	66.58	271.18	36.91
Vanadium	<1.1	<1.1		<1.1	<1.7
Zinc	<6.4	68.3	<9.7	<9.7	<13.0

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

Table 9

Analytical Data Summary for MW-4

Constituents	Units	10/12/2007 10/13/2007	1/9/2008	4/8/2008	7/16/2008	10/23/2008	4/8/2009 4/13/2009	10/5/2009
Antimony	ug/L	<6.000	<6.000	<6.000	<6.000	<6.000	<6.000	<6.000
Arsenic	ug/L	23.600	16.600	21.400	7.640	4.720	3.400	5.900
Barium	ug/L	742.0	603.0	793.0	544.0	514.0	549.0	623.0
Beryllium	ug/L	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000
Cadmium	ug/L	1.210000	.834000	1.360000	<.500000	<.500000	<.500000	<.500000
Chromium	ug/L	<20.000	<20.000	28.000	<20.000	<20.000	<20.000	<20.000
Cobalt	ug/L	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000
Copper	ug/L	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000
Cyanide	ug/L							
Lead	ug/L	<4.0000	<4.0000	4.1500	<4.0000	<4.0000	<4.0000	<4.0000
Mercury	ug/L							
Nickel	ug/L	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000
Selenium	ug/L	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000
Silver	ug/L	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000
Total suspended solids	mg/L							
Turbidity, field	NTU							
Vanadium	ug/L	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000
Zinc	ug/L	69.099998	<20.000000	36.500000	<20.000000	21.100000	50.700001	52.599998

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

Table 9

Analytical Data Summary for MW-4

Constituents	2/25/2010	4/21/2010	10/14/2010	4/13/2011	10/18/2011	4/24/2012	10/24/2012 10/26/2012	4/8/2013 4/16/2013
Antimony	<6.000	<6.000	<6.000	<6.000	<2.730	<1.450	<.120	3.740
Arsenic	7.850	6.440	8.540	6.570	4.050	2.100	2.460	16.400
Barium	564.0	580.0	529.0	542.0	513.0	533.0	710.0	774.0
Beryllium	<1.0000	<1.0000	<1.0000	<1.0000	<.0510	<.0790	.0600	<.0696
Cadmium	.530000	<.500000	<.500000	<.500000	.236000	<.229000	.410000	.430000
Chromium	<20.000	<20.000	<20.000	<20.000	<1.810	<1.810	.420	6.890
Cobalt	<20.0000	<20.0000	<20.0000	<20.0000	8.2700	5.8500	10.1000	10.0000
Copper	<20.000	<20.000	<20.000	23.600	12.000	<1.510	2.080	6.130
Cyanide		<10.00						
Lead	<4.0000	<4.0000	<4.0000	<4.0000	<1.0000	.9000	.7800	2.4500
Mercury		<.2000						
Nickel	<50.000	<50.000	<50.000	<50.000	14.000	13.300	12.800	18.200
Selenium	<5.000	<5.000	<5.000	<5.000	<1.690	<.700	<.297	1.640
Silver	<20.0000	<20.0000	<20.0000	<20.0000	<1.7000	<1.7000	<.0270	<.0789
Thallium	<2.0000	<2.0000	<2.0000	<2.0000	<.8400	<.2880	.0100	.1480
Total suspended solids								
Turbidity, field								
Vanadium	<50.000	<50.000	<50.000	<50.000	<2.100	3.660	3.250	9.470
Zinc	<20.000000	41.000000	47.099998	<20.000000	<9.110000	14.200000	4.500000	13.600000

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

Table 9

Analytical Data Summary for MW-4

Constituents	11/5/2013 11/7/2013	5/1/2014 5/8/2014	10/31/2014 11/10/2014	12/19/2014 12/22/2014	5/1/2015 5/12/2015	9/14/2015 9/22/2015	3/24/2016 4/13/2016	11/11/2016 11/30/2016
Antimony	.108	.422	<.161		<.161	<.161	<.237	<.237
Arsenic	1.870	1.240	<.945		<.945	<.945	<.672	<.672
Barium	514.0	513.0	469.0		463.0	479.0	484.0	539.0
Beryllium	<.0696	<.0800	<.0390		<.0390	<.0390	<.2210	<.2210
Cadmium	.191000	.144000	.117000		.149000	.133000	.170000	.142000
Chromium	<.418	147.000	<1.240		<1.240	<1.240	<.355	<.355
Cobalt	4.3700	6.0900	.9670		.4480	.3300	.4110	.4410
Copper	2.390	4.710	.520		<.485	<.485	<1.220	<1.220
Cyanide		<3.10				<3.04		<3.52
Lead	.3240	<.1800	.1090		<.0967	<.0967	<.2110	<.2110
Mercury		<.0710				<.0926		<.1420
Nickel	15.800	105.000	5.990		5.630	4.310	5.700	4.280
Selenium	1.520	<.700	<3.340		<3.340	<3.340	<.630	<.630
Silver	<.0789	<.0330	<.0420		<.0420	<.0420	.1650	<.1530
Thallium	.0371	.0790	<.0325		<.0325	<.0325	.0310	.0280
Total suspended solids			4.830		<1.200	<1.200	<.581	<.581
Turbidity, field			10.5800	1.3090	.0997	1.0810	.1490	1.8430
Vanadium	.843	7.190	1.020		.695	.787	.785	.948
Zinc	<.625000	2.010000	<6.950000		<6.950000	<6.950000	<5.210000	<5.210000

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

Table 9

Analytical Data Summary for MW-4

Constituents	5/5/2017 5/25/2017	11/1/2017 11/22/2017	6/4/2018 6/27/2018	10/28/2018 10/31/2018	6/4/2019 6/13/2019
Antimony	<.185	.691	<.420	<.420	<1.320
Arsenic	<.505	.784	<.570 .637J	<.570	<.232 .653J
Barium	482.0	40.6	530.0	464.0	451.0
Beryllium	<.1250	<.1250	<.1900	<.1900	<.5300
Cadmium	<.044100 .168000J	.273000	<.060000 .124000J	<.060000 .158000J	<.167000
Chromium	<.729	2.280	<.760	<.760	<1.140 1.680J
Cobalt	<.0453 .2420J	3.7500	1.4400	<.0610 .4580J	<.4020
Copper	<2.190	5.840	<4.533 *	<1.600	<.497 .966J
Cyanide		<3.46			
Lead	<.3240	<.3240	<.2500	<.2500	<.1860
Mercury		<.1120			
Nickel	<.929 3.220J	11.900	5.780	<1.000 3.990J	5.230
Selenium	<.928	31.600	<.900	<.900	<.982
Silver	<.1400	<.1400	<.3000	<.3000	<.1150
Thallium	<.0644 .1010J	<.0644	<.1700	<.1700	<.5700
Total suspended solids	2.880	1.880	2.500	2.750	<.638
Turbidity, field	8.7800	.7597	1.4180	7.7670	
Vanadium	<.840	1.070	<.520 .913J	<.520 1.230J	<2.150
Zinc	<11.500000	<11.500000	<10.000000	<10.000000	<6.920000

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

Table 9

Analytical Data Summary for MW-4

Constituents	10/30/2019 11/20/2019	6/16/2020 7/7/2020	11/3/2020 11/23/2020	5/17/2021 6/8/2021	9/21/2021 9/29/2021	3/2/2022 3/29/2022
Antimony	<.530	<.510	<.510	<1.100	<1.100	<.690
Arsenic	<.750	<.880	<.880	<.750	<.750	<.750
Barium	191.0	421.0	409.0	475.0	482.0	503.0
Beryllium	<.2700	<.2700	<.2700	<.2700	<.2700	<.2700
Cadmium	<.039000	.139000	.163000	.184000	.122000	.118000
Chromium	<.980	<1.100	<1.100	<1.100	<1.100	<1.100
Cobalt	<.0910	<.0910 .2640J	1.4800	.9370	1.0700	1.4400
Copper	<2.000	<1.500	<1.500	<1.400	<1.400	<1.800
Cyanide						
Lead	<.2700	<.1100	<.1100	<.2100	<.2100	<.2400
Mercury						
Nickel	<1.700	<1.900 3.580J	11.900	5.360	5.050	7.470
Selenium	<1.000	<1.000	<1.000	<.960	<.960	<.960
Silver	<.3700	<.3700	<.3700	<.4200	<.4200	<.4900
Thallium	<.2700	<.2600	<.2600	<.2600	<.2600	<.2600
Total suspended solids	<.638 .750J	<.638 .750J	<.638	<.638 1.000J	<.638 1.380J	<1.700
Turbidity, field	.4900	1.2500	.0000		3.8100	.0000
Vanadium	<.820 1.230J	<.850 .892J	<.850 1.060J	<1.100	<1.100	<1.100
Zinc	<10.000000	<10.000000	<10.000000	<10.000000	<10.000000	<10.000000

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

Table 9

Analytical Data Summary for MW-4

Constituents	8/16/2022 9/13/2022	6/6/2023 6/27/2023	11/1/2023 11/20/2023	6/11/2024 7/3/2024	11/19/2024 12/18/2024	2/14/2025
Antimony	<.690	<1.000	<1.000	<1.000	<1.000	
Arsenic	<.750 .762J	<.530	<.530 1.150J	<.530 .792J	<.530 1.050J	
Barium	536.0	134.0	514.0	485.0	518.0	
Beryllium	<.2700	<.3300	<.3300	<.3300	<.3300	
Cadmium	<.055000 .076000J	<.100000	<.100000	<.100000	.254000	<.100000
Chromium	<1.100	<1.100	<1.100	<1.200	<1.200	
Cobalt	1.6100	<.1700	1.5400	1.8500	2.0400	
Copper	<1.800	<1.800	<1.800	<1.800	<1.800	
Cyanide		<4.30				
Lead	<.2400	<.2400	<.2400	<.2600 .2700J	<.2600	
Mercury		<.1400				
Nickel	7.160	<1.900	5.360	6.270	6.170	
Selenium	<.960	<1.400	<1.400	<1.400	<1.400	
Silver	<.4900	<.5000	<.5000	1.2100	<.5000	
Thallium	<.2600	<.2600	<.2600	<.5700	<.5700	
Total suspended solids	<.638 1.630J	<.638 1.380J	8.500	2.250	2.450	
Turbidity, field	.0000	1.1500	1.1400	.8800	1.1700	.8400
Vanadium	<1.100	<1.100	<1.100	<1.100	<1.100	
Zinc	<10.000000	<6.400000	<6.400000	<9.700001	<9.700000	

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

Table 9

Analytical Data Summary for MW-4

Constituents	6/2/2025 6/9/2025
Antimony	<1.000
Arsenic	<.530 .759J
Barium	505.0
Beryllium	<.3300
Cadmium	<.100000
Chromium	<1.800
Cobalt	2.2500
Copper	<3.200
Cyanide	
Lead	<.3300
Mercury	
Nickel	8.820
Selenium	<1.400
Silver	<.5000
Thallium	<.5700
Total suspended solids	2.500
Turbidity, field	.6300
Vanadium	<1.700
Zinc	<13.000000

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

Table 9

Analytical Data Summary for MW-40A

Constituents	Units	9/21/2021 9/29/2021	12/14/2021	3/2/2022 3/29/2022	6/22/2022 6/27/2022	8/16/2022 9/13/2022	12/6/2022 12/7/2022	6/6/2023 6/27/2023
Antimony	ug/L	<1.10	<1.10	<.69	<.69	<.69	<.69	<1.00
Arsenic	ug/L	<.750	<.750 .759J	<.750	<.750	<.750	<.750	<.530
Barium	ug/L	279	278	260	257	162	238	216
Beryllium	ug/L	<.27	<.27	<.27	<.27	<.27	<.27	<.33
Cadmium	ug/L	<.051	<.051	<.055	<.055	<.055 .064J	<.055	<.100 .163J
Chromium	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
Cobalt	ug/L	3.220	1.060	1.170	.807	1.470	2.190	1.510
Copper	ug/L	<1.40 2.64J	<1.40	<1.80	<1.80	<1.80 2.08J	<1.80	7.71
Cyanide	ug/L							
Lead	ug/L	<.210 .379J	<.210 .271J	<.240	<.240	<.240 .272J	<.240	<.240
Mercury	ug/L							
Nickel	ug/L	17.00	7.32	11.00	7.85	10.20	12.70	19.00
Selenium	ug/L	<.96 1.55J	<.96	<.96	<.96	<.96	<.96	<1.40
Silver	ug/L	<.42	<.42	<.49	<.49	<.49	<.49	<.50
Thallium	ug/L	<.26	<.26	<.26	<.26	<.26	<.26	<.26
Total suspended solids	mg/L	81.50	33.00	12.30	21.40	47.70	24.50	6.75
Turbidity, field	NTU	100.92	26.96	40.36	17.09	98.21	13.86	5.58
Vanadium	ug/L	<1.10	<1.10	<1.10 1.12J	<1.10	<1.10 1.69J	<1.10	<1.10 1.91J
Zinc	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<6.4

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

Table 9

Analytical Data Summary for MW-40A

Constituents	11/1/2023 11/20/2023	6/11/2024 7/3/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	<1.00	<1.00	<1.00	<1.00
Arsenic	<.530 .558J	<.530	<.530	<.530
Barium	228	210	215	202
Beryllium	<.33	<.33	<.33	<.33
Cadmium	<.100	<.100	<.100	<.100
Chromium	<1.1	<1.2	<1.2	<1.8
Cobalt	1.860	1.690	2.140	1.570
Copper	<1.80	<1.80	<1.80	<3.20
Cyanide	<4.3	<3.5		
Lead	<.240	<.260	<.260 .282J	<.330
Mercury	<.14	<.11		
Nickel	17.40	11.10	16.80	14.10
Selenium	<1.40	<1.40	<1.40	<1.40
Silver	<.50	<.50	<.50	<.50
Thallium	<.26	<.57	<.57	<.57
Total suspended solids	8.25	7.13	22.30	9.63
Turbidity, field	20.13	12.07	42.50	6.00
Vanadium	<1.10	<1.10	<1.10	<1.70
Zinc	<6.4	<9.7	<9.7	<13.0

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

Table 9

Analytical Data Summary for MW-41A

Constituents	Units	8/16/2022 9/13/2022	12/6/2022 12/7/2022	6/6/2023 6/27/2023	8/24/2023 8/29/2023	11/1/2023 11/20/2023	1/23/2024 1/25/2024	6/11/2024 7/3/2024
Antimony	ug/L	<.690 .761J	<.690	<1.000	<1.000	<1.000		<1.000
Arsenic	ug/L	<.750	<.750	<.530 .708J	<.530 .866J	<.530		<.530 .595J
Barium	ug/L	154	143	145	141	169		125
Beryllium	ug/L	<.27	<.27	<.33	<.33	<.33		<.33
Cadmium	ug/L	<.055	<.055	<.100	<.100	<.100		<.100
Chromium	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1		<1.2
Cobalt	ug/L	.647	<.190 .415J	.710	.541	1.010	<.170	<.170 .215J
Copper	ug/L	<1.8	<1.8	<1.8	<1.8	<1.8		<1.8
Lead	ug/L	<.24	<.24	<.24	<.24	<.24		<.26
Nickel	ug/L	<1.9	<1.9	<1.9	<1.9	<1.9		<2.1
Selenium	ug/L	<.96	<.96	<1.40	<1.40	<1.40		<1.40
Silver	ug/L	<.49	<.49	<.50	<.50	<.50		<.50
Thallium	ug/L	<.26	<.26	<.26	<.26	<.26		<.57
Total suspended solids	mg/L	4.380	3.130	4.130	3.630	<.638 1.500J	<.638 1.750J	2.630
Turbidity, field	NTU	12.37	2.00	1.78	4.40	.57	.98	1.73
Vanadium	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1		<1.1
Zinc	ug/L	<10.0	<10.0	<6.4	<6.4	<6.4		<9.7

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

Table 9

Analytical Data Summary for MW-41A

Constituents	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	<1.000	<1.000
Arsenic	<.530 .967J	<.530 1.200J
Barium	159	159
Beryllium	<.33	<.33
Cadmium	<.100	<.100
Chromium	<1.2	<1.8
Cobalt	<.170 .211J	<.170 .220J
Copper	<1.8	<3.2
Lead	<.26	<.33
Nickel	<2.1	<2.3
Selenium	<1.40	<1.40
Silver	<.50	<.50
Thallium	<.57	<.57
Total suspended solids	6.000	6.630
Turbidity, field	12.99	10.17
Vanadium	<1.1	<1.7
Zinc	<9.7	<13.0

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

Table 9

Analytical Data Summary for MW-42A

Constituents	Units	8/16/2022 9/13/2022	12/6/2022 12/7/2022	6/6/2023 6/27/2023	8/24/2023 8/29/2023	11/1/2023 11/20/2023	6/11/2024 7/3/2024	11/19/2024 12/18/2024
Antimony	ug/L	<.69	<.69	<1.00	<1.00	<1.00	<1.00	<1.00
Arsenic	ug/L	<.750	2.960	<.530	<.530 .560J	<.530 .541J	<.530	<.530 .547J
Barium	ug/L	281.0	119.0	83.4	125.0	101.0	128.0	177.0
Beryllium	ug/L	<.27	<.27	<.33	<.33	<.33	<.33	<.33
Cadmium	ug/L	.281	<.055	<.100	<.100	<.100	<.100	<.100
Chromium	ug/L	<1.10 1.95J	<1.10	<1.10	<1.10	<1.10	<1.20	<1.20
Cobalt	ug/L	3.980	3.310	.518	2.460	2.560	2.560	2.770
Copper	ug/L	9.67	<1.80	<1.80	<1.80	<1.80	<1.80	<1.80 2.00J
Cyanide	ug/L						<3.5	
Lead	ug/L	<.24 .41J	<.24	<.24	<.24	<.24	<.26	<.26
Mercury	ug/L						<.11	
Nickel	ug/L	37.20	14.70	8.62	19.30	14.80	16.60	27.60
Selenium	ug/L	<.96	<.96	<1.40	<1.40	<1.40	<1.40	<1.40
Silver	ug/L	<.49	<.49	<.50	<.50	<.50	<.50	<.50
Thallium	ug/L	<.260 .385J	<.260	<.260	<.260	<.260	<.570	<.570
Total suspended solids	mg/L	6.25	13.30	18.60	7.00	8.00	4.38	14.10
Turbidity, field	NTU	18.52	6.50	17.27	3.57	8.67	9.00	33.63
Vanadium	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
Zinc	ug/L	<10.0	<10.0	<6.4	<6.4	<6.4	<9.7	<9.7

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

Table 9

Analytical Data Summary for MW-42A

Constituents	2/14/2025	6/2/2025 6/9/2025
Antimony		<1.00
Arsenic		<.530
Barium		152.0
Beryllium		<.33
Cadmium		<.100
Chromium		<1.80
Cobalt		1.370
Copper		<3.20
Cyanide		<3.5
Lead		<.33
Mercury		<.11
Nickel	23.50	26.10
Selenium		<1.40
Silver		<.50
Thallium		<.570
Total suspended solids		6.25
Turbidity, field	4.29	24.38
Vanadium		<1.7
Zinc		<13.0

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

Table 9

Analytical Data Summary for MW-43A

Constituents	Units	8/16/2022 9/13/2022	12/6/2022 12/7/2022	6/6/2023 6/27/2023	8/24/2023 8/29/2023	11/1/2023 11/20/2023
Antimony	ug/L	<.69	<.69	<1.00	<4.00	<1.00
Arsenic	ug/L	8.06	7.34	8.28	8.85	9.81
Barium	ug/L	157	167	180	250	274
Beryllium	ug/L	<.27	<.27	<.33	<.33	<.33
Cadmium	ug/L	<.055000	<.055000	<.100000	<.100000	<.100000
Chromium	ug/L	<1.1	<1.1	<1.1	<1.1	12.0
Cobalt	ug/L	3.68	3.27	4.51	4.93	4.75
Copper	ug/L	<1.8	<1.8	<1.8	<1.8	6.4
Cyanide	ug/L					
Lead	ug/L	<.24	<.24	<.24	<.24	<.24
Mercury	ug/L					
Nickel	ug/L	24.4	25.6	31.0	41.5	36.4
Selenium	ug/L	<.96	<.96	<1.40	<1.40	<1.40
Silver	ug/L	<.49	<.49	<.50	<.50	<.50
Thallium	ug/L	<.26	<.26	<.26	<.26	<.26
Total suspended solids	mg/L	31.5	26.0	30.3	39.0	37.0
Turbidity, field	NTU	22.75	26.61	67.20	14.62	5.00
Vanadium	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1
Zinc	ug/L	<10.000000	<10.000000	<6.400000	<6.400000 8.740000J	<6.400000 7.360000J

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

Table 9

Analytical Data Summary for MW-43A

Constituents	6/11/2024 7/3/2024	8/27/2024 9/5/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	<1.00		<1.00	<1.00
Arsenic	6.28		6.32	7.28
Barium	163		214	186
Beryllium	<.33		<.33	<.33
Cadmium	<.100000		<.100000	<.100000
Chromium	<1.2		<1.2	<1.8
Cobalt	3.49		3.83	3.92
Copper	<1.8		<1.8	<3.2
Cyanide	<3.5			<3.5
Lead	<.26		<.26	<.33
Mercury				<.11
Nickel	17.3		25.9	22.5
Selenium	<1.40		<1.40	<1.40
Silver	9.36	<.50	<.50	<.50
Thallium	<.57		<.57	<.57
Total suspended solids	22.0	28.5	29.0	21.0
Turbidity, field	3.89	11.63	12.02	27.15
Vanadium	<1.1		<1.1	<1.7
Zinc	<9.700001		<9.700000 12.800000J	<13.000000

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

Table 9

Analytical Data Summary for MW-44A

Constituents	Units	8/16/2022 9/13/2022	12/6/2022 12/7/2022	6/6/2023 6/27/2023	8/24/2023 8/29/2023	11/1/2023 11/20/2023	6/11/2024 7/3/2024	11/19/2024 12/18/2024
Antimony	ug/L	<.69	<.69	<1.00	<1.00	<1.00	<1.00	<1.00
Arsenic	ug/L	<.750	<.750	<.530	<.530	<.530 .666J	<.530 .663J	<.530
Barium	ug/L	168	212	157	239	253	137	159
Beryllium	ug/L	<.27	<.27	<.33	<.33	<.33	<.33	<.33
Cadmium	ug/L	<.055	<.055 .082J	.306	.416	.795	.389	<.100 .181J
Chromium	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1	<1.2	<1.2
Cobalt	ug/L	.530	.583	<.170 .251J	.603	<.170 .327J	<.170 .423J	<.170 .435J
Copper	ug/L	<1.80	<1.80	<1.80	<1.80	<1.80 2.58J	<1.80 9.56J	<1.80
Cyanide	ug/L						<3.5	
Lead	ug/L	<.240	<.240	<.240	<.240	<.240	<.260 .313J	<.260
Mercury	ug/L						<.11	
Nickel	ug/L	21.7	51.8	28.7	70.2	66.6	21.6	34.2
Selenium	ug/L	<.96	<.96	<1.40	<1.40	<1.40	<1.40 1.99J	<1.40
Silver	ug/L	<.49	<.49	<.50	<.50	<.50	1.01	<.50
Thallium	ug/L	<.260	<.260	<.260	<.260	<.260	<.570 .748J	<.570
Total suspended solids	mg/L	8.000	2.880	<.638 1.130J	<.638 1.500J	<.638 .875J	1.880	7.670
Turbidity, field	NTU	1.79	2.06	10.04	1.56	.38	2.63	9.13
Vanadium	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
Zinc	ug/L	<10.0 13.4J	21.3	<6.4 18.1J	27.3	26.0	<9.7 13.8J	<9.7 19.5J

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

Table 9

Analytical Data Summary for MW-44A

Constituents	6/2/2025 6/9/2025
Antimony	<1.00
Arsenic	<.530
Barium	173
Beryllium	<.33
Cadmium	.499
Chromium	<1.8
Cobalt	<.170 .256J
Copper	<3.20
Cyanide	<3.5
Lead	<.330
Mercury	<.11
Nickel	39.1
Selenium	<1.40
Silver	<.50
Thallium	<.570
Total suspended solids	<1.310
Turbidity, field	3.04
Vanadium	<1.7
Zinc	26.5

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

Table 9

Analytical Data Summary for MW-45A

Constituents	Units	11/1/2023 11/20/2023	1/23/2024 1/25/2024	6/11/2024 7/3/2024	8/27/2024 9/5/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	ug/L	<1	<1	<1	<1	<1	<1
Arsenic	ug/L	<.53	<.53	<.53	<.53	<.53	<.53
Barium	ug/L	218	137	103	118	128	136
Beryllium	ug/L	<.33	<.33	<.33	<.33	<.33	<.33
Cadmium	ug/L	<.100	<.100	<.100	<.100 .194J	<.100 .132J	<.100
Chromium	ug/L	<1.10 2.02J	<1.10	<1.20	<1.20	<1.20	<1.80
Cobalt	ug/L	<.170 .394J	<.170 .263J	<.170 .257J	<.170 .389J	<.170 .296J	<.170 .329J
Copper	ug/L	<1.8	<1.8	<1.8	<1.8	<1.8	<3.2
Lead	ug/L	<.240	<.240	<.260	<.260 .265J	<.260	<.330
Nickel	ug/L	<1.9	<1.9	<2.1	<2.1	<2.1	<2.3
Selenium	ug/L	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4
Silver	ug/L	<.5	<.5	<.5	<.5	<.5	<.5
Thallium	ug/L	<.26	<.26	<.57	<.57	<.57	<.57
Total suspended solids	mg/L	2.500	<.638 1.130J	<1.390	2.630	3.250	1.880
Turbidity, field	NTU	1.87	.00	.67	2.16	6.59	2.98
Vanadium	ug/L	<1.10 1.13J	<1.10	<1.10	<1.10	<1.10	<1.70
Zinc	ug/L	<6.40	<6.40 8.46J	<9.70	<9.70	<9.70	<13.00

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

Table 9

Analytical Data Summary for MW-46A

Constituents	Units	11/1/2023 11/20/2023	1/23/2024 1/25/2024	6/11/2024 7/3/2024	8/27/2024 9/5/2024	11/19/2024 12/18/2024
Antimony	ug/L	<1	<1	<1	<1	<1
Arsenic	ug/L	<.530 .780J	<.530 .984J	<.530 .714J	<.530 .770J	<.530 .805J
Barium	ug/L	262	275	213	236	262
Beryllium	ug/L	<.33	<.33	<.33	<.33	<.33
Cadmium	ug/L	<.100000	<.100000 .123000J	<.100000	<.100000	<.100000 .115000J
Chromium	ug/L	<1.10	<1.10 1.12J	<1.20	<1.20	<1.20
Cobalt	ug/L	<.170 .405J	<.170 .253J	<.170	<.170 .241J	<.170 .288J
Copper	ug/L	<1.80	<1.80 2.39J	<1.80	<1.80 1.99J	<1.80 1.99J
Lead	ug/L	<.240	<.240 .393J	<.260	<.260 .386J	<.260 .307J
Nickel	ug/L	33.8	35.0	26.6	26.6	28.2
Selenium	ug/L	<1.4	<1.4	<1.4	<1.4	<1.4
Silver	ug/L	<.50	<.50	9.06	<.50	<.50
Thallium	ug/L	<.26	<.26	<.57	<.57	<.57
Total suspended solids	mg/L	11.5	36.1	10.3	26.3	19.6
Turbidity, field	NTU	79.73	173.01	12.22	68.05	103.12
Vanadium	ug/L	<1.10	<1.10 2.14J	<1.10	<1.10 1.17J	<1.10 1.35J
Zinc	ug/L	<6.400000	<6.400000 7.190000J	<9.700001	<9.700000	<9.700000

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

Table 9

Analytical Data Summary for MW-46A

Constituents	6/2/2025 6/9/2025
Antimony	<1
Arsenic	<.530 .640J
Barium	245
Beryllium	<.33
Cadmium	<.100000
Chromium	<1.80
Cobalt	<.170 .178J
Copper	<3.20
Lead	<.330
Nickel	24.0
Selenium	<1.4
Silver	<.50
Thallium	<.57
Total suspended solids	25.5
Turbidity, field	10.97
Vanadium	<1.70
Zinc	<13.000000

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

Table 9

Analytical Data Summary for MW-4B

Constituents	Units	10/12/2007 10/13/2007	1/9/2008	4/8/2008	7/16/2008	10/23/2008	4/8/2009 4/13/2009	10/5/2009
Antimony	ug/L	<6.000	<6.000	<6.000	<6.000	<6.000	<6.000	<6.000
Arsenic	ug/L	<1.000	2.260	<1.000	<1.000	<1.000	2.290	1.450
Barium	ug/L	344	358	337	264	343	447	372
Beryllium	ug/L	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000
Cadmium	ug/L	<.500000	<.500000	<.500000	<.500000	<.500000	<.500000	<.500000
Chromium	ug/L	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000
Cobalt	ug/L	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000
Copper	ug/L	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000
Cyanide	ug/L							
Lead	ug/L	<4.0000	<4.0000	<4.0000	<4.0000	<4.0000	7.6800	<4.0000
Mercury	ug/L							
Nickel	ug/L	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000
Selenium	ug/L	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000
Silver	ug/L	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000
Total suspended solids	mg/L							
Turbidity, field	NTU							
Vanadium	ug/L	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000
Zinc	ug/L	52.200001	<20.000000	26.200001	<20.000000	<20.000000	36.299999	31.700001

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

Table 9

Analytical Data Summary for MW-4B

Constituents	2/25/2010	4/21/2010	10/14/2010	4/13/2011	10/18/2011	4/24/2012	10/24/2012 10/26/2012	4/8/2013 4/16/2013
Antimony	10.600	<6.000	<6.000	<6.000	<2.730	<1.450	.220	.698
Arsenic	2.340	<1.000	<1.000	<1.000	1.140	2.530	14.100	15.300
Barium	441	339	346	211	404	540	920	644
Beryllium	<1.0000	<1.0000	<1.0000	<1.0000	<.0510	<.0790	.1200	.1090
Cadmium	<.500000	<.500000	<.500000	<.500000	<.124000	<.229000	.250000	.189000
Chromium	<20.000	<20.000	<20.000	<20.000	3.500	4.470	8.600	36.000
Cobalt	<20.0000	<20.0000	<20.0000	<20.0000	4.4300	8.7000	18.7000	15.1000
Copper	<20.000	<20.000	<20.000	<20.000	11.800	<1.510	11.800	12.100
Cyanide	<10.00							
Lead	<4.0000	13.8000	5.3200	<4.0000	<1.0000	.9100	3.6800	3.9700
Mercury	<.2000							
Nickel	<50.000	<50.000	<50.000	<50.000	24.400	38.700	57.600	62.400
Selenium	<5.000	<5.000	<5.000	<5.000	<1.690	<.700	<.297	1.740
Silver	<20.0000	<20.0000	<20.0000	<20.0000	<1.7000	<1.7000	<.0270	<.0789
Thallium	<2.0000	<2.0000	<2.0000	<2.0000	<.8400	<.2880	.0100	.1550
Total suspended solids								
Turbidity, field								
Vanadium	<50.000	<50.000	<50.000	<50.000	<2.100	<2.100	8.180	11.300
Zinc	<20.000000	27.100000	22.000000	<20.000000	<9.110000	10.800000	7.010000	13.300000

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

Table 9

Analytical Data Summary for MW-4B

Constituents	11/5/2013 11/7/2013	5/1/2014 5/8/2014	10/31/2014 11/10/2014	12/19/2014 12/22/2014	5/1/2015 5/12/2015	7/1/2015	9/14/2015 9/22/2015	12/9/2015
Antimony	.256	.994	<.161		<.161		<.161	
Arsenic	1.190	1.190	<.945		<.945		<.945	
Barium	333	462	144		307		237	
Beryllium	<.0696	.1140	<.0390		<.0390		.0520	
Cadmium	.137000	<.100000	<.112000		<.112000		<.112000	
Chromium	<.418	.650	<1.240		<1.240		<1.240	
Cobalt	4.6700	6.7900	.9680		2.0500		1.7700	
Copper	3.760	2.390	4.110		1.670		.618	
Cyanide			<3100.00				<3.04	
Lead	5.5500	<.1800	.1170		<.0967		.1410	
Mercury			<71.0000				<.0926	
Nickel	16.000	22.300	2.510		9.830		4.500	
Selenium	2.240	<.700	<3.340		<3.340		<3.340	
Silver	<.0789	<.0330	<.0420		.0530		<.0420	
Thallium	.0384	.3080	<.0325		<.0325		<.0325	
Total suspended solids			2.130		6.830	15.500	6.000	37.000
Turbidity, field			10.8700	1.3560	.8004	1.1470	9.4000	3.7900
Vanadium	1.550	.783	1.110		.782		.707	
Zinc	<.625000	3.490000	<6.950000		<6.950000		<6.950000	

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

Table 9

Analytical Data Summary for MW-4B

Constituents	3/24/2016 4/13/2016	11/11/2016 11/30/2016	5/5/2017 5/25/2017	11/1/2017 11/22/2017	6/4/2018 6/27/2018	10/28/2018 10/31/2018	6/4/2019 6/13/2019
Antimony	<.237	<.237	<.185	<.185	<.420	<.420 .503J	<1.320
Arsenic	1.170	<.672	<.505	<.505	<.570	<.570	<.232 .547J
Barium	396	205	213	217	305	206	187
Beryllium	<.2210	<.2210	<.1250	<.1250	<.1900	<.1900	<.5300
Cadmium	.121000	<.035100	<.044100	<.044100	<.060000	<.060000	<.167000
Chromium	.400	.451	<.729	<.729	<.760	<.760 1.040J	<1.140 2.130J
Cobalt	6.0500	.0350	<.0453 .0590J	.3620	.8340	<.0610 .0680J	<.4020
Copper	1.880	<1.220	<2.190	<2.190	<3.800 *	<1.600	2.090
Cyanide		<3.52		<3.46			
Lead	<.2110	<.2110	<.3240	<.3240	<.2500	<.2500	<.1860
Mercury		<.1420		<.1120			
Nickel	13.400	<1.530	<.929	2.910	5.110	<1.000	<.625 1.570J
Selenium	<.630	.884	<.928	1.030	<.900	<.900	<.982
Silver	.1730	<.1530	<.1400	<.1400	<.3000	<.3000	<.1150
Thallium	.0300	<.0255	<.0644 .0710J	<.0644	<.1700	<.1700	<.5700
Total suspended solids	14.400	<.581	<.581	1.380	5.370	<.638 1.000J	<.638 1.250J
Turbidity, field	75.6900	1.5710	1.3420	9.3110	7.8590	9.4300	
Vanadium	.709	1.060	<.840 1.090J	1.010	<.520 .990J	<.520 1.360J	<2.150
Zinc	<5.210000	<5.210000	<11.500000	<11.500000	<10.000000	<10.000000	<6.920000

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

Table 9

Analytical Data Summary for MW-4B

Constituents	10/30/2019 11/20/2019	2/3/2020 2/17/2020	6/16/2020 7/7/2020	11/3/2020 11/23/2020	5/17/2021 6/8/2021	9/21/2021 9/29/2021
Antimony	<.530		<.510	<.510	<1.100	<1.100
Arsenic	<.750		<.880	<.880	<.750	<.750
Barium	455	168	180	178	176	189
Beryllium	<.2700		<.2700	<.2700	<.2700	<.2700
Cadmium	.135000	<.039000	<.049000	<.049000	<.051000	<.051000
Chromium	<.980		<1.100	<1.100	<1.100	<1.100
Cobalt	<.0910 .2210J		<.0910	<.0910 .1490J	<.0910	<.1900
Copper	<2.000		<1.500	<1.500	<1.400	<1.400
Cyanide						
Lead	<.2700		<.1100	<.1100	<.2100	<.2100
Mercury						
Nickel	<1.700 3.570J		<1.900	<1.900	<1.900	<1.900
Selenium	<1.000		<1.000	<1.000	<.960	<.960
Silver	<.3700		<.3700	<.3700	<.4200	<.4200
Thallium	<.2700		<.2600	<.2600	<.2600	<.2600
Total suspended solids	<.638	<.638 .875J	<.638 1.250J	<.638 .750J	<.638	<.638 1.130J
Turbidity, field	.8900	1.6700	.8200	3.9800		5.1500
Vanadium	<.820 .956J		<.850 1.060J	<.850 1.410J	<1.100 1.140J	<1.100
Zinc	<10.000000		<10.000000	<10.000000	<10.000000	<10.000000

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

Table 9

Analytical Data Summary for MW-4B

Constituents	3/2/2022 3/29/2022	8/16/2022 9/13/2022	6/6/2023 6/27/2023	11/1/2023 11/20/2023	1/23/2024 1/25/2024	6/11/2024 7/3/2024	8/27/2024 9/5/2024
Antimony	<.690	<.690	<1.000	<1.000		<1.000	
Arsenic	<.750	<.750	<.530	<.530		<.530	
Barium	184	209	183	267	413	184	
Beryllium	<.2700	<.2700	<.3300	<.3300		<.3300	
Cadmium	<.055000	<.055000	<.100000	<.100000		<.100000	
Chromium	<1.100 1.670J	<1.100	<1.100	<1.100		<1.200	
Cobalt	<.1900	<.1900	<.1700	<.1700 .2130J		<.1700	
Copper	<1.800	<1.800	<1.800	<1.800		<1.800	
Cyanide							
Lead	<.2400	<.2400	<.2400	<.2400		<.2600	
Mercury							
Nickel	<1.900	<1.900	<1.900	<1.900 3.500J		<2.100	
Selenium	<.960	<.960	<1.400	<1.400		<1.400	
Silver	<.4900	<.4900	<.5000	<.5000		5.3700	<.5000
Thallium	<.2600	<.2600	<.2600	<.2600		<.5700	
Total suspended solids	<1.700	<.638	<.638 .750J	<.638 1.750J	2.130	<1.390	<1.390
Turbidity, field	.0600	.0000	.6700	1.9500	.8700	1.7500	2.3700
Vanadium	<1.100	<1.100 1.150J	<1.100	<1.100 1.500J		<1.100	
Zinc	<10.000000	<10.000000	<6.400000	<6.400000		<9.700001	

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

Table 9

Analytical Data Summary for MW-4B

Constituents	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	<1.000	<1.000
Arsenic	<.530	<.530
Barium	225	199
Beryllium	<.3300	<.3300
Cadmium	<.100000	<.100000
Chromium	<1.200	<1.800
Cobalt	<.1700	<.1700
Copper	<1.800	<3.200
Cyanide		
Lead	<.2600	<.3300
Mercury		
Nickel	<2.100	<2.300
Selenium	<1.400	<1.400
Silver	<.5000	<.5000
Thallium	<.5700	<.5700
Total suspended solids	<1.430	<1.310 1.380J
Turbidity, field	1.1400	1.1000
Vanadium	<1.100	<1.700
Zinc	<9.700000	<13.000000

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

Table 9

Analytical Data Summary for MW-7A

Constituents	Units	10/12/2007 10/13/2007	1/9/2008	4/8/2008	7/16/2008	10/23/2008	4/8/2009 4/13/2009	10/5/2009	4/21/2010
Antimony	ug/L	<6.0000	<6.0000	<6.0000	<6.0000	<6.0000	<6.0000	<6.0000	<6.0000
Arsenic	ug/L	<1.000	1.450	1.150	<1.000	2.230	<1.000	<1.000	<2.000
Barium	ug/L	191.0	202.0	301.0	185.0	381.0	195.0	220.0	181.0
Beryllium	ug/L	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000	<1.0000
Cadmium	ug/L	<.5000	<.5000	<.5000	<.5000	<.5000	<.5000	<.5000	<.5000
Chromium	ug/L	<20.000	<20.000	64.500	<20.000	<20.000	<20.000	<20.000	<20.000
Cobalt	ug/L	<20.0000	<20.0000	21.4000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000
Copper	ug/L	<20.000	<20.000	50.700	<20.000	<20.000	<20.000	<20.000	<20.000
Cyanide	ug/L								
Lead	ug/L	<4.0000	<4.0000	4.1600	<4.0000	9.4600	<4.0000	<4.0000	<4.0000
Mercury	ug/L								
Nickel	ug/L	<50.000	<50.000	53.600	<50.000	<50.000	<50.000	<50.000	<50.000
Selenium	ug/L	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000
Silver	ug/L	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000	<20.0000
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000
Total suspended solids	mg/L								
Turbidity, field	NTU								
Vanadium	ug/L	<50.000	<50.000	75.600	<50.000	<50.000	<50.000	<50.000	<50.000
Zinc	ug/L	45.800	<20.000	94.900	<20.000	67.000	35.000	41.800	25.900

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

Table 9

Analytical Data Summary for MW-7A

Constituents	10/14/2010	4/13/2011	10/18/2011	4/24/2012	10/24/2012 10/26/2012	4/8/2013 4/16/2013	11/5/2013 11/7/2013	5/1/2014 5/8/2014
Antimony	<6.0000	<6.0000	<2.7300	1.8400	<.1200	.4350	.0751	.9880
Arsenic	<1.000	<1.000	<.600	.876	.810	.970	<.544	<.330
Barium	263.0	197.0	319.0	307.0	316.0	155.0	326.0	149.0
Beryllium	<1.0000	<1.0000	.1590	.7820	.0600	<.0696	<.0696	<.0800
Cadmium	<.5000	<.5000	<.1240	<.2290	.0800	<.1060	<.1060	<.1000
Chromium	<20.000	<20.000	1.990	4.530	.520	6.590	.771	4.600
Cobalt	<20.0000	<20.0000	3.6800	7.5100	1.0300	.6610	.6040	.1500
Copper	<20.000	<20.000	18.700	16.600	2.250	4.700	1.860	.579
Cyanide								
Lead	5.4100	<4.0000	4.7200	8.9600	.8400	1.5200	.2110	.2240
Mercury								
Nickel	<50.000	<50.000	9.700	9.510	7.270	3.350	6.390	.459
Selenium	<5.000	<5.000	<1.690	<.700	<.297	<1.460	<1.460	<.700
Silver	<20.0000	<20.0000	<1.7000	<1.7000	<.0270	<.0789	<.0789	<.0330
Thallium	<2.0000	<2.0000	<.8400	<.2880	.0100	.0840	<.0267	.1510
Total suspended solids								
Turbidity, field								
Vanadium	<50.000	<50.000	2.140	11.500	1.440	1.630	<.833	1.200
Zinc	38.600	<20.000	15.200	17.600	2.420	8.060	<.625	3.260

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

Table 9

Analytical Data Summary for MW-7A

Constituents	10/31/2014 11/10/2014	5/1/2015 5/12/2015	9/14/2015 9/22/2015	3/24/2016 4/13/2016	11/11/2016 11/30/2016	5/5/2017 5/25/2017	11/1/2017 11/22/2017	6/4/2018 6/27/2018
Antimony	.1640	<.1610	<.1610	<.2370	<.2370	<.1850	<.1850	<.4200
Arsenic	<.945	<.945	<.945	<.672	<.672	<.505	<.505	<.570
Barium	184.0	152.0	240.0	165.0	315.0	150.0	172.0	166.0
Beryllium	<.0390	<.0390	<.0390	<.2210	<.2210	<.1250	<.1250	<.1900
Cadmium	<.1120	<.1120	<.1120	<.0351	<.0351	<.0441	<.0441	<.0600
Chromium	4.200	3.750	<1.240	4.020	.425	<.729 2.450J	3.220	5.260
Cobalt	<.0528	<.0528	.0780	<.0274	.0290	<.0453	<.0453	<.0610 .0660J
Copper	<.485	<.485	<.485	<1.220	<1.220	<2.190	<2.190	<3.800 *
Cyanide								
Lead	.1130	<.0967	.8000	<.2110	<.2110	<.3240	<.3240	<.2500
Mercury								
Nickel	.586	<.581	3.600	<1.530	6.700	<.929 1.110J	<.929	<1.000 1.680J
Selenium	<3.340	<3.340	<3.340	.821	<.630	<.928	<.928	<.900
Silver	<.0420	<.0420	<.0420	<.1530	<.1530	<.1400	<.1400	<.3000
Thallium	<.0325	<.0325	<.0325	<.0255	.0500	<.0644	<.0644	<.1700
Total suspended solids	<1.410	<1.130	<1.200	.750	.875	<.581 1.130J	.750	<.638 1.250J
Turbidity, field	.7996	.6573	1.0020	.5112	.6005	5.6610	1.1160	.3710
Vanadium	.727	.459	.666	.429	.377	<.840	.917	<.520 .603J
Zinc	7.010	<6.950	26.500	<5.210	<5.210	<11.500	<11.500	<10.000

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

Table 9

Analytical Data Summary for MW-7A

Constituents	10/28/2018 10/31/2018	6/4/2019 6/13/2019	10/30/2019 11/20/2019	2/3/2020 2/17/2020	6/16/2020 7/7/2020	11/3/2020 11/23/2020	2/3/2021 2/24/2021
Antimony	<.4200	<1.3200	<.5300		<.5100	1.6700	<1.1000
Arsenic	<.570	<.232 .430J	<.750		<.880	<.880	
Barium	171.0	160.0	185.0	174.0	139.0	160.0	
Beryllium	<.1900	<.5300	<.2700		<.2700	<.2700	
Cadmium	<.0600	<.1670	<.0390 .0610J		<.0490	<.0490 .0580J	
Chromium	<.760 3.270J	<1.140 4.920J	<.980 2.950J		<1.100 2.120J	<1.100 2.390J	
Cobalt	<.0610	<.4020	<.0910		<.0910	<.0910	
Copper	<1.600	<.497 1.020J	<2.000		<1.500	<1.500	
Cyanide							
Lead	<.2500	<.1860	<.2700		<.1100	<.1100	
Mercury							
Nickel	<1.000	2.070	<1.700		<1.900	<1.900	
Selenium	<.900	<.982	<1.000		<1.000	<1.000	
Silver	<.3000	<.1150	<.3700		<.3700	<.3700	
Thallium	<.1700	<.5700	<.2700		<.2600	<.2600	
Total suspended solids	2.500	<.638	2.630	<.638	2.500	<.638 1.000J	<.638 .875J
Turbidity, field	4.2110		1.0400	.0000	4.4100	.7600	.5100
Vanadium	<.520 .673J	<2.150	<.820 .862J		<.850	<.850	
Zinc	<10.000	<6.920 6.990J	35.800	<10.000	<10.000	<10.000	

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

Table 9

Analytical Data Summary for MW-7A

Constituents	5/17/2021 6/8/2021	9/21/2021 9/29/2021	3/2/2022 3/29/2022	8/16/2022 9/13/2022	6/6/2023 6/27/2023	8/24/2023 8/29/2023	11/1/2023 11/20/2023
Antimony	<1.1000	<1.1000	<.6900	<.6900	<1.0000		<1.0000
Arsenic	<.750	<.750	<.750	<.750	<.530		<.530
Barium	166.0	156.0	143.0	71.9	323.0	366.0	451.0
Beryllium	<.2700	<.2700	<.2700	<.2700	<.3300		<.3300
Cadmium	<.0510	<.0510	<.0550	<.0550	<.1000		<.1000
Chromium	<1.100 3.290J	<1.100 3.380J	<1.100 3.010J	<1.100	<1.100		<1.100
Cobalt	<.0910	<.1900	<.1900	<.1900 .3390J	<.1700		<.1700 .2570J
Copper	<1.400	<1.400	<1.800	<1.800	<1.800		<1.800
Cyanide							
Lead	<.2100	<.2100	<.2400	<.2400	<.2400		<.2400
Mercury							
Nickel	<1.900	<1.900	<1.900	<1.900	5.110		12.800
Selenium	<.960	<.960	<.960	<.960	<1.400		<1.400
Silver	<.4200	<.4200	<.4900	<.4900	<.5000		<.5000
Thallium	<.2600	<.2600	<.2600	<.2600	<.2600		<.2600
Total suspended solids	<.638	<.638 1.000J	<.638	1.880	<.638	5.130	3.130
Turbidity, field		3.3200	.0000	2.2400	.8400	1.1100	1.4200
Vanadium	<1.100	<1.100	<1.100 1.210J	<1.100	<1.100		<1.100
Zinc	<10.000	<10.000	<10.000	<10.000	<6.400		<6.400

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

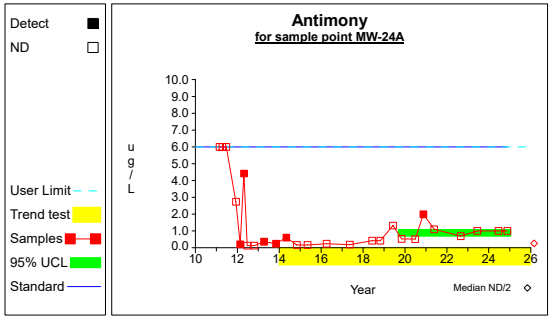
Table 9

Analytical Data Summary for MW-7A

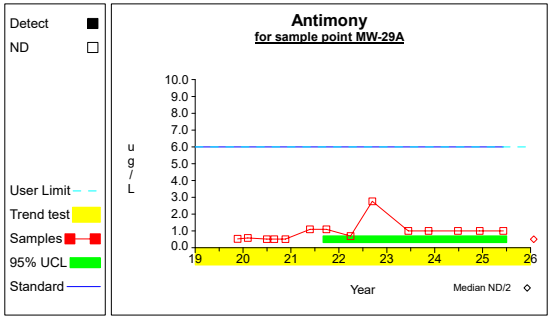
Constituents	6/11/2024 7/3/2024	11/19/2024 12/18/2024	2/14/2025	6/2/2025 6/9/2025
Antimony	<1.0000	<1.0000		<1.0000
Arsenic	<.530	<.530		<.530
Barium	190.0	425.0	196.0	176.0
Beryllium	<.3300	<.3300		<.3300
Cadmium	<.1000	<.1000		<.1000
Chromium	<1.200 3.340J	<1.200		<1.800 3.290J
Cobalt	<.1700	<.1700		<.1700
Copper	<1.800	<1.800		<3.200
Cyanide	<3.5			
Lead	<.2600	<.2600		<.3300
Mercury	<.11			
Nickel	<2.100	8.810		<2.300
Selenium	<1.400	<1.400		<1.400
Silver	<.5000	<.5000		<.5000
Thallium	<.5700	<.5700		<.5700
Total suspended solids	<1.390	<1.540		2.000
Turbidity, field	1.8300	.2200	.7500	2.3300
Vanadium	<1.100	<1.100		<1.700
Zinc	<9.700	<9.700		<13.000

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

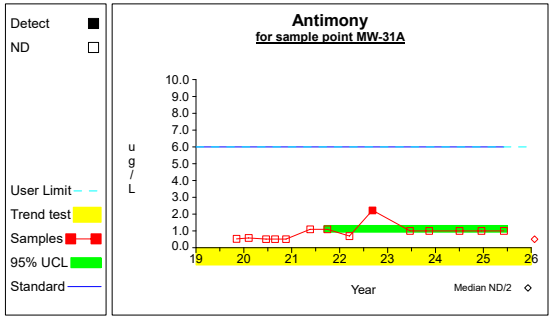
Confidence Limits (Assessment)



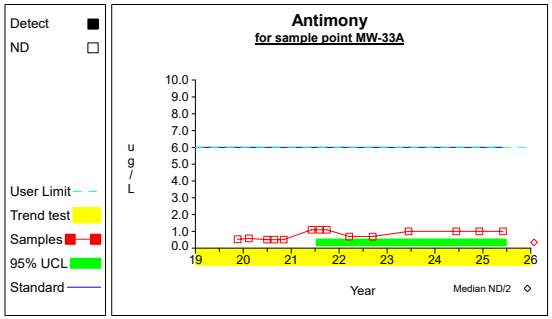
Graph 1



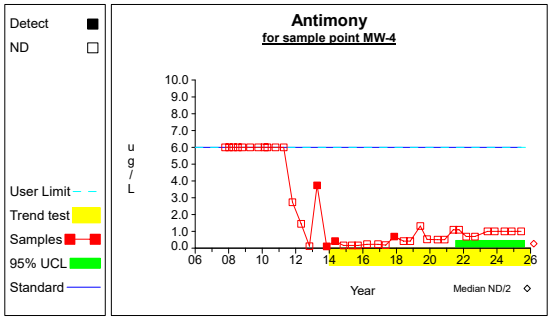
Graph 2



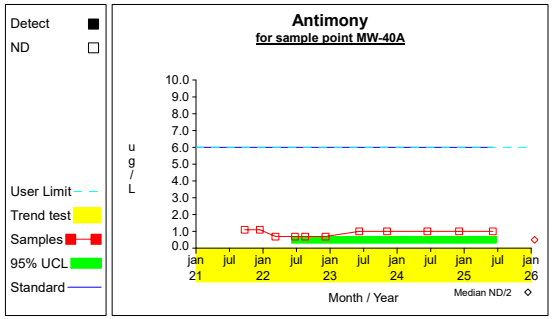
Graph 3



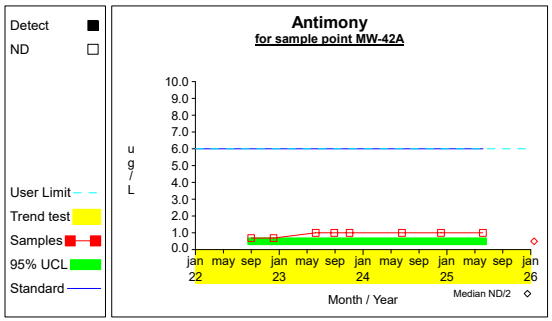
Graph 4



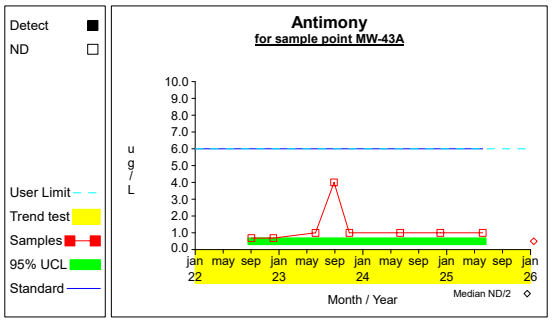
Graph 5



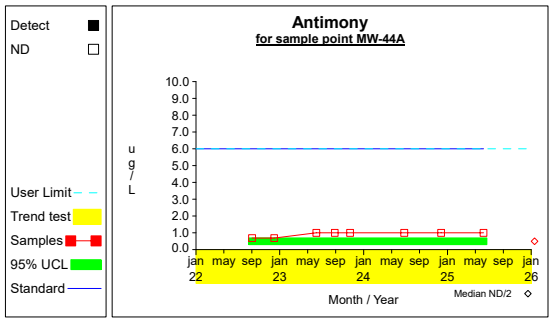
Graph 6



Graph 7

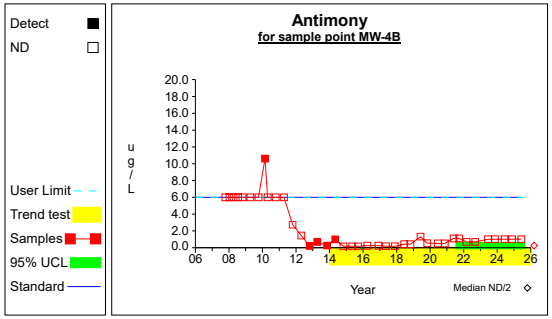


Graph 8

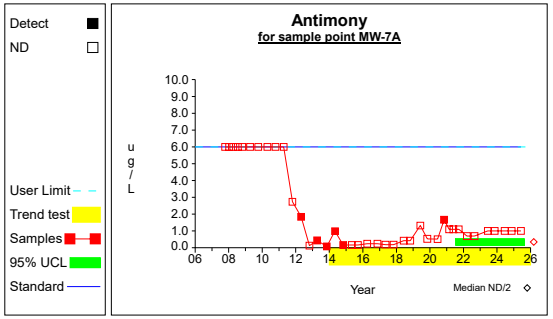


Graph 9

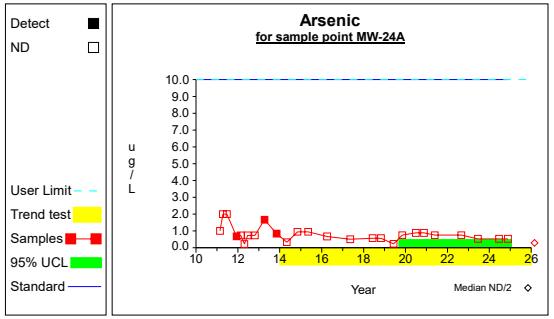
Confidence Limits (Assessment)



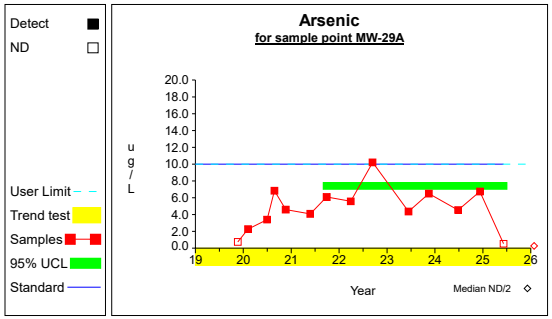
Graph 10



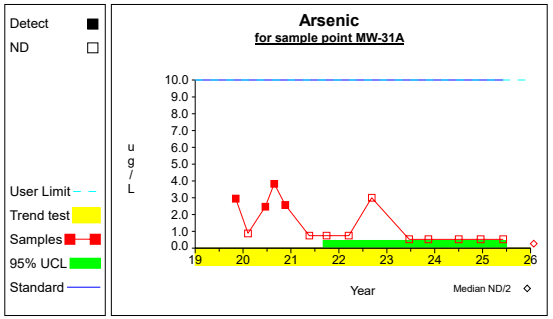
Graph 11



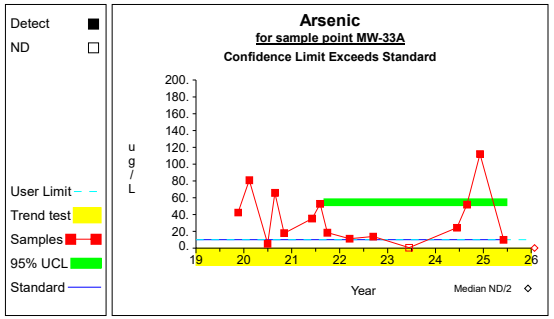
Graph 12



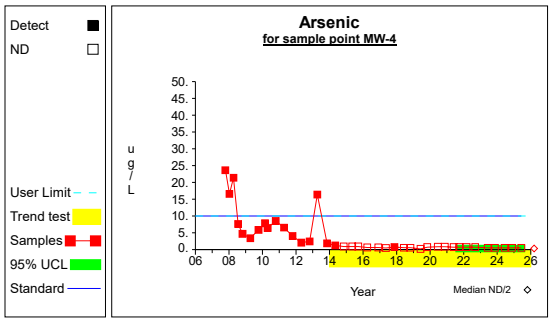
Graph 13



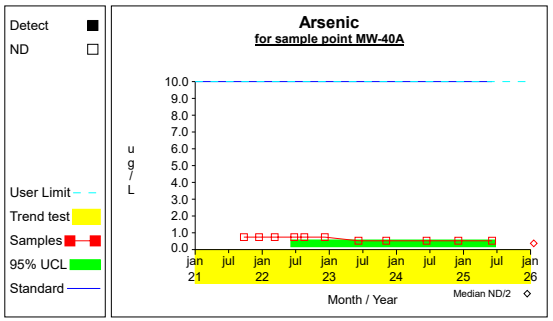
Graph 14



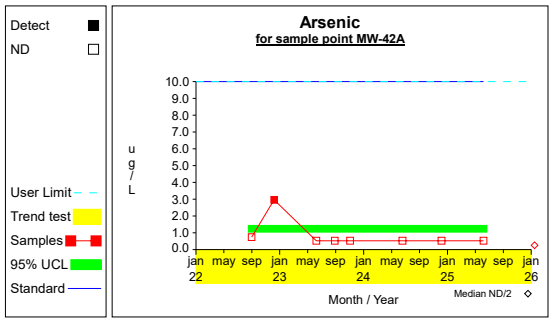
Graph 15



Graph 16

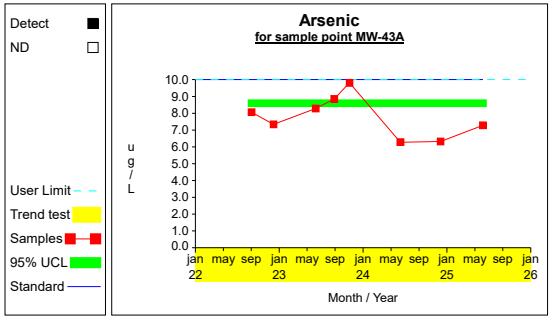


Graph 17

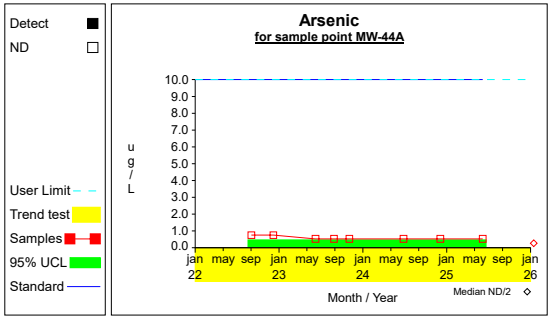


Graph 18

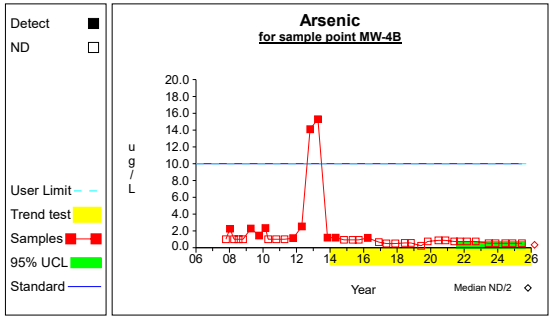
Confidence Limits (Assessment)



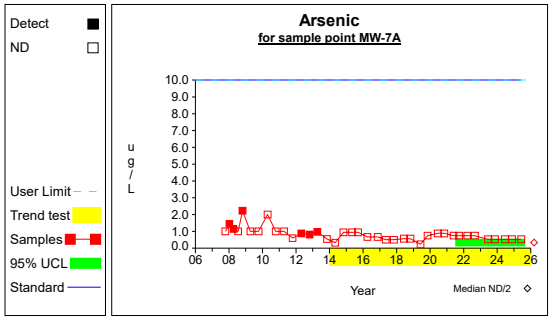
Graph 19



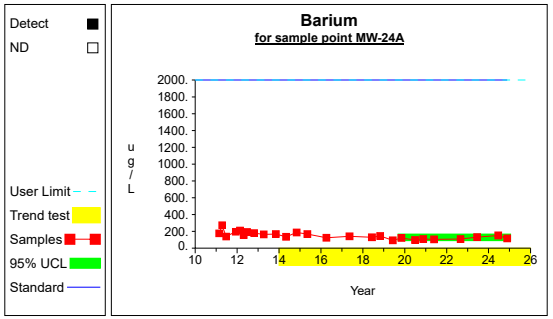
Graph 20



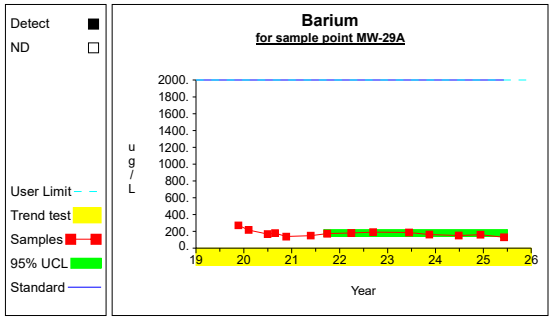
Graph 21



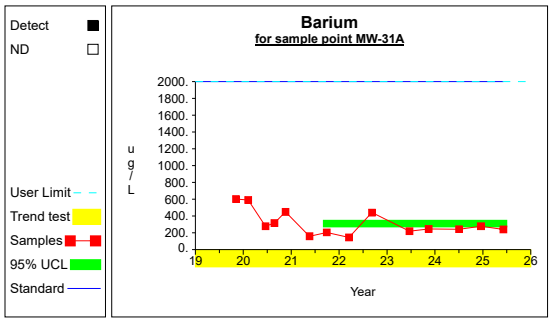
Graph 22



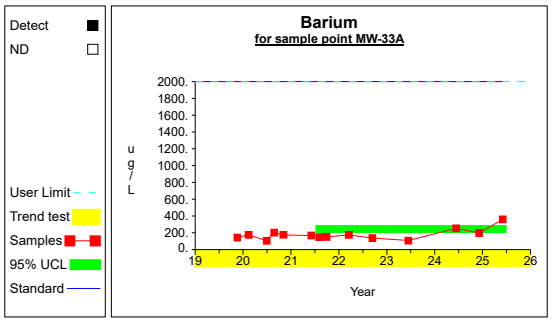
Graph 23



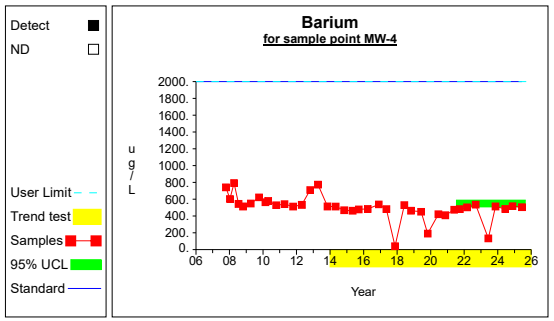
Graph 24



Graph 25

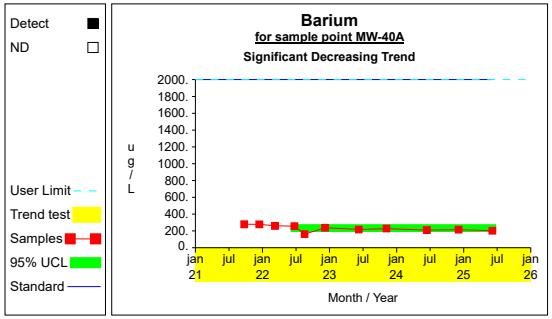


Graph 26

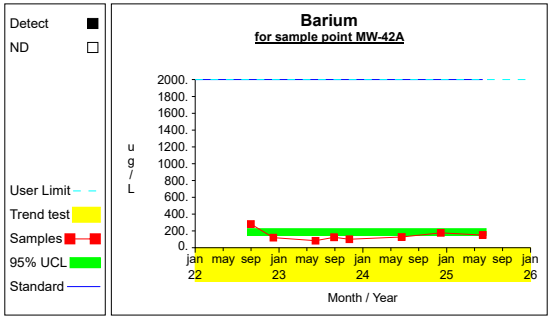


Graph 27

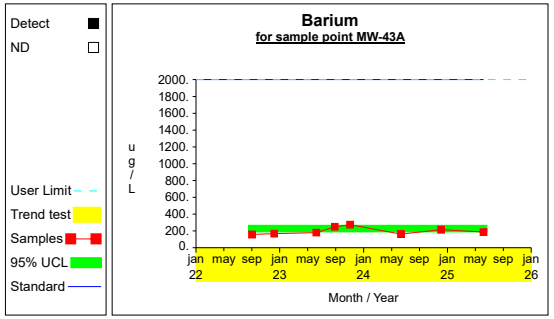
Confidence Limits (Assessment)



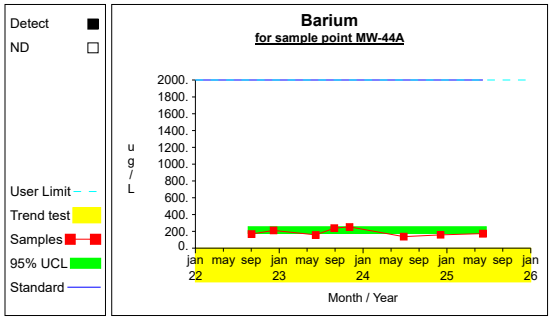
Graph 28



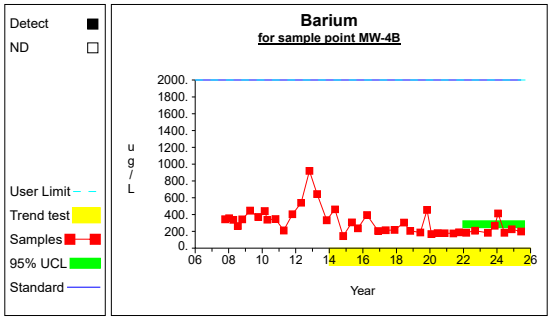
Graph 29



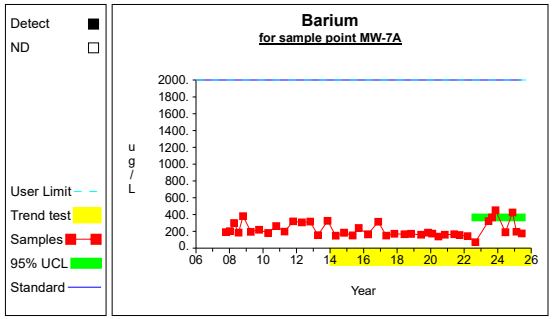
Graph 30



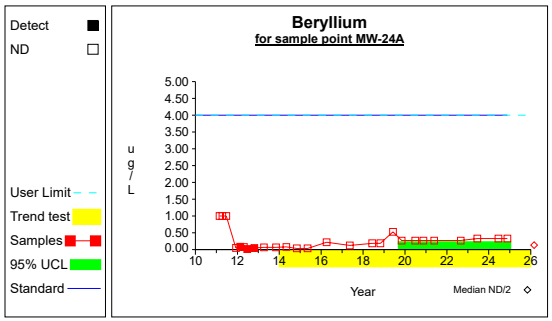
Graph 31



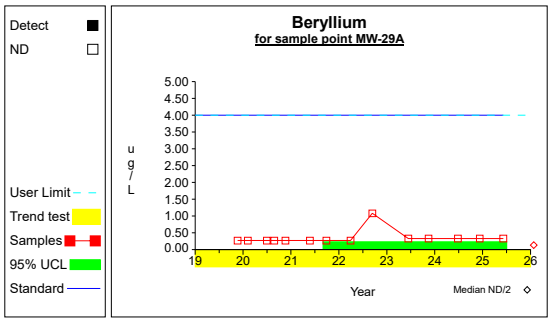
Graph 32



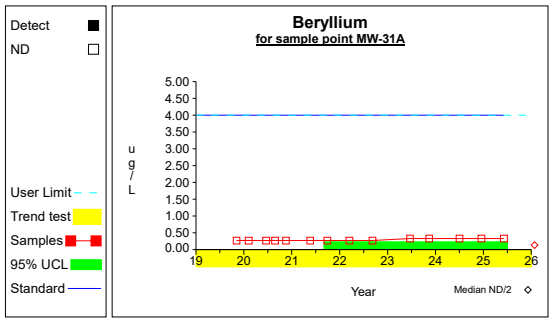
Graph 33



Graph 34

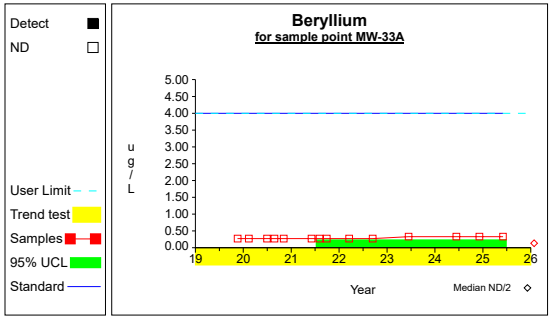


Graph 35

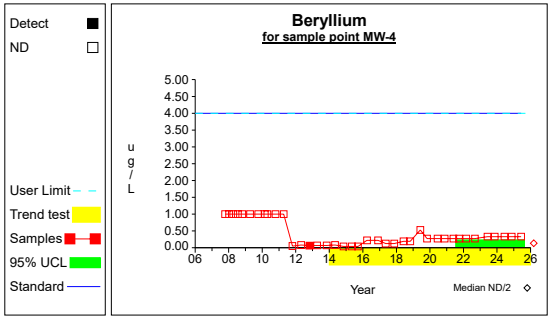


Graph 36

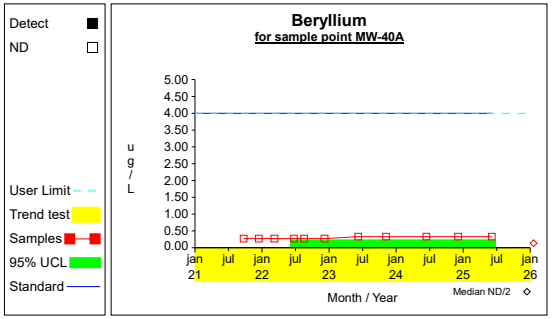
Confidence Limits (Assessment)



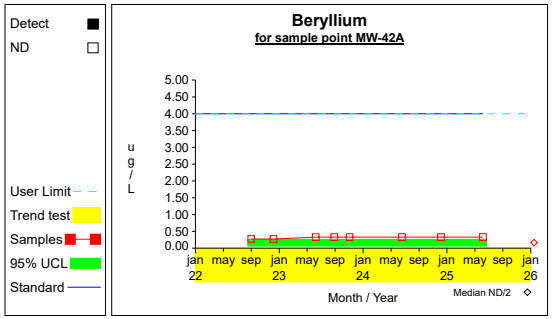
Graph 37



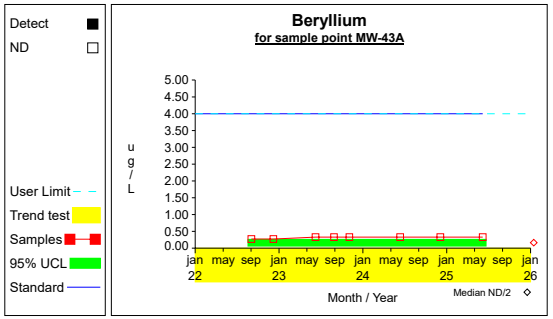
Graph 38



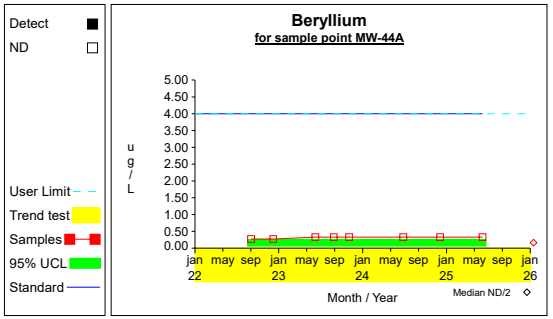
Graph 39



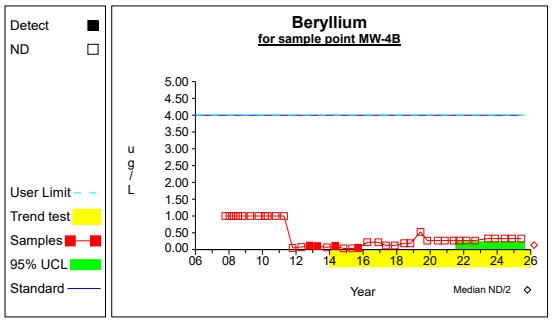
Graph 40



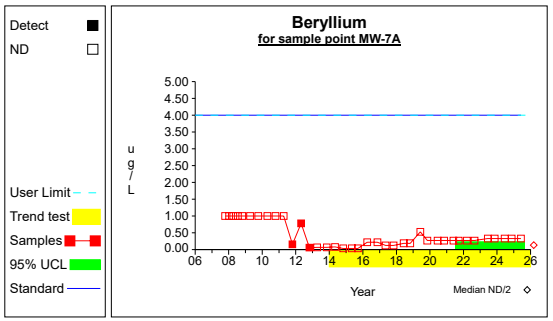
Graph 41



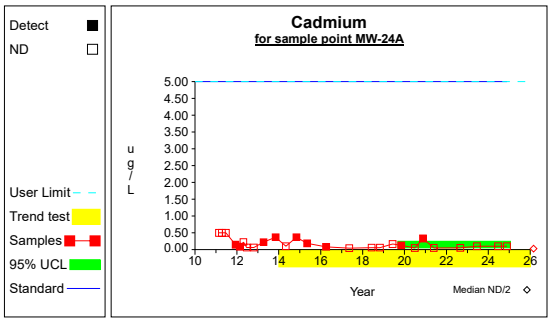
Graph 42



Graph 43

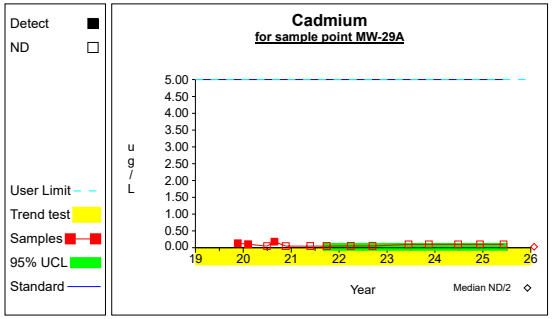


Graph 44

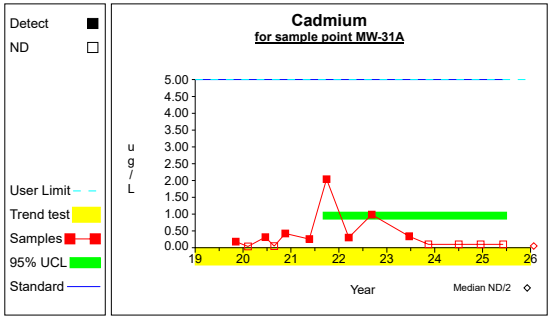


Graph 45

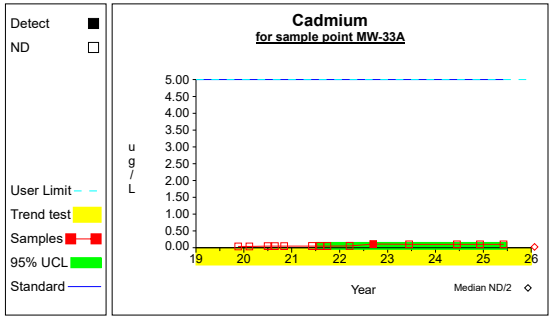
Confidence Limits (Assessment)



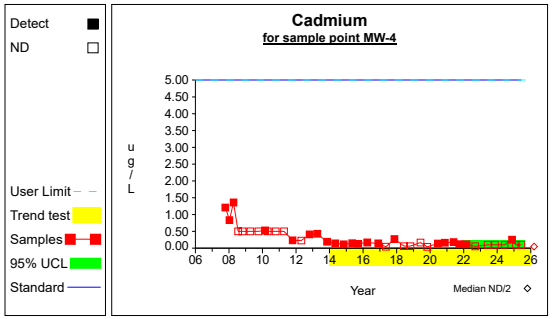
Graph 46



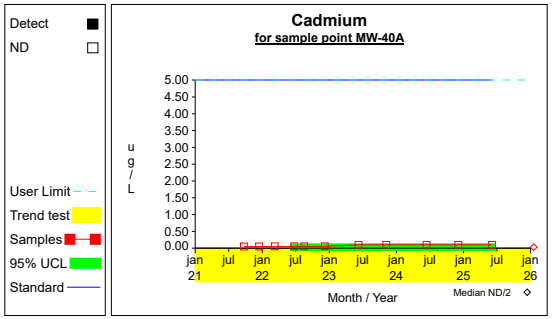
Graph 47



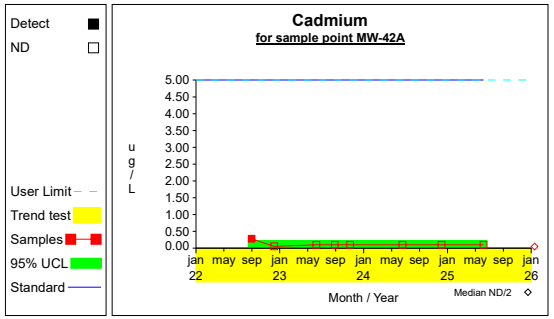
Graph 48



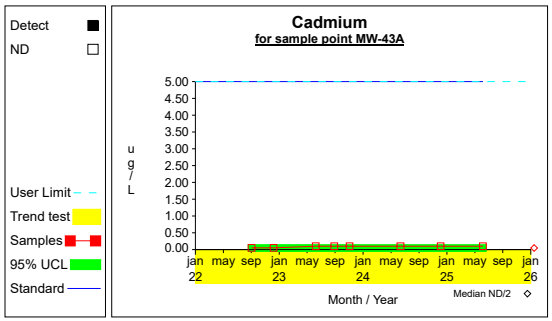
Graph 49



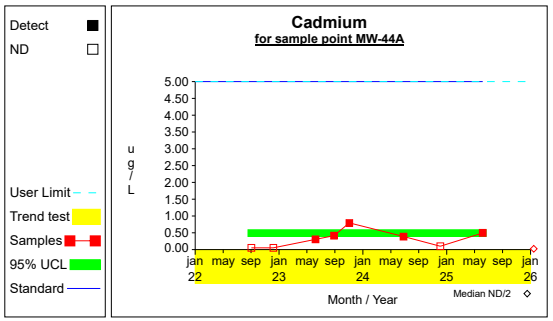
Graph 50



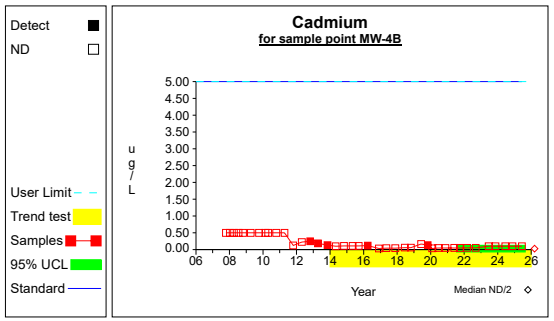
Graph 51



Graph 52

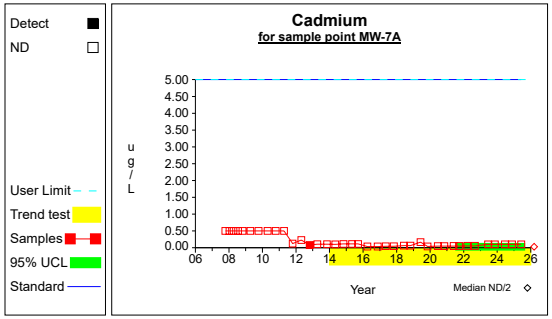


Graph 53

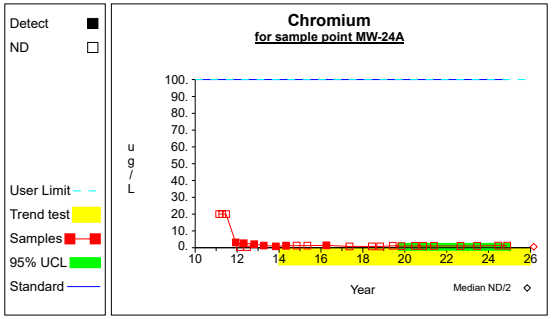


Graph 54

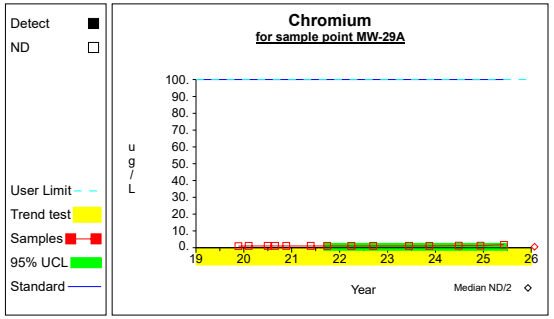
Confidence Limits (Assessment)



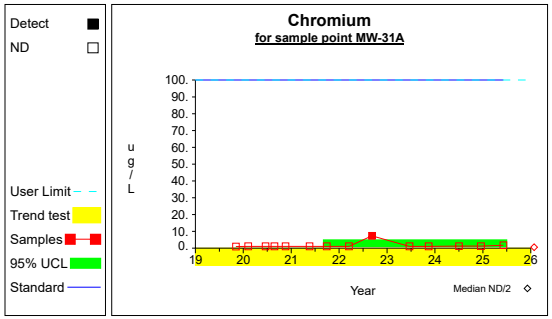
Graph 55



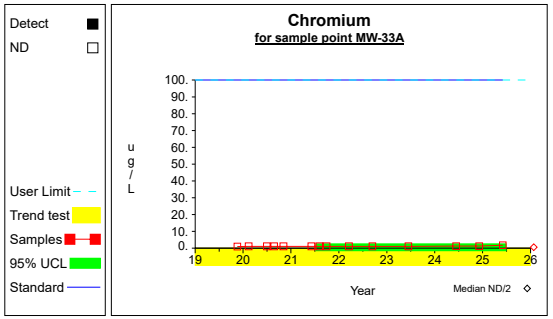
Graph 56



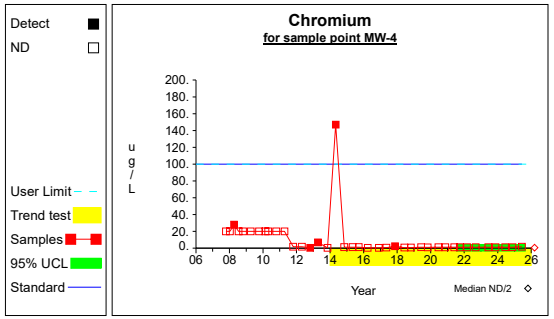
Graph 57



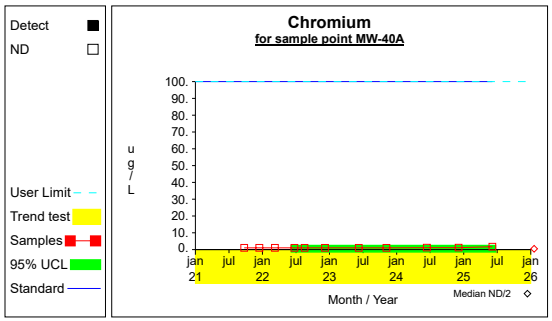
Graph 58



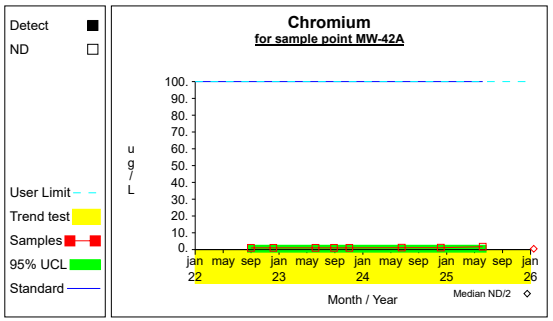
Graph 59



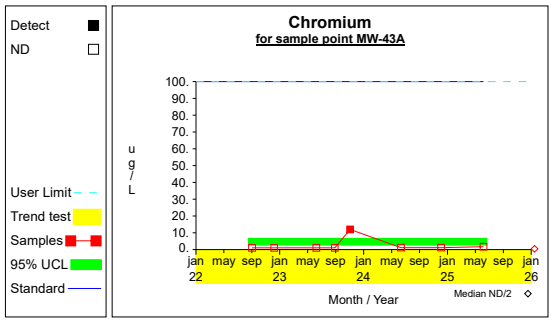
Graph 60



Graph 61

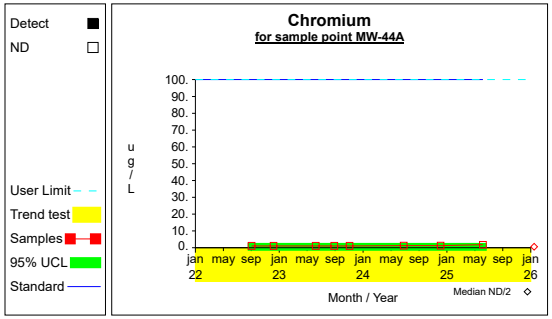


Graph 62

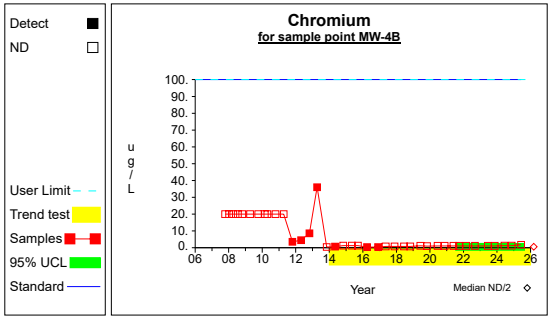


Graph 63

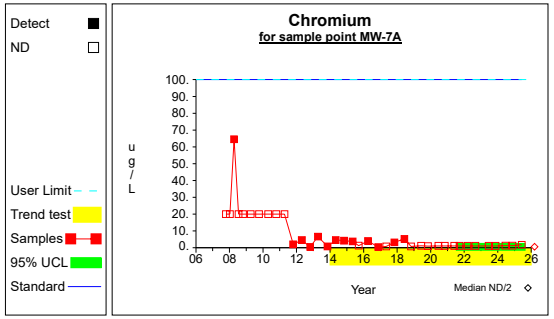
Confidence Limits (Assessment)



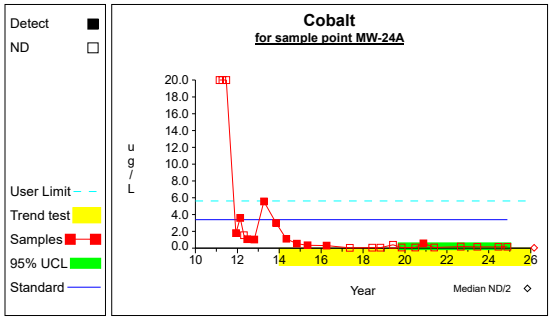
Graph 64



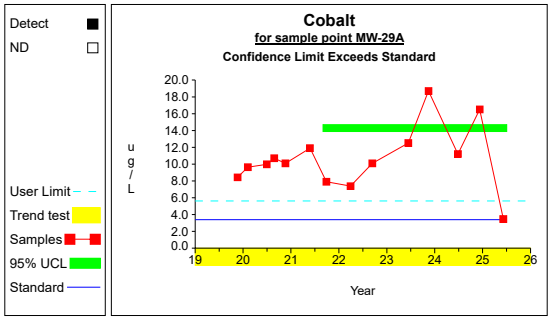
Graph 65



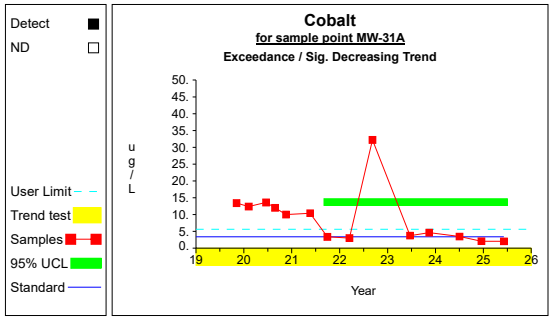
Graph 66



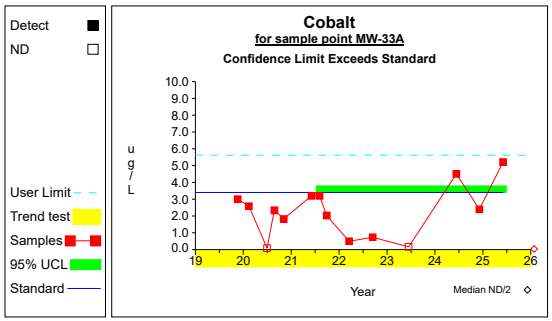
Graph 67



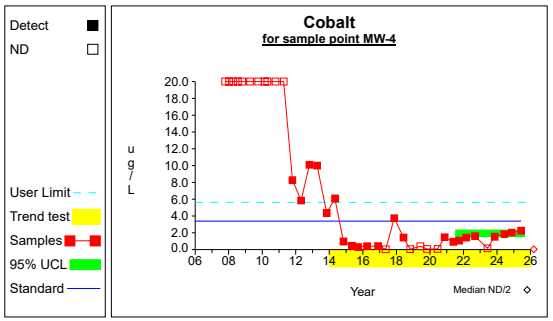
Graph 68



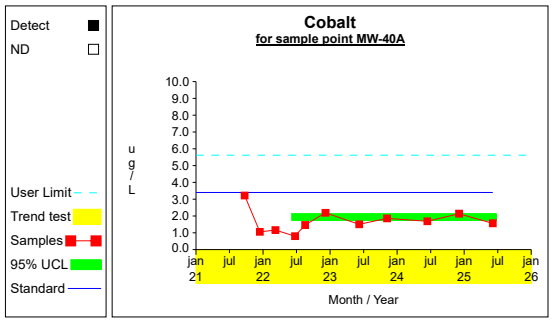
Graph 69



Graph 70

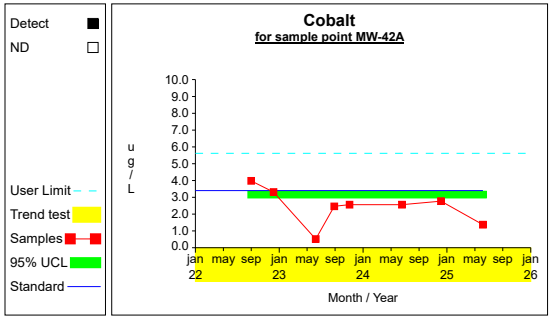


Graph 71

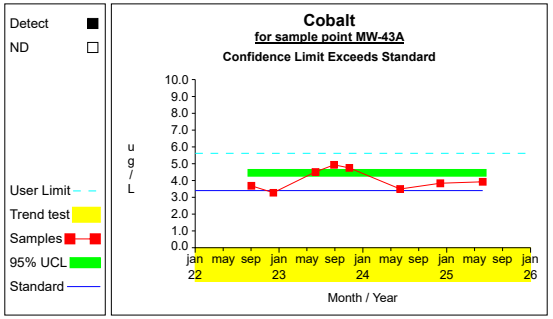


Graph 72

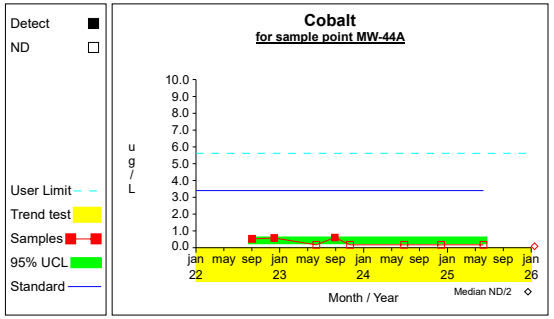
Confidence Limits (Assessment)



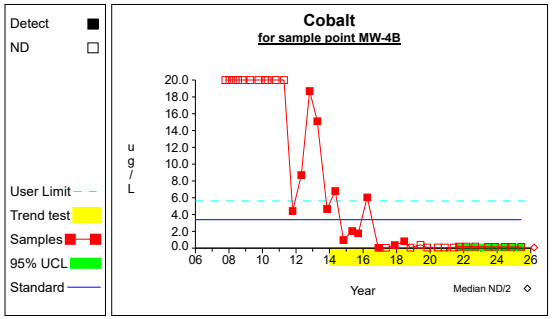
Graph 73



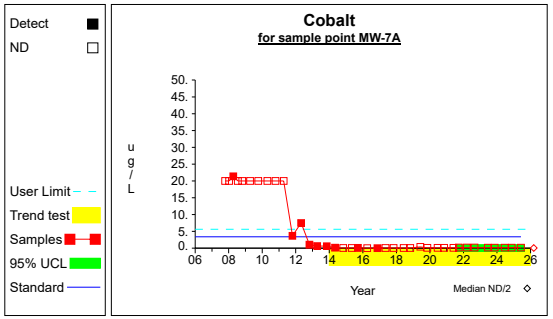
Graph 74



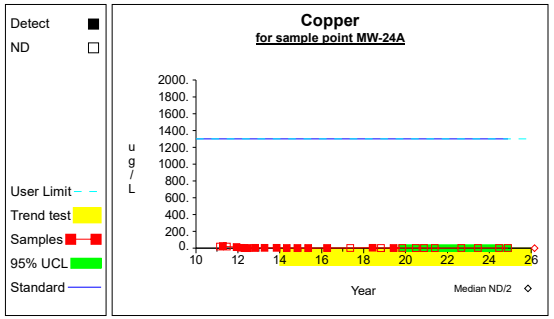
Graph 75



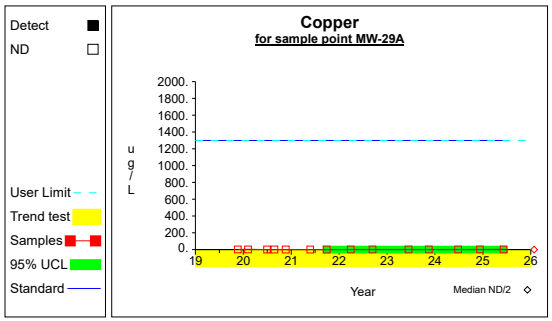
Graph 76



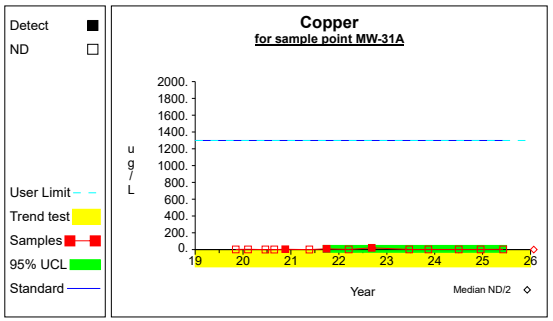
Graph 77



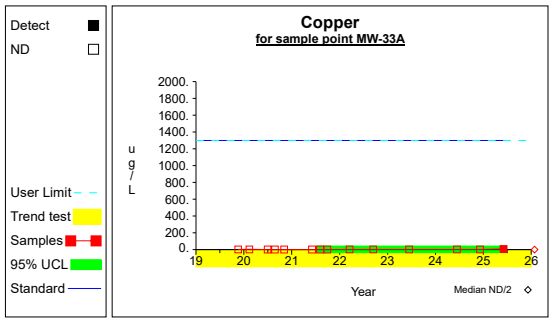
Graph 78



Graph 79

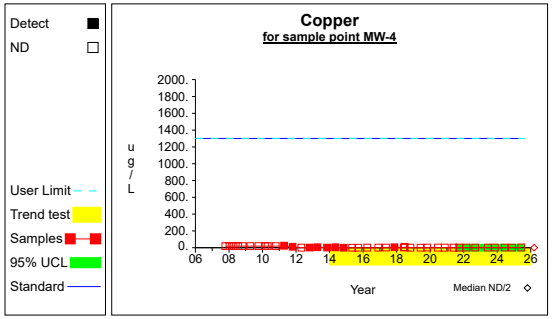


Graph 80

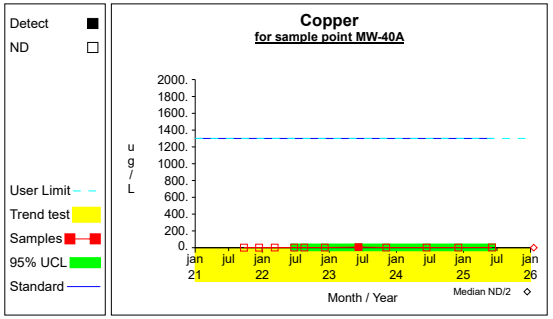


Graph 81

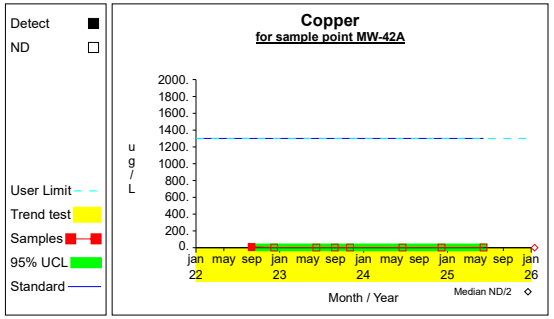
Confidence Limits (Assessment)



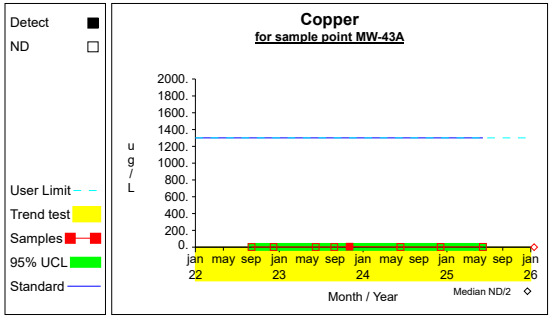
Graph 82



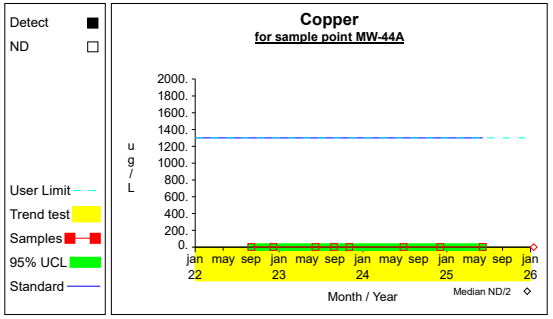
Graph 83



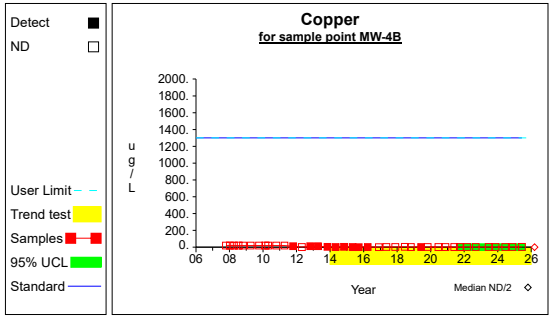
Graph 84



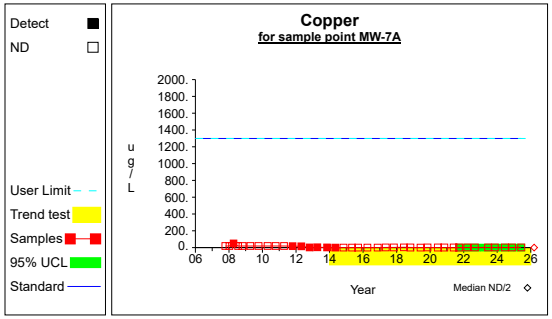
Graph 85



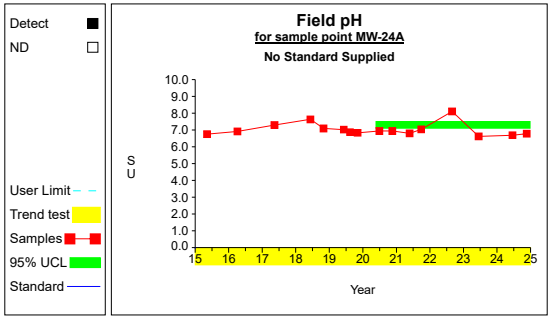
Graph 86



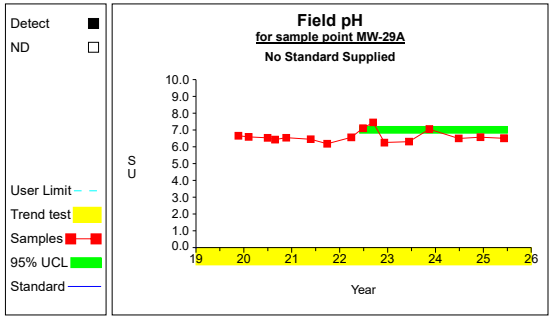
Graph 87



Graph 88

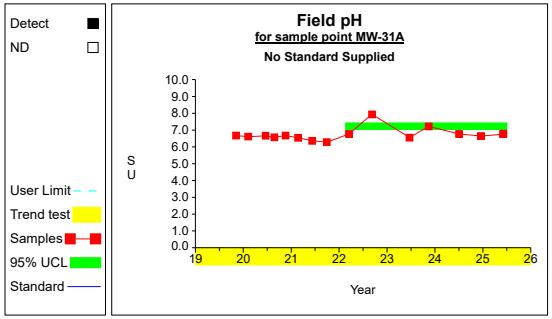


Graph 89

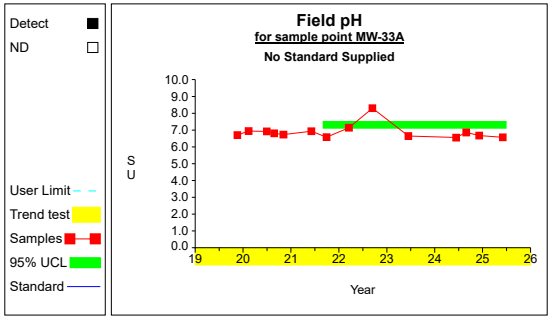


Graph 90

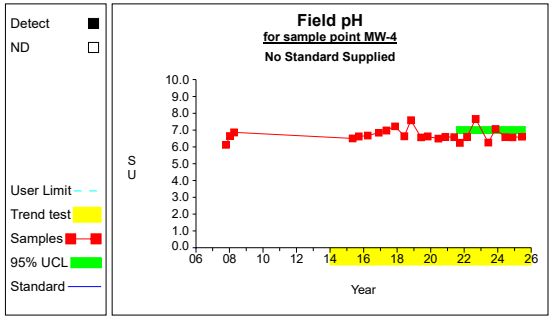
Confidence Limits (Assessment)



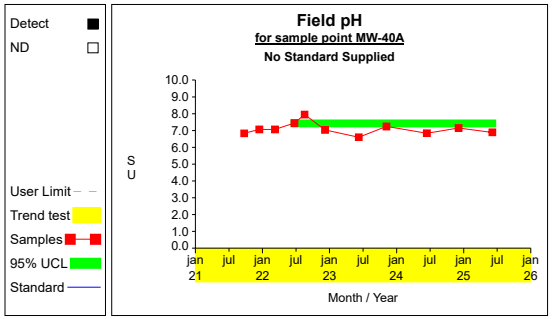
Graph 91



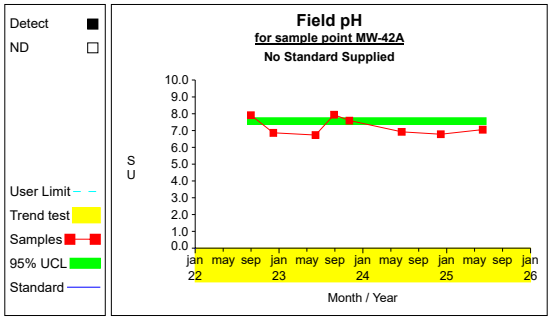
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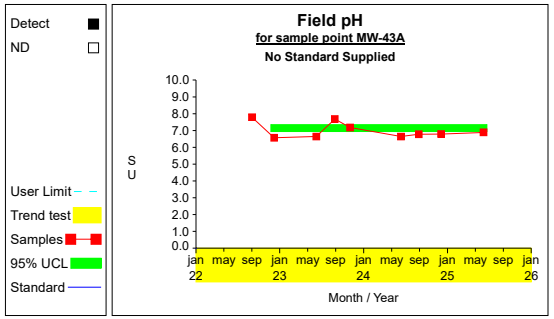
Graph 93



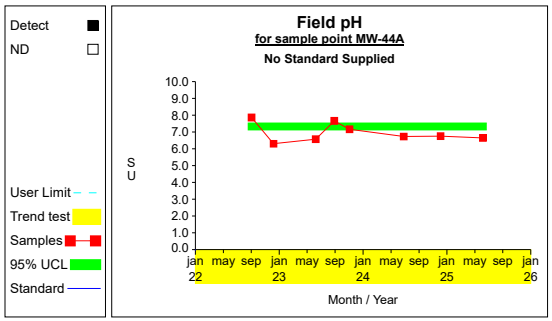
Graph 94



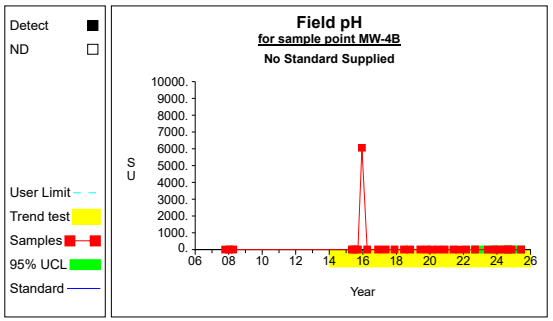
Graph 95



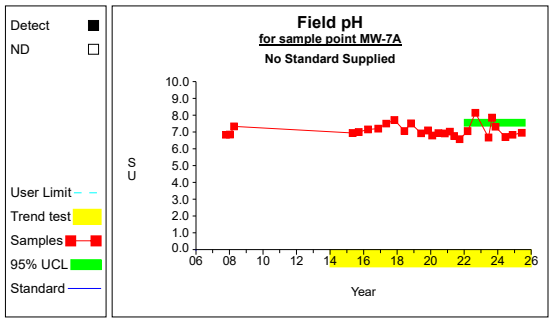
Graph 96



Graph 97

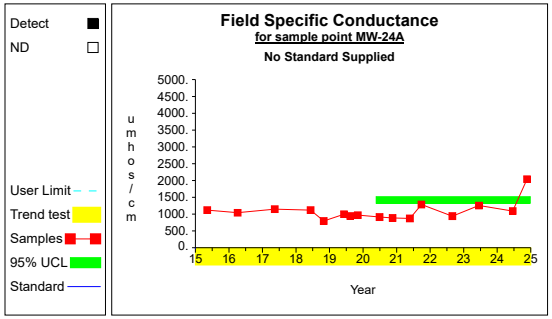


Graph 98

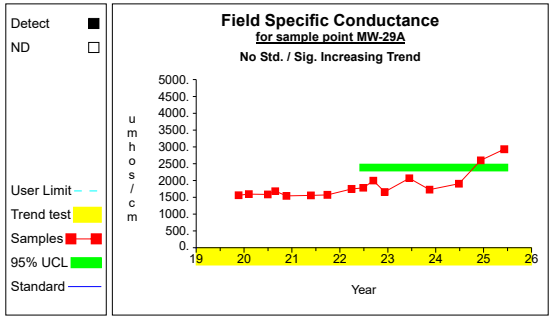


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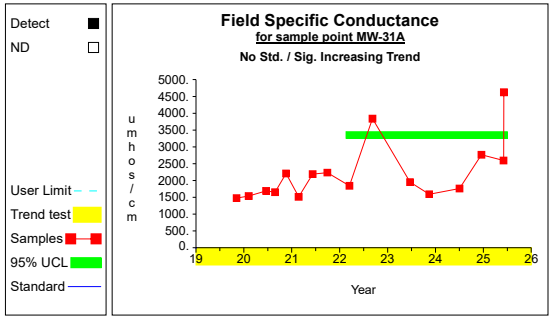
Confidence Limits (Assessment)



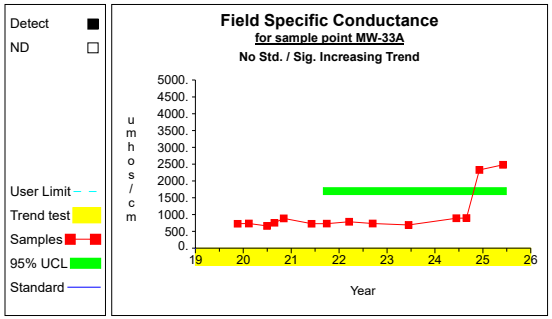
Graph 100



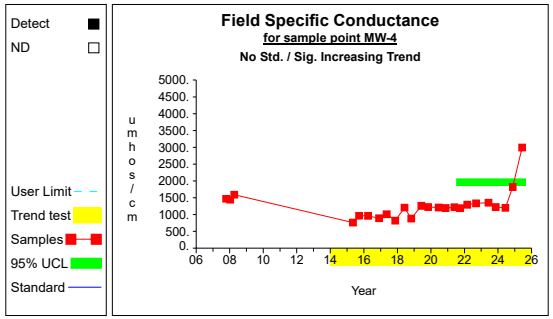
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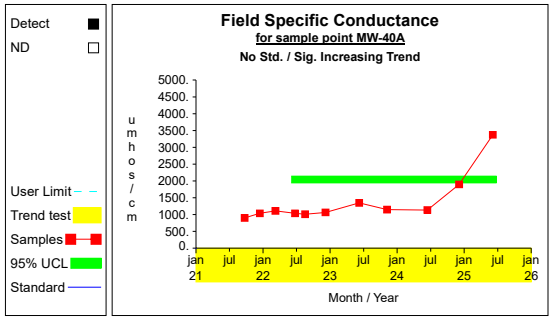
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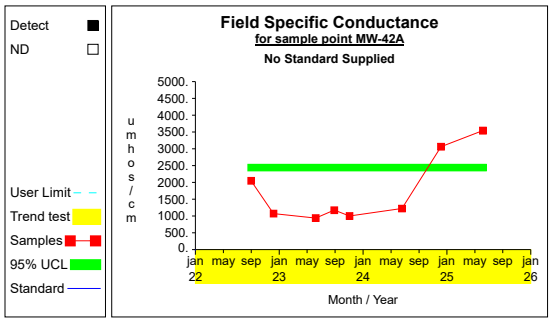
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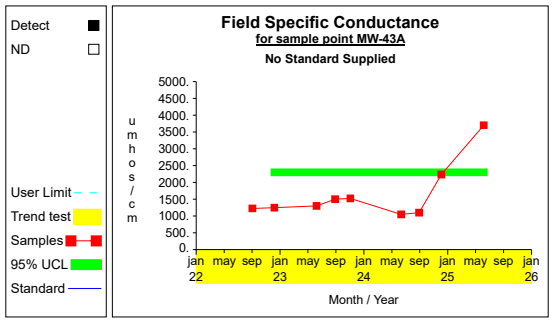
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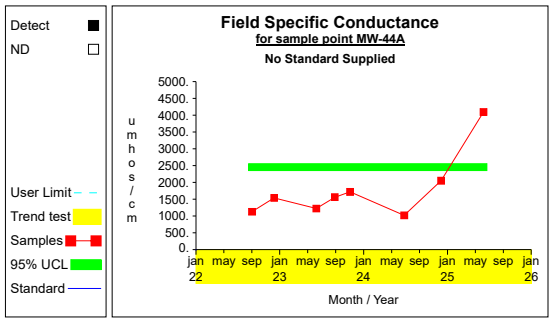
Graph 105



Graph 106

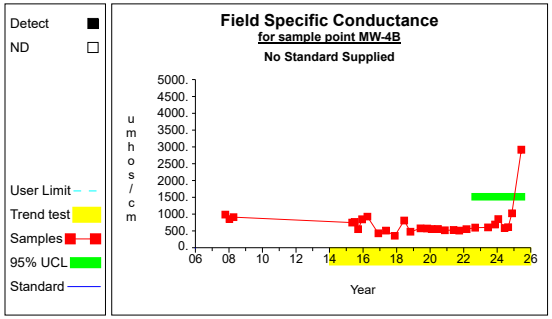


Graph 107

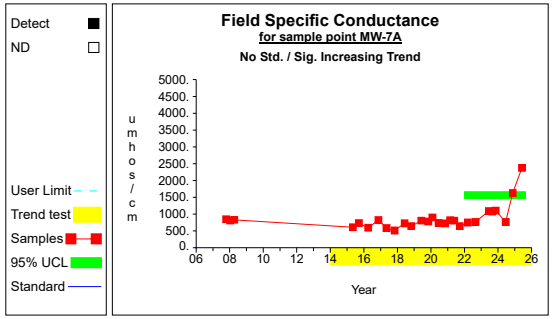


Graph 108

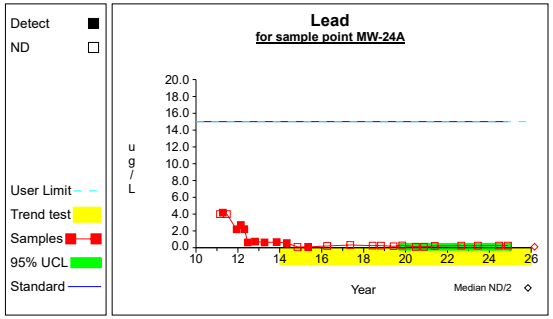
Confidence Limits (Assessment)



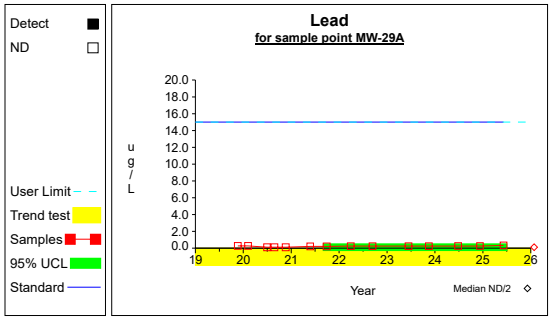
Graph 109



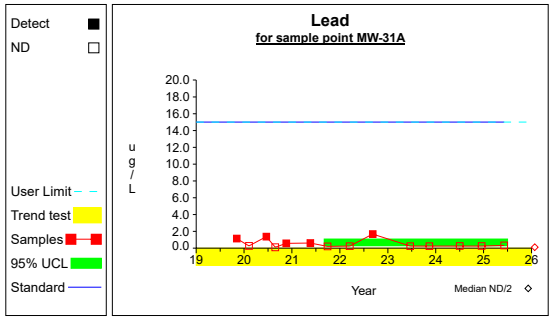
Graph 110



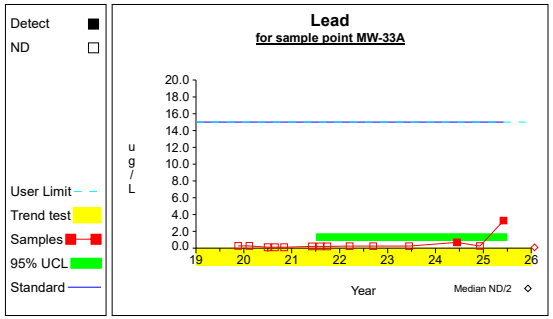
Graph 111



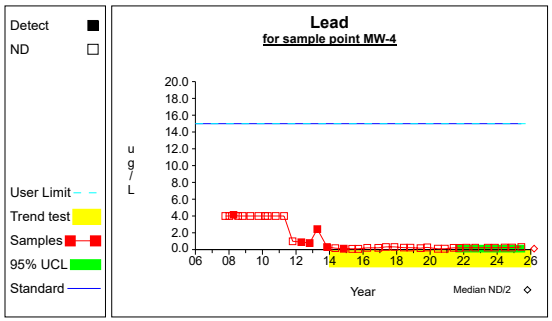
Graph 112



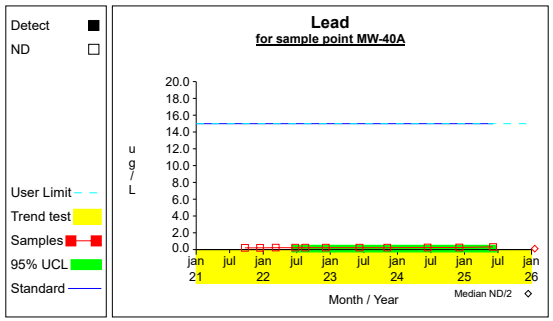
Graph 113



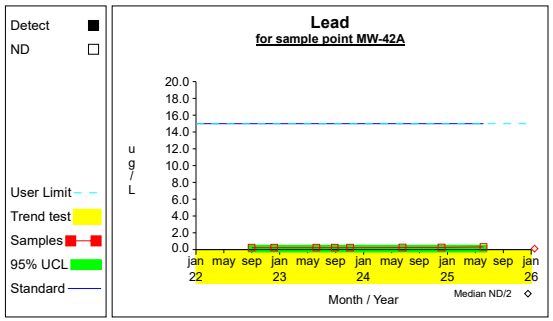
Graph 114



Graph 115

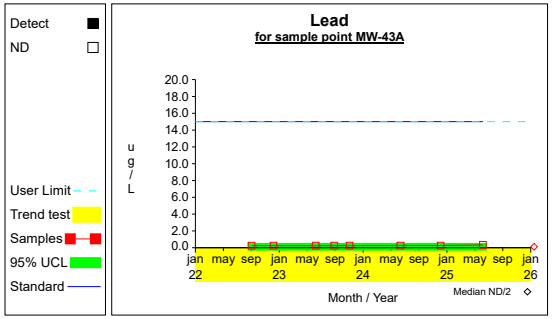


Graph 116

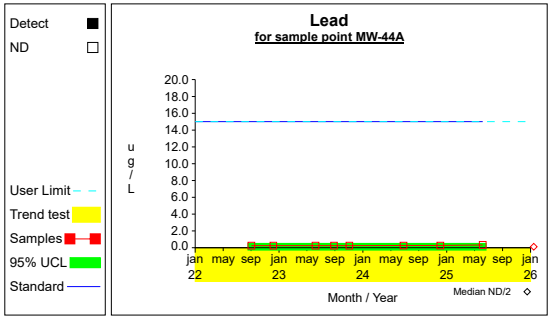


Graph 117

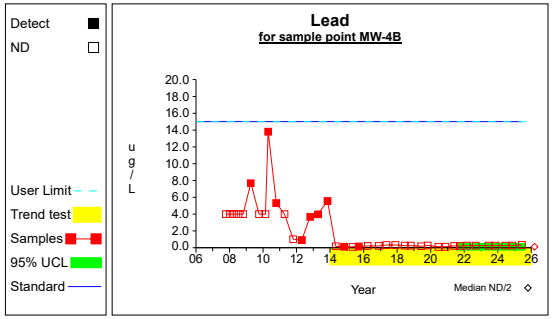
Confidence Limits (Assessment)



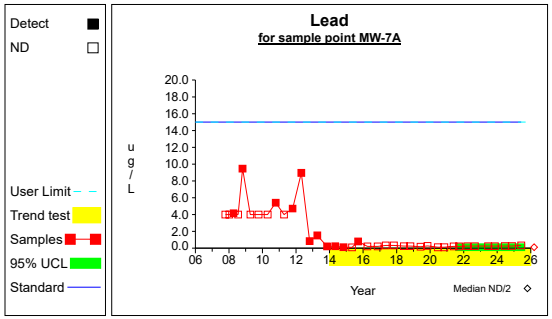
Graph 118



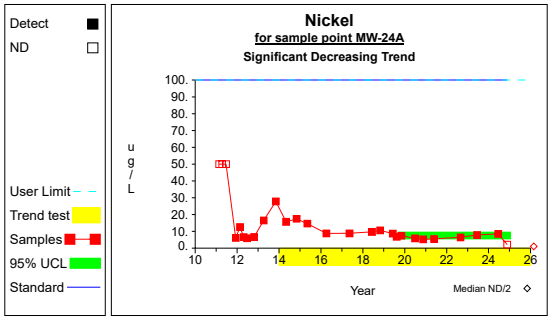
Graph 119



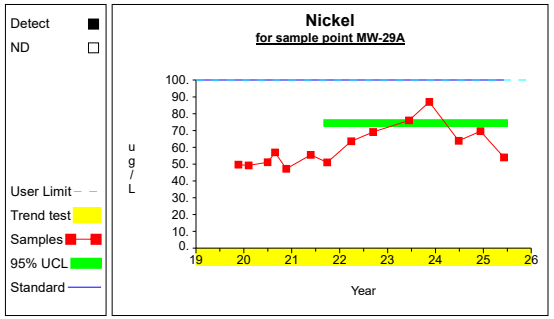
Graph 120



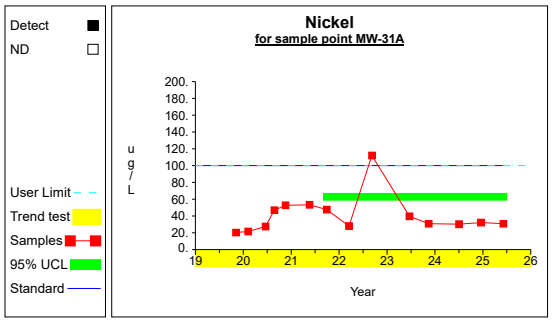
Graph 121



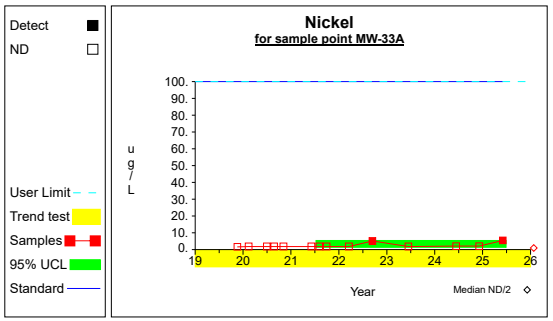
Graph 122



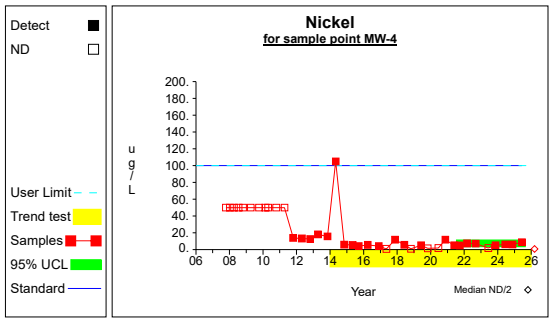
Graph 123



Graph 124

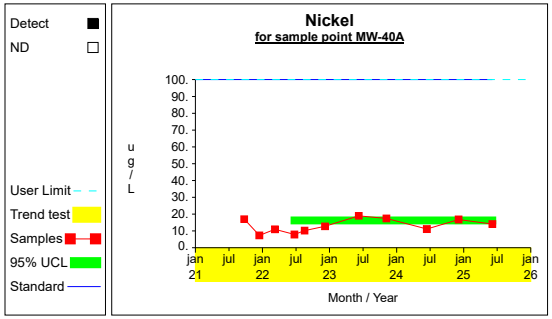


Graph 125

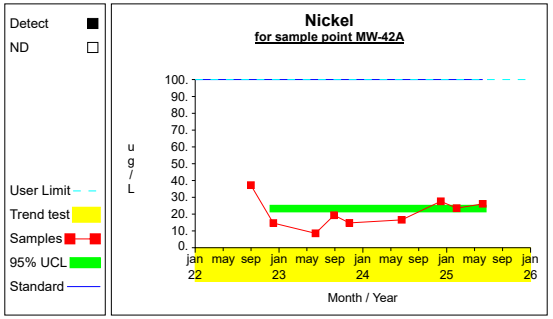


Graph 126

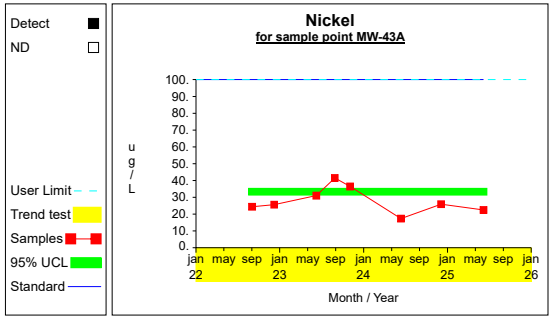
Confidence Limits (Assessment)



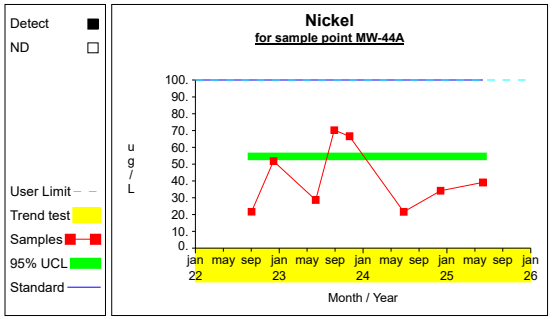
Graph 127



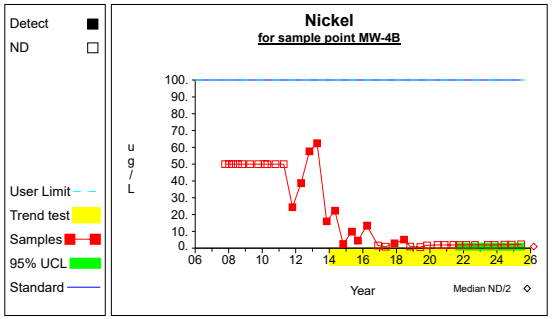
Graph 128



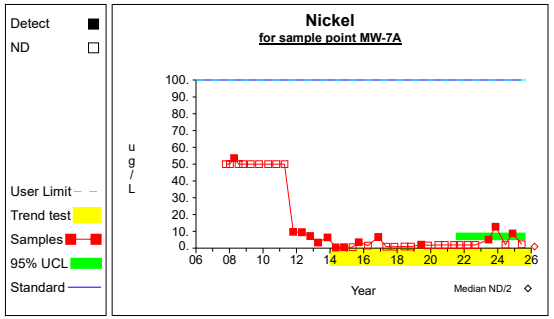
Graph 129



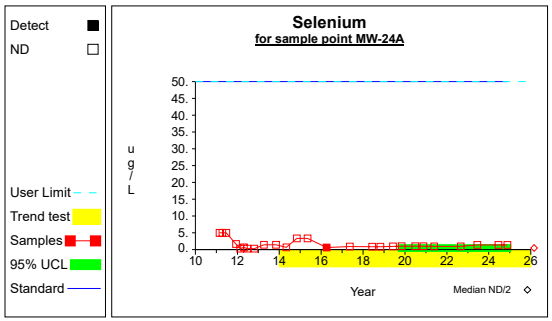
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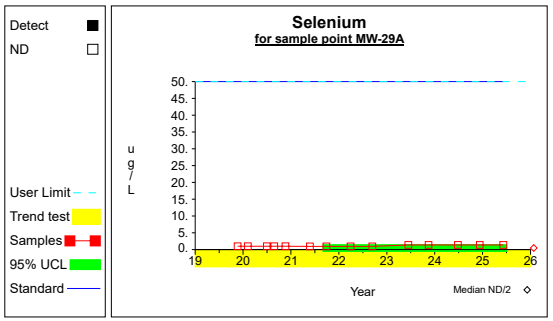
Graph 131



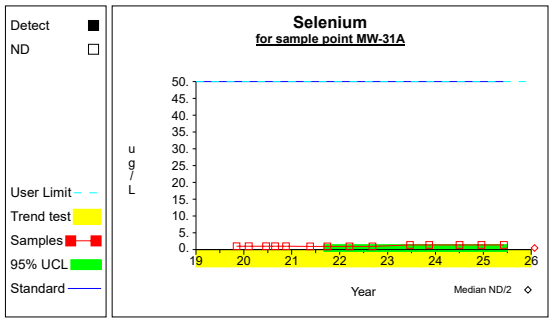
Graph 132



Graph 133

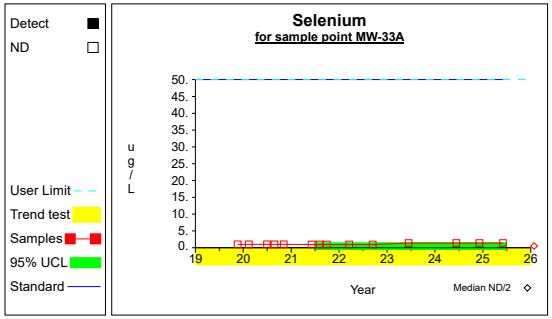


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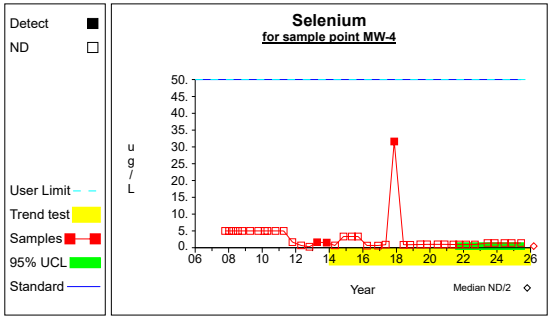


Graph 135

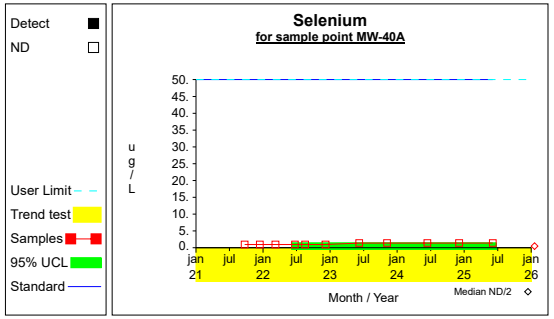
Confidence Limits (Assessment)



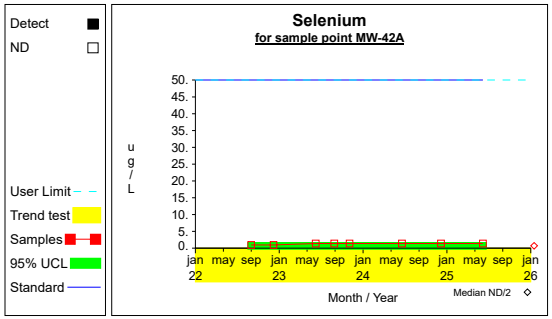
Graph 136



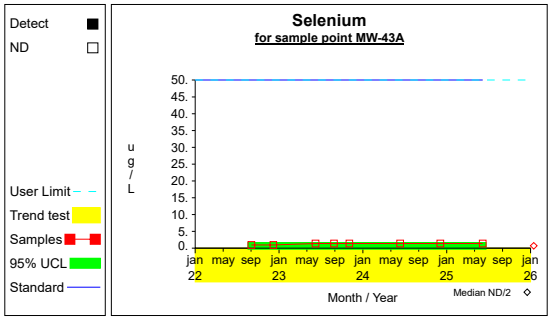
Graph 137



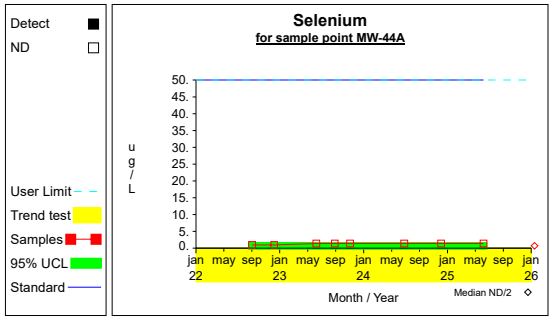
Graph 138



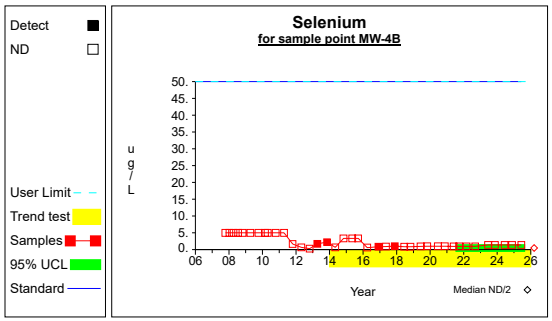
Graph 139



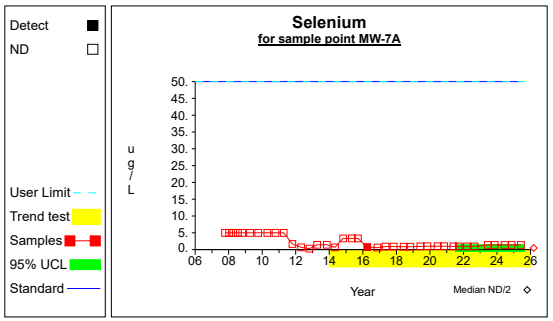
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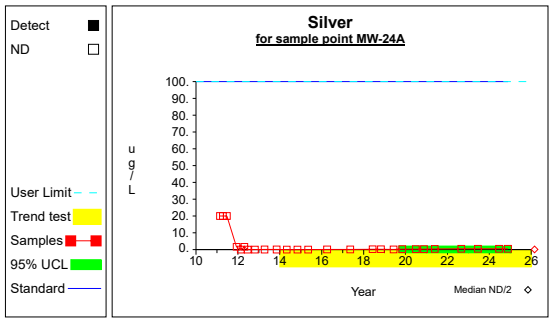
Graph 141



Graph 142

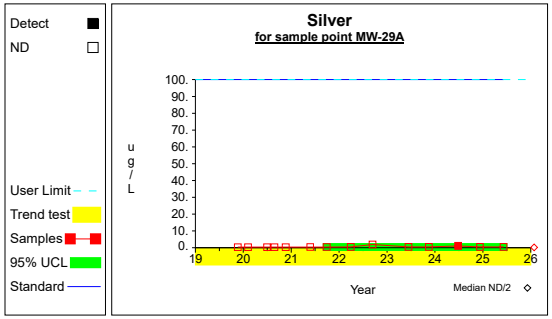


Graph 143

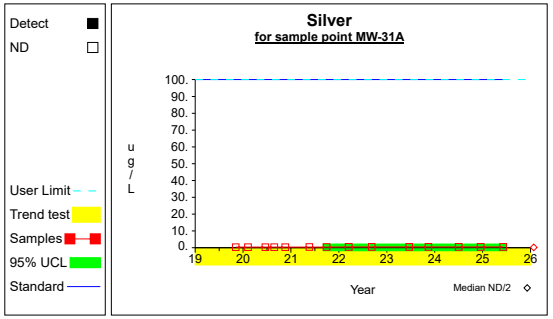


Graph 144

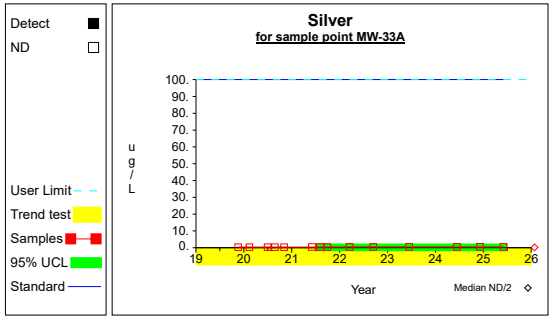
Confidence Limits (Assessment)



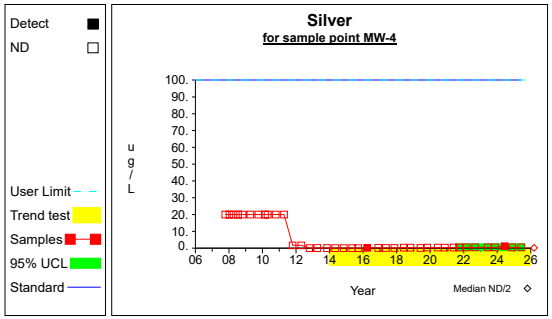
Graph 145



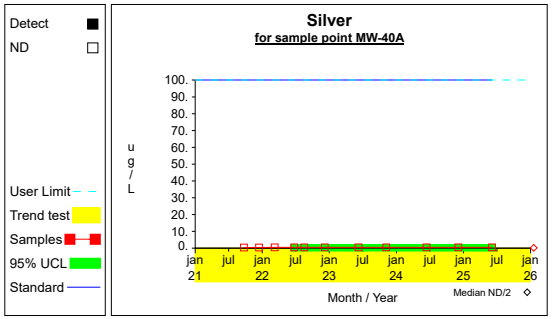
Graph 146



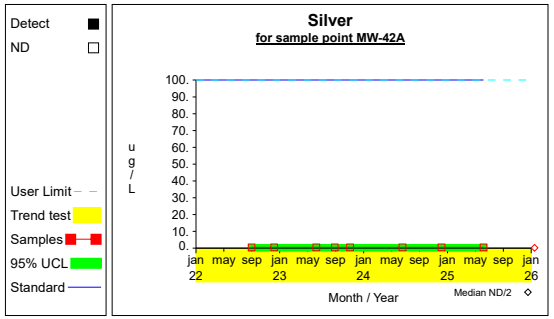
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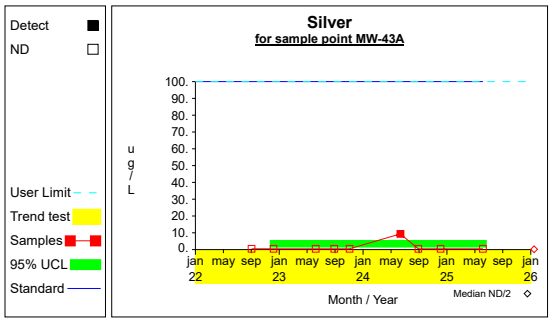
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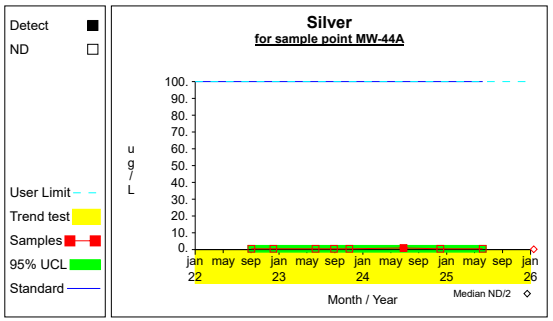
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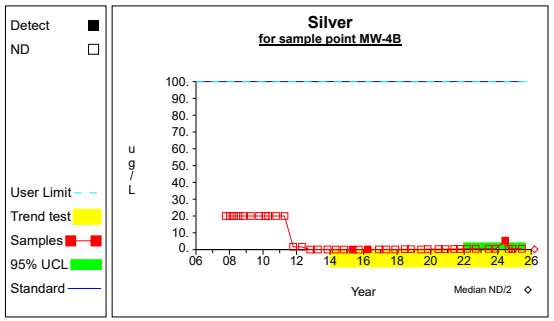
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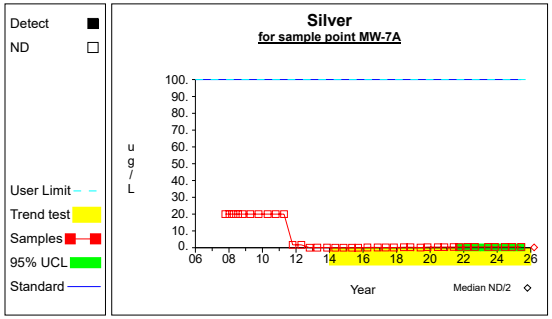


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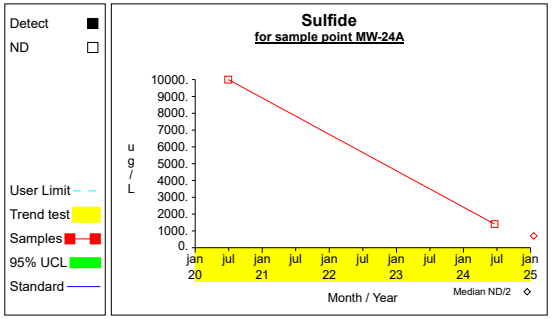


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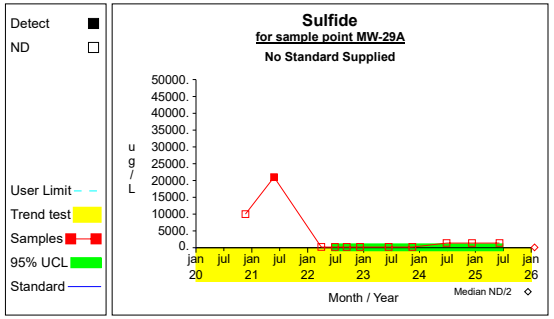
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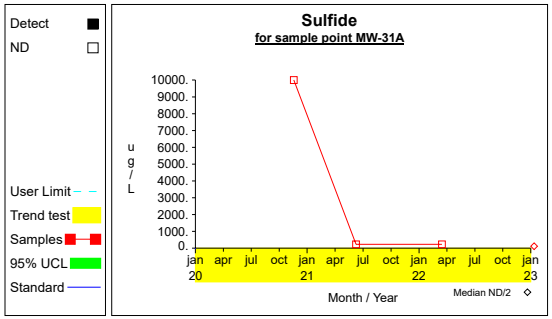
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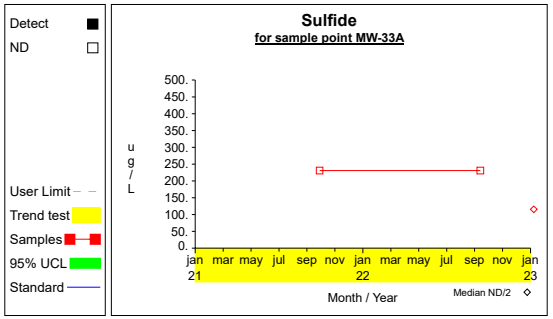
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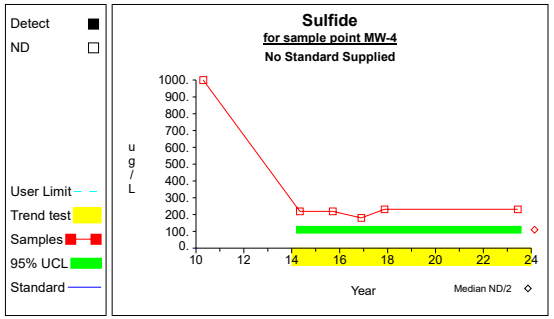
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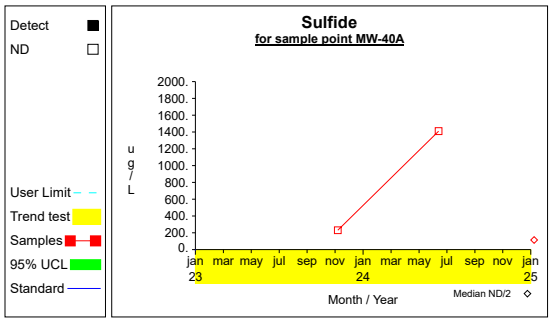
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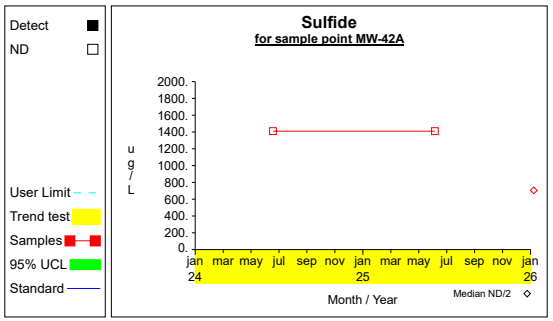
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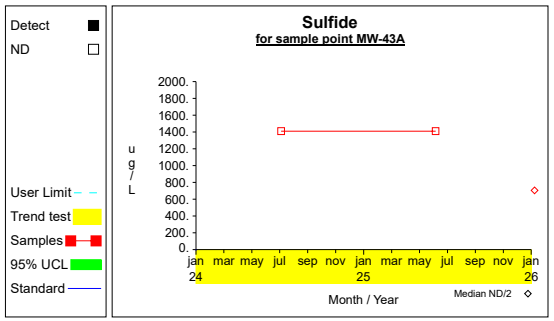
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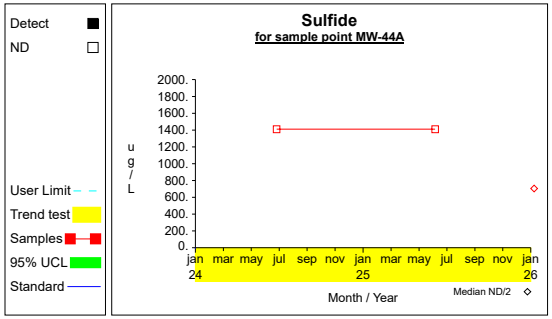


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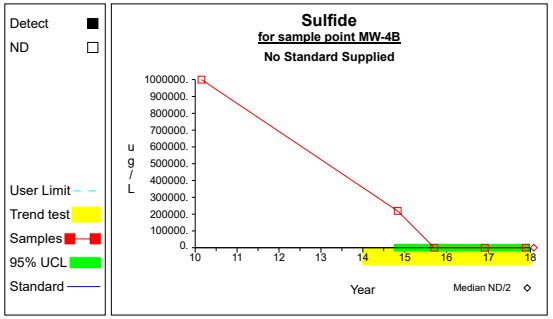


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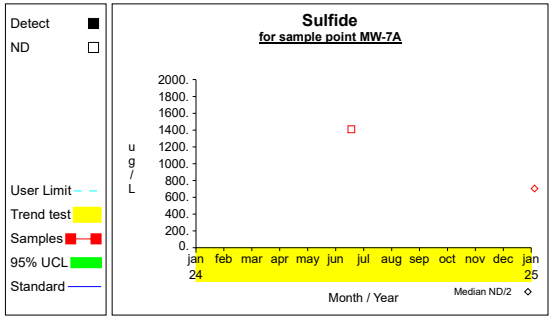
Confidence Limits (Assessment)



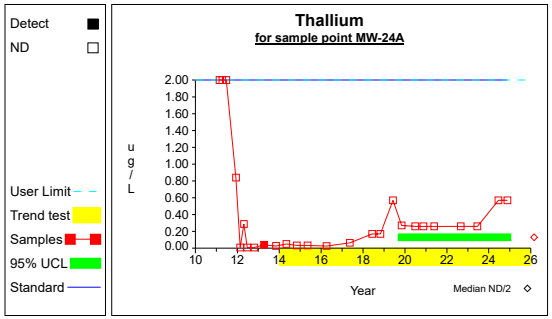
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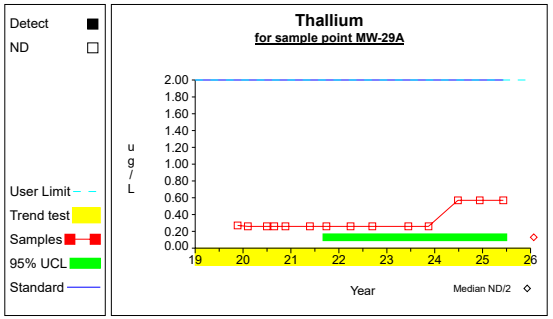
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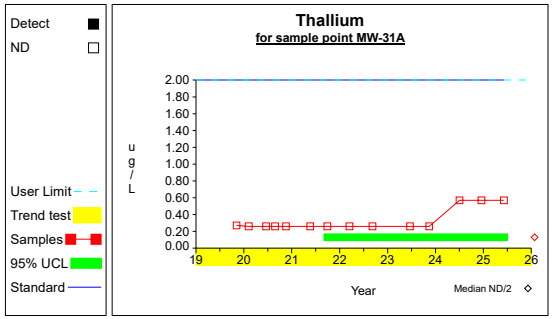
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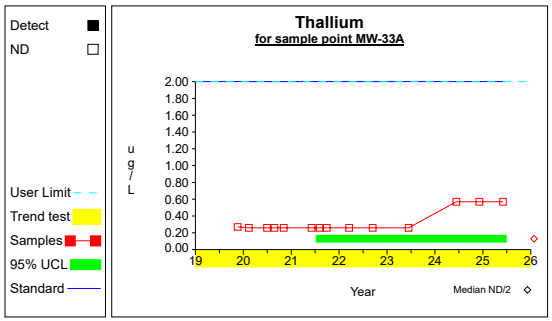
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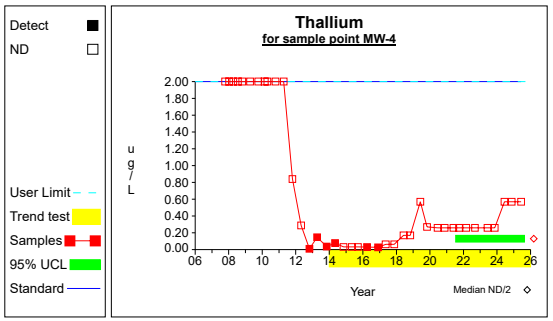
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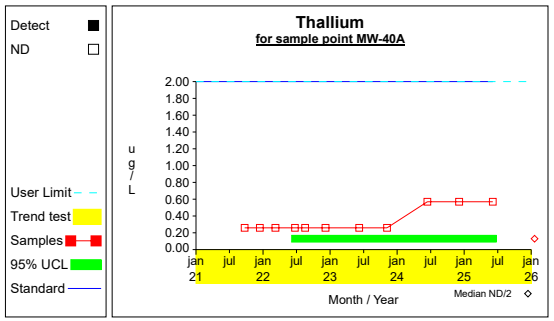
Graph 168



Graph 169

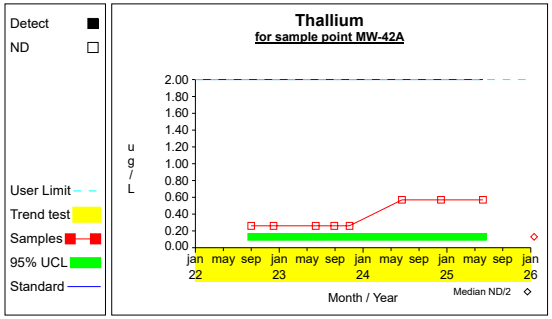


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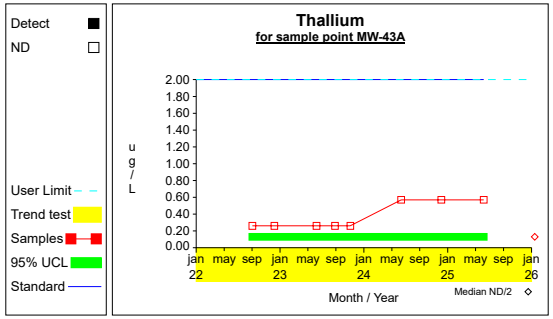


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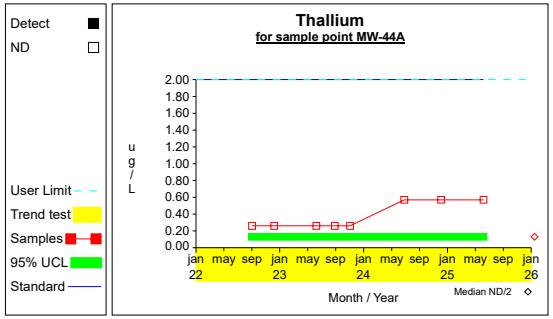
Confidence Limits (Assessment)



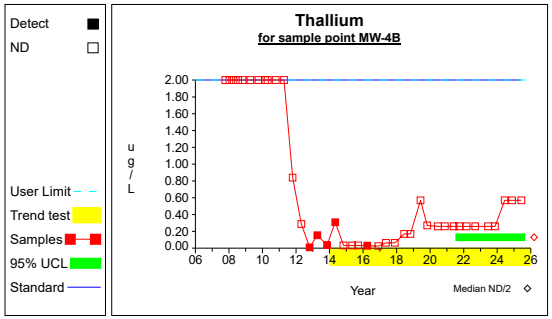
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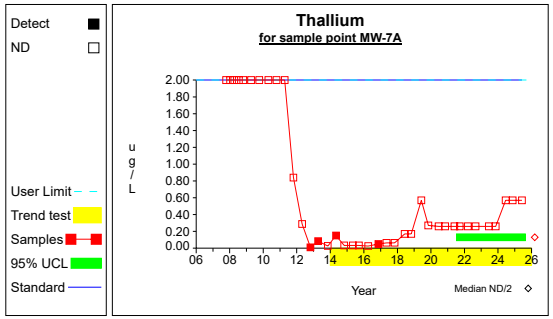
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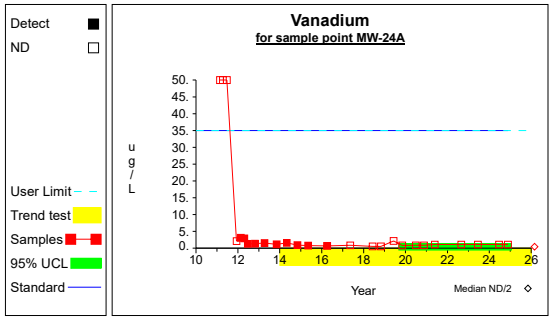
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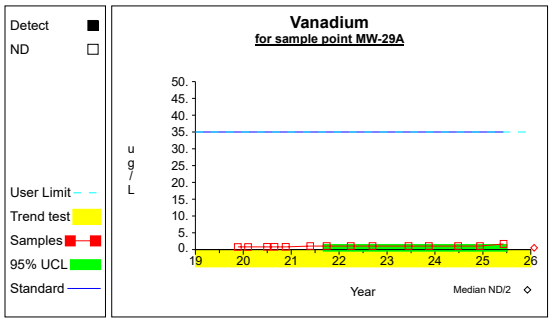
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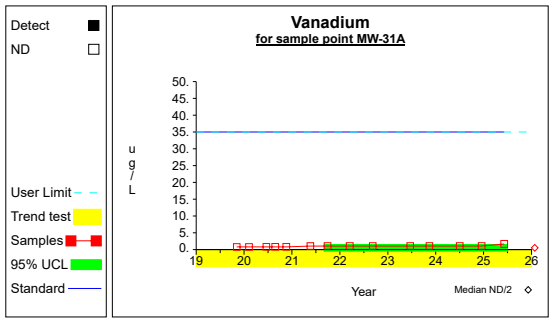
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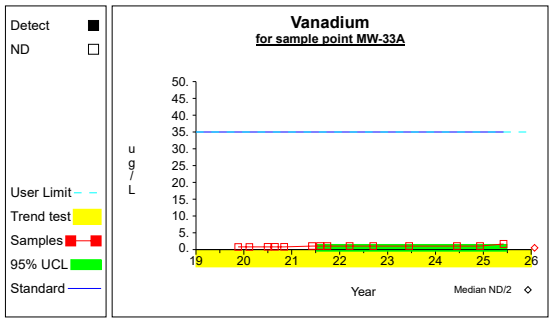
Graph 177



Graph 178

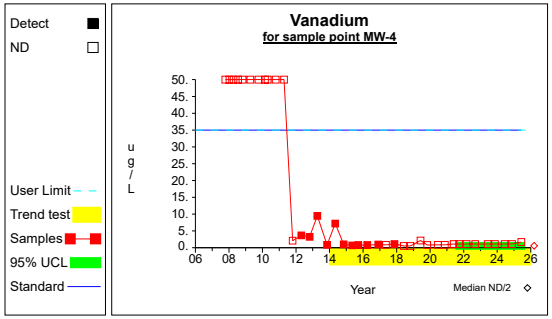


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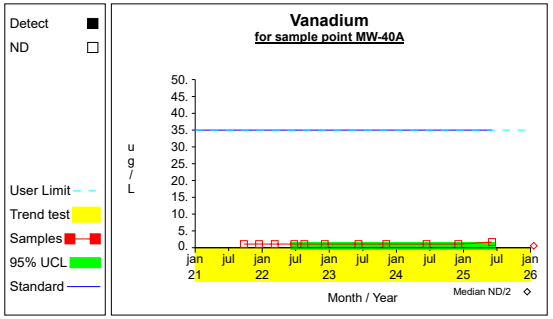


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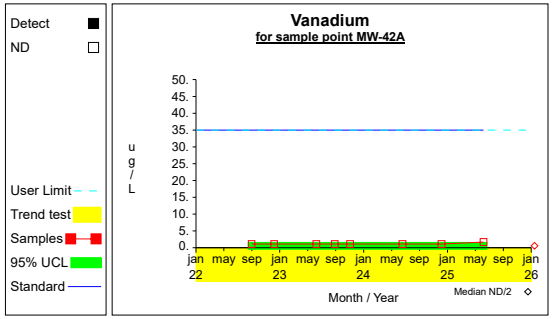
Confidence Limits (Assessment)



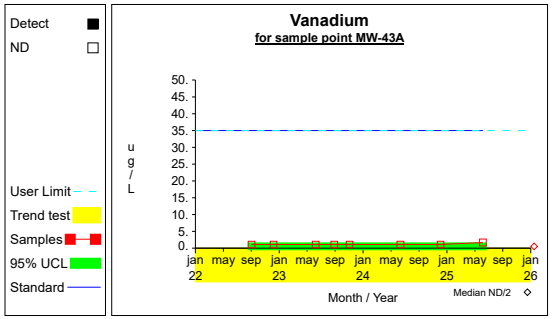
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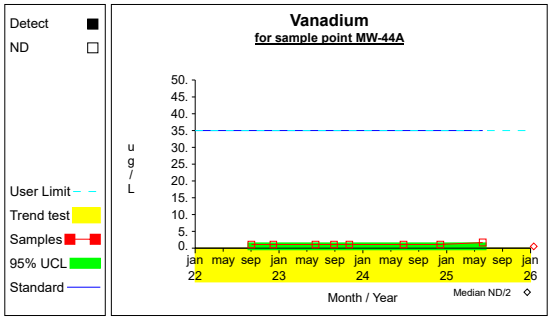
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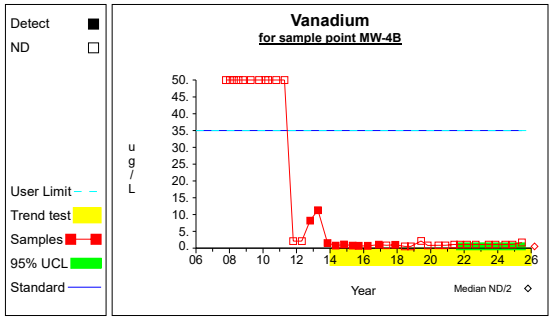
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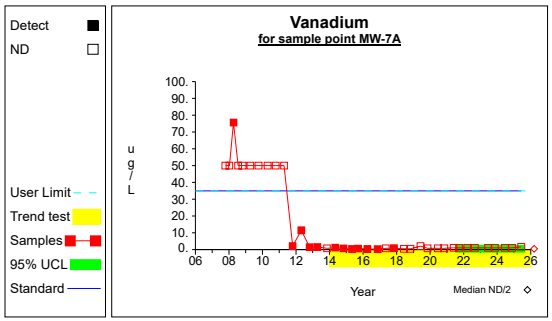
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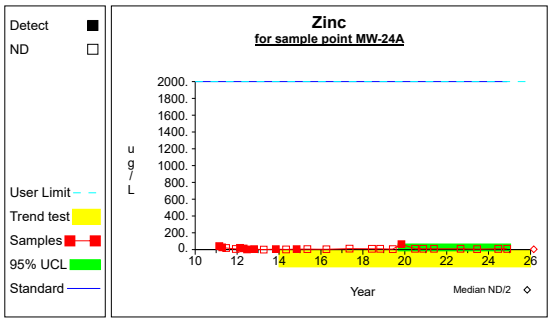
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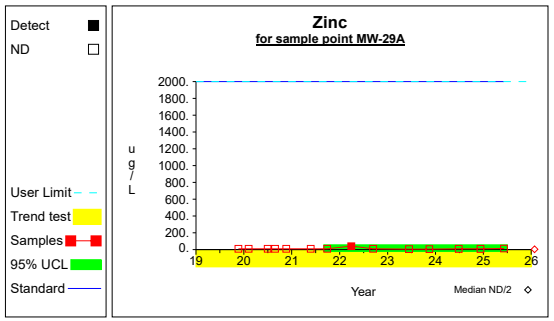
Graph 186



Graph 187

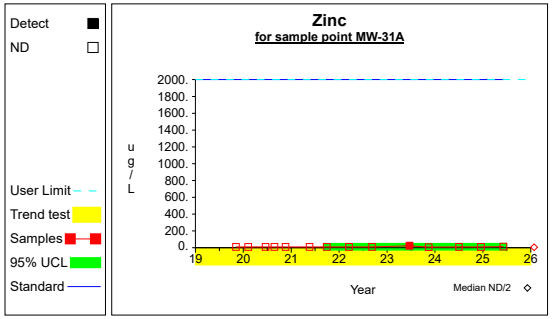


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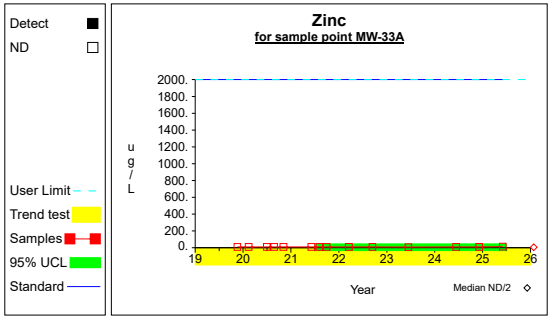


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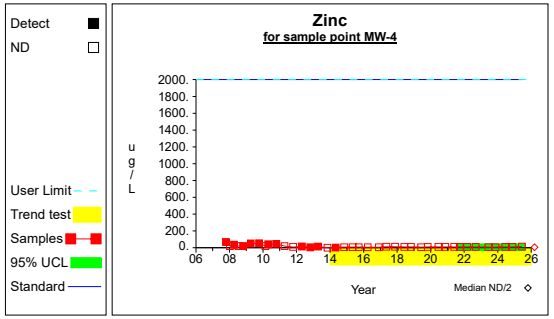
Confidence Limits (Assessment)



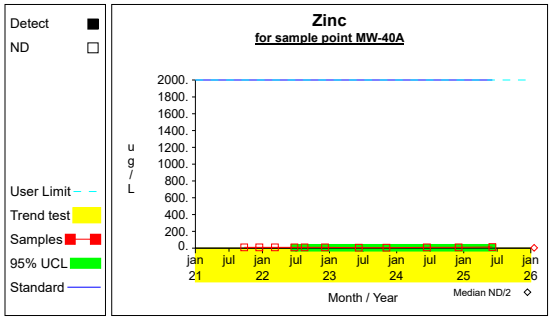
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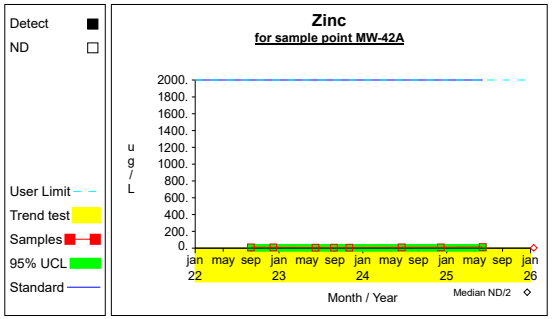
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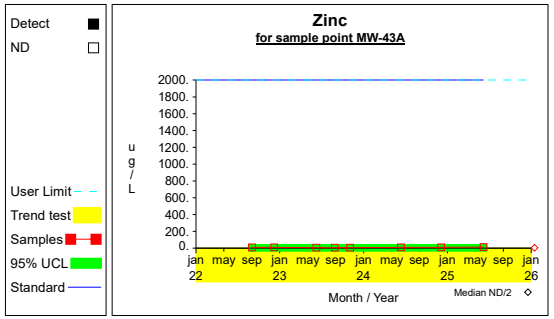
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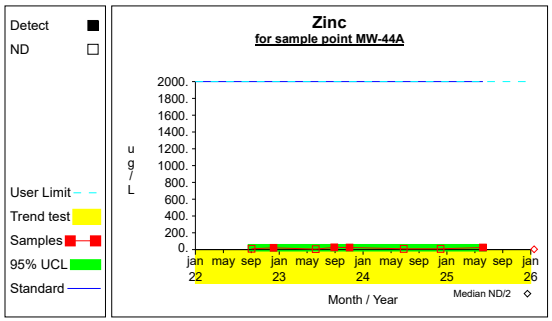
Graph 193



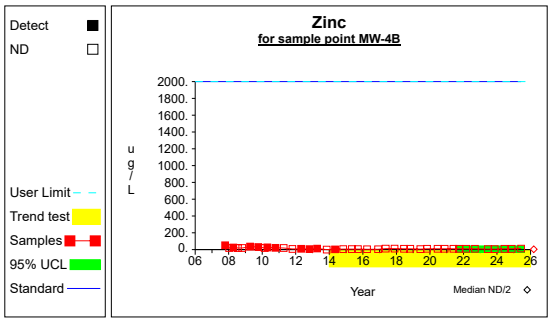
Graph 194



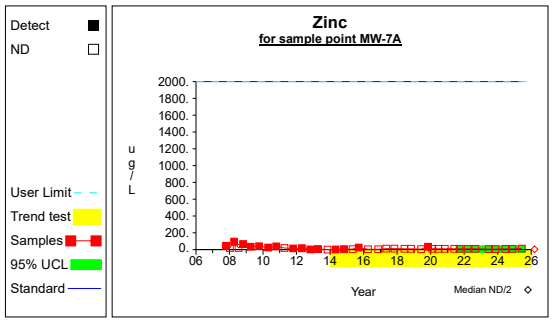
Graph 195



Graph 196



Graph 197



Graph 198

Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
Antimony	ug/L	MW-24A	8	0.472	0.613	0.670	0.061	0.883	6.000	
Antimony	ug/L	MW-29A	8	0.500	0.000	0.670	0.500	0.500	6.000	
Antimony	ug/L	MW-31A	8	0.715	0.608	0.670	0.308	1.122	6.000	
Antimony	ug/L	MW-33A	8	0.345	0.000	0.670	0.345	0.345	6.000	
Antimony	ug/L	MW-4	8	0.265	0.000	0.670	0.265	0.265	6.000	
Antimony	ug/L	MW-40A	8	0.500	0.000	0.670	0.500	0.500	6.000	
Antimony	ug/L	MW-42A	8	0.500	0.000	0.670	0.500	0.500	6.000	
Antimony	ug/L	MW-43A	8	0.500	0.000	0.670	0.500	0.500	6.000	
Antimony	ug/L	MW-44A	8	0.500	0.000	0.670	0.500	0.500	6.000	
Antimony	ug/L	MW-4B	8	0.255	0.000	0.670	0.255	0.255	6.000	
Antimony	ug/L	MW-7A	8	0.345	0.000	0.670	0.345	0.345	6.000	
Arsenic	ug/L	MW-24A	8	0.285	0.000	0.670	0.285	0.285	10.000	
Arsenic	ug/L	MW-29A	8	5.534	2.792	0.670	3.664	7.405	10.000	
Arsenic	ug/L	MW-31A	8	0.265	0.000	0.670	0.265	0.265	10.000	
Arsenic	ug/L	MW-33A	8	30.216	36.386	0.670	5.843	54.588	10.000	
Arsenic	ug/L	MW-4	8	0.336	0.000	0.670	0.336	0.336	10.000	
Arsenic	ug/L	MW-40A	8	0.375	0.000	0.670	0.375	0.375	10.000	
Arsenic	ug/L	MW-42A	8	0.602	0.953	0.670	0.000	1.240	10.000	
Arsenic	ug/L	MW-43A	8	7.778	1.220	0.670	6.960	8.595	10.000	
Arsenic	ug/L	MW-44A	8	0.265	0.000	0.670	0.265	0.265	10.000	
Arsenic	ug/L	MW-4B	8	0.336	0.000	0.670	0.336	0.336	10.000	
Arsenic	ug/L	MW-7A	8	0.336	0.000	0.670	0.336	0.336	10.000	
Barium	ug/L	MW-24A	8	117.850	17.431	0.670	106.175	129.525	2000.000	
Barium	ug/L	MW-29A	8	167.250	20.401	0.670	153.585	180.915	2000.000	

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

Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	
Antimony	
Antimony	
Antimony	
Antimony	
Antimony	
Antimony	
Antimony	
Antimony	
Antimony	
Antimony	
Arsenic	
Arsenic	
Arsenic	
Arsenic	**
Arsenic	
Arsenic	
Arsenic	
Arsenic	
Arsenic	
Arsenic	
Arsenic	
Barium	
Barium	

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Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
Barium	ug/L	MW-31A	8	252.500	85.674	0.670	195.115	309.885	2000.000	
Barium	ug/L	MW-33A	8	192.250	81.289	0.670	137.801	246.699	2000.000	
Barium	ug/L	MW-4	8	459.625	132.726	0.670	370.723	548.527	2000.000	
Barium	ug/L	MW-40A	8	216.000	27.923	0.670	197.297	234.703	2000.000	dec
Barium	ug/L	MW-42A	8	145.800	61.713	0.670	104.464	187.136	2000.000	
Barium	ug/L	MW-43A	8	198.875	43.202	0.670	169.938	227.812	2000.000	
Barium	ug/L	MW-44A	8	187.250	42.132	0.670	159.030	215.470	2000.000	
Barium	ug/L	MW-4B	8	233.000	78.060	0.670	180.714	285.286	2000.000	
Barium	ug/L	MW-7A	8	274.863	135.529	0.670	184.083	365.642	2000.000	
Beryllium	ug/L	MW-24A	8	0.135	0.000	0.670	0.135	0.135	4.000	
Beryllium	ug/L	MW-29A	8	0.135	0.000	0.670	0.135	0.135	4.000	
Beryllium	ug/L	MW-31A	8	0.135	0.000	0.670	0.135	0.135	4.000	
Beryllium	ug/L	MW-33A	8	0.135	0.000	0.670	0.135	0.135	4.000	
Beryllium	ug/L	MW-4	8	0.135	0.000	0.670	0.135	0.135	4.000	
Beryllium	ug/L	MW-40A	8	0.135	0.000	0.670	0.135	0.135	4.000	
Beryllium	ug/L	MW-42A	8	0.165	0.000	0.670	0.165	0.165	4.000	
Beryllium	ug/L	MW-43A	8	0.165	0.000	0.670	0.165	0.165	4.000	
Beryllium	ug/L	MW-44A	8	0.165	0.000	0.670	0.165	0.165	4.000	
Beryllium	ug/L	MW-4B	8	0.135	0.000	0.670	0.135	0.135	4.000	
Beryllium	ug/L	MW-7A	8	0.135	0.000	0.670	0.135	0.135	4.000	
Cadmium	ug/L	MW-24A	8	0.080	0.108	0.670	0.008	0.152	5.000	
Cadmium	ug/L	MW-29A	8	0.028	0.000	0.670	0.028	0.028	5.000	
Cadmium	ug/L	MW-31A	8	0.483	0.705	0.670	0.011	0.955	5.000	
Cadmium	ug/L	MW-33A	8	0.036	0.029	0.670	0.016	0.055	5.000	

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Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	
Barium Barium Barium Barium Barium Barium Barium Barium Barium	
Beryllium Beryllium Beryllium Beryllium Beryllium Beryllium Beryllium Beryllium Beryllium Beryllium Beryllium	
Cadmium Cadmium Cadmium Cadmium	

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Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
Cadmium	ug/L	MW-4	8	0.084	0.073	0.670	0.035	0.133	5.000	
Cadmium	ug/L	MW-40A	8	0.028	0.000	0.670	0.028	0.028	5.000	
Cadmium	ug/L	MW-42A	8	0.079	0.082	0.670	0.024	0.134	5.000	
Cadmium	ug/L	MW-43A	8	0.050	0.000	0.670	0.050	0.050	5.000	
Cadmium	ug/L	MW-44A	8	0.311	0.275	0.670	0.127	0.495	5.000	
Cadmium	ug/L	MW-4B	8	0.030	0.000	0.670	0.030	0.030	5.000	
Cadmium	ug/L	MW-7A	8	0.030	0.000	0.670	0.030	0.030	5.000	
Chromium	ug/L	MW-24A	8	0.550	0.000	0.670	0.550	0.550	100.000	
Chromium	ug/L	MW-29A	8	0.550	0.000	0.670	0.550	0.550	100.000	
Chromium	ug/L	MW-31A	8	1.395	2.390	0.670	0.000	2.996	100.000	
Chromium	ug/L	MW-33A	8	0.550	0.000	0.670	0.550	0.550	100.000	
Chromium	ug/L	MW-4	8	0.550	0.000	0.670	0.550	0.550	100.000	
Chromium	ug/L	MW-40A	8	0.550	0.000	0.670	0.550	0.550	100.000	
Chromium	ug/L	MW-42A	8	0.550	0.000	0.670	0.550	0.550	100.000	
Chromium	ug/L	MW-43A	8	1.981	4.048	0.670	0.000	4.693	100.000	
Chromium	ug/L	MW-44A	8	0.550	0.000	0.670	0.550	0.550	100.000	
Chromium	ug/L	MW-4B	8	0.550	0.000	0.670	0.550	0.550	100.000	
Chromium	ug/L	MW-7A	8	0.550	0.000	0.670	0.550	0.550	100.000	
Cobalt	ug/L	MW-24A	8	0.111	0.185	0.670	0.000	0.235	3.400	
Cobalt	ug/L	MW-29A	8	10.969	4.958	0.670	7.648	14.289	3.400	
Cobalt	ug/L	MW-31A	8	6.820	10.290	0.670	0.000	13.712	3.400	dec
Cobalt	ug/L	MW-33A	8	2.330	1.889	0.670	1.065	3.595	3.400	
Cobalt	ug/L	MW-4	8	1.481	0.686	0.670	1.021	1.940	3.400	
Cobalt	ug/L	MW-40A	8	1.655	0.439	0.670	1.361	1.948	3.400	

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Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	
Cadmium	
Cadmium	
Cadmium	
Cadmium	
Cadmium	
Cadmium	
Cadmium	
Chromium	
Chromium	
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Chromium	
Chromium	
Cobalt	
Cobalt	**
Cobalt	**
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Cobalt	
Cobalt	

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Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
Cobalt	ug/L	MW-42A	8	2.441	1.076	0.670	1.720	3.162	3.400	
Cobalt	ug/L	MW-43A	8	4.048	0.609	0.670	3.639	4.456	3.400	
Cobalt	ug/L	MW-44A	8	0.268	0.253	0.670	0.098	0.437	3.400	
Cobalt	ug/L	MW-4B	8	0.085	0.000	0.670	0.085	0.085	3.400	
Cobalt	ug/L	MW-7A	8	0.045	0.000	0.670	0.045	0.046	3.400	
Copper	ug/L	MW-24A	8	0.900	0.000	0.670	0.900	0.900	1300.000	
Copper	ug/L	MW-29A	8	0.900	0.000	0.670	0.900	0.900	1300.000	
Copper	ug/L	MW-31A	8	4.567	7.450	0.670	0.000	9.557	1300.000	
Copper	ug/L	MW-33A	8	1.908	2.850	0.670	0.000	3.816	1300.000	
Copper	ug/L	MW-4	8	0.900	0.000	0.670	0.900	0.900	1300.000	
Copper	ug/L	MW-40A	8	1.751	2.408	0.670	0.139	3.364	1300.000	
Copper	ug/L	MW-42A	8	1.996	3.101	0.670	0.000	4.073	1300.000	
Copper	ug/L	MW-43A	8	1.588	1.945	0.670	0.285	2.890	1300.000	
Copper	ug/L	MW-44A	8	0.900	0.000	0.670	0.900	0.900	1300.000	
Copper	ug/L	MW-4B	8	0.900	0.000	0.670	0.900	0.900	1300.000	
Copper	ug/L	MW-7A	8	0.800	0.000	0.670	0.800	0.800	1300.000	
Field pH	SU	MW-24A	8	6.989	0.470	0.670	6.674	7.304		
Field pH	SU	MW-29A	8	6.717	0.429	0.670	6.430	7.005		
Field pH	SU	MW-31A	8	6.926	0.449	0.670	6.626	7.227		
Field pH	SU	MW-33A	8	6.914	0.594	0.670	6.516	7.312		
Field pH	SU	MW-4	8	6.693	0.466	0.670	6.380	7.005		
Field pH	SU	MW-40A	8	7.144	0.416	0.670	6.865	7.422		
Field pH	SU	MW-42A	8	7.223	0.509	0.670	6.882	7.563		
Field pH	SU	MW-43A	8	6.896	0.370	0.670	6.649	7.144		

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Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	
Cobalt	
Cobalt	**
Cobalt	
Cobalt	
Cobalt	
Copper	
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Copper	
Field pH	
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Field pH	
Field pH	
Field pH	
Field pH	
Field pH	
Field pH	

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Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
Field pH	SU	MW-44A	8	6.960	0.550	0.670	6.591	7.329		
Field pH	SU	MW-4B	8	6.950	0.463	0.670	6.640	7.260		
Field pH	SU	MW-7A	8	7.188	0.544	0.670	6.823	7.552		
Field Specific Conductance	umhos/cm	MW-24A	8	1159.845	391.046	0.670	897.917	1421.773		
Field Specific Conductance	umhos/cm	MW-29A	8	2083.400	450.072	0.670	1781.935	2384.865		inc
Field Specific Conductance	umhos/cm	MW-31A	8	2621.075	1093.034	0.670	1888.946	3353.204		inc
Field Specific Conductance	umhos/cm	MW-33A	8	1192.605	752.352	0.670	688.669	1696.541		inc
Field Specific Conductance	umhos/cm	MW-4	8	1550.825	617.034	0.670	1137.528	1964.122		inc
Field Specific Conductance	umhos/cm	MW-40A	8	1501.363	809.306	0.670	959.279	2043.446		inc
Field Specific Conductance	umhos/cm	MW-42A	8	1757.739	1021.247	0.670	1073.694	2441.784		
Field Specific Conductance	umhos/cm	MW-43A	8	1707.400	887.129	0.670	1113.189	2301.611		
Field Specific Conductance	umhos/cm	MW-44A	8	1792.288	988.512	0.670	1130.169	2454.406		
Field Specific Conductance	umhos/cm	MW-4B	8	985.093	794.583	0.670	452.870	1517.315		
Field Specific Conductance	umhos/cm	MW-7A	8	1193.819	557.924	0.670	820.114	1567.524		inc
Lead	ug/L	MW-24A	8	0.120	0.000	0.670	0.120	0.120	15.000	
Lead	ug/L	MW-29A	8	0.120	0.000	0.670	0.120	0.120	15.000	
Lead	ug/L	MW-31A	8	0.315	0.552	0.670	0.000	0.684	15.000	
Lead	ug/L	MW-33A	8	0.577	1.115	0.670	0.000	1.324	15.000	
Lead	ug/L	MW-4	8	0.120	0.000	0.670	0.120	0.120	15.000	
Lead	ug/L	MW-40A	8	0.120	0.000	0.670	0.120	0.120	15.000	
Lead	ug/L	MW-42A	8	0.120	0.000	0.670	0.120	0.120	15.000	
Lead	ug/L	MW-43A	8	0.120	0.000	0.670	0.120	0.120	15.000	
Lead	ug/L	MW-44A	8	0.120	0.000	0.670	0.120	0.120	15.000	
Lead	ug/L	MW-4B	8	0.120	0.000	0.670	0.120	0.120	15.000	

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Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	
Field pH	
Field pH	
Field pH	
Field Specific Conductance	
Field Specific Conductance	
Field Specific Conductance	
Field Specific Conductance	
Field Specific Conductance	
Field Specific Conductance	
Field Specific Conductance	
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Lead	
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Lead	

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Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
Lead	ug/L	MW-7A	8	0.120	0.000	0.670	0.120	0.120	15.000	
Nickel	ug/L	MW-24A	8	5.980	2.306	0.670	4.435	7.525	100.000	dec
Nickel	ug/L	MW-29A	8	66.775	11.575	0.670	59.022	74.528	100.000	
Nickel	ug/L	MW-31A	8	43.963	28.239	0.670	25.048	62.877	100.000	
Nickel	ug/L	MW-33A	8	2.049	2.037	0.670	0.684	3.413	100.000	
Nickel	ug/L	MW-4	8	5.894	2.370	0.670	4.307	7.481	100.000	
Nickel	ug/L	MW-40A	8	13.644	3.887	0.670	11.040	16.247	100.000	
Nickel	ug/L	MW-42A	8	18.903	6.484	0.670	14.560	23.245	100.000	
Nickel	ug/L	MW-43A	8	28.075	7.834	0.670	22.827	33.323	100.000	
Nickel	ug/L	MW-44A	8	41.738	19.162	0.670	28.903	54.572	100.000	
Nickel	ug/L	MW-4B	8	0.950	0.000	0.670	0.950	0.950	100.000	
Nickel	ug/L	MW-7A	8	3.934	4.603	0.670	0.851	7.017	100.000	
Selenium	ug/L	MW-24A	8	0.500	0.000	0.670	0.500	0.500	50.000	
Selenium	ug/L	MW-29A	8	0.500	0.000	0.670	0.500	0.500	50.000	
Selenium	ug/L	MW-31A	8	0.500	0.000	0.670	0.500	0.500	50.000	
Selenium	ug/L	MW-33A	8	0.500	0.000	0.670	0.500	0.500	50.000	
Selenium	ug/L	MW-4	8	0.491	0.000	0.670	0.491	0.491	50.000	
Selenium	ug/L	MW-40A	8	0.480	0.000	0.670	0.480	0.480	50.000	
Selenium	ug/L	MW-42A	8	0.700	0.000	0.670	0.700	0.700	50.000	
Selenium	ug/L	MW-43A	8	0.700	0.000	0.670	0.700	0.700	50.000	
Selenium	ug/L	MW-44A	8	0.700	0.000	0.670	0.700	0.700	50.000	
Selenium	ug/L	MW-4B	8	0.500	0.000	0.670	0.500	0.500	50.000	
Selenium	ug/L	MW-7A	8	0.491	0.000	0.670	0.491	0.491	50.000	
Silver	ug/L	MW-24A	8	0.150	0.000	0.670	0.150	0.150	100.000	

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Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	
Lead	
Nickel Nickel Nickel Nickel Nickel Nickel Nickel Nickel Nickel Nickel Nickel	
Selenium Selenium Selenium Selenium Selenium Selenium Selenium Selenium Selenium Selenium	
Silver	

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Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
Silver	ug/L	MW-29A	8	0.321	0.315	0.670	0.110	0.532	100.000	
Silver	ug/L	MW-31A	8	0.210	0.000	0.670	0.210	0.210	100.000	
Silver	ug/L	MW-33A	8	0.210	0.000	0.670	0.210	0.210	100.000	
Silver	ug/L	MW-4	8	0.313	0.362	0.670	0.070	0.556	100.000	
Silver	ug/L	MW-40A	8	0.245	0.000	0.670	0.245	0.245	100.000	
Silver	ug/L	MW-42A	8	0.250	0.000	0.670	0.250	0.250	100.000	
Silver	ug/L	MW-43A	8	1.389	3.221	0.670	0.000	3.546	100.000	
Silver	ug/L	MW-44A	8	0.345	0.269	0.670	0.165	0.525	100.000	
Silver	ug/L	MW-4B	8	0.833	1.833	0.670	0.000	2.061	100.000	
Silver	ug/L	MW-7A	8	0.185	0.000	0.670	0.185	0.185	100.000	
Sulfide	ug/L	MW-24A	2							
Sulfide	ug/L	MW-29A	8	115.500	0.000	0.670	115.500	115.500		
Sulfide	ug/L	MW-31A	3							
Sulfide	ug/L	MW-33A	2							
Sulfide	ug/L	MW-4	5	109.500	0.000	0.953	109.500	109.500		
Sulfide	ug/L	MW-40A	2							
Sulfide	ug/L	MW-42A	2							
Sulfide	ug/L	MW-43A	2							
Sulfide	ug/L	MW-44A	2							
Sulfide	ug/L	MW-4B	4	109.500	0.000	1.176	109.500	109.500		
Sulfide	ug/L	MW-7A	1							
Thallium	ug/L	MW-24A	8	0.130	0.000	0.670	0.130	0.130	2.000	
Thallium	ug/L	MW-29A	8	0.130	0.000	0.670	0.130	0.130	2.000	
Thallium	ug/L	MW-31A	8	0.130	0.000	0.670	0.130	0.130	2.000	

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Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	
Silver	
Silver	
Silver	
Silver	
Silver	
Silver	
Silver	
Silver	
Silver	
Silver	
Sulfide	*
Sulfide	
Sulfide	*
Sulfide	*
Sulfide	
Sulfide	*
Sulfide	*
Sulfide	*
Sulfide	*
Sulfide	
Sulfide	*
Thallium	
Thallium	
Thallium	

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Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
Thallium	ug/L	MW-33A	8	0.130	0.000	0.670	0.130	0.130	2.000	
Thallium	ug/L	MW-4	8	0.130	0.000	0.670	0.130	0.130	2.000	
Thallium	ug/L	MW-40A	8	0.130	0.000	0.670	0.130	0.130	2.000	
Thallium	ug/L	MW-42A	8	0.130	0.000	0.670	0.130	0.130	2.000	
Thallium	ug/L	MW-43A	8	0.130	0.000	0.670	0.130	0.130	2.000	
Thallium	ug/L	MW-44A	8	0.130	0.000	0.670	0.130	0.130	2.000	
Thallium	ug/L	MW-4B	8	0.130	0.000	0.670	0.130	0.130	2.000	
Thallium	ug/L	MW-7A	8	0.130	0.000	0.670	0.130	0.130	2.000	
Vanadium	ug/L	MW-24A	8	0.425	0.000	0.670	0.425	0.425	35.000	
Vanadium	ug/L	MW-29A	8	0.550	0.000	0.670	0.550	0.550	35.000	
Vanadium	ug/L	MW-31A	8	0.550	0.000	0.670	0.550	0.550	35.000	
Vanadium	ug/L	MW-33A	8	0.550	0.000	0.670	0.550	0.550	35.000	
Vanadium	ug/L	MW-4	8	0.550	0.000	0.670	0.550	0.550	35.000	
Vanadium	ug/L	MW-40A	8	0.550	0.000	0.670	0.550	0.550	35.000	
Vanadium	ug/L	MW-42A	8	0.550	0.000	0.670	0.550	0.550	35.000	
Vanadium	ug/L	MW-43A	8	0.550	0.000	0.670	0.550	0.550	35.000	
Vanadium	ug/L	MW-44A	8	0.550	0.000	0.670	0.550	0.550	35.000	
Vanadium	ug/L	MW-4B	8	0.550	0.000	0.670	0.550	0.550	35.000	
Vanadium	ug/L	MW-7A	8	0.550	0.000	0.670	0.550	0.550	35.000	
Zinc	ug/L	MW-24A	8	12.419	21.408	0.670	0.000	26.758	2000.000	
Zinc	ug/L	MW-29A	8	9.638	13.117	0.670	0.852	18.423	2000.000	
Zinc	ug/L	MW-31A	8	7.313	6.541	0.670	2.931	11.694	2000.000	
Zinc	ug/L	MW-33A	8	5.000	0.000	0.670	5.000	5.000	2000.000	
Zinc	ug/L	MW-4	8	5.000	0.000	0.670	5.000	5.000	2000.000	

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

Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	
Thallium Thallium Thallium Thallium Thallium Thallium Thallium Thallium	
Vanadium Vanadium Vanadium Vanadium Vanadium Vanadium Vanadium Vanadium Vanadium Vanadium Vanadium	
Zinc Zinc Zinc Zinc Zinc	

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

Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
Zinc	ug/L	MW-40A	8	5.000	0.000	0.670	5.000	5.000	2000.000	
Zinc	ug/L	MW-42A	8	4.850	0.000	0.670	4.850	4.850	2000.000	
Zinc	ug/L	MW-43A	8	4.850	0.000	0.670	4.850	4.850	2000.000	
Zinc	ug/L	MW-44A	8	15.062	11.060	0.670	7.654	22.471	2000.000	
Zinc	ug/L	MW-4B	8	5.000	0.000	0.670	5.000	5.000	2000.000	
Zinc	ug/L	MW-7A	8	5.000	0.000	0.670	5.000	5.000	2000.000	

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

Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	
Zinc	
Zinc	
Zinc	
Zinc	
Zinc	
Zinc	

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

Worksheet 6 - Assessment Monitoring
Antimony (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **3.775** / **8** = **0.472**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))$^{1/2}$ = ((**4.415** - **14.251**/**8**) / (**8**-1))$^{1/2}$ = **0.613**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**$^{1/2}$ = **0.472** - **1.895** * **0.613**/**8**$^{1/2}$ = **0.061**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**$^{1/2}$ = **0.472** + **1.895** * **0.613**/**8**$^{1/2}$ = **0.883**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **159.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**120** ± **2.576** * **159.667**$^{1/2}$) / 2 = [**43.725**, **76.275**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Antimony (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.0** / **8** = **0.5**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.0** - **16.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.5** - **1.895** * **0.0**/**8**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.5** + **1.895** * **0.0**/**8**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Antimony (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **5.72** / **8** = **0.715**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**6.678** - **32.718**/**8**) / (**8**-1))^{½} = **0.608**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.715** - **1.895** * **0.608**/**8**^{½} = **0.308**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.715** + **1.895** * **0.608**/**8**^{½} = **1.122**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **65.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **65.0**^{½}) / 2 = [**35.116**, **55.884**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Antimony (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.76** / **8** = **0.345**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.952** - **7.618**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.345** - **1.895** * **0.0**/**8**^{½} = **0.345**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.345** + **1.895** * **0.0**/**8**^{½} = **0.345**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Antimony (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.12** / **8** = **0.265**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.562** - **4.494**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.265** - **1.895** * **0.0**/**8**^{½} = **0.265**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.265** + **1.895** * **0.0**/**8**^{½} = **0.265**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **337.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **337.0**^{½}) / 2 = [**102.855**, **150.145**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Antimony (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.0** / **8** = **0.5**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.0** - **16.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.5** - **1.895** * **0.0**/**8**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.5** + **1.895** * **0.0**/**8**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **0.0**^{½}) / 2 = [**27.5**, **27.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Antimony (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.0** / **8** = **0.5**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.0** - **16.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.5** - **1.895** * **0.0**/**8**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.5** + **1.895** * **0.0**/**8**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Antimony (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.0** / **8** = **0.5**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.0** - **16.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.5** - **1.895** * **0.0**/**8**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.5** + **1.895** * **0.0**/**8**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Antimony (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.0** / **8** = **0.5**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.0** - **16.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.5** - **1.895** * **0.0**/**8**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.5** + **1.895** * **0.0**/**8**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Antimony (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.04** / **8** = **0.255**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.52** - **4.162**/**8**) / (**8**-1))^{½} = **5.40**x**10**$^{-9}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.255** - **1.895** * **5.40**x**10**$^{-9}$/**8**^{½} = **0.255**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.255** + **1.895** * **5.40**x**10**$^{-9}$/**8**^{½} = **0.255**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **176.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **176.0**^{½}) / 2 = [**109.413**, **143.587**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Antimony (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.76** / **8** = **0.345**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.952** - **7.618**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.345** - **1.895** * **0.0**/**8**^{½} = **0.345**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.345** + **1.895** * **0.0**/**8**^{½} = **0.345**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **24** * (**24**-1) / 2 = **276**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **528.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**276** ± **2.576** * **528.667**^{½}) / 2 = [**108.385**, **167.615**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.28** / **8** = **0.285**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.65** - **5.198**/**8**) / (**8**-1))^{½} = **2.52**x**10**$^{-9}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.285** - **1.895** * **2.52**x**10**$^{-9}$/**8**^{½} = **0.285**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.285** + **1.895** * **2.52**x**10**$^{-9}$/**8**^{½} = **0.285**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **0.0**^{½}) / 2 = [**60.0**, **60.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **44.275** / **8** = **5.534**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**299.614** - **1960.276**/**8**) / (**8**-1))^{½} = **2.792**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **5.534** - **1.895** * **2.792**/**8**^{½} = **3.664**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **5.534** + **1.895** * **2.792**/**8**^{½} = **7.405**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.563**	Sen's estimator of trend.
7	var(S) = **332.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **332.667**^{½}) / 2 = [**22.008**, **68.992**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.884**, **2.253**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.12** / **8** = **0.265**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.562** - **4.494**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.265** - **1.895** * **0.0**/**8**^{½} = **0.265**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.265** + **1.895** * **0.0**/**8**^{½} = **0.265**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **208.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **208.667**^{½}) / 2 = [**26.894**, **64.106**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.742**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **241.725** / **8** = **30.216**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**16571.71** - **58430.976**/**8**) / (**8**-1))^{½} = **36.386**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **30.216** - **1.895** * **36.386**/**8**^{½} = **5.843**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **30.216** + **1.895** * **36.386**/**8**^{½} = **54.588**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **15** * (**15**-1) / 2 = **105**	Number of sample pairs during trend detection period.
6	S = **-3.49**	Sen's estimator of trend.
7	var(S) = **408.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**105** ± **2.576** * **408.333**^{½}) / 2 = [**26.473**, **78.527**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-17.71**, **11.001**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.688** / **8** = **0.336**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.903** - **7.225**/**8**) / (**8**-1))^{½} = **6.19**x**10**$^{-9}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.336** - **1.895** * **6.19**x**10**$^{-9}$/**8**^{½} = **0.336**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.336** + **1.895** * **6.19**x**10**$^{-9}$/**8**^{½} = **0.336**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **337.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **337.0**^{½}) / 2 = [**102.855**, **150.145**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **3.0** / **8** = **0.375**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.125** - **9.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.375** - **1.895** * **0.0**/**8**^{½} = **0.375**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.375** + **1.895** * **0.0**/**8**^{½} = **0.375**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **0.0**^{½}) / 2 = [**27.5**, **27.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.815** / **8** = **0.602**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**9.253** - **23.184**/**8**) / (**8**-1))^{½} = **0.953**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.602** - **1.895** * **0.953**/**8**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.602** + **1.895** * **0.953**/**8**^{½} = **1.24**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **21.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **21.0**^{½}) / 2 = [**8.098**, **19.902**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **62.22** / **8** = **7.778**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**494.335** - **3871.328**/**8**) / (**8**-1))^{½} = **1.22**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **7.778** - **1.895** * **1.22**/**8**^{½} = **6.96**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **7.778** + **1.895** * **1.22**/**8**^{½} = **8.595**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **-0.392**	Sen's estimator of trend.
7	var(S) = **65.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **65.333**^{½}) / 2 = [**3.589**, **24.411**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-2.934**, **2.268**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.12** / **8** = **0.265**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.562** - **4.494**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.265** - **1.895** * **0.0**/**8**^{½} = **0.265**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.265** + **1.895** * **0.0**/**8**^{½} = **0.265**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.688** / **8** = **0.336**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.903** - **7.225**/**8**) / (**8**-1))^{½} = **6.19**x**10**$^{-9}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.336** - **1.895** * **6.19**x**10**$^{-9}$/**8**^{½} = **0.336**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.336** + **1.895** * **6.19**x**10**$^{-9}$/**8**^{½} = **0.336**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **337.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **337.0**^{½}) / 2 = [**102.855**, **150.145**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.688** / **8** = **0.336**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.903** - **7.225**/**8**) / (**8**-1))^{½} = **6.19**x**10**$^{-9}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.336** - **1.895** * **6.19**x**10**$^{-9}$/**8**^{½} = **0.336**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.336** + **1.895** * **6.19**x**10**$^{-9}$/**8**^{½} = **0.336**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **0.0**^{½}) / 2 = [**126.5**, **126.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **942.8** / **8** = **117.85**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**113235.84** - **888871.84**/**8**) / (**8**-1))^{½} = **17.431**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **117.85** - **1.895** * **17.431**/**8**^{½} = **106.175**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **117.85** + **1.895** * **17.431**/**8**^{½} = **129.525**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **-3.669**	Sen's estimator of trend.
7	var(S) = **493.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **493.333**^{½}) / 2 = [**31.392**, **88.608**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-10.424**, **3.004**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1338.0** / **8** = **167.25**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**226694.0** - **1.79**x**10^6**/**8**) / (**8**-1))^{½} = **20.401**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **167.25** - **1.895** * **20.401**/**8**^{½} = **153.585**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **167.25** + **1.895** * **20.401**/**8**^{½} = **180.915**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **-8.967**	Sen's estimator of trend.
7	var(S) = **333.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **333.667**^{½}) / 2 = [**21.973**, **69.027**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-26.325**, **4.178**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2020.0** / **8** = **252.5**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**561430.0** - **4.08**x**10^6**/**8**) / (**8**-1))^{½} = **85.674**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **252.5** - **1.895** * **85.674**/**8**^{½} = **195.115**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **252.5** + **1.895** * **85.674**/**8**^{½} = **309.885**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **-41.674**	Sen's estimator of trend.
7	var(S) = **332.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **332.667**^{½}) / 2 = [**22.008**, **68.992**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-110.254**, **23.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1538.0** / **8** = **192.25**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**341936.0** - **2.37**x**10^6**/**8**) / (**8**-1))^{½} = **81.289**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **192.25** - **1.895** * **81.289**/**8**^{½} = **137.801**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **192.25** + **1.895** * **81.289**/**8**^{½} = **246.699**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **10.898**	Sen's estimator of trend.
7	var(S) = **332.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **332.667**^{½}) / 2 = [**22.008**, **68.992**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-20.965**, **40.187**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **3677.0** / **8** = **459.625**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.81**x**10^6** - **1.35**x**10^7**/**8**) / (**8**-1))^{½} = **132.726**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **459.625** - **1.895** * **132.726**/**8**^{½} = **370.723**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **459.625** + **1.895** * **132.726**/**8**^{½} = **548.527**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **1.884**	Sen's estimator of trend.
7	var(S) = **1432.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **1432.667**^{½}) / 2 = [**77.748**, **175.252**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-10.018**, **10.274**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1728.0** / **8** = **216.0**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**378706.0** - **2.99**x**10^6**/**8**) / (**8**-1))^{½} = **27.923**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **216.0** - **1.895** * **27.923**/**8**^{½} = **197.297**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **216.0** + **1.895** * **27.923**/**8**^{½} = **234.703**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **-21.128**	Sen's estimator of trend.
7	var(S) = **165.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **165.0**^{½}) / 2 = [**10.955**, **44.045**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-40.936**, **-6.978**]	Two-sided confidence interval for slope.
10	UCL(S) < 0	**Significant decreasing trend.**

Worksheet 6 - Assessment Monitoring
Barium (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1166.4** / **8** = **145.8**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**196720.56** - **1.36**x**10^6**/**8**) / (**8**-1))^{½} = **61.713**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **145.8** - **1.895** * **61.713**/**8**^{½} = **104.464**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **145.8** + **1.895** * **61.713**/**8**^{½} = **187.136**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **10.743**	Sen's estimator of trend.
7	var(S) = **65.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **65.333**^{½}) / 2 = [**3.589**, **24.411**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-155.061**, **51.275**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1591.0** / **8** = **198.875**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**329475.0** - **2.53**x**10^6**/**8**) / (**8**-1))^{½} = **43.202**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **198.875** - **1.895** * **43.202**/**8**^{½} = **169.938**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **198.875** + **1.895** * **43.202**/**8**^{½} = **227.812**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **23.115**	Sen's estimator of trend.
7	var(S) = **65.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **65.333**^{½}) / 2 = [**3.589**, **24.411**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-55.457**, **115.828**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1498.0** / **8** = **187.25**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**292926.0** - **2.24**x**10^6**/**8**) / (**8**-1))^{½} = **42.132**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **187.25** - **1.895** * **42.132**/**8**^{½} = **159.03**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **187.25** + **1.895** * **42.132**/**8**^{½} = **215.47**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **-1.325**	Sen's estimator of trend.
7	var(S) = **65.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **65.333**^{½}) / 2 = [**3.589**, **24.411**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-96.103**, **74.616**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1864.0** / **8** = **233.0**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**476966.0** - **3.47**x**10^6**/**8**) / (**8**-1))^{½} = **78.06**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **233.0** - **1.895** * **78.06**/**8**^{½} = **180.714**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **233.0** + **1.895** * **78.06**/**8**^{½} = **285.286**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **25** * (**25**-1) / 2 = **300**	Number of sample pairs during trend detection period.
6	S = **-3.956**	Sen's estimator of trend.
7	var(S) = **1832.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**300** ± **2.576** * **1832.333**^{½}) / 2 = [**94.866**, **205.134**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-14.615**, **5.476**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2198.9** / **8** = **274.863**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**732972.61** - **4.84**x**10^6**/**8**) / (**8**-1))^{½} = **135.529**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **274.863** - **1.895** * **135.529**/**8**^{½} = **184.083**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **274.863** + **1.895** * **135.529**/**8**^{½} = **365.642**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **26** * (**26**-1) / 2 = **325**	Number of sample pairs during trend detection period.
6	S = **2.664**	Sen's estimator of trend.
7	var(S) = **2056.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**325** ± **2.576** * **2056.333**^{½}) / 2 = [**104.093**, **220.907**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-4.054**, **13.354**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Beryllium (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.08** / **8** = **0.135**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.146** - **1.166**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.135** - **1.895** * **0.0**/**8**^{½} = **0.135**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.135** + **1.895** * **0.0**/**8**^{½} = **0.135**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **0.0**^{½}) / 2 = [**60.0**, **60.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Beryllium (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.08** / **8** = **0.135**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.146** - **1.166**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.135** - **1.895** * **0.0**/**8**^{½} = **0.135**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.135** + **1.895** * **0.0**/**8**^{½} = **0.135**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Beryllium (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.08** / **8** = **0.135**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.146** - **1.166**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.135** - **1.895** * **0.0**/**8**^{½} = **0.135**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.135** + **1.895** * **0.0**/**8**^{½} = **0.135**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Beryllium (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.08** / **8** = **0.135**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.146** - **1.166**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.135** - **1.895** * **0.0**/**8**^{½} = **0.135**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.135** + **1.895** * **0.0**/**8**^{½} = **0.135**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Beryllium (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.08** / **8** = **0.135**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.146** - **1.166**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.135** - **1.895** * **0.0**/**8**^{½} = **0.135**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.135** + **1.895** * **0.0**/**8**^{½} = **0.135**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **0.0**^{½}) / 2 = [**126.5**, **126.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Beryllium (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.08** / **8** = **0.135**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.146** - **1.166**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.135** - **1.895** * **0.0**/**8**^{½} = **0.135**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.135** + **1.895** * **0.0**/**8**^{½} = **0.135**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **0.0**^{½}) / 2 = [**27.5**, **27.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Beryllium (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.32** / **8** = **0.165**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.218** - **1.742**/**8**) / (**8**-1))^{½} = **3.46**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.165** - **1.895** * **3.46**x**10**$^{-10}$/**8**^{½} = **0.165**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.165** + **1.895** * **3.46**x**10**$^{-10}$/**8**^{½} = **0.165**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Beryllium (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.32** / **8** = **0.165**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.218** - **1.742**/**8**) / (**8**-1))^{½} = **3.46**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.165** - **1.895** * **3.46**x**10**$^{-10}$/**8**^{½} = **0.165**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.165** + **1.895** * **3.46**x**10**$^{-10}$/**8**^{½} = **0.165**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Beryllium (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.32** / **8** = **0.165**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.218** - **1.742**/**8**) / (**8**-1))^{½} = **3.46**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.165** - **1.895** * **3.46**x**10**$^{-10}$/**8**^{½} = **0.165**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.165** + **1.895** * **3.46**x**10**$^{-10}$/**8**^{½} = **0.165**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Beryllium (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.08** / **8** = **0.135**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.146** - **1.166**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.135** - **1.895** * **0.0**/**8**^{½} = **0.135**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.135** + **1.895** * **0.0**/**8**^{½} = **0.135**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **337.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **337.0**^{½}) / 2 = [**102.855**, **150.145**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Beryllium (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.08** / **8** = **0.135**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.146** - **1.166**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.135** - **1.895** * **0.0**/**8**^{½} = **0.135**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.135** + **1.895** * **0.0**/**8**^{½} = **0.135**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **0.0**^{½}) / 2 = [**126.5**, **126.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.641** / **8** = **0.08**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.133** - **0.411**/**8**) / (**8**-1))^{½} = **0.108**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.08** - **1.895** * **0.108**/**8**^{½} = **0.008**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.08** + **1.895** * **0.108**/**8**^{½} = **0.152**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **328.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **328.333**^{½}) / 2 = [**36.661**, **83.339**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.018**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.22** / **8** = **0.028**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.006** - **0.048**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.028** - **1.895** * **0.0**/**8**^{½} = **0.028**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.028** + **1.895** * **0.0**/**8**^{½} = **0.028**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **168.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **168.667**^{½}) / 2 = [**28.773**, **62.227**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.02**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **3.866** / **8** = **0.483**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**5.347** - **14.946**/**8**) / (**8**-1))^{½} = **0.705**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.483** - **1.895** * **0.705**/**8**^{½} = **0.011**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.483** + **1.895** * **0.705**/**8**^{½} = **0.955**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **305.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **305.333**^{½}) / 2 = [**22.994**, **68.006**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.11**, **0.103**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.287** / **8** = **0.036**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.016** - **0.082**/**8**) / (**8**-1))^{½} = **0.029**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.036** - **1.895** * **0.029**/**8**^{½} = **0.016**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.036** + **1.895** * **0.029**/**8**^{½} = **0.055**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **65.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **65.0**^{½}) / 2 = [**35.116**, **55.884**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.672** / **8** = **0.084**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.093** - **0.452**/**8**) / (**8**-1))^{½} = **0.073**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.084** - **1.895** * **0.073**/**8**^{½} = **0.035**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.084** + **1.895** * **0.073**/**8**^{½} = **0.133**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **24** * (**24**-1) / 2 = **276**	Number of sample pairs during trend detection period.
6	S = **-0.002**	Sen's estimator of trend.
7	var(S) = **1460.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**276** ± **2.576** * **1460.333**^{½}) / 2 = [**88.78**, **187.22**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.014**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.22** / **8** = **0.028**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.006** - **0.048**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.028** - **1.895** * **0.0**/**8**^{½} = **0.028**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.028** + **1.895** * **0.0**/**8**^{½} = **0.028**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **0.0**^{½}) / 2 = [**27.5**, **27.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.631** / **8** = **0.079**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.096** - **0.398**/**8**) / (**8**-1))^{½} = **0.082**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.079** - **1.895** * **0.082**/**8**^{½} = **0.024**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.079** + **1.895** * **0.082**/**8**^{½} = **0.134**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **21.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **21.0**^{½}) / 2 = [**8.098**, **19.902**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.4** / **8** = **0.05**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.02** - **0.16**/**8**) / (**8**-1))^{½} = **7.32x10^{-10}**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.05** - **1.895** * **7.32x10^{-10}**/**8**^{½} = **0.05**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.05** + **1.895** * **7.32x10^{-10}**/**8**^{½} = **0.05**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.488** / **8** = **0.311**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.301** - **6.188**/**8**) / (**8**-1))^{½} = **0.275**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.311** - **1.895** * **0.275**/**8**^{½} = **0.127**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.311** + **1.895** * **0.275**/**8**^{½} = **0.495**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.144**	Sen's estimator of trend.
7	var(S) = **61.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **61.667**^{½}) / 2 = [**3.886**, **24.114**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.343**, **0.678**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.24** / **8** = **0.03**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.007** - **0.058**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.03** - **1.895** * **0.0**/**8**^{½} = **0.03**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.03** + **1.895** * **0.0**/**8**^{½} = **0.03**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **24** * (**24**-1) / 2 = **276**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **367.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**276** ± **2.576** * **367.667**^{½}) / 2 = [**113.303**, **162.697**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.24** / **8** = **0.03**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.007** - **0.058**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.03** - **1.895** * **0.0**/**8**^{½} = **0.03**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.03** + **1.895** * **0.0**/**8**^{½} = **0.03**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **0.0**^{½}) / 2 = [**126.5**, **126.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chromium (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **159.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **159.667**^{½}) / 2 = [**43.725**, **76.275**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chromium (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chromium (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **11.16** / **8** = **1.395**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**55.554** - **124.546**/**8**) / (**8**-1))^{½} = **2.39**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1.395** - **1.895** * **2.39**/**8**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1.395** + **1.895** * **2.39**/**8**^{½} = **2.996**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **65.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **65.0**^{½}) / 2 = [**35.116**, **55.884**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chromium (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chromium (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **337.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **337.0**^{½}) / 2 = [**102.855**, **150.145**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chromium (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **0.0**^{½}) / 2 = [**27.5**, **27.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chromium (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chromium (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **15.85** / **8** = **1.981**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**146.118** - **251.223**/**8**) / (**8**-1))^{½} = **4.048**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1.981** - **1.895** * **4.048**/**8**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1.981** + **1.895** * **4.048**/**8**^{½} = **4.693**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **21.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **21.0**^{½}) / 2 = [**8.098**, **19.902**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chromium (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chromium (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **483.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **483.667**^{½}) / 2 = [**98.174**, **154.826**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chromium (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **940.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **940.333**^{½}) / 2 = [**87.004**, **165.996**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.395**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.889** / **8** = **0.111**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.339** - **0.789**/**8**) / (**8**-1))^{½} = **0.185**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.111** - **1.895** * **0.185**/**8**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.111** + **1.895** * **0.185**/**8**^{½} = **0.235**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **328.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **328.333**^{½}) / 2 = [**36.661**, **83.339**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.076**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **87.75** / **8** = **10.969**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1134.555** - **7700.063**/**8**) / (**8**-1))^{½} = **4.958**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **10.969** - **1.895** * **4.958**/**8**^{½} = **7.648**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **10.969** + **1.895** * **4.958**/**8**^{½} = **14.289**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.615**	Sen's estimator of trend.
7	var(S) = **332.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **332.667**^{½}) / 2 = [**22.008**, **68.992**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-1.25**, **2.483**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **54.56** / **8** = **6.82**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1113.304** - **2976.794**/**8**) / (**8**-1))^{½} = **10.29**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **6.82** - **1.895** * **10.29**/**8**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **6.82** + **1.895** * **10.29**/**8**^{½} = **13.712**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **-2.132**	Sen's estimator of trend.
7	var(S) = **333.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **333.667**^{½}) / 2 = [**21.973**, **69.027**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-3.503**, **-0.36**]	Two-sided confidence interval for slope.
10	UCL(S) < 0	**Significant decreasing trend.**

Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **18.642** / **8** = **2.33**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**68.412** - **347.506**/**8**) / (**8**-1))^{½} = **1.889**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **2.33** - **1.895** * **1.889**/**8**^{½} = **1.065**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **2.33** + **1.895** * **1.889**/**8**^{½} = **3.595**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.117**	Sen's estimator of trend.
7	var(S) = **331.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **331.667**^{½}) / 2 = [**22.043**, **68.957**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.971**, **0.743**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **11.846** / **8** = **1.481**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**20.831** - **140.316**/**8**) / (**8**-1))^{½} = **0.686**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1.481** - **1.895** * **0.686**/**8**^{½} = **1.021**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1.481** + **1.895** * **0.686**/**8**^{½} = **1.94**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.104**	Sen's estimator of trend.
7	var(S) = **1404.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **1404.333**^{½}) / 2 = [**78.233**, **174.767**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.085**, **0.233**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **13.237** / **8** = **1.655**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**23.249** - **175.218**/**8**) / (**8**-1))^{½} = **0.439**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1.655** - **1.895** * **0.439**/**8**^{½} = **1.361**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1.655** + **1.895** * **0.439**/**8**^{½} = **1.948**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.177**	Sen's estimator of trend.
7	var(S) = **165.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **165.0**^{½}) / 2 = [**10.955**, **44.045**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.566**, **0.548**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **19.528** / **8** = **2.441**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**55.773** - **381.343**/**8**) / (**8**-1))^{½} = **1.076**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **2.441** - **1.895** * **1.076**/**8**^{½} = **1.72**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **2.441** + **1.895** * **1.076**/**8**^{½} = **3.162**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **-0.575**	Sen's estimator of trend.
7	var(S) = **64.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **64.333**^{½}) / 2 = [**3.669**, **24.331**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-2.616**, **0.868**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **32.38** / **8** = **4.048**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**133.658** - **1048.464**/**8**) / (**8**-1))^{½} = **0.609**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **4.048** - **1.895** * **0.609**/**8**^{½} = **3.639**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **4.048** + **1.895** * **0.609**/**8**^{½} = **4.456**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.116**	Sen's estimator of trend.
7	var(S) = **65.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **65.333**^{½}) / 2 = [**3.589**, **24.411**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-1.234**, **1.415**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.141** / **8** = **0.268**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.021** - **4.584**/**8**) / (**8**-1))^{½} = **0.253**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.268** - **1.895** * **0.253**/**8**^{½} = **0.098**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.268** + **1.895** * **0.253**/**8**^{½} = **0.437**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **-0.081**	Sen's estimator of trend.
7	var(S) = **48.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **48.667**^{½}) / 2 = [**5.015**, **22.985**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.547**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.68** / **8** = **0.085**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.058** - **0.462**/**8**) / (**8**-1))^{½} = **1.76**x**10**$^{-9}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.085** - **1.895** * **1.76**x**10**$^{-9}$/**8**^{½} = **0.085**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.085** + **1.895** * **1.76**x**10**$^{-9}$/**8**^{½} = **0.085**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **1025.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **1025.333**^{½}) / 2 = [**85.257**, **167.743**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.201**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.364** / **8** = **0.046**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.017** - **0.132**/**8**) / (**8**-1))^{½} = **6.33**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.046** - **1.895** * **6.33**x**10**$^{-10}$/**8**^{½} = **0.045**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.046** + **1.895** * **6.33**x**10**$^{-10}$/**8**^{½} = **0.046**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **483.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **483.667**^{½}) / 2 = [**98.174**, **154.826**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **7.2** / **8** = **0.9**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**6.48** - **51.84**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.9** - **1.895** * **0.0**/**8**^{½} = **0.9**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.9** + **1.895** * **0.0**/**8**^{½} = **0.9**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **-0.038**	Sen's estimator of trend.
7	var(S) = **367.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **367.333**^{½}) / 2 = [**35.314**, **84.686**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.21**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **7.2** / **8** = **0.9**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**6.48** - **51.84**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.9** - **1.895** * **0.0**/**8**^{½} = **0.9**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.9** + **1.895** * **0.0**/**8**^{½} = **0.9**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **36.54** / **8** = **4.568**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**555.376** - **1335.172**/**8**) / (**8**-1))^{½} = **7.45**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **4.568** - **1.895** * **7.45**/**8**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **4.568** + **1.895** * **7.45**/**8**^{½} = **9.557**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **168.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **168.667**^{½}) / 2 = [**28.773**, **62.227**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **15.26** / **8** = **1.908**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**85.952** - **232.868**/**8**) / (**8**-1))^{½} = **2.85**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1.908** - **1.895** * **2.85**/**8**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1.908** + **1.895** * **2.85**/**8**^{½} = **3.816**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **65.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **65.0**^{½}) / 2 = [**35.116**, **55.884**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **7.2** / **8** = **0.9**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**6.48** - **51.84**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.9** - **1.895** * **0.0**/**8**^{½} = **0.9**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.9** + **1.895** * **0.0**/**8**^{½} = **0.9**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **24** * (**24**-1) / 2 = **276**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **528.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**276** ± **2.576** * **528.667**^{½}) / 2 = [**108.385**, **167.615**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **14.01** / **8** = **1.751**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**65.114** - **196.28**/**8**) / (**8**-1))^{½} = **2.408**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1.751** - **1.895** * **2.408**/**8**^{½} = **0.139**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1.751** + **1.895** * **2.408**/**8**^{½} = **3.364**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **40.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **40.0**^{½}) / 2 = [**19.354**, **35.646**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **15.97** / **8** = **1.996**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**99.179** - **255.041**/**8**) / (**8**-1))^{½} = **3.101**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1.996** - **1.895** * **3.101**/**8**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1.996** + **1.895** * **3.101**/**8**^{½} = **4.073**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **21.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **21.0**^{½}) / 2 = [**8.098**, **19.902**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **12.7** / **8** = **1.588**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**46.63** - **161.29**/**8**) / (**8**-1))^{½} = **1.945**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1.588** - **1.895** * **1.945**/**8**^{½} = **0.285**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1.588** + **1.895** * **1.945**/**8**^{½} = **2.89**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **21.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **21.0**^{½}) / 2 = [**8.098**, **19.902**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **7.2** / **8** = **0.9**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**6.48** - **51.84**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.9** - **1.895** * **0.0**/**8**^{½} = **0.9**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.9** + **1.895** * **0.0**/**8**^{½} = **0.9**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **7.2** / **8** = **0.9**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**6.48** - **51.84**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.9** - **1.895** * **0.0**/**8**^{½} = **0.9**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.9** + **1.895** * **0.0**/**8**^{½} = **0.9**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **844.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **844.333**^{½}) / 2 = [**89.074**, **163.926**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.055**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **6.4** / **8** = **0.8**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**5.12** - **40.96**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.8** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.8**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.8** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.8**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **176.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **176.0**^{½}) / 2 = [**109.413**, **143.587**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field pH (SU) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **55.91** / **8** = **6.989**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**392.288** - **3125.928**/**8**) / (**8**-1))^{½} = **0.47**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **6.989** - **1.895** * **0.47**/**8**^{½} = **6.674**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **6.989** + **1.895** * **0.47**/**8**^{½} = **7.304**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **-0.036**	Sen's estimator of trend.
7	var(S) = **492.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **492.333**^{½}) / 2 = [**31.421**, **88.579**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.112**, **0.062**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field pH (SU) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **53.74** / **8** = **6.718**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**362.289** - **2887.988**/**8**) / (**8**-1))^{½} = **0.429**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **6.718** - **1.895** * **0.429**/**8**^{½} = **6.43**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **6.718** + **1.895** * **0.429**/**8**^{½} = **7.005**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **-0.005**	Sen's estimator of trend.
7	var(S) = **493.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **493.333**^{½}) / 2 = [**31.392**, **88.608**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.137**, **0.145**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field pH (SU) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **55.41** / **8** = **6.926**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**385.194** - **3070.268**/**8**) / (**8**-1))^{½} = **0.449**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **6.926** - **1.895** * **0.449**/**8**^{½} = **6.626**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **6.926** + **1.895** * **0.449**/**8**^{½} = **7.227**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.026**	Sen's estimator of trend.
7	var(S) = **491.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **491.333**^{½}) / 2 = [**31.45**, **88.55**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.088**, **0.132**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field pH (SU) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **55.31** / **8** = **6.914**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**384.872** - **3059.196**/**8**) / (**8**-1))^{½} = **0.594**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **6.914** - **1.895** * **0.594**/**8**^{½} = **6.516**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **6.914** + **1.895** * **0.594**/**8**^{½} = **7.312**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **-0.033**	Sen's estimator of trend.
7	var(S) = **333.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **333.667**^{½}) / 2 = [**21.973**, **69.027**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.166**, **0.129**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field pH (SU) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **53.54** / **8** = **6.693**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**359.837** - **2866.532**/**8**) / (**8**-1))^{½} = **0.466**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **6.693** - **1.895** * **0.466**/**8**^{½} = **6.38**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **6.693** + **1.895** * **0.466**/**8**^{½} = **7.005**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **-0.008**	Sen's estimator of trend.
7	var(S) = **1092.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **1092.667**^{½}) / 2 = [**62.425**, **147.575**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.073**, **0.025**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field pH (SU) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **57.15** / **8** = **7.144**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**409.476** - **3266.123**/**8**) / (**8**-1))^{½} = **0.416**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **7.144** - **1.895** * **0.416**/**8**^{½} = **6.865**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **7.144** + **1.895** * **0.416**/**8**^{½} = **7.422**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **-0.02**	Sen's estimator of trend.
7	var(S) = **164.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **164.0**^{½}) / 2 = [**11.006**, **43.994**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.367**, **0.368**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field pH (SU) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **57.78** / **8** = **7.223**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**419.13** - **3338.528**/**8**) / (**8**-1))^{½} = **0.509**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **7.223** - **1.895** * **0.509**/**8**^{½} = **6.882**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **7.223** + **1.895** * **0.509**/**8**^{½} = **7.563**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **-0.266**	Sen's estimator of trend.
7	var(S) = **65.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **65.333**^{½}) / 2 = [**3.589**, **24.411**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-1.377**, **0.65**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field pH (SU) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **55.17** / **8** = **6.896**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**381.424** - **3043.729**/**8**) / (**8**-1))^{½} = **0.37**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **6.896** - **1.895** * **0.37**/**8**^{½} = **6.649**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **6.896** + **1.895** * **0.37**/**8**^{½} = **7.144**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **9** * (**9**-1) / 2 = **36**	Number of sample pairs during trend detection period.
6	S = **0.019**	Sen's estimator of trend.
7	var(S) = **91.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**36** ± **2.576** * **91.0**^{½}) / 2 = [**5.713**, **30.287**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.892**, **0.272**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field pH (SU) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **55.68** / **8** = **6.96**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**389.654** - **3100.262**/**8**) / (**8**-1))^{½} = **0.55**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **6.96** - **1.895** * **0.55**/**8**^{½} = **6.591**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **6.96** + **1.895** * **0.55**/**8**^{½} = **7.329**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **-0.2**	Sen's estimator of trend.
7	var(S) = **65.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **65.333**^{½}) / 2 = [**3.589**, **24.411**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-1.354**, **0.707**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field pH (SU) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **55.6** / **8** = **6.95**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**387.921** - **3091.36**/**8**) / (**8**-1))^{½} = **0.463**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **6.95** - **1.895** * **0.463**/**8**^{½} = **6.64**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **6.95** + **1.895** * **0.463**/**8**^{½} = **7.26**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **26** * (**26**-1) / 2 = **325**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **2051.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**325** ± **2.576** * **2051.667**^{½}) / 2 = [**104.16**, **220.84**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.097**, **0.034**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field pH (SU) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **57.5** / **8** = **7.188**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**415.351** - **3306.25**/**8**) / (**8**-1))^{½} = **0.544**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **7.188** - **1.895** * **0.544**/**8**^{½} = **6.823**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **7.188** + **1.895** * **0.544**/**8**^{½} = **7.552**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **24** * (**24**-1) / 2 = **276**	Number of sample pairs during trend detection period.
6	S = **-0.026**	Sen's estimator of trend.
7	var(S) = **1625.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**276** ± **2.576** * **1625.333**^{½}) / 2 = [**86.074**, **189.926**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.087**, **0.047**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field Specific Conductance (umhos/cm) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **9278.76** / **8** = **1159.845**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.18**x**10^7** - **8.61**x**10^7**/**8**) / (**8**-1))^{½} = **391.046**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1159.845** - **1.895** * **391.046**/**8**^{½} = **897.917**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1159.845** + **1.895** * **391.046**/**8**^{½} = **1421.773**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **9.466**	Sen's estimator of trend.
7	var(S) = **492.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **492.333**^{½}) / 2 = [**31.421**, **88.579**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-44.471**, **91.655**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field Specific Conductance (umhos/cm) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **16667.2** / **8** = **2083.4**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**3.61**x**10^7** - **2.78**x**10^8**/**8**) / (**8**-1))^{½} = **450.072**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **2083.4** - **1.895** * **450.072**/**8**^{½} = **1781.935**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **2083.4** + **1.895** * **450.072**/**8**^{½} = **2384.865**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **137.722**	Sen's estimator of trend.
7	var(S) = **493.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **493.333**^{½}) / 2 = [**31.392**, **88.608**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**42.024**, **266.812**]	Two-sided confidence interval for slope.
10	LCL(S) > 0	**Significant increasing trend.**

Worksheet 6 - Assessment Monitoring
Field Specific Conductance (umhos/cm) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **20968.6** / **8** = **2621.075**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**6.33**x**10^7** - **4.40**x**10^8**/**8**) / (**8**-1))^{½} = **1093.034**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **2621.075** - **1.895** * **1093.034**/**8**^{½} = **1888.946**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **2621.075** + **1.895** * **1093.034**/**8**^{½} = **3353.204**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **199.803**	Sen's estimator of trend.
7	var(S) = **493.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **493.333**^{½}) / 2 = [**31.392**, **88.608**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**15.667**, **573.55**]	Two-sided confidence interval for slope.
10	LCL(S) > 0	**Significant increasing trend.**

Worksheet 6 - Assessment Monitoring
Field Specific Conductance (umhos/cm) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **9540.84** / **8** = **1192.605**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.53**x**10^7** - **9.10**x**10^7**/**8**) / (**8**-1))^{½} = **752.352**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1192.605** - **1.895** * **752.352**/**8**^{½} = **688.669**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1192.605** + **1.895** * **752.352**/**8**^{½} = **1696.541**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **46.022**	Sen's estimator of trend.
7	var(S) = **333.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **333.667**^{½}) / 2 = [**21.973**, **69.027**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.013**, **348.024**]	Two-sided confidence interval for slope.
10	LCL(S) > 0	**Significant increasing trend.**

Worksheet 6 - Assessment Monitoring
Field Specific Conductance (umhos/cm) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **12406.6** / **8** = **1550.825**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.19**x**10^7** - **1.54**x**10^8**/**8**) / (**8**-1))^{½} = **617.034**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1550.825** - **1.895** * **617.034**/**8**^{½} = **1137.528**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1550.825** + **1.895** * **617.034**/**8**^{½} = **1964.122**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **62.077**	Sen's estimator of trend.
7	var(S) = **1096.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**210** ± **2.576** * **1096.667**^{½}) / 2 = [**62.347**, **147.653**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**28.8**, **107.297**]	Two-sided confidence interval for slope.
10	LCL(S) > 0	**Significant increasing trend.**

Worksheet 6 - Assessment Monitoring
Field Specific Conductance (umhos/cm) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **12010.9** / **8** = **1501.363**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.26**x**10^7** - **1.44**x**10^8**/**8**) / (**8**-1))^{½} = **809.306**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1501.363** - **1.895** * **809.306**/**8**^{½} = **959.279**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1501.363** + **1.895** * **809.306**/**8**^{½} = **2043.446**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **189.768**	Sen's estimator of trend.
7	var(S) = **165.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **165.0**^{½}) / 2 = [**10.955**, **44.045**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**22.234**, **668.864**]	Two-sided confidence interval for slope.
10	LCL(S) > 0	**Significant increasing trend.**

Worksheet 6 - Assessment Monitoring
Field Specific Conductance (umhos/cm) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **14061.91** / **8** = **1757.739**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**3.20**x**10^7** - **1.98**x**10^8**/**8**) / (**8**-1))^{½} = **1021.247**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1757.739** - **1.895** * **1021.247**/**8**^{½} = **1073.694**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1757.739** + **1.895** * **1021.247**/**8**^{½} = **2441.784**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **399.833**	Sen's estimator of trend.
7	var(S) = **65.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **65.333**^{½}) / 2 = [**3.589**, **24.411**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-918.308**, **1531.235**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field Specific Conductance (umhos/cm) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **13659.2** / **8** = **1707.4**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.88**x**10^7** - **1.87**x**10^8**/**8**) / (**8**-1))^{½} = **887.129**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1707.4** - **1.895** * **887.129**/**8**^{½} = **1113.189**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1707.4** + **1.895** * **887.129**/**8**^{½} = **2301.611**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **9** * (**9**-1) / 2 = **36**	Number of sample pairs during trend detection period.
6	S = **325.943**	Sen's estimator of trend.
7	var(S) = **92.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**36** ± **2.576** * **92.0**^{½}) / 2 = [**5.646**, **30.354**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-193.771**, **1288.571**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field Specific Conductance (umhos/cm) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **14338.3** / **8** = **1792.288**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**3.25**x**10^7** - **2.06**x**10^8**/**8**) / (**8**-1))^{½} = **988.512**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1792.288** - **1.895** * **988.512**/**8**^{½} = **1130.169**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1792.288** + **1.895** * **988.512**/**8**^{½} = **2454.406**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **471.229**	Sen's estimator of trend.
7	var(S) = **65.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **65.333**^{½}) / 2 = [**3.589**, **24.411**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-455.955**, **1530.633**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field Specific Conductance (umhos/cm) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **7880.74** / **8** = **985.093**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.22**x**10^7** - **6.21**x**10^7**/**8**) / (**8**-1))^{½} = **794.583**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **985.093** - **1.895** * **794.583**/**8**^{½} = **452.87**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **985.093** + **1.895** * **794.583**/**8**^{½} = **1517.315**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **26** * (**26**-1) / 2 = **325**	Number of sample pairs during trend detection period.
6	S = **13.531**	Sen's estimator of trend.
7	var(S) = **2058.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**325** ± **2.576** * **2058.333**^{½}) / 2 = [**104.065**, **220.935**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-20.46**, **40.005**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Field Specific Conductance (umhos/cm) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **9550.55** / **8** = **1193.819**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.36**x**10^7** - **9.12**x**10^7**/**8**) / (**8**-1))^{½} = **557.924**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1193.819** - **1.895** * **557.924**/**8**^{½} = **820.114**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1193.819** + **1.895** * **557.924**/**8**^{½} = **1567.524**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **24** * (**24**-1) / 2 = **276**	Number of sample pairs during trend detection period.
6	S = **47.011**	Sen's estimator of trend.
7	var(S) = **1625.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**276** ± **2.576** * **1625.333**^{½}) / 2 = [**86.074**, **189.926**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**10.905**, **103.476**]	Two-sided confidence interval for slope.
10	LCL(S) > 0	**Significant increasing trend.**

Worksheet 6 - Assessment Monitoring
Lead (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.96** / **8** = **0.12**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.115** - **0.922**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.12** - **1.895** * **0.0**/**8**^{½} = **0.12**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.12** + **1.895** * **0.0**/**8**^{½} = **0.12**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **159.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **159.667**^{½}) / 2 = [**43.725**, **76.275**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Lead (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.96** / **8** = **0.12**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.115** - **0.922**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.12** - **1.895** * **0.0**/**8**^{½} = **0.12**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.12** + **1.895** * **0.0**/**8**^{½} = **0.12**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Lead (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.52** / **8** = **0.315**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.923** - **6.35**/**8**) / (**8**-1))^{½} = **0.552**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.315** - **1.895** * **0.552**/**8**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.315** + **1.895** * **0.552**/**8**^{½} = **0.684**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **241.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **241.667**^{½}) / 2 = [**25.477**, **65.523**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.267**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Lead (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.612** / **8** = **0.577**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**11.369** - **21.271**/**8**) / (**8**-1))^{½} = **1.115**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.577** - **1.895** * **1.115**/**8**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.577** + **1.895** * **1.115**/**8**^{½} = **1.324**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **121.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **121.0**^{½}) / 2 = [**31.332**, **59.668**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Lead (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.96** / **8** = **0.12**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.115** - **0.922**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.12** - **1.895** * **0.0**/**8**^{½} = **0.12**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.12** + **1.895** * **0.0**/**8**^{½} = **0.12**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **176.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **176.0**^{½}) / 2 = [**109.413**, **143.587**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Lead (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.96** / **8** = **0.12**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.115** - **0.922**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.12** - **1.895** * **0.0**/**8**^{½} = **0.12**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.12** + **1.895** * **0.0**/**8**^{½} = **0.12**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **0.0**^{½}) / 2 = [**27.5**, **27.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Lead (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.96** / **8** = **0.12**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.115** - **0.922**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.12** - **1.895** * **0.0**/**8**^{½} = **0.12**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.12** + **1.895** * **0.0**/**8**^{½} = **0.12**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Lead (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.96** / **8** = **0.12**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.115** - **0.922**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.12** - **1.895** * **0.0**/**8**^{½} = **0.12**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.12** + **1.895** * **0.0**/**8**^{½} = **0.12**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Lead (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.96** / **8** = **0.12**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.115** - **0.922**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.12** - **1.895** * **0.0**/**8**^{½} = **0.12**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.12** + **1.895** * **0.0**/**8**^{½} = **0.12**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Lead (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.96** / **8** = **0.12**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.115** - **0.922**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.12** - **1.895** * **0.0**/**8**^{½} = **0.12**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.12** + **1.895** * **0.0**/**8**^{½} = **0.12**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **337.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **337.0**^{½}) / 2 = [**102.855**, **150.145**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Lead (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.96** / **8** = **0.12**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.115** - **0.922**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.12** - **1.895** * **0.0**/**8**^{½} = **0.12**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.12** + **1.895** * **0.0**/**8**^{½} = **0.12**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **483.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **483.667**^{½}) / 2 = [**98.174**, **154.826**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **47.84** / **8** = **5.98**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**323.322** - **2288.666**/**8**) / (**8**-1))^{½} = **2.306**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **5.98** - **1.895** * **2.306**/**8**^{½} = **4.435**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **5.98** + **1.895** * **2.306**/**8**^{½} = **7.525**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **17** * (**17**-1) / 2 = **136**	Number of sample pairs during trend detection period.
6	S = **-1.089**	Sen's estimator of trend.
7	var(S) = **589.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**136** ± **2.576** * **589.333**^{½}) / 2 = [**36.732**, **99.268**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-1.685**, **-0.366**]	Two-sided confidence interval for slope.
10	UCL(S) < 0	**Significant decreasing trend.**

Worksheet 6 - Assessment Monitoring
Nickel (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **534.2** / **8** = **66.775**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**36609.14** - **285369.64**/**8**) / (**8**-1))^{½} = **11.575**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **66.775** - **1.895** * **11.575**/**8**^{½} = **59.022**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **66.775** + **1.895** * **11.575**/**8**^{½} = **74.528**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **4.447**	Sen's estimator of trend.
7	var(S) = **333.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **333.667**^{½}) / 2 = [**21.973**, **69.027**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.088**, **9.579**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **351.7** / **8** = **43.963**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**21043.65** - **123692.89**/**8**) / (**8**-1))^{½} = **28.239**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **43.963** - **1.895** * **28.239**/**8**^{½} = **25.048**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **43.963** + **1.895** * **28.239**/**8**^{½} = **62.877**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.969**	Sen's estimator of trend.
7	var(S) = **332.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **332.667**^{½}) / 2 = [**22.008**, **68.992**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-5.581**, **11.472**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **16.39** / **8** = **2.049**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**62.622** - **268.632**/**8**) / (**8**-1))^{½} = **2.037**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **2.049** - **1.895** * **2.037**/**8**^{½} = **0.684**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **2.049** + **1.895** * **2.037**/**8**^{½} = **3.413**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **121.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **121.0**^{½}) / 2 = [**31.332**, **59.668**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **47.15** / **8** = **5.894**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**317.195** - **2223.123**/**8**) / (**8**-1))^{½} = **2.37**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **5.894** - **1.895** * **2.37**/**8**^{½} = **4.307**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **5.894** + **1.895** * **2.37**/**8**^{½} = **7.481**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **1415.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **1415.0**^{½}) / 2 = [**78.05**, **174.95**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.856**, **0.463**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **109.15** / **8** = **13.644**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1594.973** - **11913.723**/**8**) / (**8**-1))^{½} = **3.887**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **13.644** - **1.895** * **3.887**/**8**^{½} = **11.04**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **13.644** + **1.895** * **3.887**/**8**^{½} = **16.247**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **1.514**	Sen's estimator of trend.
7	var(S) = **165.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **165.0**^{½}) / 2 = [**10.955**, **44.045**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-2.51**, **5.915**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **151.22** / **8** = **18.903**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**3152.704** - **22867.488**/**8**) / (**8**-1))^{½} = **6.484**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **18.903** - **1.895** * **6.484**/**8**^{½} = **14.56**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **18.903** + **1.895** * **6.484**/**8**^{½} = **23.245**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **9** * (**9**-1) / 2 = **36**	Number of sample pairs during trend detection period.
6	S = **3.929**	Sen's estimator of trend.
7	var(S) = **92.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**36** ± **2.576** * **92.0**^{½}) / 2 = [**5.646**, **30.354**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-18.422**, **10.081**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **224.6** / **8** = **28.075**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**6735.28** - **50445.16**/**8**) / (**8**-1))^{½} = **7.834**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **28.075** - **1.895** * **7.834**/**8**^{½} = **22.827**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **28.075** + **1.895** * **7.834**/**8**^{½} = **33.323**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **-0.965**	Sen's estimator of trend.
7	var(S) = **65.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **65.333**^{½}) / 2 = [**3.589**, **24.411**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-19.559**, **14.949**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **333.9** / **8** = **41.738**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**16506.43** - **111489.21**/**8**) / (**8**-1))^{½} = **19.162**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **41.738** - **1.895** * **19.162**/**8**^{½} = **28.903**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **41.738** + **1.895** * **19.162**/**8**^{½} = **54.572**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **4.452**	Sen's estimator of trend.
7	var(S) = **65.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **65.333**^{½}) / 2 = [**3.589**, **24.411**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-36.519**, **42.758**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **7.6** / **8** = **0.95**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**7.22** - **57.76**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.95** - **1.895** * **0.0**/**8**^{½} = **0.95**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.95** + **1.895** * **0.0**/**8**^{½} = **0.95**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **940.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **940.333**^{½}) / 2 = [**87.004**, **165.996**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.624**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **31.47** / **8** = **3.934**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**272.081** - **990.361**/**8**) / (**8**-1))^{½} = **4.603**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **3.934** - **1.895** * **4.603**/**8**^{½} = **0.851**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **3.934** + **1.895** * **4.603**/**8**^{½} = **7.017**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **1025.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **1025.333**^{½}) / 2 = [**85.257**, **167.743**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.087**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Selenium (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.0** / **8** = **0.5**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.0** - **16.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.5** - **1.895** * **0.0**/**8**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.5** + **1.895** * **0.0**/**8**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **85.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **85.0**^{½}) / 2 = [**48.125**, **71.875**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Selenium (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.0** / **8** = **0.5**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.0** - **16.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.5** - **1.895** * **0.0**/**8**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.5** + **1.895** * **0.0**/**8**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Selenium (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.0** / **8** = **0.5**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.0** - **16.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.5** - **1.895** * **0.0**/**8**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.5** + **1.895** * **0.0**/**8**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Selenium (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.0** / **8** = **0.5**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.0** - **16.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.5** - **1.895** * **0.0**/**8**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.5** + **1.895** * **0.0**/**8**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Selenium (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **3.928** / **8** = **0.491**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.929** - **15.429**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.491** - **1.895** * **0.0**/**8**^{½} = **0.491**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.491** + **1.895** * **0.0**/**8**^{½} = **0.491**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **176.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **176.0**^{½}) / 2 = [**109.413**, **143.587**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Selenium (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **3.84** / **8** = **0.48**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.843** - **14.746**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.48** - **1.895** * **0.0**/**8**^{½} = **0.48**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.48** + **1.895** * **0.0**/**8**^{½} = **0.48**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **0.0**^{½}) / 2 = [**27.5**, **27.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Selenium (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **5.6** / **8** = **0.7**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**3.92** - **31.36**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.7** - **1.895** * **0.0**/**8**^{½} = **0.7**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.7** + **1.895** * **0.0**/**8**^{½} = **0.7**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Selenium (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **5.6** / **8** = **0.7**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**3.92** - **31.36**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.7** - **1.895** * **0.0**/**8**^{½} = **0.7**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.7** + **1.895** * **0.0**/**8**^{½} = **0.7**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Selenium (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **5.6** / **8** = **0.7**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**3.92** - **31.36**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.7** - **1.895** * **0.0**/**8**^{½} = **0.7**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.7** + **1.895** * **0.0**/**8**^{½} = **0.7**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Selenium (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.0** / **8** = **0.5**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.0** - **16.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.5** - **1.895** * **0.0**/**8**^{½} = **0.5**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.5** + **1.895** * **0.0**/**8**^{½} = **0.5**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **337.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **337.0**^{½}) / 2 = [**102.855**, **150.145**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Selenium (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **3.928** / **8** = **0.491**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.929** - **15.429**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.491** - **1.895** * **0.0**/**8**^{½} = **0.491**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.491** + **1.895** * **0.0**/**8**^{½} = **0.491**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **176.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **176.0**^{½}) / 2 = [**109.413**, **143.587**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Silver (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.2** / **8** = **0.15**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.18** - **1.44**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.15** - **1.895** * **0.0**/**8**^{½} = **0.15**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.15** + **1.895** * **0.0**/**8**^{½} = **0.15**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **0.0**^{½}) / 2 = [**60.0**, **60.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Silver (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.57** / **8** = **0.321**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.519** - **6.605**/**8**) / (**8**-1))^{½} = **0.315**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.321** - **1.895** * **0.315**/**8**^{½} = **0.11**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.321** + **1.895** * **0.315**/**8**^{½} = **0.532**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **65.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **65.0**^{½}) / 2 = [**35.116**, **55.884**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Silver (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.68** / **8** = **0.21**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.353** - **2.822**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.21** - **1.895** * **0.0**/**8**^{½} = **0.21**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.21** + **1.895** * **0.0**/**8**^{½} = **0.21**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Silver (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.68** / **8** = **0.21**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.353** - **2.822**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.21** - **1.895** * **0.0**/**8**^{½} = **0.21**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.21** + **1.895** * **0.0**/**8**^{½} = **0.21**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Silver (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.505** / **8** = **0.313**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.704** - **6.275**/**8**) / (**8**-1))^{½} = **0.362**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.313** - **1.895** * **0.362**/**8**^{½} = **0.07**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.313** + **1.895** * **0.362**/**8**^{½} = **0.556**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **337.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **337.0**^{½}) / 2 = [**102.855**, **150.145**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Silver (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.96** / **8** = **0.245**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.48** - **3.842**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.245** - **1.895** * **0.0**/**8**^{½} = **0.245**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.245** + **1.895** * **0.0**/**8**^{½} = **0.245**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **0.0**^{½}) / 2 = [**27.5**, **27.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Silver (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.0** / **8** = **0.25**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.5** - **4.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.25** - **1.895** * **0.0**/**8**^{½} = **0.25**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.25** + **1.895** * **0.0**/**8**^{½} = **0.25**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Silver (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **11.11** / **8** = **1.389**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**88.047** - **123.432**/**8**) / (**8**-1))^{½} = **3.221**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1.389** - **1.895** * **3.221**/**8**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1.389** + **1.895** * **3.221**/**8**^{½} = **3.546**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **9** * (**9**-1) / 2 = **36**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **26.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**36** ± **2.576** * **26.667**^{½}) / 2 = [**11.349**, **24.651**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Silver (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2.76** / **8** = **0.345**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.458** - **7.618**/**8**) / (**8**-1))^{½} = **0.269**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.345** - **1.895** * **0.269**/**8**^{½} = **0.165**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.345** + **1.895** * **0.269**/**8**^{½} = **0.525**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **21.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **21.0**^{½}) / 2 = [**8.098**, **19.902**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Silver (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **6.665** / **8** = **0.833**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**29.076** - **44.422**/**8**) / (**8**-1))^{½} = **1.833**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.833** - **1.895** * **1.833**/**8**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.833** + **1.895** * **1.833**/**8**^{½} = **2.061**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **24** * (**24**-1) / 2 = **276**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **528.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**276** ± **2.576** * **528.667**^{½}) / 2 = [**108.385**, **167.615**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Silver (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.48** / **8** = **0.185**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.274** - **2.19**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.185** - **1.895** * **0.0**/**8**^{½} = **0.185**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.185** + **1.895** * **0.0**/**8**^{½} = **0.185**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **0.0**^{½}) / 2 = [**126.5**, **126.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Sulfide (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **924.0** / **8** = **115.5**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**106722.0** - **853776.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **115.5** - **1.895** * **0.0**/**8**^{½} = **115.5**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **115.5** + **1.895** * **0.0**/**8**^{½} = **115.5**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **40.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **40.0**^{½}) / 2 = [**19.354**, **35.646**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Sulfide (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **547.5** / **5** = **109.5**	Compute the mean of the last 5 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**59951.25** - **299756.25**/**5**) / (**5**-1))^{½} = **0.0**	Compute sd of the last 5 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **109.5** - **2.132** * **0.0**/**5**^{½} = **109.5**	Compute lower confidence limit for the mean of the last 5 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **109.5** + **2.132** * **0.0**/**5**^{½} = **109.5**	Compute upper confidence limit for the mean of the last 5 measurements.
5	N' = **N** * (**N**-1) / 2 = **5** * (**5**-1) / 2 = **10**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**10** ± **2.576** * **0.0**^{½}) / 2 = [**5.0**, **5.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Sulfide (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **438.0** / **4** = **109.5**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**47961.0** - **191844.0**/**4**) / (**4**-1))^{½} = **0.0**	Compute sd of the last 4 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **109.5** - **2.353** * **0.0**/**4**^{½} = **109.5**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **109.5** + **2.353** * **0.0**/**4**^{½} = **109.5**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **4** * (**4**-1) / 2 = **6**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**6** ± **2.576** * **0.0**^{½}) / 2 = [**3.0**, **3.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Thallium (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.04** / **8** = **0.13**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.135** - **1.082**/**8**) / (**8**-1))^{½} = **8.76**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.13** - **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.13** + **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **0.0**^{½}) / 2 = [**60.0**, **60.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Thallium (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.04** / **8** = **0.13**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.135** - **1.082**/**8**) / (**8**-1))^{½} = **8.76**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.13** - **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.13** + **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Thallium (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.04** / **8** = **0.13**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.135** - **1.082**/**8**) / (**8**-1))^{½} = **8.76**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.13** - **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.13** + **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Thallium (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.04** / **8** = **0.13**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.135** - **1.082**/**8**) / (**8**-1))^{½} = **8.76**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.13** - **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.13** + **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Thallium (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.04** / **8** = **0.13**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.135** - **1.082**/**8**) / (**8**-1))^{½} = **8.76**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.13** - **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.13** + **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **483.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **483.667**^{½}) / 2 = [**98.174**, **154.826**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Thallium (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.04** / **8** = **0.13**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.135** - **1.082**/**8**) / (**8**-1))^{½} = **8.76**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.13** - **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.13** + **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **0.0**^{½}) / 2 = [**27.5**, **27.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Thallium (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.04** / **8** = **0.13**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.135** - **1.082**/**8**) / (**8**-1))^{½} = **8.76**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.13** - **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.13** + **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Thallium (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.04** / **8** = **0.13**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.135** - **1.082**/**8**) / (**8**-1))^{½} = **8.76**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.13** - **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.13** + **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Thallium (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.04** / **8** = **0.13**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.135** - **1.082**/**8**) / (**8**-1))^{½} = **8.76**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.13** - **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.13** + **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Thallium (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.04** / **8** = **0.13**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.135** - **1.082**/**8**) / (**8**-1))^{½} = **8.76**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.13** - **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.13** + **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **337.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **337.0**^{½}) / 2 = [**102.855**, **150.145**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Thallium (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.04** / **8** = **0.13**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.135** - **1.082**/**8**) / (**8**-1))^{½} = **8.76**x**10**$^{-10}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.13** - **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.13** + **1.895** * **8.76**x**10**$^{-10}$/**8**^{½} = **0.13**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **337.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **337.0**^{½}) / 2 = [**102.855**, **150.145**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vanadium (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **3.4** / **8** = **0.425**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.445** - **11.56**/**8**) / (**8**-1))^{½} = **8.58**x**10**$^{-9}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.425** - **1.895** * **8.58**x**10**$^{-9}$/**8**^{½} = **0.425**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.425** + **1.895** * **8.58**x**10**$^{-9}$/**8**^{½} = **0.425**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **280.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **280.667**^{½}) / 2 = [**38.422**, **81.578**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.062**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vanadium (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vanadium (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vanadium (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vanadium (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **940.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **940.333**^{½}) / 2 = [**87.004**, **165.996**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.046**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vanadium (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **0.0**^{½}) / 2 = [**27.5**, **27.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vanadium (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vanadium (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vanadium (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vanadium (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **940.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **940.333**^{½}) / 2 = [**87.004**, **165.996**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.033**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vanadium (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.4** / **8** = **0.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2.42** - **19.36**/**8**) / (**8**-1))^{½} = **1.17**x**10**$^{-8}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.55** - **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.55** + **1.895** * **1.17**x**10**$^{-8}$/**8**^{½} = **0.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **940.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **940.333**^{½}) / 2 = [**87.004**, **165.996**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Zinc (ug/L) at MW-24A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **99.35** / **8** = **12.419**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**4441.818** - **9870.423**/**8**) / (**8**-1))^{½} = **21.408**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **12.419** - **1.895** * **21.408**/**8**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **12.419** + **1.895** * **21.408**/**8**^{½} = **26.758**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **16** * (**16**-1) / 2 = **120**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **159.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**120** ± **2.576** * **159.667**^{½}) / 2 = [**43.725**, **76.275**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Zinc (ug/L) at MW-29A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **77.1** / **8** = **9.638**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1947.41** - **5944.41**/**8**) / (**8**-1))^{½} = **13.117**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **9.638** - **1.895** * **13.117**/**8**^{½} = **0.852**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **9.638** + **1.895** * **13.117**/**8**^{½} = **18.423**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **65.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **65.0**^{½}) / 2 = [**35.116**, **55.884**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Zinc (ug/L) at MW-31A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **58.5** / **8** = **7.313**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**727.25** - **3422.25**/**8**) / (**8**-1))^{½} = **6.541**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **7.313** - **1.895** * **6.541**/**8**^{½} = **2.931**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **7.313** + **1.895** * **6.541**/**8**^{½} = **11.694**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **65.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **65.0**^{½}) / 2 = [**35.116**, **55.884**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Zinc (ug/L) at MW-33A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **40.0** / **8** = **5.0**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**200.0** - **1600.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **5.0** - **1.895** * **0.0**/**8**^{½} = **5.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **5.0** + **1.895** * **0.0**/**8**^{½} = **5.0**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Zinc (ug/L) at MW-4

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **40.0** / **8** = **5.0**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**200.0** - **1600.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **5.0** - **1.895** * **0.0**/**8**^{½} = **5.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **5.0** + **1.895** * **0.0**/**8**^{½} = **5.0**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **176.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **176.0**^{½}) / 2 = [**109.413**, **143.587**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Zinc (ug/L) at MW-40A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **40.0** / **8** = **5.0**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**200.0** - **1600.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **5.0** - **1.895** * **0.0**/**8**^{½} = **5.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **5.0** + **1.895** * **0.0**/**8**^{½} = **5.0**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **11** * (**11**-1) / 2 = **55**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**55** ± **2.576** * **0.0**^{½}) / 2 = [**27.5**, **27.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Zinc (ug/L) at MW-42A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **38.8** / **8** = **4.85**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**188.18** - **1505.44**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **4.85** - **1.895** * **0.0**/**8**^{½} = **4.85**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **4.85** + **1.895** * **0.0**/**8**^{½} = **4.85**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Zinc (ug/L) at MW-43A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **38.8** / **8** = **4.85**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**188.18** - **1505.44**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **4.85** - **1.895** * **0.0**/**8**^{½} = **4.85**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **4.85** + **1.895** * **0.0**/**8**^{½} = **4.85**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **0.0**^{½}) / 2 = [**14.0**, **14.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Zinc (ug/L) at MW-44A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **120.5** / **8** = **15.063**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**2671.32** - **14520.25**/**8**) / (**8**-1))^{½} = **11.06**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **15.063** - **1.895** * **11.06**/**8**^{½} = **7.654**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **15.063** + **1.895** * **11.06**/**8**^{½} = **22.471**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **56.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**28** ± **2.576** * **56.667**^{½}) / 2 = [**4.304**, **23.696**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-18.956**, **22.913**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

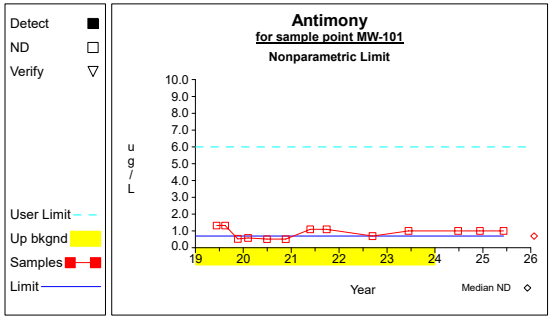
Worksheet 6 - Assessment Monitoring
Zinc (ug/L) at MW-4B

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **40.0** / **8** = **5.0**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**200.0** - **1600.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **5.0** - **1.895** * **0.0**/**8**^{½} = **5.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **5.0** + **1.895** * **0.0**/**8**^{½} = **5.0**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **23** * (**23**-1) / 2 = **253**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **176.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**253** ± **2.576** * **176.0**^{½}) / 2 = [**109.413**, **143.587**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

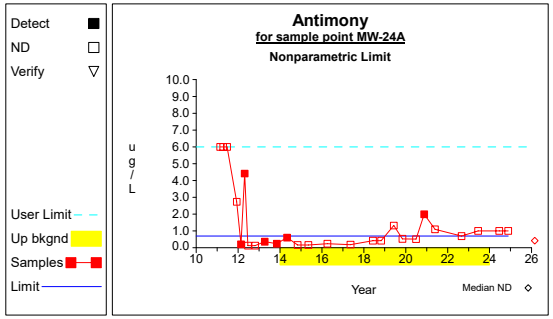
Worksheet 6 - Assessment Monitoring
Zinc (ug/L) at MW-7A

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **40.0** / **8** = **5.0**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**200.0** - **1600.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **5.0** - **1.895** * **0.0**/**8**^{½} = **5.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **5.0** + **1.895** * **0.0**/**8**^{½} = **5.0**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **24** * (**24**-1) / 2 = **276**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **675.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**276** ± **2.576** * **675.333**^{½}) / 2 = [**104.529**, **171.471**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

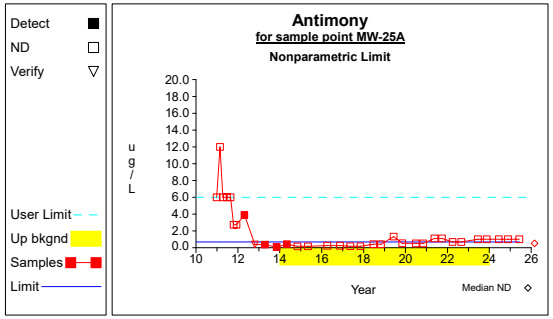
Up vs. Down Prediction Limits



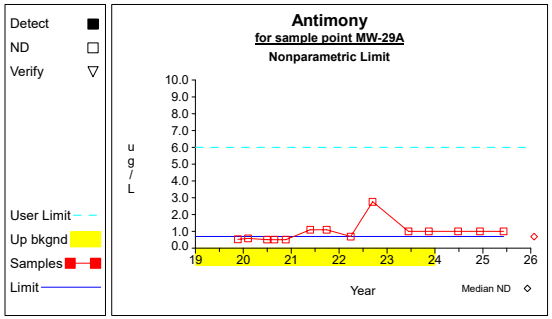
Graph 1



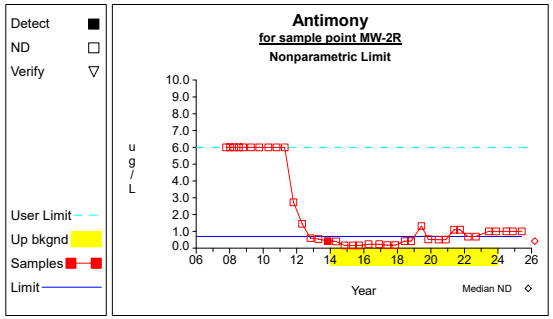
Graph 2



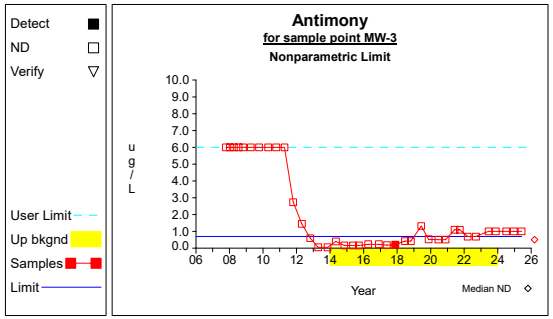
Graph 3



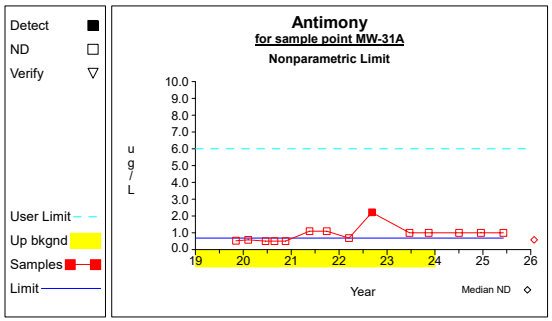
Graph 4



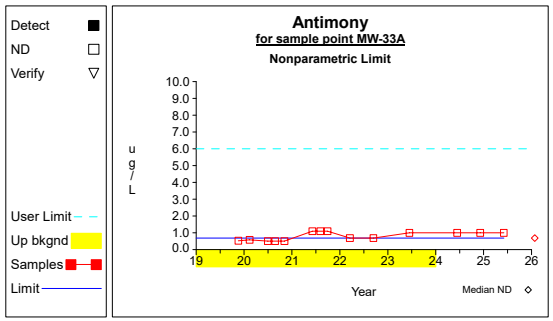
Graph 5



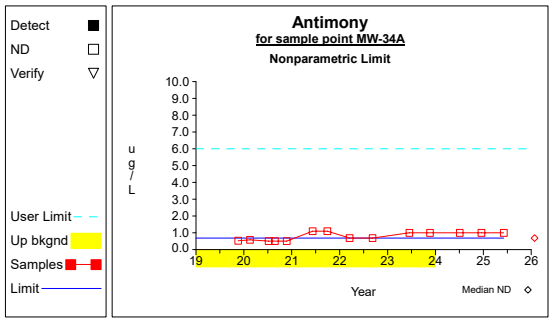
Graph 6



Graph 7

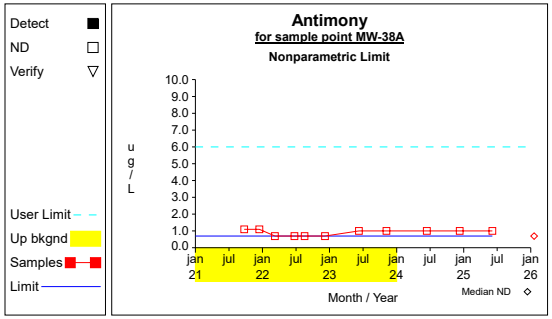


Graph 8

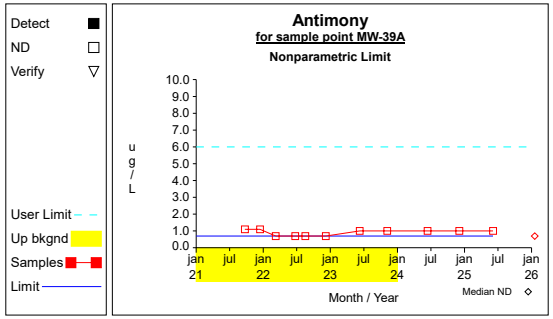


Graph 9

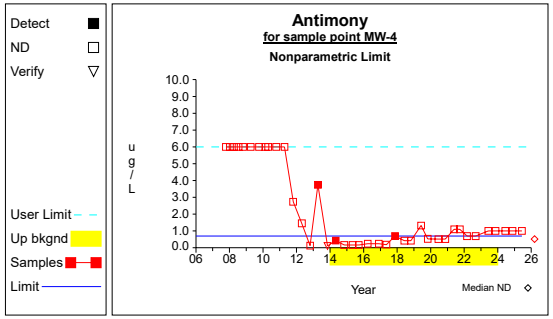
Up vs. Down Prediction Limits



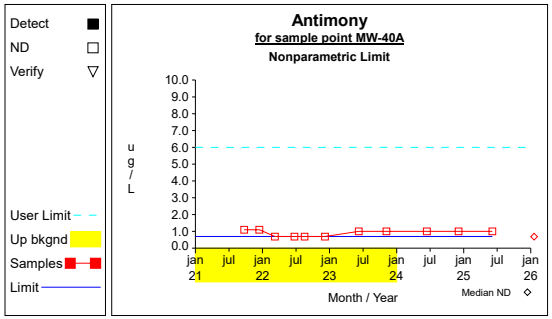
Graph 10



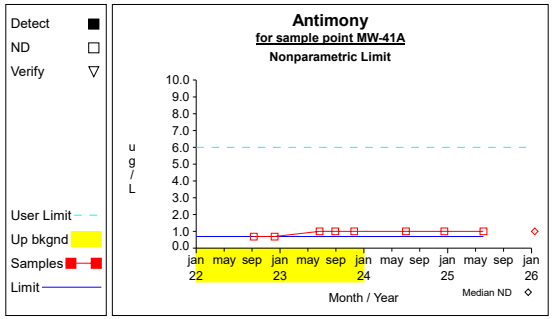
Graph 11



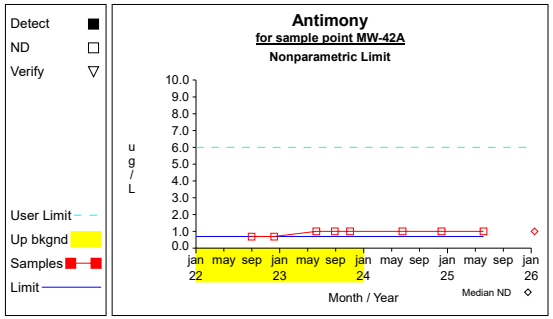
Graph 12



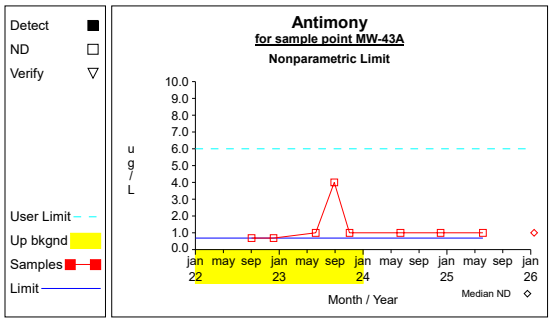
Graph 13



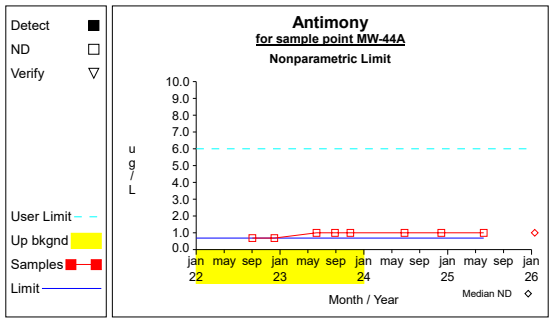
Graph 14



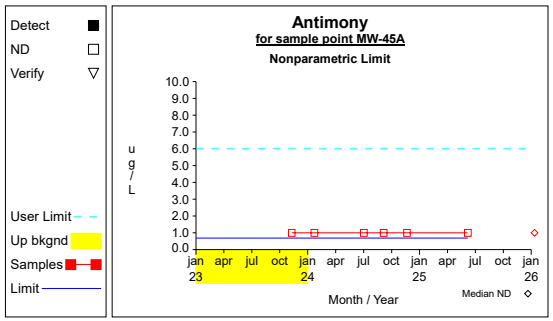
Graph 15



Graph 16

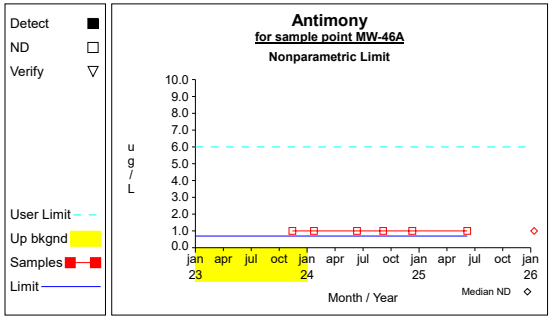


Graph 17

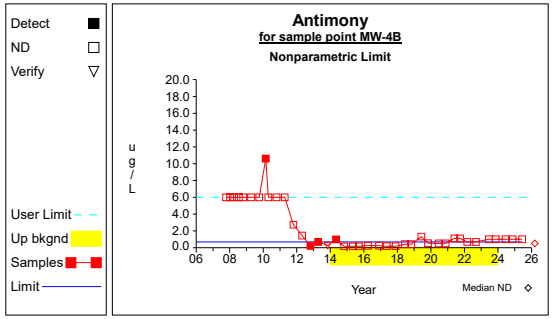


Graph 18

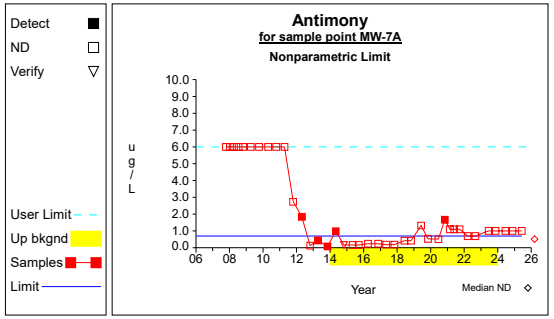
Up vs. Down Prediction Limits



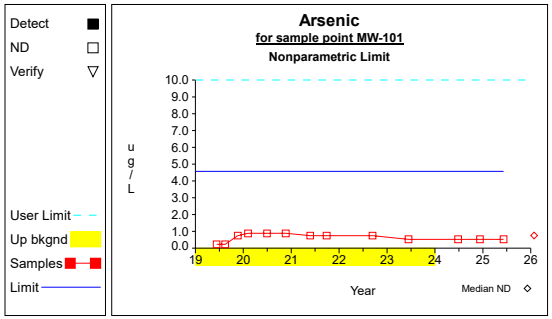
Graph 19



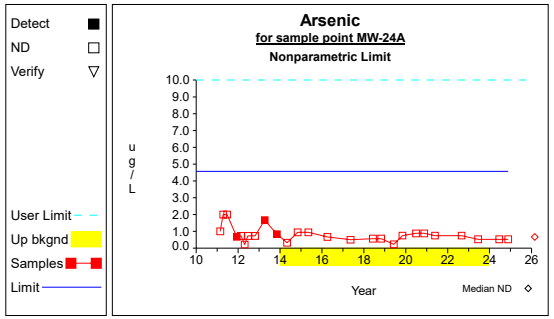
Graph 20



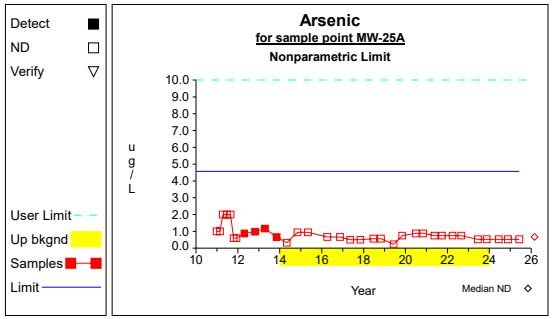
Graph 21



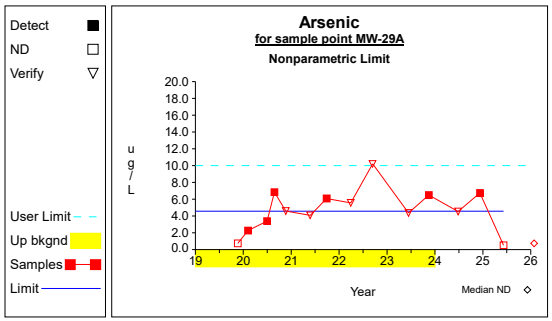
Graph 22



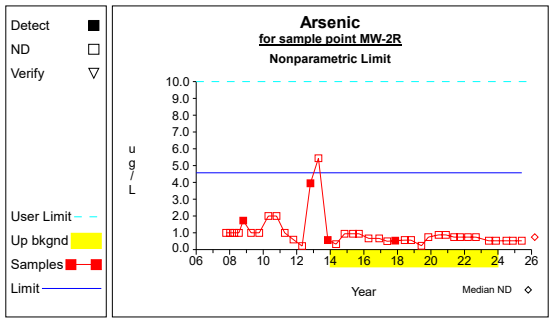
Graph 23



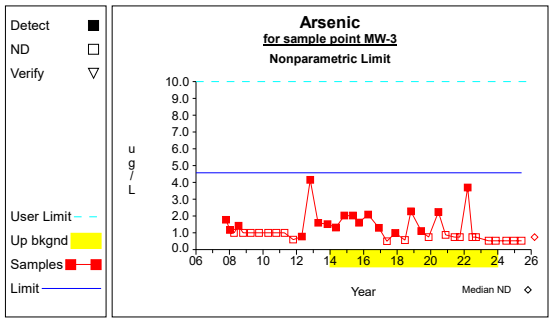
Graph 24



Graph 25

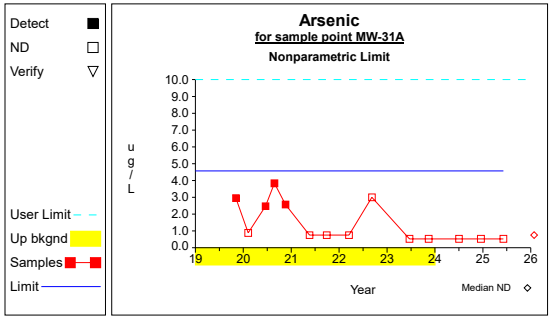


Graph 26

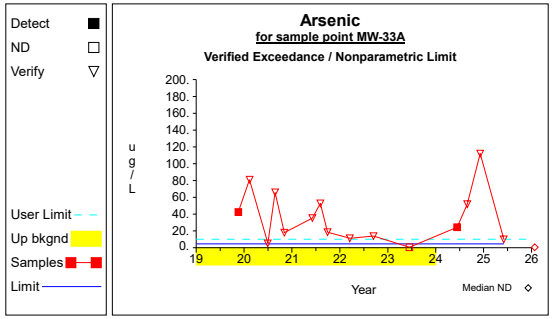


Graph 27

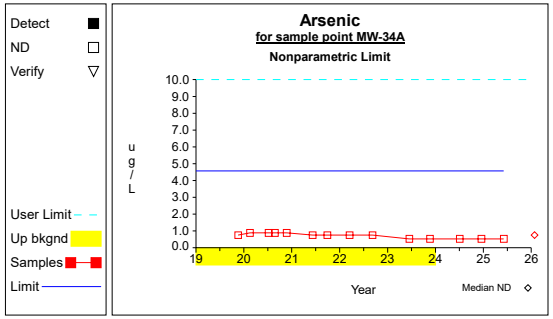
Up vs. Down Prediction Limits



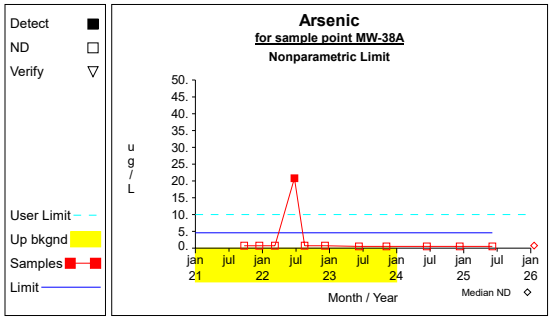
Graph 28



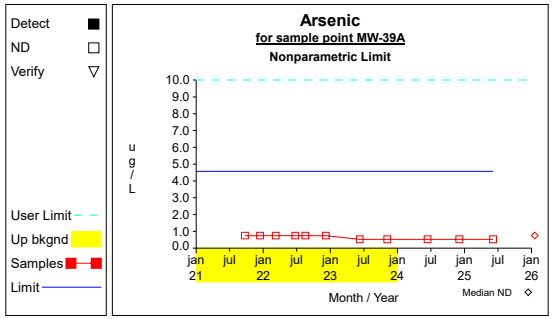
Graph 29



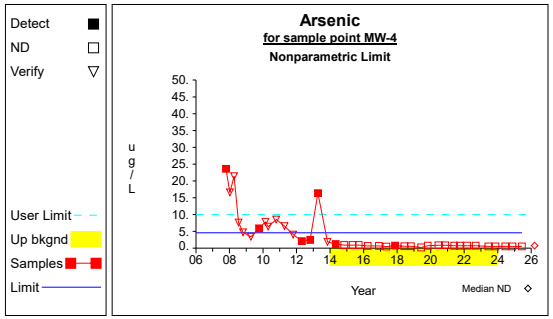
Graph 30



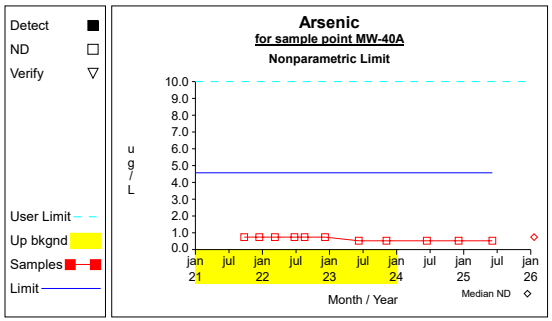
Graph 31



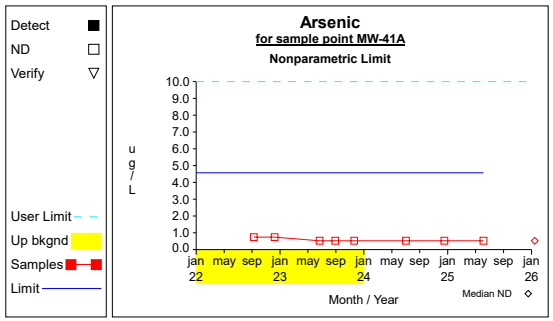
Graph 32



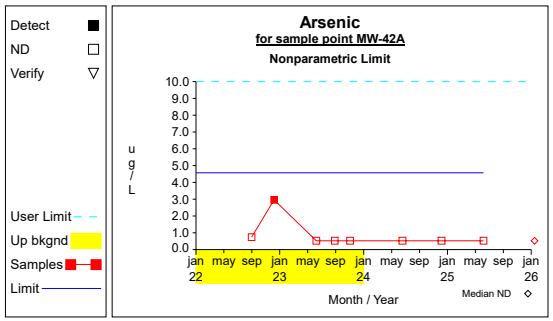
Graph 33



Graph 34

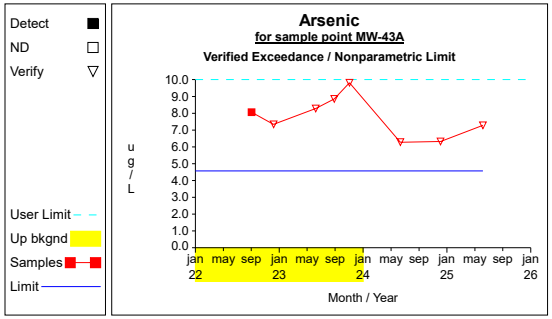


Graph 35

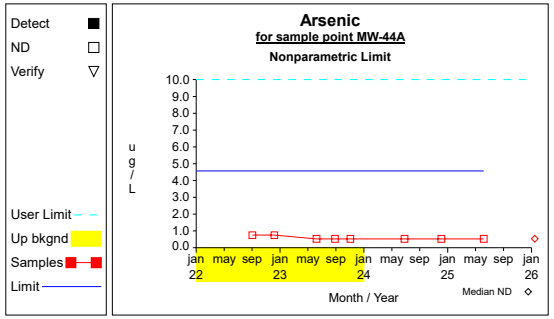


Graph 36

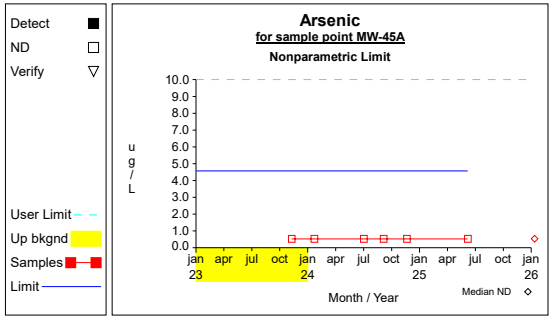
Up vs. Down Prediction Limits



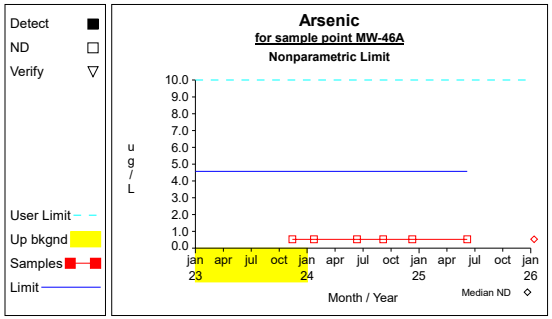
Graph 37



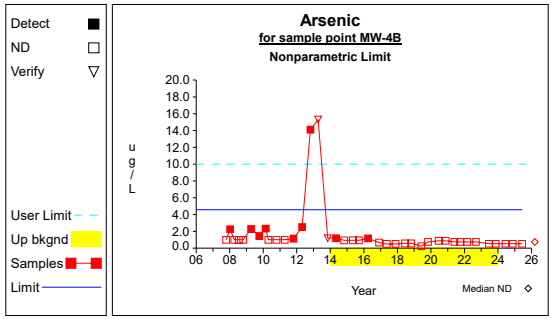
Graph 38



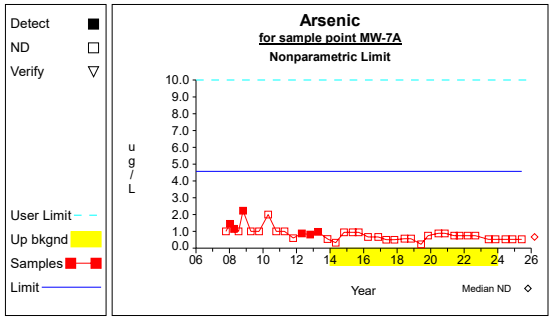
Graph 39



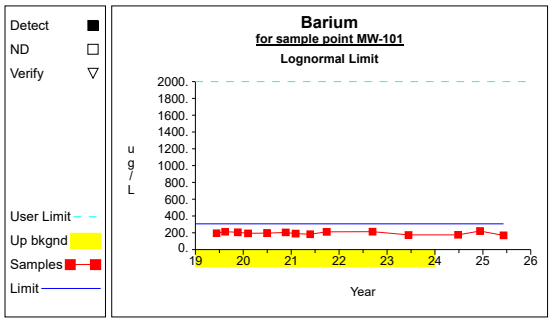
Graph 40



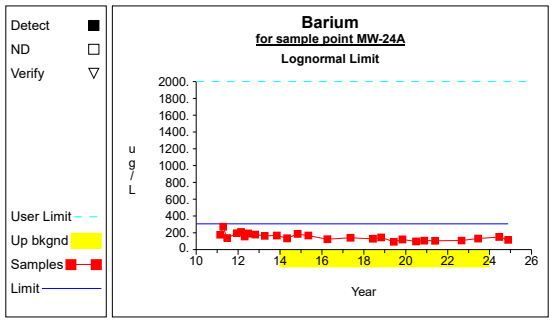
Graph 41



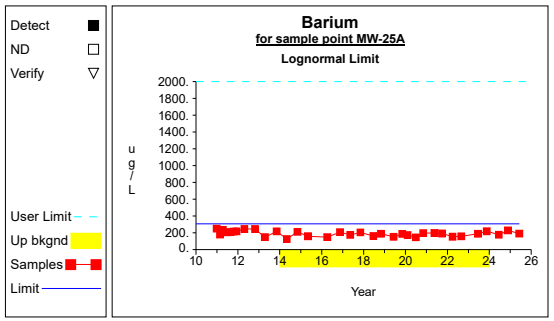
Graph 42



Graph 43

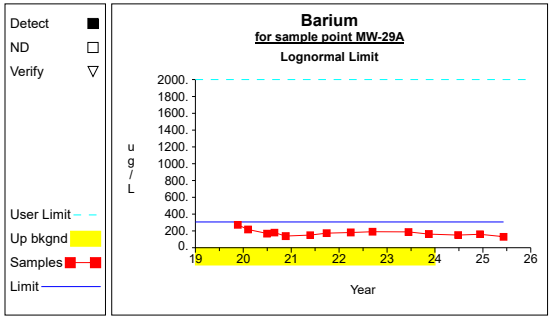


Graph 44

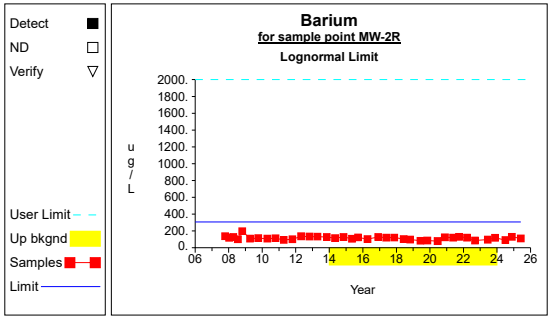


Graph 45

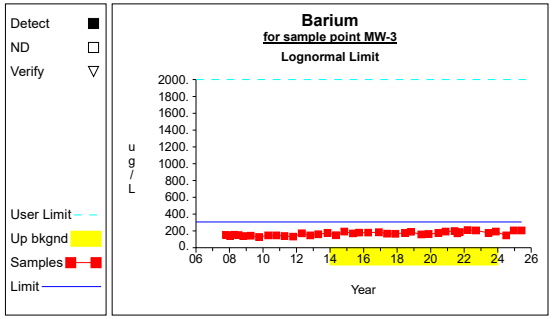
Up vs. Down Prediction Limits



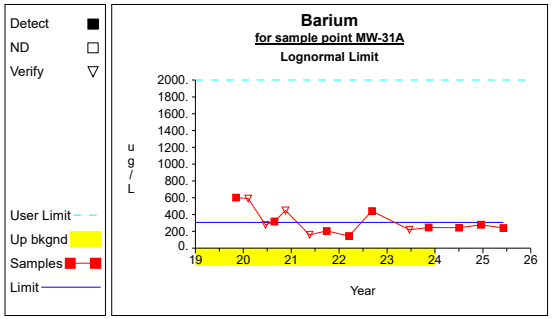
Graph 46



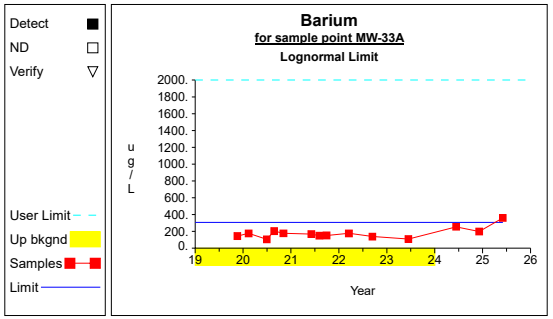
Graph 47



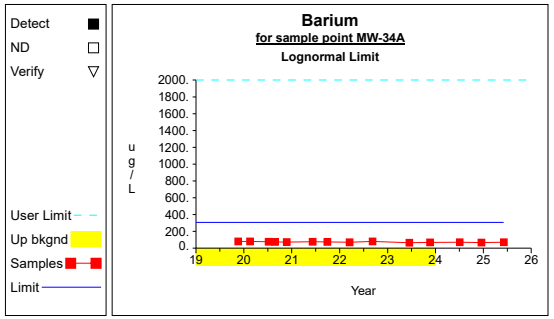
Graph 48



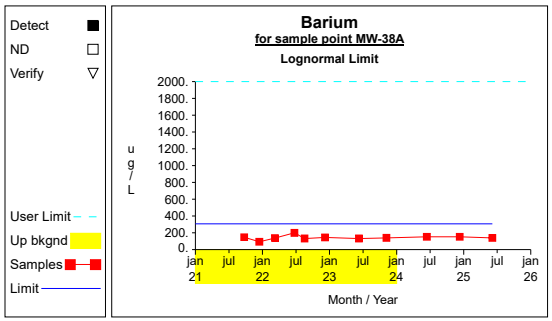
Graph 49



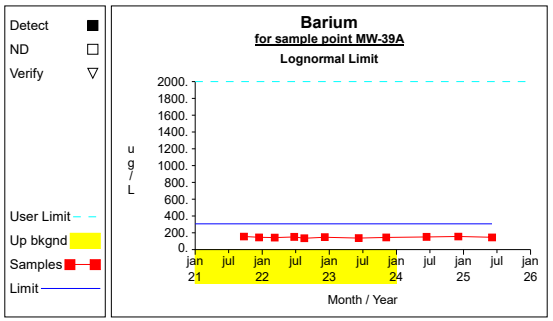
Graph 50



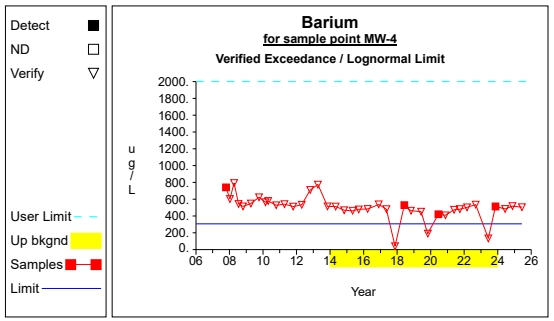
Graph 51



Graph 52

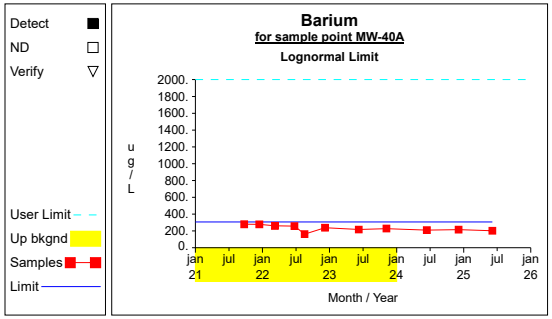


Graph 53

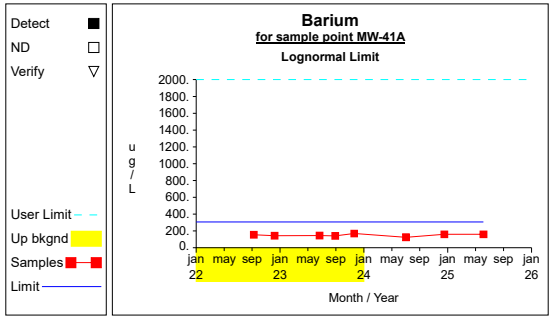


Graph 54

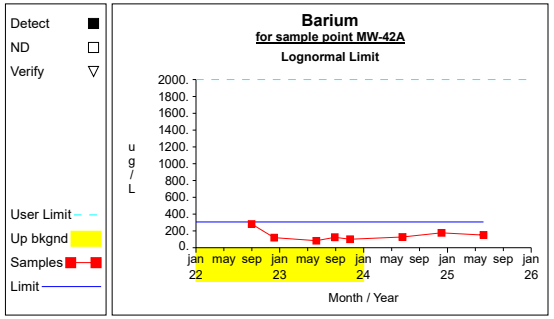
Up vs. Down Prediction Limits



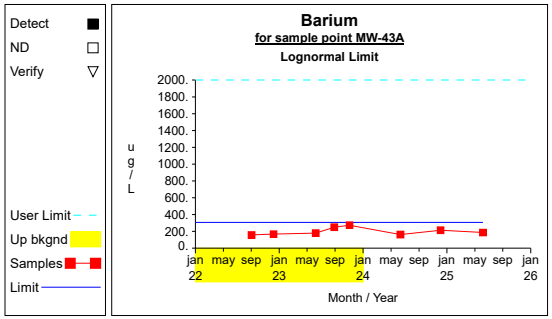
Graph 55



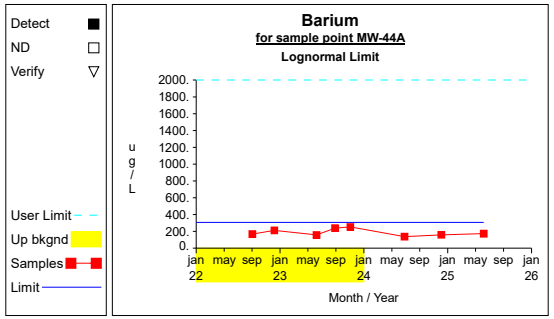
Graph 56



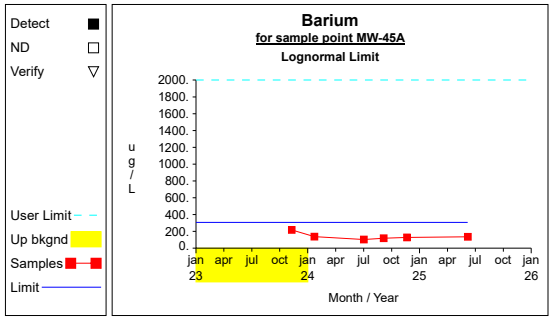
Graph 57



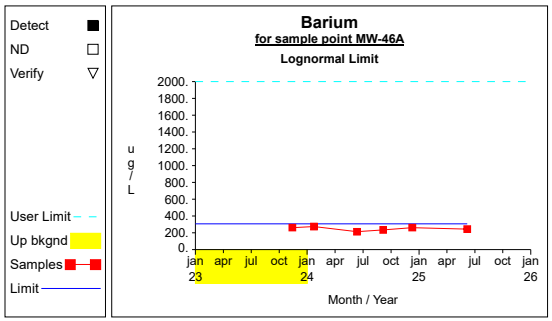
Graph 58



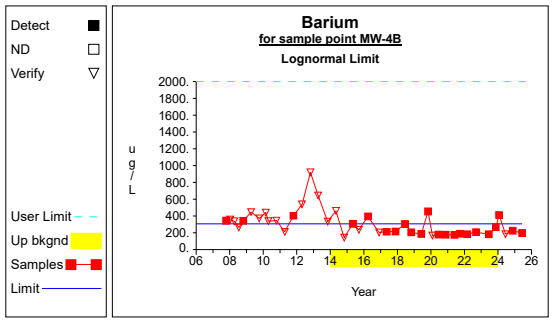
Graph 59



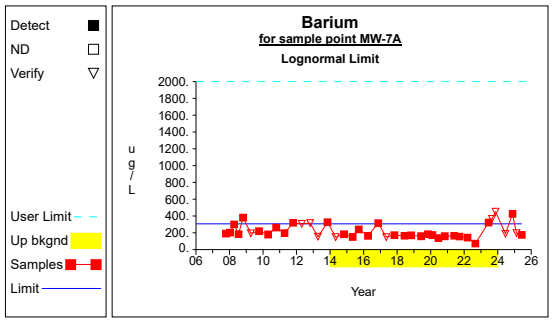
Graph 60



Graph 61

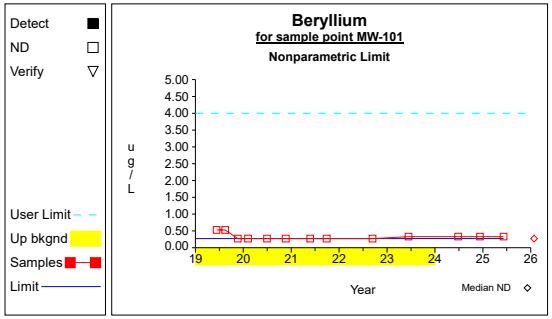


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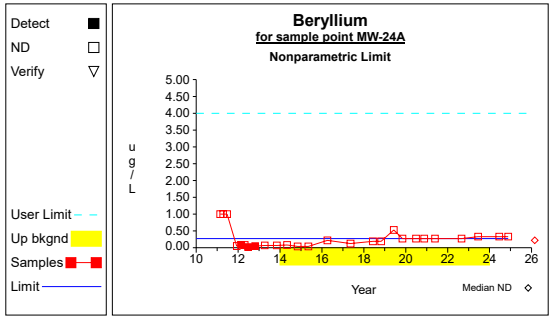


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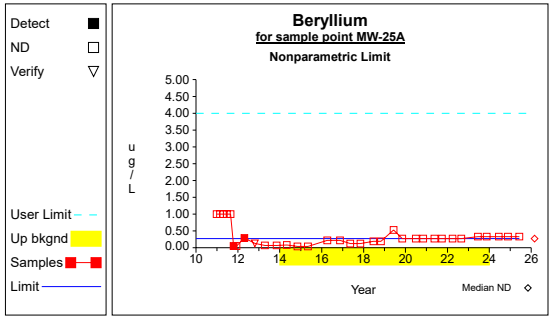
Up vs. Down Prediction Limits



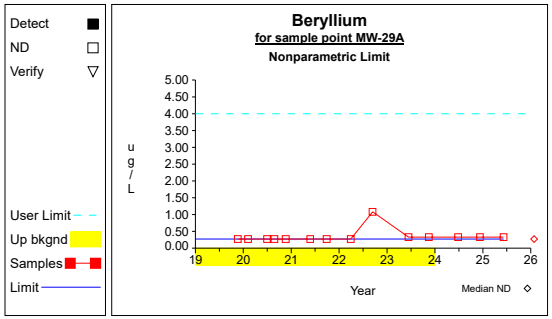
Graph 64



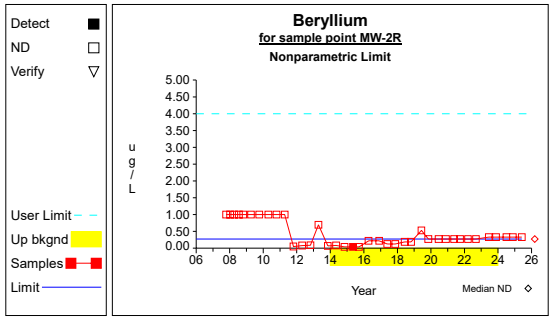
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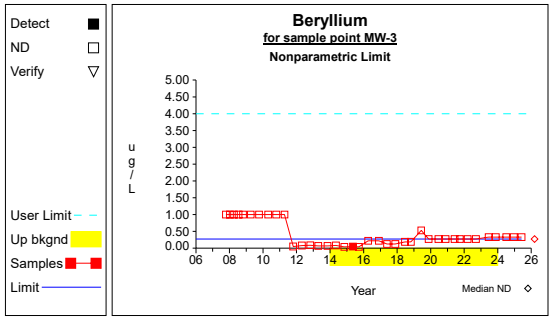
Graph 66



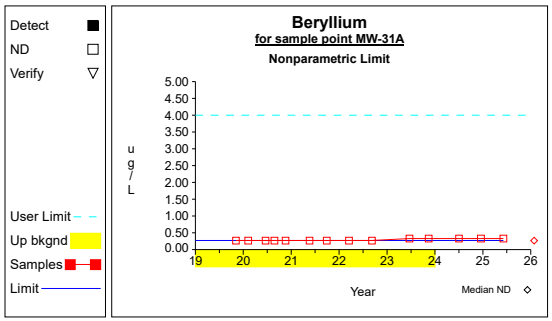
Graph 67



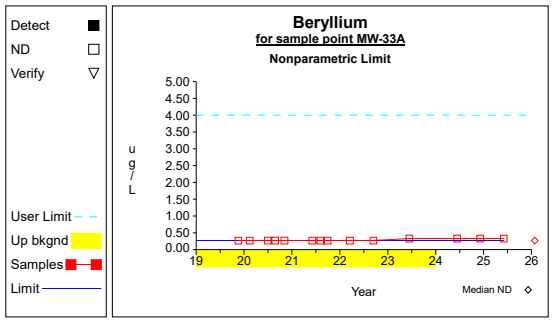
Graph 68



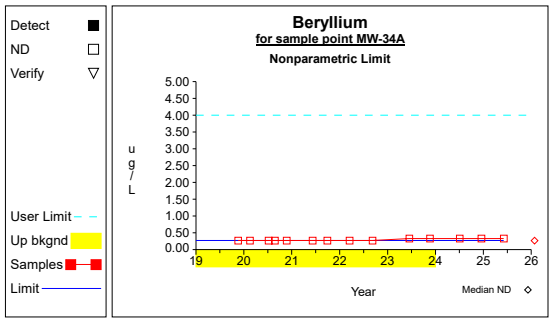
Graph 69



Graph 70

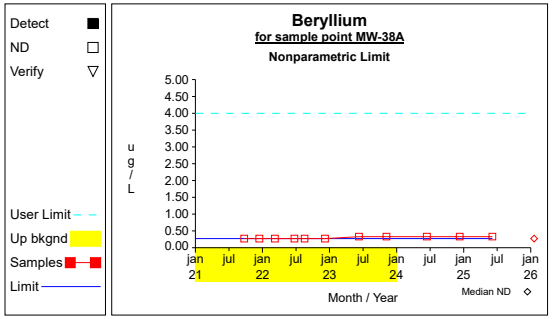


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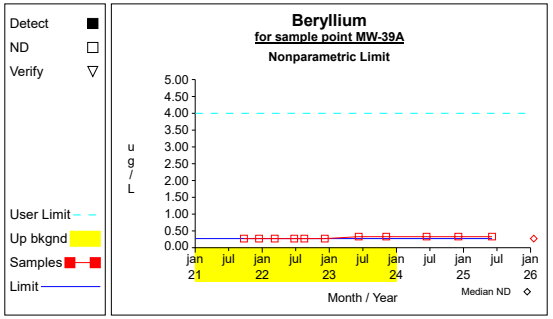


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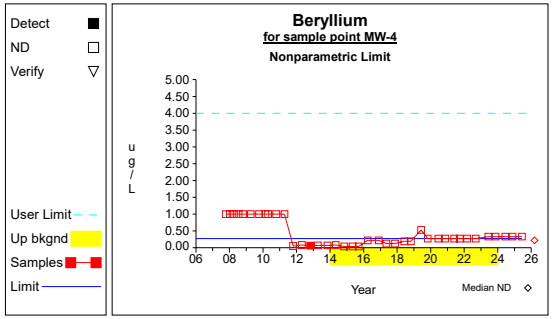
Up vs. Down Prediction Limits



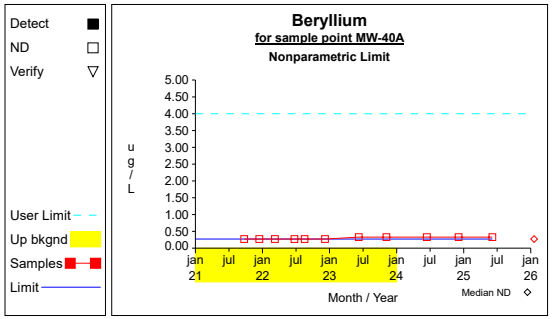
Graph 73



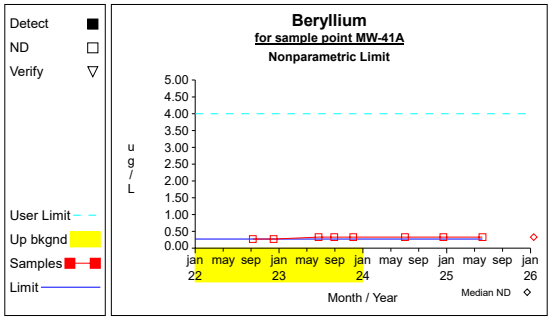
Graph 74



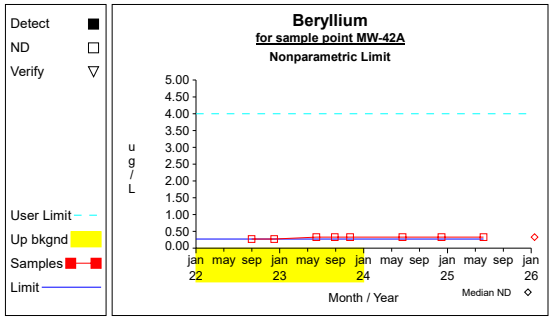
Graph 75



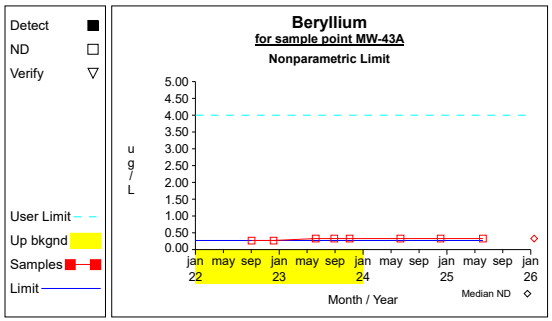
Graph 76



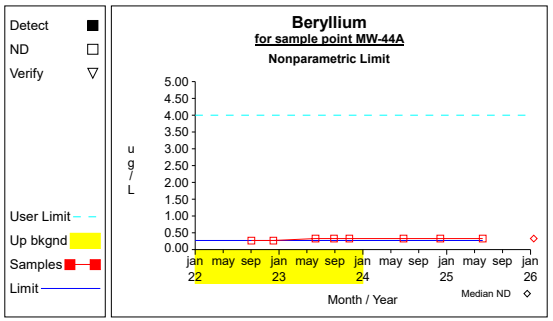
Graph 77



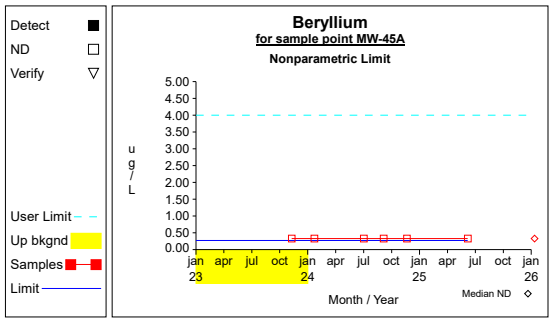
Graph 78



Graph 79

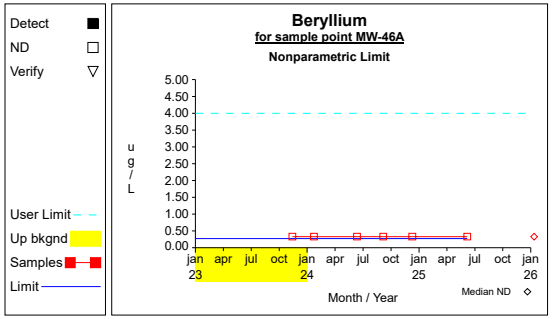


Graph 80

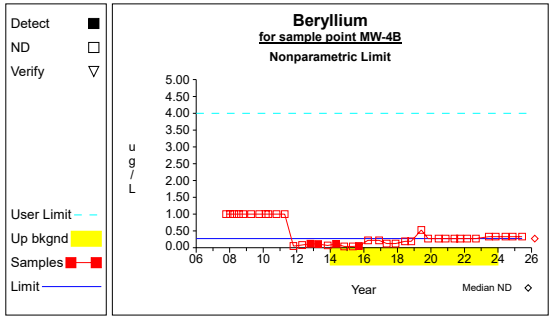


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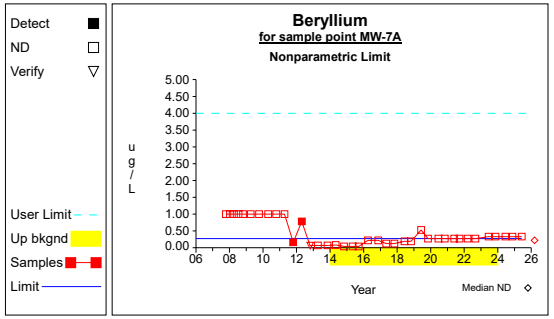
Up vs. Down Prediction Limits



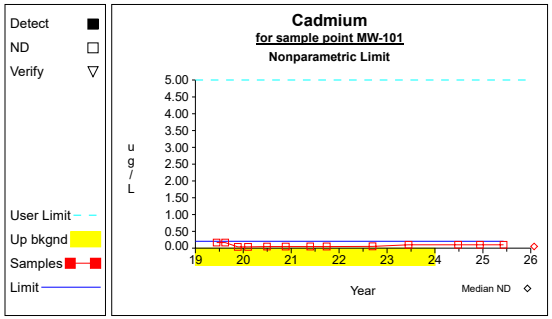
Graph 82



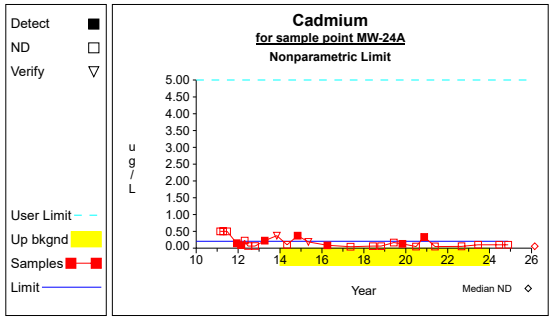
Graph 83



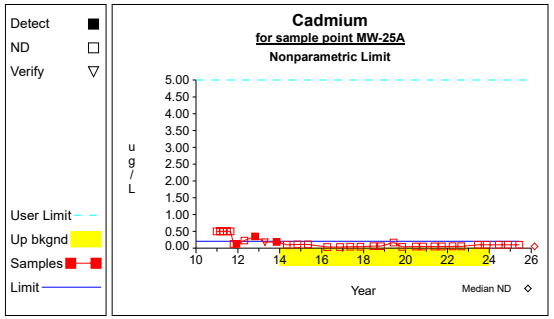
Graph 84



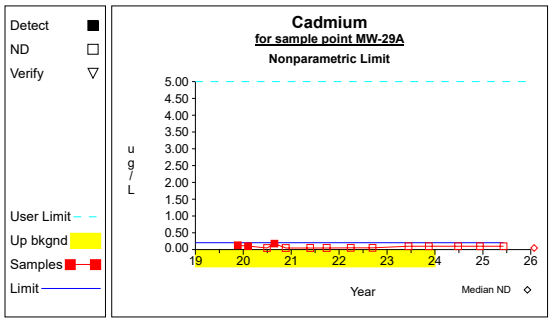
Graph 85



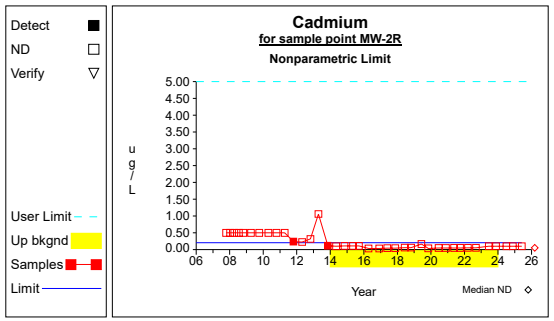
Graph 86



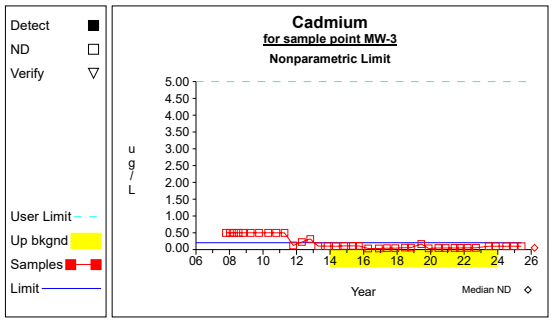
Graph 87



Graph 88

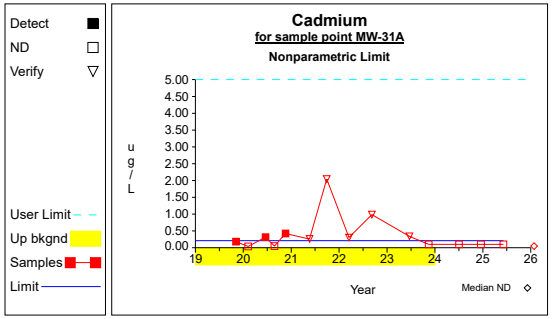


Graph 89

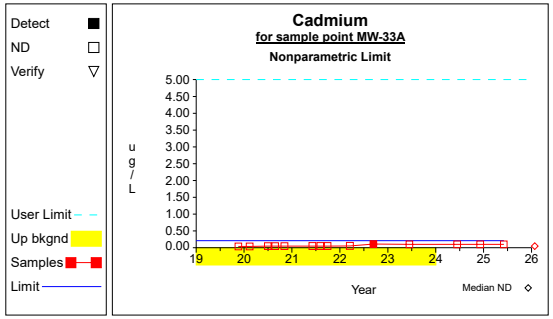


Graph 90

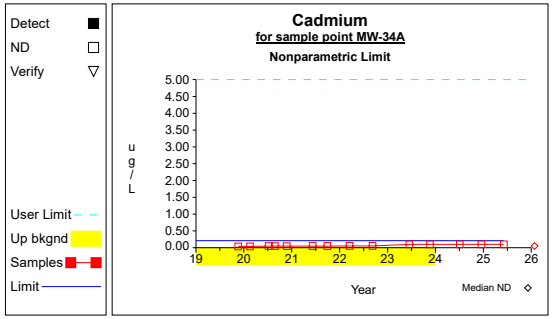
Up vs. Down Prediction Limits



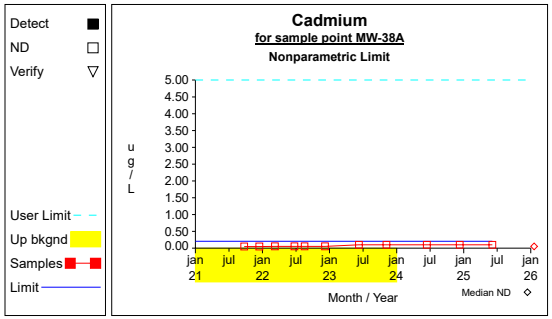
Graph 91



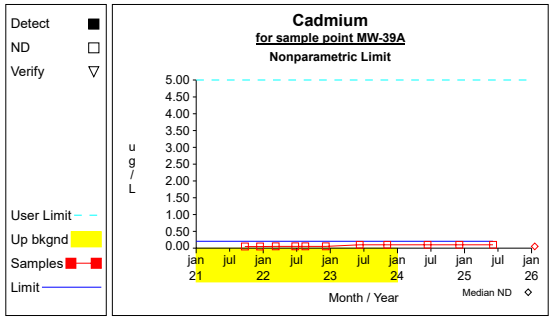
Graph 92



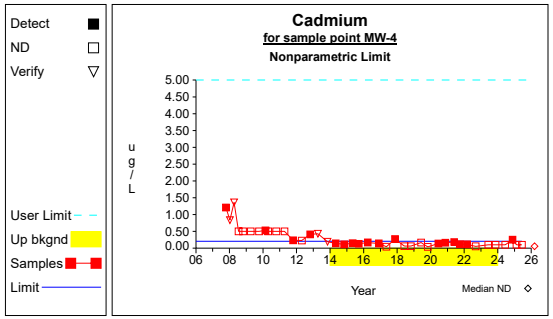
Graph 93



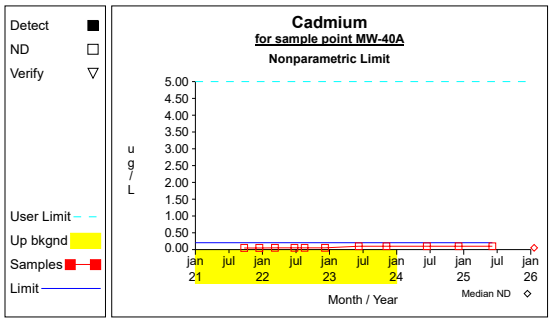
Graph 94



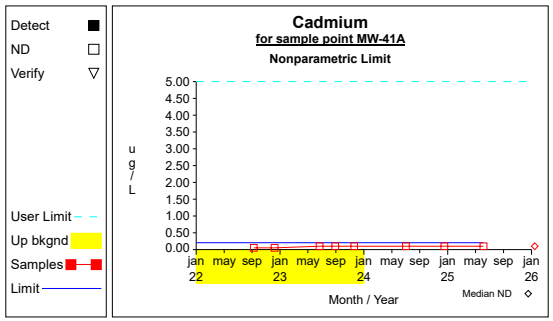
Graph 95



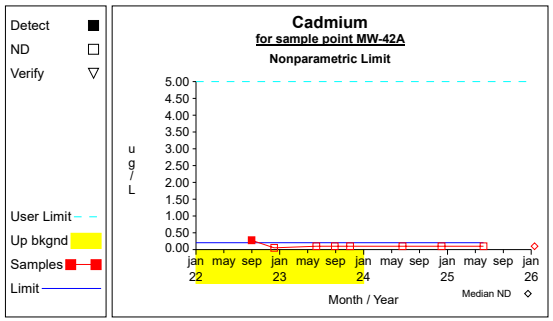
Graph 96



Graph 97

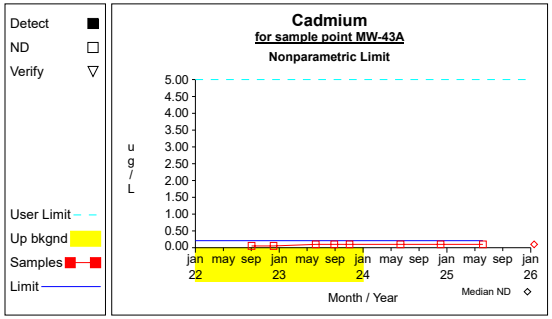


Graph 98

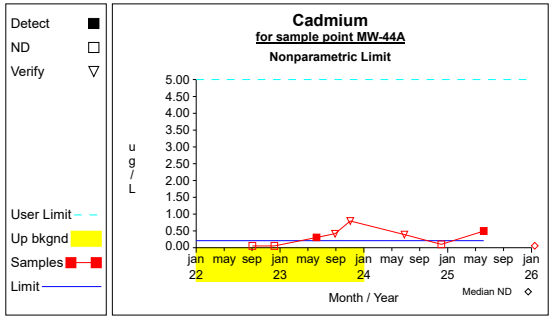


Graph 99

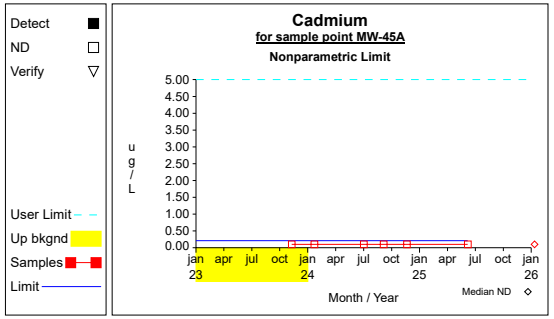
Up vs. Down Prediction Limits



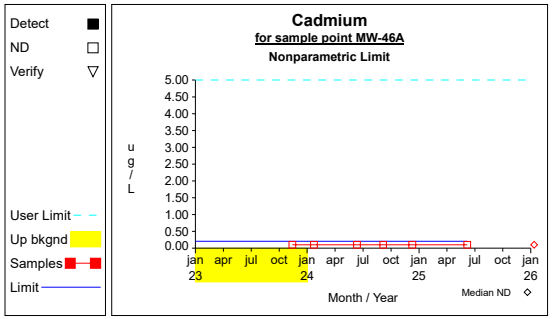
Graph 100



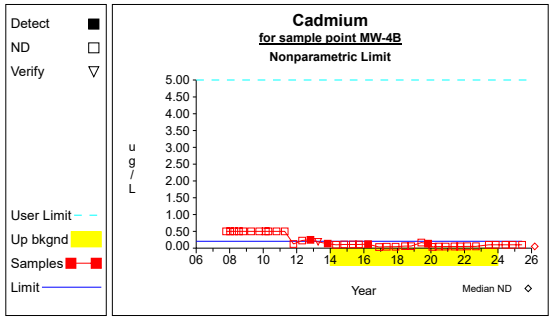
Graph 101



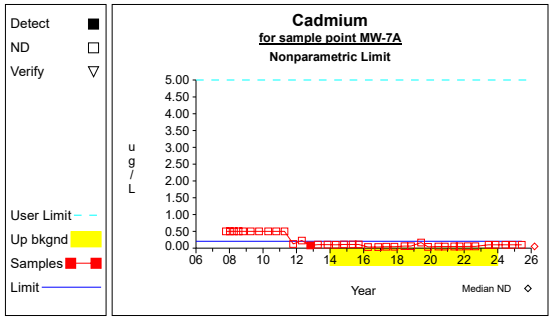
Graph 102



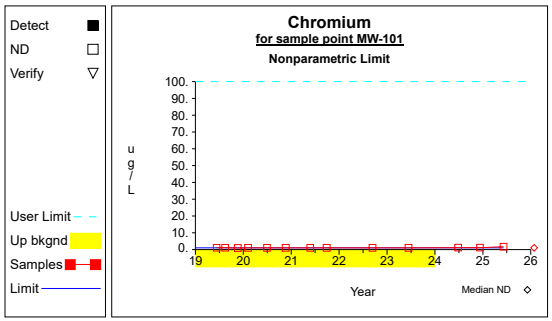
Graph 103



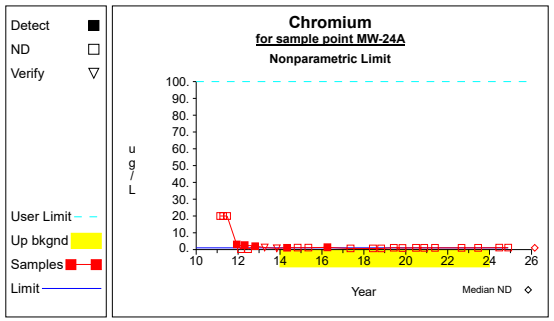
Graph 104



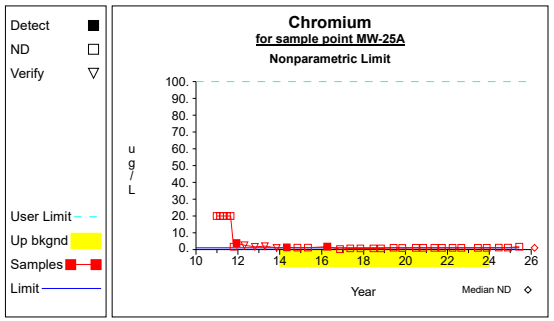
Graph 105



Graph 106

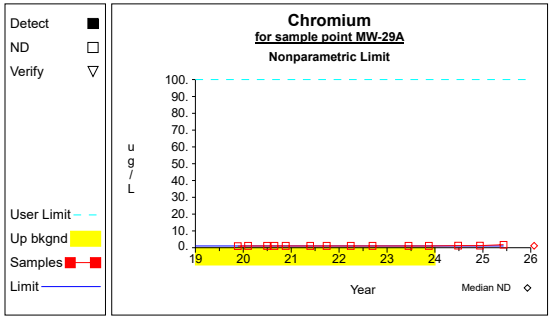


Graph 107

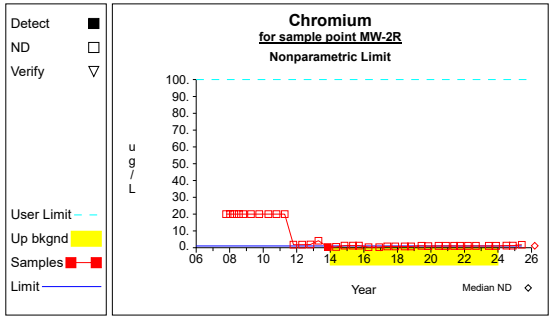


Graph 108

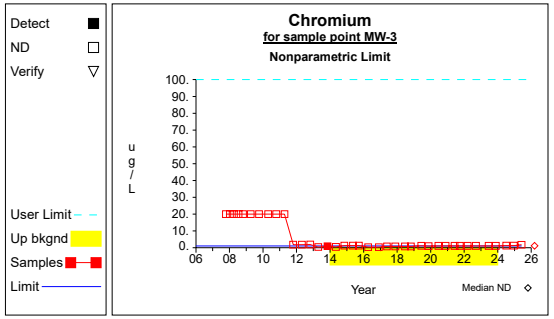
Up vs. Down Prediction Limits



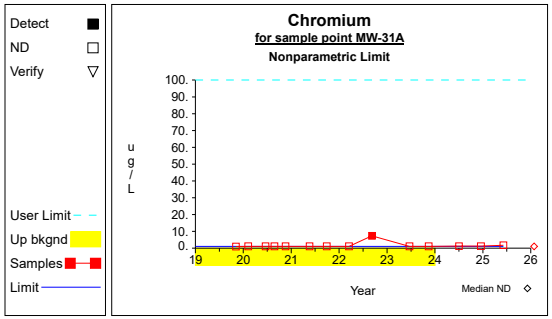
Graph 109



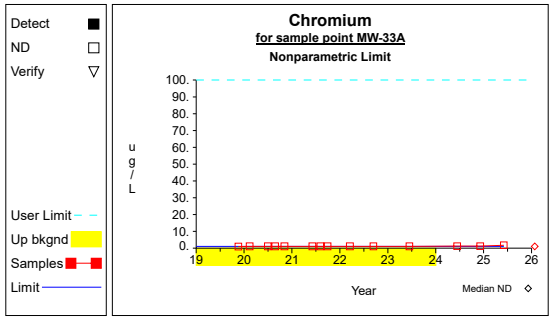
Graph 110



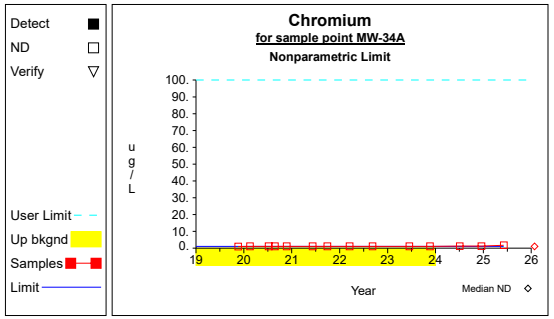
Graph 111



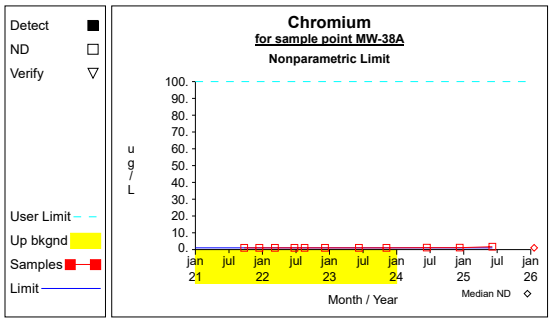
Graph 112



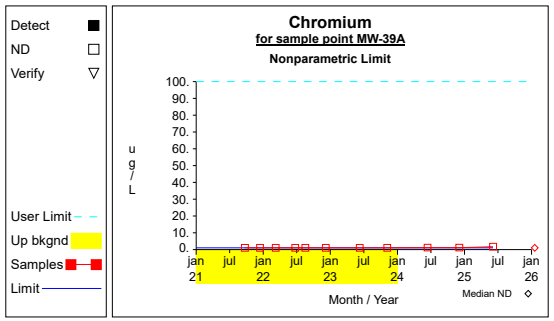
Graph 113



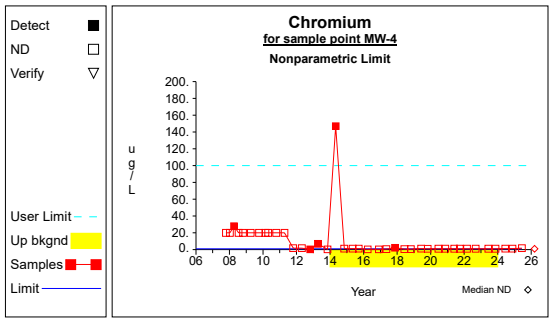
Graph 114



Graph 115

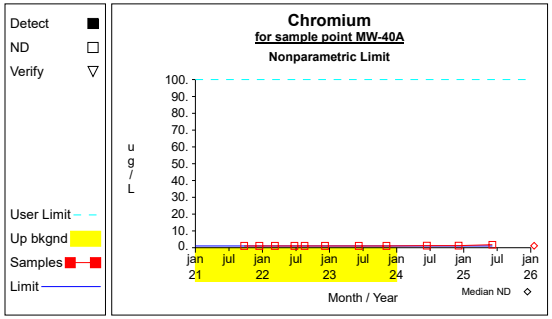


Graph 116

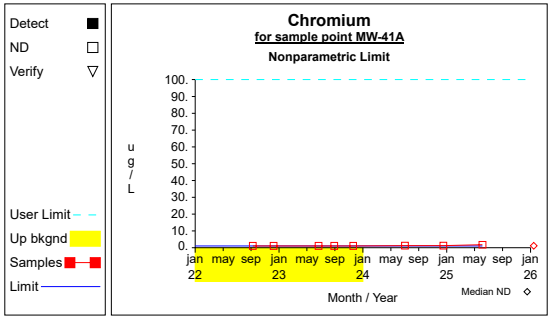


Graph 117

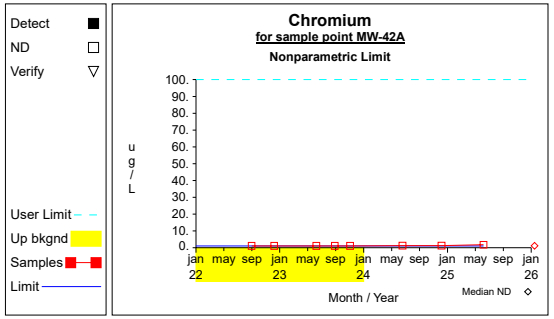
Up vs. Down Prediction Limits



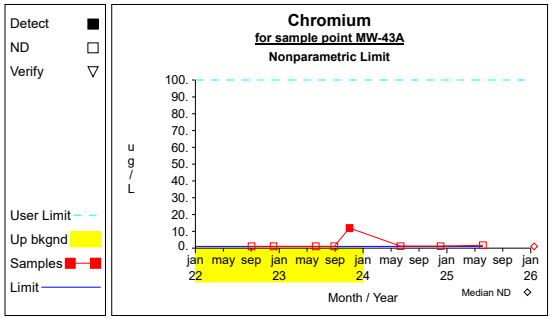
Graph 118



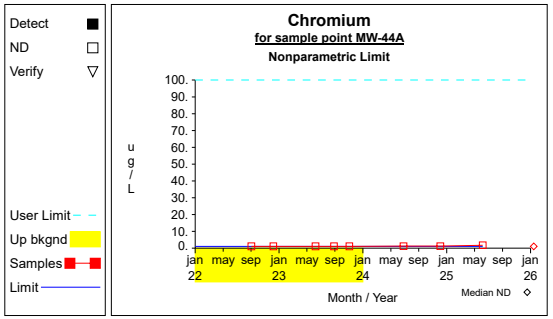
Graph 119



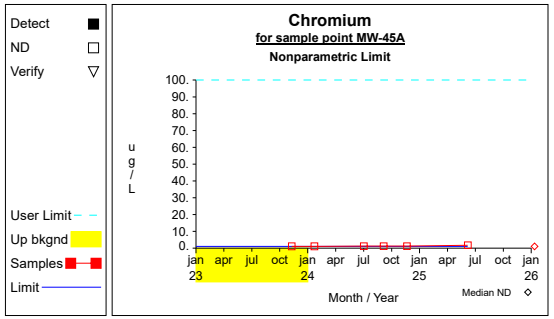
Graph 120



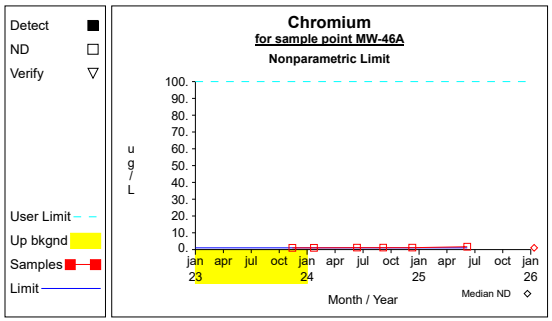
Graph 121



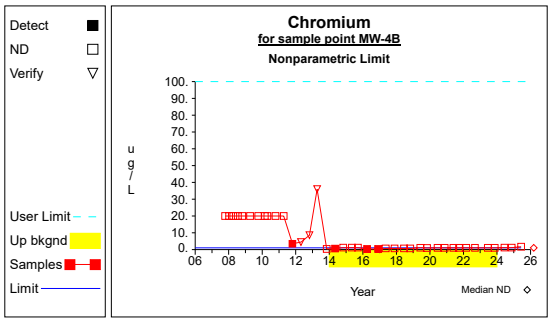
Graph 122



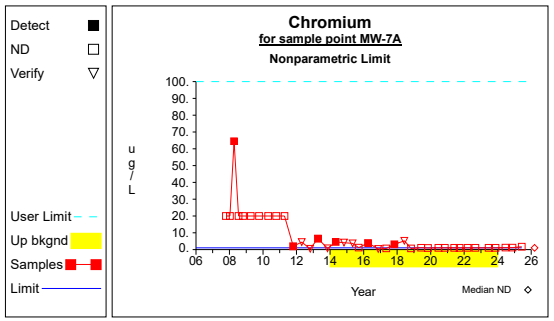
Graph 123



Graph 124

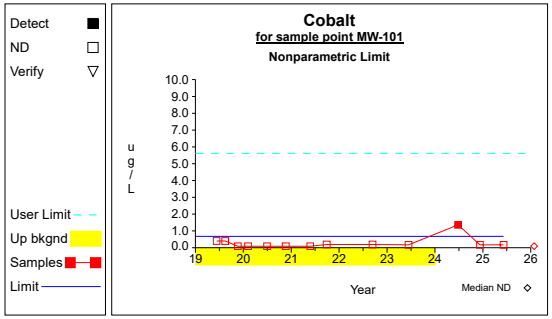


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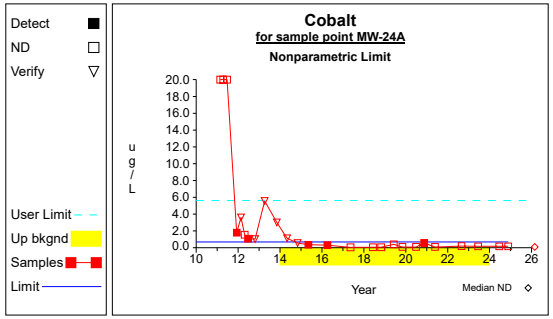


Graph 126

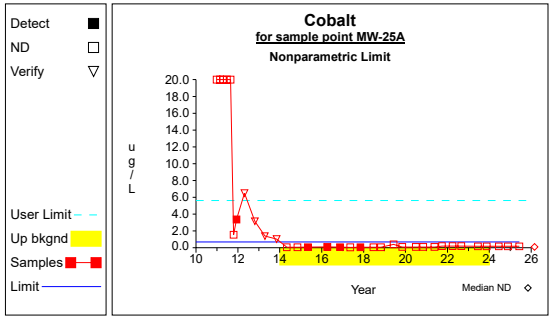
Up vs. Down Prediction Limits



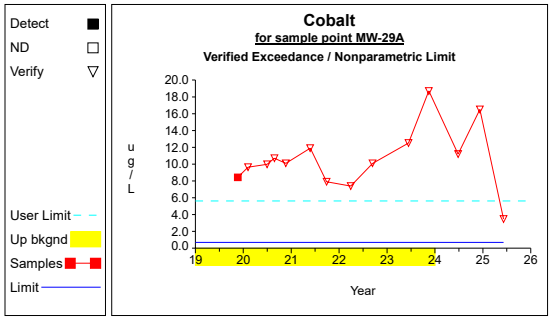
Graph 127



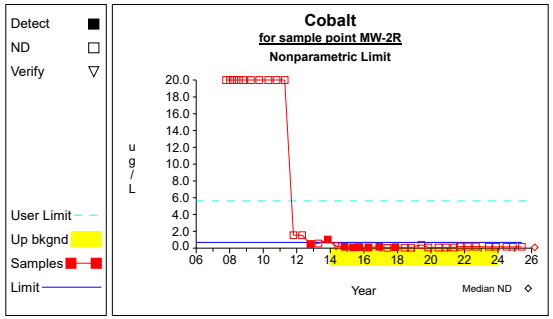
Graph 128



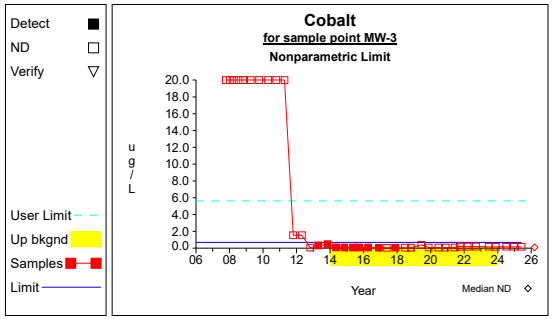
Graph 129



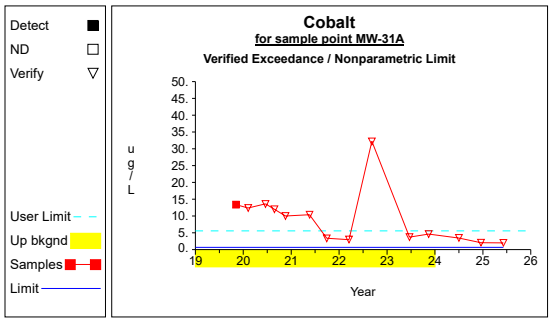
Graph 130



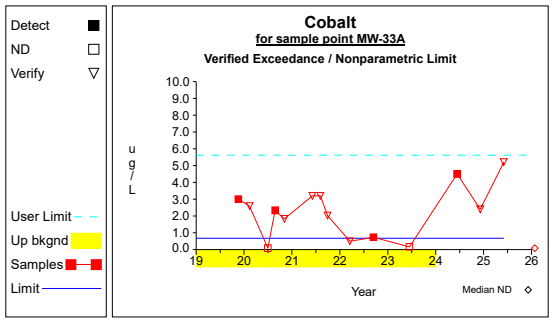
Graph 131



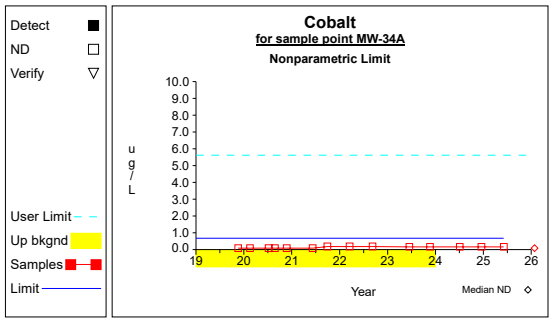
Graph 132



Graph 133

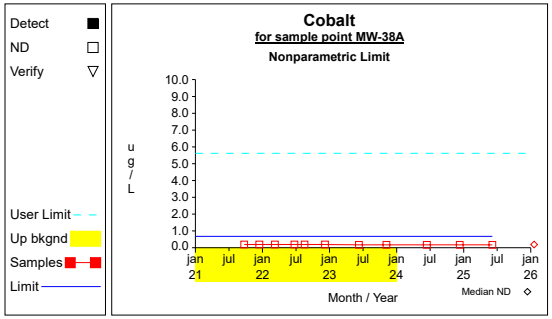


Graph 134

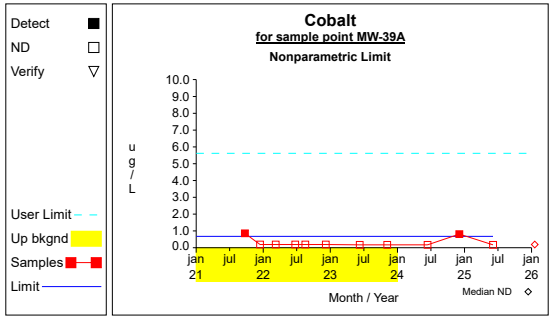


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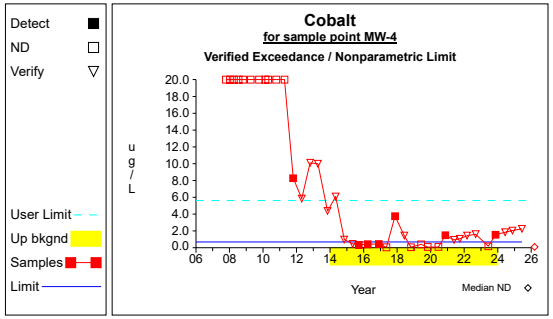
Up vs. Down Prediction Limits



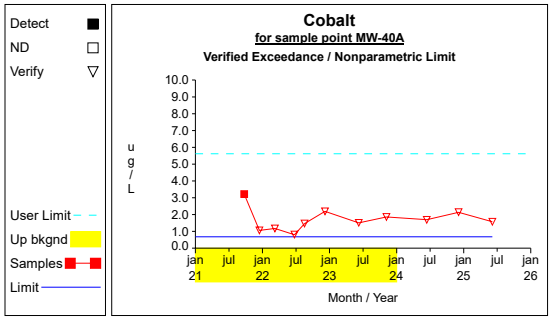
Graph 136



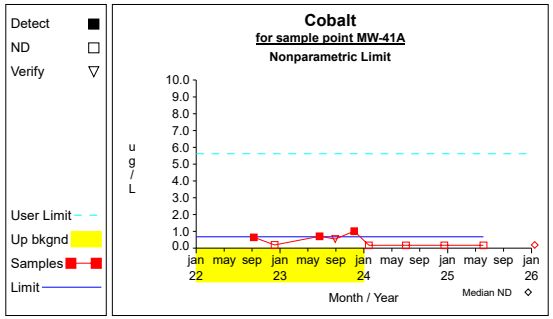
Graph 137



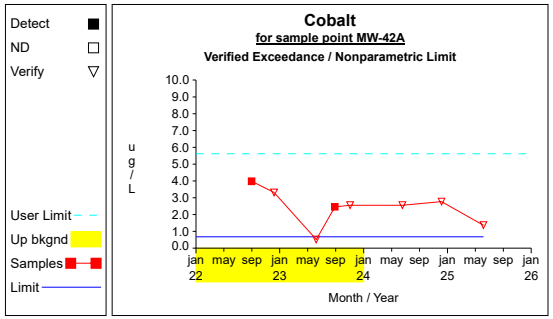
Graph 138



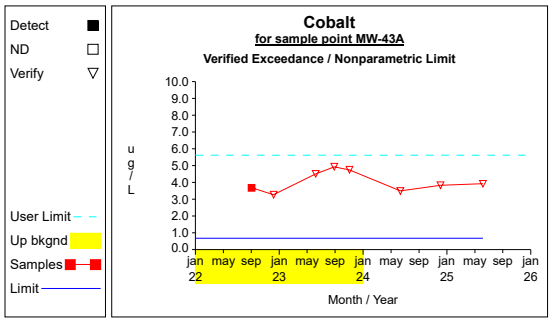
Graph 139



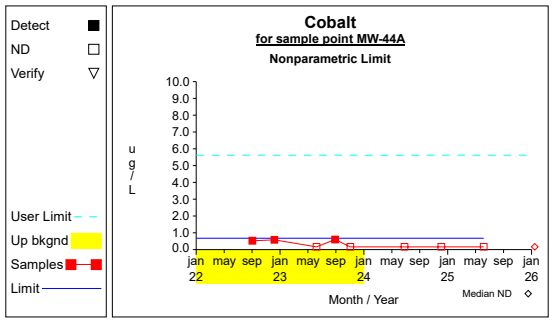
Graph 140



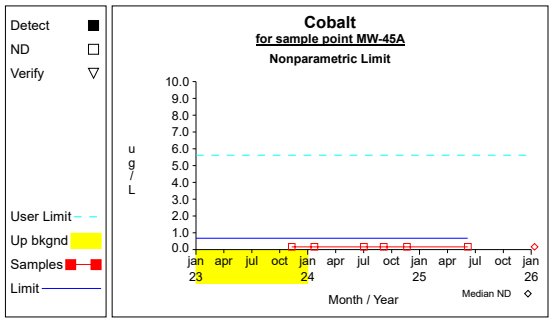
Graph 141



Graph 142

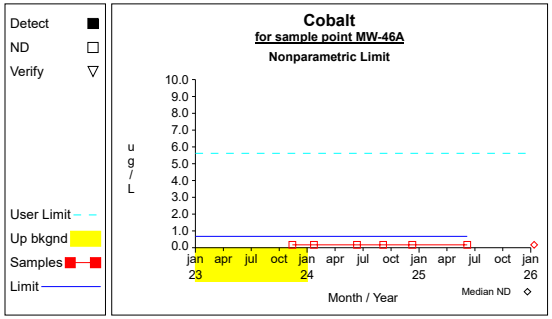


Graph 143

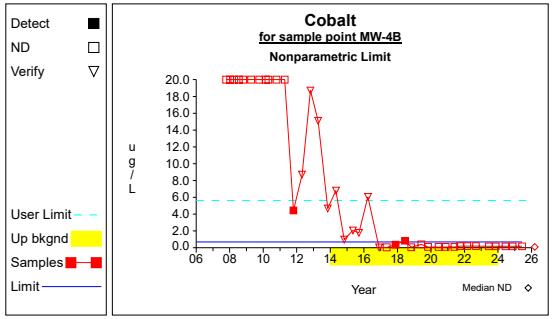


Graph 144

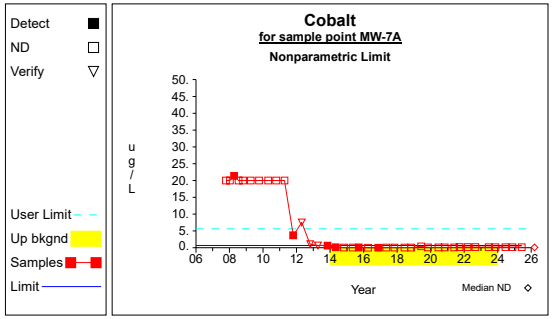
Up vs. Down Prediction Limits



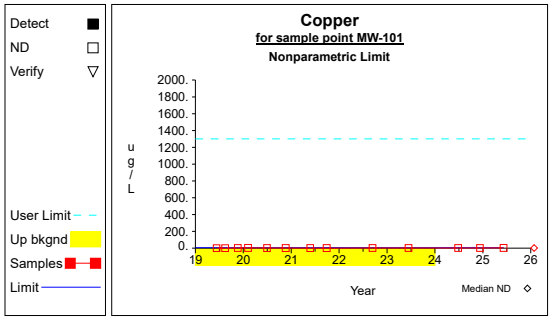
Graph 145



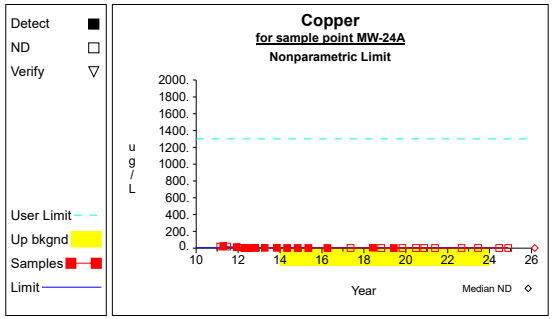
Graph 146



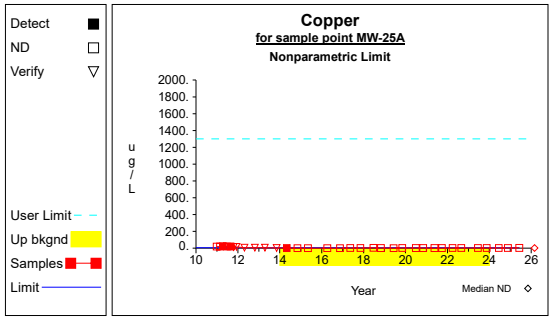
Graph 147



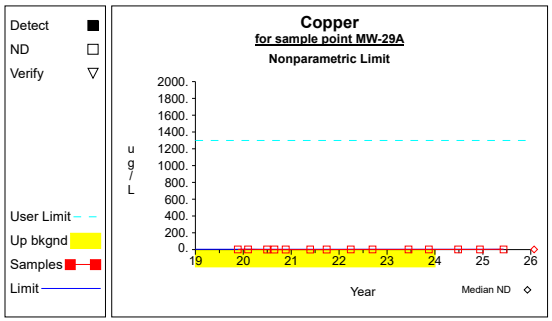
Graph 148



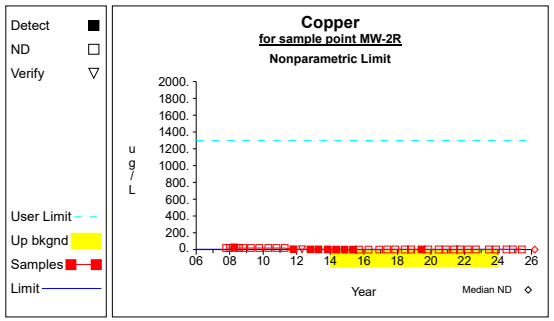
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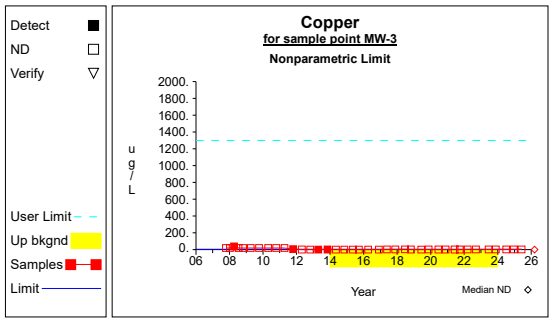
Graph 150



Graph 151

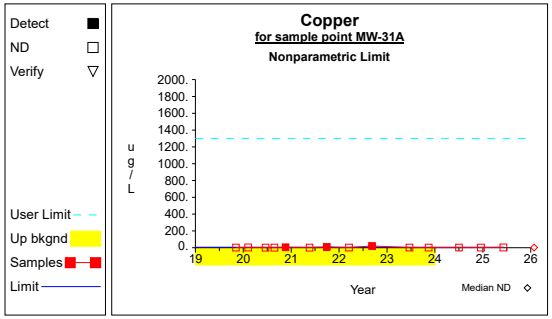


Graph 152

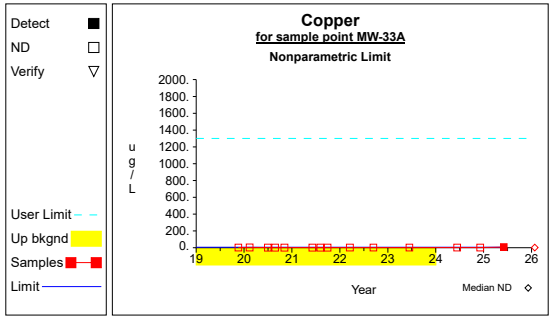


Graph 153

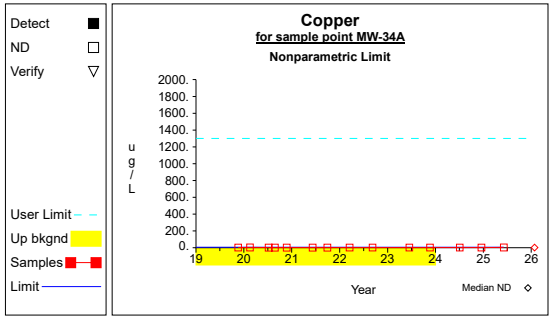
Up vs. Down Prediction Limits



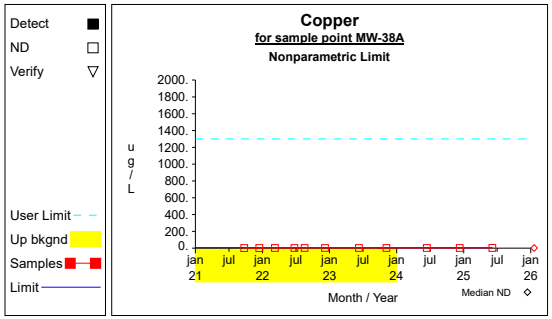
Graph 154



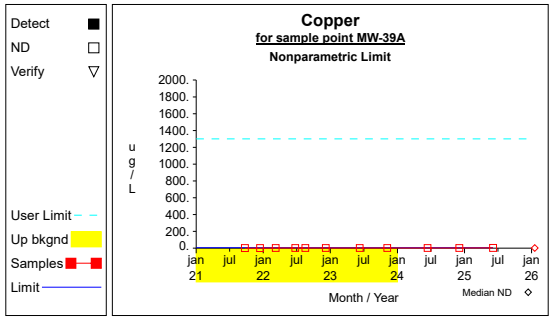
Graph 155



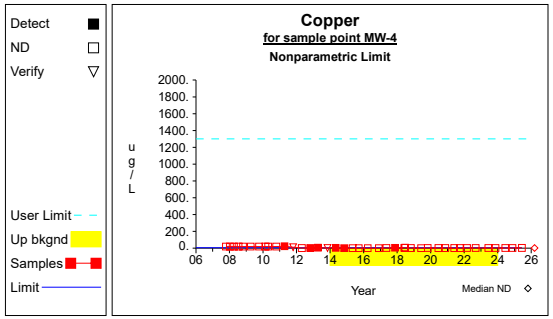
Graph 156



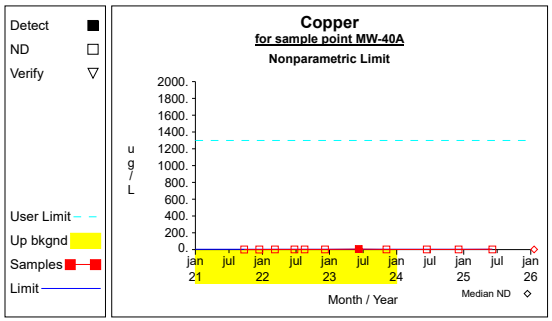
Graph 157



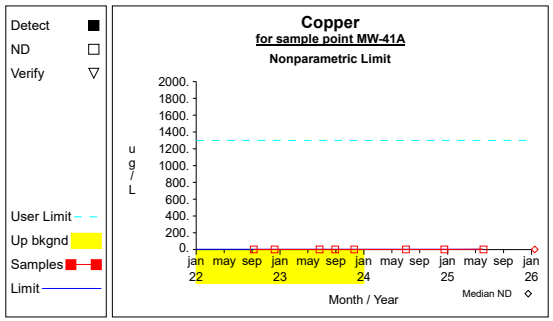
Graph 158



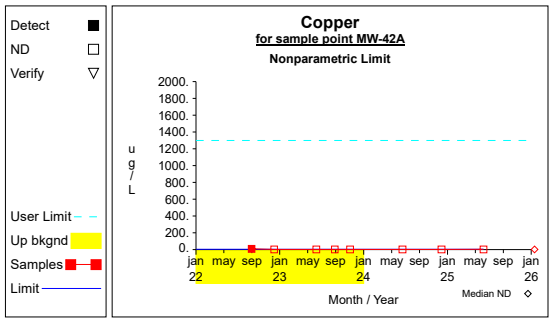
Graph 159



Graph 160

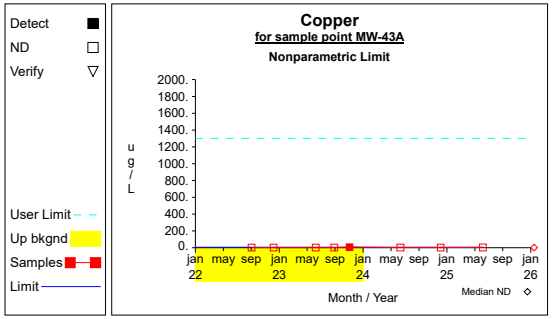


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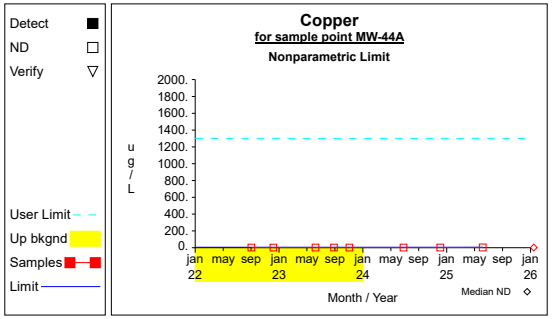


Graph 162

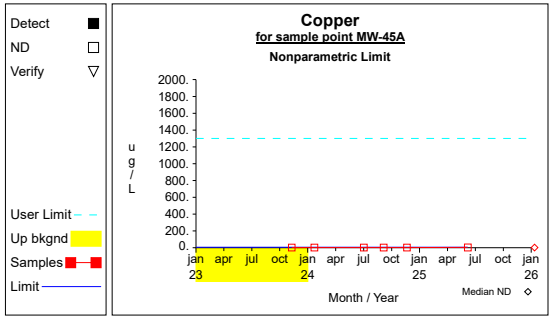
Up vs. Down Prediction Limits



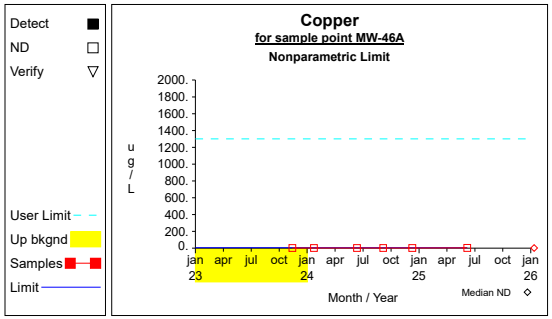
Graph 163



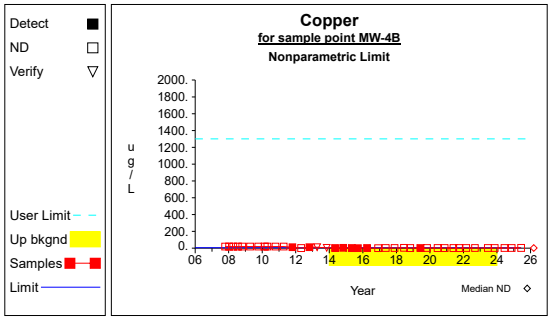
Graph 164



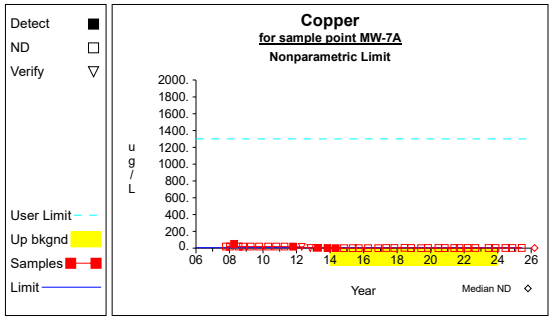
Graph 165



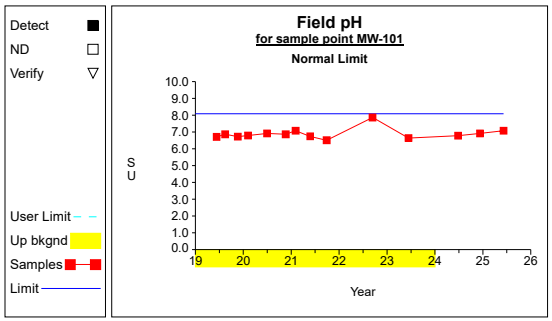
Graph 166



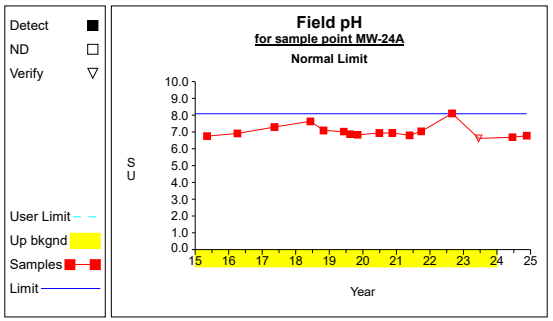
Graph 167



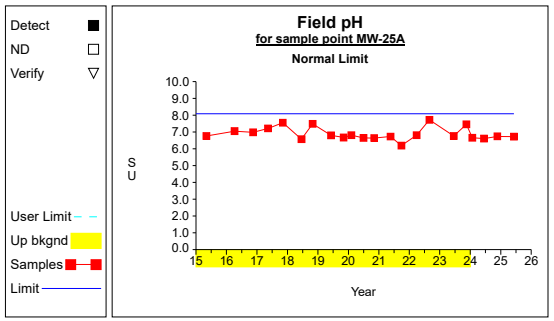
Graph 168



Graph 169

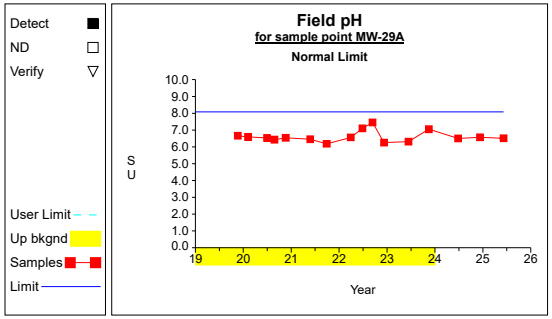


Graph 170

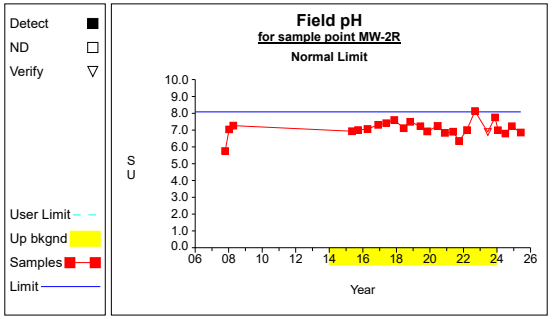


Graph 171

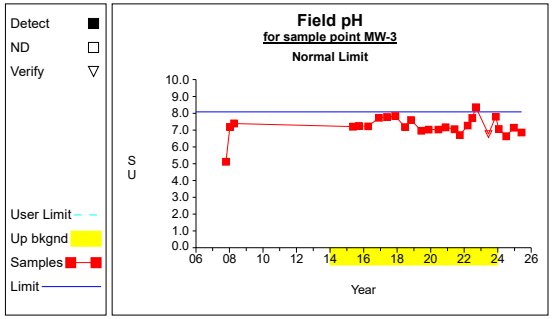
Up vs. Down Prediction Limits



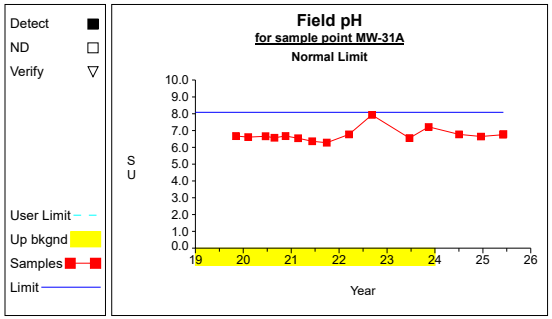
Graph 172



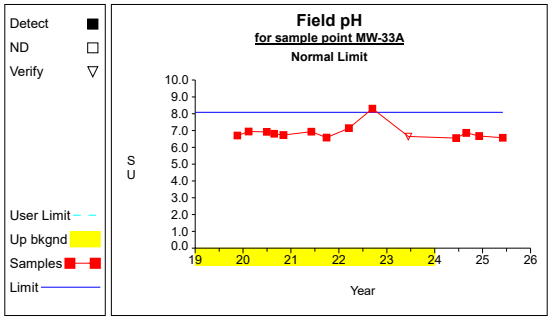
Graph 173



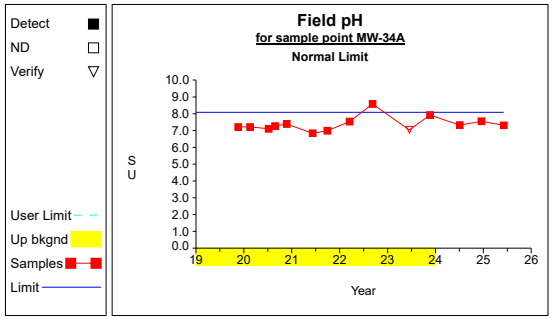
Graph 174



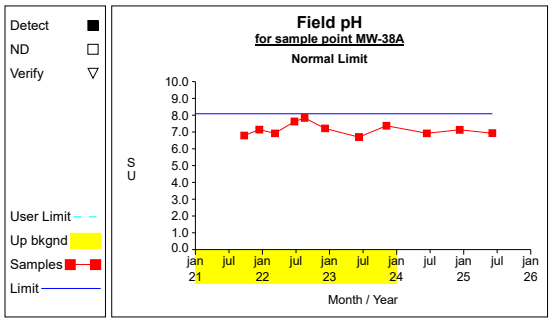
Graph 175



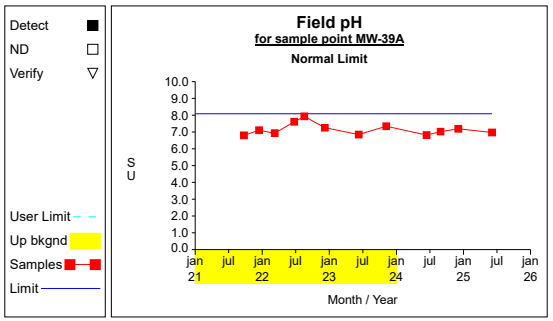
Graph 176



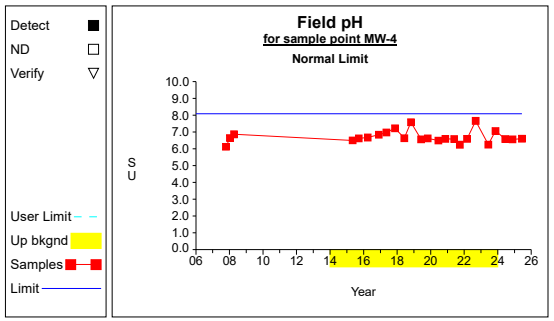
Graph 177



Graph 178

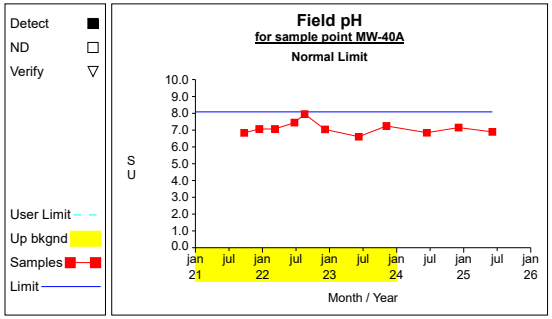


Graph 179

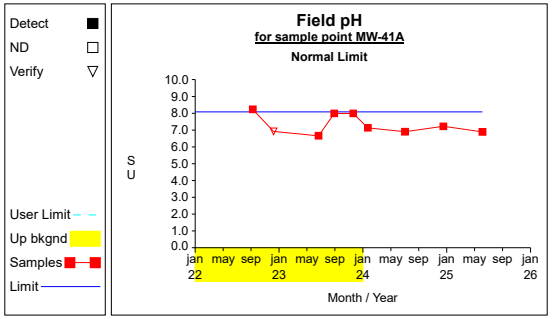


Graph 180

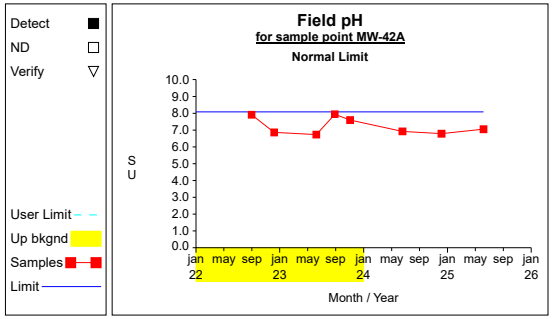
Up vs. Down Prediction Limits



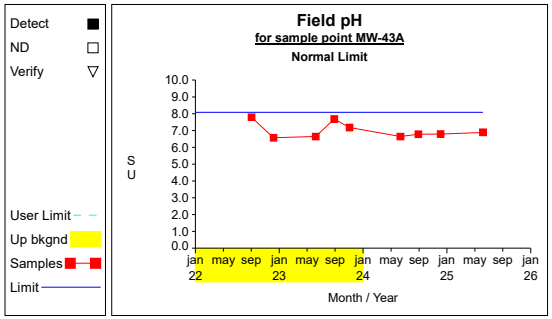
Graph 181



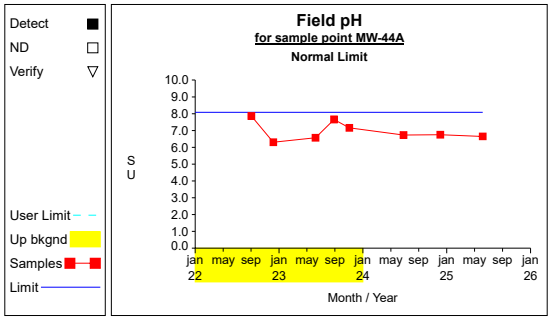
Graph 182



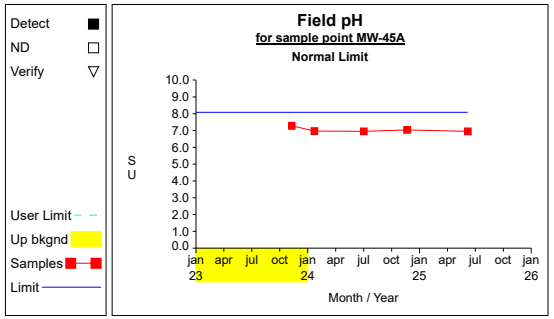
Graph 183



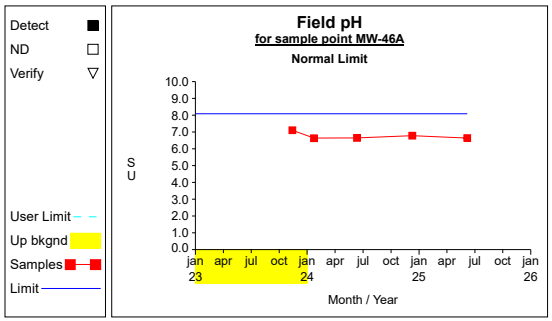
Graph 184



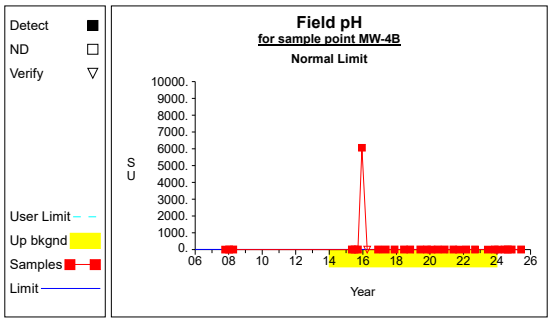
Graph 185



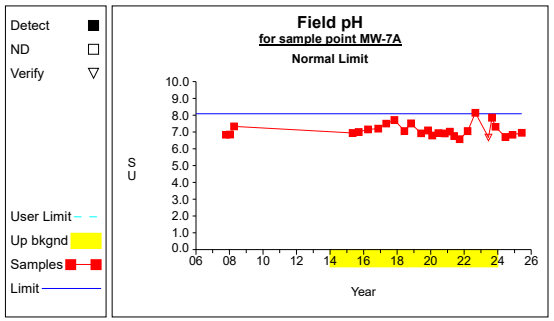
Graph 186



Graph 187

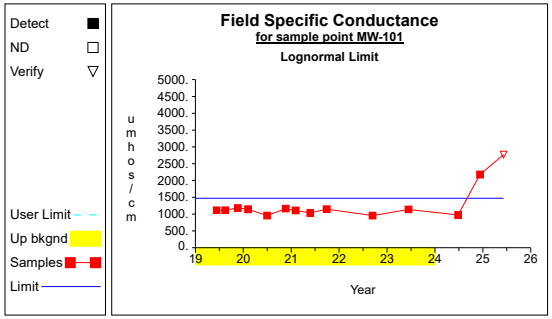


Graph 188

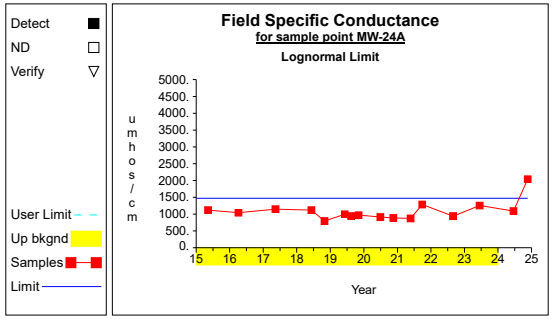


Graph 189

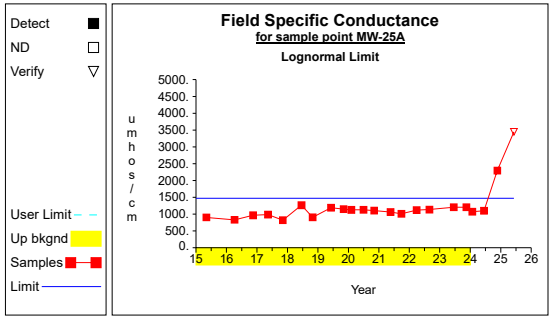
Up vs. Down Prediction Limits



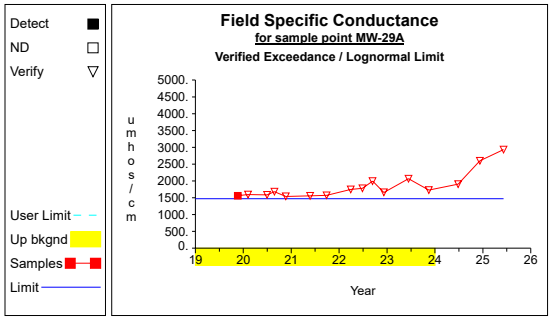
Graph 190



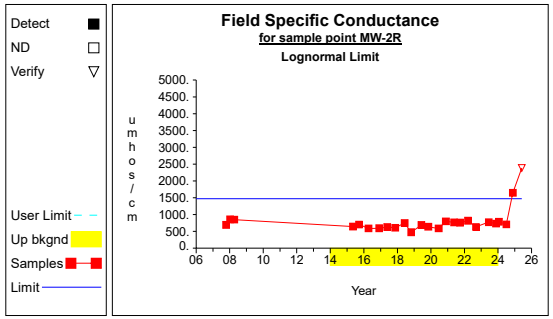
Graph 191



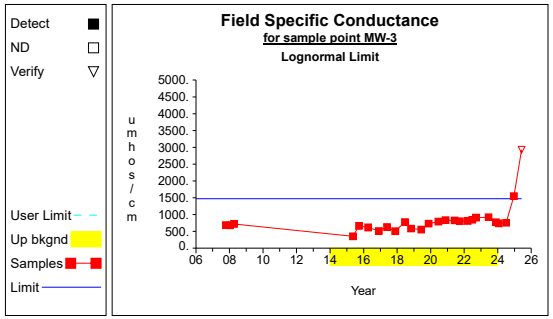
Graph 192



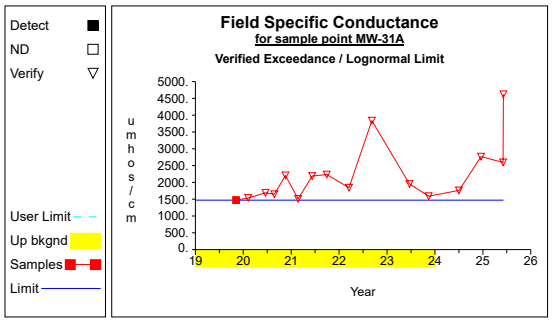
Graph 193



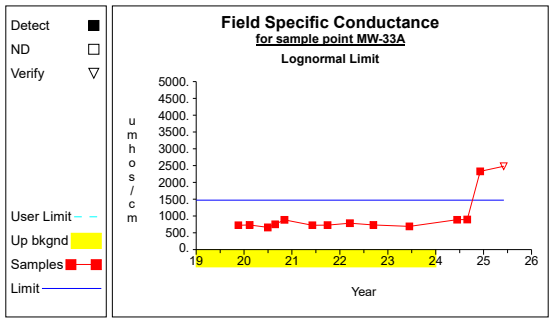
Graph 194



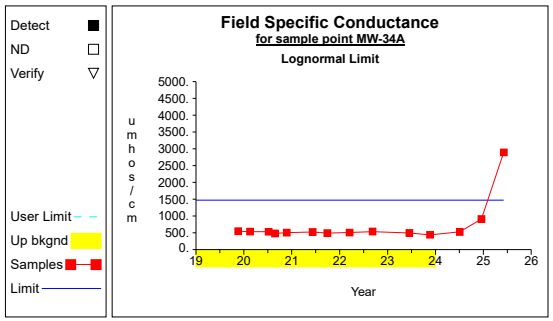
Graph 195



Graph 196

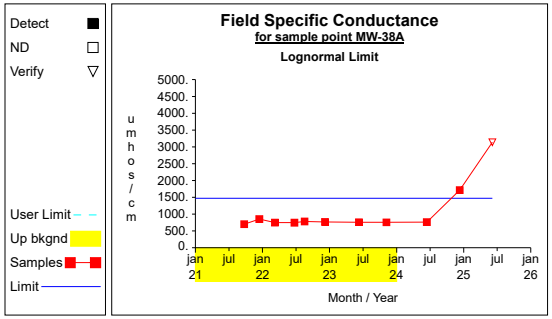


Graph 197

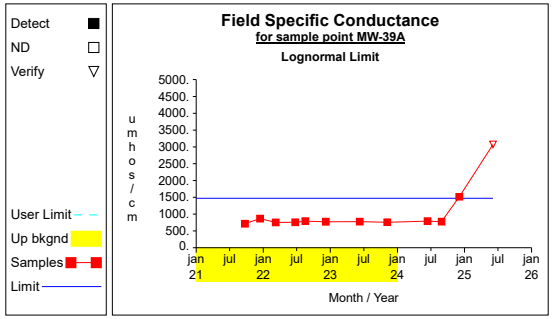


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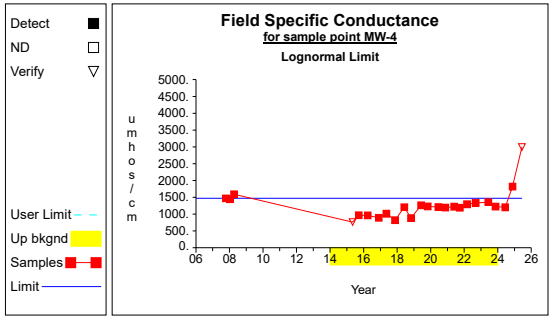
Up vs. Down Prediction Limits



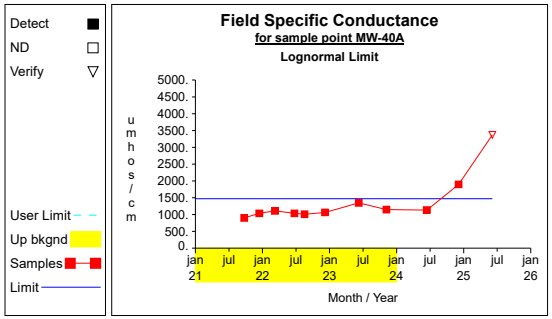
Graph 199



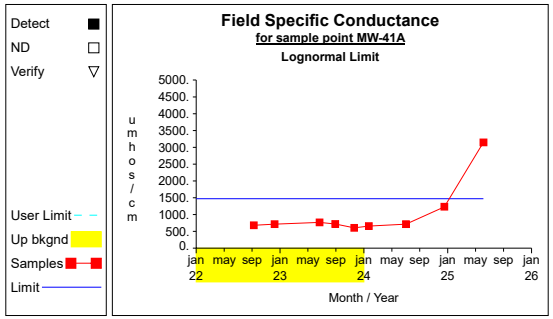
Graph 200



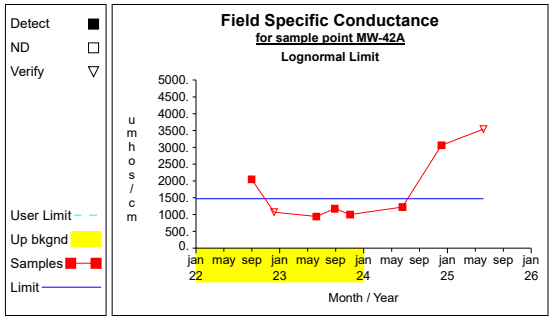
Graph 201



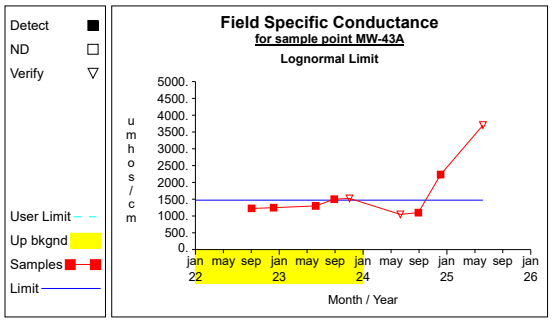
Graph 202



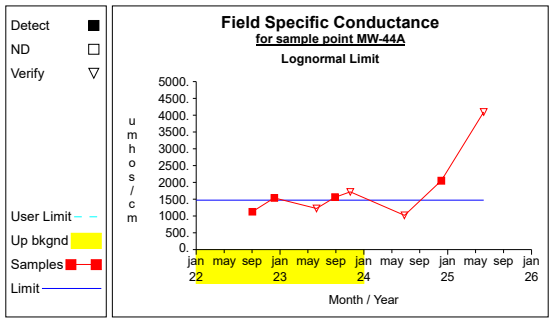
Graph 203



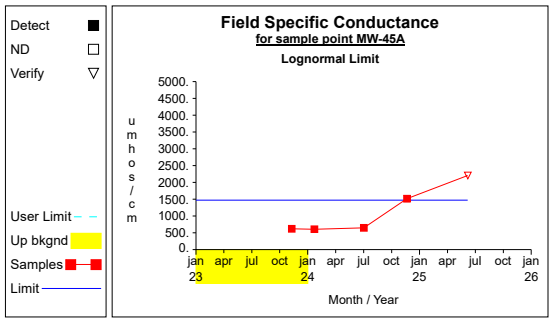
Graph 204



Graph 205

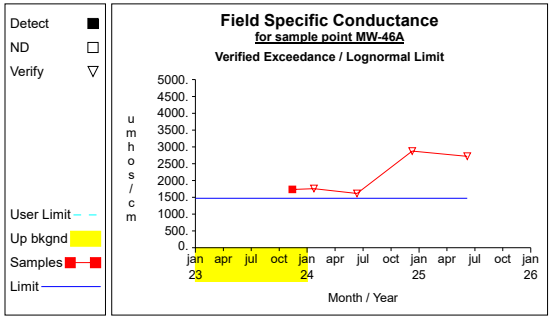


Graph 206

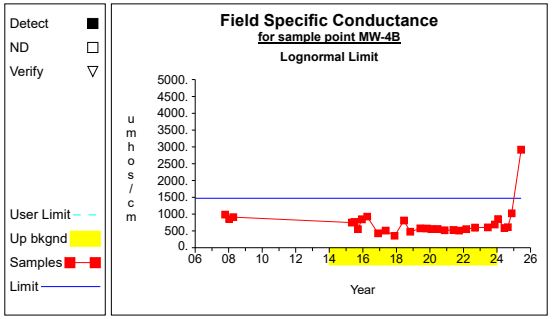


Graph 207

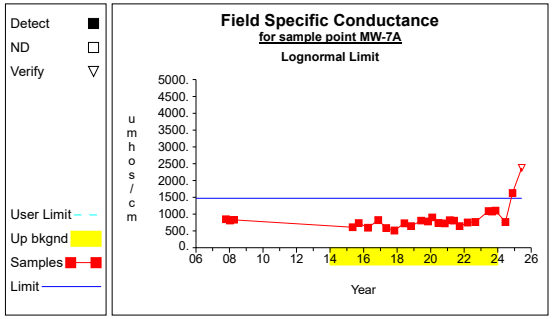
Up vs. Down Prediction Limits



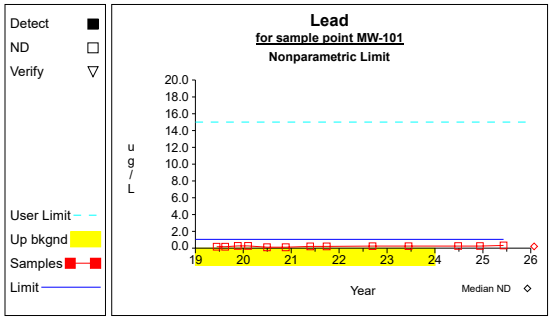
Graph 208



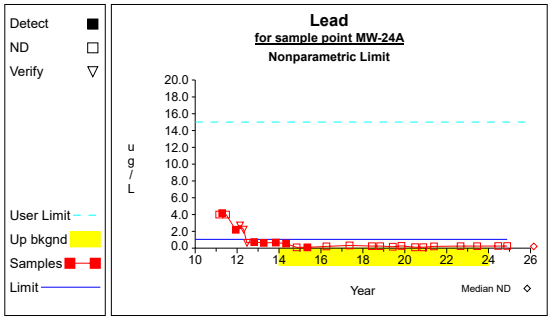
Graph 209



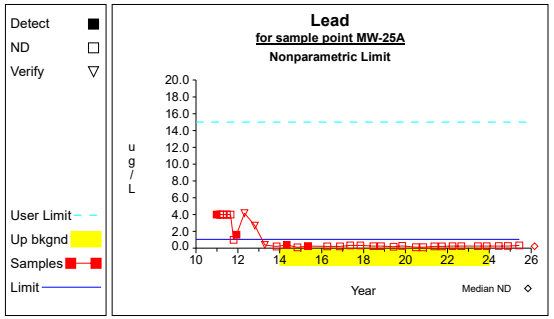
Graph 210



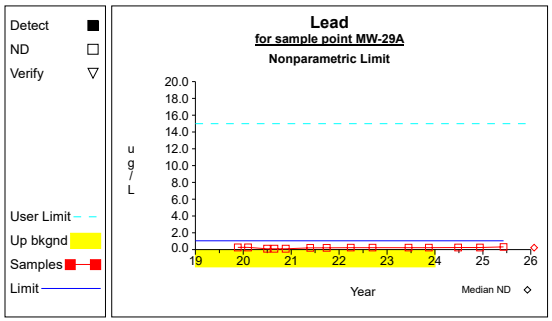
Graph 211



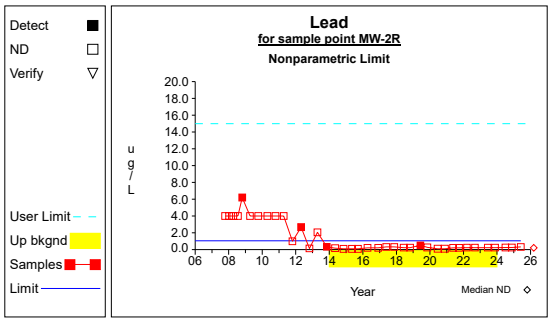
Graph 212



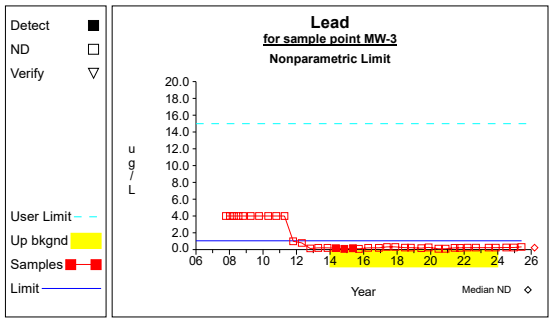
Graph 213



Graph 214

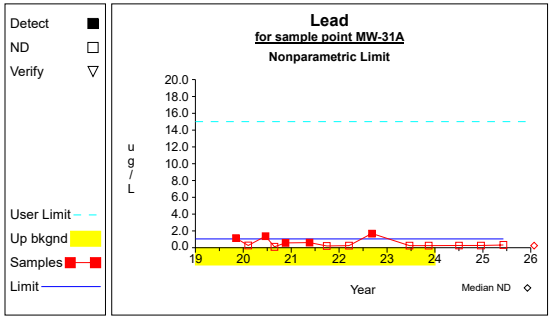


Graph 215

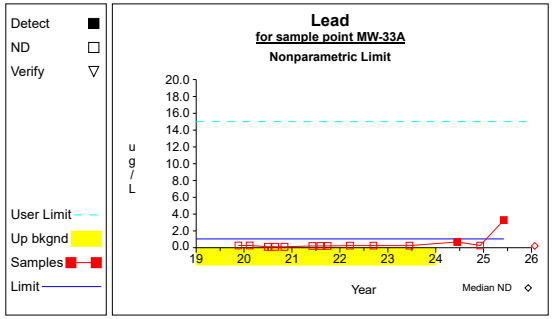


Graph 216

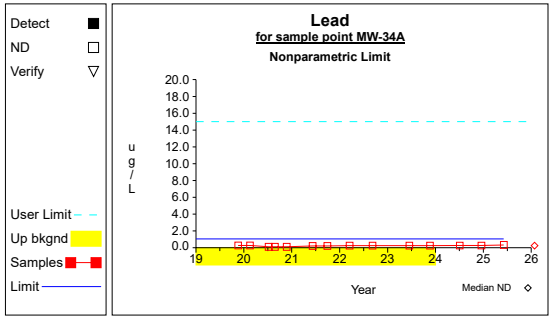
Up vs. Down Prediction Limits



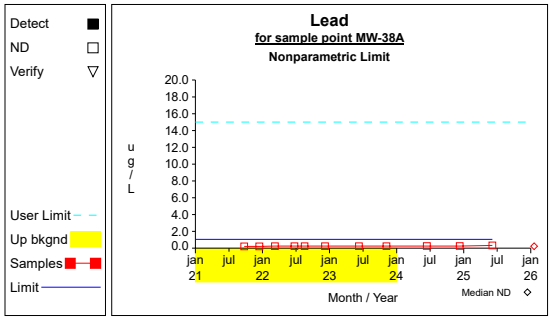
Graph 217



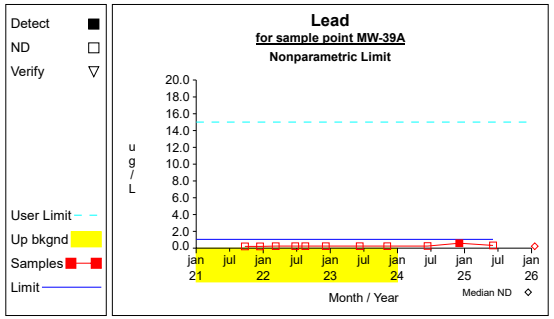
Graph 218



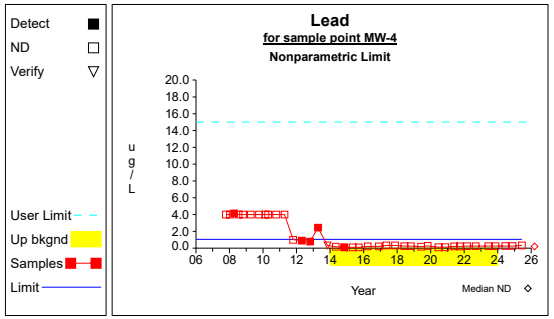
Graph 219



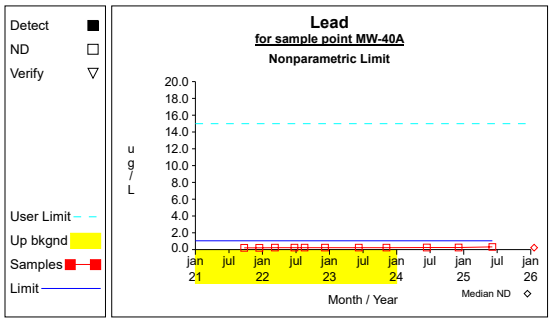
Graph 220



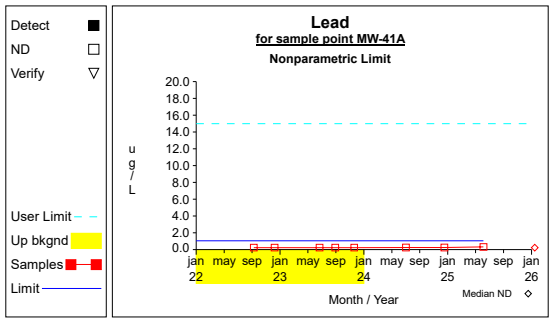
Graph 221



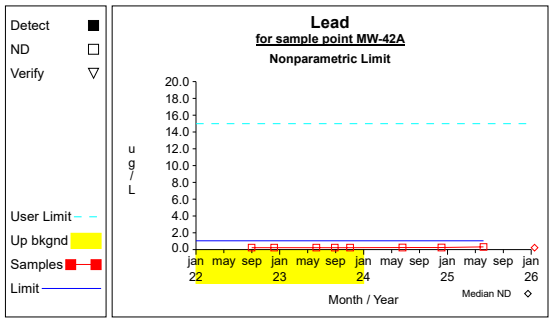
Graph 222



Graph 223

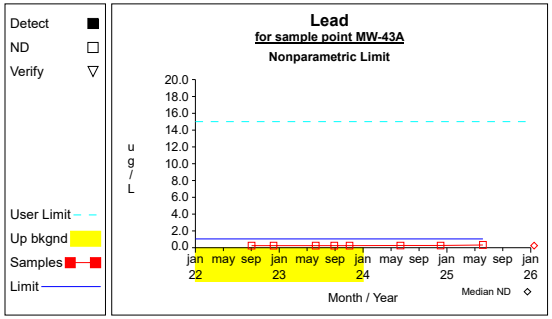


Graph 224

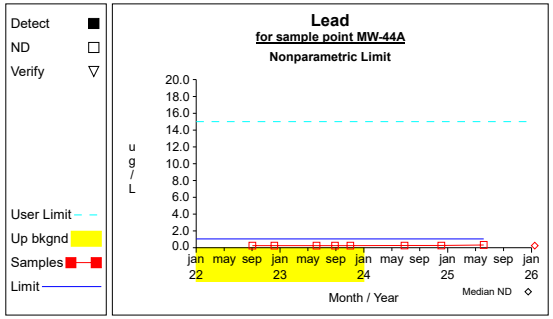


Graph 225

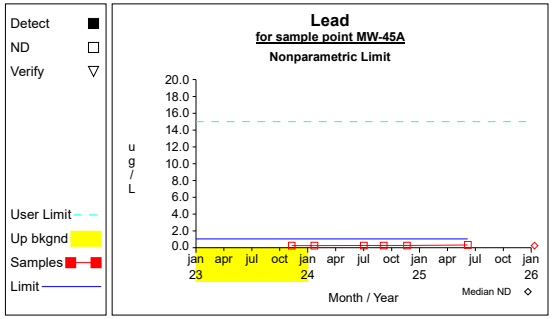
Up vs. Down Prediction Limits



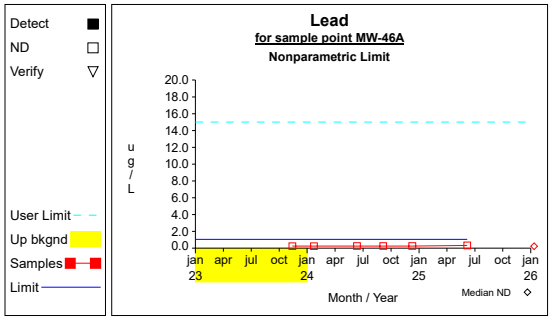
Graph 226



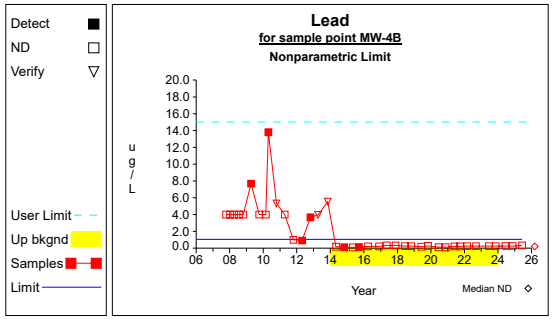
Graph 227



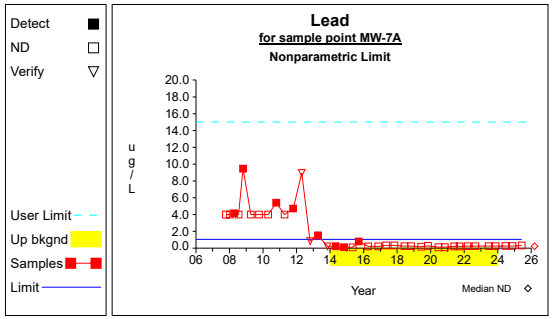
Graph 228



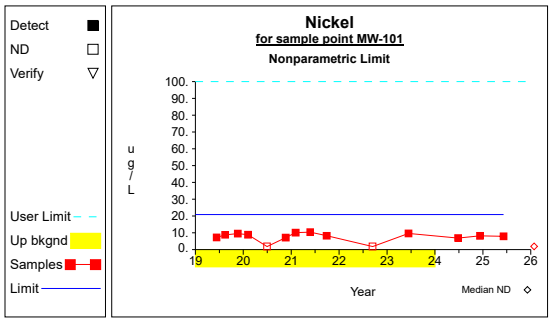
Graph 229



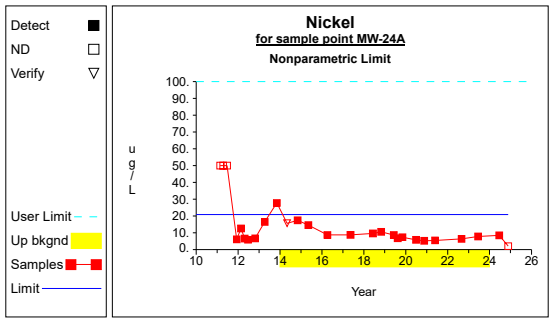
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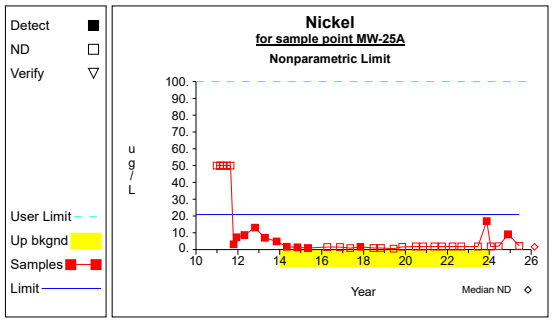
Graph 231



Graph 232

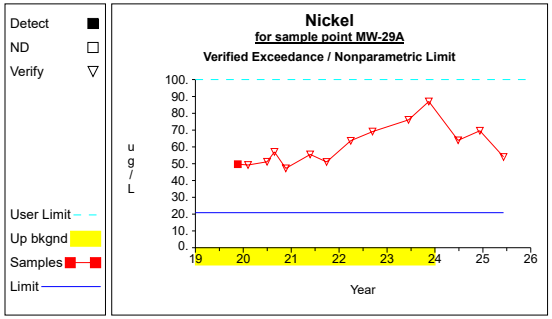


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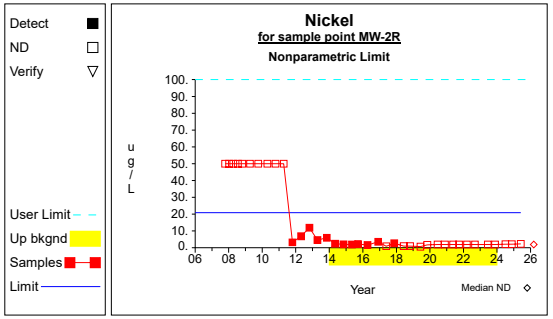


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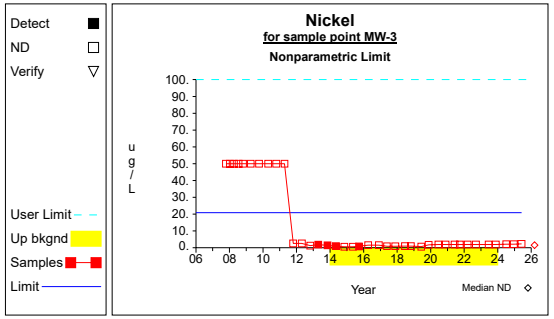
Up vs. Down Prediction Limits



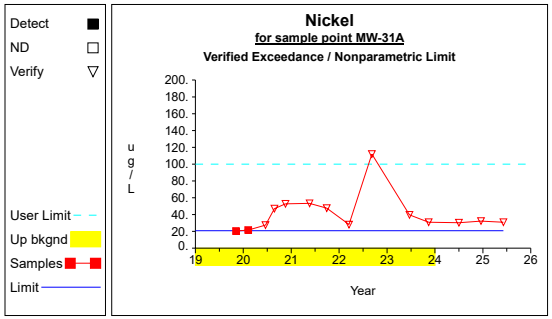
Graph 235



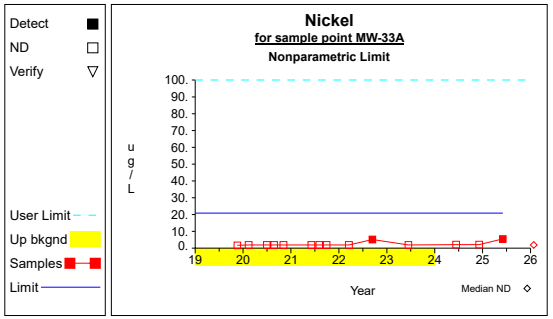
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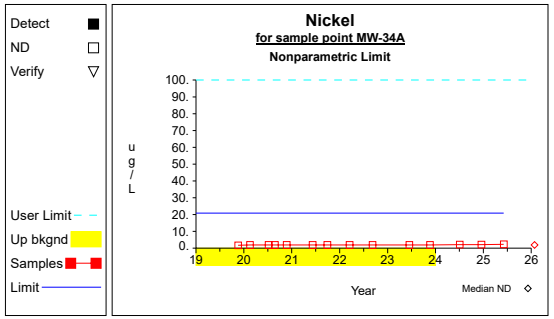
Graph 237



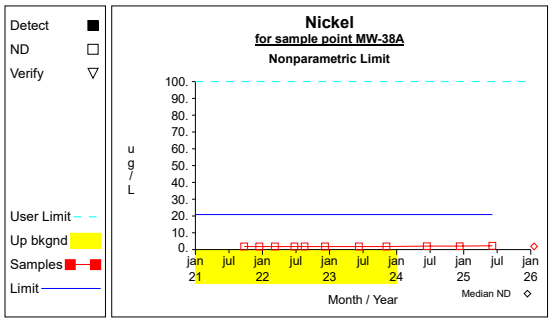
Graph 238



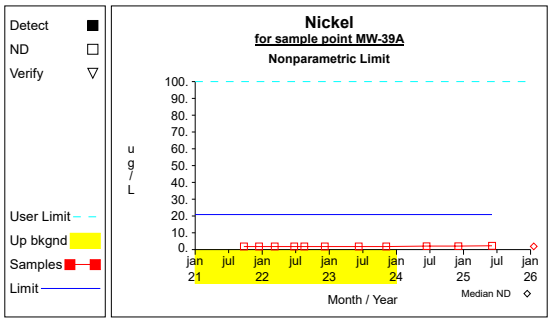
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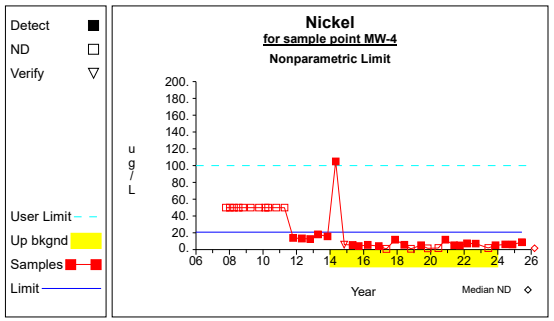
Graph 240



Graph 241

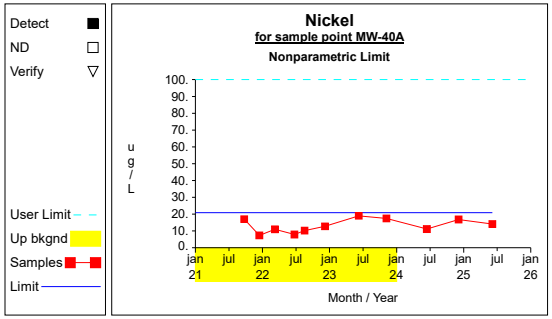


Graph 242

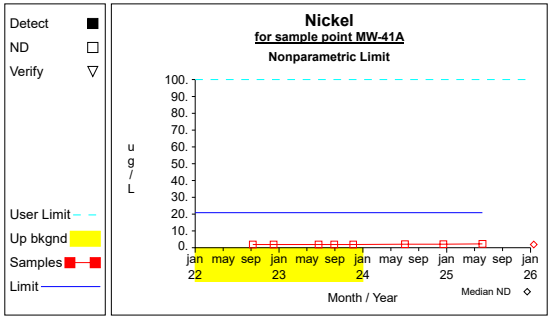


Graph 243

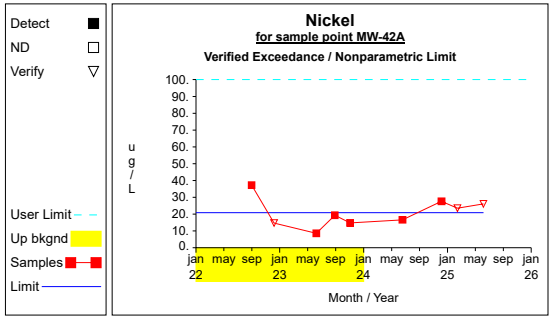
Up vs. Down Prediction Limits



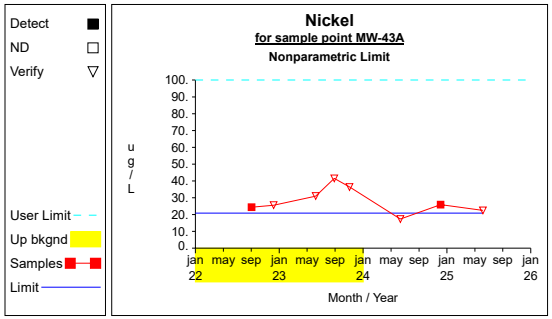
Graph 244



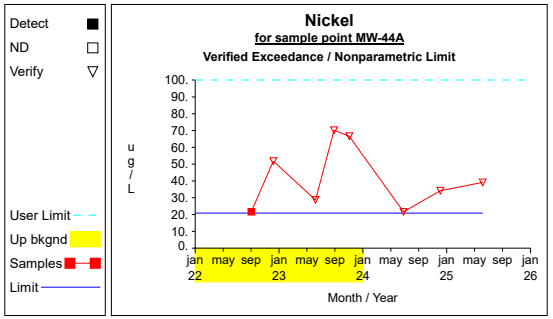
Graph 245



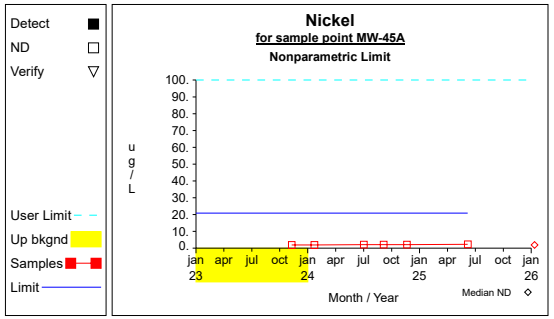
Graph 246



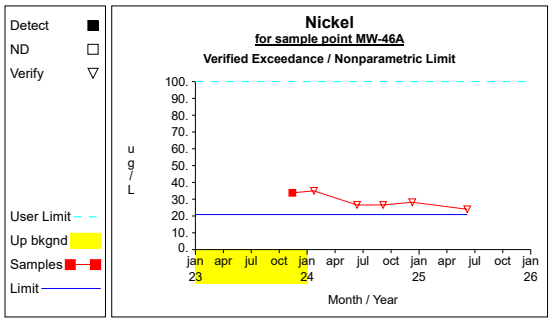
Graph 247



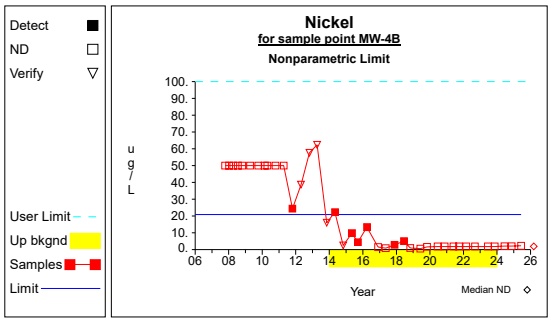
Graph 248



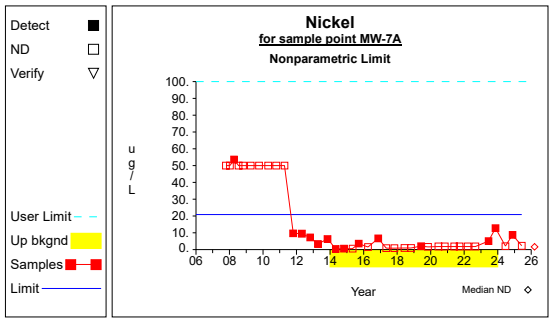
Graph 249



Graph 250

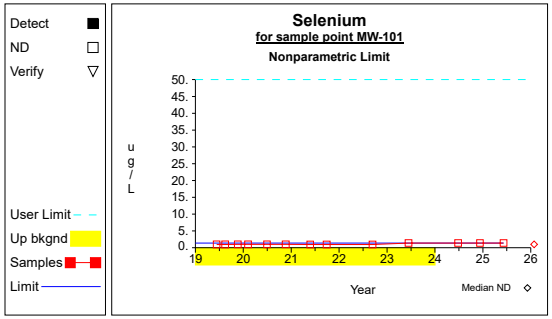


Graph 251

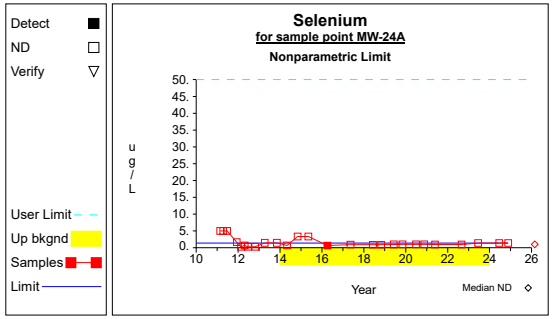


Graph 252

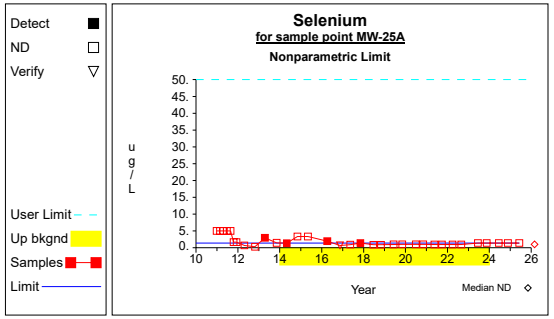
Up vs. Down Prediction Limits



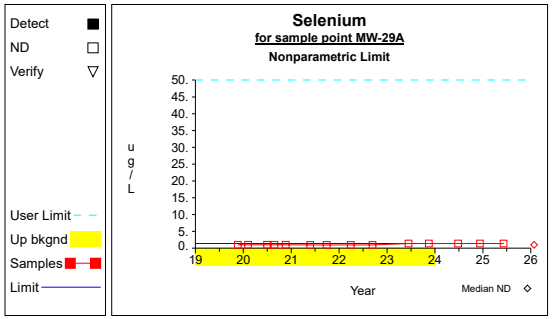
Graph 253



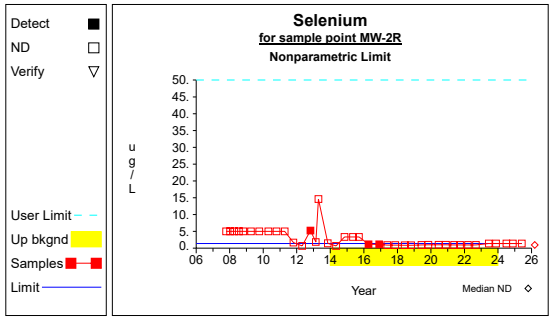
Graph 254



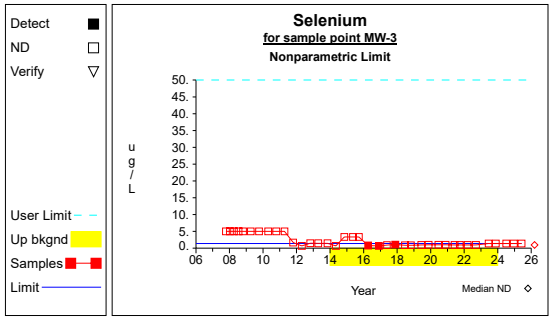
Graph 255



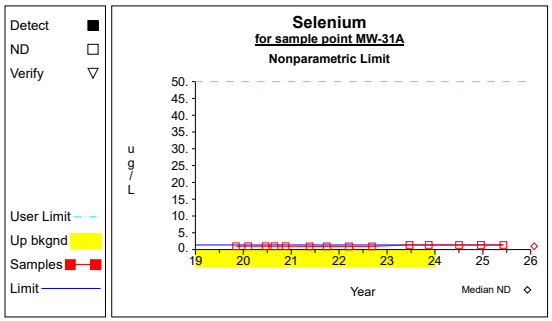
Graph 256



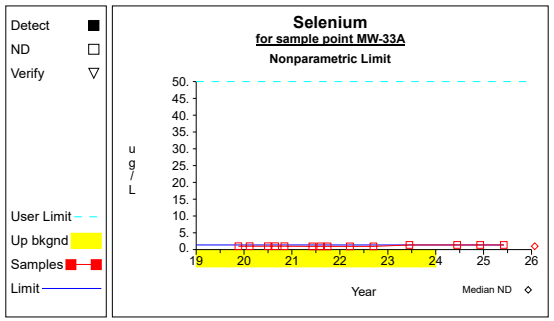
Graph 257



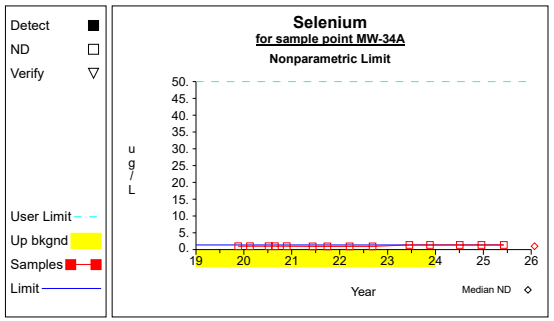
Graph 258



Graph 259

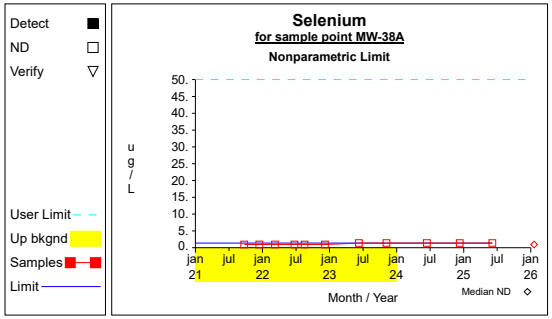


Graph 260

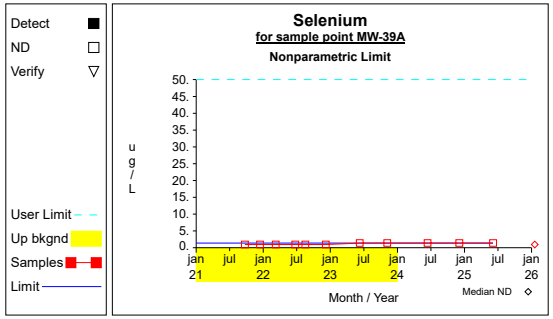


Graph 261

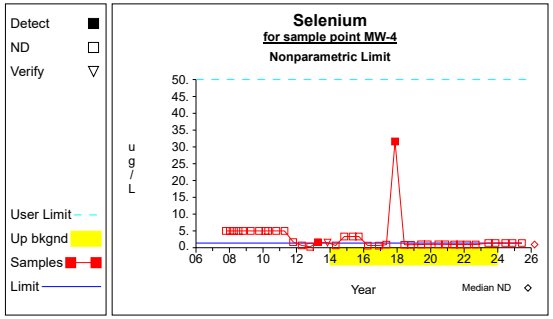
Up vs. Down Prediction Limits



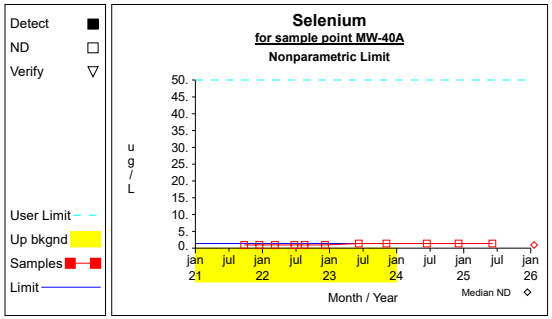
Graph 262



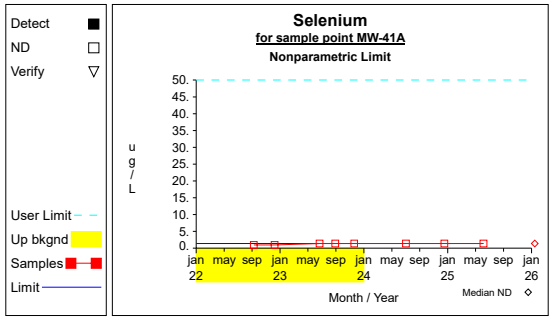
Graph 263



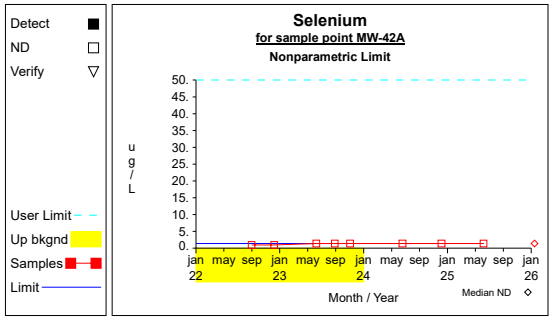
Graph 264



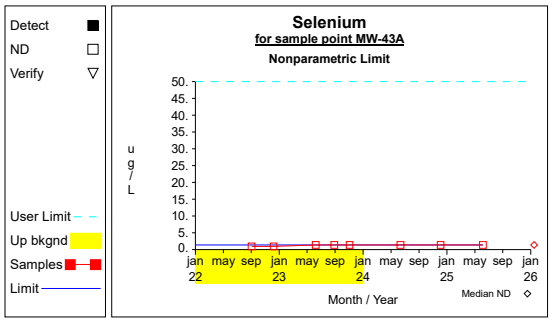
Graph 265



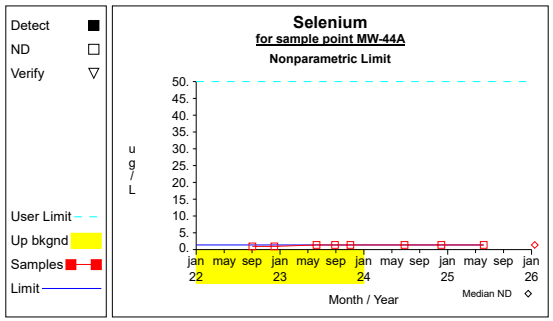
Graph 266



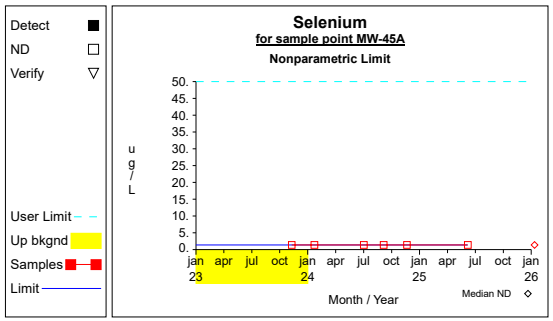
Graph 267



Graph 268

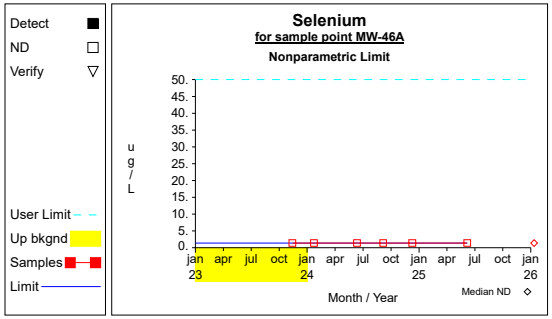


Graph 269

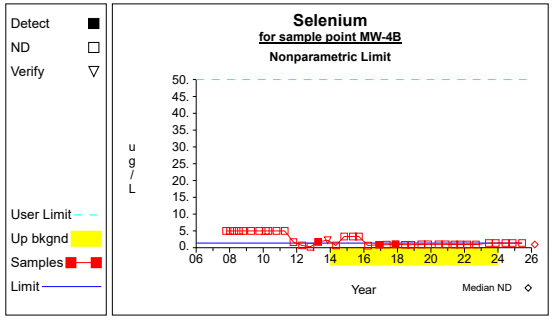


Graph 270

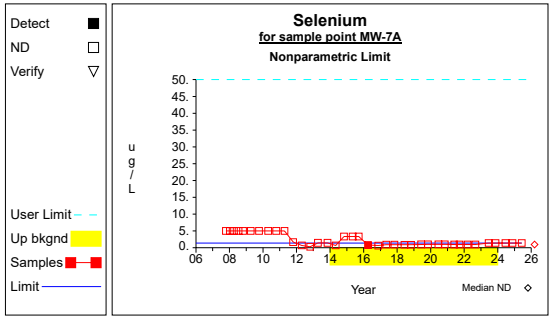
Up vs. Down Prediction Limits



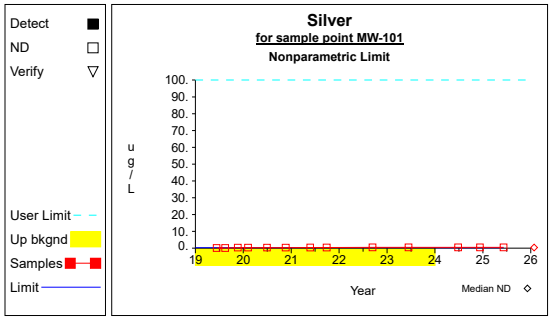
Graph 271



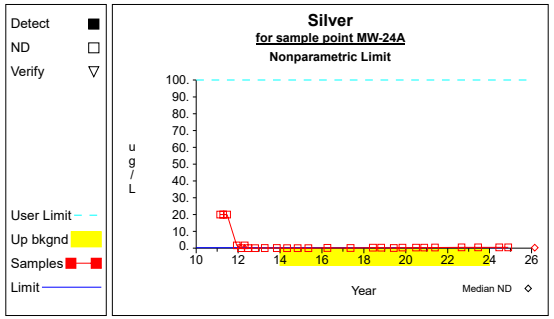
Graph 272



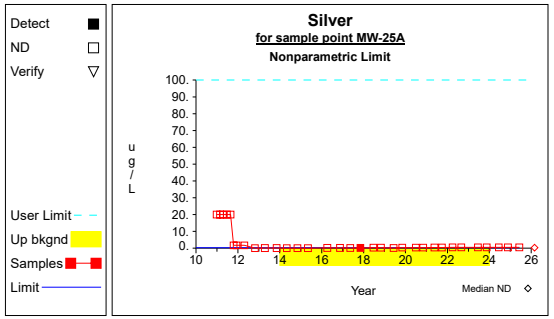
Graph 273



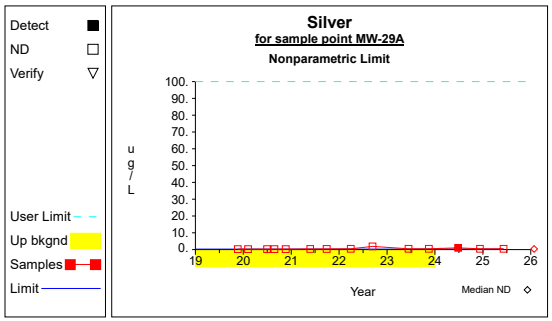
Graph 274



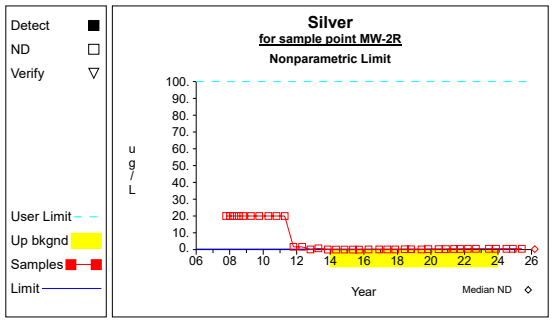
Graph 275



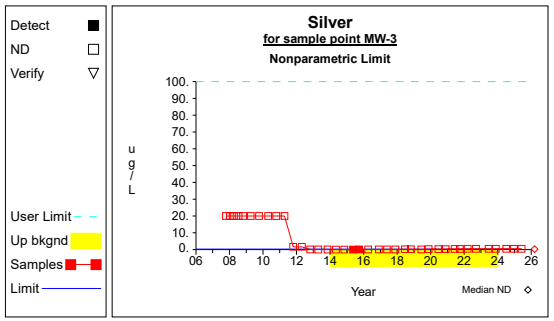
Graph 276



Graph 277

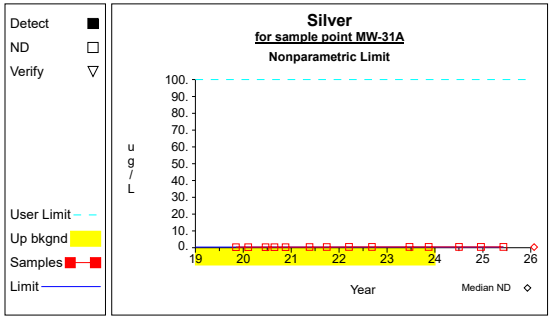


Graph 278

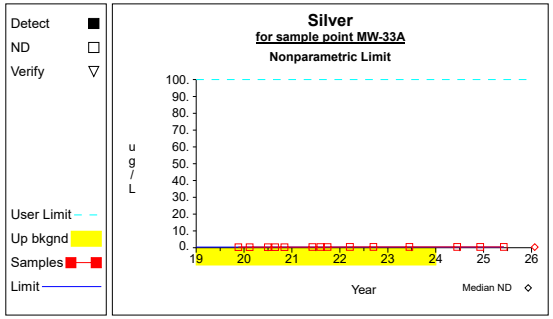


Graph 279

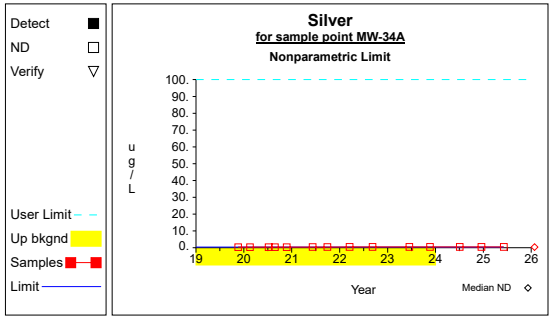
Up vs. Down Prediction Limits



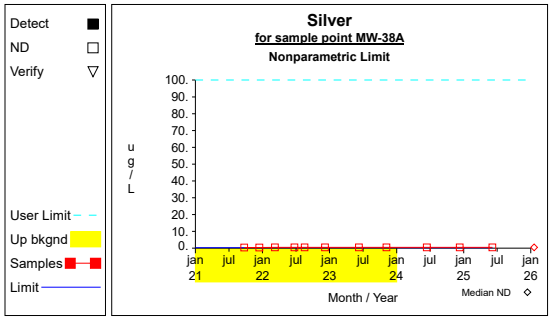
Graph 280



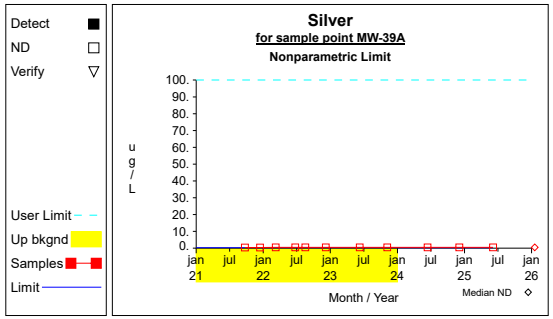
Graph 281



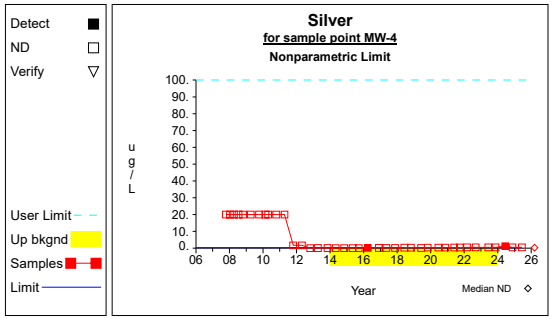
Graph 282



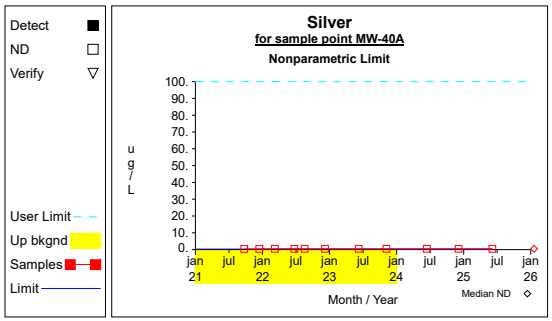
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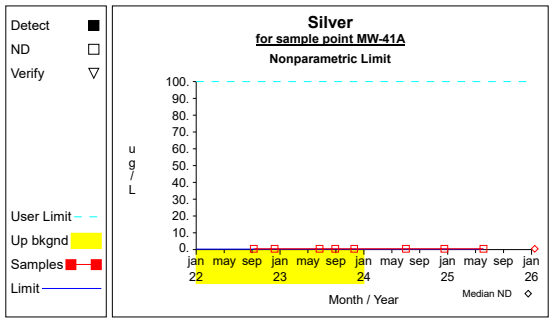
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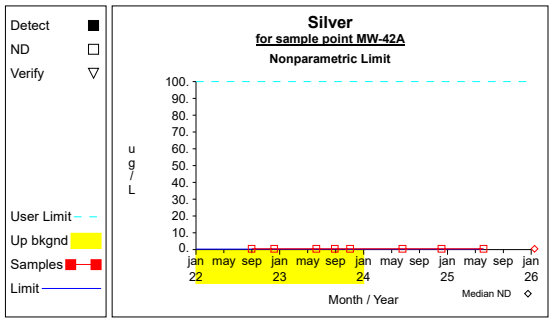
Graph 285



Graph 286

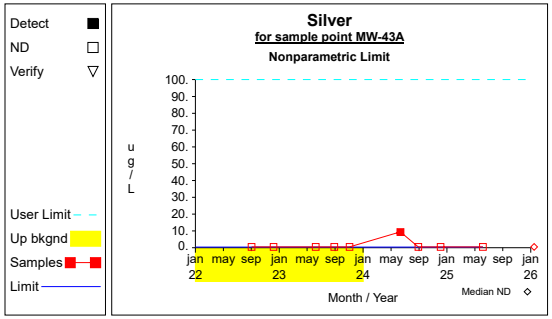


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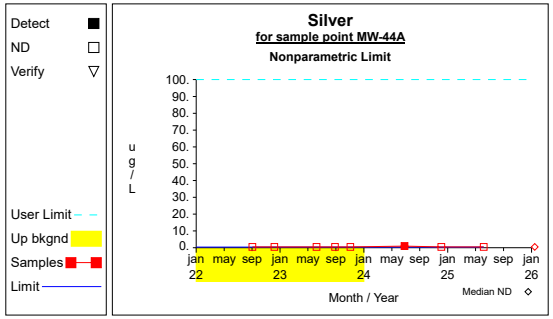


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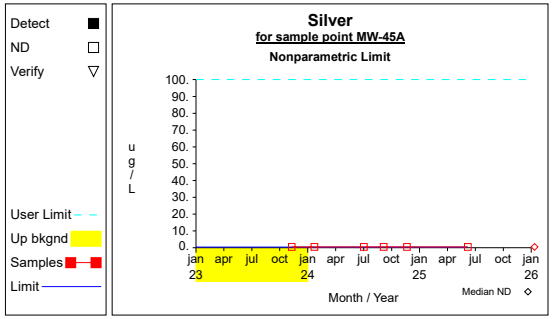
Up vs. Down Prediction Limits



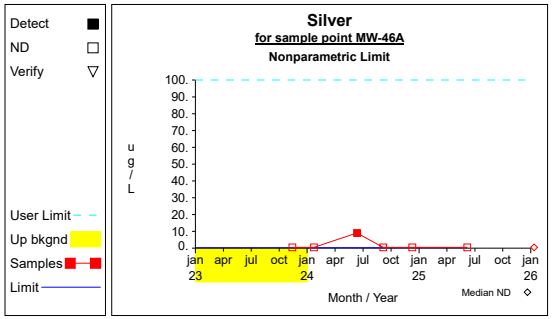
Graph 289



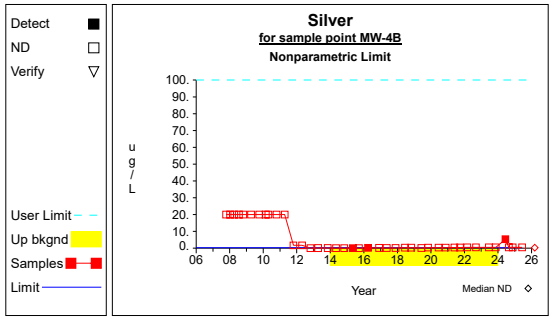
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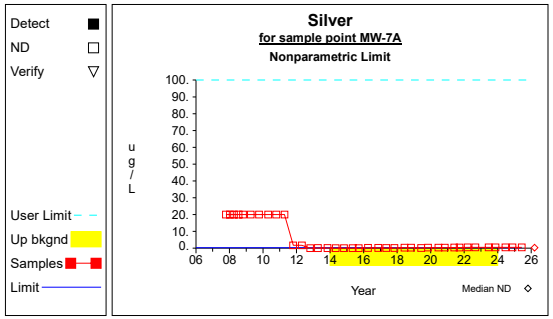
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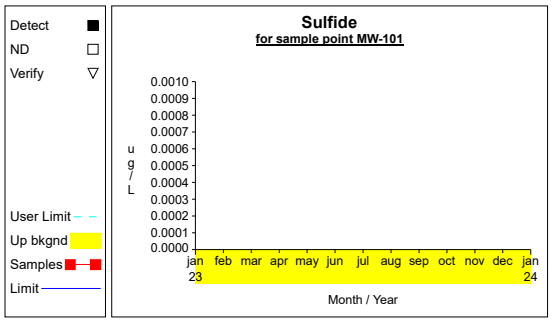
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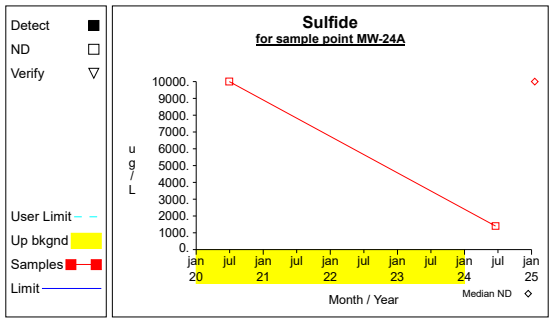
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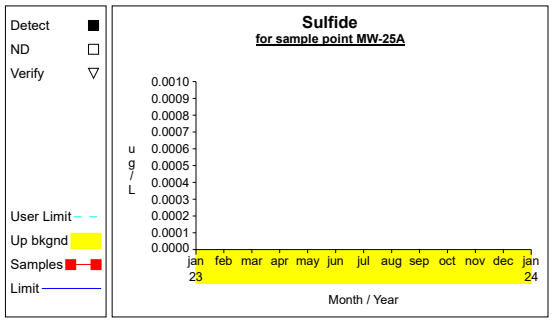
Graph 294



Graph 295

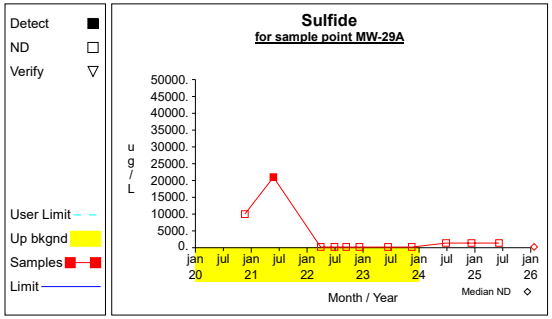


Graph 296

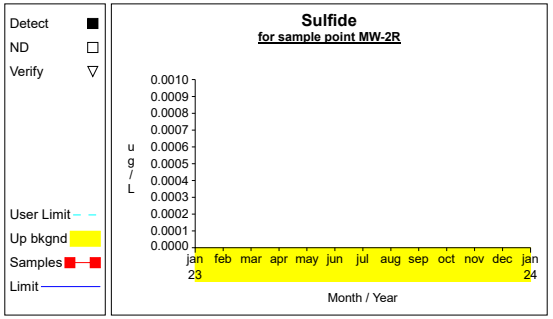


Graph 297

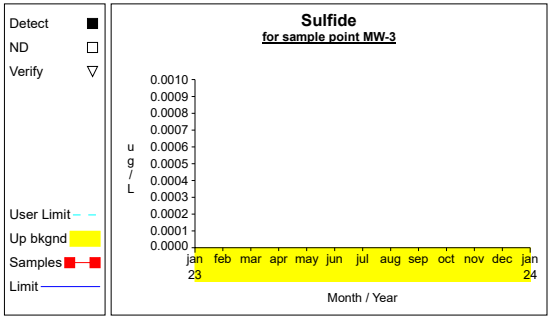
Up vs. Down Prediction Limits



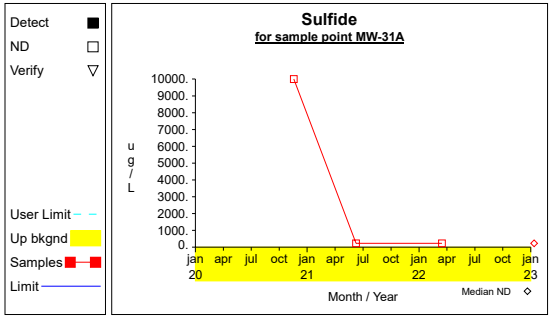
Graph 298



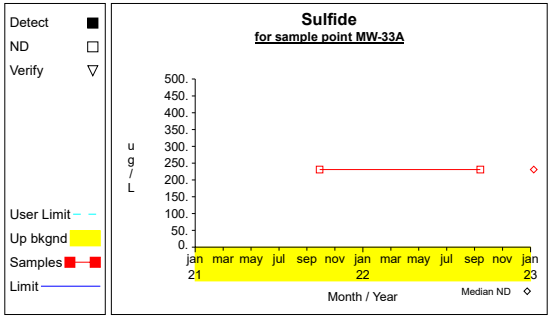
Graph 299



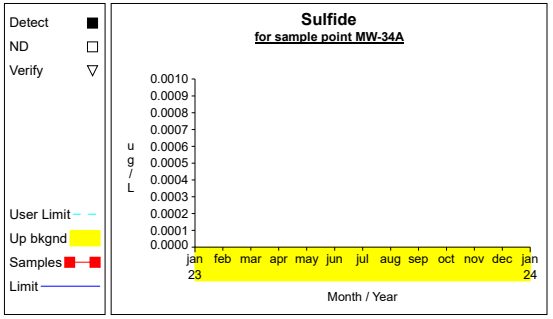
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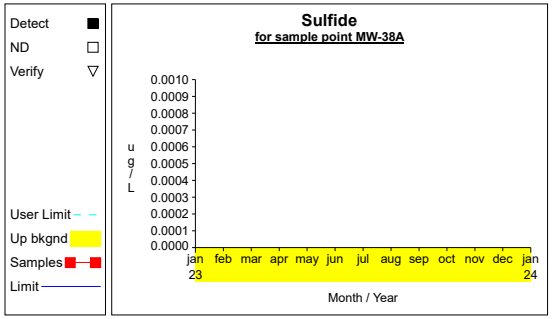
Graph 301



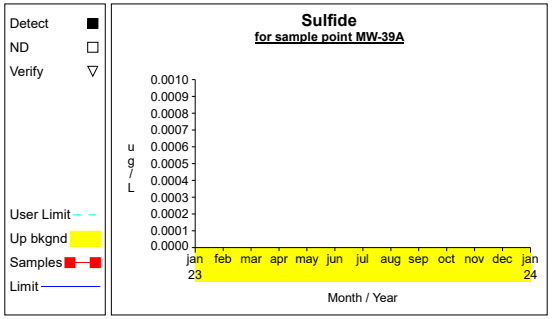
Graph 302



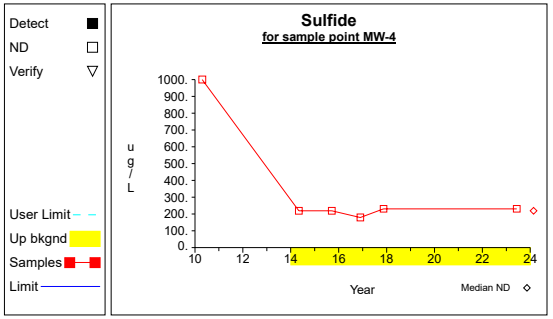
Graph 303



Graph 304

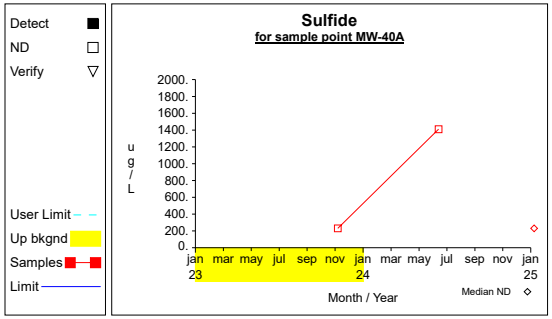


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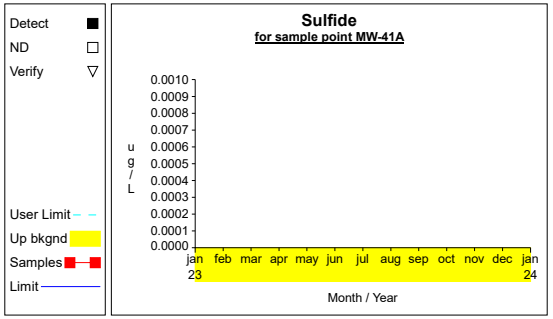


Graph 306

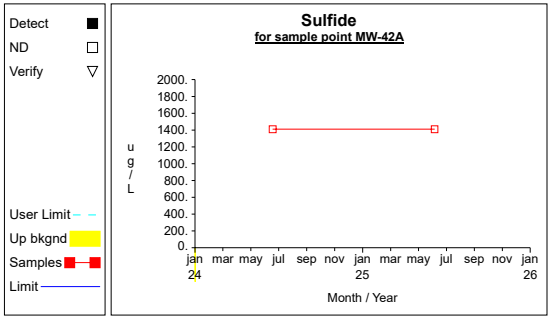
Up vs. Down Prediction Limits



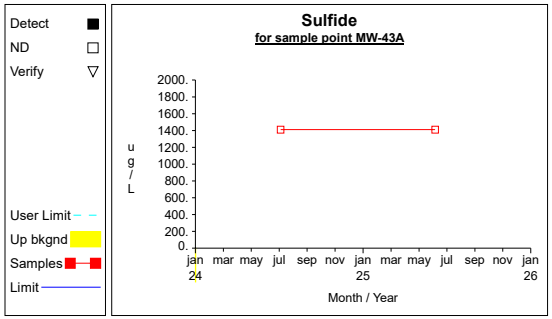
Graph 307



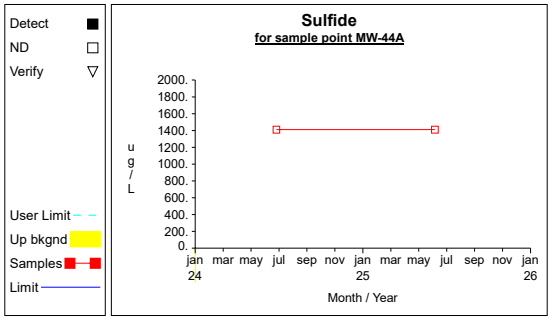
Graph 308



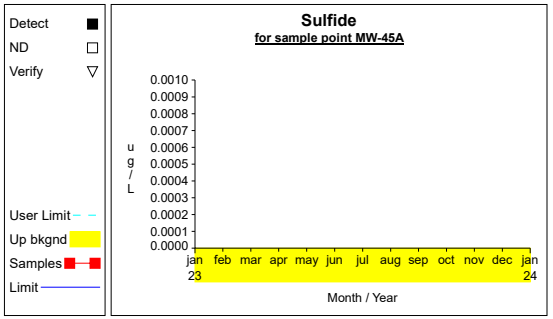
Graph 309



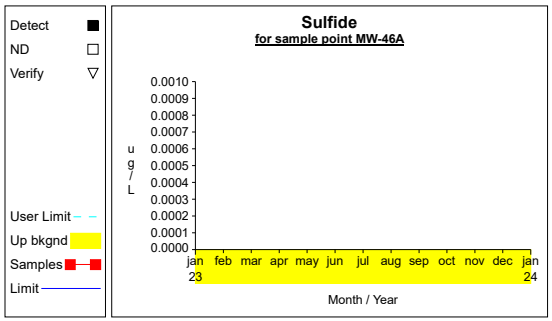
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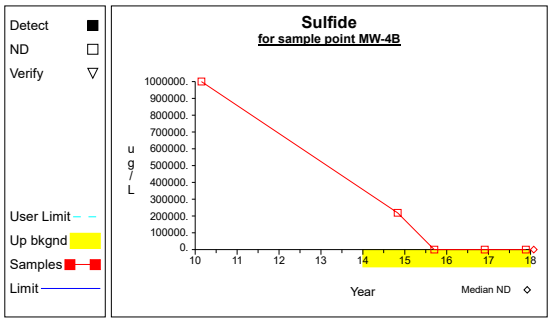
Graph 311



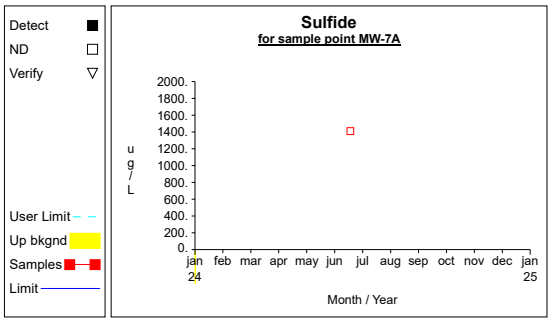
Graph 312



Graph 313

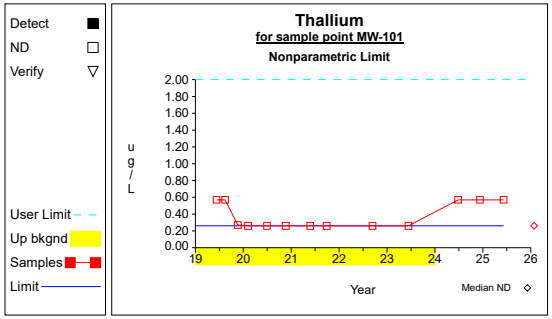


Graph 314

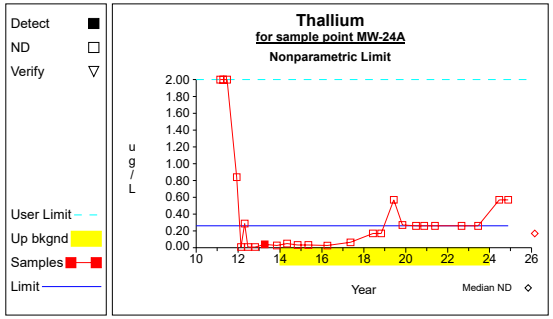


Graph 315

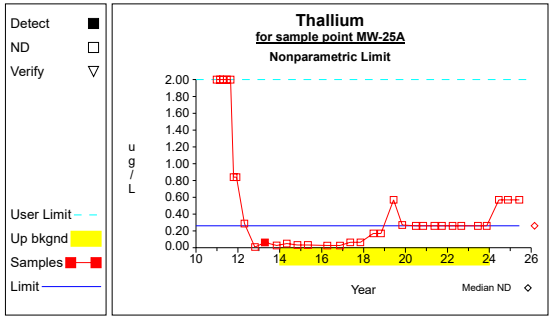
Up vs. Down Prediction Limits



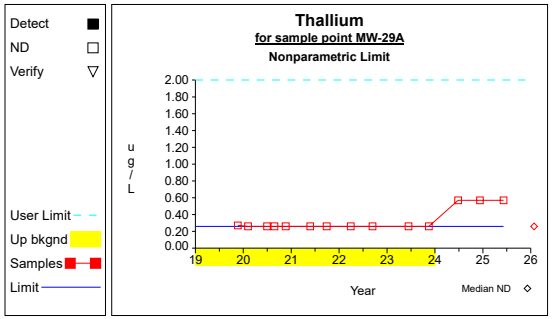
Graph 316



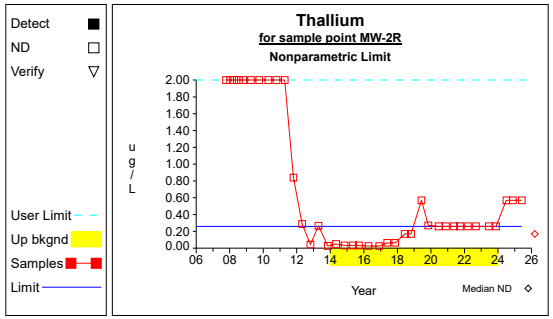
Graph 317



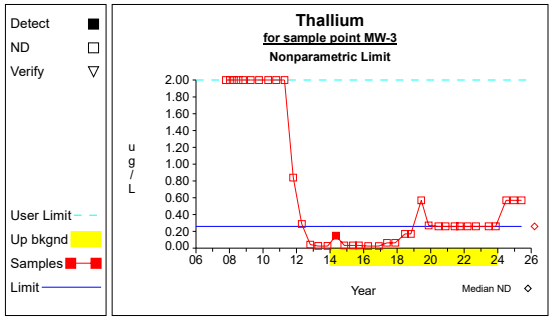
Graph 318



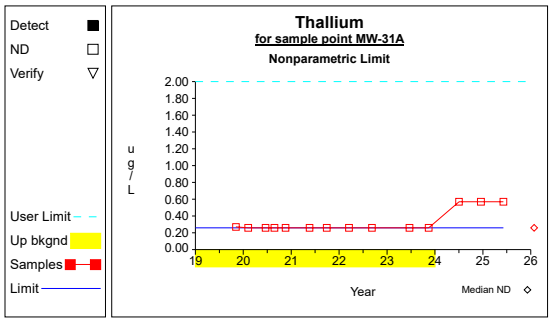
Graph 319



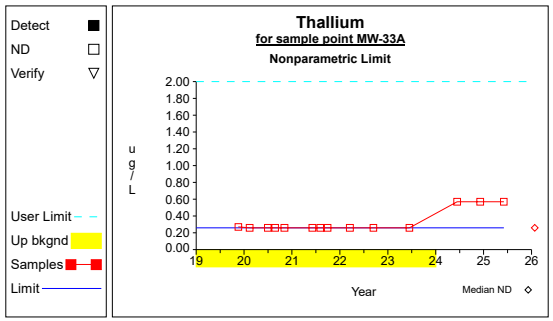
Graph 320



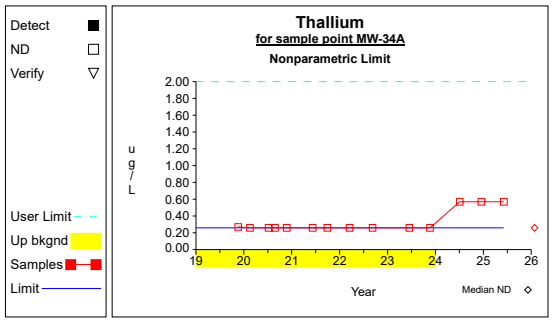
Graph 321



Graph 322

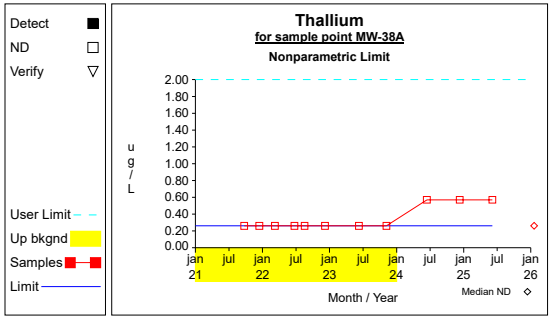


Graph 323

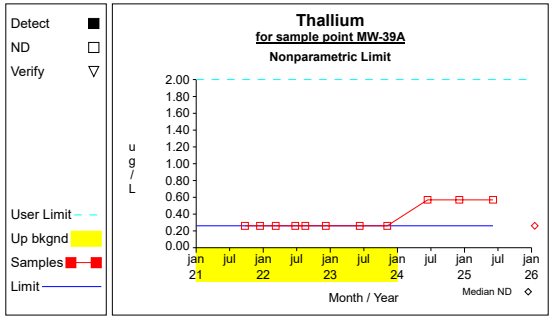


Graph 324

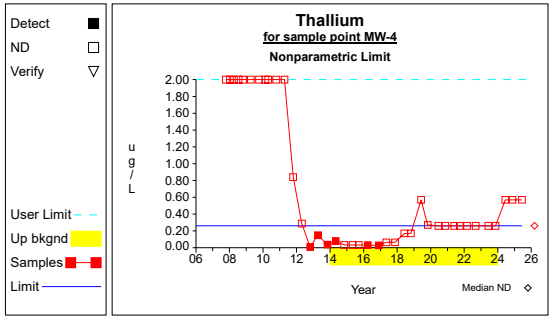
Up vs. Down Prediction Limits



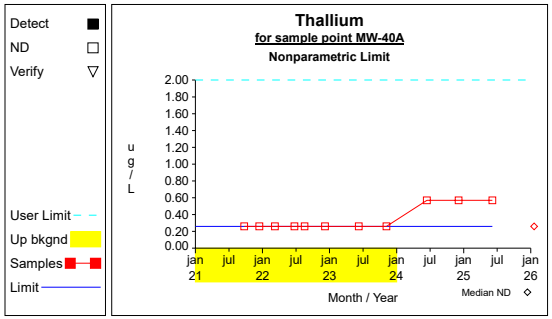
Graph 325



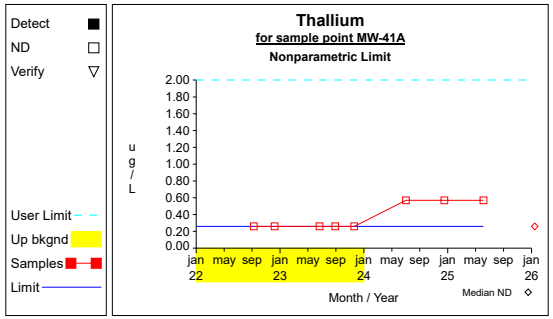
Graph 326



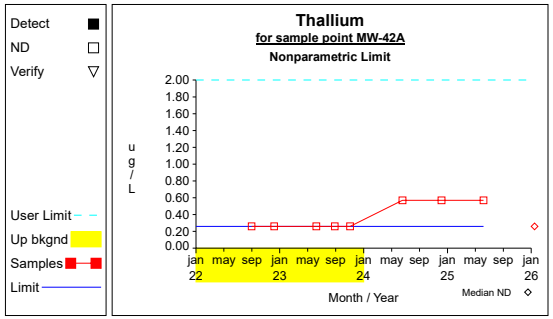
Graph 327



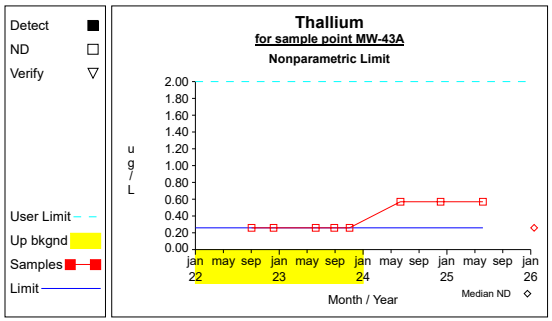
Graph 328



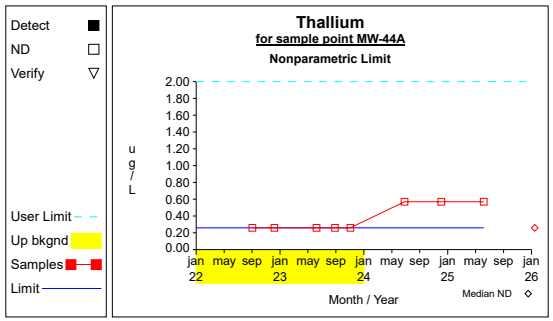
Graph 329



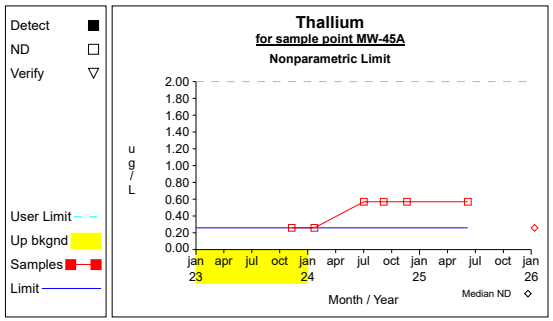
Graph 330



Graph 331

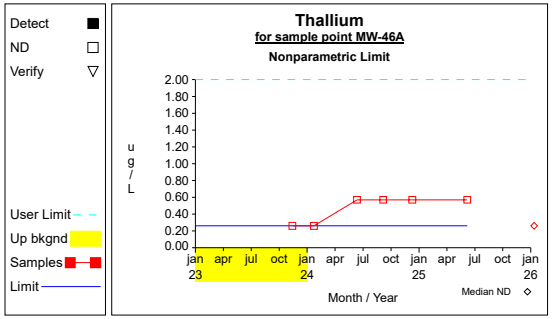


Graph 332

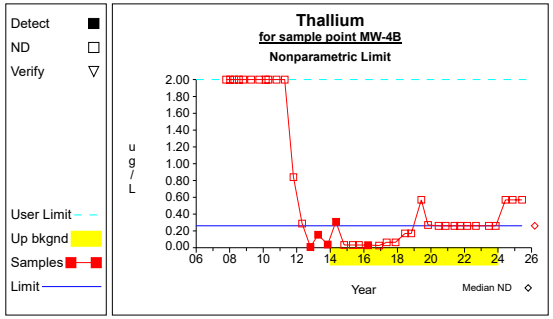


Graph 333

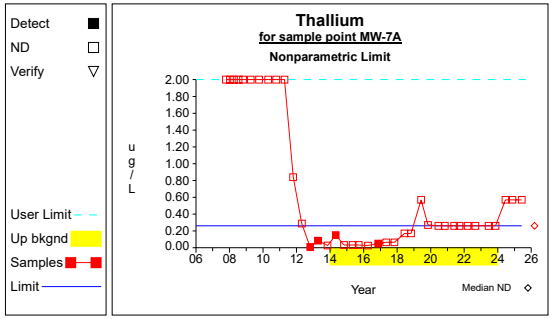
Up vs. Down Prediction Limits



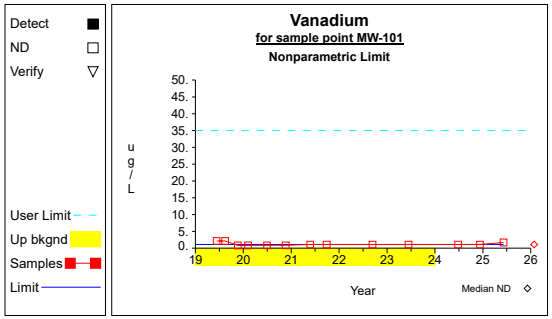
Graph 334



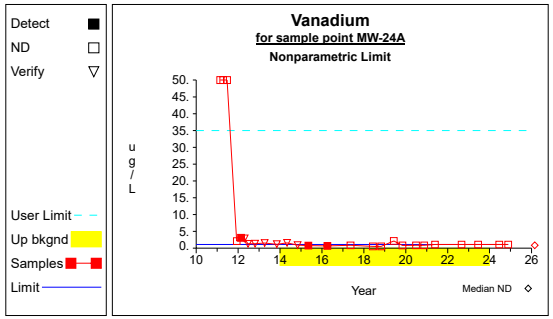
Graph 335



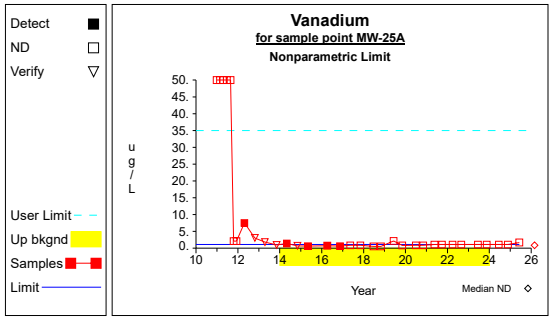
Graph 336



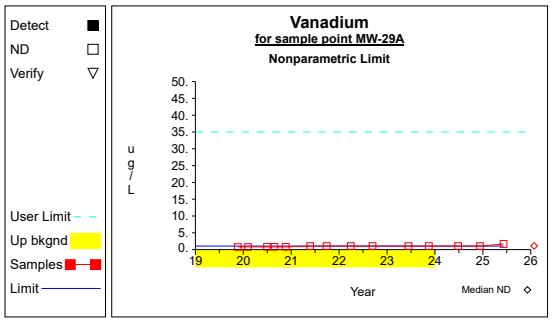
Graph 337



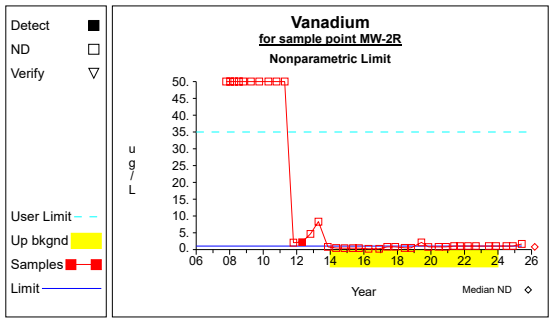
Graph 338



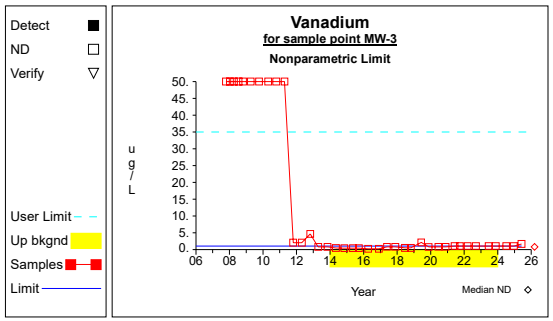
Graph 339



Graph 340

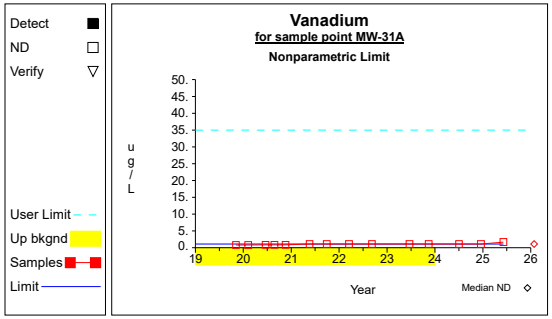


Graph 341

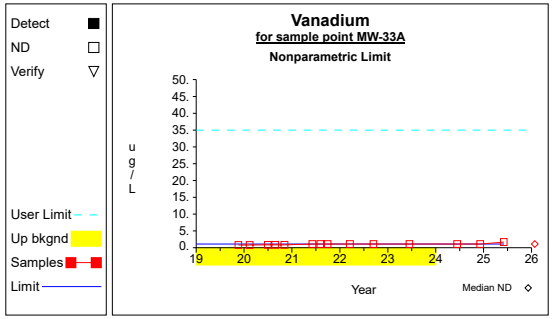


Graph 342

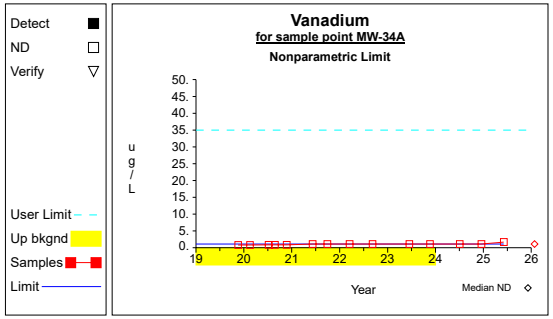
Up vs. Down Prediction Limits



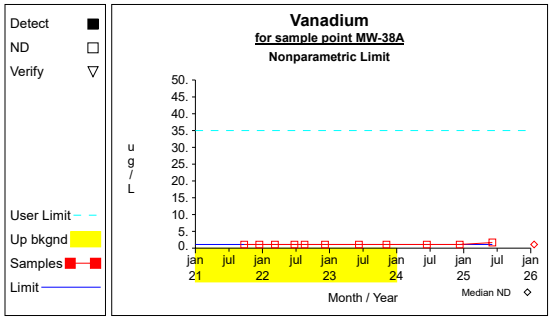
Graph 343



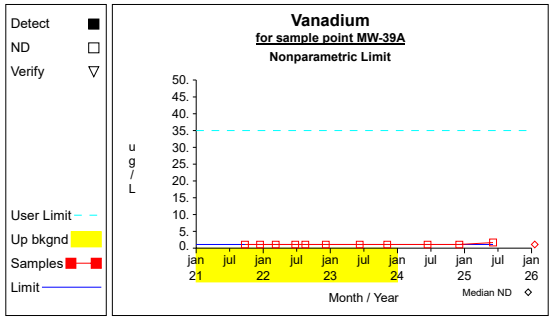
Graph 344



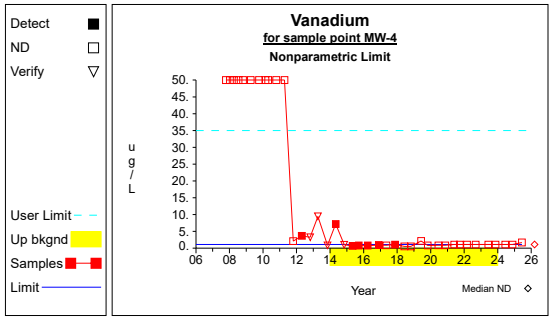
Graph 345



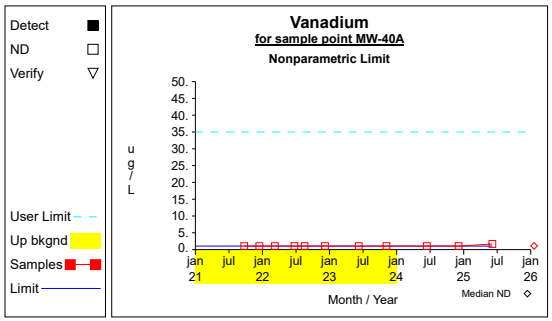
Graph 346



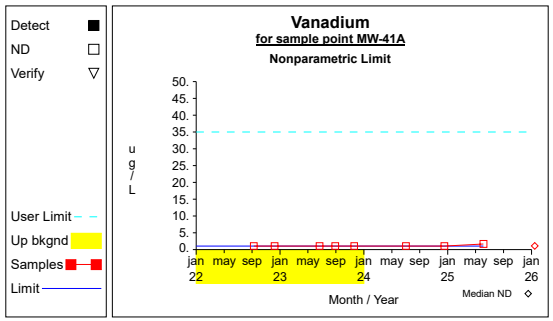
Graph 347



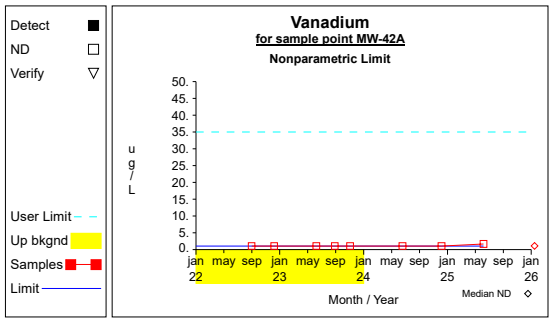
Graph 348



Graph 349

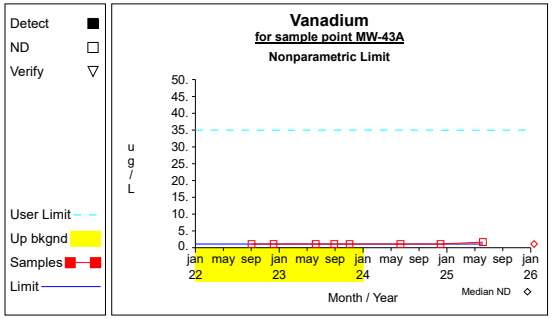


Graph 350

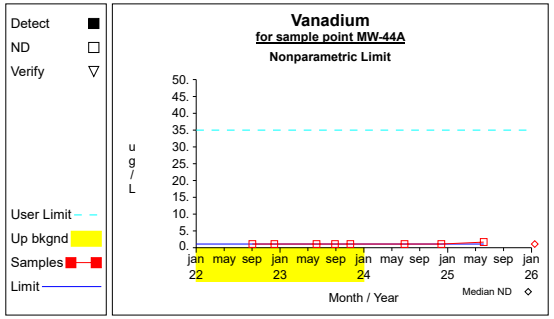


Graph 351

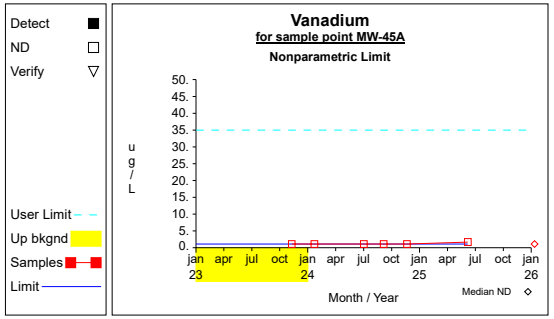
Up vs. Down Prediction Limits



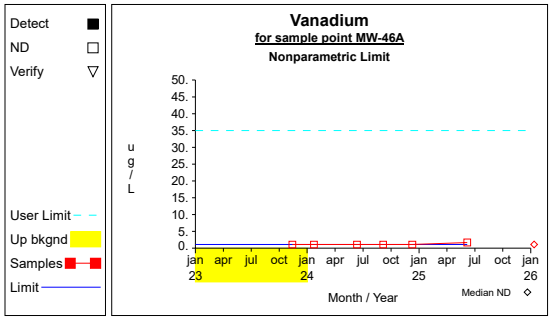
Graph 352



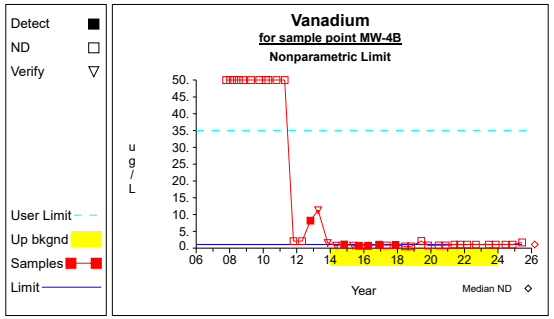
Graph 353



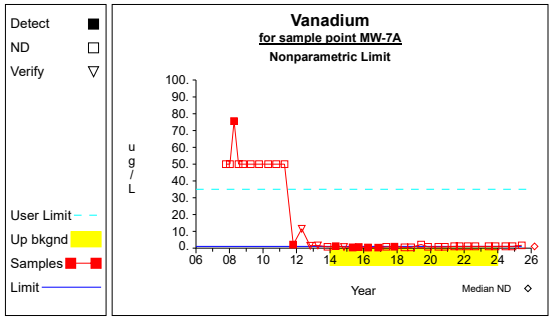
Graph 354



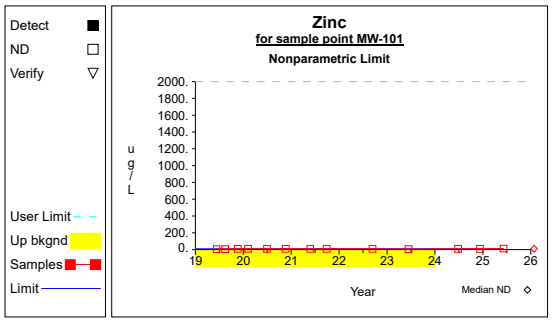
Graph 355



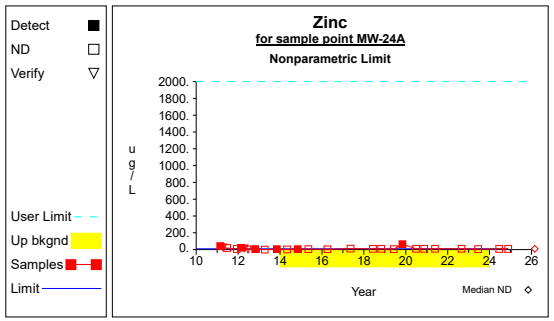
Graph 356



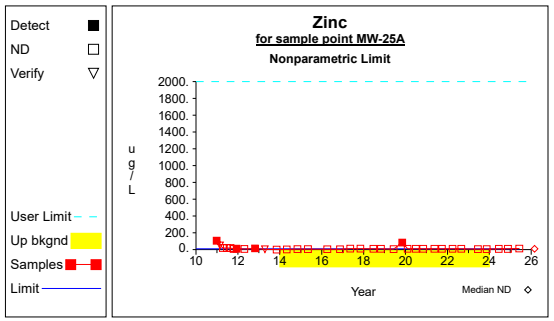
Graph 357



Graph 358

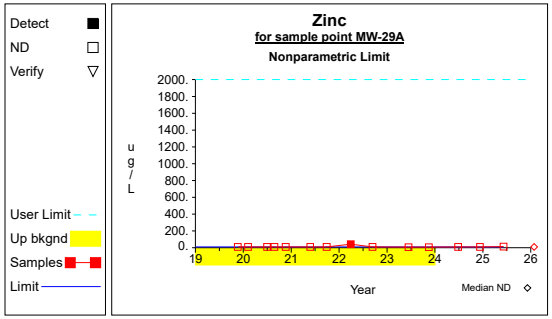


Graph 359

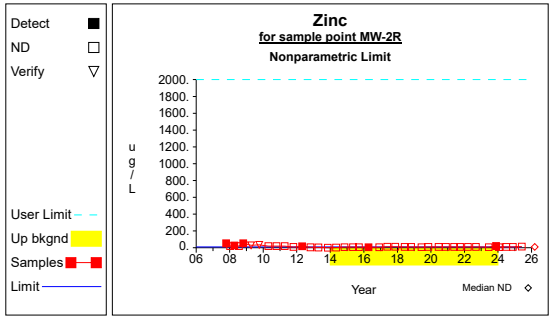


Graph 360

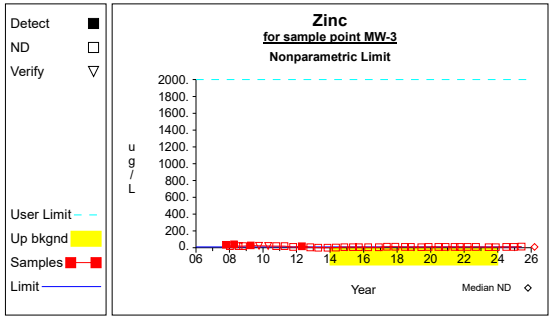
Up vs. Down Prediction Limits



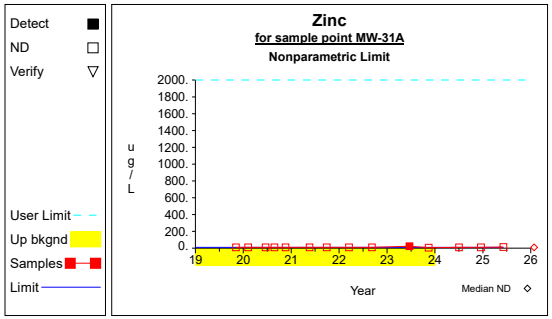
Graph 361



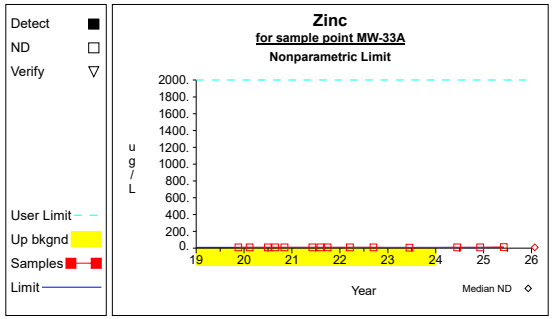
Graph 362



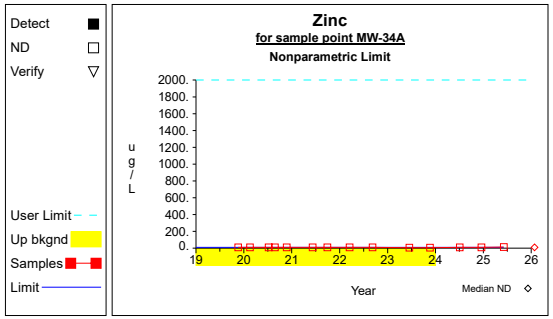
Graph 363



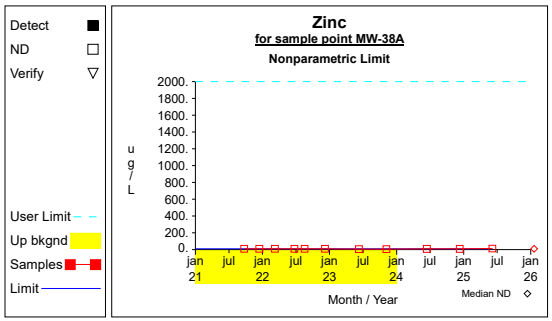
Graph 364



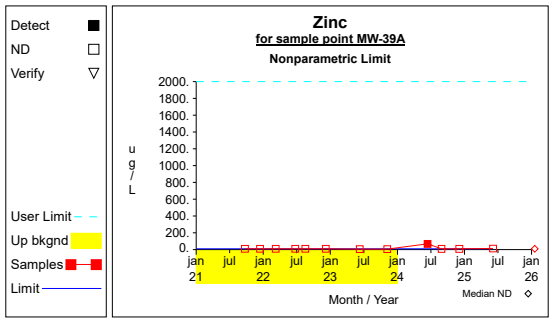
Graph 365



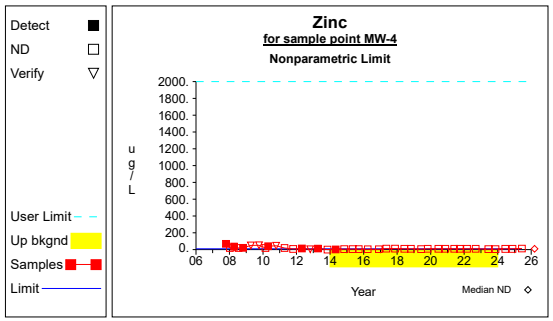
Graph 366



Graph 367

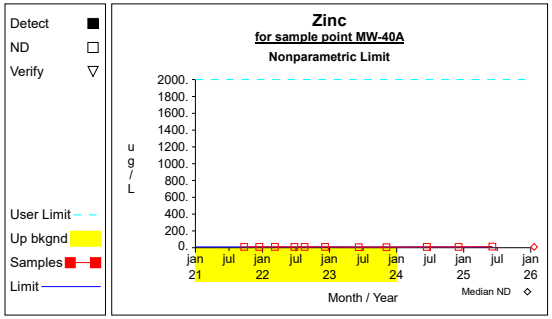


Graph 368

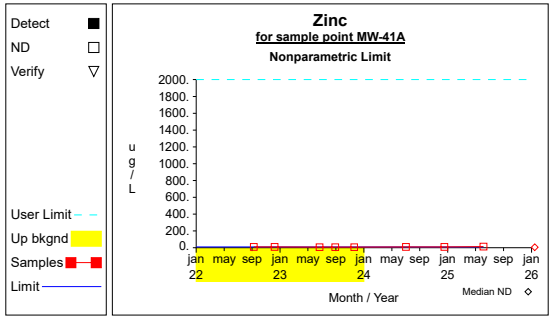


Graph 369

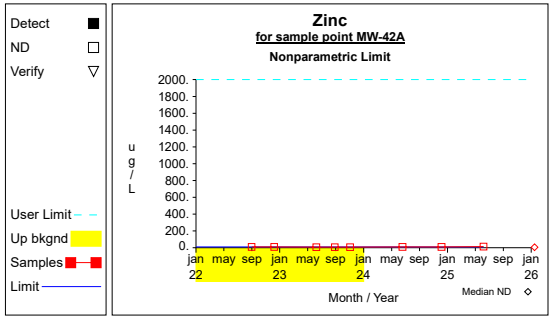
Up vs. Down Prediction Limits



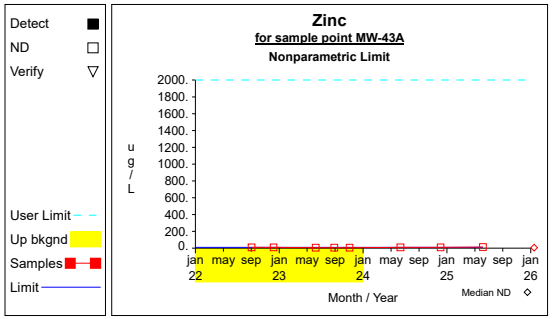
Graph 370



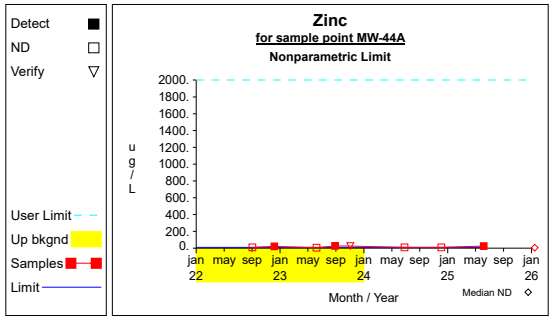
Graph 371



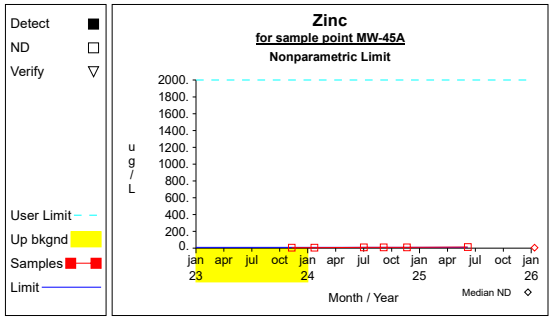
Graph 372



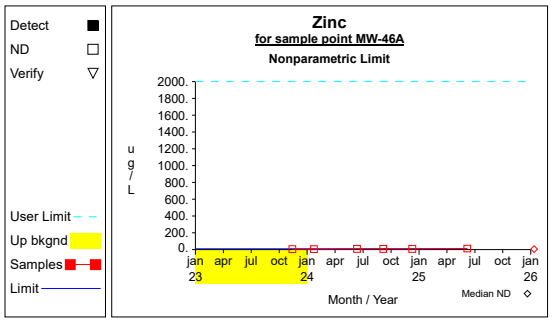
Graph 373



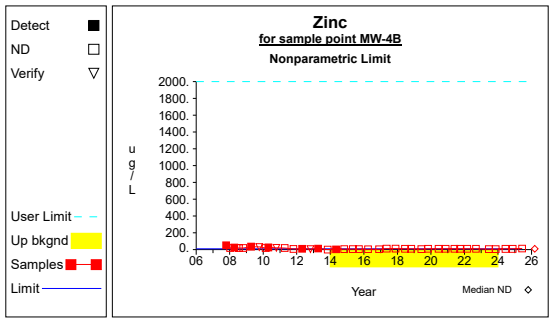
Graph 374



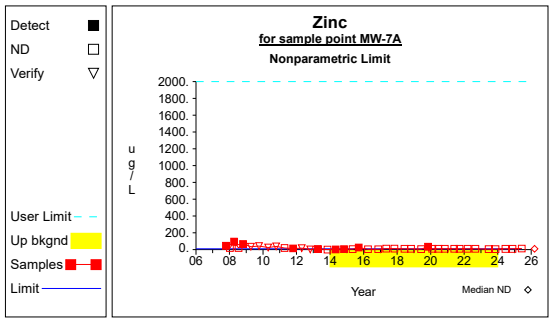
Graph 375



Graph 376



Graph 377



Graph 378

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

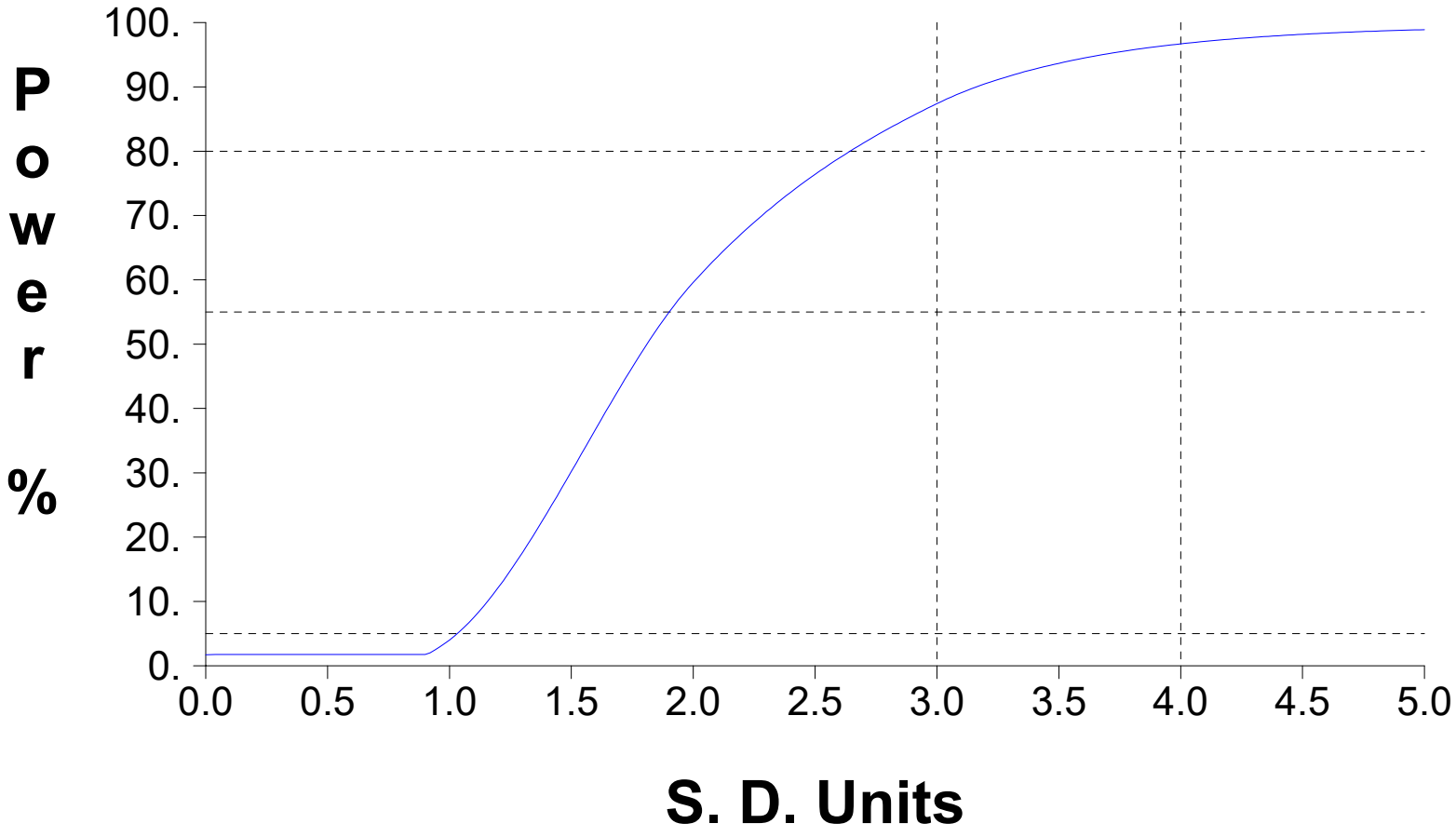


Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony	ug/L	MW-1	05/05/2014	ND	0.4000	0.6900	**
Antimony	ug/L	MW-1	11/07/2014	ND	0.1610	0.6900	**
Antimony	ug/L	MW-1	05/01/2015	ND	0.1610	0.6900	**
Antimony	ug/L	MW-1	09/16/2015	ND	0.1610	0.6900	**
Antimony	ug/L	MW-1	04/11/2016	ND	0.2370	0.6900	**
Antimony	ug/L	MW-1	11/11/2016	ND	0.2370	0.6900	**
Antimony	ug/L	MW-1	05/08/2017	ND	0.1850	0.6900	**
Antimony	ug/L	MW-1	11/16/2017	ND	0.1850	0.6900	**
Antimony	ug/L	MW-1	06/06/2018	ND	0.4200	0.6900	**
Antimony	ug/L	MW-1	10/28/2018	ND	0.4200	0.6900	**
Antimony	ug/L	MW-1	06/04/2019	ND	1.3200	0.6900	**
Antimony	ug/L	MW-1	11/01/2019	ND	0.5300	0.6900	**
Antimony	ug/L	MW-1	06/17/2020	ND	0.5100	0.6900	**
Antimony	ug/L	MW-1	11/03/2020	ND	0.5100	0.6900	**
Antimony	ug/L	MW-1	05/17/2021	ND	1.1000	0.6900	**
Antimony	ug/L	MW-1	09/22/2021	ND	1.1000	0.6900	**
Antimony	ug/L	MW-1	03/16/2022	ND	0.6900		
Antimony	ug/L	MW-1	08/31/2022	ND	0.6900		
Antimony	ug/L	MW-1	06/14/2023	ND	1.0000	0.6900	**
Antimony	ug/L	MW-1	11/09/2023	ND	1.0000	0.6900	**
Antimony	ug/L	MW-37A	09/22/2021	ND	1.1000	0.6900	**
Antimony	ug/L	MW-37A	12/14/2021	ND	1.1000	0.6900	**
Antimony	ug/L	MW-37A	03/07/2022	ND	0.6900		
Antimony	ug/L	MW-37A	06/27/2022	ND	0.6900		
Antimony	ug/L	MW-37A	08/17/2022	ND	0.6900		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony	ug/L	MW-37A	12/06/2022	ND	0.6900		
Antimony	ug/L	MW-37A	06/08/2023	ND	1.0000	0.6900	**
Arsenic	ug/L	MW-1	05/05/2014		0.3540		
Arsenic	ug/L	MW-1	11/07/2014	ND	0.9450	0.7500	**
Arsenic	ug/L	MW-1	05/01/2015	ND	0.9450	0.7500	**
Arsenic	ug/L	MW-1	09/16/2015	ND	0.9450	0.7500	**
Arsenic	ug/L	MW-1	04/11/2016	ND	0.6720	0.7500	**
Arsenic	ug/L	MW-1	11/11/2016	ND	0.6720	0.7500	**
Arsenic	ug/L	MW-1	05/08/2017	ND	0.5050	0.7500	**
Arsenic	ug/L	MW-1	11/16/2017		0.6620		
Arsenic	ug/L	MW-1	06/06/2018	ND	0.5700	0.7500	**
Arsenic	ug/L	MW-1	10/28/2018	ND	0.5700	0.7500	**
Arsenic	ug/L	MW-1	06/04/2019	ND	0.2320	0.7500	**
Arsenic	ug/L	MW-1	11/01/2019	ND	0.7500		
Arsenic	ug/L	MW-1	06/17/2020	ND	0.8800	0.7500	**
Arsenic	ug/L	MW-1	11/03/2020	ND	0.8800	0.7500	**
Arsenic	ug/L	MW-1	05/17/2021	ND	0.7500		
Arsenic	ug/L	MW-1	09/22/2021	ND	0.7500		
Arsenic	ug/L	MW-1	03/16/2022	ND	0.7500		
Arsenic	ug/L	MW-1	08/31/2022	ND	0.7500		
Arsenic	ug/L	MW-1	06/14/2023	ND	0.5300	0.7500	**
Arsenic	ug/L	MW-1	11/09/2023	ND	0.5300	0.7500	**
Arsenic	ug/L	MW-37A	09/22/2021	ND	0.7500		
Arsenic	ug/L	MW-37A	12/14/2021	ND	0.7500		
Arsenic	ug/L	MW-37A	03/07/2022		4.5700		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Arsenic	ug/L	MW-37A	06/27/2022	ND	0.7500		
Arsenic	ug/L	MW-37A	08/17/2022	ND	0.7500		
Arsenic	ug/L	MW-37A	12/06/2022	ND	0.7500		
Arsenic	ug/L	MW-37A	06/08/2023	ND	0.5300	0.7500	**
Barium	ug/L	MW-1	05/05/2014		124.0000		
Barium	ug/L	MW-1	11/07/2014		190.0000		
Barium	ug/L	MW-1	05/01/2015		104.0000		
Barium	ug/L	MW-1	09/16/2015		166.0000		
Barium	ug/L	MW-1	04/11/2016		93.8000		
Barium	ug/L	MW-1	11/11/2016		114.0000		
Barium	ug/L	MW-1	05/08/2017		95.1000		
Barium	ug/L	MW-1	11/16/2017		130.0000		
Barium	ug/L	MW-1	06/06/2018		119.0000		
Barium	ug/L	MW-1	10/28/2018		142.0000		
Barium	ug/L	MW-1	06/04/2019		93.8000		
Barium	ug/L	MW-1	11/01/2019		124.0000		
Barium	ug/L	MW-1	06/17/2020		94.9000		
Barium	ug/L	MW-1	11/03/2020		184.0000		
Barium	ug/L	MW-1	05/17/2021		146.0000		
Barium	ug/L	MW-1	09/22/2021		111.0000		
Barium	ug/L	MW-1	03/16/2022		112.0000		
Barium	ug/L	MW-1	08/31/2022		112.0000		
Barium	ug/L	MW-1	06/14/2023		106.0000		
Barium	ug/L	MW-1	11/09/2023		282.0000		
Barium	ug/L	MW-37A	09/22/2021		202.0000		

* - 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	ug/L	MW-37A	12/14/2021		137.0000		
Barium	ug/L	MW-37A	03/07/2022		273.0000		
Barium	ug/L	MW-37A	06/27/2022		144.0000		
Barium	ug/L	MW-37A	08/17/2022		122.0000		
Barium	ug/L	MW-37A	12/06/2022		247.0000		
Barium	ug/L	MW-37A	06/08/2023		111.0000		
Beryllium	ug/L	MW-1	05/05/2014	ND	0.0800	0.2700	**
Beryllium	ug/L	MW-1	11/07/2014	ND	0.0390	0.2700	**
Beryllium	ug/L	MW-1	05/01/2015	ND	0.0390	0.2700	**
Beryllium	ug/L	MW-1	09/16/2015	ND	0.0390	0.2700	**
Beryllium	ug/L	MW-1	04/11/2016	ND	0.2210	0.2700	**
Beryllium	ug/L	MW-1	11/11/2016	ND	0.2210	0.2700	**
Beryllium	ug/L	MW-1	05/08/2017	ND	0.1250	0.2700	**
Beryllium	ug/L	MW-1	11/16/2017	ND	0.1250	0.2700	**
Beryllium	ug/L	MW-1	06/06/2018	ND	0.1900	0.2700	**
Beryllium	ug/L	MW-1	10/28/2018	ND	0.1900	0.2700	**
Beryllium	ug/L	MW-1	06/04/2019	ND	0.5300	0.2700	**
Beryllium	ug/L	MW-1	11/01/2019	ND	0.2700		
Beryllium	ug/L	MW-1	06/17/2020	ND	0.2700		
Beryllium	ug/L	MW-1	11/03/2020	ND	0.2700		
Beryllium	ug/L	MW-1	05/17/2021	ND	0.2700		
Beryllium	ug/L	MW-1	09/22/2021	ND	0.2700		
Beryllium	ug/L	MW-1	03/16/2022	ND	0.2700		
Beryllium	ug/L	MW-1	08/31/2022	ND	0.2700		
Beryllium	ug/L	MW-1	06/14/2023	ND	0.3300	0.2700	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Beryllium	ug/L	MW-1	11/09/2023	ND	0.3300	0.2700	**
Beryllium	ug/L	MW-37A	09/22/2021	ND	0.2700		
Beryllium	ug/L	MW-37A	12/14/2021	ND	0.2700		
Beryllium	ug/L	MW-37A	03/07/2022	ND	0.2700		
Beryllium	ug/L	MW-37A	06/27/2022	ND	0.2700		
Beryllium	ug/L	MW-37A	08/17/2022	ND	0.2700		
Beryllium	ug/L	MW-37A	12/06/2022	ND	0.2700		
Beryllium	ug/L	MW-37A	06/08/2023	ND	0.3300	0.2700	**
Cadmium	ug/L	MW-1	05/05/2014	ND	0.1000	0.0550	**
Cadmium	ug/L	MW-1	11/07/2014	ND	0.1120	0.0550	**
Cadmium	ug/L	MW-1	05/01/2015	ND	0.1120	0.0550	**
Cadmium	ug/L	MW-1	09/16/2015	ND	0.1120	0.0550	**
Cadmium	ug/L	MW-1	04/11/2016	ND	0.0351	0.0550	**
Cadmium	ug/L	MW-1	11/11/2016	ND	0.0351	0.0550	**
Cadmium	ug/L	MW-1	05/08/2017	ND	0.0441	0.0550	**
Cadmium	ug/L	MW-1	11/16/2017	ND	0.0441	0.0550	**
Cadmium	ug/L	MW-1	06/06/2018	ND	0.0600	0.0550	**
Cadmium	ug/L	MW-1	10/28/2018	ND	0.0600	0.0550	**
Cadmium	ug/L	MW-1	06/04/2019	ND	0.1670	0.0550	**
Cadmium	ug/L	MW-1	11/01/2019	ND	0.0390	0.0550	**
Cadmium	ug/L	MW-1	06/17/2020	ND	0.0490	0.0550	**
Cadmium	ug/L	MW-1	11/03/2020	ND	0.0490	0.0550	**
Cadmium	ug/L	MW-1	05/17/2021	ND	0.0510	0.0550	**
Cadmium	ug/L	MW-1	09/22/2021	ND	0.0510	0.0550	**
Cadmium	ug/L	MW-1	03/16/2022	ND	0.0550		

* - 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	ug/L	MW-1	08/31/2022	ND	0.0550		
Cadmium	ug/L	MW-1	06/14/2023	ND	0.1000	0.0550	**
Cadmium	ug/L	MW-1	11/09/2023		0.2090		
Cadmium	ug/L	MW-37A	09/22/2021	ND	0.0510	0.0550	**
Cadmium	ug/L	MW-37A	12/14/2021	ND	0.0510	0.0550	**
Cadmium	ug/L	MW-37A	03/07/2022	ND	0.0550		
Cadmium	ug/L	MW-37A	06/27/2022	ND	0.0550		
Cadmium	ug/L	MW-37A	08/17/2022	ND	0.0550		
Cadmium	ug/L	MW-37A	12/06/2022	ND	0.0550		
Cadmium	ug/L	MW-37A	06/08/2023	ND	0.1000	0.0550	**
Chromium	ug/L	MW-1	05/05/2014		0.8160		
Chromium	ug/L	MW-1	11/07/2014	ND	1.2400	1.1000	**
Chromium	ug/L	MW-1	05/01/2015	ND	1.2400	1.1000	**
Chromium	ug/L	MW-1	09/16/2015	ND	1.2400	1.1000	**
Chromium	ug/L	MW-1	04/11/2016		0.8520		
Chromium	ug/L	MW-1	11/11/2016		0.4230		
Chromium	ug/L	MW-1	05/08/2017	ND	0.7290	1.1000	**
Chromium	ug/L	MW-1	11/16/2017	ND	0.7290	1.1000	**
Chromium	ug/L	MW-1	06/06/2018	ND	0.7600	1.1000	**
Chromium	ug/L	MW-1	10/28/2018	ND	0.7600	1.1000	**
Chromium	ug/L	MW-1	06/04/2019	ND	1.1400	1.1000	**
Chromium	ug/L	MW-1	11/01/2019	ND	0.9800	1.1000	**
Chromium	ug/L	MW-1	06/17/2020	ND	1.1000		
Chromium	ug/L	MW-1	11/03/2020	ND	1.1000		
Chromium	ug/L	MW-1	05/17/2021	ND	1.1000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Chromium	ug/L	MW-1	09/22/2021	ND	1.1000		
Chromium	ug/L	MW-1	03/16/2022	ND	1.1000		
Chromium	ug/L	MW-1	08/31/2022	ND	1.1000		
Chromium	ug/L	MW-1	06/14/2023	ND	1.1000		
Chromium	ug/L	MW-1	11/09/2023	ND	1.1000		
Chromium	ug/L	MW-37A	09/22/2021	ND	1.1000		
Chromium	ug/L	MW-37A	12/14/2021	ND	1.1000		
Chromium	ug/L	MW-37A	03/07/2022	ND	1.1000		
Chromium	ug/L	MW-37A	06/27/2022	ND	1.1000		
Chromium	ug/L	MW-37A	08/17/2022	ND	1.1000		
Chromium	ug/L	MW-37A	12/06/2022	ND	1.1000		
Chromium	ug/L	MW-37A	06/08/2023	ND	1.1000		
Cobalt	ug/L	MW-1	05/05/2014		0.2310		
Cobalt	ug/L	MW-1	11/07/2014		0.1680		
Cobalt	ug/L	MW-1	05/01/2015	ND	0.0528	0.1700	**
Cobalt	ug/L	MW-1	09/16/2015		0.1820		
Cobalt	ug/L	MW-1	04/11/2016		0.0520		
Cobalt	ug/L	MW-1	11/11/2016		0.0470		
Cobalt	ug/L	MW-1	05/08/2017	ND	0.0453	0.1700	**
Cobalt	ug/L	MW-1	11/16/2017		0.0830		
Cobalt	ug/L	MW-1	06/06/2018	ND	0.0610	0.1700	**
Cobalt	ug/L	MW-1	10/28/2018	ND	0.0610	0.1700	**
Cobalt	ug/L	MW-1	06/04/2019	ND	0.4020	0.1700	**
Cobalt	ug/L	MW-1	11/01/2019	ND	0.0910	0.1700	**
Cobalt	ug/L	MW-1	06/17/2020	ND	0.0910	0.1700	**

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** - 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	ug/L	MW-1	11/03/2020	ND	0.0910	0.1700	**
Cobalt	ug/L	MW-1	05/17/2021	ND	0.0910	0.1700	**
Cobalt	ug/L	MW-1	09/22/2021	ND	0.1900	0.1700	**
Cobalt	ug/L	MW-1	03/16/2022	ND	0.1900	0.1700	**
Cobalt	ug/L	MW-1	08/31/2022	ND	0.1900	0.1700	**
Cobalt	ug/L	MW-1	06/14/2023	ND	0.1700		
Cobalt	ug/L	MW-1	11/09/2023	ND	0.1700		
Cobalt	ug/L	MW-37A	09/22/2021		0.6810		
Cobalt	ug/L	MW-37A	12/14/2021	ND	0.1900	0.1700	**
Cobalt	ug/L	MW-37A	03/07/2022	ND	0.1900	0.1700	**
Cobalt	ug/L	MW-37A	06/27/2022	ND	0.1900	0.1700	**
Cobalt	ug/L	MW-37A	08/17/2022	ND	0.1900	0.1700	**
Cobalt	ug/L	MW-37A	12/06/2022	ND	0.1900	0.1700	**
Cobalt	ug/L	MW-37A	06/08/2023	ND	0.1700		
Copper	ug/L	MW-1	05/05/2014		1.0400		
Copper	ug/L	MW-1	11/07/2014		0.9060		
Copper	ug/L	MW-1	05/01/2015	ND	0.4850	1.8000	**
Copper	ug/L	MW-1	09/16/2015		0.5260		
Copper	ug/L	MW-1	04/11/2016	ND	1.2200	1.8000	**
Copper	ug/L	MW-1	11/11/2016	ND	1.2200	1.8000	**
Copper	ug/L	MW-1	05/08/2017	ND	2.1900	1.8000	**
Copper	ug/L	MW-1	11/16/2017	ND	2.1900	1.8000	**
Copper	ug/L	MW-1	06/06/2018	ND	3.8000	1.8000	**
Copper	ug/L	MW-1	10/28/2018	ND	1.6000	1.8000	**
Copper	ug/L	MW-1	06/04/2019	ND	0.4970	1.8000	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Copper	ug/L	MW-1	11/01/2019	ND	2.0000	1.8000	**
Copper	ug/L	MW-1	06/17/2020	ND	1.5000	1.8000	**
Copper	ug/L	MW-1	11/03/2020	ND	1.5000	1.8000	**
Copper	ug/L	MW-1	05/17/2021	ND	1.4000	1.8000	**
Copper	ug/L	MW-1	09/22/2021	ND	1.4000	1.8000	**
Copper	ug/L	MW-1	03/16/2022	ND	1.8000		
Copper	ug/L	MW-1	08/31/2022	ND	1.8000		
Copper	ug/L	MW-1	06/14/2023	ND	1.8000		
Copper	ug/L	MW-1	11/09/2023		5.2700		
Copper	ug/L	MW-37A	09/22/2021	ND	1.4000	1.8000	**
Copper	ug/L	MW-37A	12/14/2021	ND	1.4000	1.8000	**
Copper	ug/L	MW-37A	03/07/2022	ND	1.8000		
Copper	ug/L	MW-37A	06/27/2022	ND	1.8000		
Copper	ug/L	MW-37A	08/17/2022	ND	1.8000		
Copper	ug/L	MW-37A	12/06/2022	ND	1.8000		
Copper	ug/L	MW-37A	06/08/2023	ND	1.8000		
Field pH	SU	MW-1	05/01/2015		6.9500		
Field pH	SU	MW-1	09/16/2015		6.8800		
Field pH	SU	MW-1	12/09/2015		6.7400		
Field pH	SU	MW-1	04/11/2016		7.2000		
Field pH	SU	MW-1	11/11/2016		7.1700		
Field pH	SU	MW-1	05/08/2017		7.4400		
Field pH	SU	MW-1	11/16/2017		7.5100		
Field pH	SU	MW-1	06/06/2018		6.9700		
Field pH	SU	MW-1	10/28/2018		7.3100		

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Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Field pH	SU	MW-1	06/04/2019		6.9700		
Field pH	SU	MW-1	11/01/2019		6.9500		
Field pH	SU	MW-1	06/17/2020		6.6900		
Field pH	SU	MW-1	11/03/2020		6.7300		
Field pH	SU	MW-1	05/17/2021		6.6500		
Field pH	SU	MW-1	09/22/2021		6.1900		
Field pH	SU	MW-1	03/16/2022		7.1100		
Field pH	SU	MW-1	08/31/2022		8.0700		
Field pH	SU	MW-1	06/14/2023		6.5900		
Field pH	SU	MW-1	11/09/2023		6.9500		
Field pH	SU	MW-37A	09/22/2021		6.3700		
Field pH	SU	MW-37A	12/14/2021		6.8000		
Field pH	SU	MW-37A	03/07/2022		6.8000		
Field pH	SU	MW-37A	06/27/2022		7.6100		
Field pH	SU	MW-37A	08/17/2022		7.7900		
Field pH	SU	MW-37A	12/06/2022		7.0100		
Field pH	SU	MW-37A	06/08/2023		6.8600		
Field Specific Conductance	umhos/cm	MW-1	05/01/2015		551.7000		
Field Specific Conductance	umhos/cm	MW-1	09/16/2015		1052.0000		
Field Specific Conductance	umhos/cm	MW-1	12/09/2015		1431.0000		
Field Specific Conductance	umhos/cm	MW-1	04/11/2016		508.0000		
Field Specific Conductance	umhos/cm	MW-1	11/11/2016		470.4000		
Field Specific Conductance	umhos/cm	MW-1	05/08/2017		463.2000		
Field Specific Conductance	umhos/cm	MW-1	11/16/2017		645.3000		
Field Specific Conductance	umhos/cm	MW-1	06/06/2018		649.9000		

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

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Field Specific Conductance	umhos/cm	MW-1	10/28/2018		536.5000		
Field Specific Conductance	umhos/cm	MW-1	06/04/2019		558.4100		
Field Specific Conductance	umhos/cm	MW-1	11/01/2019		623.1200		
Field Specific Conductance	umhos/cm	MW-1	06/17/2020		559.3700		
Field Specific Conductance	umhos/cm	MW-1	11/03/2020		1056.6000		
Field Specific Conductance	umhos/cm	MW-1	05/17/2021		888.2900		
Field Specific Conductance	umhos/cm	MW-1	09/22/2021		504.9900		
Field Specific Conductance	umhos/cm	MW-1	03/16/2022		737.2900		
Field Specific Conductance	umhos/cm	MW-1	08/31/2022		563.2100		
Field Specific Conductance	umhos/cm	MW-1	06/14/2023		636.7100		
Field Specific Conductance	umhos/cm	MW-1	11/09/2023		1456.6000		
Field Specific Conductance	umhos/cm	MW-37A	09/22/2021		679.6700		
Field Specific Conductance	umhos/cm	MW-37A	12/14/2021		724.2600		
Field Specific Conductance	umhos/cm	MW-37A	03/07/2022		682.4500		
Field Specific Conductance	umhos/cm	MW-37A	06/27/2022		698.0400		
Field Specific Conductance	umhos/cm	MW-37A	08/17/2022		668.8600		
Field Specific Conductance	umhos/cm	MW-37A	12/06/2022		713.3200		
Field Specific Conductance	umhos/cm	MW-37A	06/08/2023		617.8900		
Lead	ug/L	MW-1	05/05/2014	ND	0.1800	0.2400	**
Lead	ug/L	MW-1	11/07/2014	ND	0.0967	0.2400	**
Lead	ug/L	MW-1	05/01/2015	ND	0.0967	0.2400	**
Lead	ug/L	MW-1	09/16/2015		0.3030		
Lead	ug/L	MW-1	04/11/2016	ND	0.2110	0.2400	**
Lead	ug/L	MW-1	11/11/2016	ND	0.2110	0.2400	**
Lead	ug/L	MW-1	05/08/2017	ND	0.3240	0.2400	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Lead	ug/L	MW-1	11/16/2017	ND	0.3240	0.2400	**
Lead	ug/L	MW-1	06/06/2018	ND	0.2500	0.2400	**
Lead	ug/L	MW-1	10/28/2018	ND	0.2500	0.2400	**
Lead	ug/L	MW-1	06/04/2019	ND	0.1860	0.2400	**
Lead	ug/L	MW-1	11/01/2019	ND	0.2700	0.2400	**
Lead	ug/L	MW-1	06/17/2020	ND	0.1100	0.2400	**
Lead	ug/L	MW-1	11/03/2020	ND	0.1100	0.2400	**
Lead	ug/L	MW-1	05/17/2021	ND	0.2100	0.2400	**
Lead	ug/L	MW-1	09/22/2021	ND	0.2100	0.2400	**
Lead	ug/L	MW-1	03/16/2022	ND	0.2400		
Lead	ug/L	MW-1	08/31/2022	ND	0.2400		
Lead	ug/L	MW-1	06/14/2023	ND	0.2400		
Lead	ug/L	MW-1	11/09/2023		0.9940		
Lead	ug/L	MW-37A	09/22/2021		1.0600		
Lead	ug/L	MW-37A	12/14/2021	ND	0.2100	0.2400	**
Lead	ug/L	MW-37A	03/07/2022	ND	0.2400		
Lead	ug/L	MW-37A	06/27/2022	ND	0.2400		
Lead	ug/L	MW-37A	08/17/2022	ND	0.2400		
Lead	ug/L	MW-37A	12/06/2022	ND	0.2400		
Lead	ug/L	MW-37A	06/08/2023	ND	0.2400		
Nickel	ug/L	MW-1	05/05/2014		4.0100		
Nickel	ug/L	MW-1	11/07/2014		6.2000		
Nickel	ug/L	MW-1	05/01/2015		1.4900		
Nickel	ug/L	MW-1	09/16/2015		5.8700		
Nickel	ug/L	MW-1	04/11/2016	ND	1.5300	1.9000	**

* - 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	
Nickel	ug/L	MW-1	11/11/2016	ND	1.5300	1.9000	**
Nickel	ug/L	MW-1	05/08/2017	ND	0.9290	1.9000	**
Nickel	ug/L	MW-1	11/16/2017		1.5300		
Nickel	ug/L	MW-1	06/06/2018	ND	1.0000	1.9000	**
Nickel	ug/L	MW-1	10/28/2018	ND	1.0000	1.9000	**
Nickel	ug/L	MW-1	06/04/2019	ND	0.6250	1.9000	**
Nickel	ug/L	MW-1	11/01/2019	ND	1.7000	1.9000	**
Nickel	ug/L	MW-1	06/17/2020	ND	1.9000		
Nickel	ug/L	MW-1	11/03/2020	ND	1.9000		
Nickel	ug/L	MW-1	05/17/2021	ND	1.9000		
Nickel	ug/L	MW-1	09/22/2021	ND	1.9000		
Nickel	ug/L	MW-1	03/16/2022	ND	1.9000		
Nickel	ug/L	MW-1	08/31/2022	ND	1.9000		
Nickel	ug/L	MW-1	06/14/2023	ND	1.9000		
Nickel	ug/L	MW-1	11/09/2023		20.9000		
Nickel	ug/L	MW-37A	09/22/2021	ND	1.9000		
Nickel	ug/L	MW-37A	12/14/2021	ND	1.9000		
Nickel	ug/L	MW-37A	03/07/2022	ND	1.9000		
Nickel	ug/L	MW-37A	06/27/2022	ND	1.9000		
Nickel	ug/L	MW-37A	08/17/2022	ND	1.9000		
Nickel	ug/L	MW-37A	12/06/2022	ND	1.9000		
Nickel	ug/L	MW-37A	06/08/2023	ND	1.9000		
Selenium	ug/L	MW-1	05/05/2014		1.1500		
Selenium	ug/L	MW-1	11/07/2014	ND	3.3400	0.9600	**
Selenium	ug/L	MW-1	05/01/2015	ND	3.3400	0.9600	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Selenium	ug/L	MW-1	09/16/2015	ND	3.3400	0.9600	**
Selenium	ug/L	MW-1	04/11/2016		1.4100		
Selenium	ug/L	MW-1	11/11/2016	ND	0.6300	0.9600	**
Selenium	ug/L	MW-1	05/08/2017	ND	0.9280	0.9600	**
Selenium	ug/L	MW-1	11/16/2017	ND	0.9280	0.9600	**
Selenium	ug/L	MW-1	06/06/2018	ND	0.9000	0.9600	**
Selenium	ug/L	MW-1	10/28/2018	ND	0.9000	0.9600	**
Selenium	ug/L	MW-1	06/04/2019	ND	0.9820	0.9600	**
Selenium	ug/L	MW-1	11/01/2019	ND	1.0000	0.9600	**
Selenium	ug/L	MW-1	06/17/2020	ND	1.0000	0.9600	**
Selenium	ug/L	MW-1	11/03/2020	ND	1.0000	0.9600	**
Selenium	ug/L	MW-1	05/17/2021	ND	0.9600		
Selenium	ug/L	MW-1	09/22/2021	ND	0.9600		
Selenium	ug/L	MW-1	03/16/2022	ND	0.9600		
Selenium	ug/L	MW-1	08/31/2022	ND	0.9600		
Selenium	ug/L	MW-1	06/14/2023	ND	1.4000	0.9600	**
Selenium	ug/L	MW-1	11/09/2023	ND	1.4000	0.9600	**
Selenium	ug/L	MW-37A	09/22/2021	ND	0.9600		
Selenium	ug/L	MW-37A	12/14/2021	ND	0.9600		
Selenium	ug/L	MW-37A	03/07/2022	ND	0.9600		
Selenium	ug/L	MW-37A	06/27/2022	ND	0.9600		
Selenium	ug/L	MW-37A	08/17/2022	ND	0.9600		
Selenium	ug/L	MW-37A	12/06/2022	ND	0.9600		
Selenium	ug/L	MW-37A	06/08/2023	ND	1.4000	0.9600	**
Silver	ug/L	MW-1	05/05/2014	ND	0.0330	0.3700	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Silver	ug/L	MW-1	11/07/2014	ND	0.0420	0.3700	**
Silver	ug/L	MW-1	05/01/2015	ND	0.0420	0.3700	**
Silver	ug/L	MW-1	09/16/2015		0.1170		
Silver	ug/L	MW-1	04/11/2016	ND	0.1530	0.3700	**
Silver	ug/L	MW-1	11/11/2016	ND	0.1530	0.3700	**
Silver	ug/L	MW-1	05/08/2017	ND	0.1400	0.3700	**
Silver	ug/L	MW-1	11/16/2017	ND	0.1400	0.3700	**
Silver	ug/L	MW-1	06/06/2018	ND	0.3000	0.3700	**
Silver	ug/L	MW-1	10/28/2018	ND	0.3000	0.3700	**
Silver	ug/L	MW-1	06/04/2019	ND	0.1150	0.3700	**
Silver	ug/L	MW-1	11/01/2019	ND	0.3700		
Silver	ug/L	MW-1	06/17/2020	ND	0.3700		
Silver	ug/L	MW-1	11/03/2020	ND	0.3700		
Silver	ug/L	MW-1	05/17/2021	ND	0.4200	0.3700	**
Silver	ug/L	MW-1	09/22/2021	ND	0.4200	0.3700	**
Silver	ug/L	MW-1	03/16/2022	ND	0.4900	0.3700	**
Silver	ug/L	MW-1	08/31/2022	ND	0.4900	0.3700	**
Silver	ug/L	MW-1	06/14/2023	ND	0.5000	0.3700	**
Silver	ug/L	MW-1	11/09/2023	ND	0.5000	0.3700	**
Silver	ug/L	MW-37A	09/22/2021	ND	0.4200	0.3700	**
Silver	ug/L	MW-37A	12/14/2021	ND	0.4200	0.3700	**
Silver	ug/L	MW-37A	03/07/2022	ND	0.4900	0.3700	**
Silver	ug/L	MW-37A	06/27/2022	ND	0.4900	0.3700	**
Silver	ug/L	MW-37A	08/17/2022	ND	0.4900	0.3700	**
Silver	ug/L	MW-37A	12/06/2022	ND	0.4900	0.3700	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Silver	ug/L	MW-37A	06/08/2023	ND	0.5000	0.3700	**
Sulfide	ug/L	MW-1	05/05/2014	ND	219.0000		
Sulfide	ug/L	MW-1	09/16/2015	ND	219.0000		
Sulfide	ug/L	MW-1	11/11/2016	ND	180.0000	219.0000	**
Thallium	ug/L	MW-1	05/05/2014	ND	0.0500	0.2600	**
Thallium	ug/L	MW-1	11/07/2014	ND	0.0325	0.2600	**
Thallium	ug/L	MW-1	05/01/2015	ND	0.0325	0.2600	**
Thallium	ug/L	MW-1	09/16/2015		0.0380		
Thallium	ug/L	MW-1	04/11/2016	ND	0.0255	0.2600	**
Thallium	ug/L	MW-1	11/11/2016	ND	0.0255	0.2600	**
Thallium	ug/L	MW-1	05/08/2017	ND	0.0644	0.2600	**
Thallium	ug/L	MW-1	11/16/2017	ND	0.0644	0.2600	**
Thallium	ug/L	MW-1	06/06/2018	ND	0.1700	0.2600	**
Thallium	ug/L	MW-1	10/28/2018	ND	0.1700	0.2600	**
Thallium	ug/L	MW-1	06/04/2019	ND	0.5700	0.2600	**
Thallium	ug/L	MW-1	11/01/2019	ND	0.2700	0.2600	**
Thallium	ug/L	MW-1	06/17/2020	ND	0.2600		
Thallium	ug/L	MW-1	11/03/2020	ND	0.2600		
Thallium	ug/L	MW-1	05/17/2021	ND	0.2600		
Thallium	ug/L	MW-1	09/22/2021	ND	0.2600		
Thallium	ug/L	MW-1	03/16/2022	ND	0.2600		
Thallium	ug/L	MW-1	08/31/2022	ND	0.2600		
Thallium	ug/L	MW-1	06/14/2023	ND	0.2600		
Thallium	ug/L	MW-1	11/09/2023	ND	0.2600		
Thallium	ug/L	MW-37A	09/22/2021	ND	0.2600		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Thallium	ug/L	MW-37A	12/14/2021	ND	0.2600		
Thallium	ug/L	MW-37A	03/07/2022	ND	0.2600		
Thallium	ug/L	MW-37A	06/27/2022	ND	0.2600		
Thallium	ug/L	MW-37A	08/17/2022	ND	0.2600		
Thallium	ug/L	MW-37A	12/06/2022	ND	0.2600		
Thallium	ug/L	MW-37A	06/08/2023	ND	0.2600		
Vanadium	ug/L	MW-1	05/05/2014		0.6760		
Vanadium	ug/L	MW-1	11/07/2014		0.5100		
Vanadium	ug/L	MW-1	05/01/2015	ND	0.4490	1.1000	**
Vanadium	ug/L	MW-1	09/16/2015		0.5420		
Vanadium	ug/L	MW-1	04/11/2016		0.4660		
Vanadium	ug/L	MW-1	11/11/2016		0.3940		
Vanadium	ug/L	MW-1	05/08/2017	ND	0.8400	1.1000	**
Vanadium	ug/L	MW-1	11/16/2017	ND	0.8400	1.1000	**
Vanadium	ug/L	MW-1	06/06/2018	ND	0.5200	1.1000	**
Vanadium	ug/L	MW-1	10/28/2018	ND	0.5200	1.1000	**
Vanadium	ug/L	MW-1	06/04/2019	ND	2.1500	1.1000	**
Vanadium	ug/L	MW-1	11/01/2019	ND	0.8200	1.1000	**
Vanadium	ug/L	MW-1	06/17/2020	ND	0.8500	1.1000	**
Vanadium	ug/L	MW-1	11/03/2020	ND	0.8500	1.1000	**
Vanadium	ug/L	MW-1	05/17/2021	ND	1.1000		
Vanadium	ug/L	MW-1	09/22/2021	ND	1.1000		
Vanadium	ug/L	MW-1	03/16/2022	ND	1.1000		
Vanadium	ug/L	MW-1	08/31/2022	ND	1.1000		
Vanadium	ug/L	MW-1	06/14/2023	ND	1.1000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Vanadium	ug/L	MW-1	11/09/2023	ND	1.1000		
Vanadium	ug/L	MW-37A	09/22/2021	ND	1.1000		
Vanadium	ug/L	MW-37A	12/14/2021	ND	1.1000		
Vanadium	ug/L	MW-37A	03/07/2022	ND	1.1000		
Vanadium	ug/L	MW-37A	06/27/2022	ND	1.1000		
Vanadium	ug/L	MW-37A	08/17/2022	ND	1.1000		
Vanadium	ug/L	MW-37A	12/06/2022	ND	1.1000		
Vanadium	ug/L	MW-37A	06/08/2023	ND	1.1000		
Zinc	ug/L	MW-1	05/05/2014	ND	2.0000	10.0000	**
Zinc	ug/L	MW-1	11/07/2014	ND	6.9500	10.0000	**
Zinc	ug/L	MW-1	05/01/2015	ND	6.9500	10.0000	**
Zinc	ug/L	MW-1	09/16/2015	ND	6.9500	10.0000	**
Zinc	ug/L	MW-1	04/11/2016	ND	5.2100	10.0000	**
Zinc	ug/L	MW-1	11/11/2016	ND	5.2100	10.0000	**
Zinc	ug/L	MW-1	05/08/2017	ND	11.5000	10.0000	**
Zinc	ug/L	MW-1	11/16/2017	ND	11.5000	10.0000	**
Zinc	ug/L	MW-1	06/06/2018	ND	10.0000		
Zinc	ug/L	MW-1	10/28/2018	ND	10.0000		
Zinc	ug/L	MW-1	06/04/2019	ND	6.9200	10.0000	**
Zinc	ug/L	MW-1	11/01/2019	ND	10.0000		
Zinc	ug/L	MW-1	06/17/2020	ND	10.0000		
Zinc	ug/L	MW-1	11/03/2020	ND	10.0000		
Zinc	ug/L	MW-1	05/17/2021	ND	10.0000		
Zinc	ug/L	MW-1	09/22/2021	ND	10.0000		
Zinc	ug/L	MW-1	03/16/2022	ND	10.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Zinc	ug/L	MW-1	08/31/2022	ND	10.0000		
Zinc	ug/L	MW-1	06/14/2023	ND	6.4000	10.0000	**
Zinc	ug/L	MW-1	11/09/2023	ND	6.4000	10.0000	**
Zinc	ug/L	MW-37A	09/22/2021	ND	10.0000		
Zinc	ug/L	MW-37A	12/14/2021	ND	10.0000		
Zinc	ug/L	MW-37A	03/07/2022	ND	10.0000		
Zinc	ug/L	MW-37A	06/27/2022	ND	10.0000		
Zinc	ug/L	MW-37A	08/17/2022	ND	10.0000		
Zinc	ug/L	MW-37A	12/06/2022	ND	10.0000		
Zinc	ug/L	MW-37A	06/08/2023	ND	6.4000	10.0000	**

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Antimony	ug/L	MW-101	06/06/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-24A	11/21/2024	ND	1.0000		0.6900
Antimony	ug/L	MW-25A	06/05/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-29A	06/06/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-2R	06/02/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-3	06/02/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-31A	06/05/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-33A	06/02/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-34A	06/04/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-38A	06/04/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-39A	06/04/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-4	06/09/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-40A	06/04/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-41A	06/04/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-42A	06/05/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-43A	06/05/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-44A	06/05/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-45A	06/06/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-46A	06/06/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-4B	06/09/2025	ND	1.0000		0.6900
Antimony	ug/L	MW-7A	06/06/2025	ND	1.0000		0.6900
Arsenic	ug/L	MW-101	06/06/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-24A	11/21/2024	ND	0.5300		4.5700

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Arsenic	ug/L	MW-25A	06/05/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-29A	06/06/2025	ND	0.5300	**	4.5700
Arsenic	ug/L	MW-2R	06/02/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-3	06/02/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-31A	06/05/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-33A	06/02/2025		9.8600	***	4.5700
Arsenic	ug/L	MW-34A	06/04/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-38A	06/04/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-39A	06/04/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-4	06/09/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-40A	06/04/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-41A	06/04/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-42A	06/05/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-43A	06/05/2025		7.2800	***	4.5700
Arsenic	ug/L	MW-44A	06/05/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-45A	06/06/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-46A	06/06/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-4B	06/09/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-7A	06/06/2025	ND	0.5300		4.5700
Barium	ug/L	MW-101	06/06/2025		171.0000		306.3163
Barium	ug/L	MW-24A	11/21/2024		117.0000		306.3163
Barium	ug/L	MW-25A	06/05/2025		191.0000		306.3163
Barium	ug/L	MW-29A	06/06/2025		130.0000		306.3163

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Barium	ug/L	MW-2R	06/02/2025		110.0000		306.3163
Barium	ug/L	MW-3	06/02/2025		205.0000		306.3163
Barium	ug/L	MW-31A	06/05/2025		240.0000		306.3163
Barium	ug/L	MW-33A	06/02/2025		361.0000	*	306.3163
Barium	ug/L	MW-34A	06/04/2025		70.5000		306.3163
Barium	ug/L	MW-38A	06/04/2025		140.0000		306.3163
Barium	ug/L	MW-39A	06/04/2025		146.0000		306.3163
Barium	ug/L	MW-4	06/09/2025		505.0000	***	306.3163
Barium	ug/L	MW-40A	06/04/2025		202.0000		306.3163
Barium	ug/L	MW-41A	06/04/2025		159.0000		306.3163
Barium	ug/L	MW-42A	06/05/2025		152.0000		306.3163
Barium	ug/L	MW-43A	06/05/2025		186.0000		306.3163
Barium	ug/L	MW-44A	06/05/2025		173.0000		306.3163
Barium	ug/L	MW-45A	06/06/2025		136.0000		306.3163
Barium	ug/L	MW-46A	06/06/2025		245.0000		306.3163
Barium	ug/L	MW-4B	06/09/2025		199.0000		306.3163
Barium	ug/L	MW-7A	06/06/2025		176.0000		306.3163
Beryllium	ug/L	MW-101	06/06/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-24A	11/21/2024	ND	0.3300		0.2700
Beryllium	ug/L	MW-25A	06/05/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-29A	06/06/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-2R	06/02/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-3	06/02/2025	ND	0.3300		0.2700

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Beryllium	ug/L	MW-31A	06/05/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-33A	06/02/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-34A	06/04/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-38A	06/04/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-39A	06/04/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-4	06/09/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-40A	06/04/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-41A	06/04/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-42A	06/05/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-43A	06/05/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-44A	06/05/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-45A	06/06/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-46A	06/06/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-4B	06/09/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-7A	06/06/2025	ND	0.3300		0.2700
Cadmium	ug/L	MW-101	06/06/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-24A	11/21/2024	ND	0.1000		0.2090
Cadmium	ug/L	MW-25A	06/05/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-29A	06/06/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-2R	06/02/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-3	06/02/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-31A	06/05/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-33A	06/02/2025	ND	0.1000		0.2090

* - Current value failed - awaiting verification.
** - Current value passed - previous exceedance not verified.
*** - Current value failed - exceedance verified.
**** - Current value passed - awaiting one more verification.
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ND = Not Detected, Result = detection limit.

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Cadmium	ug/L	MW-34A	06/04/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-38A	06/04/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-39A	06/04/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-4	06/09/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-40A	06/04/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-41A	06/04/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-42A	06/05/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-43A	06/05/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-44A	06/05/2025		0.4990	*	0.2090
Cadmium	ug/L	MW-45A	06/06/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-46A	06/06/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-4B	06/09/2025	ND	0.1000		0.2090
Cadmium	ug/L	MW-7A	06/06/2025	ND	0.1000		0.2090
Chromium	ug/L	MW-101	06/06/2025	ND	1.8000		1.1000
Chromium	ug/L	MW-24A	11/21/2024	ND	1.2000		1.1000
Chromium	ug/L	MW-25A	06/05/2025	ND	1.8000		1.1000
Chromium	ug/L	MW-29A	06/06/2025	ND	1.8000		1.1000
Chromium	ug/L	MW-2R	06/02/2025	ND	1.8000		1.1000
Chromium	ug/L	MW-3	06/02/2025	ND	1.8000		1.1000
Chromium	ug/L	MW-31A	06/05/2025	ND	1.8000		1.1000
Chromium	ug/L	MW-33A	06/02/2025	ND	1.8000		1.1000
Chromium	ug/L	MW-34A	06/04/2025	ND	1.8000		1.1000
Chromium	ug/L	MW-38A	06/04/2025	ND	1.8000		1.1000

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ND = Not Detected, Result = detection limit.

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Chromium	ug/L	MW-39A	06/04/2025	ND	1.8000		1.1000
Chromium	ug/L	MW-4	06/09/2025	ND	1.8000		1.1000
Chromium	ug/L	MW-40A	06/04/2025	ND	1.8000		1.1000
Chromium	ug/L	MW-41A	06/04/2025	ND	1.8000		1.1000
Chromium	ug/L	MW-42A	06/05/2025	ND	1.8000		1.1000
Chromium	ug/L	MW-43A	06/05/2025	ND	1.8000		1.1000
Chromium	ug/L	MW-44A	06/05/2025	ND	1.8000		1.1000
Chromium	ug/L	MW-45A	06/06/2025	ND	1.8000		1.1000
Chromium	ug/L	MW-46A	06/06/2025	ND	1.8000		1.1000
Chromium	ug/L	MW-4B	06/09/2025	ND	1.8000		1.1000
Chromium	ug/L	MW-7A	06/06/2025	ND	1.8000		1.1000
Cobalt	ug/L	MW-101	06/06/2025	ND	0.1700		0.6810
Cobalt	ug/L	MW-24A	11/21/2024	ND	0.1700		0.6810
Cobalt	ug/L	MW-25A	06/05/2025	ND	0.1700		0.6810
Cobalt	ug/L	MW-29A	06/06/2025		3.4700	***	0.6810
Cobalt	ug/L	MW-2R	06/02/2025	ND	0.1700		0.6810
Cobalt	ug/L	MW-3	06/02/2025	ND	0.1700		0.6810
Cobalt	ug/L	MW-31A	06/05/2025		2.0400	***	0.6810
Cobalt	ug/L	MW-33A	06/02/2025		5.2100	***	0.6810
Cobalt	ug/L	MW-34A	06/04/2025	ND	0.1700		0.6810
Cobalt	ug/L	MW-38A	06/04/2025	ND	0.1700		0.6810
Cobalt	ug/L	MW-39A	06/04/2025	ND	0.1700	**	0.6810
Cobalt	ug/L	MW-4	06/09/2025		2.2500	***	0.6810

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ND = Not Detected, Result = detection limit.

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Cobalt	ug/L	MW-40A	06/04/2025		1.5700	***	0.6810
Cobalt	ug/L	MW-41A	06/04/2025	ND	0.1700		0.6810
Cobalt	ug/L	MW-42A	06/05/2025		1.3700	***	0.6810
Cobalt	ug/L	MW-43A	06/05/2025		3.9200	***	0.6810
Cobalt	ug/L	MW-44A	06/05/2025	ND	0.1700		0.6810
Cobalt	ug/L	MW-45A	06/06/2025	ND	0.1700		0.6810
Cobalt	ug/L	MW-46A	06/06/2025	ND	0.1700		0.6810
Cobalt	ug/L	MW-4B	06/09/2025	ND	0.1700		0.6810
Cobalt	ug/L	MW-7A	06/06/2025	ND	0.1700		0.6810
Copper	ug/L	MW-101	06/06/2025	ND	3.2000		5.2700
Copper	ug/L	MW-24A	11/21/2024	ND	1.8000		5.2700
Copper	ug/L	MW-25A	06/05/2025	ND	3.2000		5.2700
Copper	ug/L	MW-29A	06/06/2025	ND	3.2000		5.2700
Copper	ug/L	MW-2R	06/02/2025	ND	3.2000		5.2700
Copper	ug/L	MW-3	06/02/2025	ND	3.2000		5.2700
Copper	ug/L	MW-31A	06/05/2025	ND	3.2000		5.2700
Copper	ug/L	MW-33A	06/02/2025		8.9600	*	5.2700
Copper	ug/L	MW-34A	06/04/2025	ND	3.2000		5.2700
Copper	ug/L	MW-38A	06/04/2025	ND	3.2000		5.2700
Copper	ug/L	MW-39A	06/04/2025	ND	3.2000		5.2700
Copper	ug/L	MW-4	06/09/2025	ND	3.2000		5.2700
Copper	ug/L	MW-40A	06/04/2025	ND	3.2000		5.2700
Copper	ug/L	MW-41A	06/04/2025	ND	3.2000		5.2700

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Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Copper	ug/L	MW-42A	06/05/2025	ND	3.2000		5.2700
Copper	ug/L	MW-43A	06/05/2025	ND	3.2000		5.2700
Copper	ug/L	MW-44A	06/05/2025	ND	3.2000		5.2700
Copper	ug/L	MW-45A	06/06/2025	ND	3.2000		5.2700
Copper	ug/L	MW-46A	06/06/2025	ND	3.2000		5.2700
Copper	ug/L	MW-4B	06/09/2025	ND	3.2000		5.2700
Copper	ug/L	MW-7A	06/06/2025	ND	3.2000		5.2700
Field pH	SU	MW-101	06/06/2025		7.0800		8.0828
Field pH	SU	MW-24A	11/21/2024		6.7800		8.0828
Field pH	SU	MW-25A	06/05/2025		6.7200		8.0828
Field pH	SU	MW-29A	06/06/2025		6.5100		8.0828
Field pH	SU	MW-2R	06/02/2025		6.8500		8.0828
Field pH	SU	MW-3	06/02/2025		6.8500		8.0828
Field pH	SU	MW-31A	06/05/2025		6.7900		8.0828
Field pH	SU	MW-33A	06/02/2025		6.5700		8.0828
Field pH	SU	MW-34A	06/04/2025		7.3100		8.0828
Field pH	SU	MW-38A	06/04/2025		6.9300		8.0828
Field pH	SU	MW-39A	06/04/2025		6.9700		8.0828
Field pH	SU	MW-4	06/09/2025		6.6000		8.0828
Field pH	SU	MW-40A	06/04/2025		6.8900		8.0828
Field pH	SU	MW-41A	06/04/2025		6.8900		8.0828
Field pH	SU	MW-42A	06/05/2025		7.0500		8.0828
Field pH	SU	MW-43A	06/05/2025		6.8900		8.0828

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Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Field pH	SU	MW-44A	06/05/2025		6.6500		8.0828
Field pH	SU	MW-45A	06/06/2025		6.9500		8.0828
Field pH	SU	MW-46A	06/06/2025		6.6400		8.0828
Field pH	SU	MW-4B	06/09/2025		6.8700		8.0828
Field pH	SU	MW-7A	06/06/2025		6.9500		8.0828
Field Specific Conductance	umhos/cm	MW-101	06/06/2025		2771.0000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-24A	11/21/2024		2038.4000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-25A	06/05/2025		3443.7000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-29A	06/06/2025		2930.3000	***	1473.0961
Field Specific Conductance	umhos/cm	MW-2R	06/02/2025		2383.0000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-3	06/02/2025		2928.3000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-31A	06/05/2025		4623.2000	***	1473.0961
Field Specific Conductance	umhos/cm	MW-33A	06/02/2025		2479.3000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-34A	06/04/2025		2891.3000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-38A	06/04/2025		3135.5000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-39A	06/04/2025		3071.4000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-4	06/09/2025		2993.7000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-40A	06/04/2025		3371.9000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-41A	06/04/2025		3147.0000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-42A	06/05/2025		3541.1000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-43A	06/05/2025		3701.8000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-44A	06/05/2025		4093.3000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-45A	06/06/2025		2205.0000	*	1473.0961

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Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Field Specific Conductance	umhos/cm	MW-46A	06/06/2025		2719.6000	***	1473.0961
Field Specific Conductance	umhos/cm	MW-4B	06/09/2025		2913.7000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-7A	06/06/2025		2375.1000	*	1473.0961
Lead	ug/L	MW-101	06/06/2025	ND	0.3300		1.0600
Lead	ug/L	MW-24A	11/21/2024	ND	0.2600		1.0600
Lead	ug/L	MW-25A	06/05/2025	ND	0.3300		1.0600
Lead	ug/L	MW-29A	06/06/2025	ND	0.3300		1.0600
Lead	ug/L	MW-2R	06/02/2025	ND	0.3300		1.0600
Lead	ug/L	MW-3	06/02/2025	ND	0.3300		1.0600
Lead	ug/L	MW-31A	06/05/2025	ND	0.3300		1.0600
Lead	ug/L	MW-33A	06/02/2025		3.2900	*	1.0600
Lead	ug/L	MW-34A	06/04/2025	ND	0.3300		1.0600
Lead	ug/L	MW-38A	06/04/2025	ND	0.3300		1.0600
Lead	ug/L	MW-39A	06/04/2025	ND	0.3300		1.0600
Lead	ug/L	MW-4	06/09/2025	ND	0.3300		1.0600
Lead	ug/L	MW-40A	06/04/2025	ND	0.3300		1.0600
Lead	ug/L	MW-41A	06/04/2025	ND	0.3300		1.0600
Lead	ug/L	MW-42A	06/05/2025	ND	0.3300		1.0600
Lead	ug/L	MW-43A	06/05/2025	ND	0.3300		1.0600
Lead	ug/L	MW-44A	06/05/2025	ND	0.3300		1.0600
Lead	ug/L	MW-45A	06/06/2025	ND	0.3300		1.0600
Lead	ug/L	MW-46A	06/06/2025	ND	0.3300		1.0600
Lead	ug/L	MW-4B	06/09/2025	ND	0.3300		1.0600

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Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Lead	ug/L	MW-7A	06/06/2025	ND	0.3300		1.0600
Nickel	ug/L	MW-101	06/06/2025		7.9300		20.9000
Nickel	ug/L	MW-24A	11/21/2024	ND	2.1000		20.9000
Nickel	ug/L	MW-25A	06/05/2025	ND	2.3000		20.9000
Nickel	ug/L	MW-29A	06/06/2025		54.0000	***	20.9000
Nickel	ug/L	MW-2R	06/02/2025	ND	2.3000		20.9000
Nickel	ug/L	MW-3	06/02/2025	ND	2.3000		20.9000
Nickel	ug/L	MW-31A	06/05/2025		30.8000	***	20.9000
Nickel	ug/L	MW-33A	06/02/2025		5.5300		20.9000
Nickel	ug/L	MW-34A	06/04/2025	ND	2.3000		20.9000
Nickel	ug/L	MW-38A	06/04/2025	ND	2.3000		20.9000
Nickel	ug/L	MW-39A	06/04/2025	ND	2.3000		20.9000
Nickel	ug/L	MW-4	06/09/2025		8.8200		20.9000
Nickel	ug/L	MW-40A	06/04/2025		14.1000		20.9000
Nickel	ug/L	MW-41A	06/04/2025	ND	2.3000		20.9000
Nickel	ug/L	MW-42A	06/05/2025		26.1000	***	20.9000
Nickel	ug/L	MW-43A	06/05/2025		22.5000	*	20.9000
Nickel	ug/L	MW-44A	06/05/2025		39.1000	***	20.9000
Nickel	ug/L	MW-45A	06/06/2025	ND	2.3000		20.9000
Nickel	ug/L	MW-46A	06/06/2025		24.0000	***	20.9000
Nickel	ug/L	MW-4B	06/09/2025	ND	2.3000		20.9000
Nickel	ug/L	MW-7A	06/06/2025	ND	2.3000		20.9000
Selenium	ug/L	MW-101	06/06/2025	ND	1.4000		1.4100

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Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Selenium	ug/L	MW-24A	11/21/2024	ND	1.4000		1.4100
Selenium	ug/L	MW-25A	06/05/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-29A	06/06/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-2R	06/02/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-3	06/02/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-31A	06/05/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-33A	06/02/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-34A	06/04/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-38A	06/04/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-39A	06/04/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-4	06/09/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-40A	06/04/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-41A	06/04/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-42A	06/05/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-43A	06/05/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-44A	06/05/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-45A	06/06/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-46A	06/06/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-4B	06/09/2025	ND	1.4000		1.4100
Selenium	ug/L	MW-7A	06/06/2025	ND	1.4000		1.4100
Silver	ug/L	MW-101	06/06/2025	ND	0.5000		0.3700
Silver	ug/L	MW-24A	11/21/2024	ND	0.5000		0.3700
Silver	ug/L	MW-25A	06/05/2025	ND	0.5000		0.3700

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*** - Current value failed - exceedance verified.
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Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Silver	ug/L	MW-29A	06/06/2025	ND	0.5000		0.3700
Silver	ug/L	MW-2R	06/02/2025	ND	0.5000		0.3700
Silver	ug/L	MW-3	06/02/2025	ND	0.5000		0.3700
Silver	ug/L	MW-31A	06/05/2025	ND	0.5000		0.3700
Silver	ug/L	MW-33A	06/02/2025	ND	0.5000		0.3700
Silver	ug/L	MW-34A	06/04/2025	ND	0.5000		0.3700
Silver	ug/L	MW-38A	06/04/2025	ND	0.5000		0.3700
Silver	ug/L	MW-39A	06/04/2025	ND	0.5000		0.3700
Silver	ug/L	MW-4	06/09/2025	ND	0.5000		0.3700
Silver	ug/L	MW-40A	06/04/2025	ND	0.5000		0.3700
Silver	ug/L	MW-41A	06/04/2025	ND	0.5000		0.3700
Silver	ug/L	MW-42A	06/05/2025	ND	0.5000		0.3700
Silver	ug/L	MW-43A	06/05/2025	ND	0.5000		0.3700
Silver	ug/L	MW-44A	06/05/2025	ND	0.5000		0.3700
Silver	ug/L	MW-45A	06/06/2025	ND	0.5000		0.3700
Silver	ug/L	MW-46A	06/06/2025	ND	0.5000		0.3700
Silver	ug/L	MW-4B	06/09/2025	ND	0.5000		0.3700
Silver	ug/L	MW-7A	06/06/2025	ND	0.5000		0.3700
Sulfide	ug/L	MW-24A	06/18/2024	ND	1410.0000		*****
Sulfide	ug/L	MW-29A	06/06/2025	ND	1410.0000		*****
Sulfide	ug/L	MW-31A	03/15/2022	ND	231.0000		*****
Sulfide	ug/L	MW-33A	09/13/2022	ND	231.0000		*****
Sulfide	ug/L	MW-4	06/08/2023	ND	231.0000		*****

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Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Sulfide	ug/L	MW-40A	06/13/2024	ND	1410.0000		*****
Sulfide	ug/L	MW-42A	06/05/2025	ND	1410.0000		*****
Sulfide	ug/L	MW-43A	06/05/2025	ND	1410.0000		*****
Sulfide	ug/L	MW-44A	06/05/2025	ND	1410.0000		*****
Sulfide	ug/L	MW-4B	11/21/2017	ND	231.0000		*****
Sulfide	ug/L	MW-7A	06/18/2024	ND	1410.0000		*****
Thallium	ug/L	MW-101	06/06/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-24A	11/21/2024	ND	0.5700		0.2600
Thallium	ug/L	MW-25A	06/05/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-29A	06/06/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-2R	06/02/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-3	06/02/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-31A	06/05/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-33A	06/02/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-34A	06/04/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-38A	06/04/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-39A	06/04/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-4	06/09/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-40A	06/04/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-41A	06/04/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-42A	06/05/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-43A	06/05/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-44A	06/05/2025	ND	0.5700		0.2600

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Thallium	ug/L	MW-45A	06/06/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-46A	06/06/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-4B	06/09/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-7A	06/06/2025	ND	0.5700		0.2600
Vanadium	ug/L	MW-101	06/06/2025	ND	1.7000		1.1000
Vanadium	ug/L	MW-24A	11/21/2024	ND	1.1000		1.1000
Vanadium	ug/L	MW-25A	06/05/2025	ND	1.7000		1.1000
Vanadium	ug/L	MW-29A	06/06/2025	ND	1.7000		1.1000
Vanadium	ug/L	MW-2R	06/02/2025	ND	1.7000		1.1000
Vanadium	ug/L	MW-3	06/02/2025	ND	1.7000		1.1000
Vanadium	ug/L	MW-31A	06/05/2025	ND	1.7000		1.1000
Vanadium	ug/L	MW-33A	06/02/2025	ND	1.7000		1.1000
Vanadium	ug/L	MW-34A	06/04/2025	ND	1.7000		1.1000
Vanadium	ug/L	MW-38A	06/04/2025	ND	1.7000		1.1000
Vanadium	ug/L	MW-39A	06/04/2025	ND	1.7000		1.1000
Vanadium	ug/L	MW-4	06/09/2025	ND	1.7000		1.1000
Vanadium	ug/L	MW-40A	06/04/2025	ND	1.7000		1.1000
Vanadium	ug/L	MW-41A	06/04/2025	ND	1.7000		1.1000
Vanadium	ug/L	MW-42A	06/05/2025	ND	1.7000		1.1000
Vanadium	ug/L	MW-43A	06/05/2025	ND	1.7000		1.1000
Vanadium	ug/L	MW-44A	06/05/2025	ND	1.7000		1.1000
Vanadium	ug/L	MW-45A	06/06/2025	ND	1.7000		1.1000
Vanadium	ug/L	MW-46A	06/06/2025	ND	1.7000		1.1000

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Vanadium	ug/L	MW-4B	06/09/2025	ND	1.7000		1.1000
Vanadium	ug/L	MW-7A	06/06/2025	ND	1.7000		1.1000
Zinc	ug/L	MW-101	06/06/2025	ND	13.0000		10.0000
Zinc	ug/L	MW-24A	11/21/2024	ND	9.7000		10.0000
Zinc	ug/L	MW-25A	06/05/2025	ND	13.0000		10.0000
Zinc	ug/L	MW-29A	06/06/2025	ND	13.0000		10.0000
Zinc	ug/L	MW-2R	06/02/2025	ND	13.0000		10.0000
Zinc	ug/L	MW-3	06/02/2025	ND	13.0000		10.0000
Zinc	ug/L	MW-31A	06/05/2025	ND	13.0000		10.0000
Zinc	ug/L	MW-33A	06/02/2025	ND	13.0000		10.0000
Zinc	ug/L	MW-34A	06/04/2025	ND	13.0000		10.0000
Zinc	ug/L	MW-38A	06/04/2025	ND	13.0000		10.0000
Zinc	ug/L	MW-39A	06/04/2025	ND	13.0000		10.0000
Zinc	ug/L	MW-4	06/09/2025	ND	13.0000		10.0000
Zinc	ug/L	MW-40A	06/04/2025	ND	13.0000		10.0000
Zinc	ug/L	MW-41A	06/04/2025	ND	13.0000		10.0000
Zinc	ug/L	MW-42A	06/05/2025	ND	13.0000		10.0000
Zinc	ug/L	MW-43A	06/05/2025	ND	13.0000		10.0000
Zinc	ug/L	MW-44A	06/05/2025		26.5000	*	10.0000
Zinc	ug/L	MW-45A	06/06/2025	ND	13.0000		10.0000
Zinc	ug/L	MW-46A	06/06/2025	ND	13.0000		10.0000
Zinc	ug/L	MW-4B	06/09/2025	ND	13.0000		10.0000
Zinc	ug/L	MW-7A	06/06/2025	ND	13.0000		10.0000

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

Table 3

Detection Frequencies in Upgradient and Downgradient Wells

Constituent	Upgradient Detect	Upgradient N	Upgradient Proportion	Downgradient Detect	Downgradient N	Downgradient Proportion
Antimony	0	27	0.000	29	398	0.073
Arsenic	3	27	0.111	104	399	0.261
Barium	27	27	1.000	405	405	1.000
Beryllium	0	27	0.000	16	397	0.040
Cadmium	1	27	0.037	60	399	0.150
Chromium	3	27	0.111	43	397	0.108
Cobalt	7	27	0.259	159	398	0.399
Copper	4	27	0.148	69	398	0.173
Field pH	26	26	1.000	321	321	1.000
Field Specific Conductance	26	26	1.000	321	321	1.000
Lead	3	27	0.111	58	397	0.146
Nickel	6	27	0.222	184	401	0.459
Selenium	2	27	0.074	20	398	0.050
Silver	1	27	0.037	12	399	0.030
Sulfide	0	3	0.000	1	38	0.026
Thallium	1	27	0.037	18	397	0.045
Vanadium	5	27	0.185	53	397	0.134
Zinc	0	27	0.000	72	401	0.180

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
Antimony	0	27	0.000	5.310	5.310					2.326
Arsenic	3	27	0.111	8.262	8.611					2.326
Barium	27	27	1.000	3.126	1.822					2.326
Beryllium	0	27	0.000	5.310	5.310					2.326
Cadmium	1	27	0.037	21.308	21.308					2.326
Chromium	3	27	0.111	6.697	7.011					2.326
Cobalt	7	27	0.259	5.310	5.760					2.326
Copper	4	27	0.148	6.158	5.224					2.326
Field pH	26	26	1.000	0.387	0.038					2.326
Field Specific Conductance	26	26	1.000	2.485	1.900					2.326
Lead	3	27	0.111	9.476	8.628					2.326
Nickel	6	27	0.222	6.857	5.517					2.326
Selenium	2	27	0.074	7.603	7.524					2.326
Silver	1	27	0.037	21.308	21.308					2.326
Sulfide	0	3	0.000	0.495	0.495					2.326
Thallium	1	27	0.037	21.308	21.308					2.326
Vanadium	5	27	0.185	5.533	5.472					2.326
Zinc	0	27	0.000	5.310	5.310					2.326

* - 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 4

Shapiro-Wilk Multiple Group Test of Normality

Constituent	Dist Form	Model Type
Antimony	non-norm	nonpar
Arsenic	non-norm	nonpar
Barium	lognor	lognor
Beryllium	non-norm	nonpar
Cadmium	non-norm	nonpar
Chromium	non-norm	nonpar
Cobalt	non-norm	nonpar
Copper	non-norm	nonpar
Field pH	normal	normal
Field Specific Conductance	lognor	lognor
Lead	non-norm	nonpar
Nickel	non-norm	nonpar
Selenium	non-norm	nonpar
Silver	non-norm	nonpar
Sulfide	normal	too few
Thallium	non-norm	nonpar
Vanadium	non-norm	nonpar
Zinc	non-norm	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	ug/L	0	27					0.6900	nonpar	***	0.99
Arsenic	ug/L	3	27					4.5700	nonpar		0.99
Barium	ug/L	27	27	4.9131	0.3216	0.0100	2.5237	306.3163	lognor		
Beryllium	ug/L	0	27					0.2700	nonpar	***	0.99
Cadmium	ug/L	1	27					0.2090	nonpar		0.99
Chromium	ug/L	3	27					1.1000	nonpar	***	0.99
Cobalt	ug/L	7	27					0.6810	nonpar		0.99
Copper	ug/L	4	27					5.2700	nonpar		0.99
Field pH	SU	26	26	7.0119	0.4229	0.0100	2.5320	8.0828	normal		
Field Specific Conductance	umhos/cm	26	26	6.5275	0.3032	0.0100	2.5320	1473.0961	lognor		
Lead	ug/L	3	27					1.0600	nonpar		0.99
Nickel	ug/L	6	27					20.9000	nonpar		0.99
Selenium	ug/L	2	27					1.4100	nonpar		0.99
Silver	ug/L	1	27					0.3700	nonpar	***	0.99
Sulfide	ug/L	0	3							*	
Thallium	ug/L	1	27					0.2600	nonpar	***	0.99
Vanadium	ug/L	5	27					1.1000	nonpar	***	0.99
Zinc	ug/L	0	27					10.0000	nonpar	***	0.99

Conf = confidence level for passing initial test or one of two verification resamples 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

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 7

Censored Data Outliers Test
for datasets with 75% or more NDs

Constituent	Units	Well	Date	Result	Detects	N	% >= PQL	% >= MDL	Manual RL	Median	>= Med
Arsenic	ug/L	MW-1	05/05/2014	0.3540	2	20	10	20	no	0.7500	
Arsenic	ug/L	MW-1	11/16/2017	0.6620	2	20	10	20	no	0.7500	
Arsenic	ug/L	MW-37A	03/07/2022	4.5700	1	7	14	43	no	0.7500	yes
Cadmium	ug/L	MW-1	11/09/2023	0.2090	1	20	5	5	no	0.0550	yes
Chromium	ug/L	MW-1	05/05/2014	0.8160	3	20	15	30	no	1.1000	
Chromium	ug/L	MW-1	04/11/2016	0.8520	3	20	15	30	no	1.1000	
Chromium	ug/L	MW-1	11/11/2016	0.4230	3	20	15	30	no	1.1000	
Cobalt	ug/L	MW-37A	09/22/2021	0.6810	1	7	14	57	no	0.1900	
Copper	ug/L	MW-1	05/05/2014	1.0400	4	20	20	25	no	1.5000	
Copper	ug/L	MW-1	11/07/2014	0.9060	4	20	20	25	no	1.5000	
Copper	ug/L	MW-1	09/16/2015	0.5260	4	20	20	25	no	1.5000	
Copper	ug/L	MW-1	11/09/2023	5.2700	4	20	20	25	no	1.5000	
Lead	ug/L	MW-1	09/16/2015	0.3030	2	20	10	15	no	0.2110	
Lead	ug/L	MW-1	11/09/2023	0.9940	2	20	10	15	no	0.2110	
Lead	ug/L	MW-37A	09/22/2021	1.0600	1	7	14	43	no	0.2400	yes
Selenium	ug/L	MW-1	05/05/2014	1.1500	2	20	10	10	no	0.9600	
Selenium	ug/L	MW-1	04/11/2016	1.4100	2	20	10	10	no	0.9600	
Silver	ug/L	MW-1	09/16/2015	0.1170	1	20	5	10	no	0.3000	no
Thallium	ug/L	MW-1	09/16/2015	0.0380	1	20	5	5	no	0.2600	no
Vanadium	ug/L	MW-1	05/05/2014	0.6760	5	20	25	40	no	0.8500	
Vanadium	ug/L	MW-1	11/07/2014	0.5100	5	20	25	40	no	0.8500	
Vanadium	ug/L	MW-1	09/16/2015	0.5420	5	20	25	40	no	0.8500	
Vanadium	ug/L	MW-1	04/11/2016	0.4660	5	20	25	40	no	0.8500	

* Failed test - potential outlier.
Potential outliers are not removed from statistical analyses.
>= Med - indicates if the result is greater than or equal to the median PQL value.
>= 2x - indicates if the result is greater than or equal to 2 x the median PQL value.
>= 3x - indicates if the result is greater than or equal to 3 x the median PQL value.

Table 7

Censored Data Outliers Test
for datasets with 75% or more NDs

Constituent	>= 2x	>= 3x	
Arsenic	no		
Arsenic	no		
Arsenic			*
Cadmium			*
Chromium	no		
Chromium	no		
Chromium	no		
Cobalt	yes		*
Copper	no		
Copper	no		
Copper	no		
Copper	yes		*
Lead	no		
Lead	yes		*
Lead			*
Selenium	no		
Selenium	no		
Silver			
Thallium			
Vanadium	no		
Vanadium	no		
Vanadium	no		
Vanadium	no		

* Failed test - potential outlier.
Potential outliers are not removed from statistical analyses.
>= Med - indicates if the result is greater than or equal to the median PQL value.
>= 2x - indicates if the result is greater than or equal to 2 x the median PQL value.
>= 3x - indicates if the result is greater than or equal to 3 x the median PQL value.

Table 7

Censored Data Outliers Test
for datasets with 75% or more NDs

Constituent	Units	Well	Date	Result	Detects	N	% >= PQL	% >= MDL	Manual RL	Median	>= Med
Vanadium	ug/L	MW-1	11/11/2016	0.3940	5	20	25	40	no	0.8500	

* Failed test - potential outlier.
Potential outliers are not removed from statistical analyses.
>= Med - indicates if the result is greater than or equal to the median PQL value.
>= 2x - indicates if the result is greater than or equal to 2 x the median PQL value.
>= 3x - indicates if the result is greater than or equal to 3 x the median PQL value.

Table 7

Censored Data Outliers Test
for datasets with 75% or more NDs

Constituent	>= 2x	>= 3x	
Vanadium	no		

* Failed test - potential outlier.
Potential outliers are not removed from statistical analyses.
>= Med - indicates if the result is greater than or equal to the median PQL value.
>= 2x - indicates if the result is greater than or equal to 2 x the median PQL value.
>= 3x - indicates if the result is greater than or equal to 3 x the median PQL value.

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Arsenic	ug/L	MW-29A	11/20/2019	ND	0.7500		4.5700
Arsenic	ug/L	MW-29A	02/06/2020		2.2800		4.5700
Arsenic	ug/L	MW-29A	06/30/2020		3.4000		4.5700
Arsenic	ug/L	MW-29A	08/26/2020		6.8400	*	4.5700
Arsenic	ug/L	MW-29A	11/20/2020		4.5900	*	4.5700
Arsenic	ug/L	MW-29A	05/24/2021		4.0900		4.5700
Arsenic	ug/L	MW-29A	09/28/2021		6.0900	*	4.5700
Arsenic	ug/L	MW-29A	03/29/2022		5.5700	*	4.5700
Arsenic	ug/L	MW-29A	09/12/2022		10.2000	*	4.5700
Arsenic	ug/L	MW-29A	06/12/2023		4.3700		4.5700
Arsenic	ug/L	MW-29A	11/15/2023		6.4900	*	4.5700
Arsenic	ug/L	MW-29A	06/26/2024		4.5400		4.5700
Arsenic	ug/L	MW-29A	12/09/2024		6.7500	*	4.5700
Arsenic	ug/L	MW-29A	06/06/2025	ND	0.5300		4.5700
Arsenic	ug/L	MW-33A	11/18/2019		42.4000	*	4.5700
Arsenic	ug/L	MW-33A	02/12/2020		80.9000	*	4.5700
Arsenic	ug/L	MW-33A	06/30/2020		5.2300	*	4.5700
Arsenic	ug/L	MW-33A	08/25/2020		65.8000	*	4.5700
Arsenic	ug/L	MW-33A	11/03/2020		17.9000	*	4.5700
Arsenic	ug/L	MW-33A	06/03/2021		35.3000	*	4.5700
Arsenic	ug/L	MW-33A	08/03/2021		52.7000	*	4.5700
Arsenic	ug/L	MW-33A	09/29/2021		18.4000	*	4.5700
Arsenic	ug/L	MW-33A	03/16/2022		11.3000	*	4.5700

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

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Arsenic	ug/L	MW-33A	09/13/2022		13.8000	*	4.5700
Arsenic	ug/L	MW-33A	06/13/2023	ND	0.5300		4.5700
Arsenic	ug/L	MW-33A	06/12/2024		24.3000	*	4.5700
Arsenic	ug/L	MW-33A	08/29/2024		51.8000	*	4.5700
Arsenic	ug/L	MW-33A	12/05/2024		112.0000	*	4.5700
Arsenic	ug/L	MW-33A	06/02/2025		9.8600	*	4.5700
Arsenic	ug/L	MW-43A	09/01/2022		8.0600	*	4.5700
Arsenic	ug/L	MW-43A	12/06/2022		7.3400	*	4.5700
Arsenic	ug/L	MW-43A	06/07/2023		8.2800	*	4.5700
Arsenic	ug/L	MW-43A	08/28/2023		8.8500	*	4.5700
Arsenic	ug/L	MW-43A	11/02/2023		9.8100	*	4.5700
Arsenic	ug/L	MW-43A	06/11/2024		6.2800	*	4.5700
Arsenic	ug/L	MW-43A	12/03/2024		6.3200	*	4.5700
Arsenic	ug/L	MW-43A	06/05/2025		7.2800	*	4.5700
Barium	ug/L	MW-33A	11/18/2019		144.0000		306.3163
Barium	ug/L	MW-33A	02/12/2020		176.0000		306.3163
Barium	ug/L	MW-33A	06/30/2020		105.0000		306.3163
Barium	ug/L	MW-33A	08/25/2020		203.0000		306.3163
Barium	ug/L	MW-33A	11/03/2020		177.0000		306.3163
Barium	ug/L	MW-33A	06/03/2021		168.0000		306.3163
Barium	ug/L	MW-33A	08/03/2021		149.0000		306.3163
Barium	ug/L	MW-33A	09/29/2021		152.0000		306.3163
Barium	ug/L	MW-33A	03/16/2022		176.0000		306.3163

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

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Barium	ug/L	MW-33A	09/13/2022		138.0000		306.3163
Barium	ug/L	MW-33A	06/13/2023		108.0000		306.3163
Barium	ug/L	MW-33A	06/12/2024		255.0000		306.3163
Barium	ug/L	MW-33A	12/05/2024		199.0000		306.3163
Barium	ug/L	MW-33A	06/02/2025		361.0000	*	306.3163
Barium	ug/L	MW-4	10/13/2007		742.0000	*	306.3163
Barium	ug/L	MW-4	01/09/2008		603.0000	*	306.3163
Barium	ug/L	MW-4	04/08/2008		793.0000	*	306.3163
Barium	ug/L	MW-4	07/16/2008		544.0000	*	306.3163
Barium	ug/L	MW-4	10/23/2008		514.0000	*	306.3163
Barium	ug/L	MW-4	04/09/2009		549.0000	*	306.3163
Barium	ug/L	MW-4	10/05/2009		623.0000	*	306.3163
Barium	ug/L	MW-4	02/25/2010		564.0000	*	306.3163
Barium	ug/L	MW-4	04/21/2010		580.0000	*	306.3163
Barium	ug/L	MW-4	10/14/2010		529.0000	*	306.3163
Barium	ug/L	MW-4	04/13/2011		542.0000	*	306.3163
Barium	ug/L	MW-4	10/18/2011		513.0000	*	306.3163
Barium	ug/L	MW-4	04/24/2012		533.0000	*	306.3163
Barium	ug/L	MW-4	10/24/2012		710.0000	*	306.3163
Barium	ug/L	MW-4	04/08/2013		774.0000	*	306.3163
Barium	ug/L	MW-4	11/05/2013		514.0000	*	306.3163
Barium	ug/L	MW-4	05/02/2014		513.0000	*	306.3163
Barium	ug/L	MW-4	11/04/2014		469.0000	*	306.3163

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Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Barium	ug/L	MW-4	05/06/2015		463.0000	*	306.3163
Barium	ug/L	MW-4	09/18/2015		479.0000	*	306.3163
Barium	ug/L	MW-4	03/31/2016		484.0000	*	306.3163
Barium	ug/L	MW-4	11/28/2016		539.0000	*	306.3163
Barium	ug/L	MW-4	05/11/2017		482.0000	*	306.3163
Barium	ug/L	MW-4	11/16/2017		40.6000		306.3163
Barium	ug/L	MW-4	06/04/2018		530.0000	*	306.3163
Barium	ug/L	MW-4	10/29/2018		464.0000	*	306.3163
Barium	ug/L	MW-4	06/04/2019		451.0000	*	306.3163
Barium	ug/L	MW-4	10/30/2019		191.0000		306.3163
Barium	ug/L	MW-4	06/17/2020		421.0000	*	306.3163
Barium	ug/L	MW-4	11/17/2020		409.0000	*	306.3163
Barium	ug/L	MW-4	05/25/2021		475.0000	*	306.3163
Barium	ug/L	MW-4	09/28/2021		482.0000	*	306.3163
Barium	ug/L	MW-4	03/02/2022		503.0000	*	306.3163
Barium	ug/L	MW-4	09/07/2022		536.0000	*	306.3163
Barium	ug/L	MW-4	06/08/2023		134.0000		306.3163
Barium	ug/L	MW-4	11/13/2023		514.0000	*	306.3163
Barium	ug/L	MW-4	06/11/2024		485.0000	*	306.3163
Barium	ug/L	MW-4	11/19/2024		518.0000	*	306.3163
Barium	ug/L	MW-4	06/09/2025		505.0000	*	306.3163
Cadmium	ug/L	MW-44A	09/01/2022	ND	0.0550		0.2090
Cadmium	ug/L	MW-44A	12/06/2022	ND	0.0550		0.2090

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Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Cadmium	ug/L	MW-44A	06/07/2023		0.3060	*	0.2090
Cadmium	ug/L	MW-44A	08/28/2023		0.4160	*	0.2090
Cadmium	ug/L	MW-44A	11/02/2023		0.7950	*	0.2090
Cadmium	ug/L	MW-44A	06/26/2024		0.3890	*	0.2090
Cadmium	ug/L	MW-44A	12/03/2024	ND	0.1000		0.2090
Cadmium	ug/L	MW-44A	06/05/2025		0.4990	*	0.2090
Cobalt	ug/L	MW-29A	11/20/2019		8.4300	*	0.6810
Cobalt	ug/L	MW-29A	02/06/2020		9.6400	*	0.6810
Cobalt	ug/L	MW-29A	06/30/2020		9.9800	*	0.6810
Cobalt	ug/L	MW-29A	08/26/2020		10.7000	*	0.6810
Cobalt	ug/L	MW-29A	11/20/2020		10.1000	*	0.6810
Cobalt	ug/L	MW-29A	05/24/2021		11.9000	*	0.6810
Cobalt	ug/L	MW-29A	09/28/2021		7.9000	*	0.6810
Cobalt	ug/L	MW-29A	03/29/2022		7.3800	*	0.6810
Cobalt	ug/L	MW-29A	09/12/2022		10.1000	*	0.6810
Cobalt	ug/L	MW-29A	06/12/2023		12.5000	*	0.6810
Cobalt	ug/L	MW-29A	11/15/2023		18.7000	*	0.6810
Cobalt	ug/L	MW-29A	06/26/2024		11.2000	*	0.6810
Cobalt	ug/L	MW-29A	12/09/2024		16.5000	*	0.6810
Cobalt	ug/L	MW-29A	06/06/2025		3.4700	*	0.6810
Cobalt	ug/L	MW-31A	11/05/2019		13.4000	*	0.6810
Cobalt	ug/L	MW-31A	02/07/2020		12.4000	*	0.6810
Cobalt	ug/L	MW-31A	06/18/2020		13.6000	*	0.6810

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Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Cobalt	ug/L	MW-31A	08/26/2020		12.0000	*	0.6810
Cobalt	ug/L	MW-31A	11/18/2020		10.0000	*	0.6810
Cobalt	ug/L	MW-31A	05/19/2021		10.4000	*	0.6810
Cobalt	ug/L	MW-31A	09/29/2021		3.3700	*	0.6810
Cobalt	ug/L	MW-31A	03/15/2022		3.0100	*	0.6810
Cobalt	ug/L	MW-31A	09/07/2022		32.2000	*	0.6810
Cobalt	ug/L	MW-31A	06/20/2023		3.7500	*	0.6810
Cobalt	ug/L	MW-31A	11/14/2023		4.6200	*	0.6810
Cobalt	ug/L	MW-31A	07/01/2024		3.4800	*	0.6810
Cobalt	ug/L	MW-31A	12/17/2024		2.0900	*	0.6810
Cobalt	ug/L	MW-31A	06/05/2025		2.0400	*	0.6810
Cobalt	ug/L	MW-33A	11/18/2019		3.0000	*	0.6810
Cobalt	ug/L	MW-33A	02/12/2020		2.5900	*	0.6810
Cobalt	ug/L	MW-33A	06/30/2020	ND	0.0910		0.6810
Cobalt	ug/L	MW-33A	08/25/2020		2.3400	*	0.6810
Cobalt	ug/L	MW-33A	11/03/2020		1.8300	*	0.6810
Cobalt	ug/L	MW-33A	06/03/2021		3.2000	*	0.6810
Cobalt	ug/L	MW-33A	08/03/2021		3.2000	*	0.6810
Cobalt	ug/L	MW-33A	09/29/2021		2.0300	*	0.6810
Cobalt	ug/L	MW-33A	03/16/2022		0.5030		0.6810
Cobalt	ug/L	MW-33A	09/13/2022		0.7430	*	0.6810
Cobalt	ug/L	MW-33A	06/13/2023	ND	0.1700		0.6810
Cobalt	ug/L	MW-33A	06/12/2024		4.5100	*	0.6810

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Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Cobalt	ug/L	MW-33A	12/05/2024		2.4000	*	0.6810
Cobalt	ug/L	MW-33A	06/02/2025		5.2100	*	0.6810
Cobalt	ug/L	MW-39A	09/23/2021		0.8570	*	0.6810
Cobalt	ug/L	MW-39A	12/14/2021	ND	0.1900		0.6810
Cobalt	ug/L	MW-39A	03/07/2022	ND	0.1900		0.6810
Cobalt	ug/L	MW-39A	06/23/2022	ND	0.1900		0.6810
Cobalt	ug/L	MW-39A	08/17/2022	ND	0.1900		0.6810
Cobalt	ug/L	MW-39A	12/06/2022	ND	0.1900		0.6810
Cobalt	ug/L	MW-39A	06/08/2023	ND	0.1700		0.6810
Cobalt	ug/L	MW-39A	11/06/2023	ND	0.1700		0.6810
Cobalt	ug/L	MW-39A	06/13/2024	ND	0.1700		0.6810
Cobalt	ug/L	MW-39A	12/03/2024		0.8120	*	0.6810
Cobalt	ug/L	MW-39A	06/04/2025	ND	0.1700		0.6810
Cobalt	ug/L	MW-4	10/13/2007	ND	20.0000		0.6810
Cobalt	ug/L	MW-4	01/09/2008	ND	20.0000		0.6810
Cobalt	ug/L	MW-4	04/08/2008	ND	20.0000		0.6810
Cobalt	ug/L	MW-4	07/16/2008	ND	20.0000		0.6810
Cobalt	ug/L	MW-4	10/23/2008	ND	20.0000		0.6810
Cobalt	ug/L	MW-4	04/09/2009	ND	20.0000		0.6810
Cobalt	ug/L	MW-4	10/05/2009	ND	20.0000		0.6810
Cobalt	ug/L	MW-4	02/25/2010	ND	20.0000		0.6810
Cobalt	ug/L	MW-4	04/21/2010	ND	20.0000		0.6810
Cobalt	ug/L	MW-4	10/14/2010	ND	20.0000		0.6810

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Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Cobalt	ug/L	MW-4	04/13/2011	ND	20.0000		0.6810
Cobalt	ug/L	MW-4	10/18/2011		8.2700	*	0.6810
Cobalt	ug/L	MW-4	04/24/2012		5.8500	*	0.6810
Cobalt	ug/L	MW-4	10/24/2012		10.1000	*	0.6810
Cobalt	ug/L	MW-4	04/08/2013		10.0000	*	0.6810
Cobalt	ug/L	MW-4	11/05/2013		4.3700	*	0.6810
Cobalt	ug/L	MW-4	05/02/2014		6.0900	*	0.6810
Cobalt	ug/L	MW-4	11/04/2014		0.9670	*	0.6810
Cobalt	ug/L	MW-4	05/06/2015		0.4480		0.6810
Cobalt	ug/L	MW-4	09/18/2015		0.3300		0.6810
Cobalt	ug/L	MW-4	03/31/2016		0.4110		0.6810
Cobalt	ug/L	MW-4	11/28/2016		0.4410		0.6810
Cobalt	ug/L	MW-4	05/11/2017	ND	0.0453		0.6810
Cobalt	ug/L	MW-4	11/16/2017		3.7500	*	0.6810
Cobalt	ug/L	MW-4	06/04/2018		1.4400	*	0.6810
Cobalt	ug/L	MW-4	10/29/2018	ND	0.0610		0.6810
Cobalt	ug/L	MW-4	06/04/2019	ND	0.4020		0.6810
Cobalt	ug/L	MW-4	10/30/2019	ND	0.0910		0.6810
Cobalt	ug/L	MW-4	06/17/2020	ND	0.0910		0.6810
Cobalt	ug/L	MW-4	11/17/2020		1.4800	*	0.6810
Cobalt	ug/L	MW-4	05/25/2021		0.9370	*	0.6810
Cobalt	ug/L	MW-4	09/28/2021		1.0700	*	0.6810
Cobalt	ug/L	MW-4	03/02/2022		1.4400	*	0.6810

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Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Cobalt	ug/L	MW-4	09/07/2022		1.6100	*	0.6810
Cobalt	ug/L	MW-4	06/08/2023	ND	0.1700		0.6810
Cobalt	ug/L	MW-4	11/13/2023		1.5400	*	0.6810
Cobalt	ug/L	MW-4	06/11/2024		1.8500	*	0.6810
Cobalt	ug/L	MW-4	11/19/2024		2.0400	*	0.6810
Cobalt	ug/L	MW-4	06/09/2025		2.2500	*	0.6810
Cobalt	ug/L	MW-40A	09/23/2021		3.2200	*	0.6810
Cobalt	ug/L	MW-40A	12/14/2021		1.0600	*	0.6810
Cobalt	ug/L	MW-40A	03/07/2022		1.1700	*	0.6810
Cobalt	ug/L	MW-40A	06/23/2022		0.8070	*	0.6810
Cobalt	ug/L	MW-40A	08/17/2022		1.4700	*	0.6810
Cobalt	ug/L	MW-40A	12/06/2022		2.1900	*	0.6810
Cobalt	ug/L	MW-40A	06/07/2023		1.5100	*	0.6810
Cobalt	ug/L	MW-40A	11/06/2023		1.8600	*	0.6810
Cobalt	ug/L	MW-40A	06/13/2024		1.6900	*	0.6810
Cobalt	ug/L	MW-40A	12/03/2024		2.1400	*	0.6810
Cobalt	ug/L	MW-40A	06/04/2025		1.5700	*	0.6810
Cobalt	ug/L	MW-42A	08/31/2022		3.9800	*	0.6810
Cobalt	ug/L	MW-42A	12/06/2022		3.3100	*	0.6810
Cobalt	ug/L	MW-42A	06/07/2023		0.5180		0.6810
Cobalt	ug/L	MW-42A	08/28/2023		2.4600	*	0.6810
Cobalt	ug/L	MW-42A	11/02/2023		2.5600	*	0.6810
Cobalt	ug/L	MW-42A	06/18/2024		2.5600	*	0.6810

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Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Cobalt	ug/L	MW-42A	12/05/2024		2.7700	*	0.6810
Cobalt	ug/L	MW-42A	06/05/2025		1.3700	*	0.6810
Cobalt	ug/L	MW-43A	09/01/2022		3.6800	*	0.6810
Cobalt	ug/L	MW-43A	12/06/2022		3.2700	*	0.6810
Cobalt	ug/L	MW-43A	06/07/2023		4.5100	*	0.6810
Cobalt	ug/L	MW-43A	08/28/2023		4.9300	*	0.6810
Cobalt	ug/L	MW-43A	11/02/2023		4.7500	*	0.6810
Cobalt	ug/L	MW-43A	06/11/2024		3.4900	*	0.6810
Cobalt	ug/L	MW-43A	12/03/2024		3.8300	*	0.6810
Cobalt	ug/L	MW-43A	06/05/2025		3.9200	*	0.6810
Copper	ug/L	MW-33A	11/18/2019	ND	2.0000		5.2700
Copper	ug/L	MW-33A	02/12/2020	ND	3.2000		5.2700
Copper	ug/L	MW-33A	06/30/2020	ND	1.5000		5.2700
Copper	ug/L	MW-33A	08/25/2020	ND	1.5000		5.2700
Copper	ug/L	MW-33A	11/03/2020	ND	1.5000		5.2700
Copper	ug/L	MW-33A	06/03/2021	ND	1.4000		5.2700
Copper	ug/L	MW-33A	08/03/2021	ND	1.4000		5.2700
Copper	ug/L	MW-33A	09/29/2021	ND	1.4000		5.2700
Copper	ug/L	MW-33A	03/16/2022	ND	1.8000		5.2700
Copper	ug/L	MW-33A	09/13/2022	ND	1.8000		5.2700
Copper	ug/L	MW-33A	06/13/2023	ND	1.8000		5.2700
Copper	ug/L	MW-33A	06/12/2024	ND	1.8000		5.2700
Copper	ug/L	MW-33A	12/05/2024	ND	1.8000		5.2700

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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	ug/L	MW-33A	06/02/2025		8.9600	*	5.2700
Field Specific Conductance	umhos/cm	MW-101	06/10/2019		1115.7000		1473.0961
Field Specific Conductance	umhos/cm	MW-101	08/14/2019		1114.7000		1473.0961
Field Specific Conductance	umhos/cm	MW-101	11/20/2019		1183.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-101	02/06/2020		1145.1000		1473.0961
Field Specific Conductance	umhos/cm	MW-101	06/30/2020		956.0100		1473.0961
Field Specific Conductance	umhos/cm	MW-101	11/20/2020		1162.3000		1473.0961
Field Specific Conductance	umhos/cm	MW-101	02/03/2021		1109.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-101	05/24/2021		1034.2000		1473.0961
Field Specific Conductance	umhos/cm	MW-101	09/28/2021		1147.2000		1473.0961
Field Specific Conductance	umhos/cm	MW-101	09/12/2022		957.1300		1473.0961
Field Specific Conductance	umhos/cm	MW-101	06/12/2023		1139.1000		1473.0961
Field Specific Conductance	umhos/cm	MW-101	06/26/2024		975.9900		1473.0961
Field Specific Conductance	umhos/cm	MW-101	12/09/2024		2176.1000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-101	06/06/2025		2771.0000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-24A	05/07/2015		1120.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-24A	04/04/2016		1040.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-24A	05/12/2017		1147.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-24A	06/07/2018		1120.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-24A	10/29/2018		793.3200		1473.0961
Field Specific Conductance	umhos/cm	MW-24A	06/05/2019		996.2500		1473.0961
Field Specific Conductance	umhos/cm	MW-24A	08/13/2019		944.6600		1473.0961
Field Specific Conductance	umhos/cm	MW-24A	11/04/2019		969.1300		1473.0961

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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
Field Specific Conductance	umhos/cm	MW-24A	06/29/2020		911.6900		1473.0961
Field Specific Conductance	umhos/cm	MW-24A	11/18/2020		886.0500		1473.0961
Field Specific Conductance	umhos/cm	MW-24A	05/24/2021		870.5900		1473.0961
Field Specific Conductance	umhos/cm	MW-24A	09/28/2021		1287.3900		1473.0961
Field Specific Conductance	umhos/cm	MW-24A	08/30/2022		938.8400		1473.0961
Field Specific Conductance	umhos/cm	MW-24A	06/14/2023		1253.2000		1473.0961
Field Specific Conductance	umhos/cm	MW-24A	06/18/2024		1092.6000		1473.0961
Field Specific Conductance	umhos/cm	MW-24A	11/21/2024		2038.4000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-25A	05/04/2015		900.7000		1473.0961
Field Specific Conductance	umhos/cm	MW-25A	04/06/2016		829.8000		1473.0961
Field Specific Conductance	umhos/cm	MW-25A	11/15/2016		963.5000		1473.0961
Field Specific Conductance	umhos/cm	MW-25A	05/11/2017		986.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-25A	11/06/2017		817.4000		1473.0961
Field Specific Conductance	umhos/cm	MW-25A	06/18/2018		1265.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-25A	10/30/2018		905.1000		1473.0961
Field Specific Conductance	umhos/cm	MW-25A	06/06/2019		1191.5000		1473.0961
Field Specific Conductance	umhos/cm	MW-25A	11/04/2019		1146.6000		1473.0961
Field Specific Conductance	umhos/cm	MW-25A	02/06/2020		1125.7000		1473.0961
Field Specific Conductance	umhos/cm	MW-25A	06/30/2020		1126.3000		1473.0961
Field Specific Conductance	umhos/cm	MW-25A	11/05/2020		1105.2000		1473.0961
Field Specific Conductance	umhos/cm	MW-25A	05/19/2021		1060.3000		1473.0961
Field Specific Conductance	umhos/cm	MW-25A	09/28/2021		1007.5000		1473.0961
Field Specific Conductance	umhos/cm	MW-25A	03/29/2022		1120.0000		1473.0961

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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
Field Specific Conductance	umhos/cm	MW-25A	08/30/2022		1133.9000		1473.0961
Field Specific Conductance	umhos/cm	MW-25A	06/15/2023		1203.6000		1473.0961
Field Specific Conductance	umhos/cm	MW-25A	11/15/2023		1203.2000		1473.0961
Field Specific Conductance	umhos/cm	MW-25A	01/25/2024		1072.3000		1473.0961
Field Specific Conductance	umhos/cm	MW-25A	06/13/2024		1099.6000		1473.0961
Field Specific Conductance	umhos/cm	MW-25A	11/21/2024		2293.8000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-25A	06/05/2025		3443.7000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-29A	11/20/2019		1559.2000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-29A	02/06/2020		1595.7000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-29A	06/30/2020		1584.9000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-29A	08/26/2020		1681.4000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-29A	11/20/2020		1541.8000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-29A	05/24/2021		1556.8000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-29A	09/28/2021		1573.5000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-29A	03/29/2022		1748.0000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-29A	06/27/2022		1781.9000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-29A	09/12/2022		1996.7000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-29A	12/07/2022		1660.1000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-29A	06/12/2023		2066.8000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-29A	11/15/2023		1728.3000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-29A	06/26/2024		1905.0000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-29A	12/09/2024		2598.1000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-29A	06/06/2025		2930.3000	*	1473.0961

* - 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
Field Specific Conductance	umhos/cm	MW-2R	10/12/2007		694.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-2R	01/09/2008		859.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-2R	04/08/2008		850.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-2R	05/07/2015		644.4000		1473.0961
Field Specific Conductance	umhos/cm	MW-2R	09/18/2015		702.8000		1473.0961
Field Specific Conductance	umhos/cm	MW-2R	04/12/2016		588.5000		1473.0961
Field Specific Conductance	umhos/cm	MW-2R	11/30/2016		594.1000		1473.0961
Field Specific Conductance	umhos/cm	MW-2R	05/24/2017		628.7000		1473.0961
Field Specific Conductance	umhos/cm	MW-2R	11/17/2017		609.1000		1473.0961
Field Specific Conductance	umhos/cm	MW-2R	06/07/2018		747.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-2R	10/28/2018		475.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-2R	06/07/2019		690.7800		1473.0961
Field Specific Conductance	umhos/cm	MW-2R	11/04/2019		638.0800		1473.0961
Field Specific Conductance	umhos/cm	MW-2R	06/18/2020		588.3100		1473.0961
Field Specific Conductance	umhos/cm	MW-2R	11/23/2020		798.8700		1473.0961
Field Specific Conductance	umhos/cm	MW-2R	05/19/2021		766.1400		1473.0961
Field Specific Conductance	umhos/cm	MW-2R	09/29/2021		760.7900		1473.0961
Field Specific Conductance	umhos/cm	MW-2R	03/16/2022		816.5200		1473.0961
Field Specific Conductance	umhos/cm	MW-2R	09/07/2022		632.9700		1473.0961
Field Specific Conductance	umhos/cm	MW-2R	06/14/2023		772.9800		1473.0961
Field Specific Conductance	umhos/cm	MW-2R	11/20/2023		730.9300		1473.0961
Field Specific Conductance	umhos/cm	MW-2R	01/23/2024		787.9500		1473.0961
Field Specific Conductance	umhos/cm	MW-2R	07/01/2024		708.7200		1473.0961

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

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Field Specific Conductance	umhos/cm	MW-2R	11/21/2024		1647.7000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-2R	06/02/2025		2383.0000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-3	10/12/2007		688.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-3	01/09/2008		682.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-3	04/08/2008		721.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-3	05/11/2015		353.9000		1473.0961
Field Specific Conductance	umhos/cm	MW-3	09/22/2015		664.1000		1473.0961
Field Specific Conductance	umhos/cm	MW-3	04/07/2016		618.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-3	11/30/2016		512.6000		1473.0961
Field Specific Conductance	umhos/cm	MW-3	05/22/2017		629.7000		1473.0961
Field Specific Conductance	umhos/cm	MW-3	11/21/2017		506.5000		1473.0961
Field Specific Conductance	umhos/cm	MW-3	06/18/2018		778.7000		1473.0961
Field Specific Conductance	umhos/cm	MW-3	10/28/2018		583.6000		1473.0961
Field Specific Conductance	umhos/cm	MW-3	06/07/2019		552.6000		1473.0961
Field Specific Conductance	umhos/cm	MW-3	11/18/2019		730.9800		1473.0961
Field Specific Conductance	umhos/cm	MW-3	06/18/2020		791.5000		1473.0961
Field Specific Conductance	umhos/cm	MW-3	11/23/2020		834.6500		1473.0961
Field Specific Conductance	umhos/cm	MW-3	06/03/2021		825.5800		1473.0961
Field Specific Conductance	umhos/cm	MW-3	09/29/2021		802.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-3	03/16/2022		812.1700		1473.0961
Field Specific Conductance	umhos/cm	MW-3	06/27/2022		847.5600		1473.0961
Field Specific Conductance	umhos/cm	MW-3	09/13/2022		908.9500		1473.0961
Field Specific Conductance	umhos/cm	MW-3	06/13/2023		922.7700		1473.0961

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*** - Manual exclusion.
ND = Not Detected, Result = detection limit.

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Field Specific Conductance	umhos/cm	MW-3	11/20/2023		772.8300		1473.0961
Field Specific Conductance	umhos/cm	MW-3	01/25/2024		739.9600		1473.0961
Field Specific Conductance	umhos/cm	MW-3	07/01/2024		756.2200		1473.0961
Field Specific Conductance	umhos/cm	MW-3	12/17/2024		1547.4000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-3	06/02/2025		2928.3000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-31A	11/05/2019		1475.1000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-31A	02/07/2020		1537.4000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-31A	06/18/2020		1689.7000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-31A	08/26/2020		1650.0000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-31A	11/18/2020		2207.9000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-31A	02/23/2021		1512.1000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-31A	06/08/2021		2191.5000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-31A	09/29/2021		2232.7000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-31A	03/15/2022		1842.6000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-31A	09/07/2022		3837.9000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-31A	06/20/2023		1952.9000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-31A	11/14/2023		1591.8000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-31A	07/01/2024		1760.6000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-31A	12/17/2024		2765.5000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-31A	06/02/2025		2594.1000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-31A	06/05/2025		4623.2000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-33A	11/18/2019		728.3000		1473.0961
Field Specific Conductance	umhos/cm	MW-33A	02/12/2020		736.3900		1473.0961

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

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Field Specific Conductance	umhos/cm	MW-33A	06/30/2020		662.3600		1473.0961
Field Specific Conductance	umhos/cm	MW-33A	08/25/2020		754.5600		1473.0961
Field Specific Conductance	umhos/cm	MW-33A	11/03/2020		886.7800		1473.0961
Field Specific Conductance	umhos/cm	MW-33A	06/03/2021		727.3400		1473.0961
Field Specific Conductance	umhos/cm	MW-33A	09/29/2021		730.0200		1473.0961
Field Specific Conductance	umhos/cm	MW-33A	03/16/2022		787.1300		1473.0961
Field Specific Conductance	umhos/cm	MW-33A	09/13/2022		736.4700		1473.0961
Field Specific Conductance	umhos/cm	MW-33A	06/13/2023		691.8400		1473.0961
Field Specific Conductance	umhos/cm	MW-33A	06/12/2024		890.3400		1473.0961
Field Specific Conductance	umhos/cm	MW-33A	08/29/2024		897.0400		1473.0961
Field Specific Conductance	umhos/cm	MW-33A	12/05/2024		2328.7000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-33A	06/02/2025		2479.3000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-34A	11/18/2019		548.6000		1473.0961
Field Specific Conductance	umhos/cm	MW-34A	02/17/2020		536.7100		1473.0961
Field Specific Conductance	umhos/cm	MW-34A	07/07/2020		533.4500		1473.0961
Field Specific Conductance	umhos/cm	MW-34A	08/25/2020		482.7800		1473.0961
Field Specific Conductance	umhos/cm	MW-34A	11/23/2020		507.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-34A	06/08/2021		524.5300		1473.0961
Field Specific Conductance	umhos/cm	MW-34A	09/29/2021		493.6500		1473.0961
Field Specific Conductance	umhos/cm	MW-34A	03/16/2022		508.5300		1473.0961
Field Specific Conductance	umhos/cm	MW-34A	09/08/2022		538.7100		1473.0961
Field Specific Conductance	umhos/cm	MW-34A	06/15/2023		497.7600		1473.0961
Field Specific Conductance	umhos/cm	MW-34A	11/20/2023		441.7700		1473.0961

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

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Field Specific Conductance	umhos/cm	MW-34A	07/03/2024		527.2900		1473.0961
Field Specific Conductance	umhos/cm	MW-34A	12/17/2024		909.9400		1473.0961
Field Specific Conductance	umhos/cm	MW-34A	06/04/2025		2891.3000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-38A	09/23/2021		698.2900		1473.0961
Field Specific Conductance	umhos/cm	MW-38A	12/14/2021		852.2700		1473.0961
Field Specific Conductance	umhos/cm	MW-38A	03/07/2022		747.5000		1473.0961
Field Specific Conductance	umhos/cm	MW-38A	06/23/2022		745.0200		1473.0961
Field Specific Conductance	umhos/cm	MW-38A	08/17/2022		780.3600		1473.0961
Field Specific Conductance	umhos/cm	MW-38A	12/06/2022		767.3800		1473.0961
Field Specific Conductance	umhos/cm	MW-38A	06/08/2023		757.8700		1473.0961
Field Specific Conductance	umhos/cm	MW-38A	11/06/2023		754.4400		1473.0961
Field Specific Conductance	umhos/cm	MW-38A	06/13/2024		760.9400		1473.0961
Field Specific Conductance	umhos/cm	MW-38A	12/09/2024		1714.9000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-38A	06/04/2025		3135.5000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-39A	09/23/2021		714.7400		1473.0961
Field Specific Conductance	umhos/cm	MW-39A	12/14/2021		864.6900		1473.0961
Field Specific Conductance	umhos/cm	MW-39A	03/07/2022		751.5800		1473.0961
Field Specific Conductance	umhos/cm	MW-39A	06/23/2022		757.3000		1473.0961
Field Specific Conductance	umhos/cm	MW-39A	08/17/2022		791.2100		1473.0961
Field Specific Conductance	umhos/cm	MW-39A	12/06/2022		772.3200		1473.0961
Field Specific Conductance	umhos/cm	MW-39A	06/08/2023		773.6700		1473.0961
Field Specific Conductance	umhos/cm	MW-39A	11/06/2023		758.9200		1473.0961
Field Specific Conductance	umhos/cm	MW-39A	06/13/2024		790.3700		1473.0961

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

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Field Specific Conductance	umhos/cm	MW-39A	08/29/2024		773.4100		1473.0961
Field Specific Conductance	umhos/cm	MW-39A	12/03/2024		1517.5000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-39A	06/04/2025		3071.4000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-4	10/13/2007		1470.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-4	01/09/2008		1440.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-4	04/08/2008		1590.0000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-4	05/06/2015		763.6000		1473.0961
Field Specific Conductance	umhos/cm	MW-4	09/18/2015		965.2000		1473.0961
Field Specific Conductance	umhos/cm	MW-4	03/31/2016		961.9000		1473.0961
Field Specific Conductance	umhos/cm	MW-4	11/28/2016		890.1000		1473.0961
Field Specific Conductance	umhos/cm	MW-4	05/11/2017		1011.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-4	11/16/2017		818.3000		1473.0961
Field Specific Conductance	umhos/cm	MW-4	06/04/2018		1206.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-4	10/29/2018		882.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-4	06/04/2019		1260.5000		1473.0961
Field Specific Conductance	umhos/cm	MW-4	10/30/2019		1225.7000		1473.0961
Field Specific Conductance	umhos/cm	MW-4	06/17/2020		1208.8000		1473.0961
Field Specific Conductance	umhos/cm	MW-4	11/17/2020		1196.1000		1473.0961
Field Specific Conductance	umhos/cm	MW-4	05/25/2021		1220.4000		1473.0961
Field Specific Conductance	umhos/cm	MW-4	09/28/2021		1190.2000		1473.0961
Field Specific Conductance	umhos/cm	MW-4	03/02/2022		1292.5000		1473.0961
Field Specific Conductance	umhos/cm	MW-4	09/07/2022		1334.6000		1473.0961
Field Specific Conductance	umhos/cm	MW-4	06/08/2023		1354.7000		1473.0961

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

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Field Specific Conductance	umhos/cm	MW-4	11/13/2023		1222.2000		1473.0961
Field Specific Conductance	umhos/cm	MW-4	06/11/2024		1201.3000		1473.0961
Field Specific Conductance	umhos/cm	MW-4	11/19/2024		1817.4000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-4	06/09/2025		2993.7000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-40A	09/23/2021		900.5000		1473.0961
Field Specific Conductance	umhos/cm	MW-40A	12/14/2021		1037.1000		1473.0961
Field Specific Conductance	umhos/cm	MW-40A	03/07/2022		1110.3000		1473.0961
Field Specific Conductance	umhos/cm	MW-40A	06/23/2022		1036.8000		1473.0961
Field Specific Conductance	umhos/cm	MW-40A	08/17/2022		1010.1000		1473.0961
Field Specific Conductance	umhos/cm	MW-40A	12/06/2022		1065.3000		1473.0961
Field Specific Conductance	umhos/cm	MW-40A	06/07/2023		1347.9000		1473.0961
Field Specific Conductance	umhos/cm	MW-40A	11/06/2023		1148.3000		1473.0961
Field Specific Conductance	umhos/cm	MW-40A	06/13/2024		1134.5000		1473.0961
Field Specific Conductance	umhos/cm	MW-40A	12/03/2024		1896.1000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-40A	06/04/2025		3371.9000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-41A	09/08/2022		681.9400		1473.0961
Field Specific Conductance	umhos/cm	MW-41A	12/07/2022		716.0500		1473.0961
Field Specific Conductance	umhos/cm	MW-41A	06/21/2023		767.4300		1473.0961
Field Specific Conductance	umhos/cm	MW-41A	08/29/2023		718.8000		1473.0961
Field Specific Conductance	umhos/cm	MW-41A	11/20/2023		605.3100		1473.0961
Field Specific Conductance	umhos/cm	MW-41A	01/23/2024		657.8700		1473.0961
Field Specific Conductance	umhos/cm	MW-41A	07/01/2024		714.7300		1473.0961
Field Specific Conductance	umhos/cm	MW-41A	12/17/2024		1232.7000		1473.0961

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

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Field Specific Conductance	umhos/cm	MW-41A	06/04/2025		3147.0000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-42A	08/31/2022		2048.5000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-42A	12/06/2022		1073.8000		1473.0961
Field Specific Conductance	umhos/cm	MW-42A	06/07/2023		940.2100		1473.0961
Field Specific Conductance	umhos/cm	MW-42A	08/28/2023		1173.9000		1473.0961
Field Specific Conductance	umhos/cm	MW-42A	11/02/2023		1001.3000		1473.0961
Field Specific Conductance	umhos/cm	MW-42A	06/18/2024		1221.8000		1473.0961
Field Specific Conductance	umhos/cm	MW-42A	12/05/2024		3061.3000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-42A	06/05/2025		3541.1000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-43A	09/01/2022		1227.3000		1473.0961
Field Specific Conductance	umhos/cm	MW-43A	12/06/2022		1248.4000		1473.0961
Field Specific Conductance	umhos/cm	MW-43A	06/07/2023		1300.8000		1473.0961
Field Specific Conductance	umhos/cm	MW-43A	08/28/2023		1499.6000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-43A	11/02/2023		1525.8000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-43A	06/11/2024		1050.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-43A	08/29/2024		1099.1000		1473.0961
Field Specific Conductance	umhos/cm	MW-43A	12/03/2024		2233.7000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-43A	06/05/2025		3701.8000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-44A	09/01/2022		1128.2000		1473.0961
Field Specific Conductance	umhos/cm	MW-44A	12/06/2022		1540.8000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-44A	06/07/2023		1224.3000		1473.0961
Field Specific Conductance	umhos/cm	MW-44A	08/28/2023		1562.2000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-44A	11/02/2023		1717.4000	*	1473.0961

* - 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
Field Specific Conductance	umhos/cm	MW-44A	06/26/2024		1021.9000		1473.0961
Field Specific Conductance	umhos/cm	MW-44A	12/03/2024		2050.2000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-44A	06/05/2025		4093.3000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-45A	11/09/2023		619.0700		1473.0961
Field Specific Conductance	umhos/cm	MW-45A	01/23/2024		608.9800		1473.0961
Field Specific Conductance	umhos/cm	MW-45A	07/01/2024		649.0800		1473.0961
Field Specific Conductance	umhos/cm	MW-45A	11/21/2024		1515.9000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-45A	06/06/2025		2205.0000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-46A	11/13/2023		1733.4000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-46A	01/23/2024		1760.1000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-46A	06/11/2024		1613.0000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-46A	12/09/2024		2875.5000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-46A	06/06/2025		2719.6000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-4B	10/13/2007		986.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-4B	01/09/2008		854.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-4B	04/08/2008		910.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-4B	05/06/2015		747.3000		1473.0961
Field Specific Conductance	umhos/cm	MW-4B	07/01/2015		767.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-4B	09/15/2015		553.4000		1473.0961
Field Specific Conductance	umhos/cm	MW-4B	12/09/2015		843.8000		1473.0961
Field Specific Conductance	umhos/cm	MW-4B	04/04/2016		925.4000		1473.0961
Field Specific Conductance	umhos/cm	MW-4B	11/29/2016		428.3000		1473.0961
Field Specific Conductance	umhos/cm	MW-4B	05/11/2017		507.9000		1473.0961

* - 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
Field Specific Conductance	umhos/cm	MW-4B	11/21/2017		354.3000		1473.0961
Field Specific Conductance	umhos/cm	MW-4B	06/15/2018		808.6000		1473.0961
Field Specific Conductance	umhos/cm	MW-4B	10/29/2018		475.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-4B	06/04/2019		576.0200		1473.0961
Field Specific Conductance	umhos/cm	MW-4B	10/30/2019		573.6300		1473.0961
Field Specific Conductance	umhos/cm	MW-4B	02/03/2020		556.2500		1473.0961
Field Specific Conductance	umhos/cm	MW-4B	06/17/2020		556.4600		1473.0961
Field Specific Conductance	umhos/cm	MW-4B	11/18/2020		519.3200		1473.0961
Field Specific Conductance	umhos/cm	MW-4B	05/25/2021		526.3500		1473.0961
Field Specific Conductance	umhos/cm	MW-4B	09/28/2021		508.4500		1473.0961
Field Specific Conductance	umhos/cm	MW-4B	03/02/2022		553.7500		1473.0961
Field Specific Conductance	umhos/cm	MW-4B	09/08/2022		597.8800		1473.0961
Field Specific Conductance	umhos/cm	MW-4B	06/15/2023		605.0300		1473.0961
Field Specific Conductance	umhos/cm	MW-4B	11/15/2023		689.2900		1473.0961
Field Specific Conductance	umhos/cm	MW-4B	01/25/2024		853.4400		1473.0961
Field Specific Conductance	umhos/cm	MW-4B	06/11/2024		583.8900		1473.0961
Field Specific Conductance	umhos/cm	MW-4B	08/27/2024		613.2100		1473.0961
Field Specific Conductance	umhos/cm	MW-4B	11/19/2024		1024.3000		1473.0961
Field Specific Conductance	umhos/cm	MW-4B	06/09/2025		2913.7000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-7A	10/13/2007		845.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-7A	01/09/2008		812.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-7A	04/08/2008		830.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-7A	05/04/2015		608.2000		1473.0961

* - 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
Field Specific Conductance	umhos/cm	MW-7A	09/14/2015		736.1000		1473.0961
Field Specific Conductance	umhos/cm	MW-7A	04/04/2016		596.3000		1473.0961
Field Specific Conductance	umhos/cm	MW-7A	11/16/2016		820.7000		1473.0961
Field Specific Conductance	umhos/cm	MW-7A	05/08/2017		584.2000		1473.0961
Field Specific Conductance	umhos/cm	MW-7A	11/01/2017		511.5000		1473.0961
Field Specific Conductance	umhos/cm	MW-7A	06/06/2018		725.4000		1473.0961
Field Specific Conductance	umhos/cm	MW-7A	10/30/2018		641.9000		1473.0961
Field Specific Conductance	umhos/cm	MW-7A	06/04/2019		805.7800		1473.0961
Field Specific Conductance	umhos/cm	MW-7A	11/04/2019		781.0800		1473.0961
Field Specific Conductance	umhos/cm	MW-7A	02/03/2020		903.0000		1473.0961
Field Specific Conductance	umhos/cm	MW-7A	06/17/2020		740.0900		1473.0961
Field Specific Conductance	umhos/cm	MW-7A	11/05/2020		723.9200		1473.0961
Field Specific Conductance	umhos/cm	MW-7A	02/23/2021		816.3400		1473.0961
Field Specific Conductance	umhos/cm	MW-7A	05/25/2021		806.1400		1473.0961
Field Specific Conductance	umhos/cm	MW-7A	09/23/2021		643.6600		1473.0961
Field Specific Conductance	umhos/cm	MW-7A	03/15/2022		748.4000		1473.0961
Field Specific Conductance	umhos/cm	MW-7A	08/31/2022		766.7600		1473.0961
Field Specific Conductance	umhos/cm	MW-7A	06/13/2023		1089.7000		1473.0961
Field Specific Conductance	umhos/cm	MW-7A	08/29/2023		1076.4000		1473.0961
Field Specific Conductance	umhos/cm	MW-7A	11/13/2023		1103.6000		1473.0961
Field Specific Conductance	umhos/cm	MW-7A	06/18/2024		765.1900		1473.0961
Field Specific Conductance	umhos/cm	MW-7A	11/19/2024		1625.4000	*	1473.0961
Field Specific Conductance	umhos/cm	MW-7A	06/06/2025		2375.1000	*	1473.0961

* - 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
Lead	ug/L	MW-33A	11/18/2019	ND	0.2700		1.0600
Lead	ug/L	MW-33A	02/12/2020	ND	0.2700		1.0600
Lead	ug/L	MW-33A	06/30/2020	ND	0.1100		1.0600
Lead	ug/L	MW-33A	08/25/2020	ND	0.1100		1.0600
Lead	ug/L	MW-33A	11/03/2020	ND	0.1100		1.0600
Lead	ug/L	MW-33A	06/03/2021	ND	0.2100		1.0600
Lead	ug/L	MW-33A	08/03/2021	ND	0.2100		1.0600
Lead	ug/L	MW-33A	09/29/2021	ND	0.2100		1.0600
Lead	ug/L	MW-33A	03/16/2022	ND	0.2400		1.0600
Lead	ug/L	MW-33A	09/13/2022	ND	0.2400		1.0600
Lead	ug/L	MW-33A	06/13/2023	ND	0.2400		1.0600
Lead	ug/L	MW-33A	06/12/2024		0.6920		1.0600
Lead	ug/L	MW-33A	12/05/2024	ND	0.2600		1.0600
Lead	ug/L	MW-33A	06/02/2025		3.2900	*	1.0600
Nickel	ug/L	MW-29A	11/20/2019		49.7000	*	20.9000
Nickel	ug/L	MW-29A	02/06/2020		49.2000	*	20.9000
Nickel	ug/L	MW-29A	06/30/2020		51.1000	*	20.9000
Nickel	ug/L	MW-29A	08/26/2020		57.0000	*	20.9000
Nickel	ug/L	MW-29A	11/20/2020		47.2000	*	20.9000
Nickel	ug/L	MW-29A	05/24/2021		55.5000	*	20.9000
Nickel	ug/L	MW-29A	09/28/2021		51.0000	*	20.9000
Nickel	ug/L	MW-29A	03/29/2022		63.6000	*	20.9000
Nickel	ug/L	MW-29A	09/12/2022		69.1000	*	20.9000

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

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Nickel	ug/L	MW-29A	06/12/2023		76.0000	*	20.9000
Nickel	ug/L	MW-29A	11/15/2023		87.0000	*	20.9000
Nickel	ug/L	MW-29A	06/26/2024		63.9000	*	20.9000
Nickel	ug/L	MW-29A	12/09/2024		69.6000	*	20.9000
Nickel	ug/L	MW-29A	06/06/2025		54.0000	*	20.9000
Nickel	ug/L	MW-31A	11/05/2019		20.4000		20.9000
Nickel	ug/L	MW-31A	02/07/2020		21.6000	*	20.9000
Nickel	ug/L	MW-31A	06/18/2020		27.5000	*	20.9000
Nickel	ug/L	MW-31A	08/26/2020		47.0000	*	20.9000
Nickel	ug/L	MW-31A	11/18/2020		52.8000	*	20.9000
Nickel	ug/L	MW-31A	05/19/2021		53.4000	*	20.9000
Nickel	ug/L	MW-31A	09/29/2021		47.7000	*	20.9000
Nickel	ug/L	MW-31A	03/15/2022		28.1000	*	20.9000
Nickel	ug/L	MW-31A	09/07/2022		112.0000	*	20.9000
Nickel	ug/L	MW-31A	06/20/2023		39.7000	*	20.9000
Nickel	ug/L	MW-31A	11/14/2023		30.8000	*	20.9000
Nickel	ug/L	MW-31A	07/01/2024		30.3000	*	20.9000
Nickel	ug/L	MW-31A	12/17/2024		32.3000	*	20.9000
Nickel	ug/L	MW-31A	06/05/2025		30.8000	*	20.9000
Nickel	ug/L	MW-42A	08/31/2022		37.2000	*	20.9000
Nickel	ug/L	MW-42A	12/06/2022		14.7000		20.9000
Nickel	ug/L	MW-42A	06/07/2023		8.6200		20.9000
Nickel	ug/L	MW-42A	08/28/2023		19.3000		20.9000

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

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Nickel	ug/L	MW-42A	11/02/2023		14.8000		20.9000
Nickel	ug/L	MW-42A	06/18/2024		16.6000		20.9000
Nickel	ug/L	MW-42A	12/05/2024		27.6000	*	20.9000
Nickel	ug/L	MW-42A	02/14/2025		23.5000	*	20.9000
Nickel	ug/L	MW-42A	06/05/2025		26.1000	*	20.9000
Nickel	ug/L	MW-43A	09/01/2022		24.4000	*	20.9000
Nickel	ug/L	MW-43A	12/06/2022		25.6000	*	20.9000
Nickel	ug/L	MW-43A	06/07/2023		31.0000	*	20.9000
Nickel	ug/L	MW-43A	08/28/2023		41.5000	*	20.9000
Nickel	ug/L	MW-43A	11/02/2023		36.4000	*	20.9000
Nickel	ug/L	MW-43A	06/11/2024		17.3000		20.9000
Nickel	ug/L	MW-43A	12/03/2024		25.9000	*	20.9000
Nickel	ug/L	MW-43A	06/05/2025		22.5000	*	20.9000
Nickel	ug/L	MW-44A	09/01/2022		21.7000	*	20.9000
Nickel	ug/L	MW-44A	12/06/2022		51.8000	*	20.9000
Nickel	ug/L	MW-44A	06/07/2023		28.7000	*	20.9000
Nickel	ug/L	MW-44A	08/28/2023		70.2000	*	20.9000
Nickel	ug/L	MW-44A	11/02/2023		66.6000	*	20.9000
Nickel	ug/L	MW-44A	06/26/2024		21.6000	*	20.9000
Nickel	ug/L	MW-44A	12/03/2024		34.2000	*	20.9000
Nickel	ug/L	MW-44A	06/05/2025		39.1000	*	20.9000
Nickel	ug/L	MW-46A	11/13/2023		33.8000	*	20.9000
Nickel	ug/L	MW-46A	01/23/2024		35.0000	*	20.9000

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

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Nickel	ug/L	MW-46A	06/11/2024		26.6000	*	20.9000
Nickel	ug/L	MW-46A	09/05/2024		26.6000	*	20.9000
Nickel	ug/L	MW-46A	12/09/2024		28.2000	*	20.9000
Nickel	ug/L	MW-46A	06/06/2025		24.0000	*	20.9000
Zinc	ug/L	MW-44A	09/01/2022	ND	10.0000		10.0000
Zinc	ug/L	MW-44A	12/06/2022		21.3000	*	10.0000
Zinc	ug/L	MW-44A	06/07/2023	ND	6.4000		10.0000
Zinc	ug/L	MW-44A	08/28/2023		27.3000	*	10.0000
Zinc	ug/L	MW-44A	11/02/2023		26.0000	*	10.0000
Zinc	ug/L	MW-44A	06/26/2024	ND	9.7000		10.0000
Zinc	ug/L	MW-44A	12/03/2024	ND	9.7000		10.0000
Zinc	ug/L	MW-44A	06/05/2025		26.5000	*	10.0000

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

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

Step	Equation	Description
1	PL = median(X) = **0.69**	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **4.57**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

Worksheet 1 - Upgradient vs. Downgradient Comparisons
Barium (ug/L)
Lognormal Prediction Limit

Step	Equation	Description
1	$Y = \log_e(X)$	Transform to natural logarithmic scale.
2	$\overline{Y}$ = **sum[Y]** / **N** = **132.654** / **27** = **4.913**	Compute mean on a natural log scale.
3	$S_Y = ((\mathbf{sum[Y^2]} - \mathbf{sum[Y]}^2/\mathbf{N}) / (\mathbf{N}-1))^{1/2}$ $= ((\mathbf{654.429} - \mathbf{17596.983}/\mathbf{27}) / (\mathbf{27}-1))^{1/2}$ = **0.322**	Compute sd on a natural log scale.
4	alpha = min[$(1-.95^{1/\mathbf{K}})^{1/3}$, .01] = min[$(1-.95^{1/\mathbf{378}})^{1/3}$, .01] = **0.01**	Adjusted per comparison false positive rate. Pass initial or 1 of 2 resamples.
5	PL = exp[$\overline{\mathbf{Y}}$ + $\mathbf{tS_Y}(1+1/\mathbf{N})^{1/2}$] = exp[**4.913** + (**2.478*****0.322**)(1+1/**27**)$^{1/2}$] = **306.316**	One-sided lognormal prediction limit (t is Student's t on N-1 degrees of freedom and 1-alpha confidence level).

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

Step	Equation	Description
1	PL = median(X) = **0.27**	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **0.209**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **1.1**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **0.681**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **5.27**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

Worksheet 1 - Upgradient vs. Downgradient Comparisons
Field pH (SU)
Normal Prediction Limit

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **182.31** / **26** = **7.012**	Compute upgradient mean.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1282.816** - **33236.936**/**26**) / (**26**-1))^{½} = **0.423**	Compute upgradient sd.
3	alpha = min[(1-.95$^{1/\mathbf{K}}$)$^{1/3}$, .01] = min[(1-.95$^{1/\mathbf{378}}$)$^{1/3}$, .01] = **0.01**	Adjusted per comparison false positive rate. Pass initial or 1 of 2 resamples.
4	PL = $\overline{\mathbf{X}}$ + **tS**(1+1/**N**)^{½} = **7.012** + (**2.485*****0.423**)(1+1/**26**)^{½} = **8.083**	One-sided normal prediction limit (t is Student's t on N-1 degrees of freedom and 1-alpha confidence level).

Worksheet 1 - Upgradient vs. Downgradient Comparisons
Field Specific Conductance (umhos/cm)
Lognormal Prediction Limit

Step	Equation	Description
1	$Y = \log_e(X)$	Transform to natural logarithmic scale.
2	$\overline{Y}$ = **sum[Y]** / **N** = **169.714** / **26** = **6.527**	Compute mean on a natural log scale.
3	$S_Y = ((\mathbf{sum[Y^2]} - \mathbf{sum[Y]}^2/\mathbf{N}) / (\mathbf{N}-1))^{1/2}$ $= ((\mathbf{1110.1} - \mathbf{28802.857}/\mathbf{26}) / (\mathbf{26}-1))^{1/2}$ = **0.303**	Compute sd on a natural log scale.
4	alpha = min[$(1-.95^{1/\mathbf{K}})^{1/3}$, .01] = min[$(1-.95^{1/\mathbf{378}})^{1/3}$, .01] = **0.01**	Adjusted per comparison false positive rate. Pass initial or 1 of 2 resamples.
5	PL = exp[$\overline{\mathbf{Y}}$ + $\mathbf{tS_Y}(1+1/\mathbf{N})^{1/2}$] = exp[**6.527** + (**2.485*****0.303**)(1+1/**26**)$^{1/2}$] = **1473.096**	One-sided lognormal prediction limit (t is Student's t on N-1 degrees of freedom and 1-alpha confidence level).

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

Step	Equation	Description
1	PL = max(X) = **1.06**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **20.9**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **1.41**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **0.37**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **0.26**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

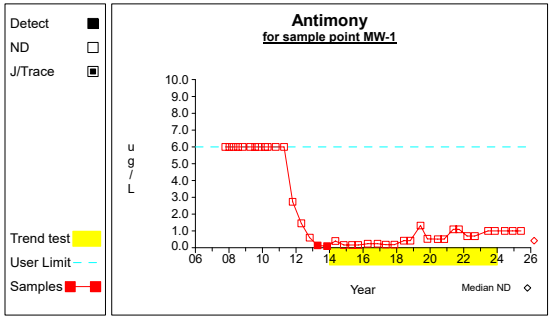
Worksheet 1 - Upgradient vs. Downgradient Comparisons
Vanadium (ug/L)
Nonparametric Prediction Limit

Step	Equation	Description
1	PL = max(X) = **1.1**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

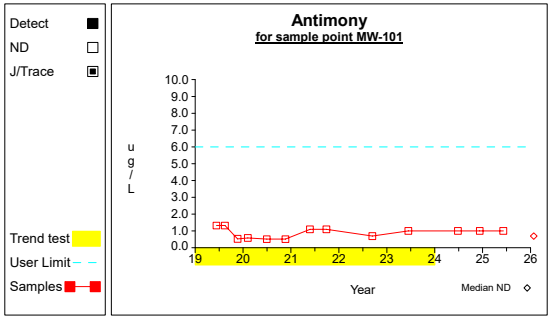
Worksheet 1 - Upgradient vs. Downgradient Comparisons
Zinc (ug/L)
Nonparametric Prediction Limit

Step	Equation	Description
1	PL = median(X) = **10.0**	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

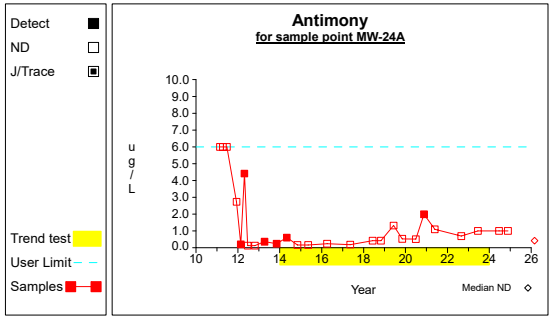
Time Series



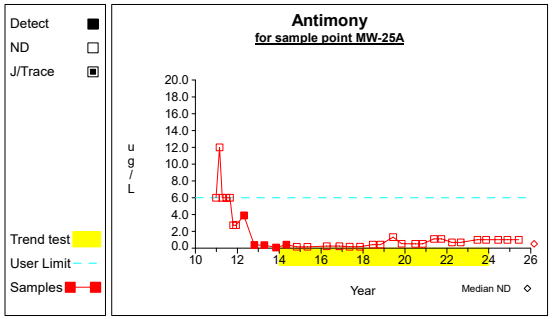
Graph 1



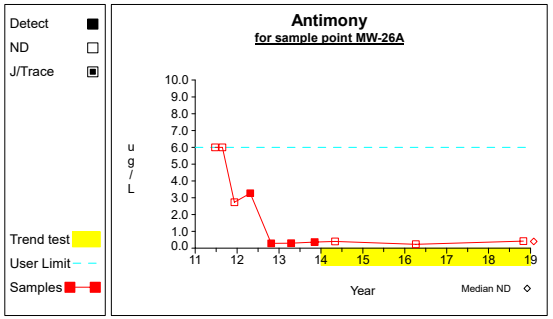
Graph 2



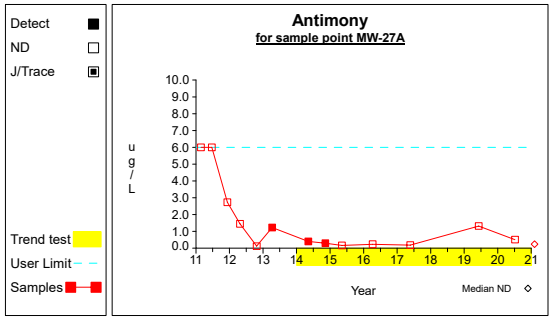
Graph 3



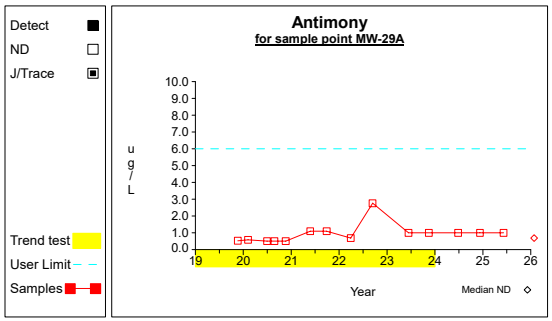
Graph 4



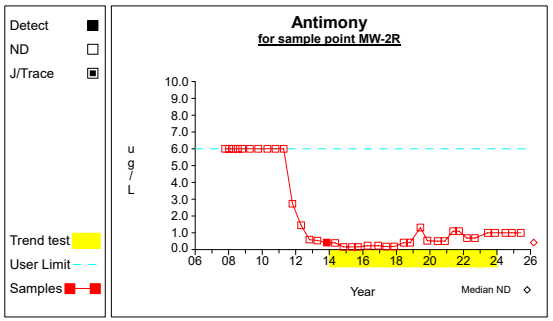
Graph 5



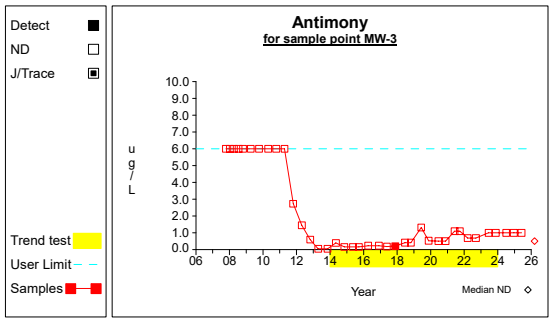
Graph 6



Graph 7

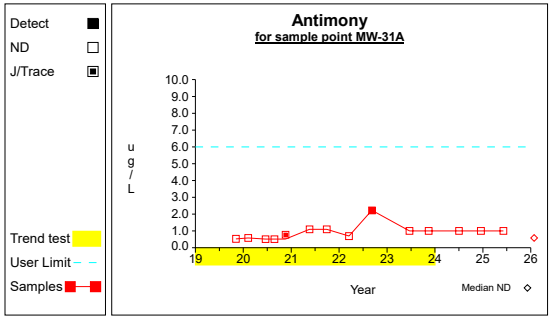


Graph 8

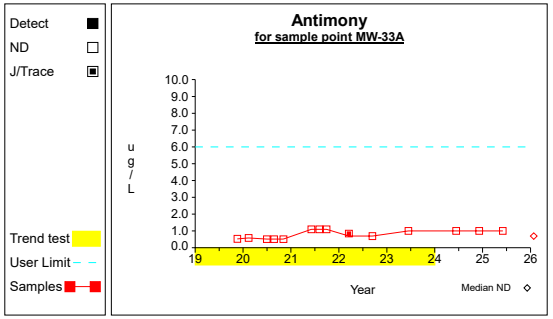


Graph 9

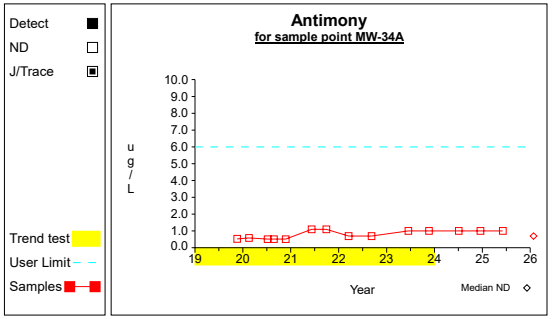
Time Series



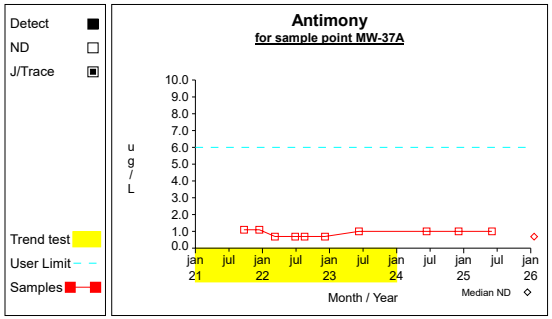
Graph 10



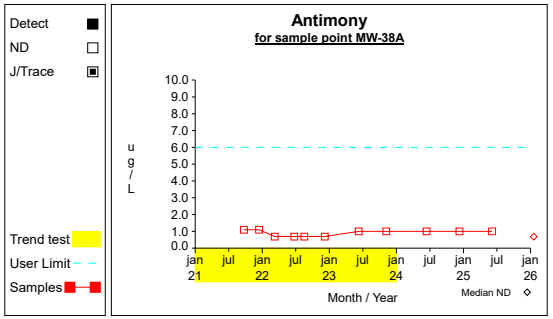
Graph 11



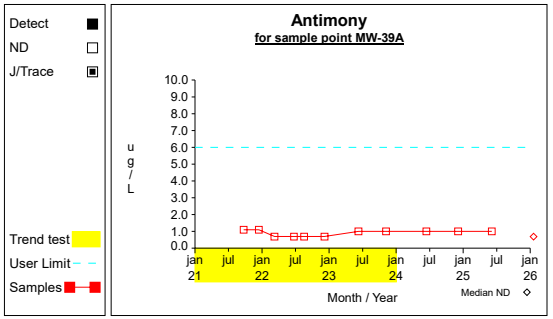
Graph 12



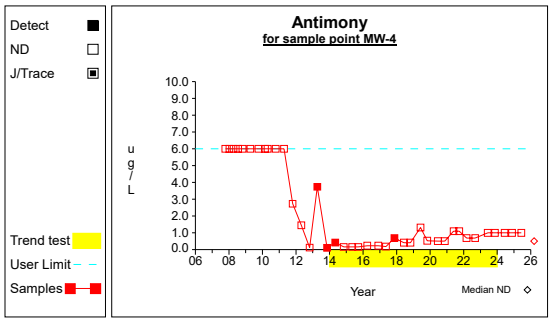
Graph 13



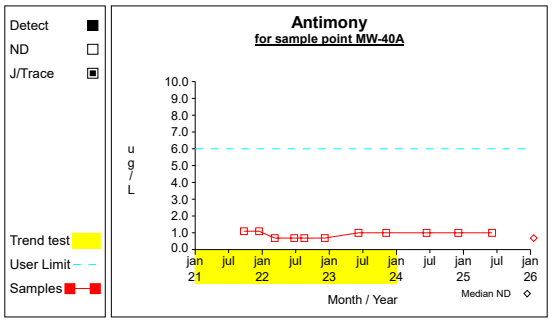
Graph 14



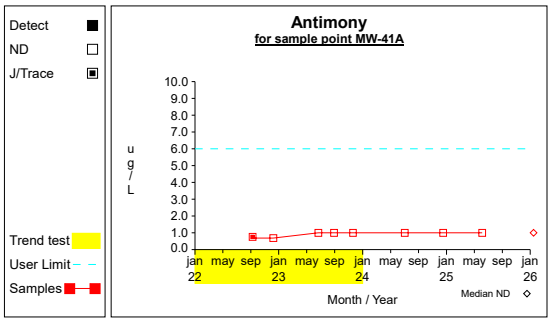
Graph 15



Graph 16

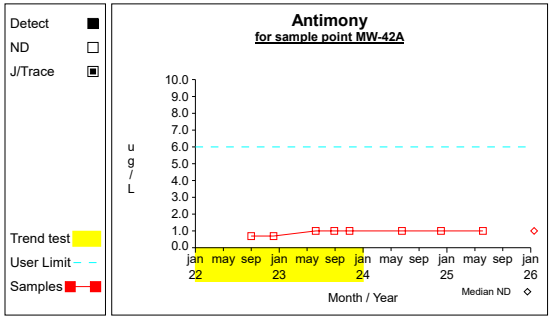


Graph 17

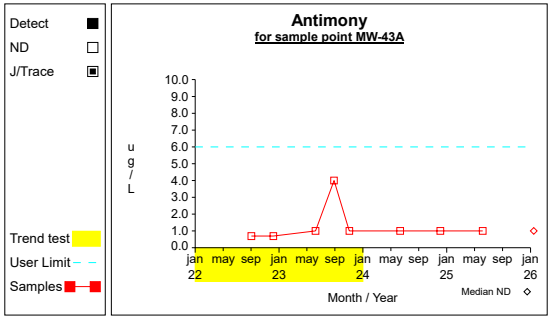


Graph 18

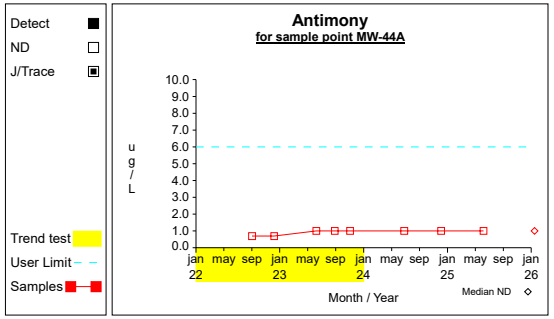
Time Series



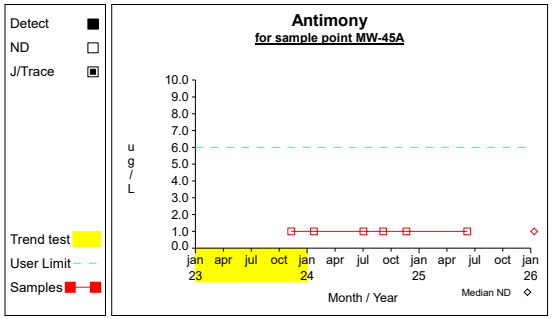
Graph 19



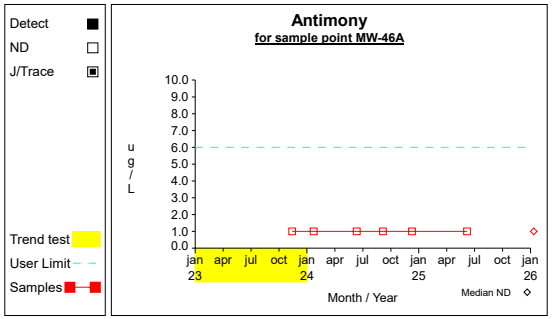
Graph 20



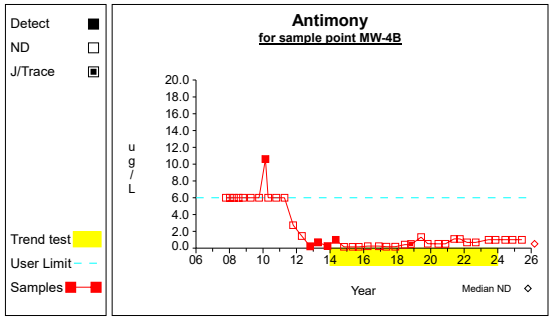
Graph 21



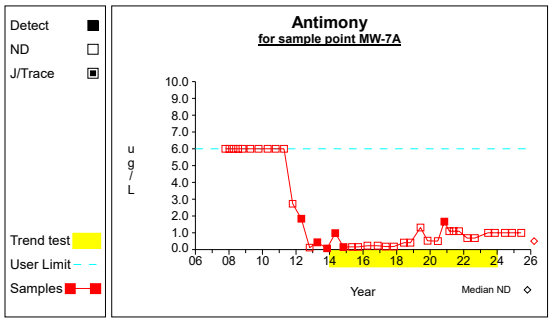
Graph 22



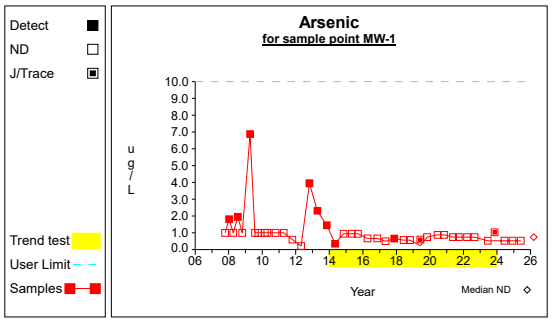
Graph 23



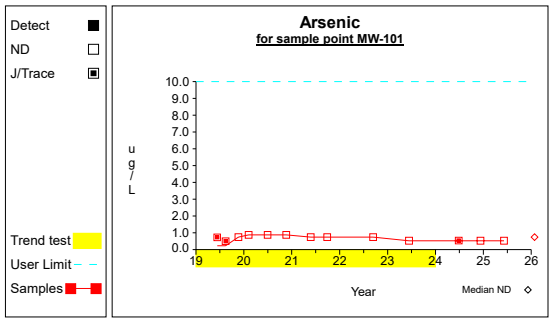
Graph 24



Graph 25

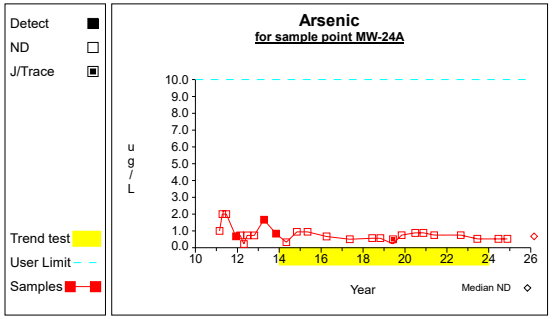


Graph 26

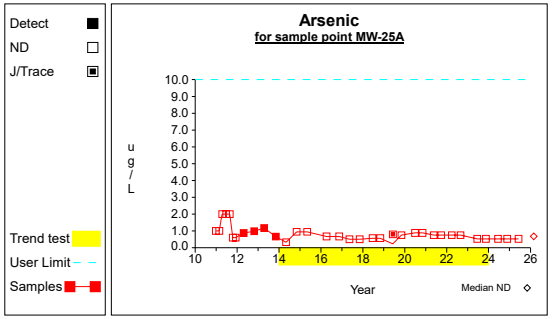


Graph 27

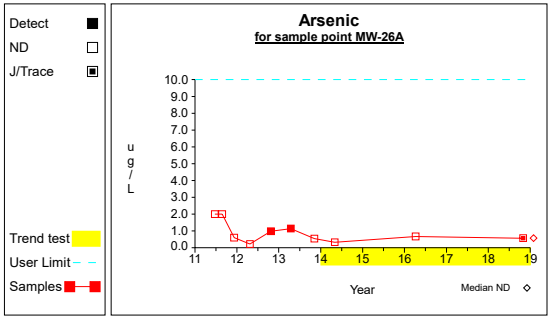
Time Series



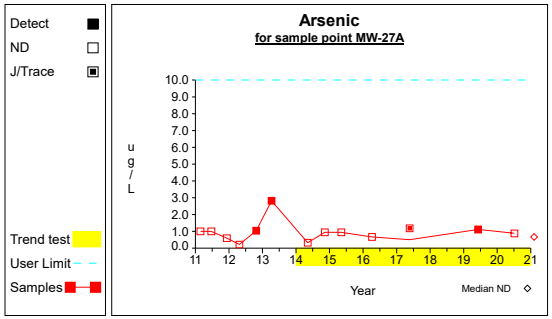
Graph 28



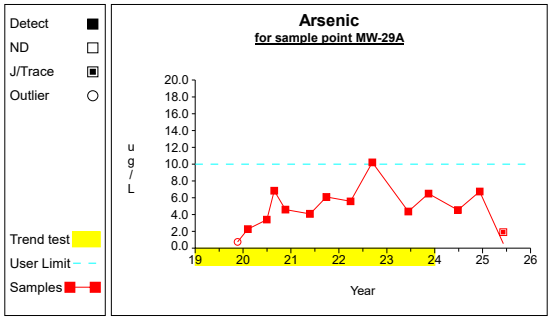
Graph 29



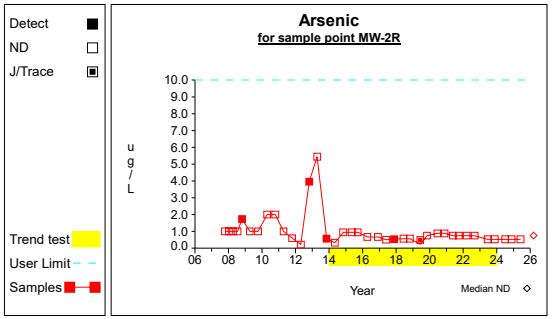
Graph 30



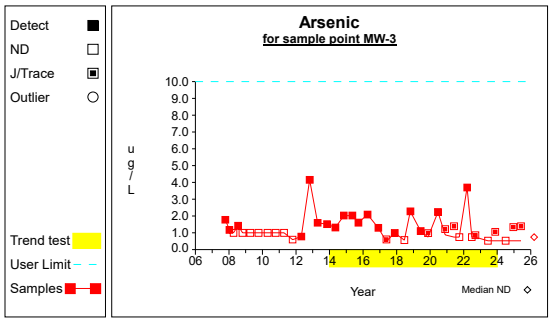
Graph 31



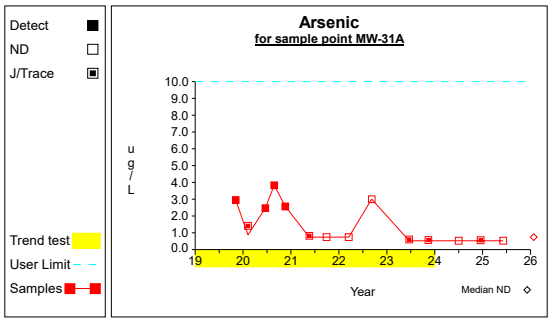
Graph 32



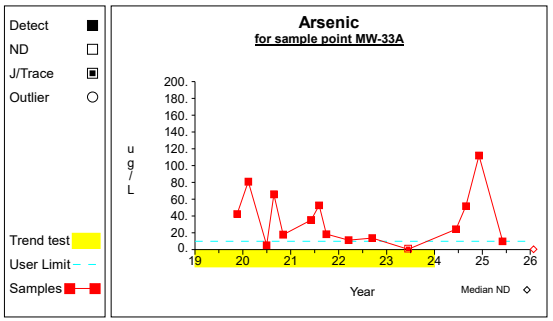
Graph 33



Graph 34

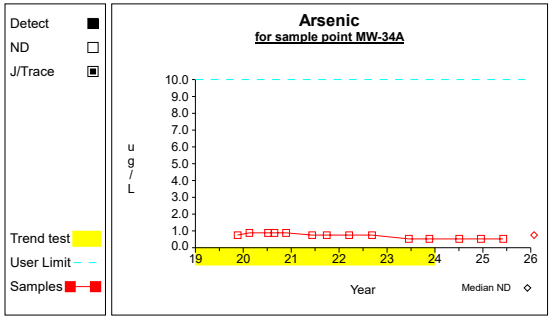


Graph 35

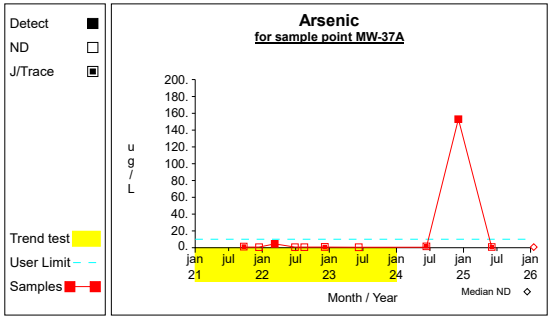


Graph 36

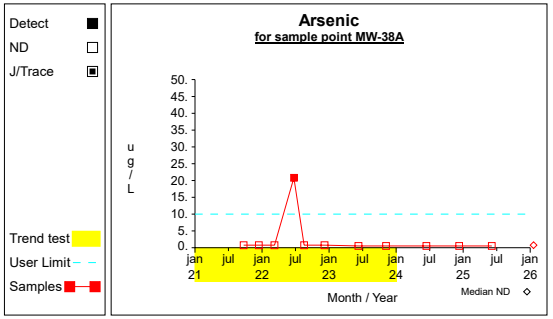
Time Series



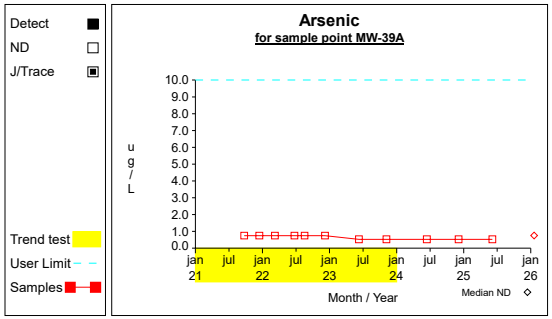
Graph 37



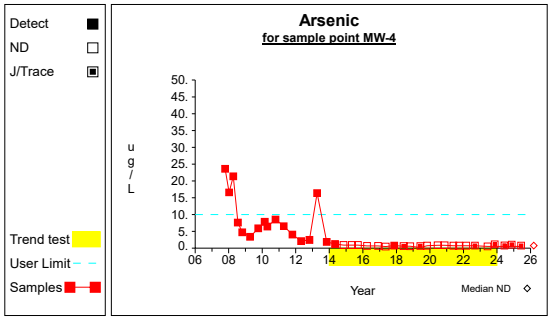
Graph 38



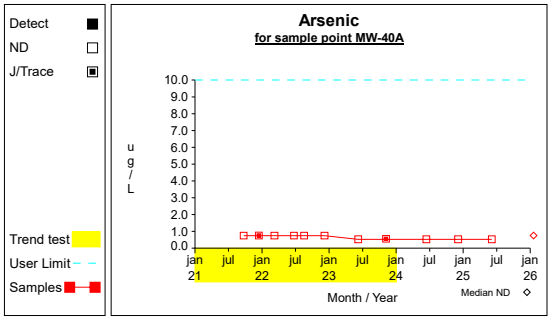
Graph 39



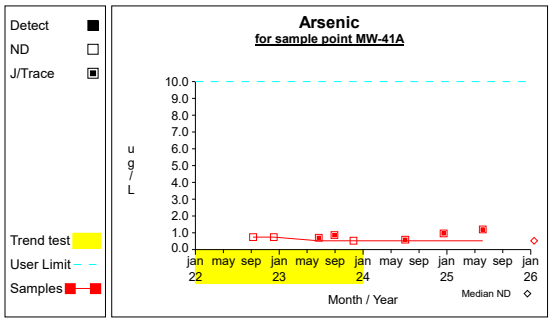
Graph 40



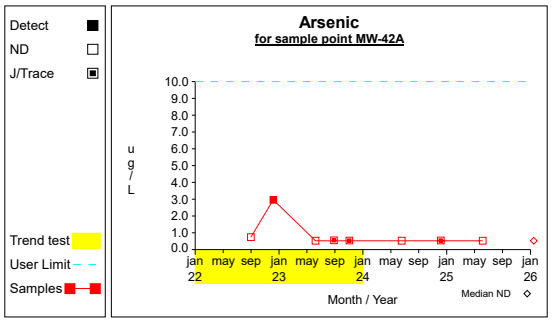
Graph 41



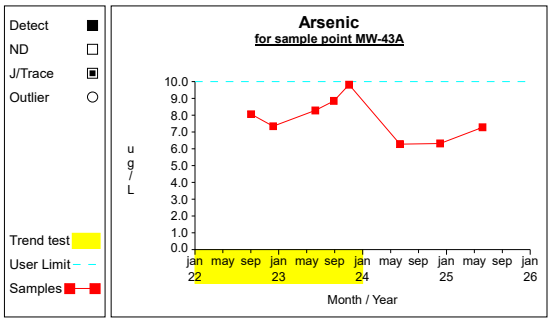
Graph 42



Graph 43

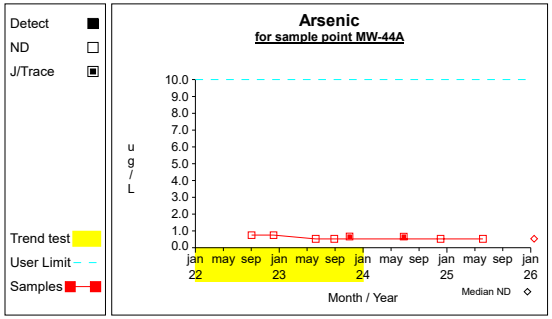


Graph 44

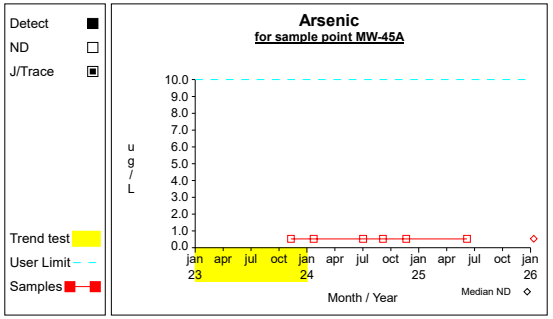


Graph 45

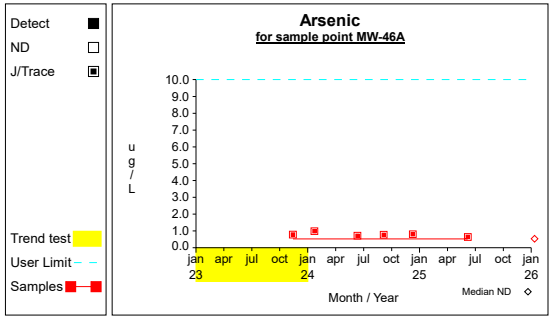
Time Series



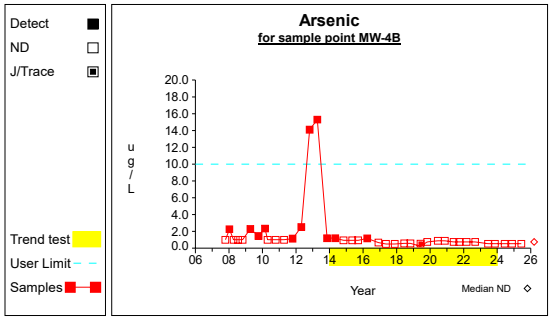
Graph 46



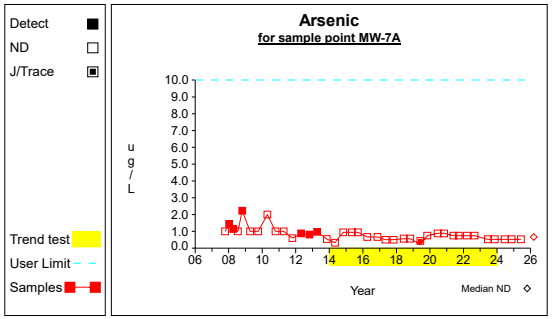
Graph 47



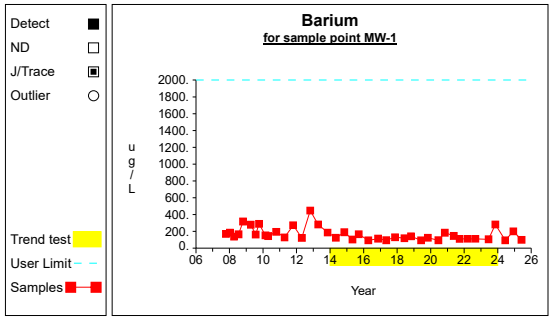
Graph 48



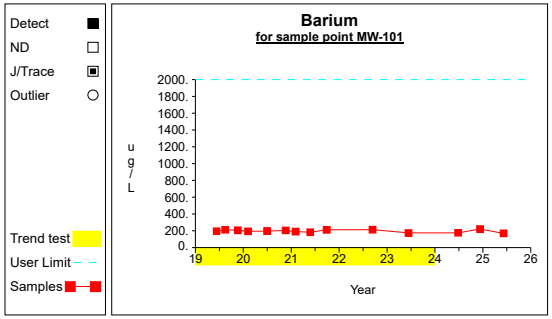
Graph 49



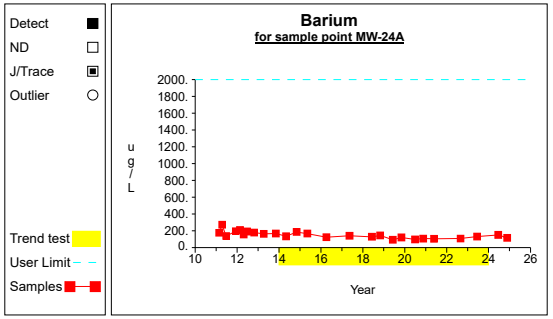
Graph 50



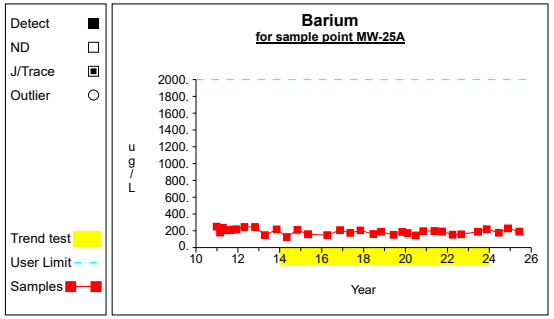
Graph 51



Graph 52

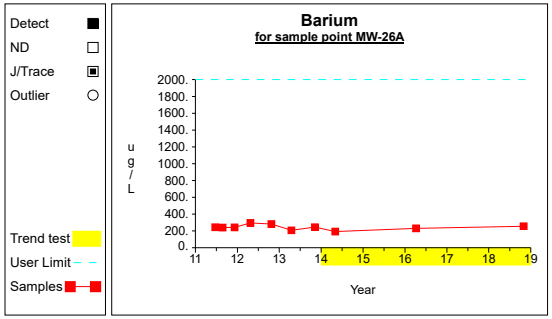


Graph 53

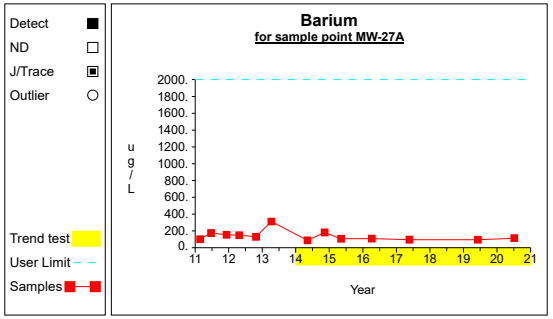


Graph 54

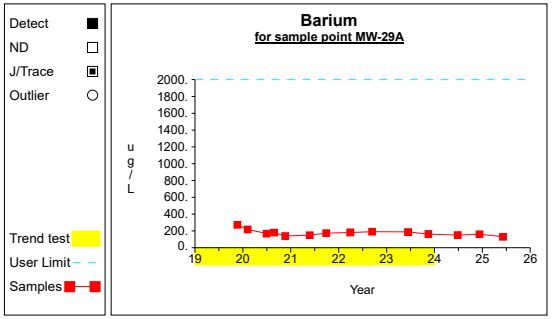
Time Series



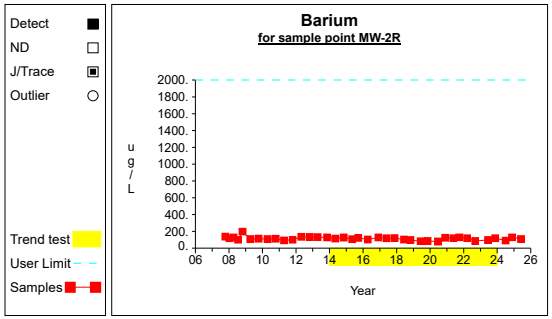
Graph 55



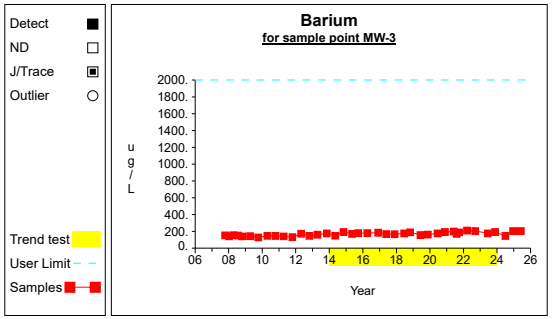
Graph 56



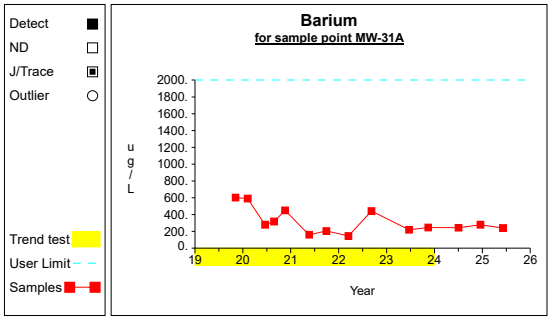
Graph 57



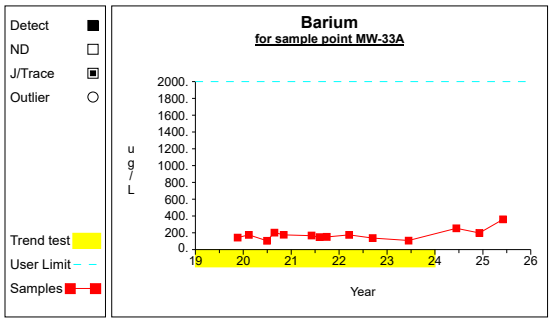
Graph 58



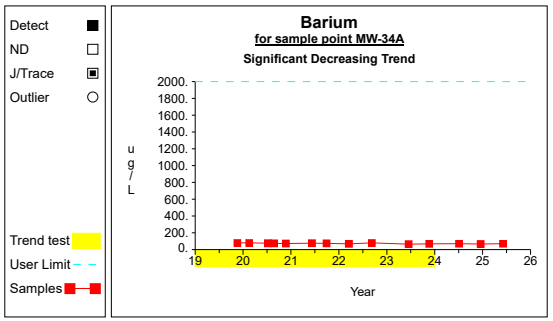
Graph 59



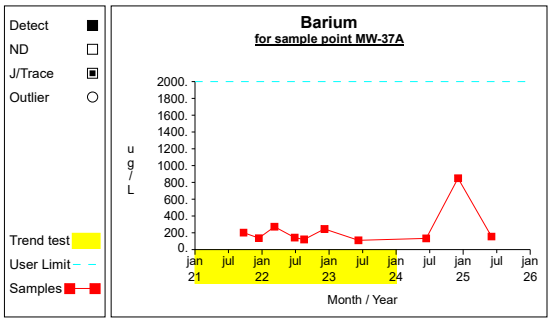
Graph 60



Graph 61

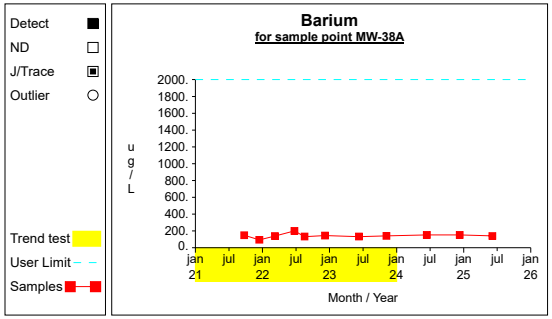


Graph 62

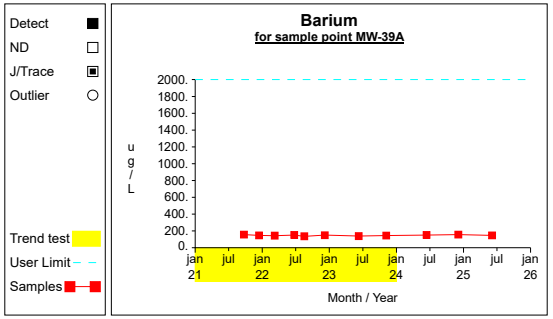


Graph 63

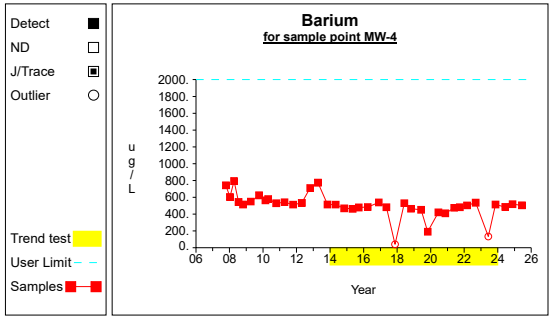
Time Series



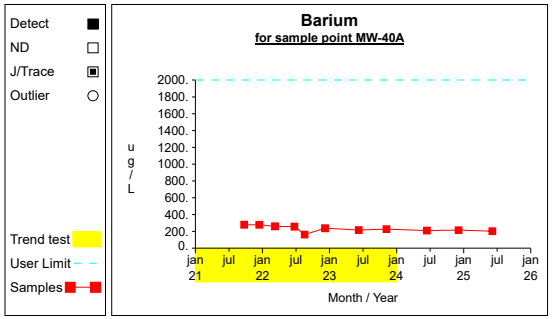
Graph 64



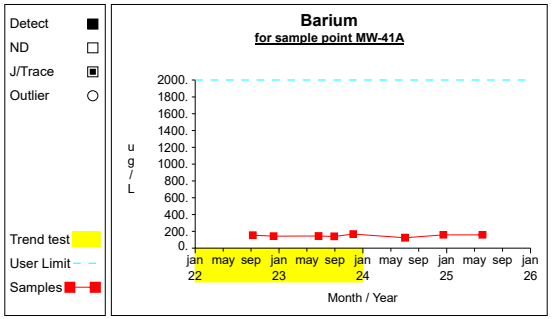
Graph 65



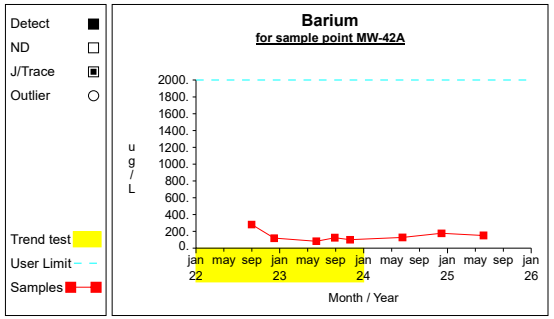
Graph 66



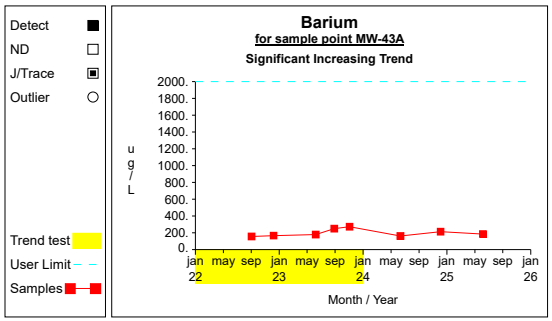
Graph 67



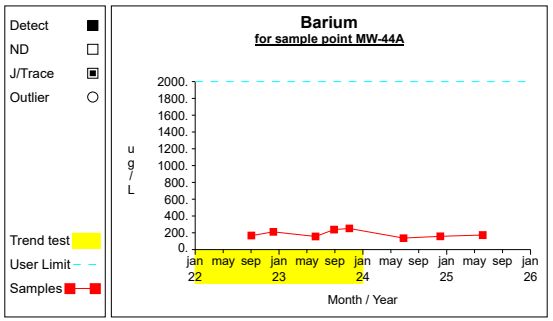
Graph 68



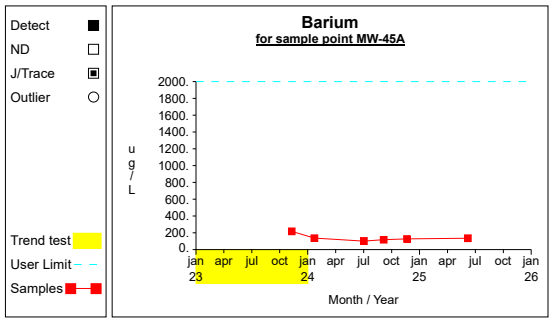
Graph 69



Graph 70

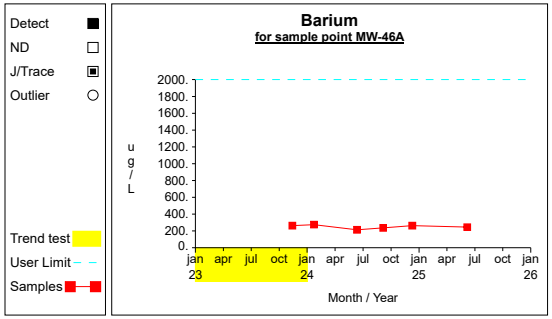


Graph 71

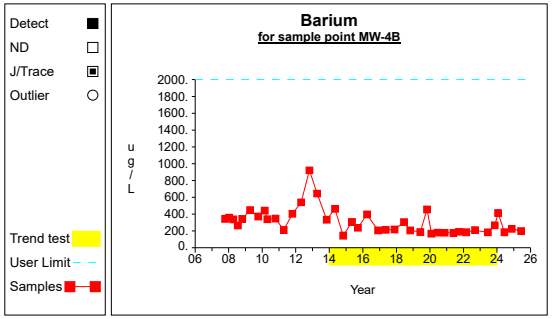


Graph 72

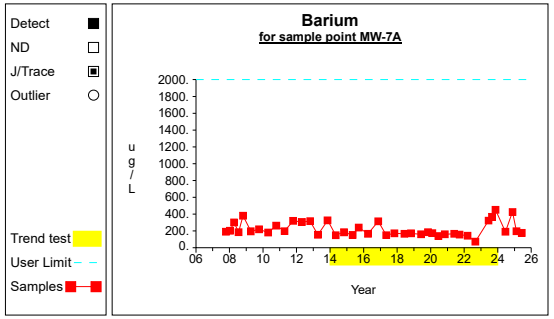
Time Series



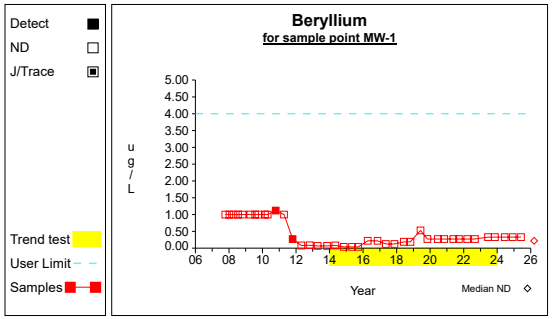
Graph 73



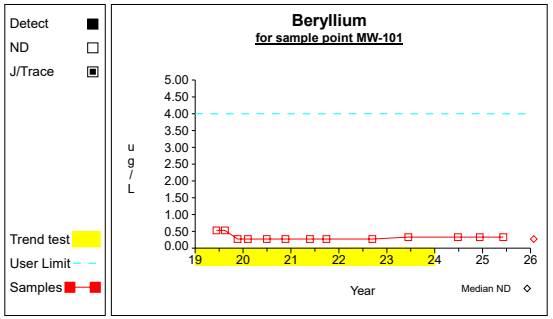
Graph 74



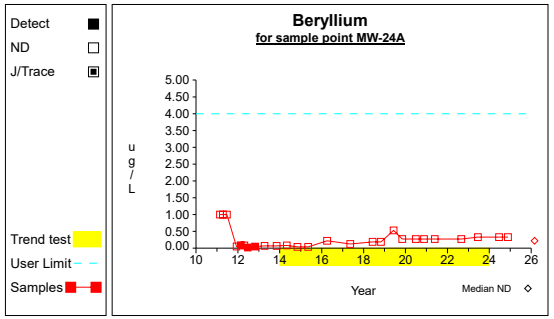
Graph 75



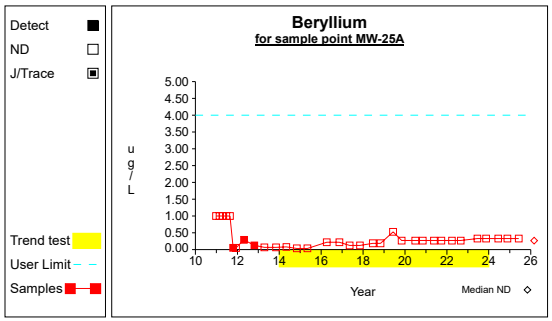
Graph 76



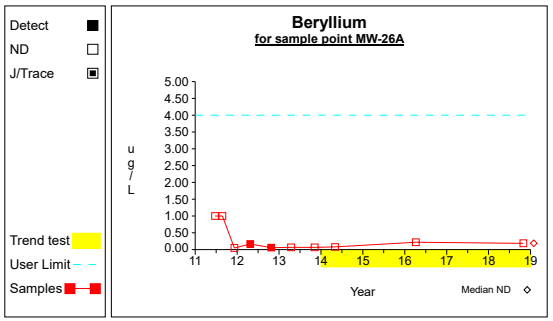
Graph 77



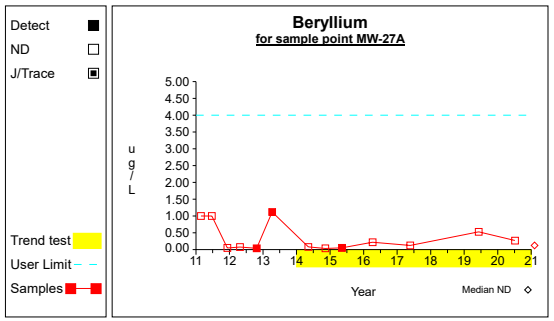
Graph 78



Graph 79

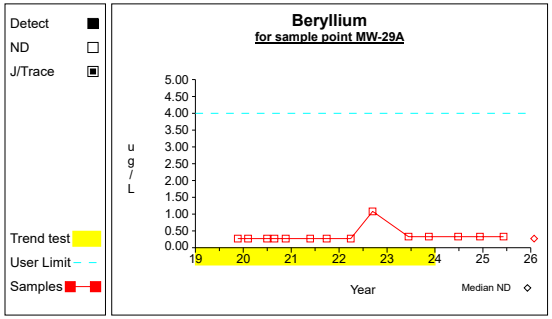


Graph 80

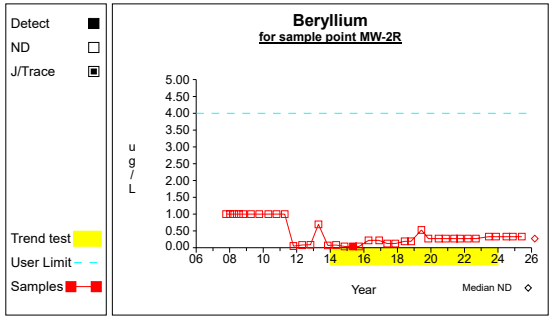


Graph 81

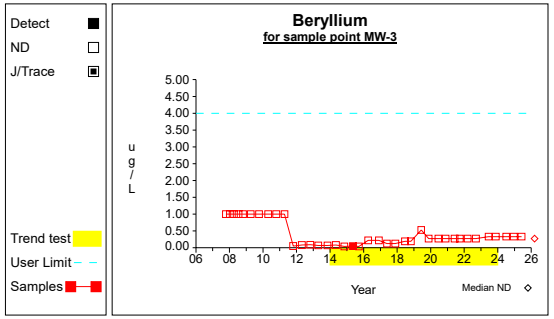
Time Series



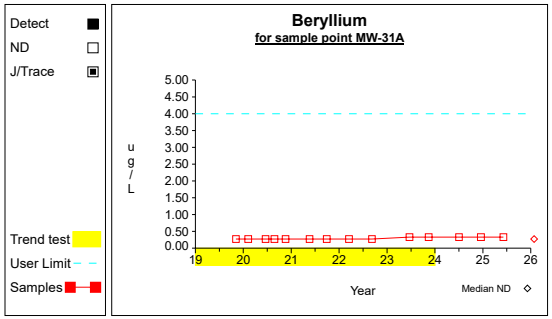
Graph 82



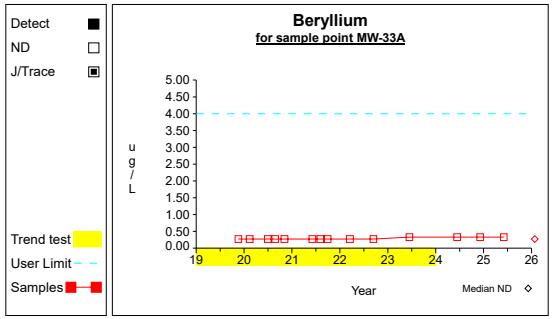
Graph 83



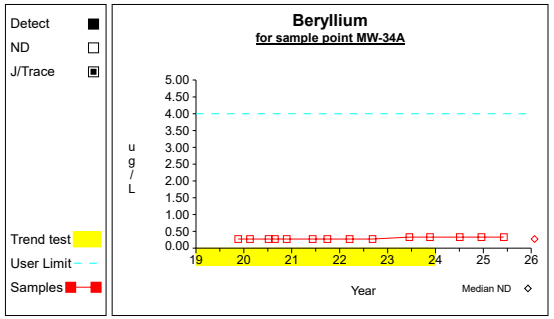
Graph 84



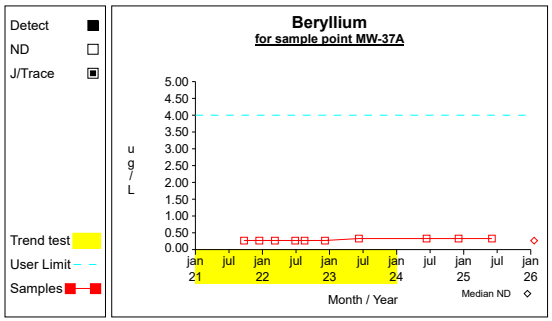
Graph 85



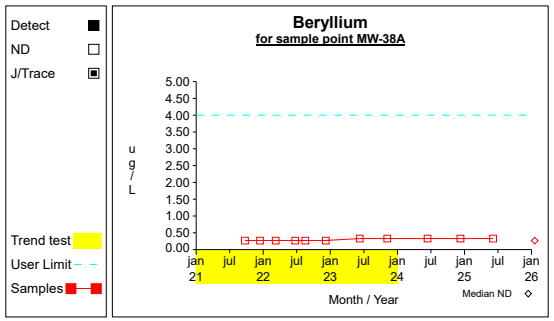
Graph 86



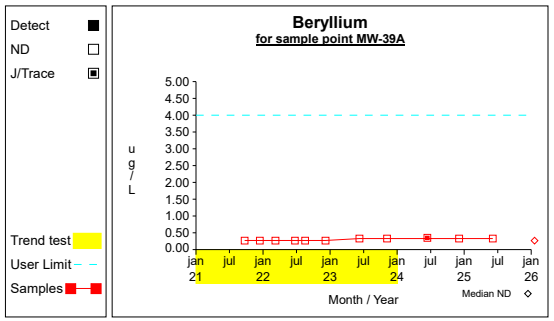
Graph 87



Graph 88

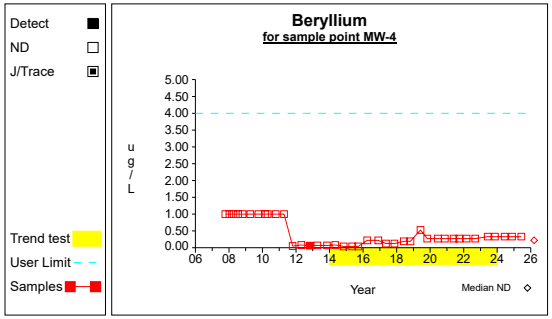


Graph 89

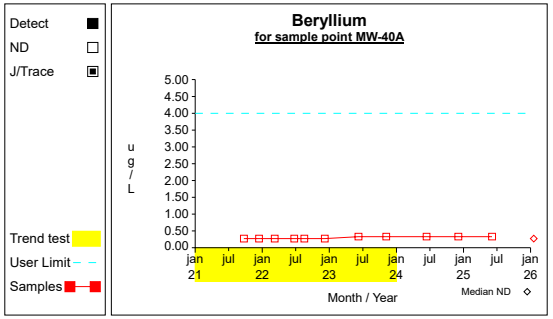


Graph 90

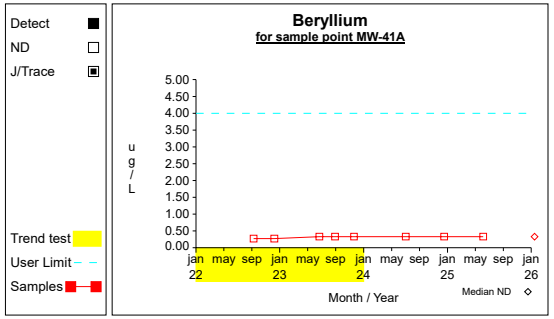
Time Series



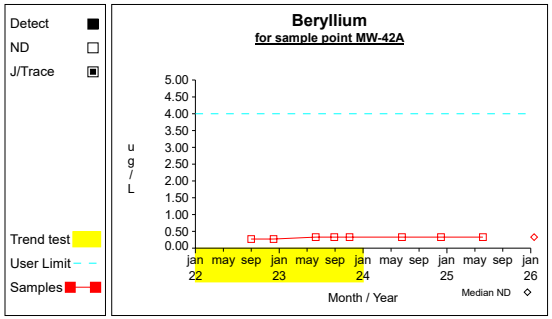
Graph 91



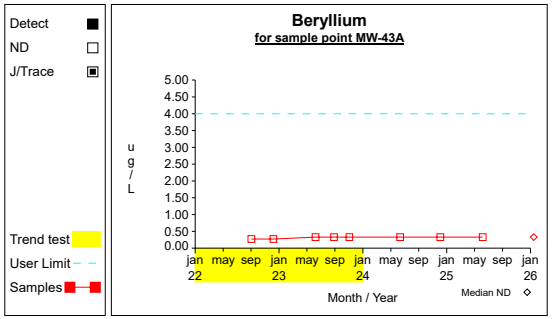
Graph 92



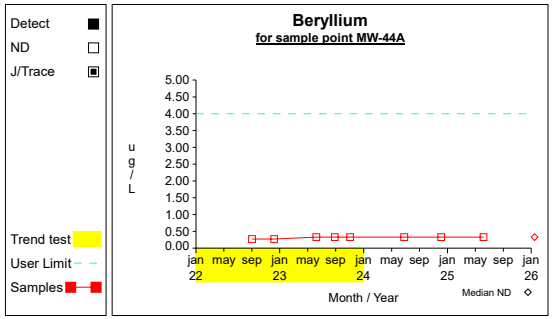
Graph 93



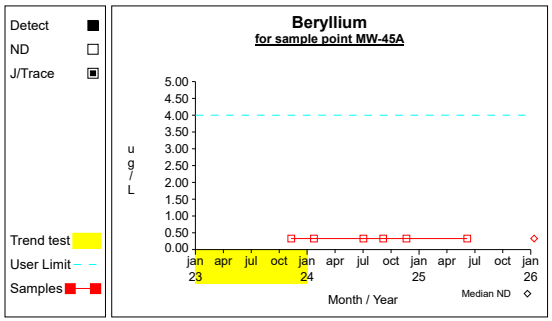
Graph 94



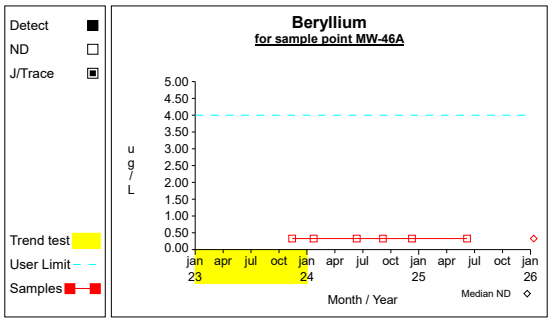
Graph 95



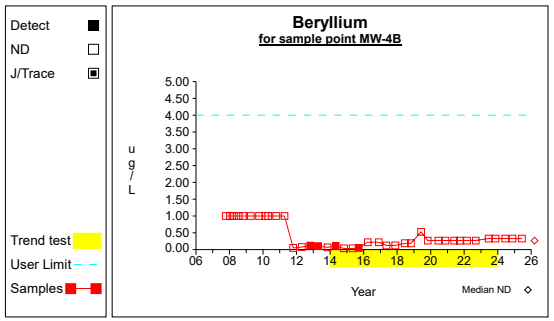
Graph 96



Graph 97

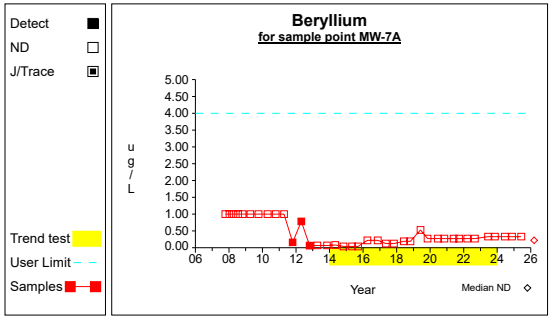


Graph 98

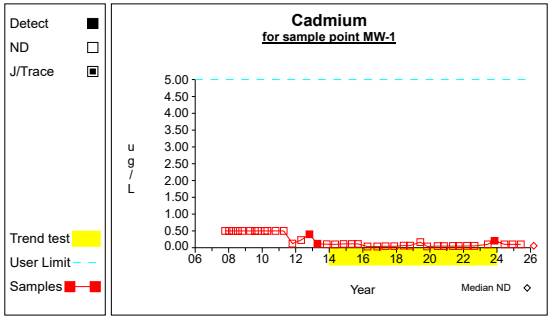


Graph 99

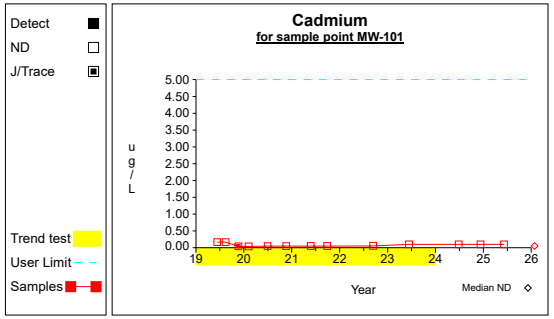
Time Series



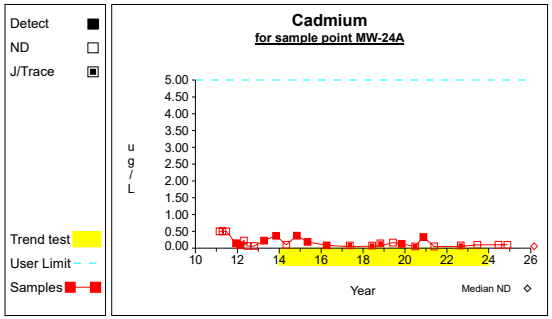
Graph 100



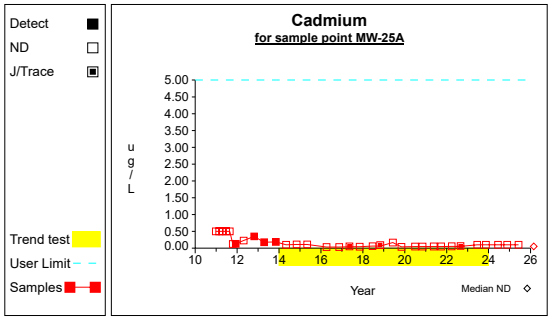
Graph 101



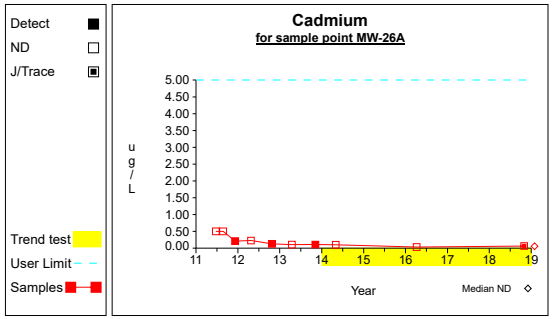
Graph 102



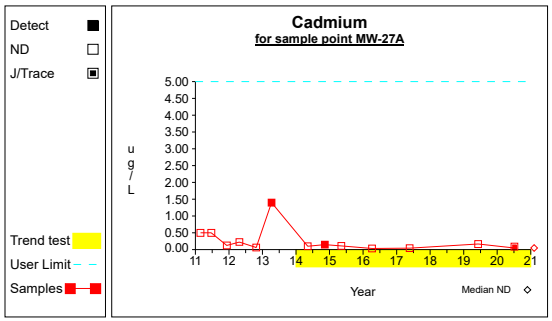
Graph 103



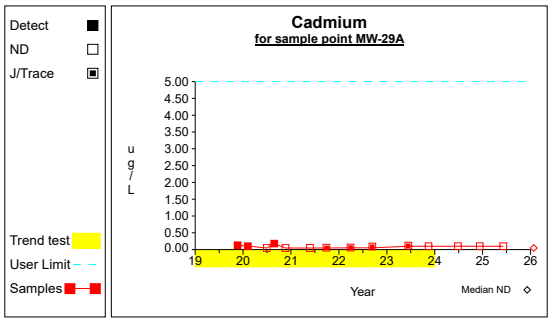
Graph 104



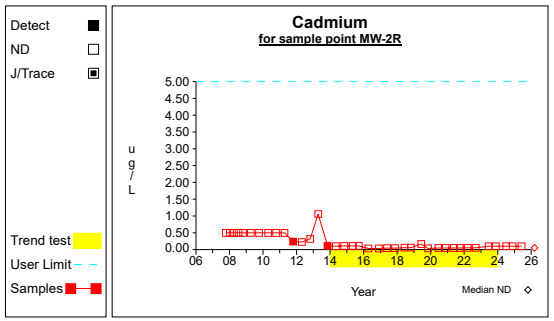
Graph 105



Graph 106

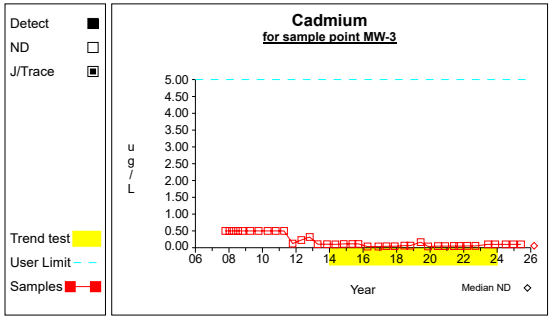


Graph 107

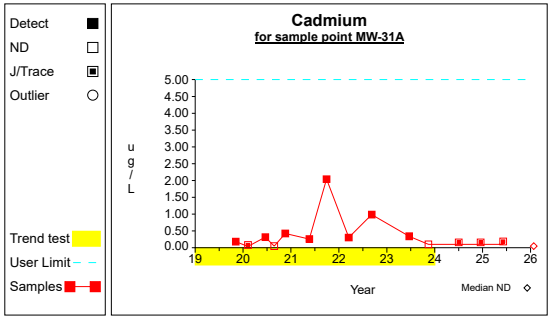


Graph 108

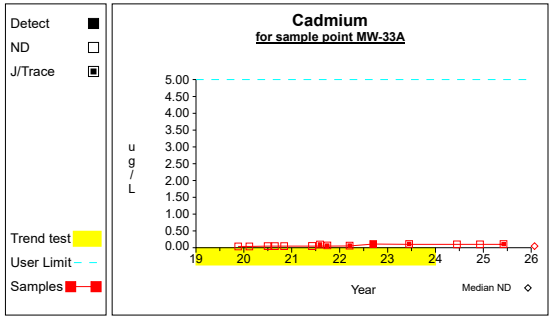
Time Series



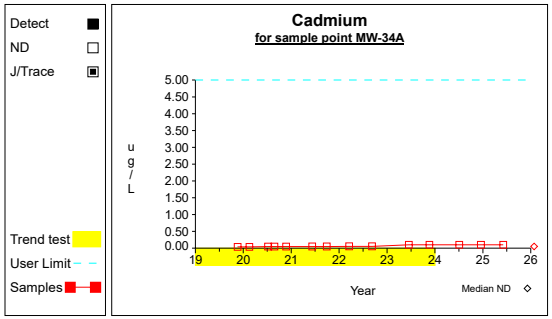
Graph 109



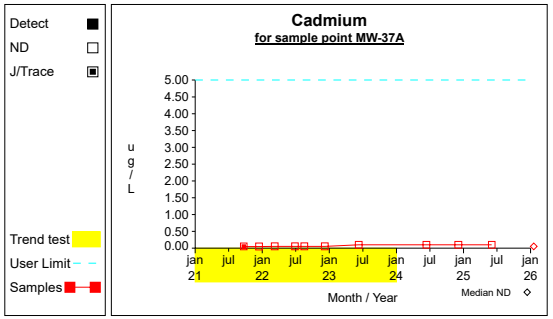
Graph 110



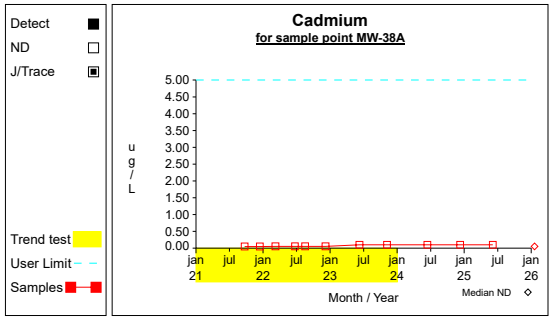
Graph 111



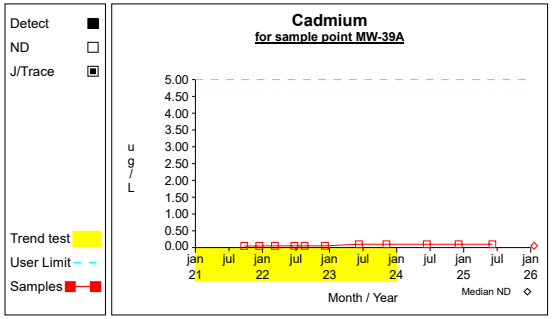
Graph 112



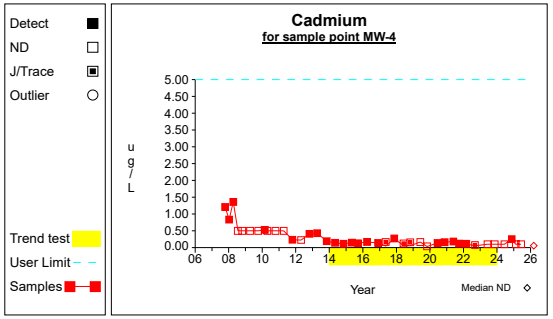
Graph 113



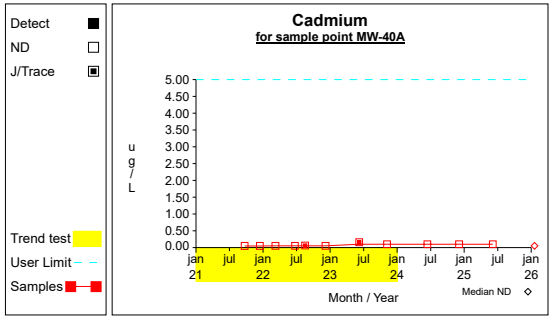
Graph 114



Graph 115

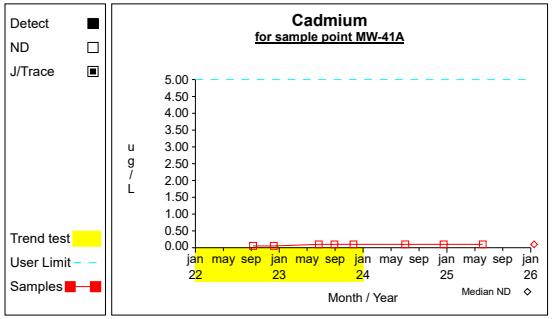


Graph 116

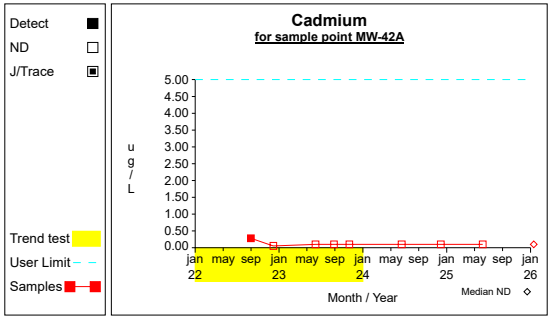


Graph 117

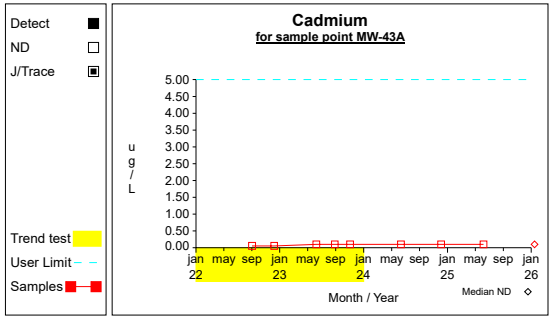
Time Series



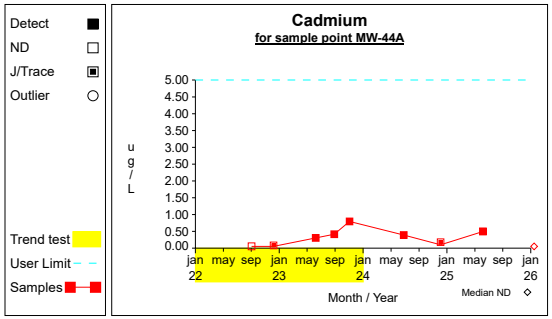
Graph 118



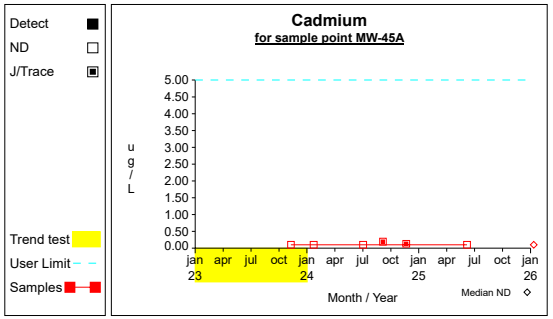
Graph 119



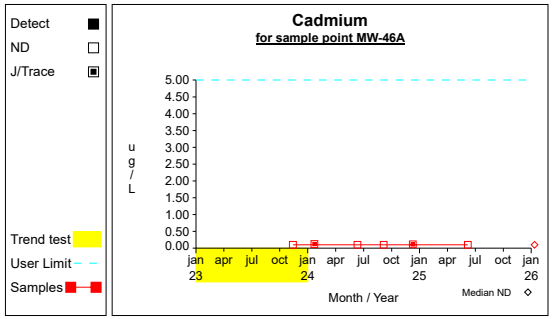
Graph 120



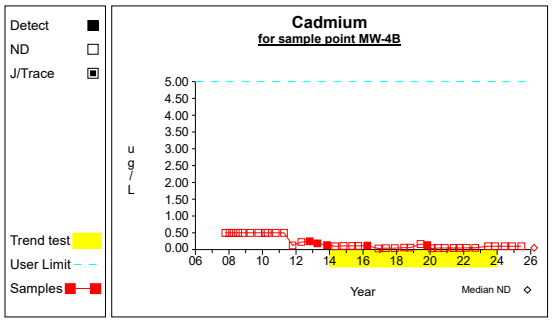
Graph 121



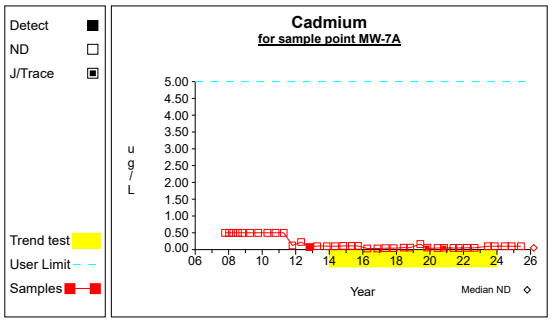
Graph 122



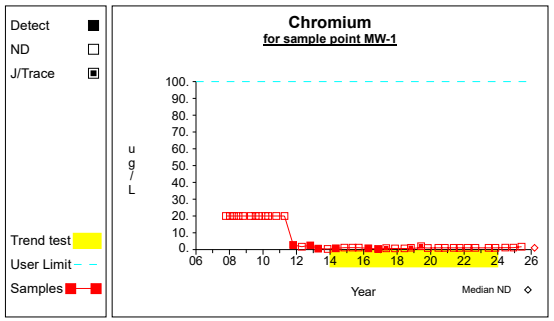
Graph 123



Graph 124

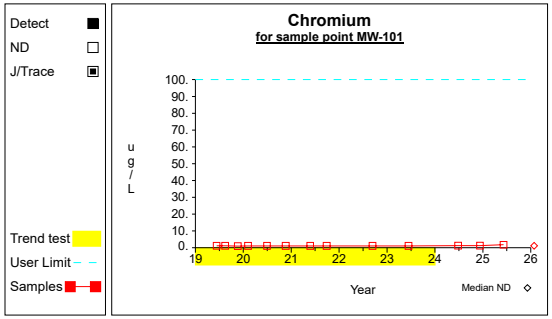


Graph 125

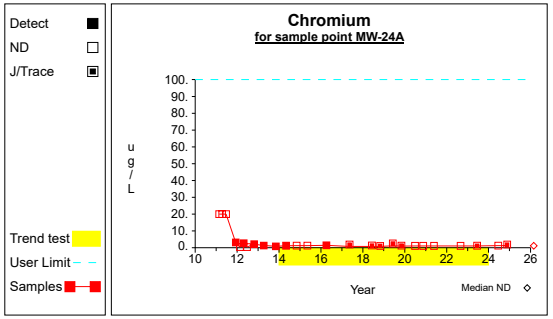


Graph 126

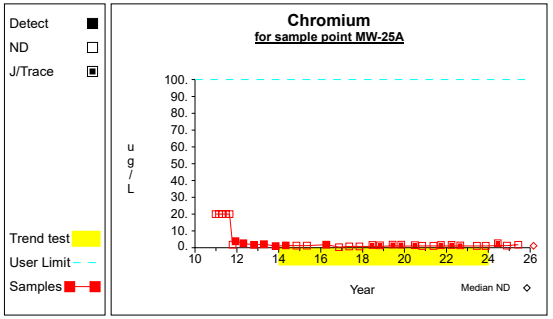
Time Series



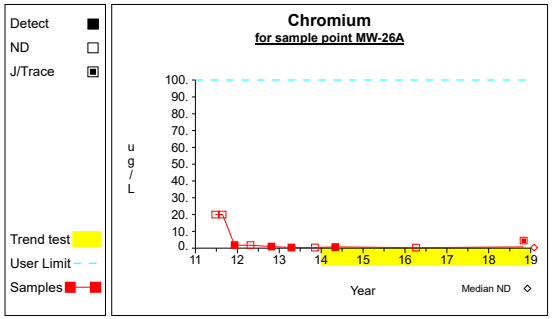
Graph 127



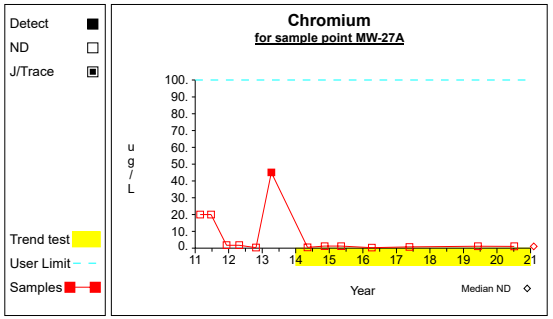
Graph 128



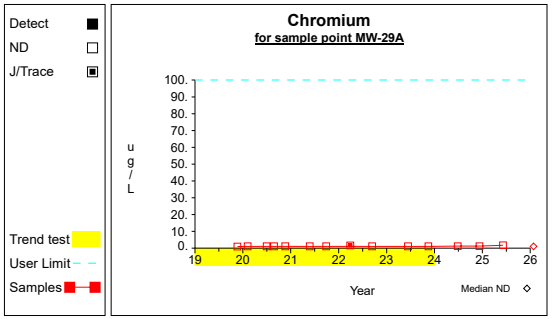
Graph 129



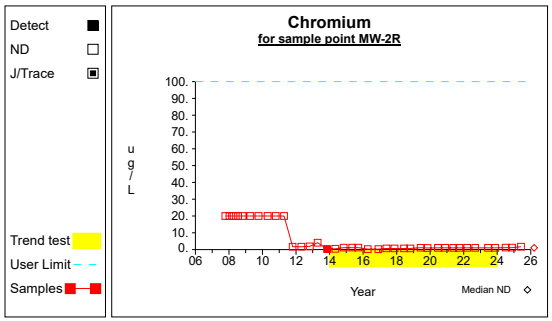
Graph 130



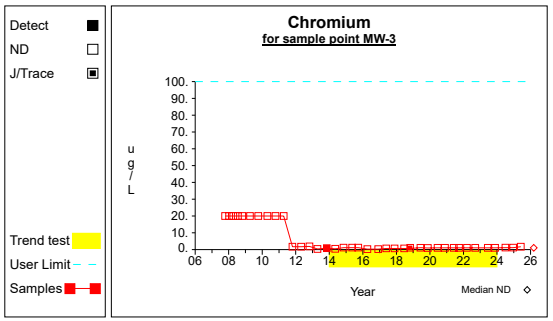
Graph 131



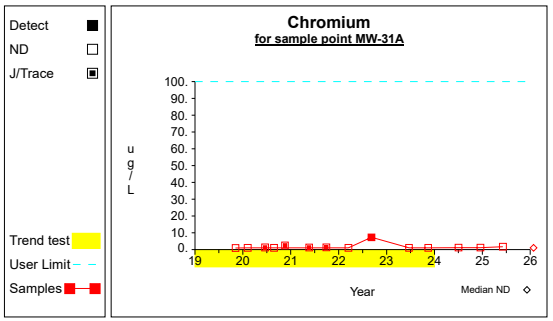
Graph 132



Graph 133

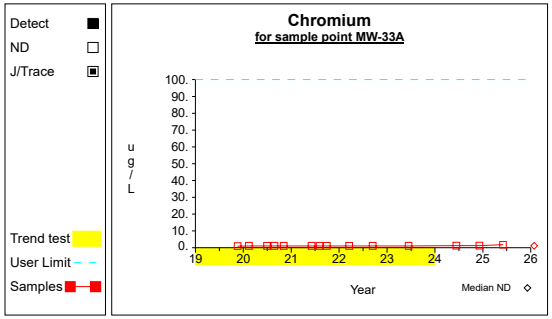


Graph 134

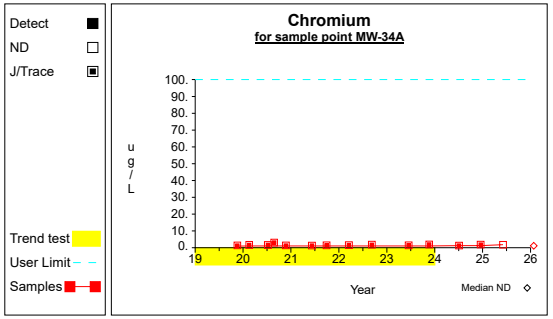


Graph 135

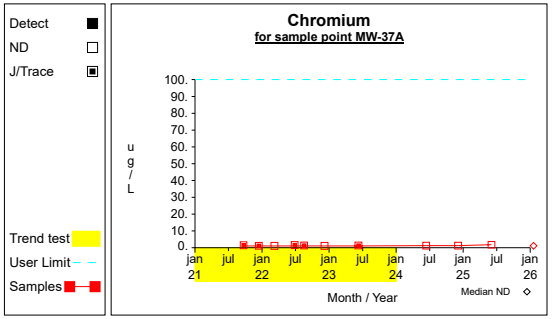
Time Series



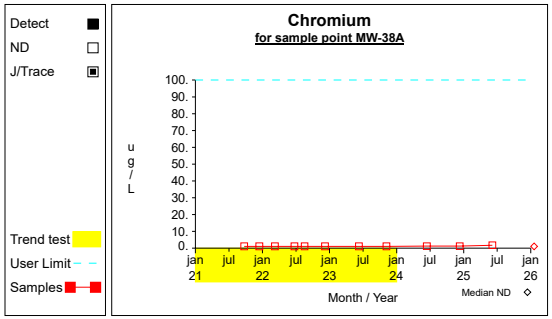
Graph 136



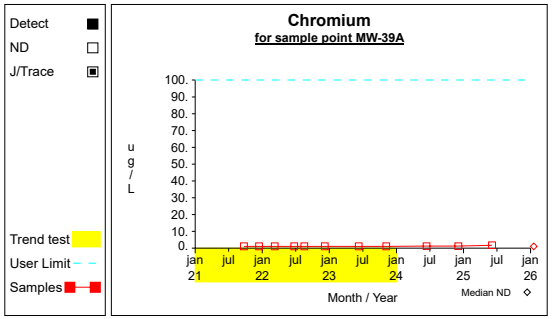
Graph 137



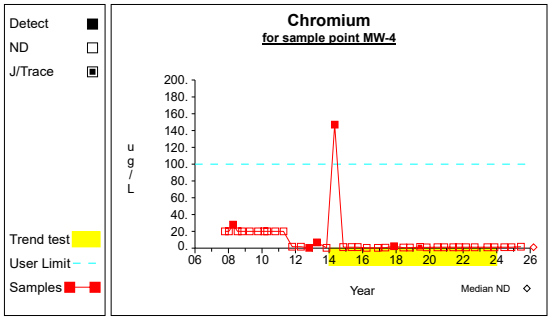
Graph 138



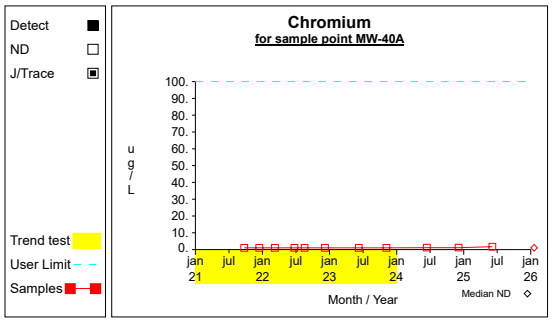
Graph 139



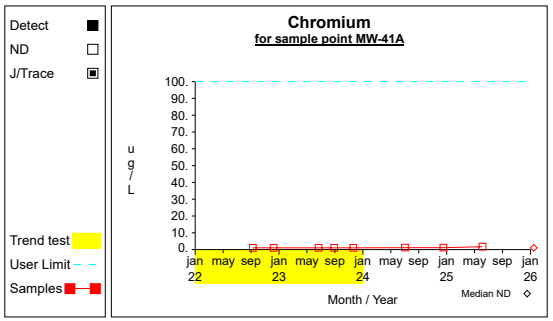
Graph 140



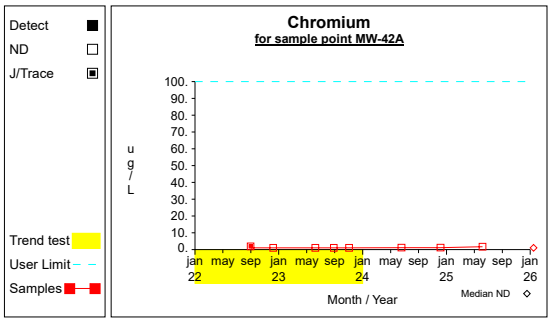
Graph 141



Graph 142

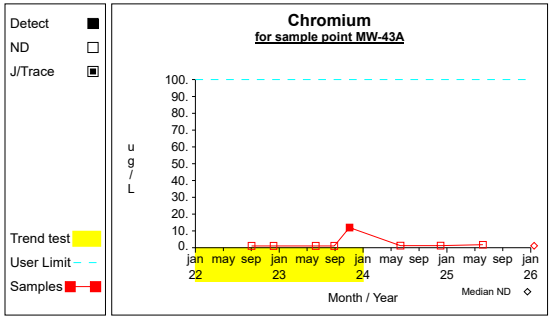


Graph 143

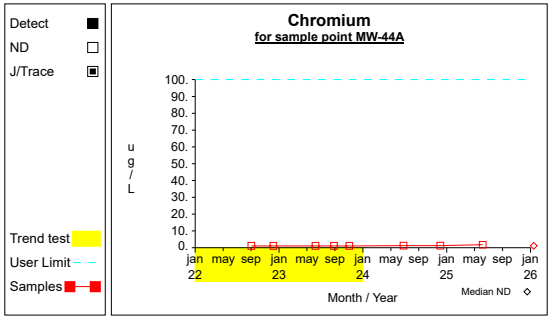


Graph 144

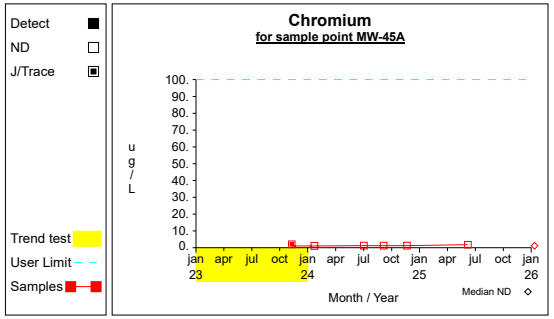
Time Series



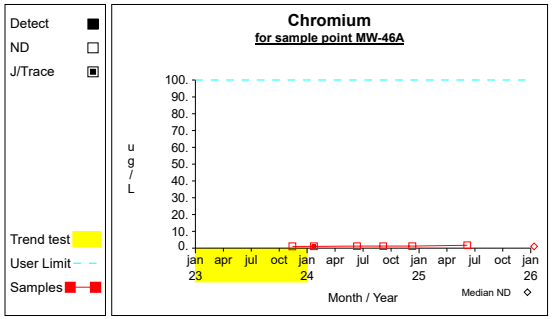
Graph 145



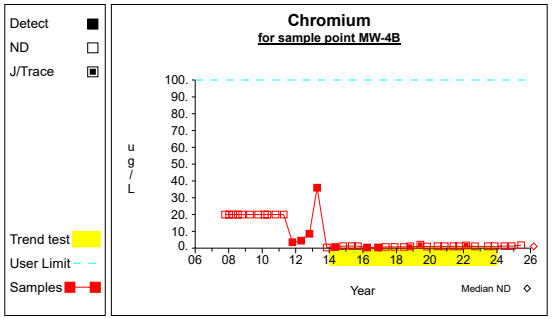
Graph 146



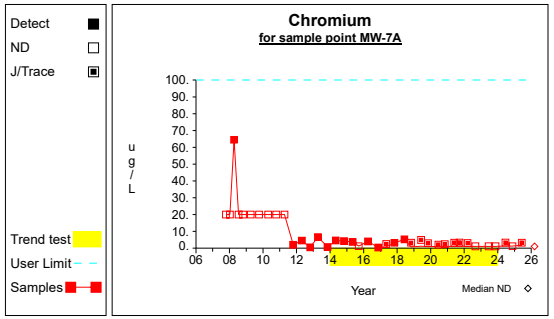
Graph 147



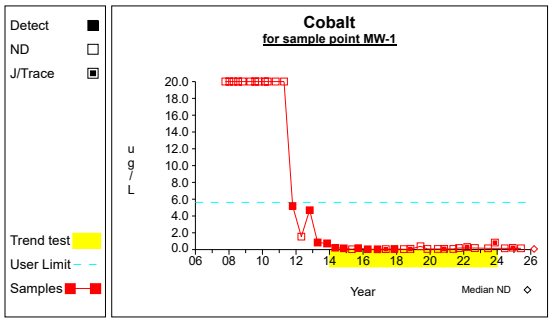
Graph 148



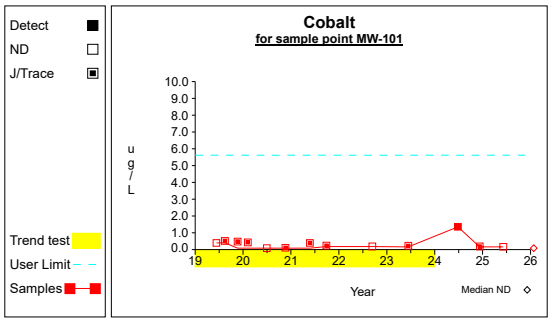
Graph 149



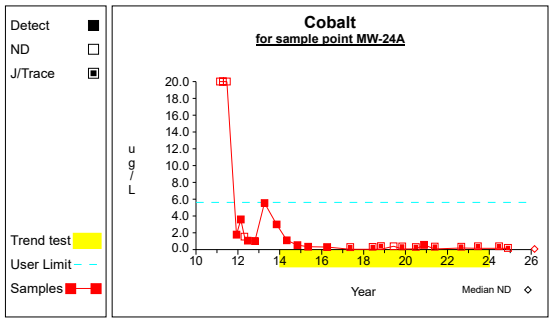
Graph 150



Graph 151

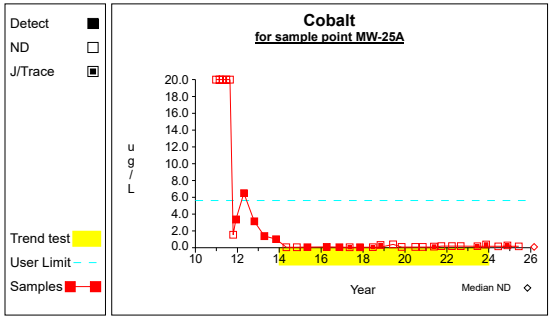


Graph 152

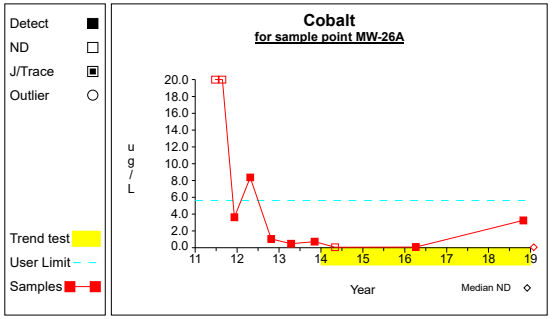


Graph 153

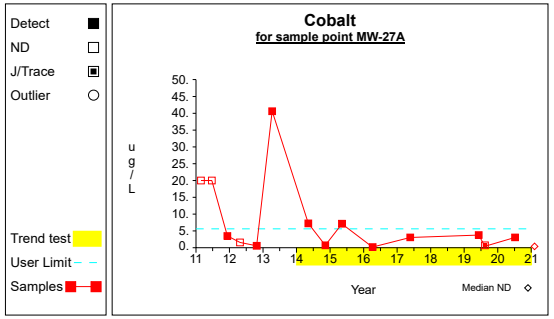
Time Series



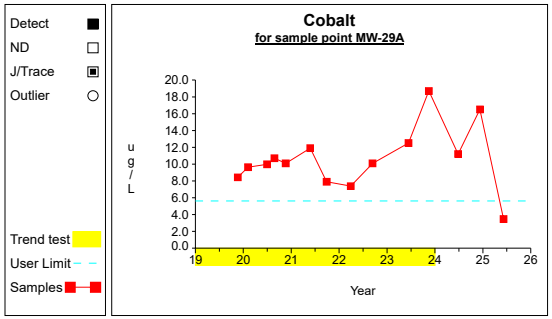
Graph 154



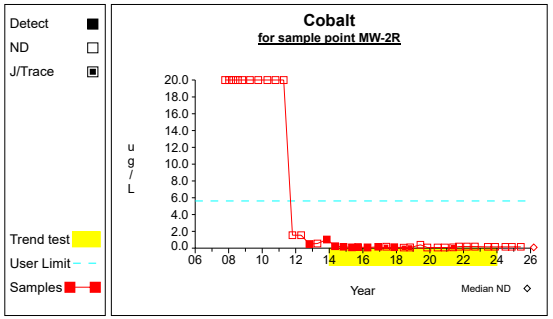
Graph 155



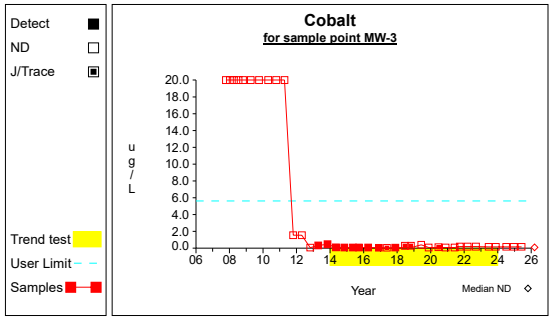
Graph 156



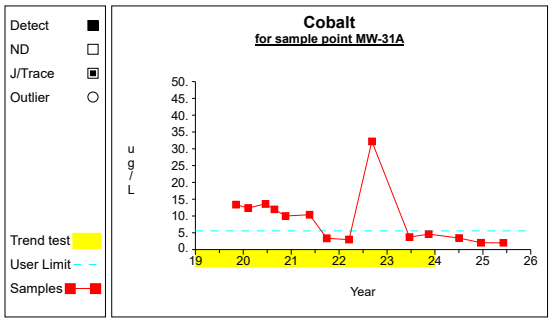
Graph 157



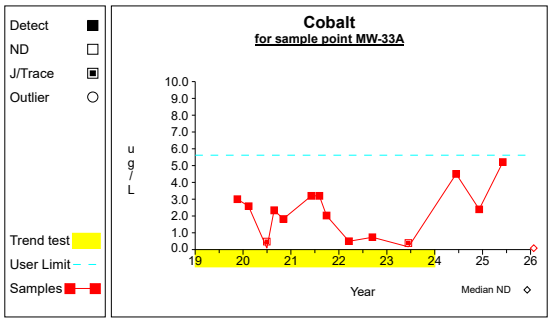
Graph 158



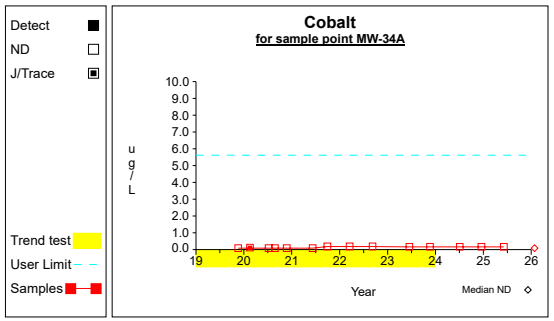
Graph 159



Graph 160

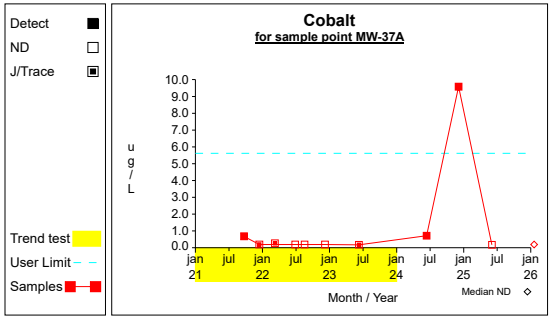


Graph 161

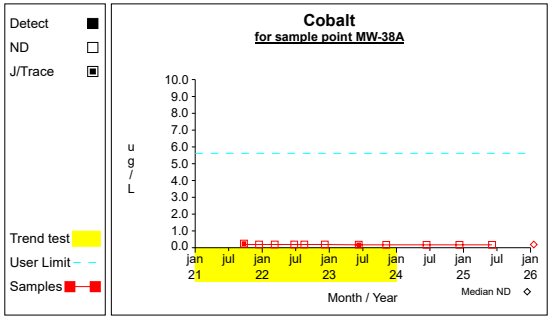


Graph 162

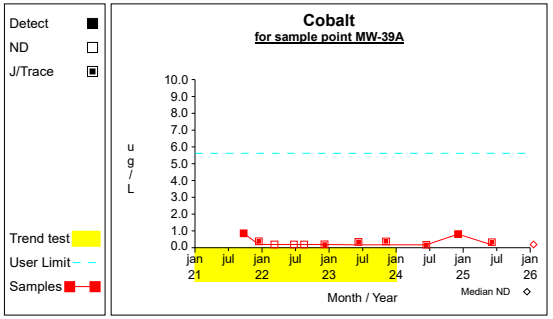
Time Series



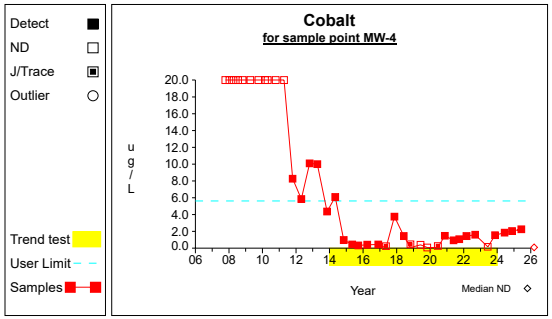
Graph 163



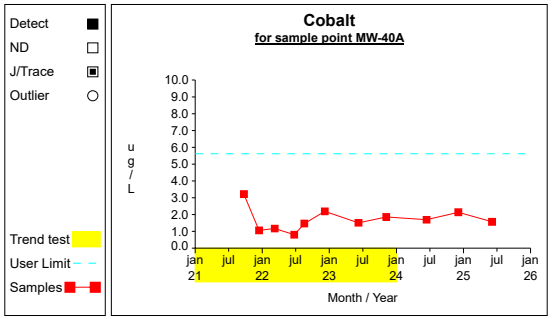
Graph 164



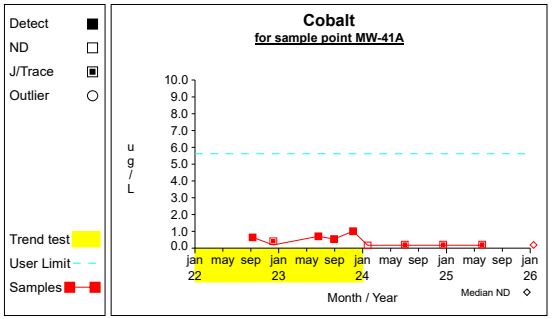
Graph 165



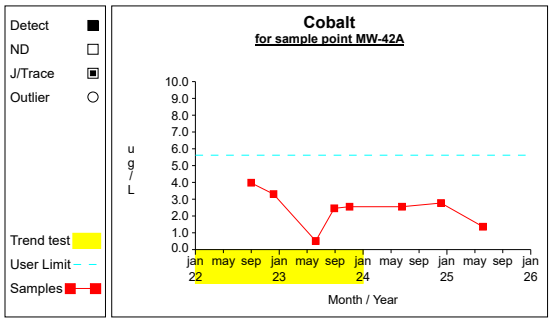
Graph 166



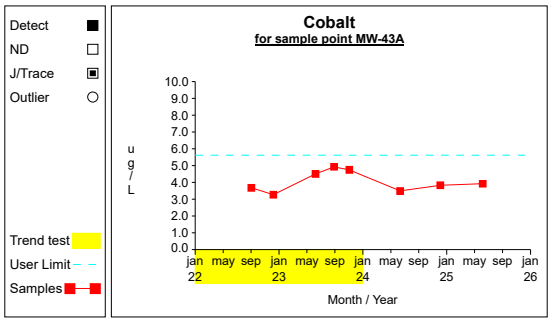
Graph 167



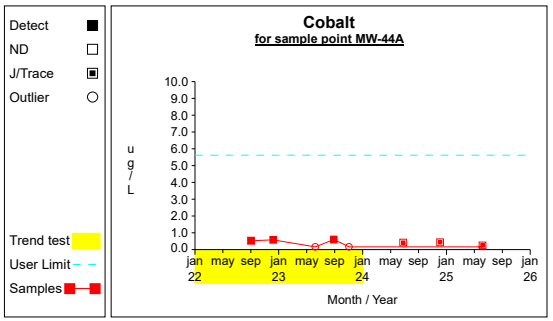
Graph 168



Graph 169

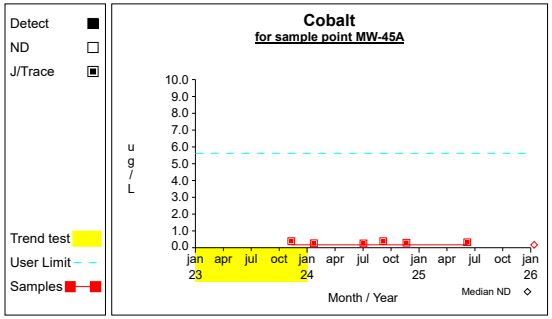


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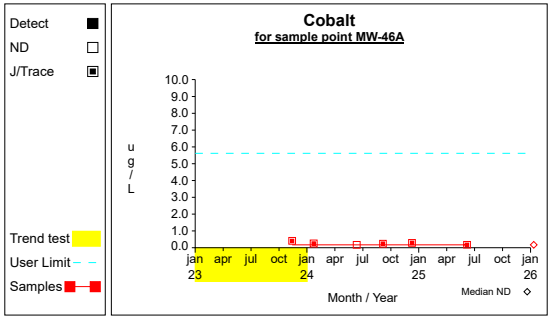


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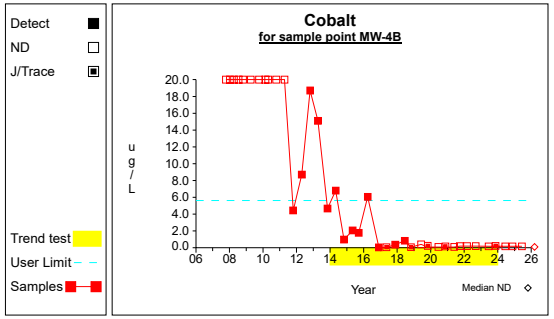
Time Series



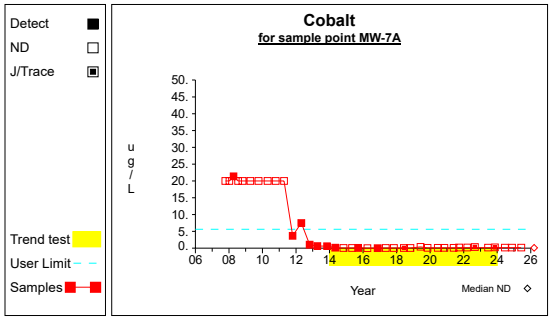
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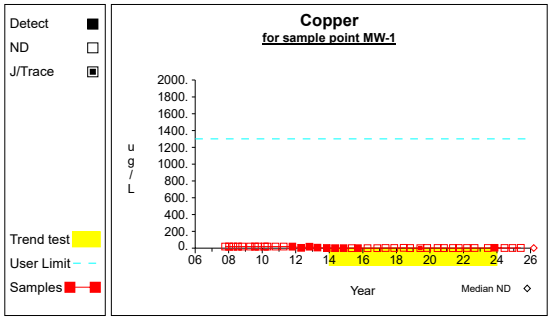
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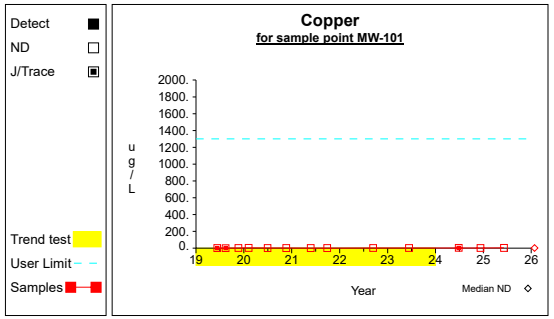
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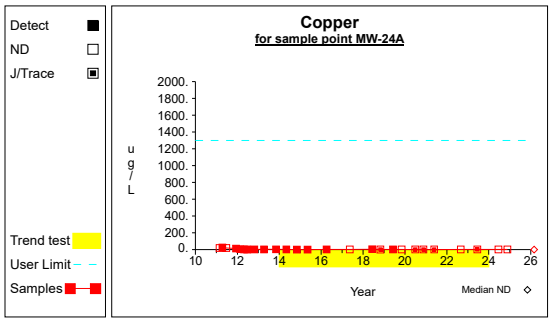
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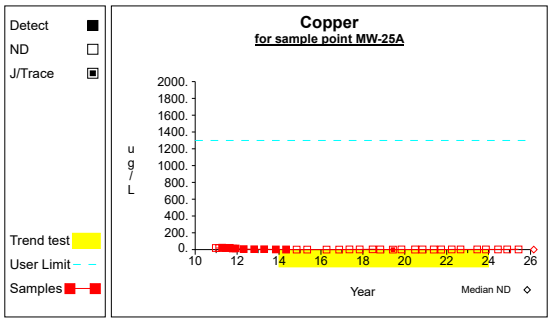
Graph 176



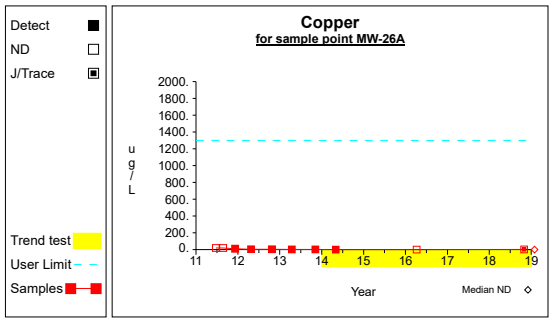
Graph 177



Graph 178

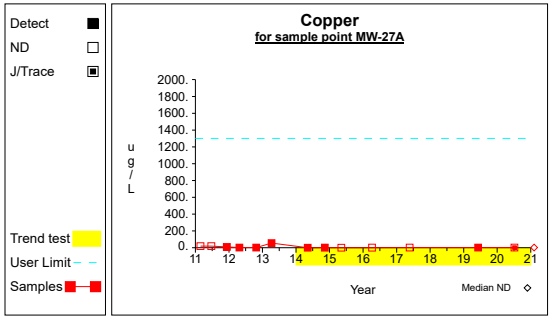


Graph 179

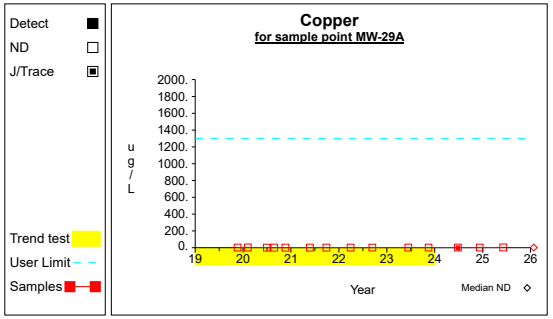


Graph 180

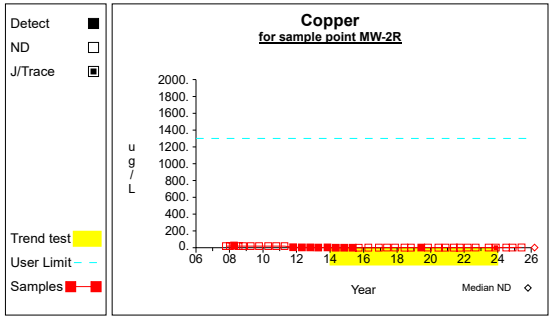
Time Series



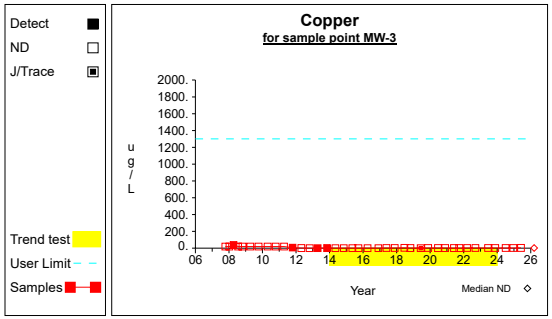
Graph 181



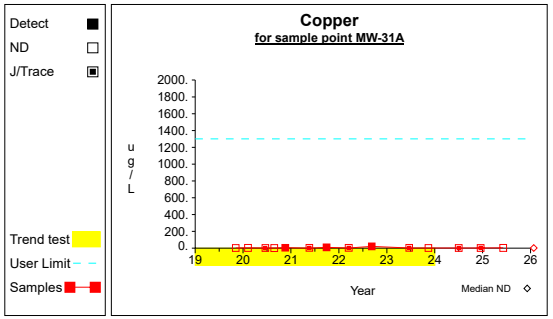
Graph 182



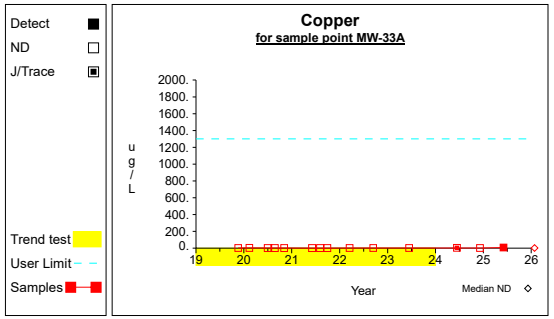
Graph 183



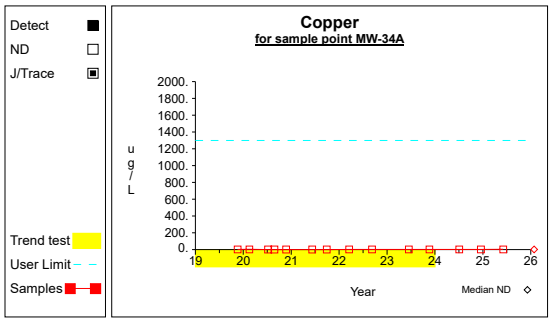
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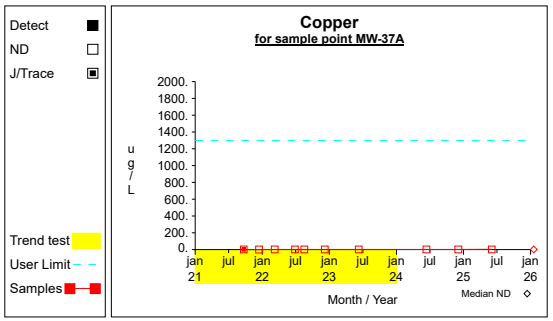
Graph 185



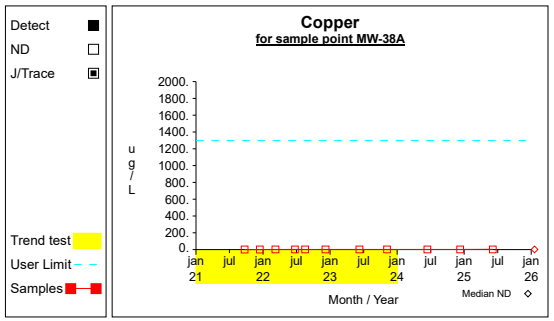
Graph 186



Graph 187

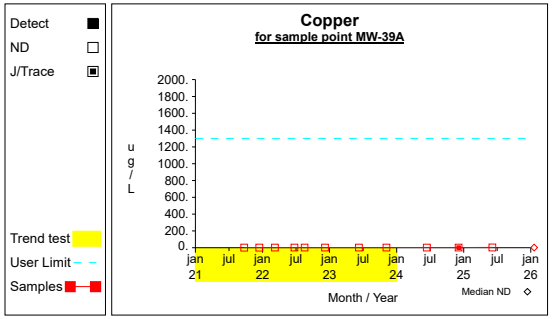


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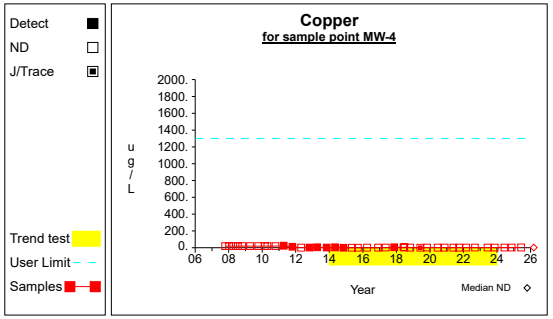


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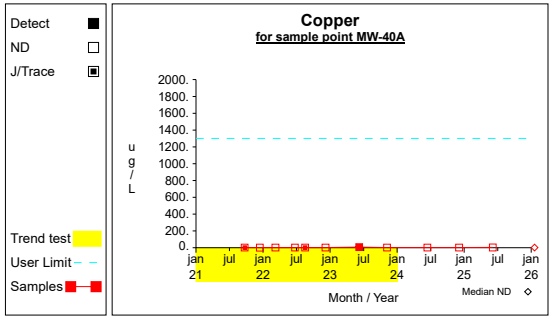
Time Series



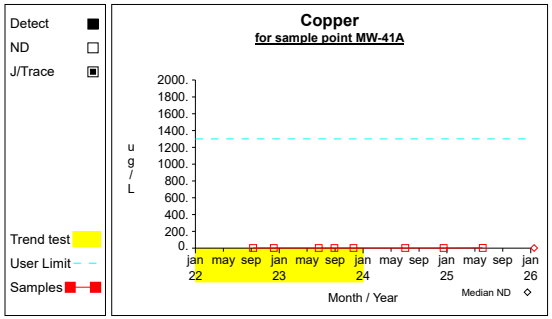
Graph 190



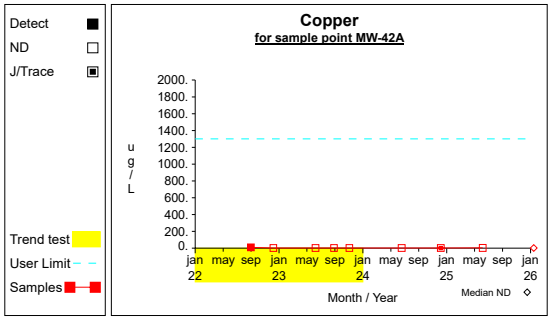
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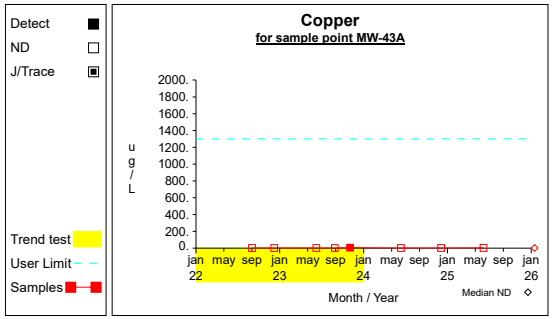
Graph 192



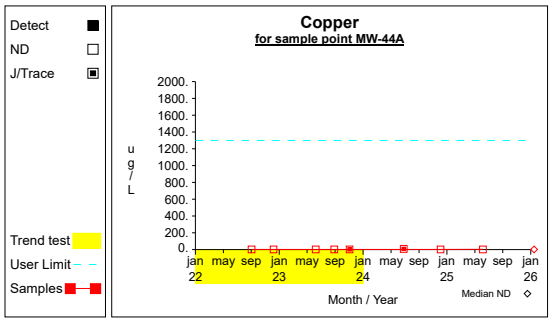
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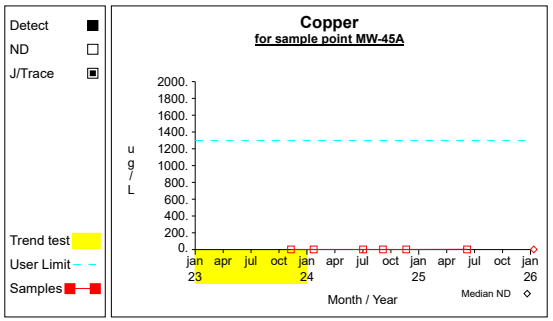
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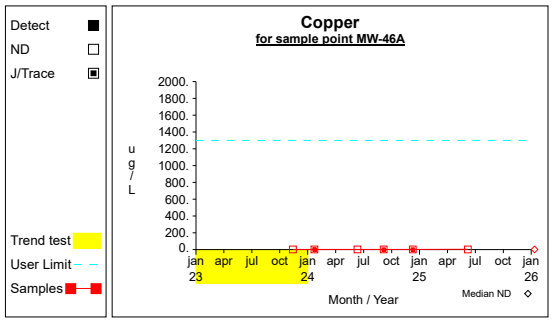
Graph 195



Graph 196

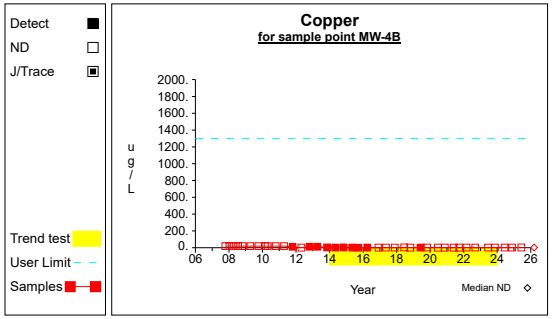


Graph 197

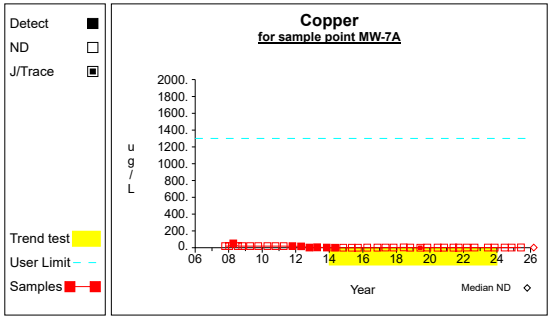


Graph 198

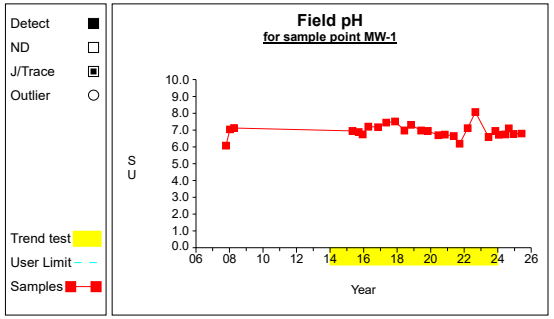
Time Series



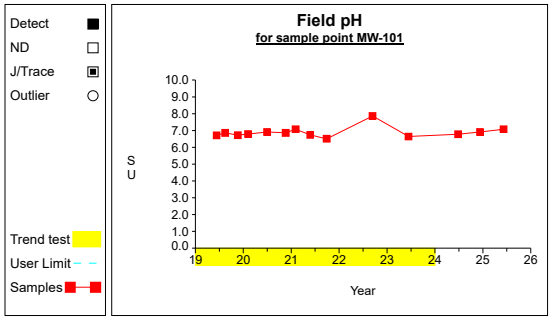
Graph 199



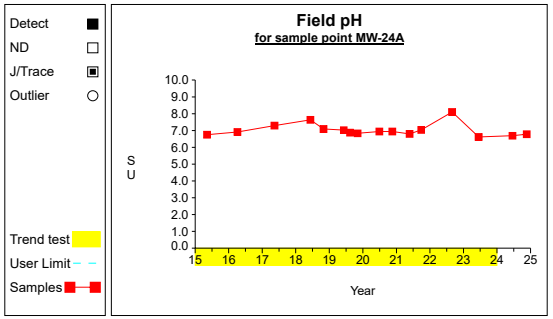
Graph 200



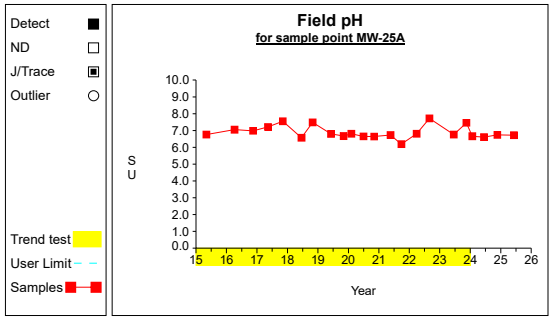
Graph 201



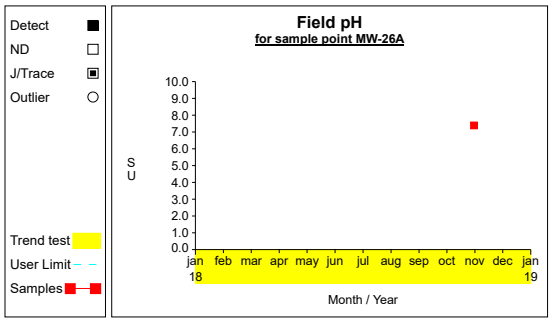
Graph 202



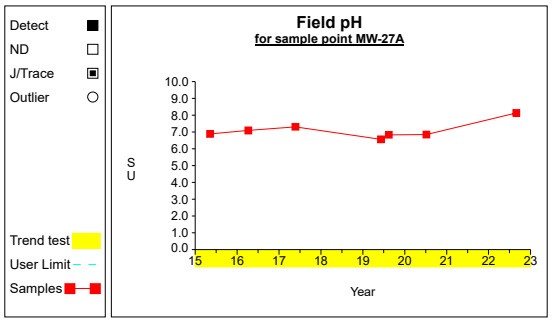
Graph 203



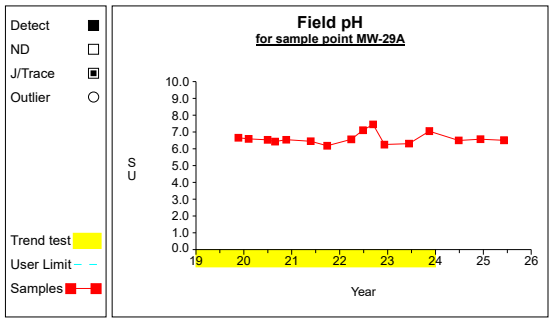
Graph 204



Graph 205

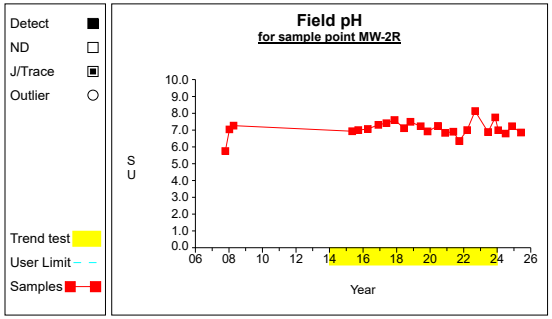


Graph 206

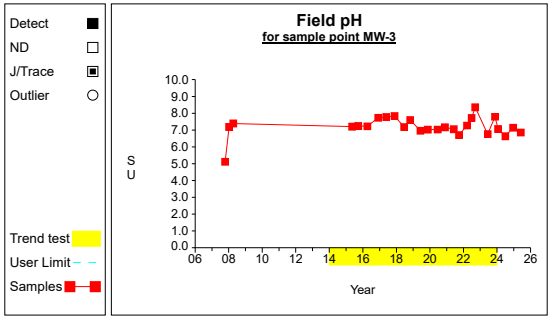


Graph 207

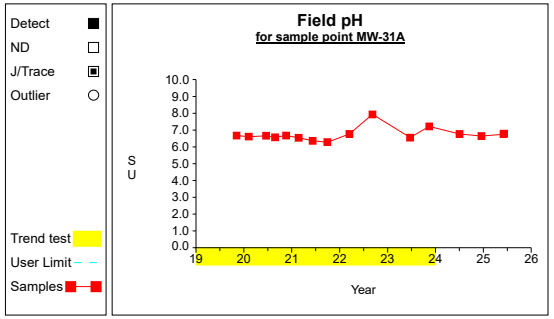
Time Series



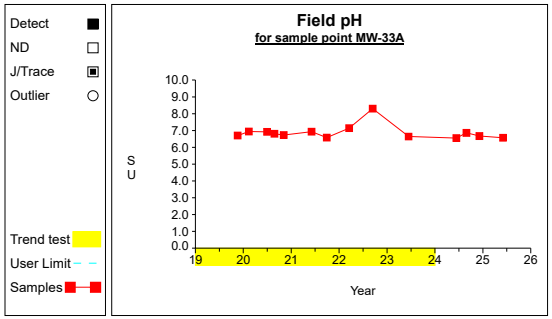
Graph 208



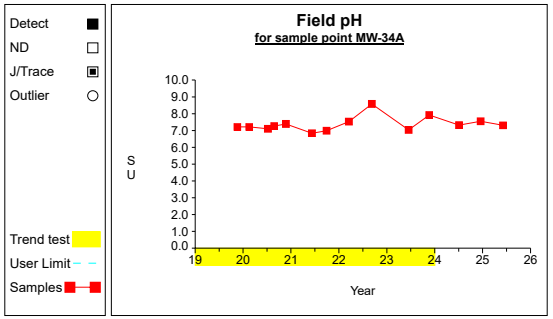
Graph 209



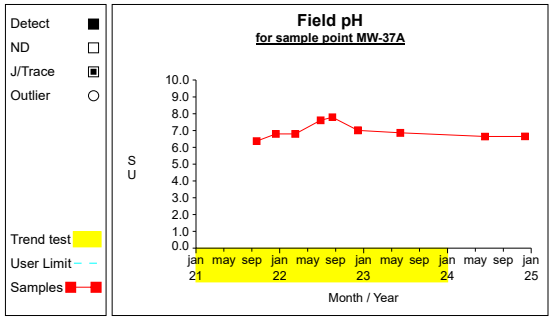
Graph 210



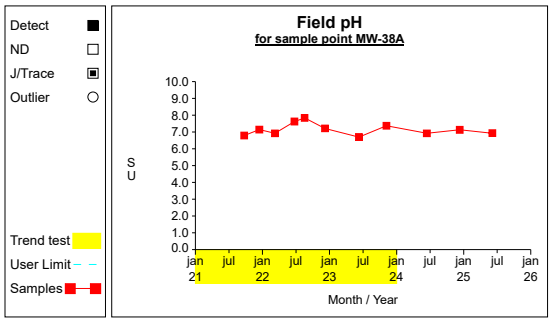
Graph 211



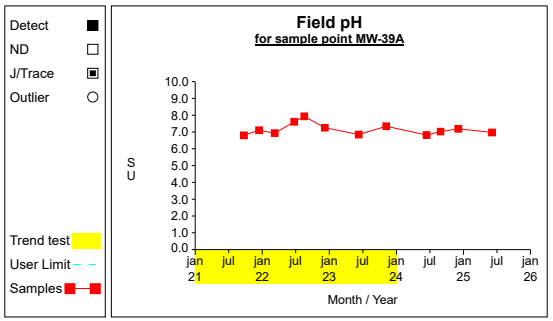
Graph 212



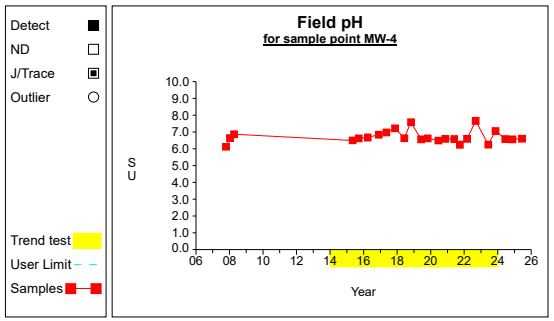
Graph 213



Graph 214

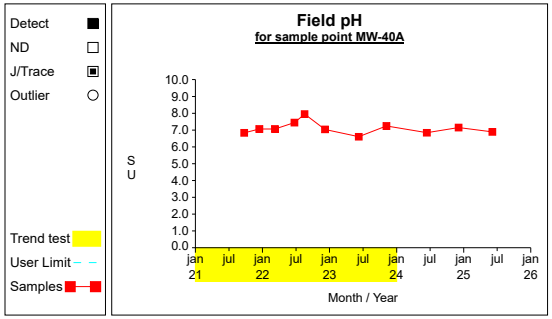


Graph 215

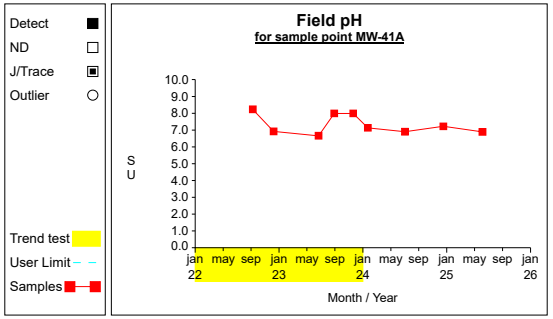


Graph 216

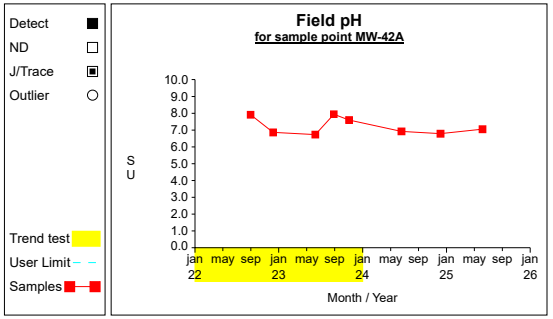
Time Series



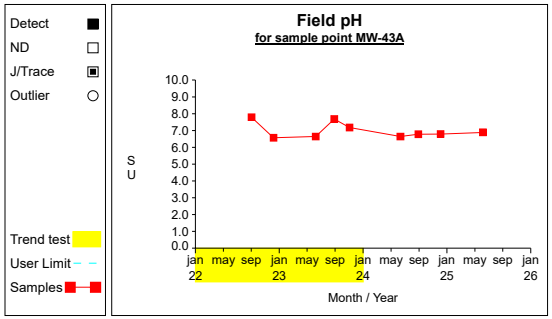
Graph 217



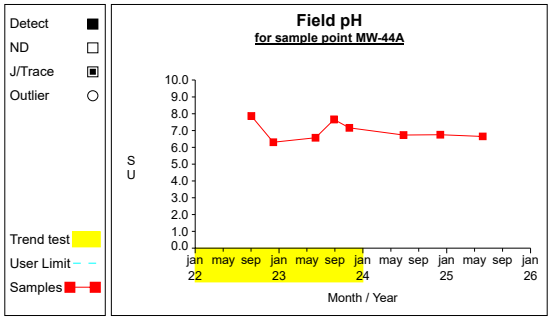
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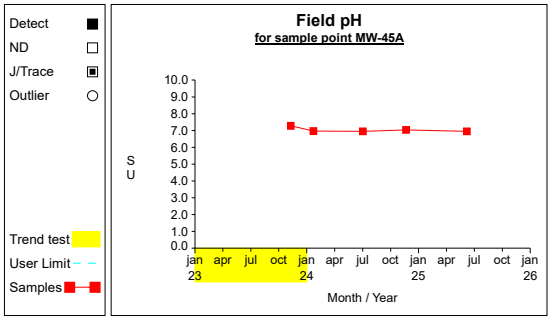
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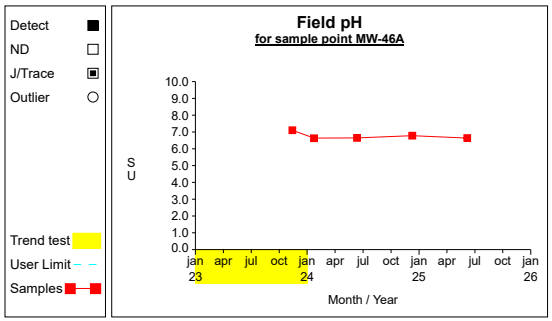
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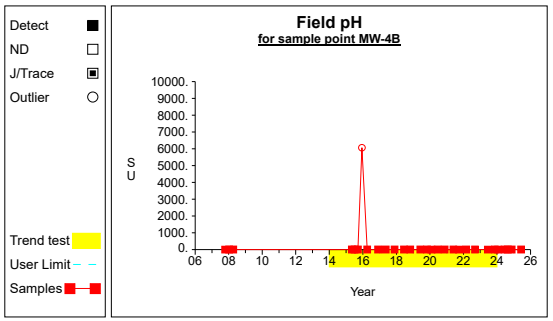
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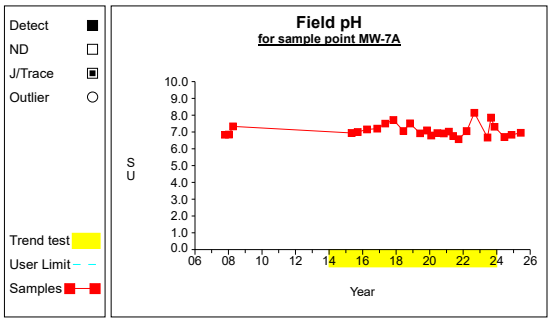
Graph 222



Graph 223

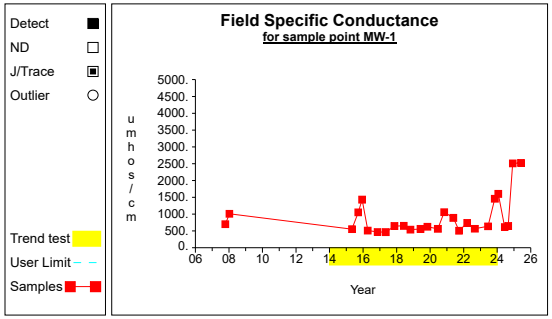


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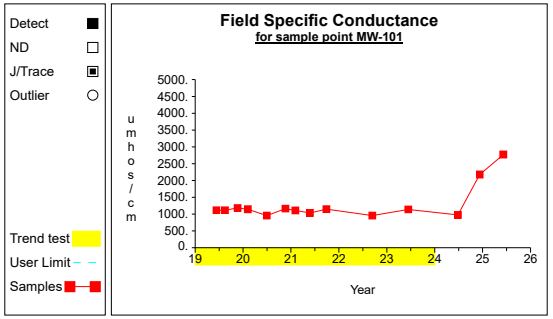


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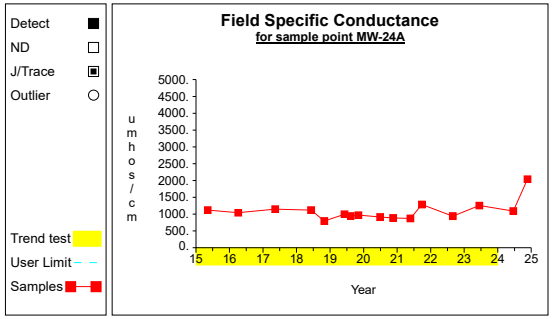
Time Series



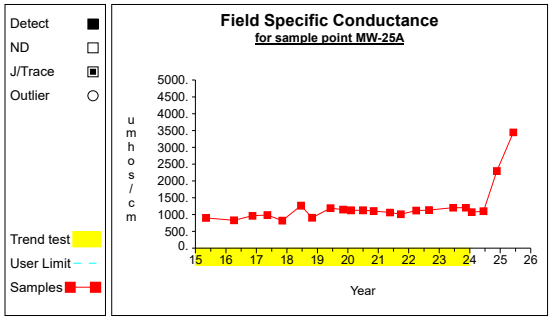
Graph 226



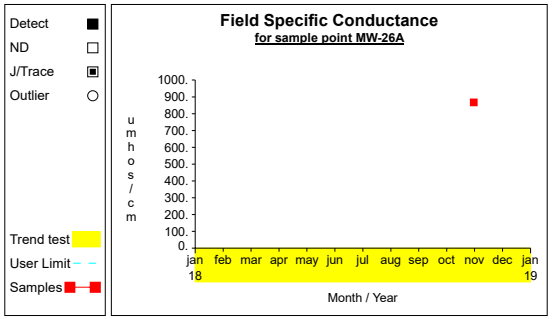
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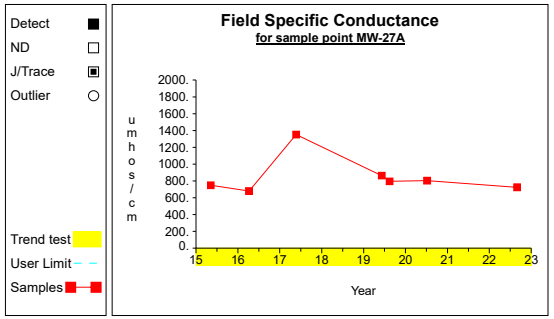
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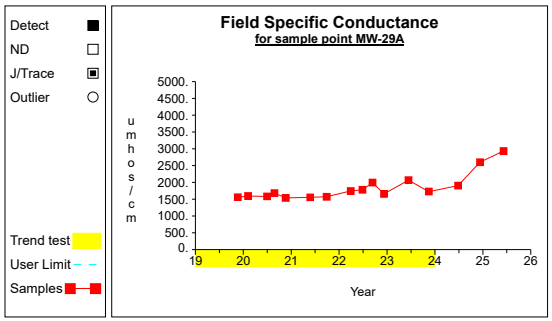
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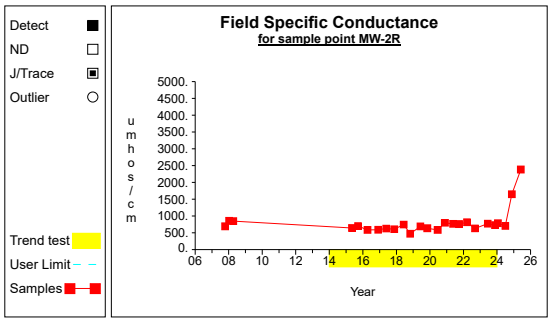
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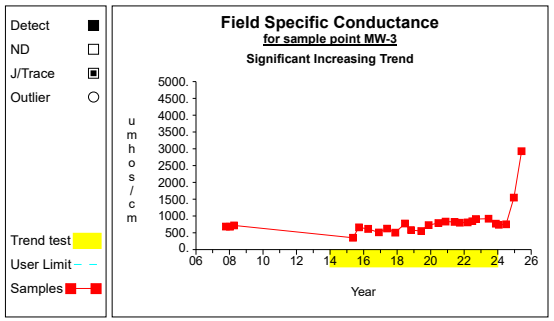
Graph 231



Graph 232

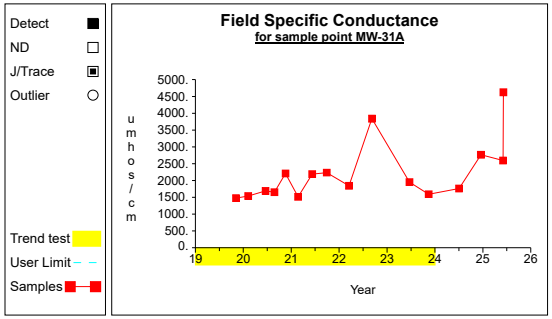


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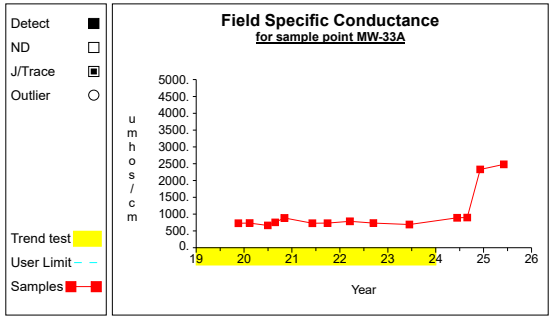


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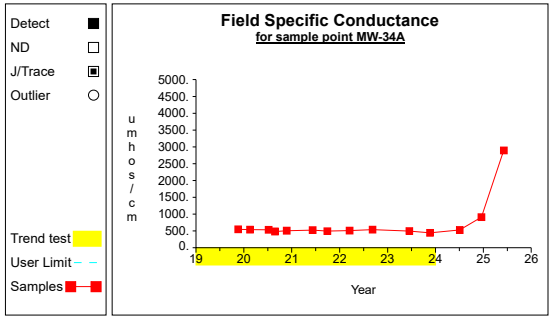
Time Series



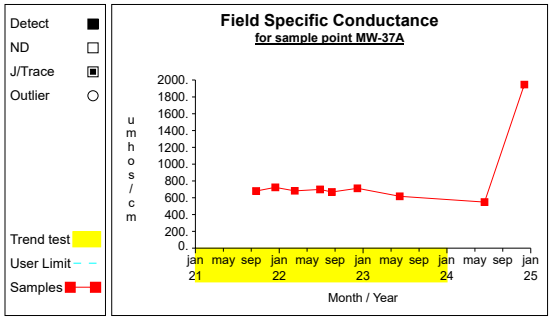
Graph 235



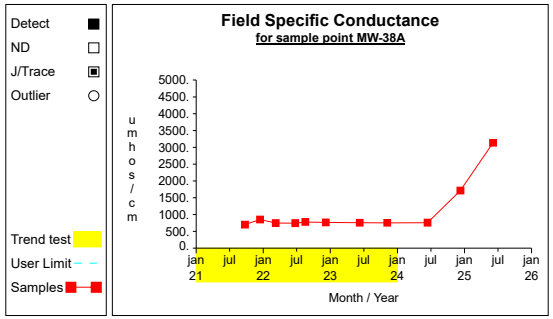
Graph 236



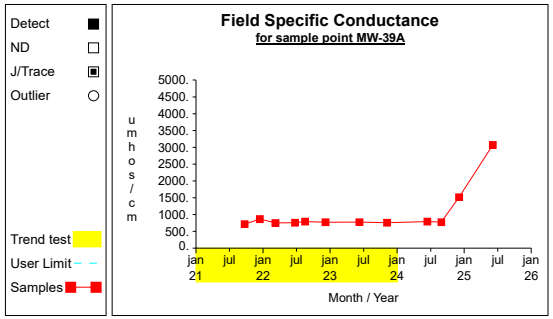
Graph 237



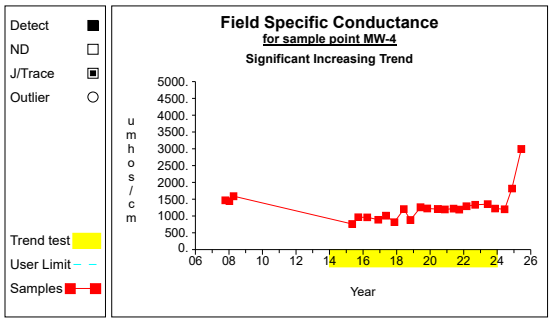
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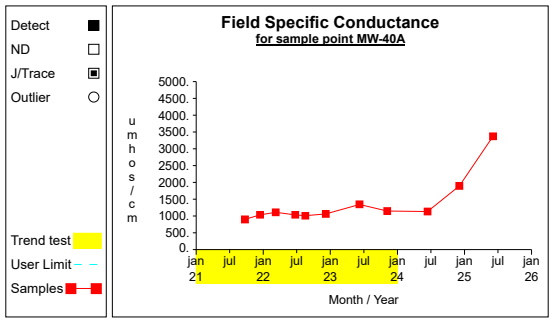
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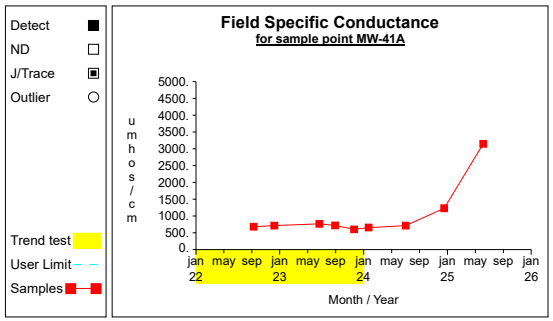
Graph 240



Graph 241

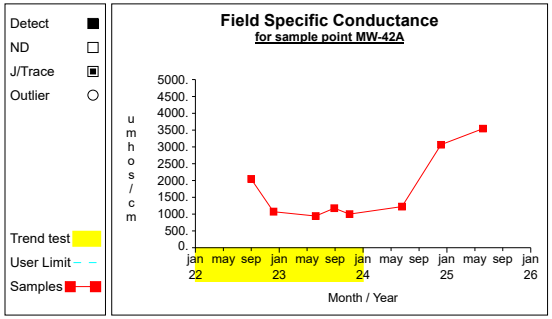


Graph 242

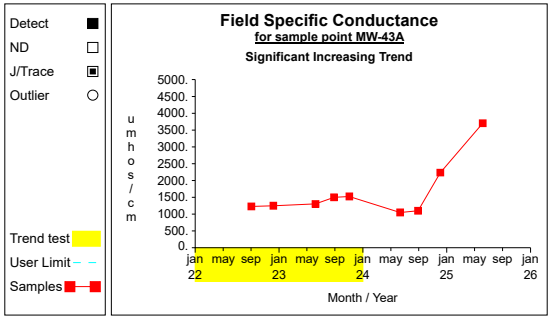


Graph 243

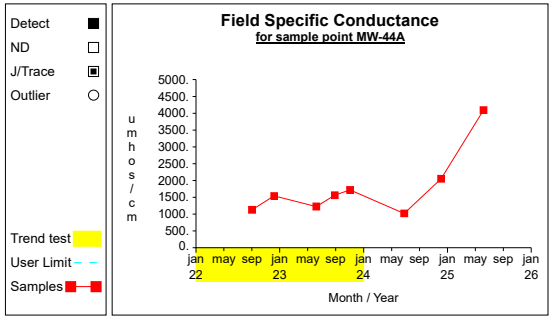
Time Series



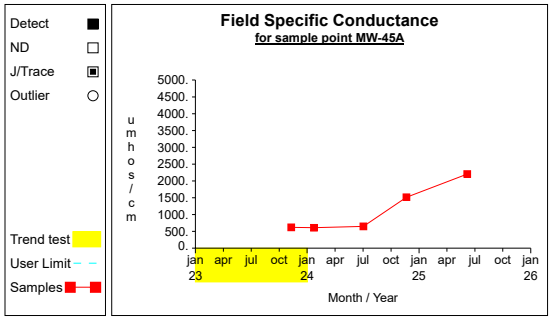
Graph 244



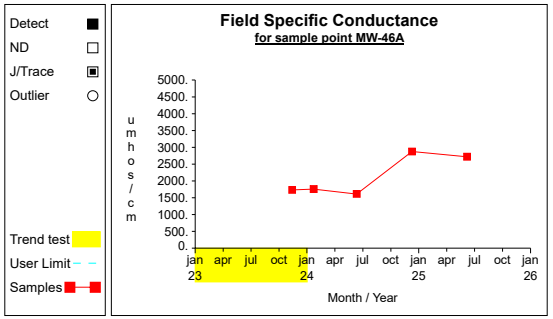
Graph 245



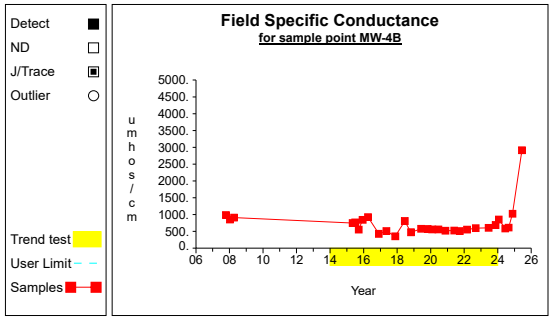
Graph 246



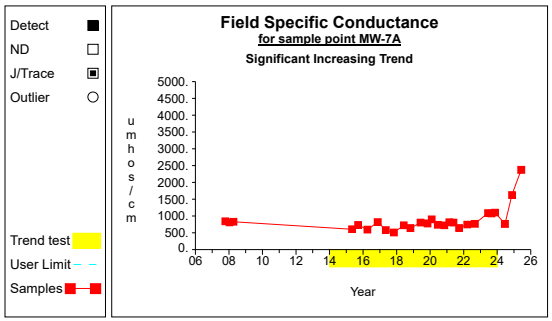
Graph 247



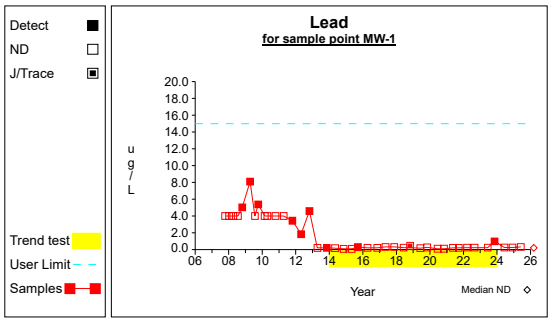
Graph 248



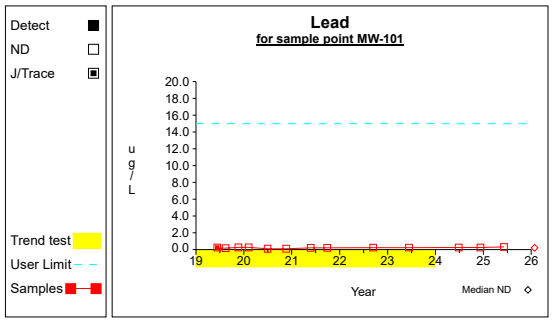
Graph 249



Graph 250

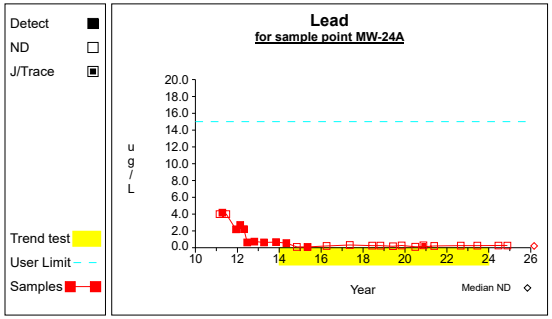


Graph 251

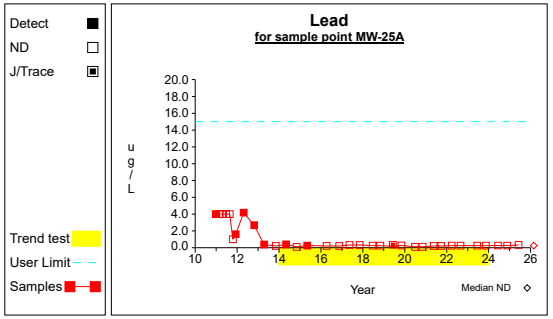


Graph 252

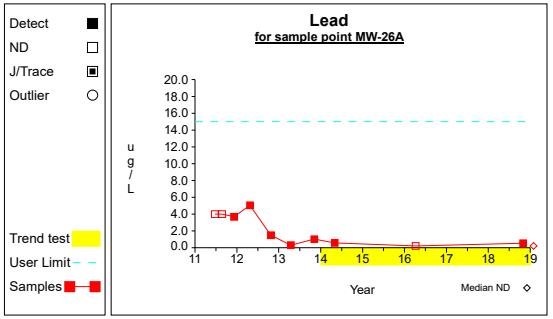
Time Series



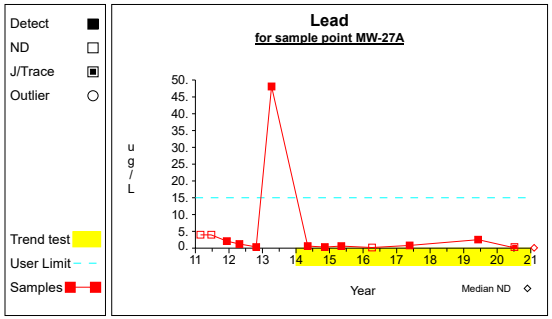
Graph 253



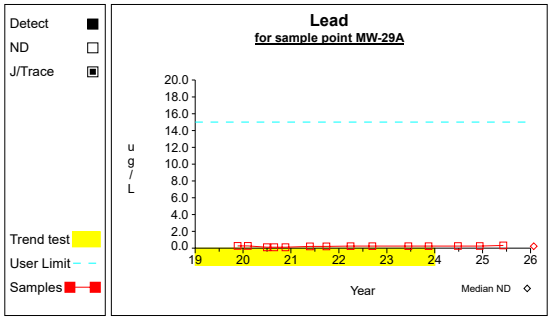
Graph 254



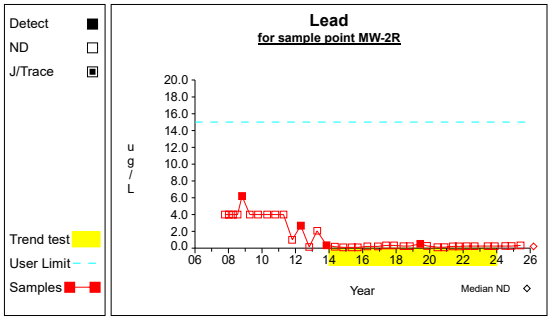
Graph 255



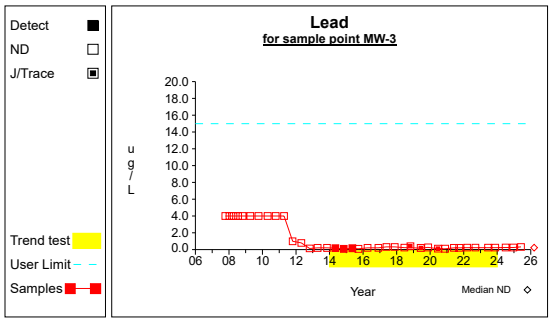
Graph 256



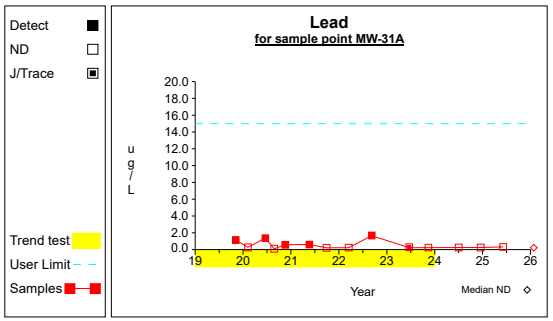
Graph 257



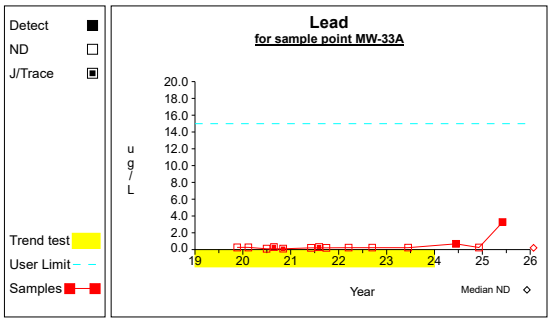
Graph 258



Graph 259

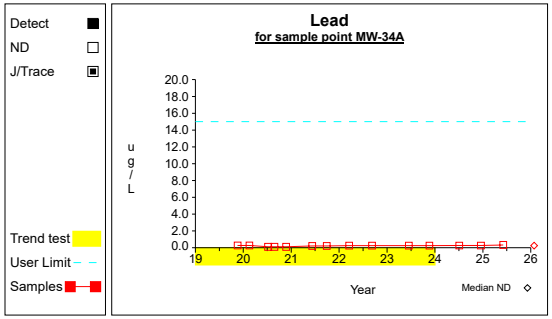


Graph 260

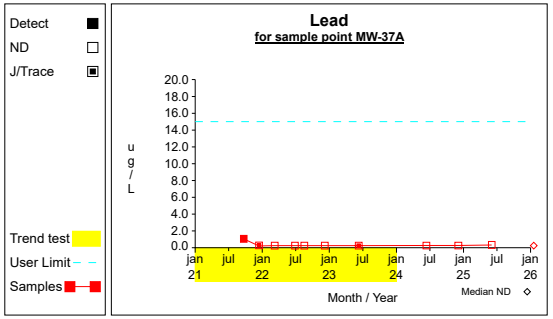


Graph 261

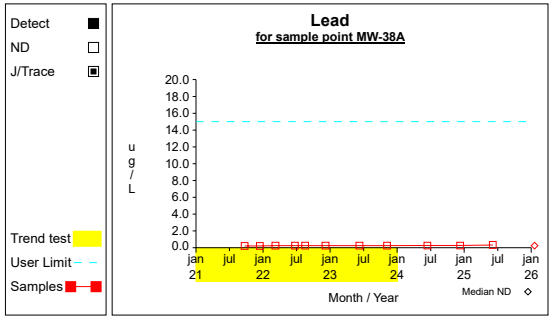
Time Series



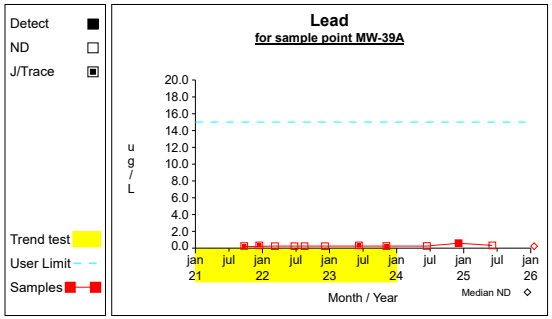
Graph 262



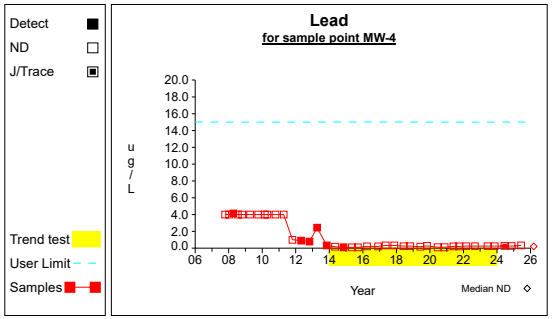
Graph 263



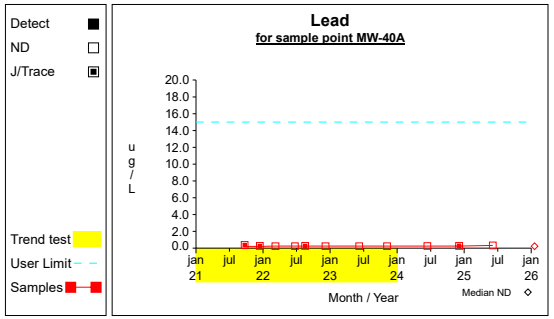
Graph 264



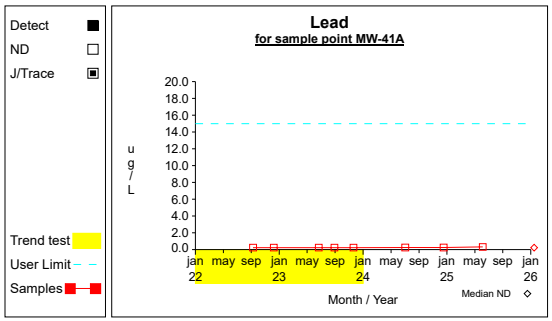
Graph 265



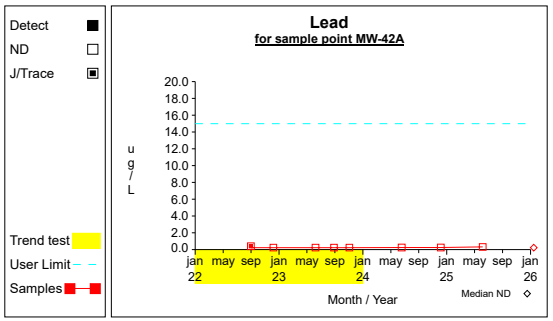
Graph 266



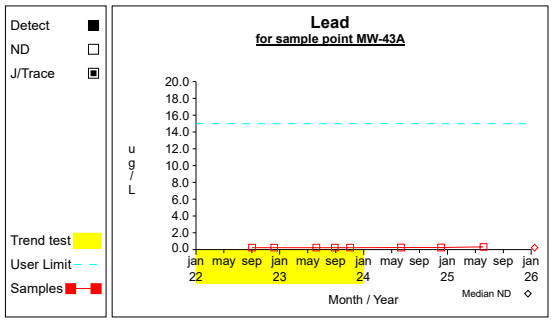
Graph 267



Graph 268

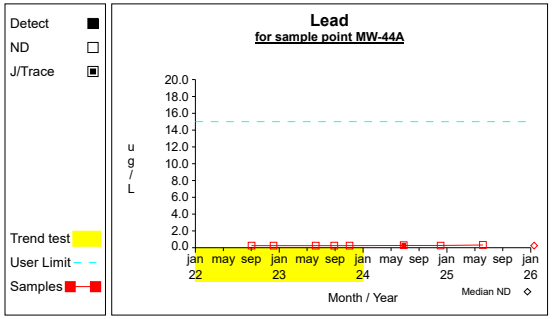


Graph 269

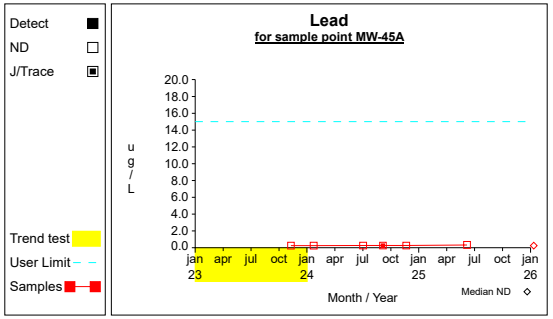


Graph 270

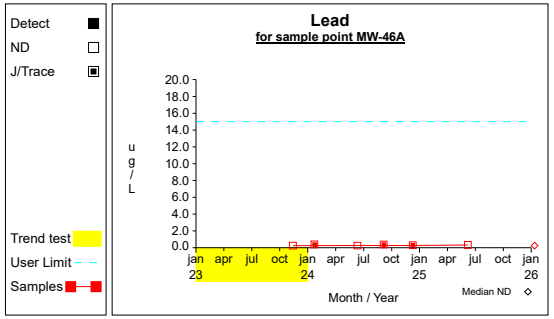
Time Series



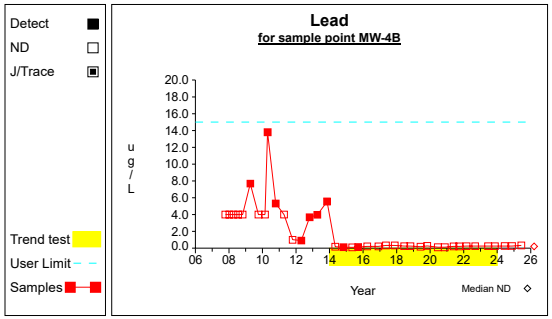
Graph 271



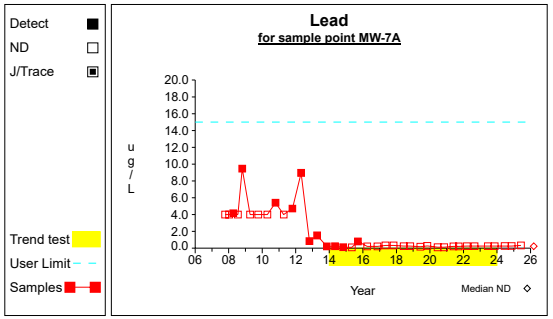
Graph 272



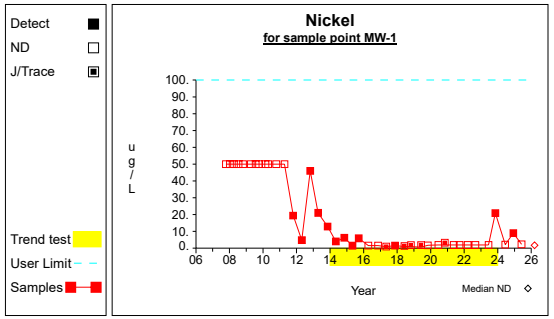
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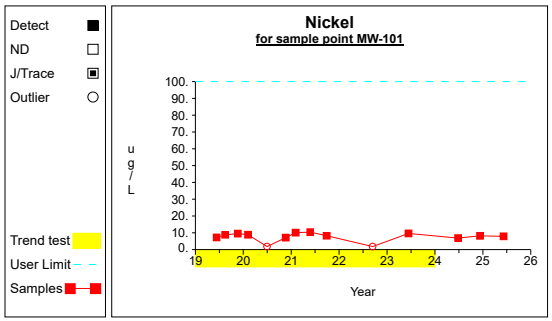
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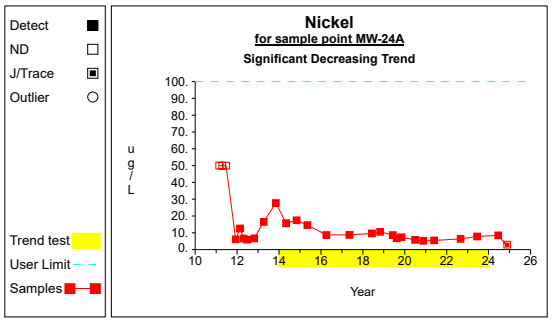
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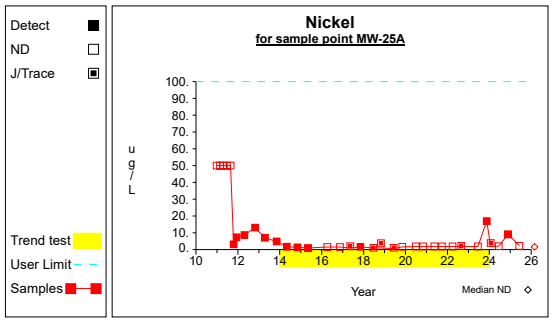
Graph 276



Graph 277

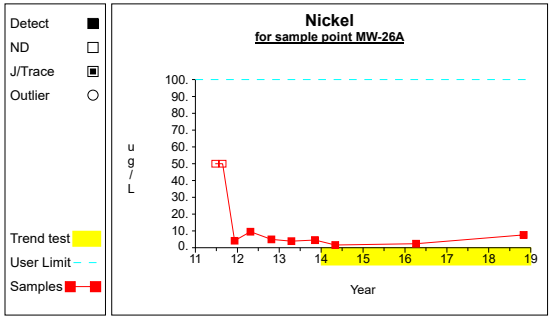


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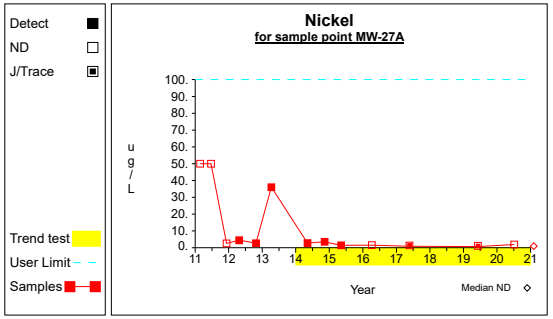


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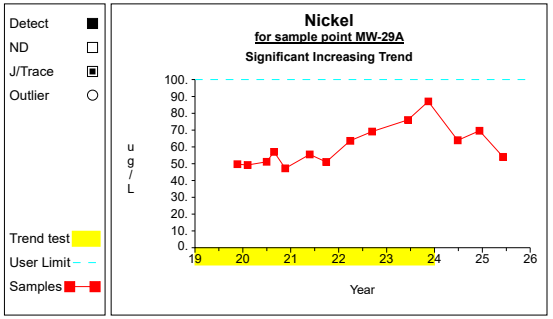
Time Series



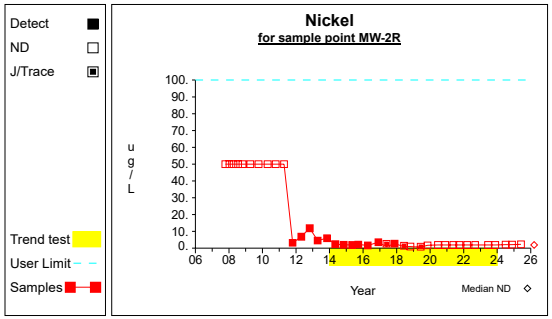
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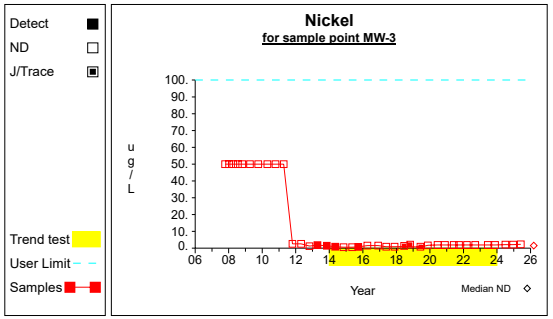
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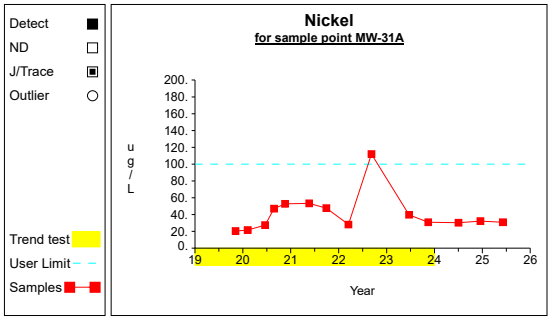
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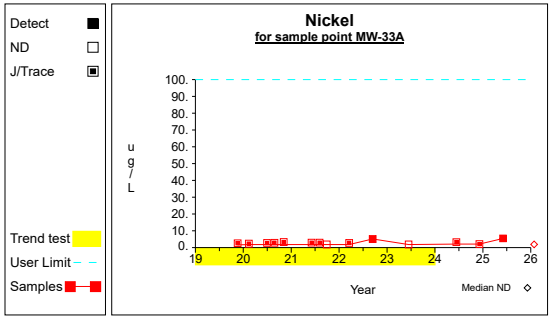
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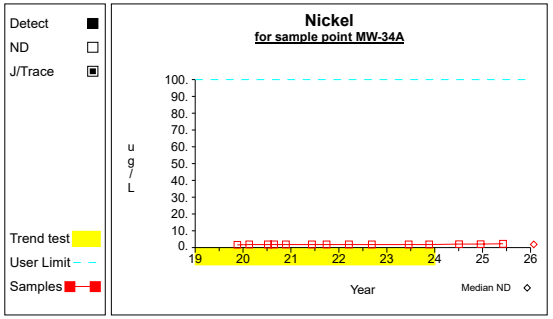
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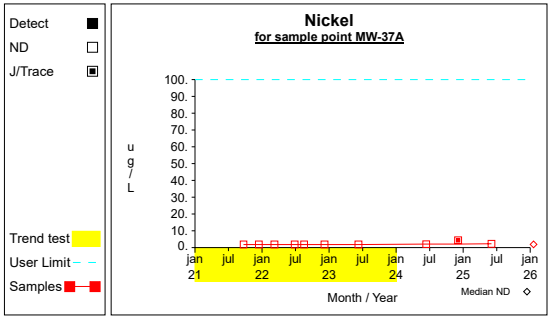
Graph 285



Graph 286

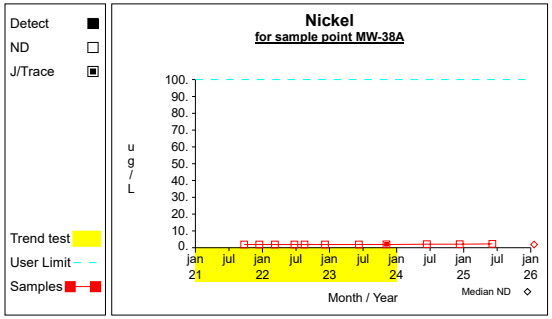


Graph 287

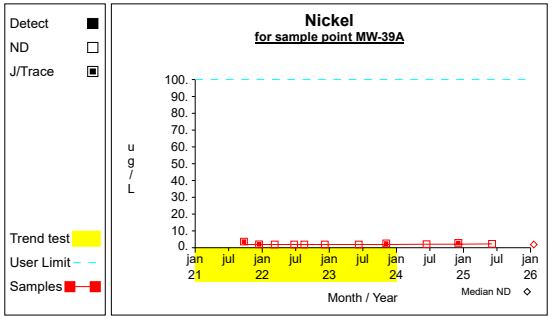


Graph 288

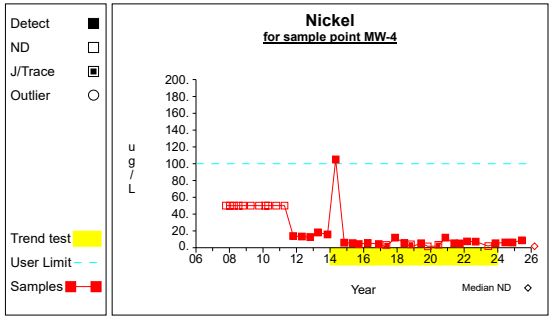
Time Series



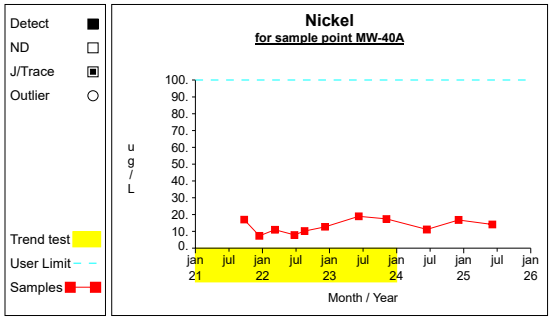
Graph 289



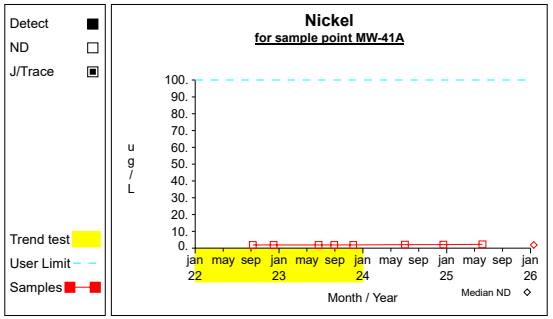
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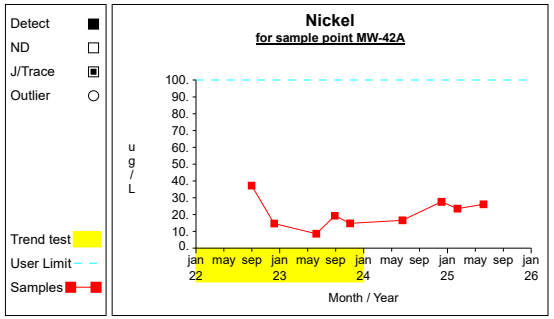
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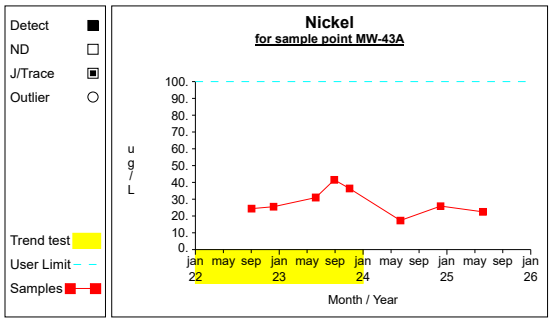
Graph 292



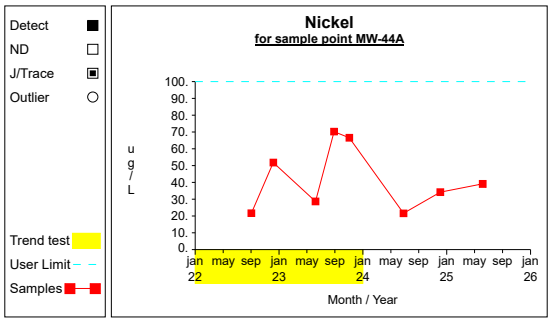
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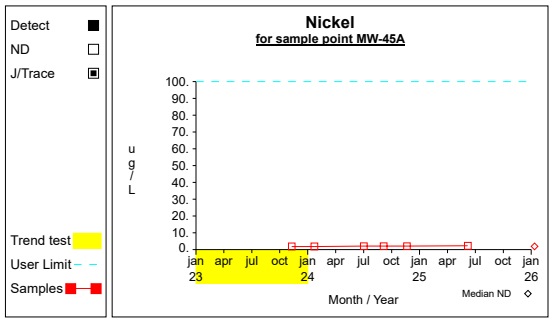
Graph 294



Graph 295

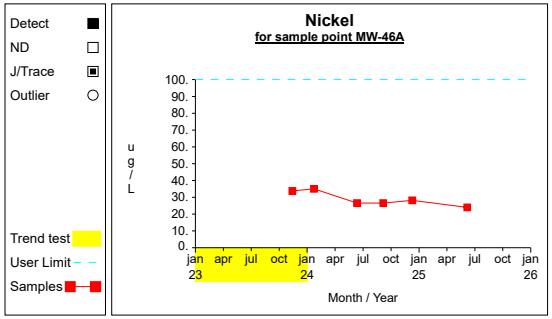


Graph 296

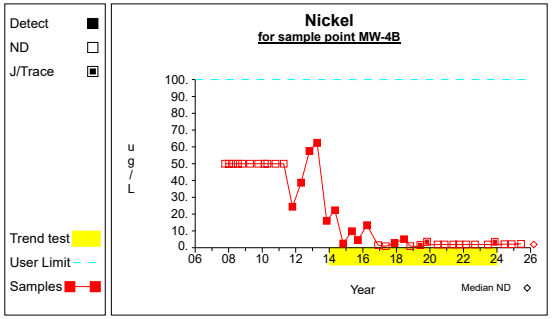


Graph 297

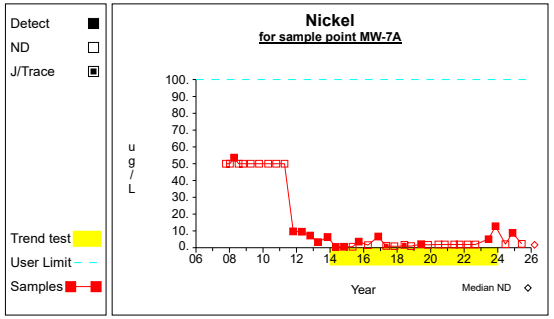
Time Series



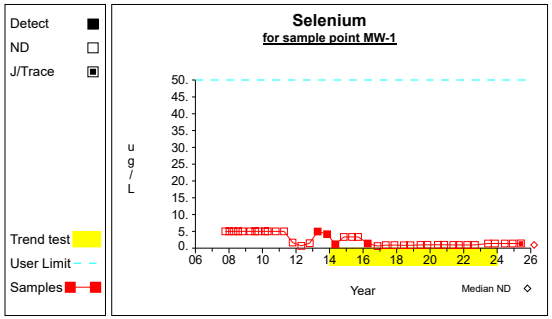
Graph 298



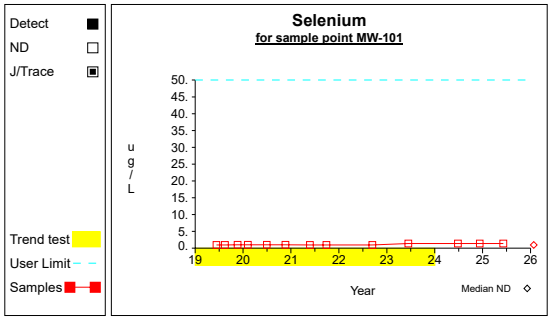
Graph 299



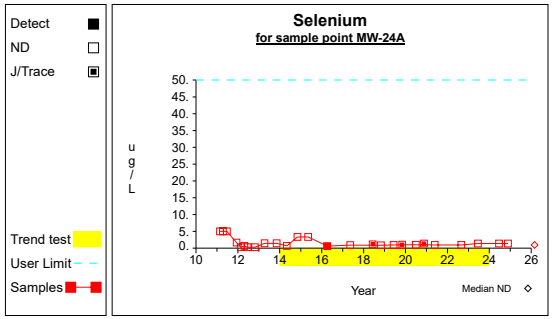
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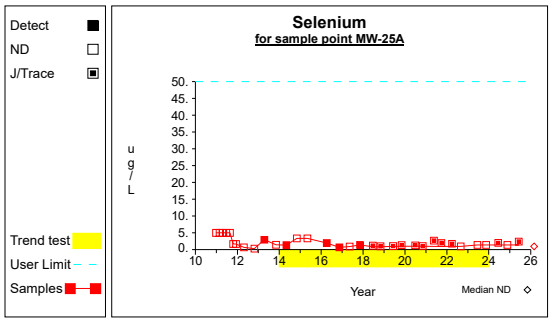
Graph 301



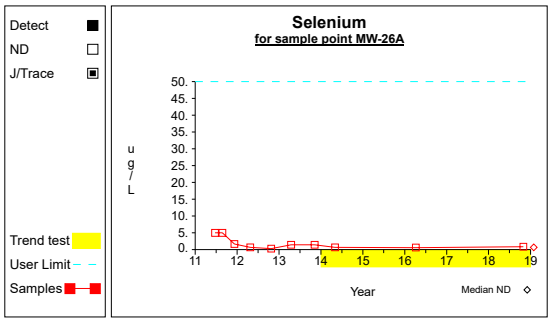
Graph 302



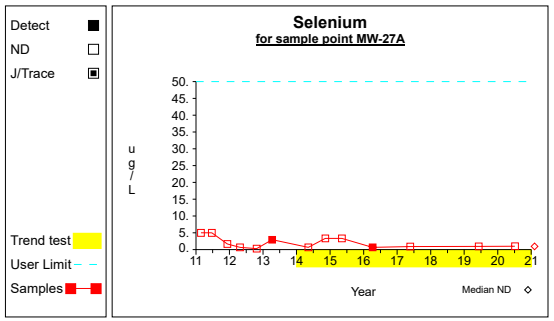
Graph 303



Graph 304

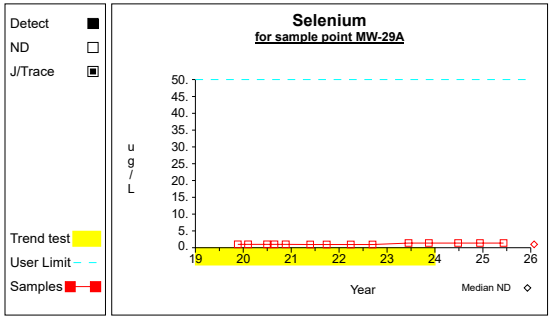


Graph 305

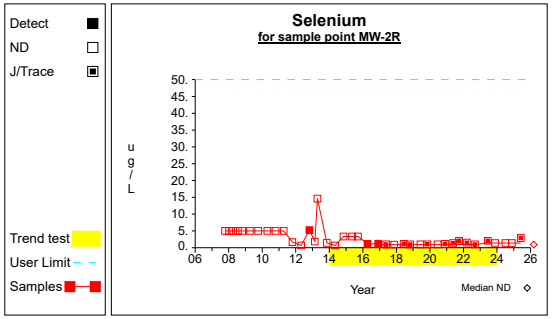


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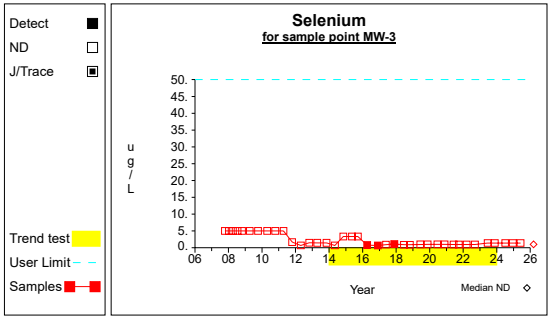
Time Series



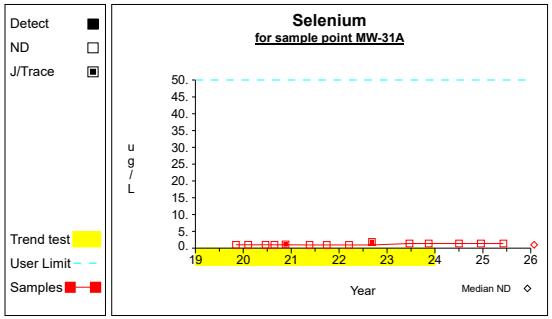
Graph 307



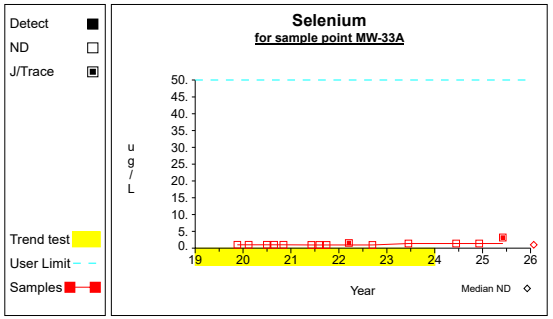
Graph 308



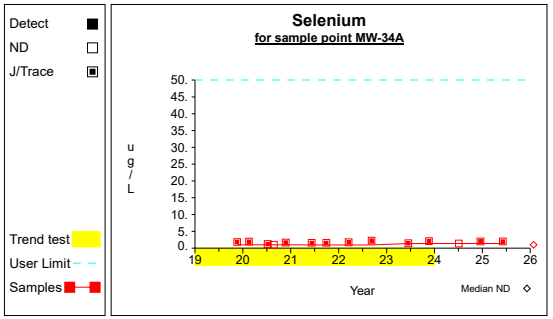
Graph 309



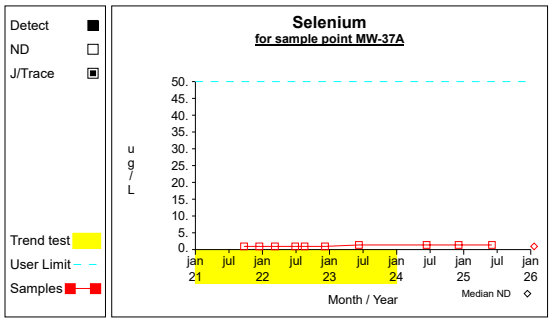
Graph 310



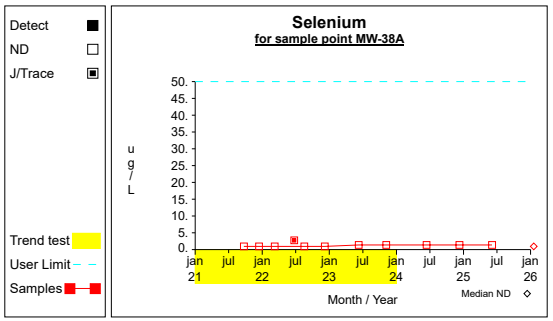
Graph 311



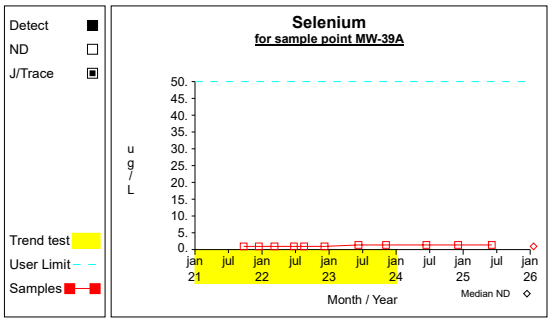
Graph 312



Graph 313

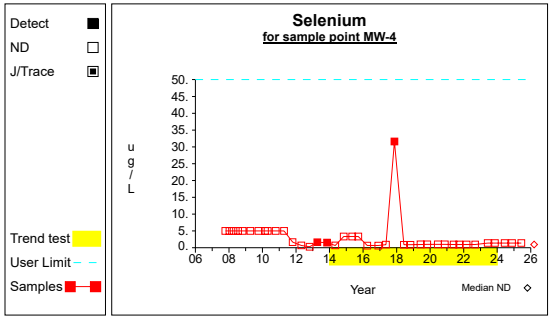


Graph 314

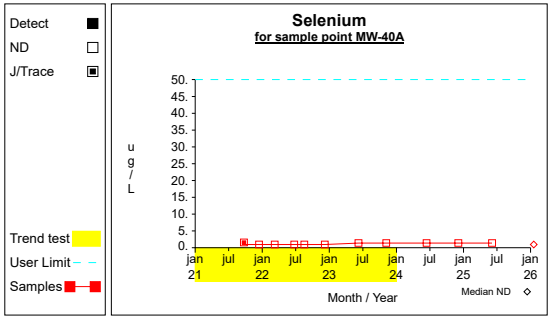


Graph 315

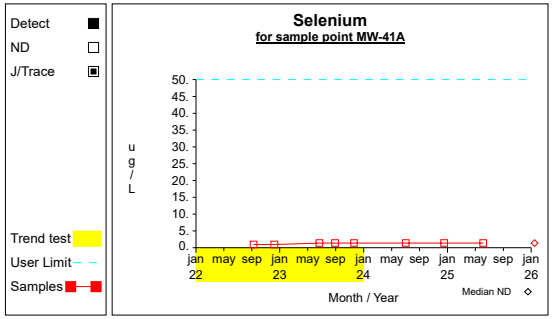
Time Series



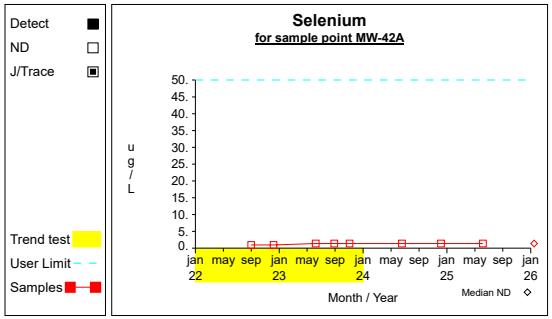
Graph 316



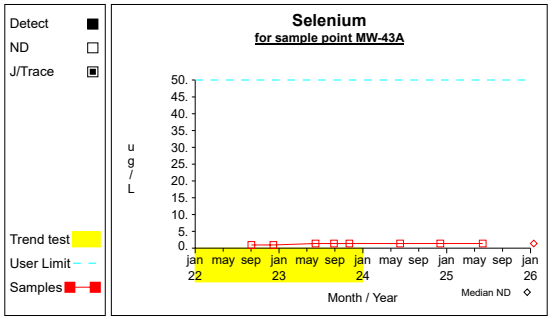
Graph 317



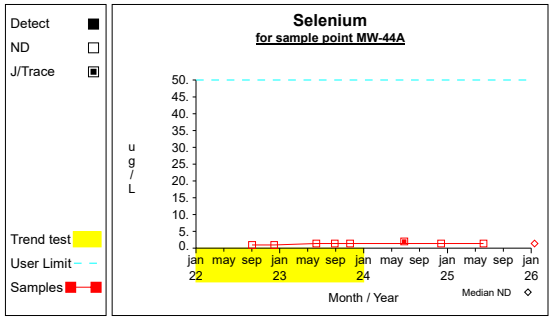
Graph 318



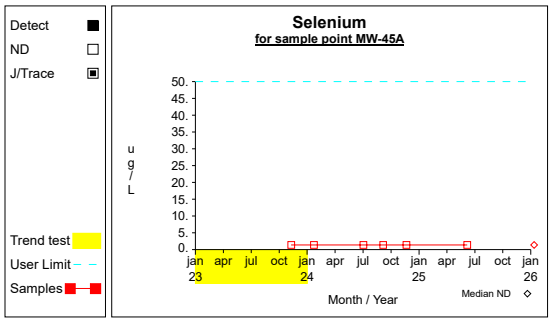
Graph 319



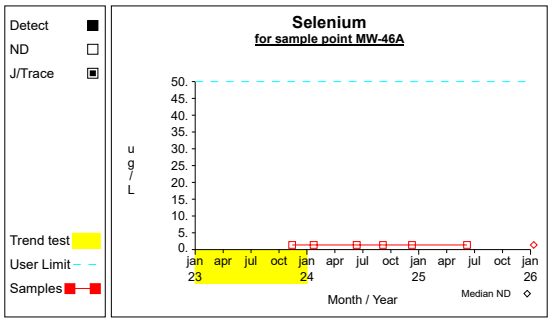
Graph 320



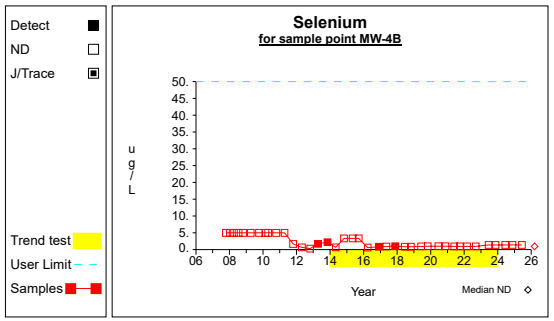
Graph 321



Graph 322

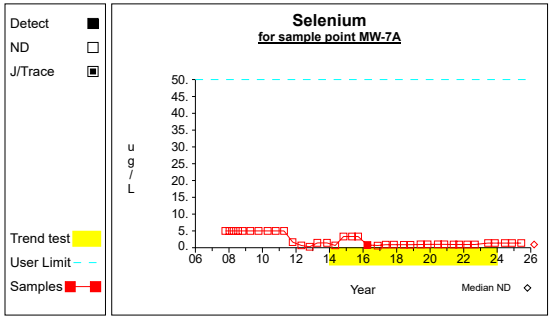


Graph 323

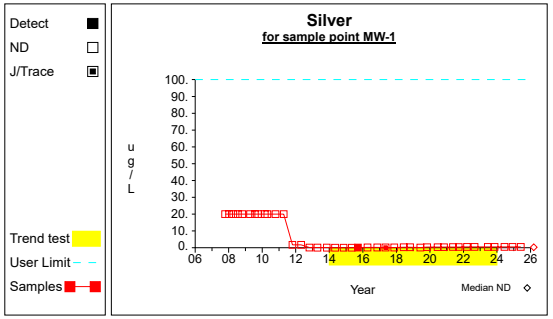


Graph 324

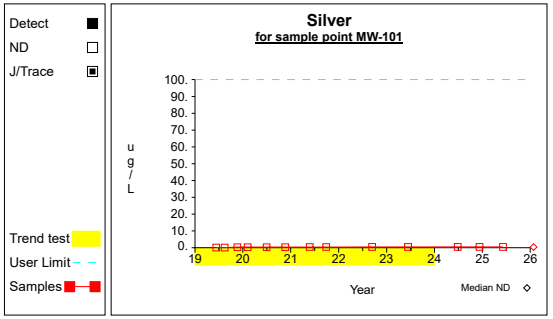
Time Series



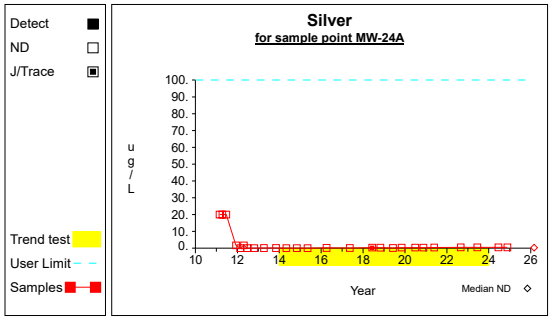
Graph 325



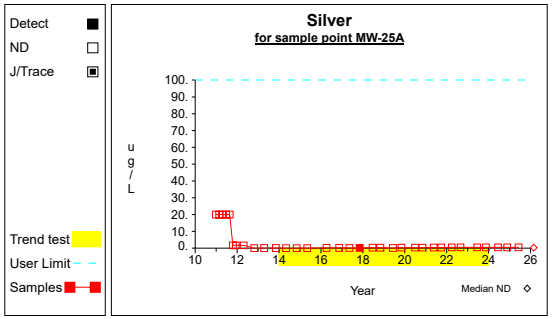
Graph 326



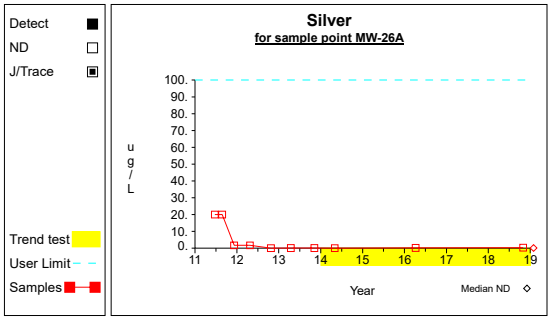
Graph 327



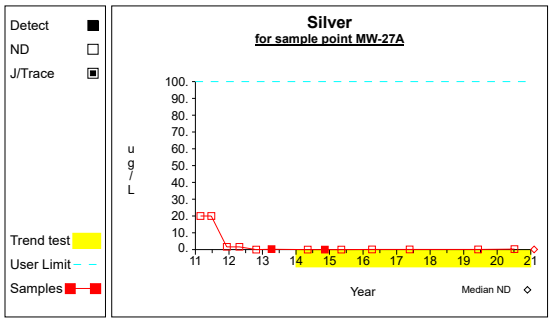
Graph 328



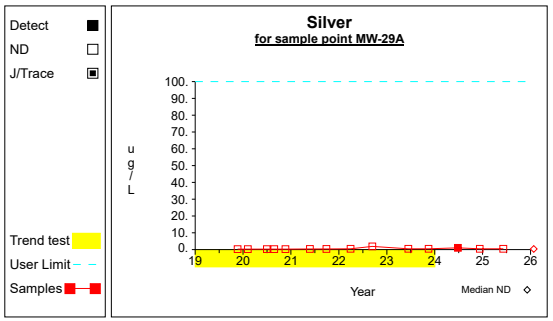
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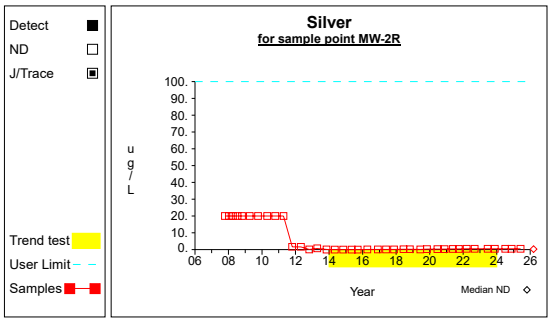
Graph 330



Graph 331

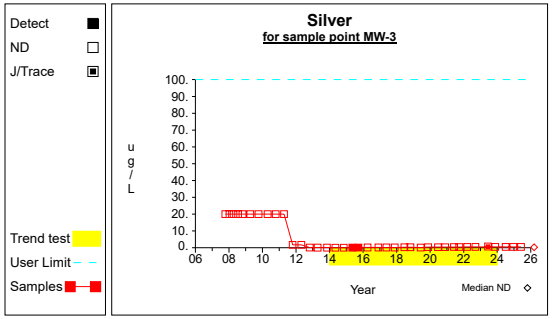


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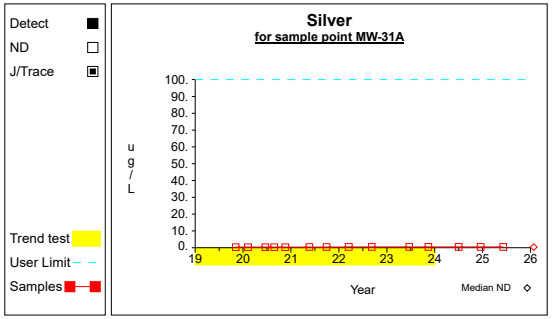


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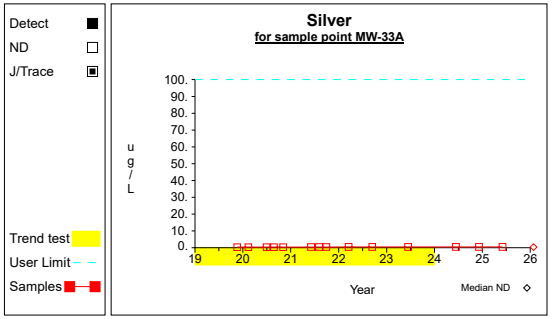
Time Series



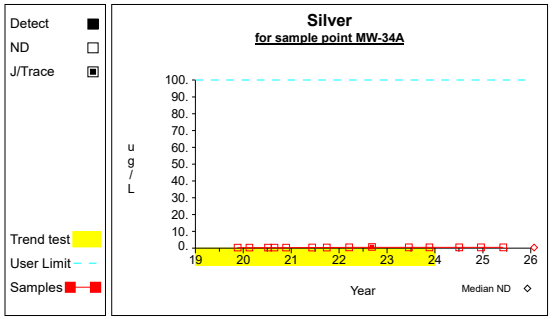
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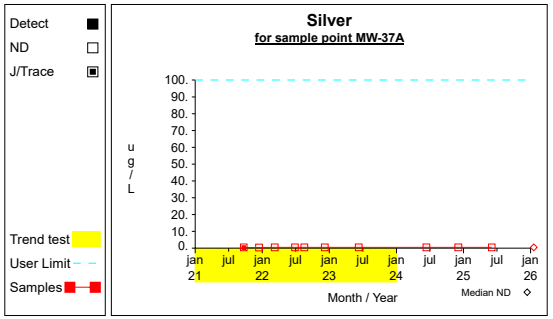
Graph 335



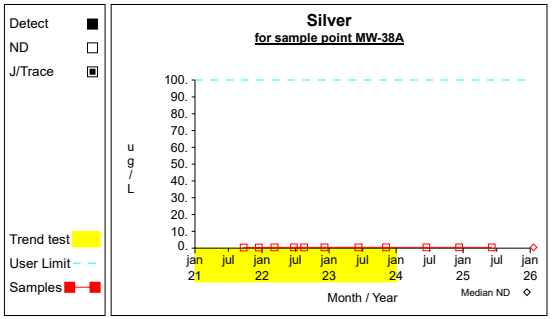
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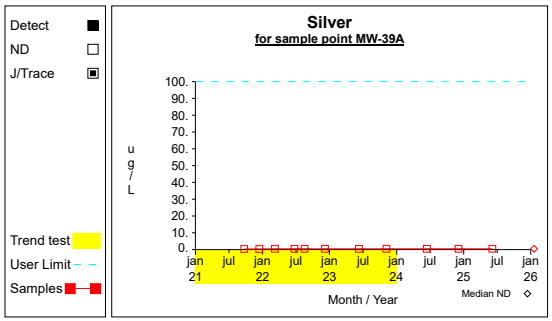
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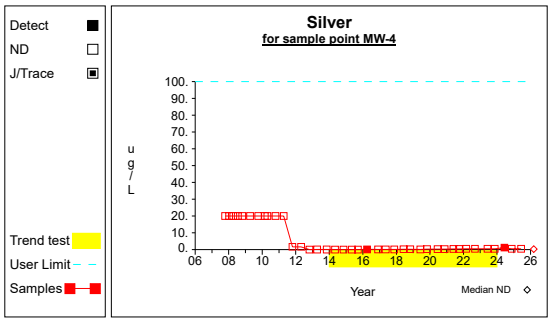
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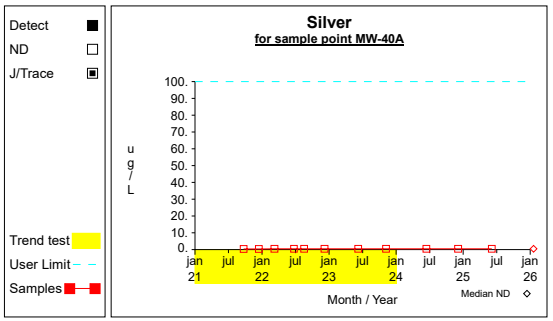
Graph 339



Graph 340

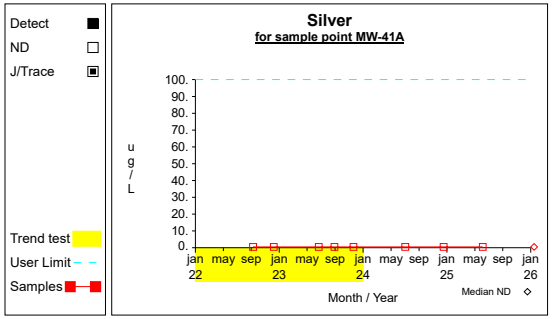


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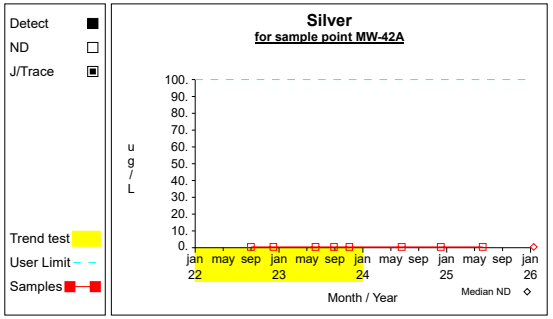


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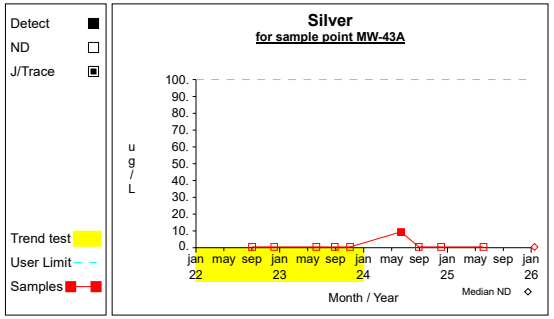
Time Series



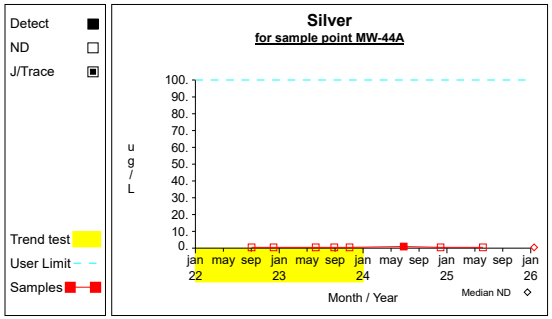
Graph 343



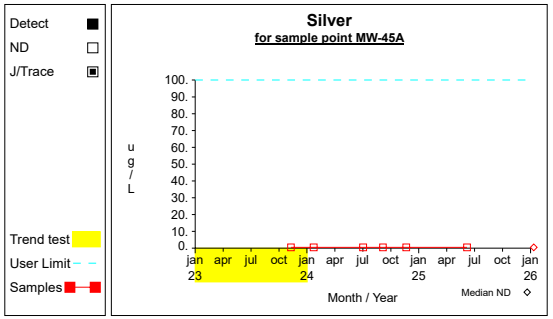
Graph 344



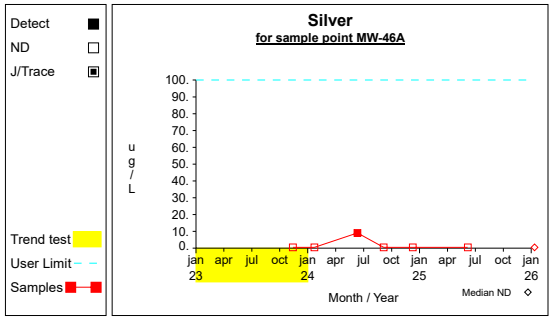
Graph 345



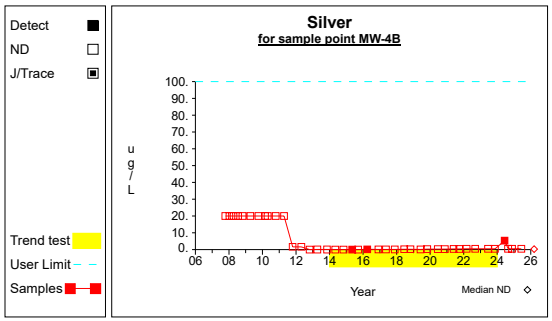
Graph 346



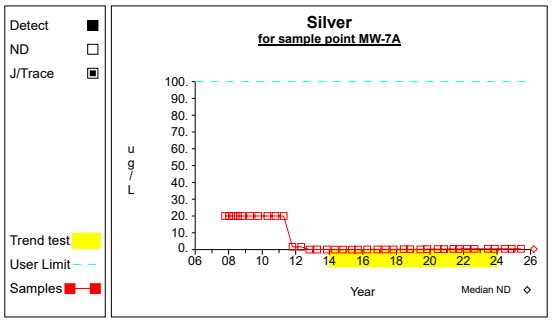
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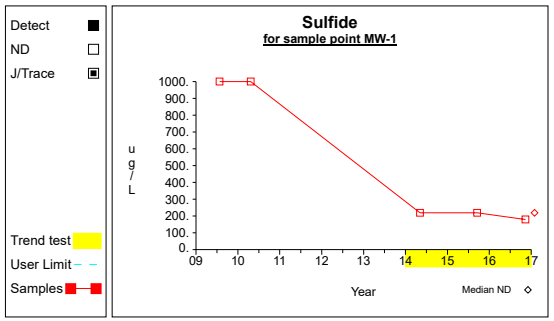
Graph 348



Graph 349

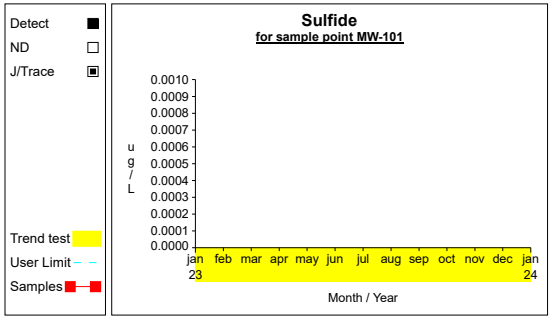


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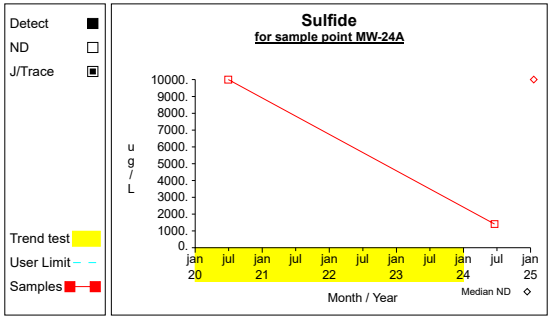


Graph 351

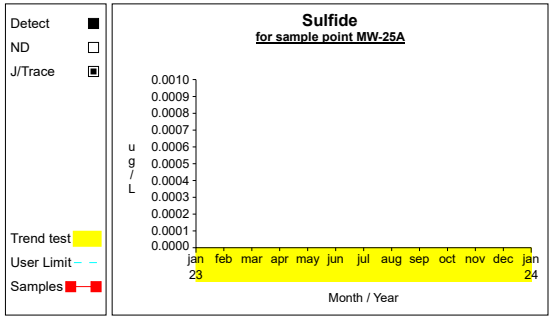
Time Series



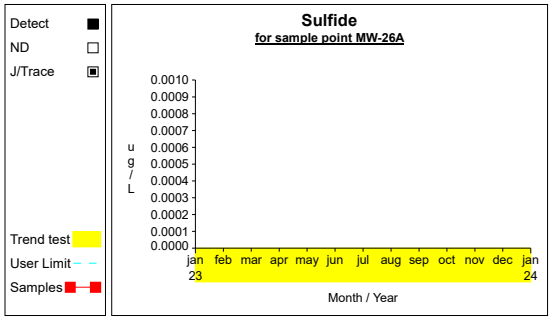
Graph 352



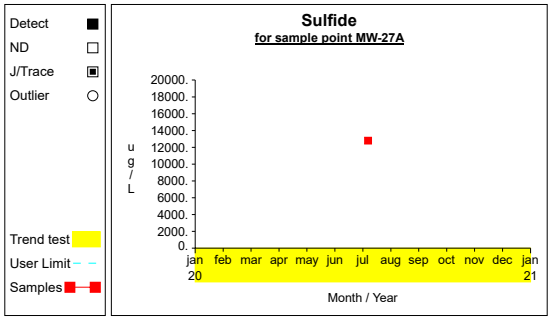
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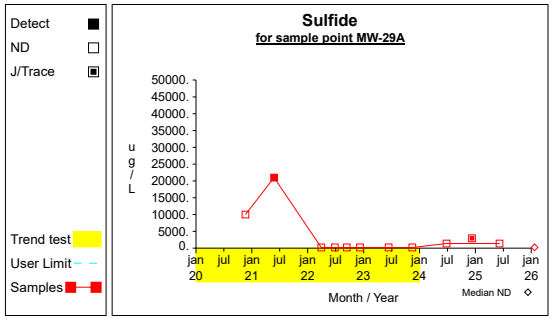
Graph 354



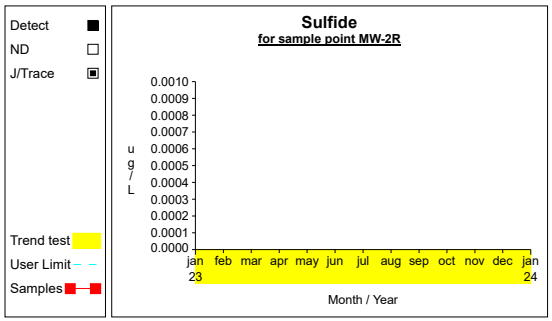
Graph 355



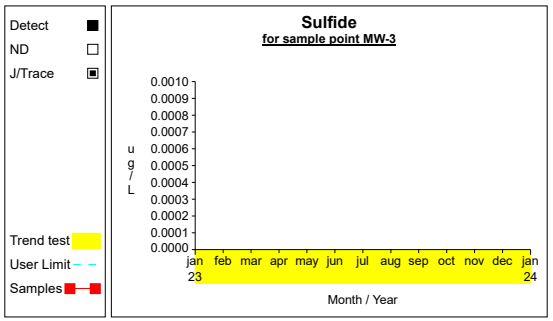
Graph 356



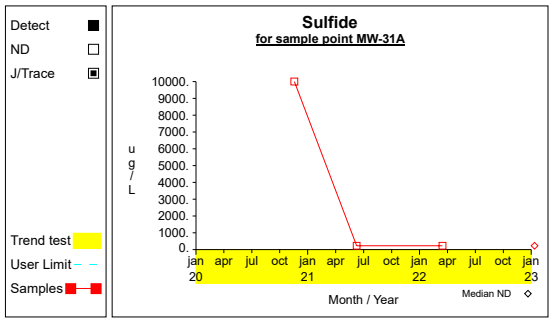
Graph 357



Graph 358

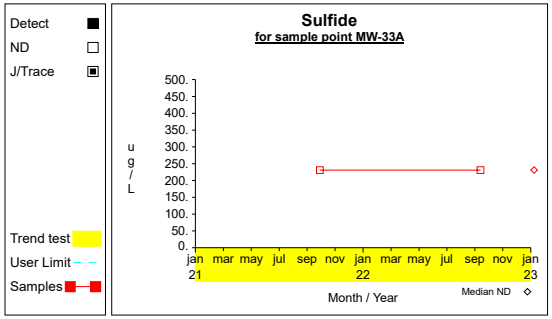


Graph 359

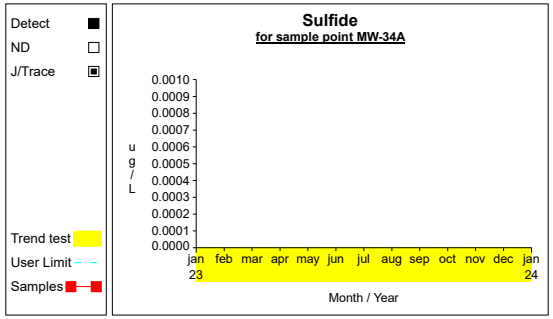


Graph 360

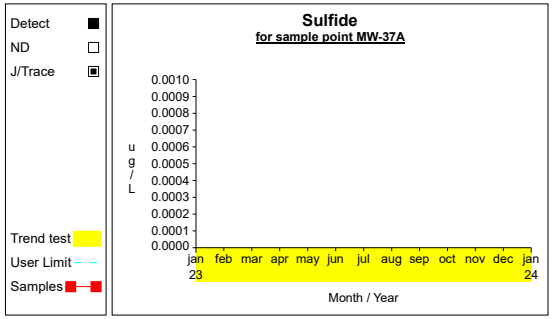
Time Series



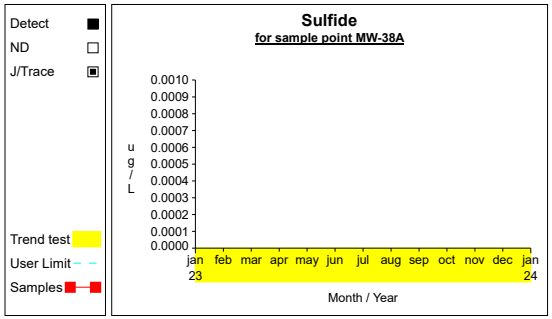
Graph 361



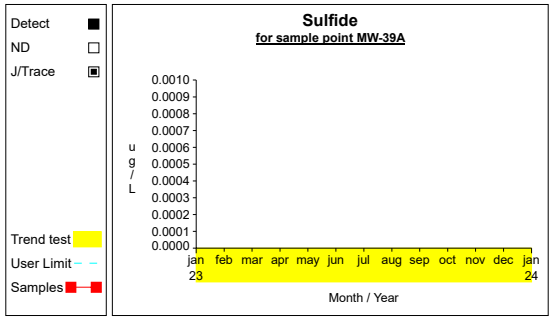
Graph 362



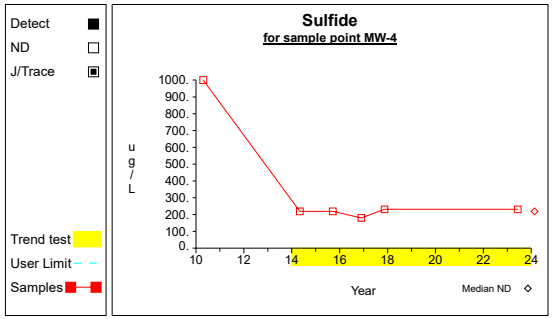
Graph 363



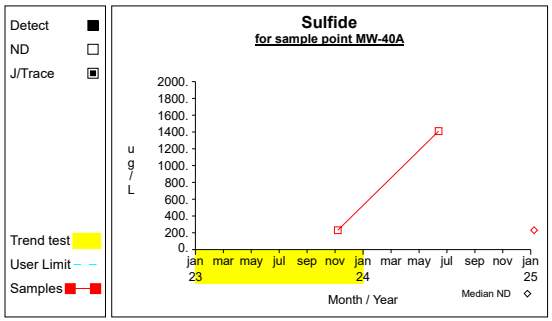
Graph 364



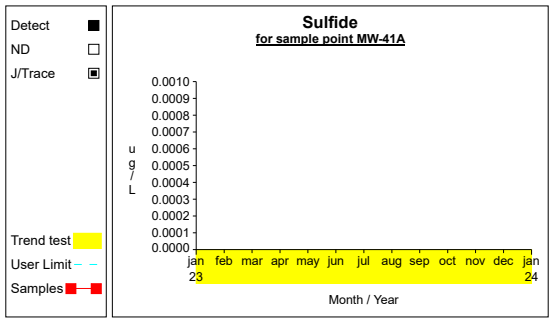
Graph 365



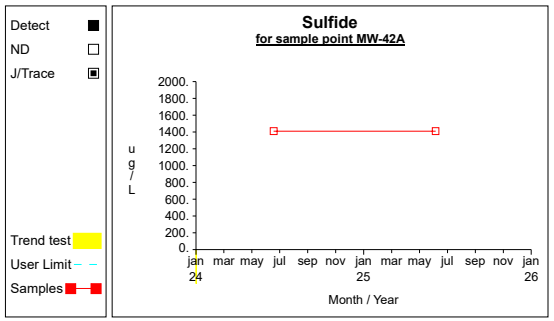
Graph 366



Graph 367

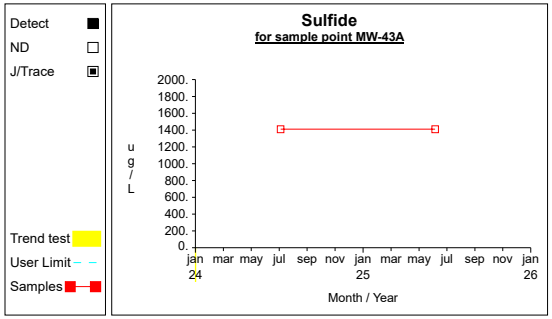


Graph 368

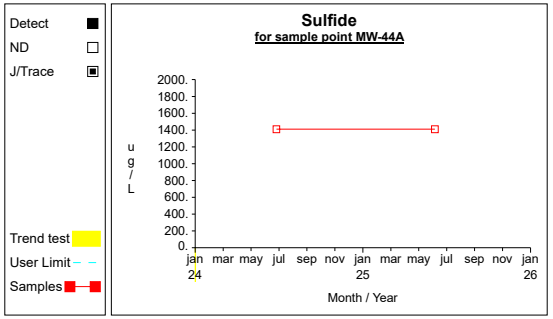


Graph 369

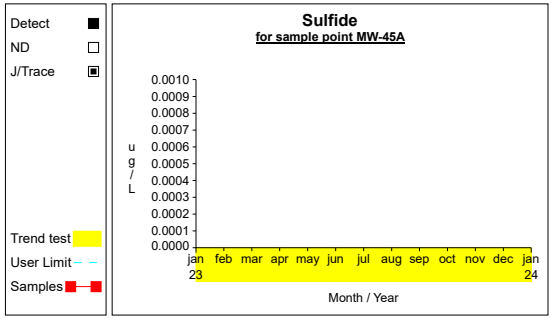
Time Series



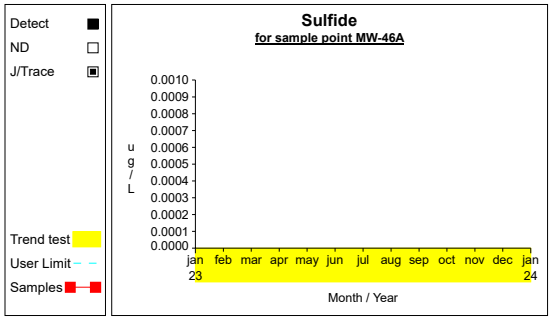
Graph 370



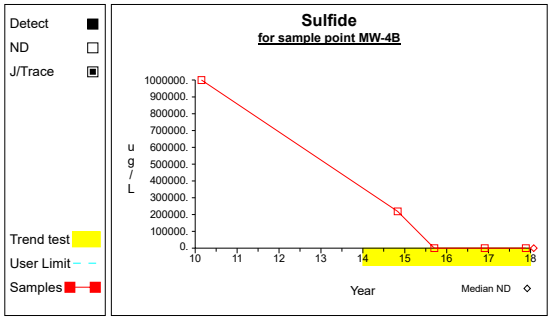
Graph 371



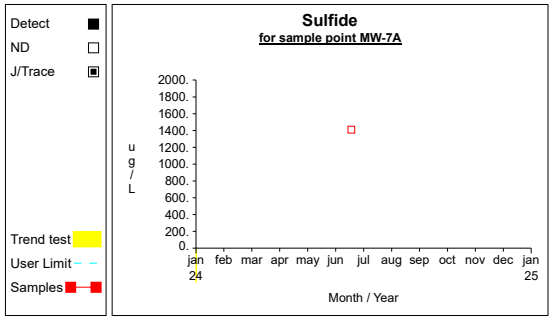
Graph 372



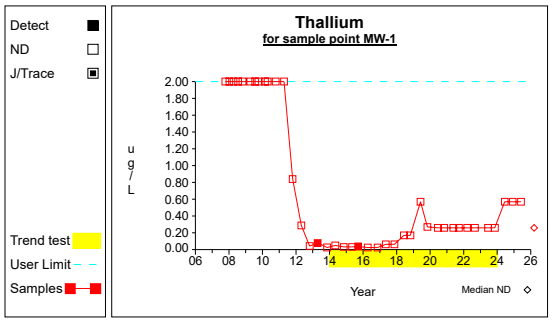
Graph 373



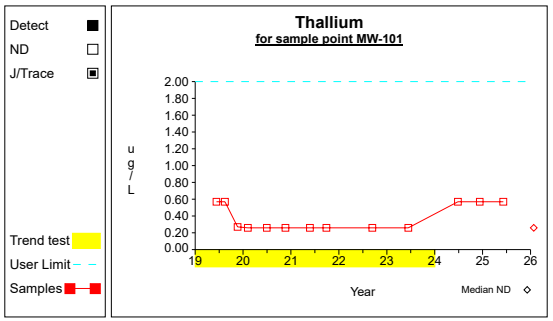
Graph 374



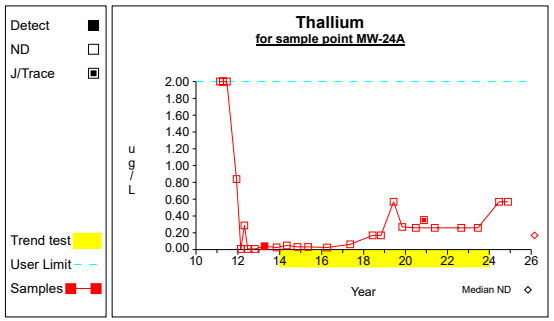
Graph 375



Graph 376

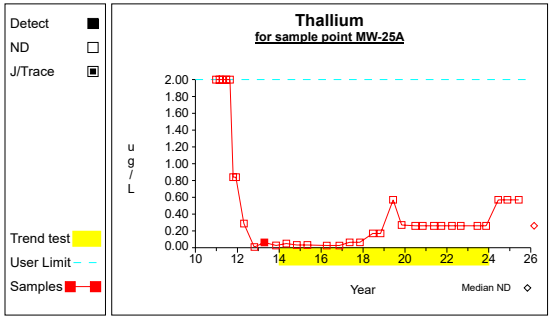


Graph 377

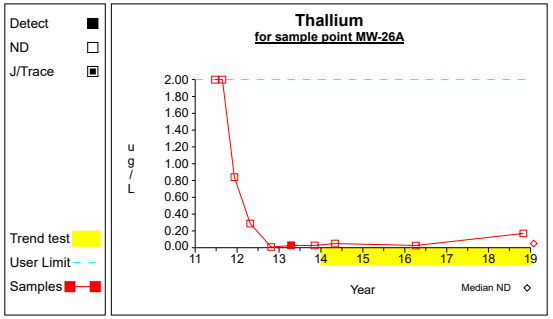


Graph 378

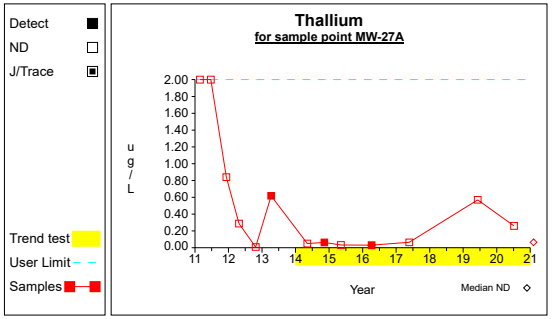
Time Series



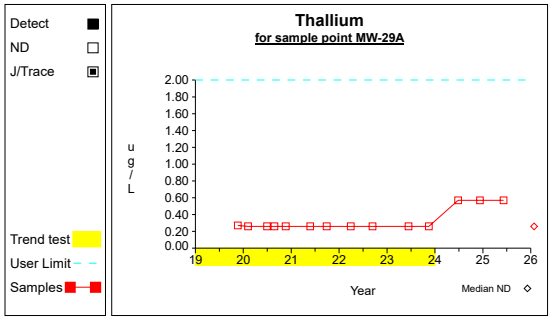
Graph 379



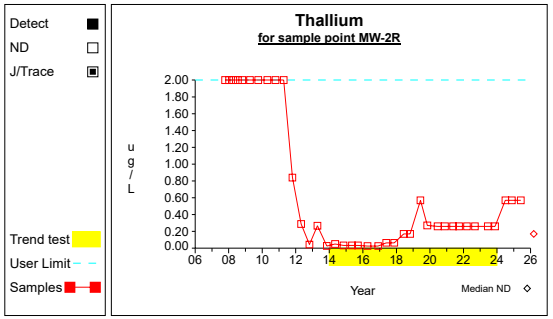
Graph 380



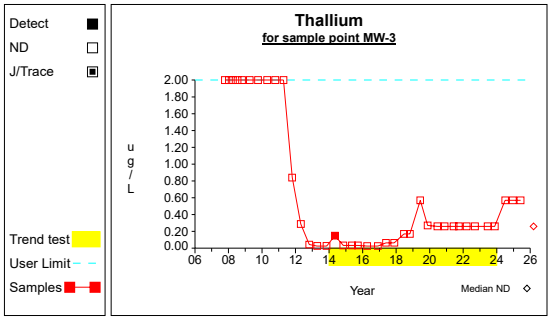
Graph 381



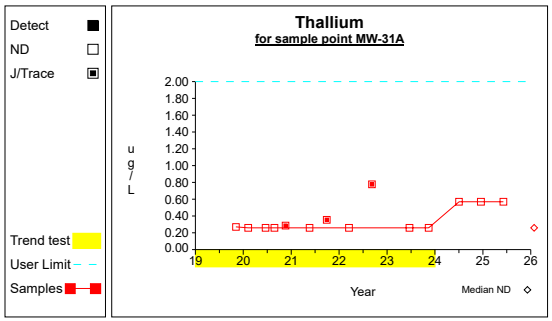
Graph 382



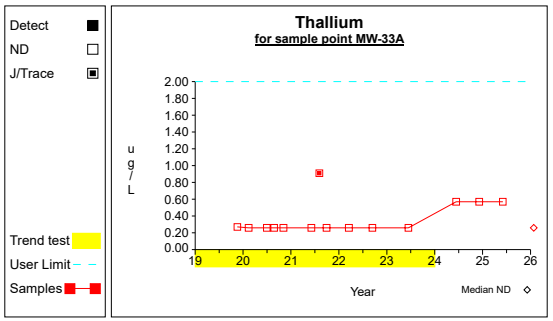
Graph 383



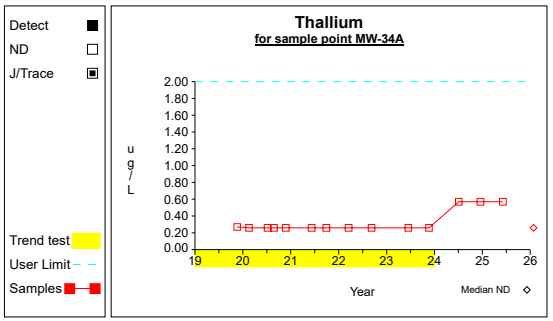
Graph 384



Graph 385

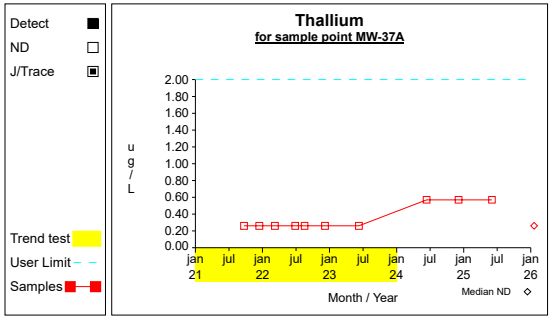


Graph 386

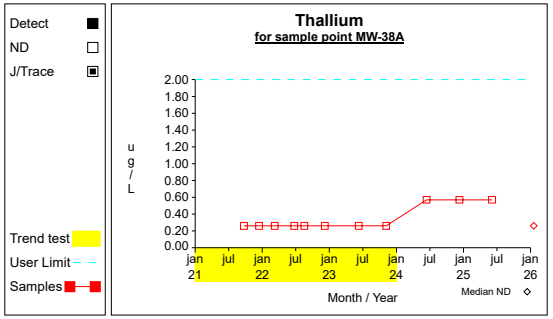


Graph 387

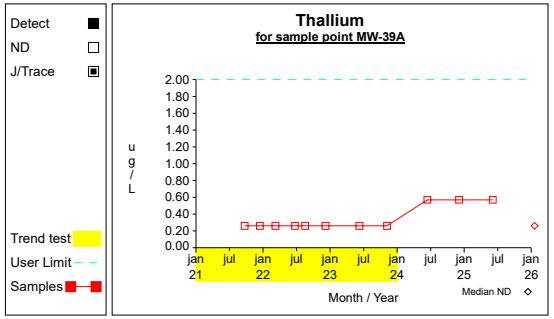
Time Series



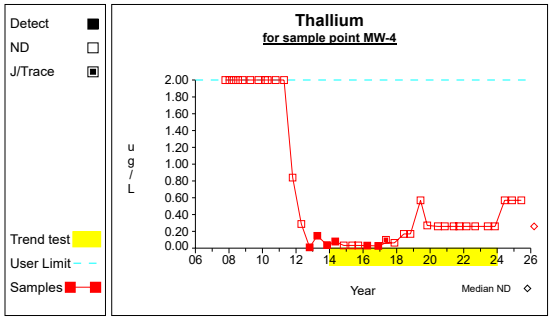
Graph 388



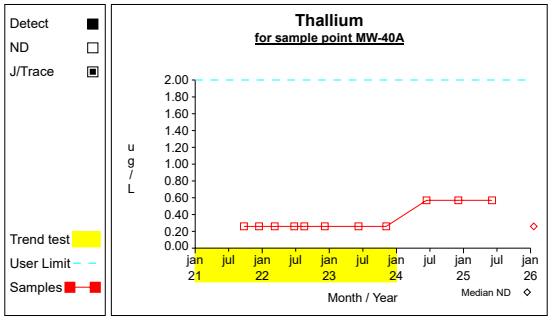
Graph 389



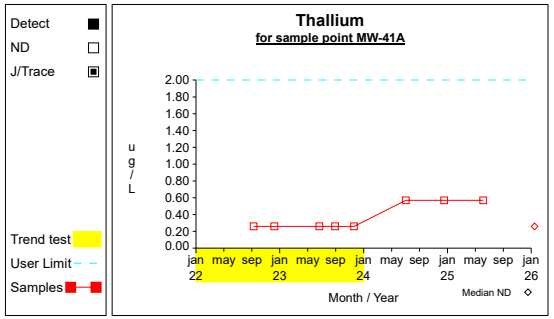
Graph 390



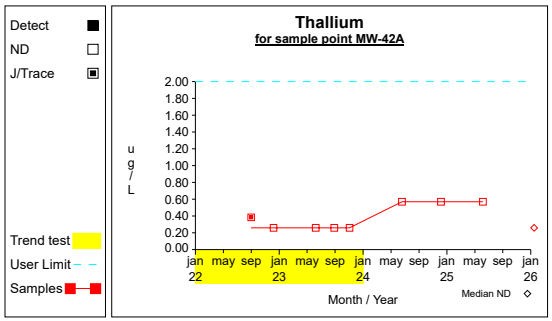
Graph 391



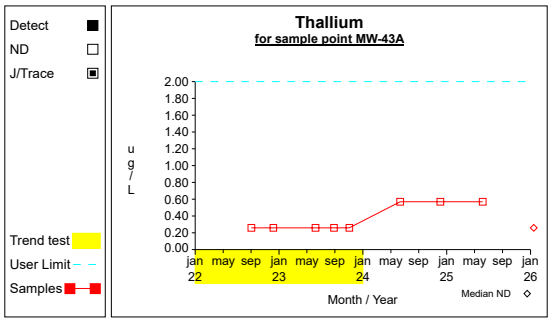
Graph 392



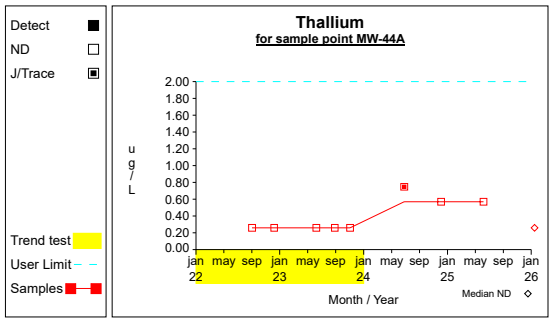
Graph 393



Graph 394

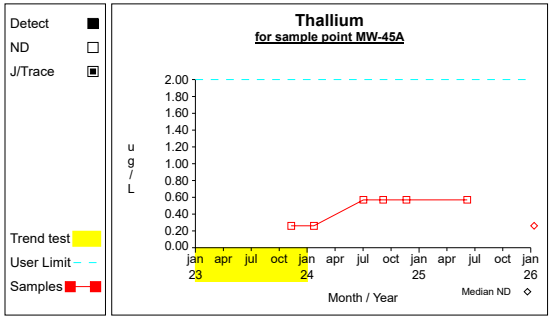


Graph 395

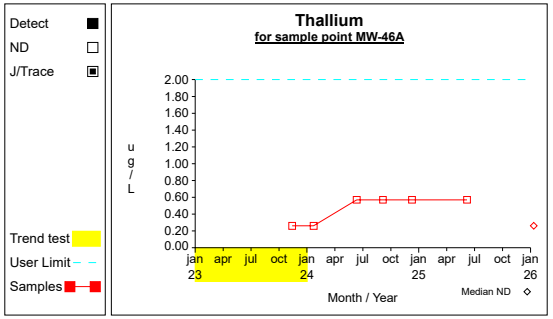


Graph 396

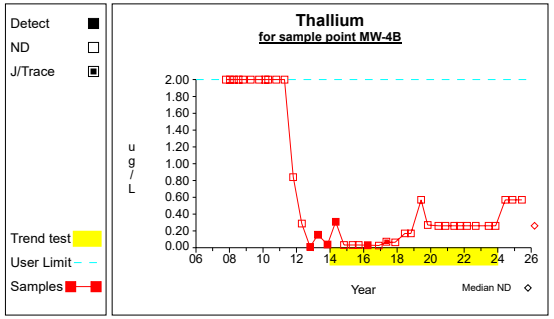
Time Series



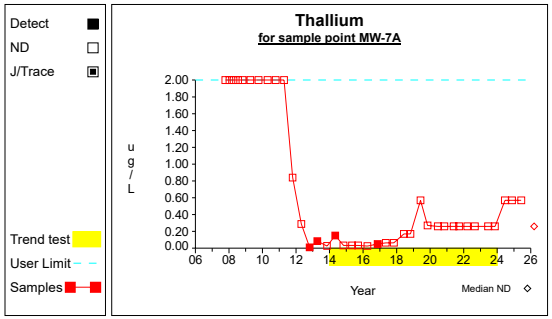
Graph 397



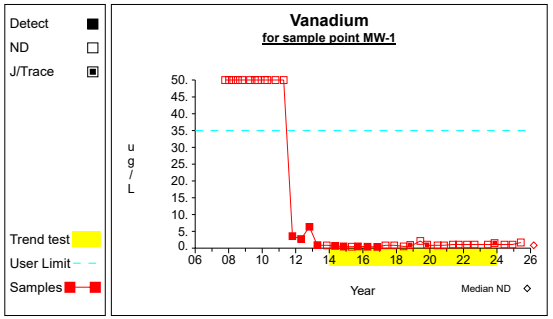
Graph 398



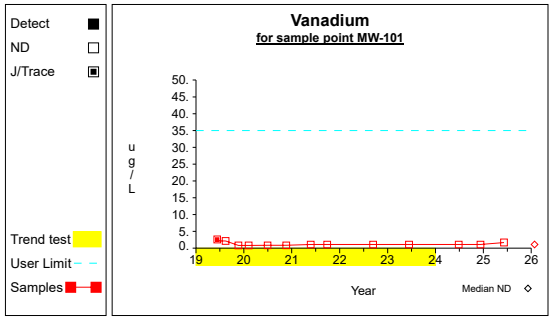
Graph 399



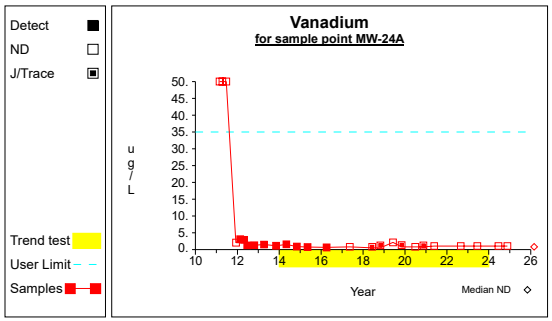
Graph 400



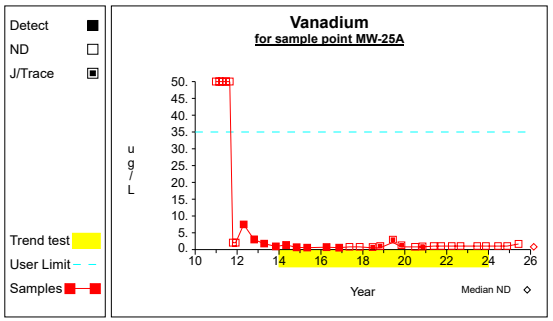
Graph 401



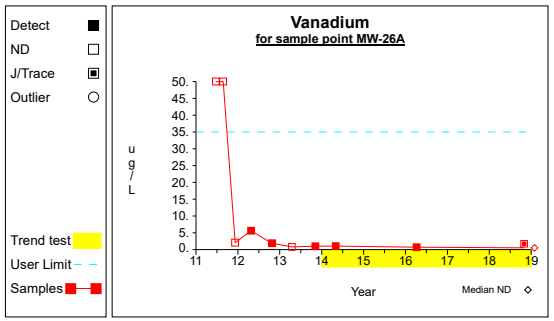
Graph 402



Graph 403

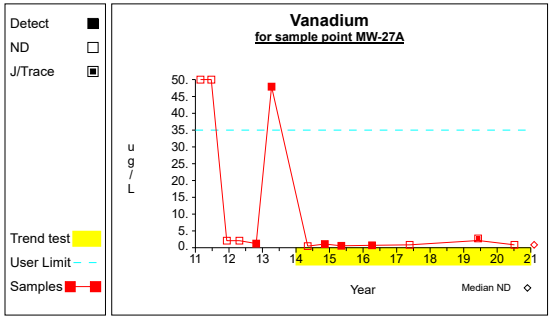


Graph 404

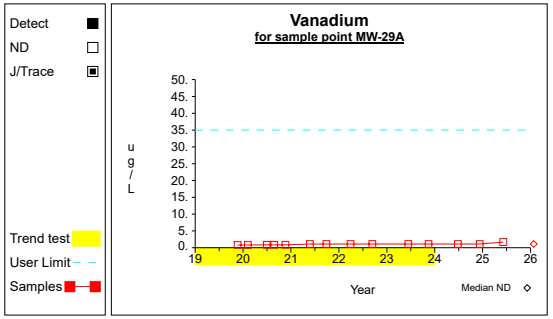


Graph 405

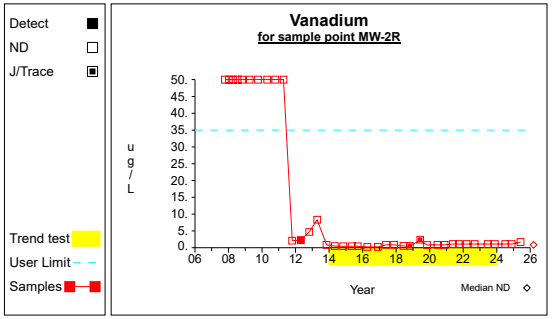
Time Series



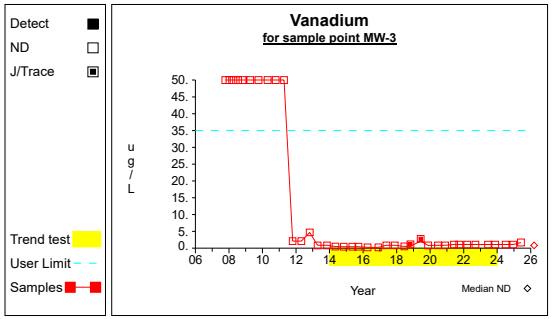
Graph 406



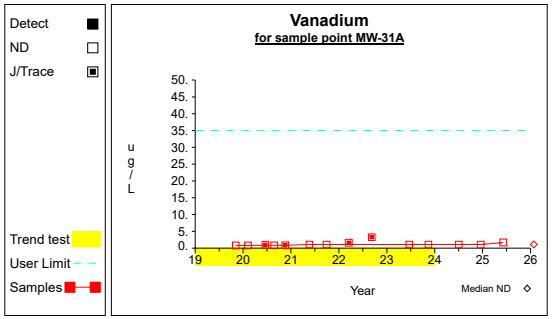
Graph 407



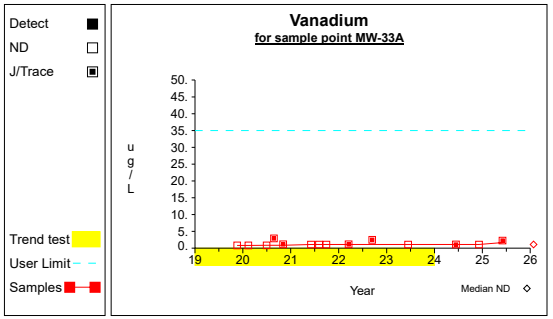
Graph 408



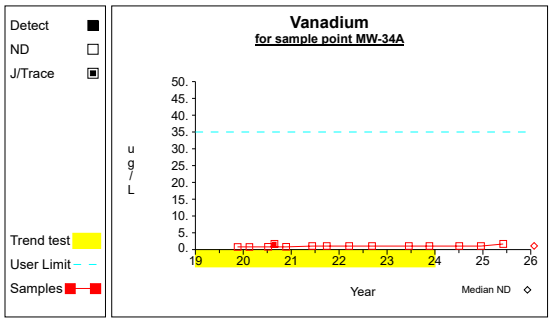
Graph 409



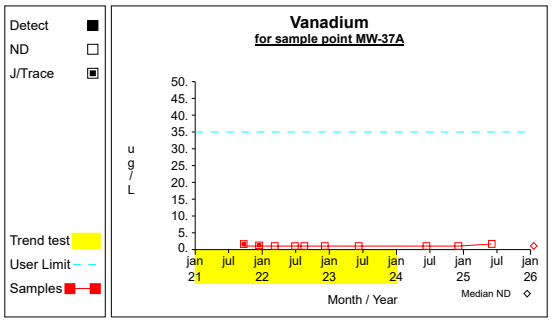
Graph 410



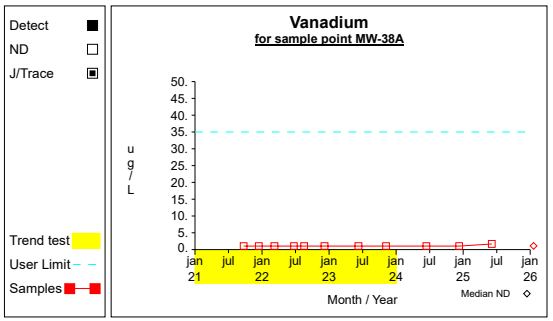
Graph 411



Graph 412

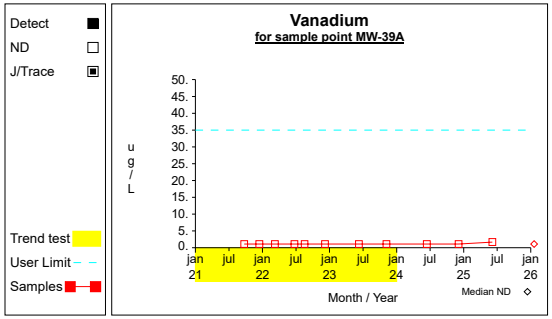


Graph 413

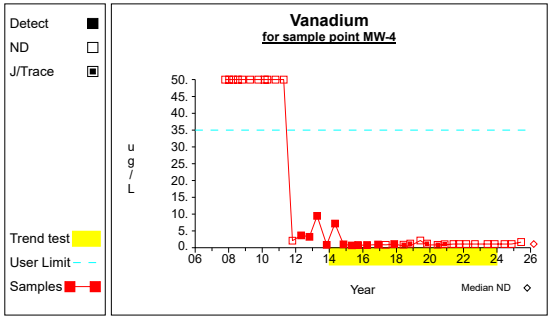


Graph 414

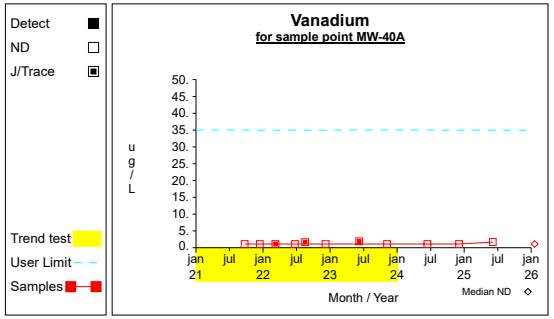
Time Series



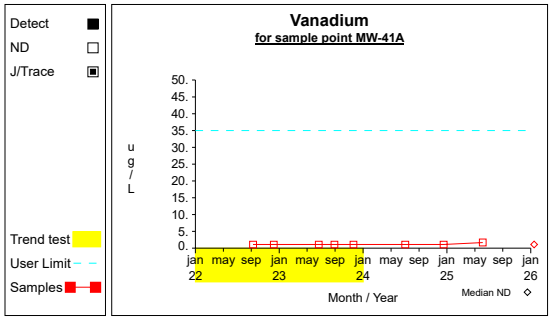
Graph 415



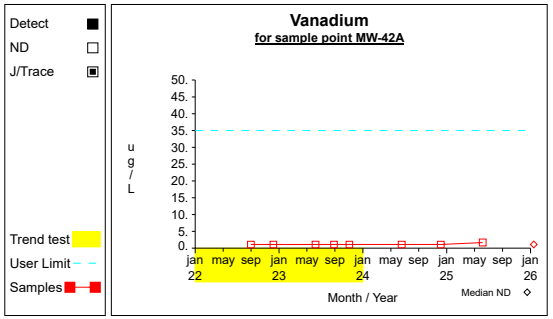
Graph 416



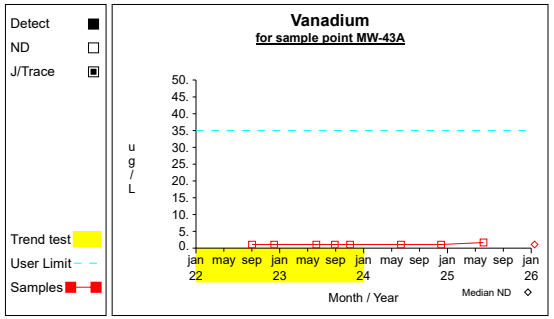
Graph 417



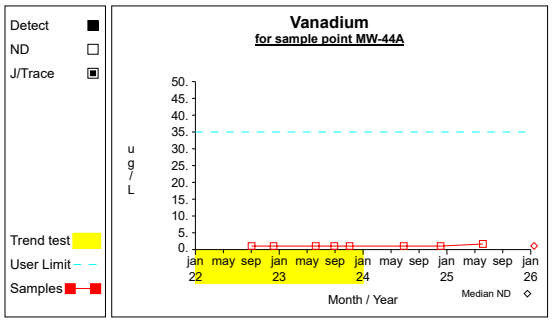
Graph 418



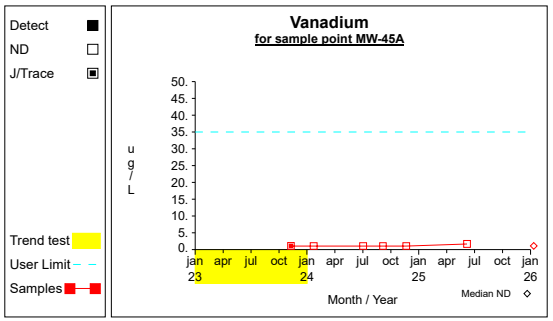
Graph 419



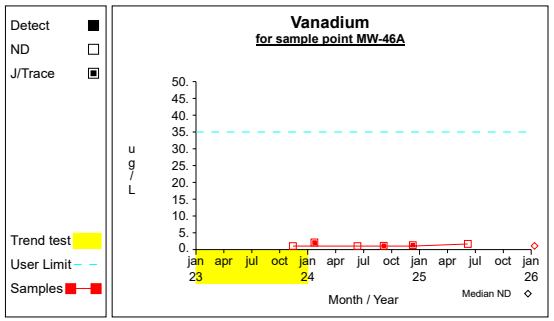
Graph 420



Graph 421

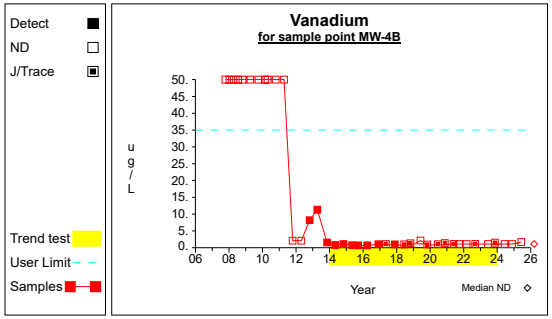


Graph 422

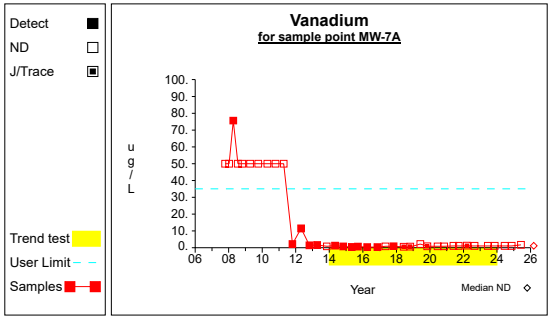


Graph 423

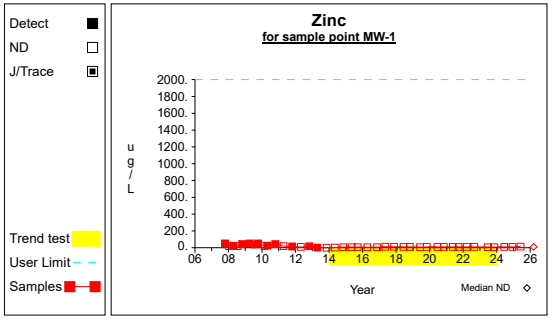
Time Series



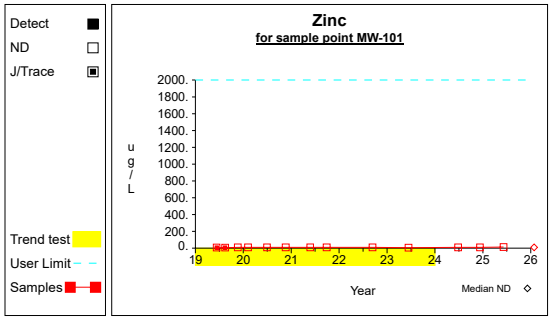
Graph 424



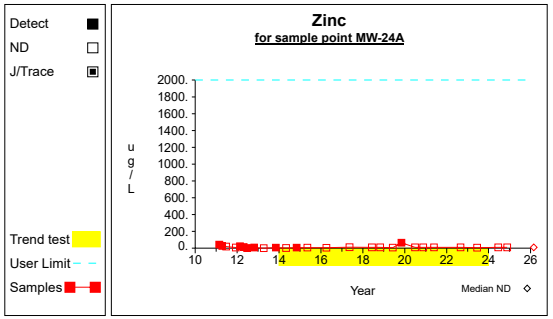
Graph 425



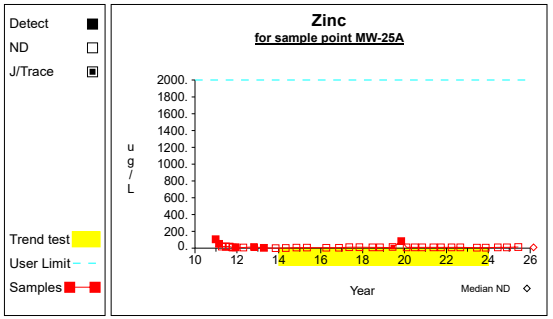
Graph 426



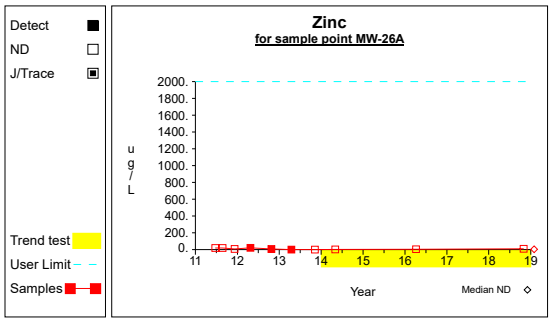
Graph 427



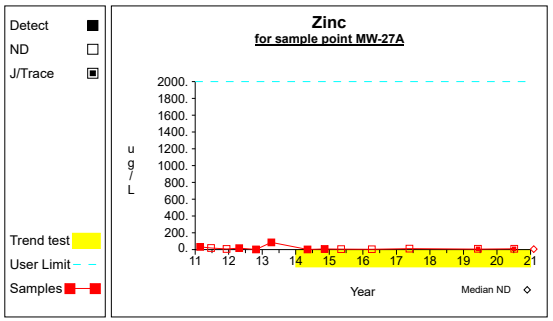
Graph 428



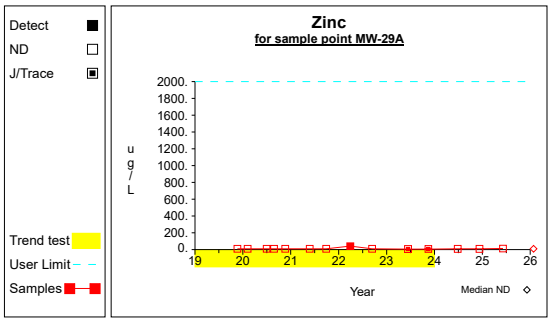
Graph 429



Graph 430

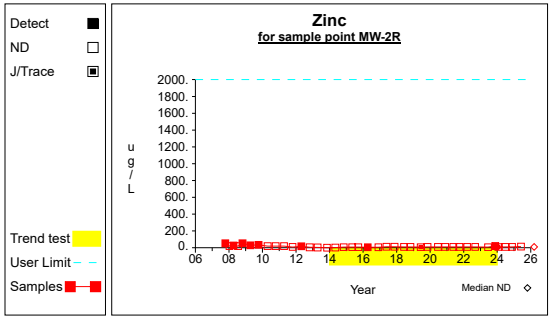


Graph 431

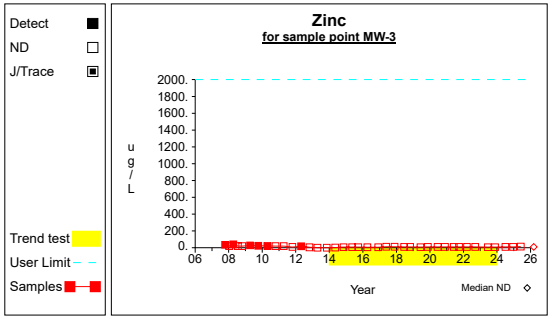


Graph 432

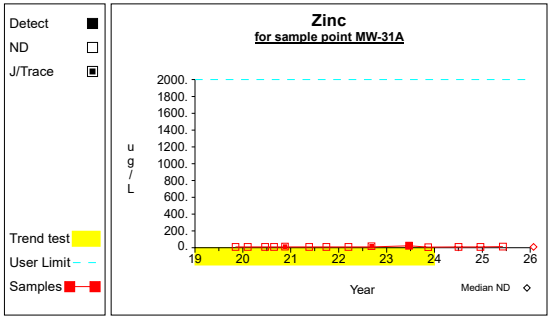
Time Series



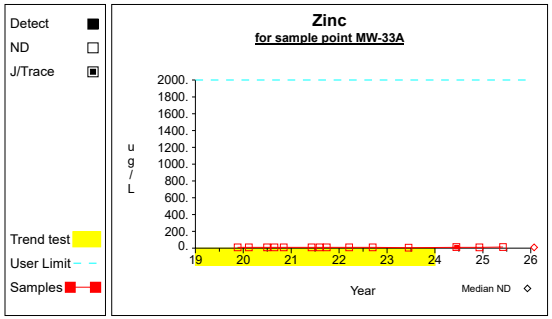
Graph 433



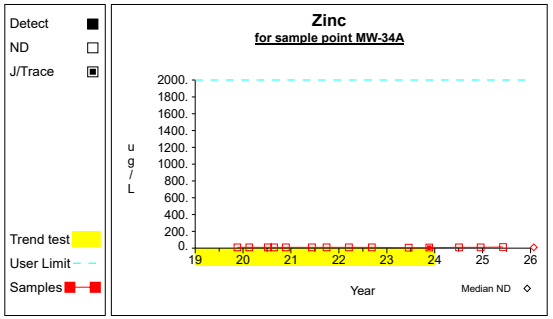
Graph 434



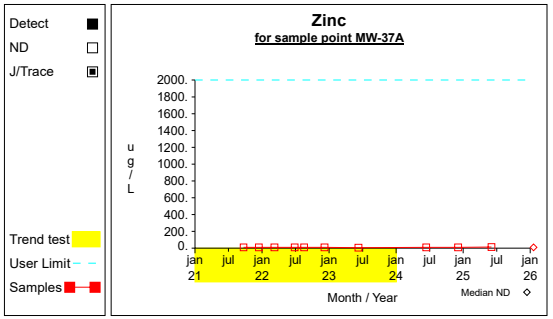
Graph 435



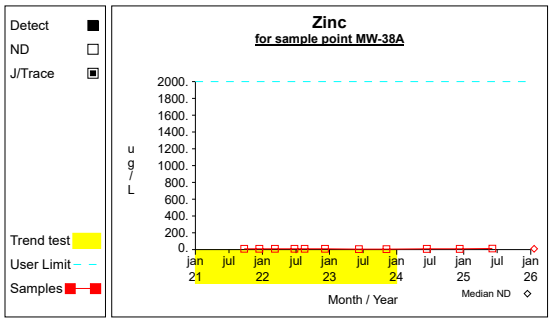
Graph 436



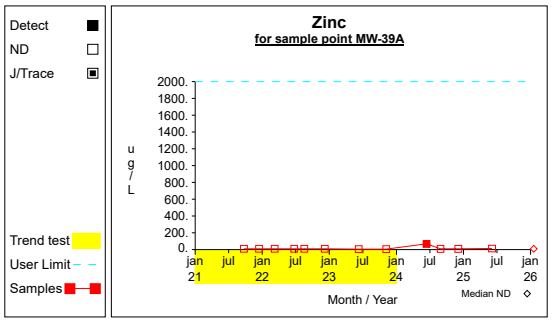
Graph 437



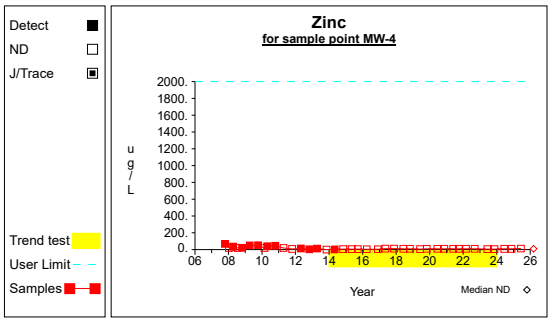
Graph 438



Graph 439

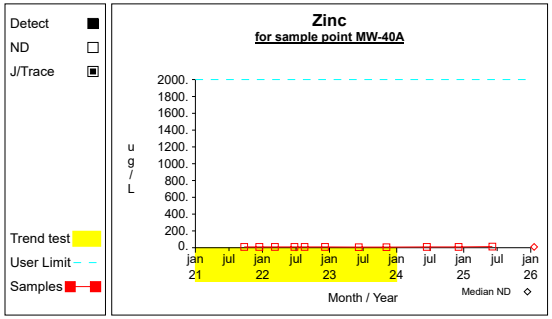


Graph 440

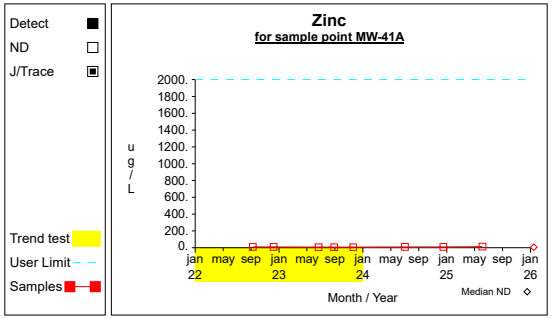


Graph 441

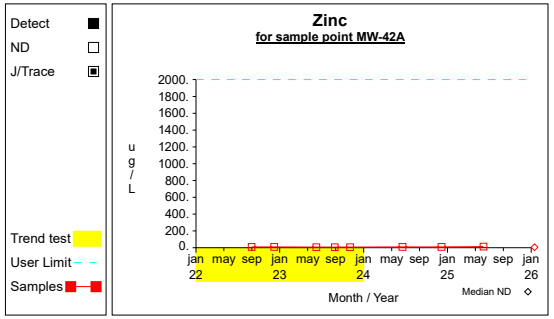
Time Series



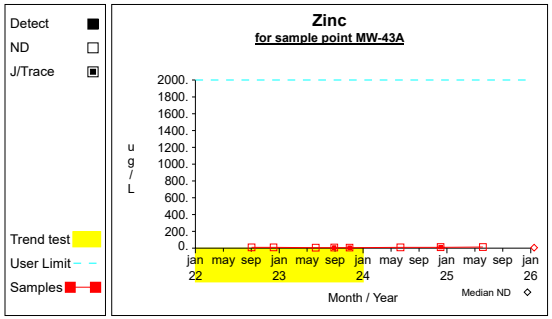
Graph 442



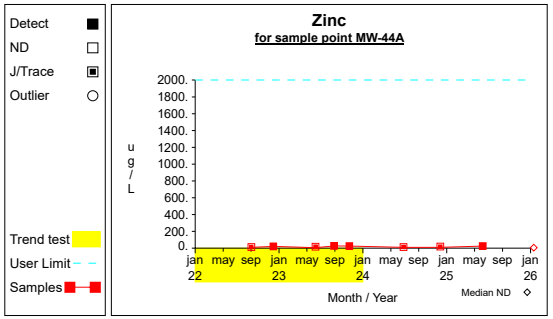
Graph 443



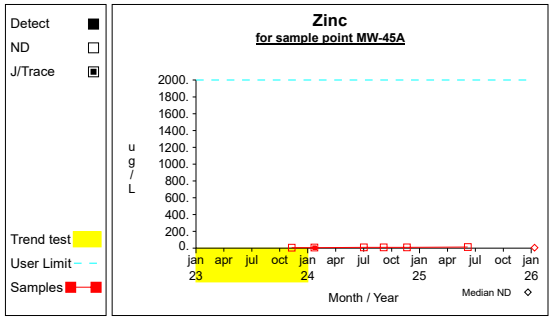
Graph 444



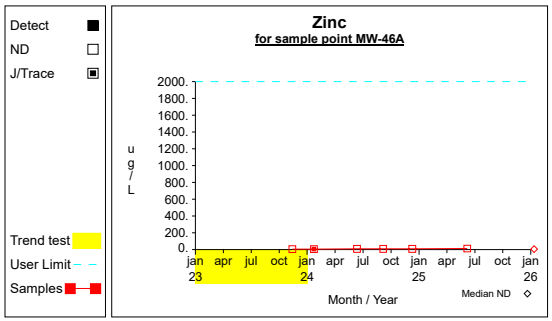
Graph 445



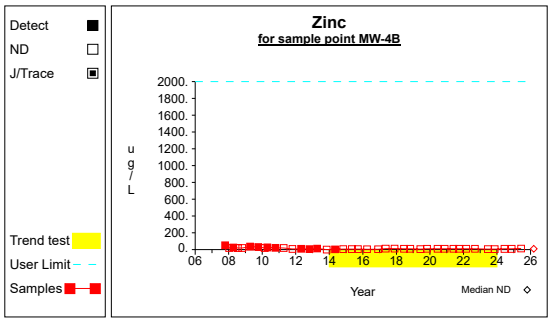
Graph 446



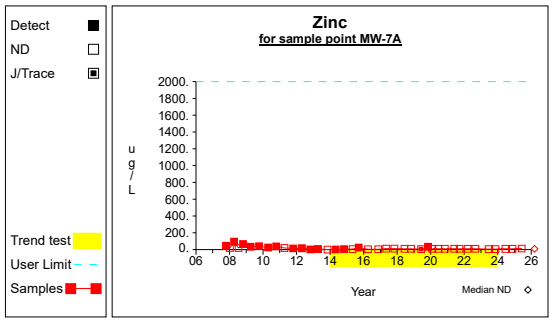
Graph 447



Graph 448



Graph 449



Graph 450

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,1,2,2-tetrachloroethane	MW-1	10/26/2012		.21	.10	ug/L
1,2-dibromo-3-chloropropane	MW-1	10/26/2012		1.17	.12	ug/L
1,2-dichlorobenzene	MW-1	10/26/2012		.480	.140	ug/L
1,2-dichlorobenzene	MW-1	4/15/2013		.185	.140	ug/L
1,2-dichloroethane	MW-1	10/26/2012		.18	.18	ug/L
1,4-dichlorobenzene	MW-1	10/26/2012		3.09	.20	ug/L
1,4-dichlorobenzene	MW-1	4/15/2013		1.52	.20	ug/L
2-butanone	MW-1	4/24/2012		.650	.470	ug/L
2-butanone	MW-1	10/26/2012		.800	.470	ug/L
2-butanone	MW-1	4/15/2013		.709	.470	ug/L
4,4'-dde	MW-1	9/16/2015		.00427	.00239	ug/L
4,4'-dde	MW-1	12/09/2015		.00671	.00233	ug/L
4,4'-ddt	MW-1	9/16/2015		.00632	.00432	ug/L
4,4'-ddt	MW-1	12/09/2015		.00947	.00422	ug/L
Acetone	MW-1	10/18/2011		2.07	1.79	ug/L
Acetone	MW-1	4/15/2013		1.94	1.79	ug/L
Acetone	MW-1	11/16/2017		1.98	1.79	ug/L
Acetonitrile	MW-1	11/11/2016		166	126	ug/L
Alpha-bhc	MW-1	9/16/2015		.00287	.00193	ug/L
Benzene	MW-1	4/01/1991		1.000	1.000	ug/L
Benzene	MW-1	10/18/2011		.170	.110	ug/L
Benzene	MW-1	10/26/2012		.650	.110	ug/L
Benzene	MW-1	4/15/2013		.287	.110	ug/L
Beta-bhc	MW-1	5/05/2014		.00594	.00511	ug/L
Bis(2-ethylhexyl)phthalate	MW-1	11/11/2016		.679	.429	ug/L
Bromomethane	MW-1	10/26/2012		.26	.22	ug/L
Carbon disulfide	MW-1	10/26/2012		.17	.15	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Chlorobenzene	MW-1	10/23/2008		1.82	1.00	ug/L
Chlorobenzene	MW-1	4/08/2009		1.33	1.00	ug/L
Chlorobenzene	MW-1	10/05/2009		1.06	1.00	ug/L
Chlorobenzene	MW-1	10/18/2011		1.63	.19	ug/L
Chlorobenzene	MW-1	4/24/2012		.43	.19	ug/L
Chlorobenzene	MW-1	10/26/2012		9.15	.19	ug/L
Chlorobenzene	MW-1	4/15/2013		4.66	.19	ug/L
Chlorobenzene	MW-1	11/07/2014		1.42	.19	ug/L
Chlorobenzene	MW-1	11/09/2023		2.89	.40	ug/L
Chlorobenzene	MW-1	1/25/2024		4.64	.40	ug/L
Chloroethane	MW-1	10/26/2012		.57	.15	ug/L
Delta-bhc	MW-1	9/16/2015		.00458	.00261	ug/L
Dichloromethane	MW-1	10/18/2011		.280	.170	ug/L
Dichloromethane	MW-1	10/26/2012		.260	.170	ug/L
Dichloromethane	MW-1	5/05/2014		.228	.170	ug/L
Dichloromethane	MW-1	11/11/2016		.925	.170	ug/L
Dichloromethane	MW-1	11/16/2017		.286	.170	ug/L
Dieldrin	MW-1	9/16/2015		.00683	.00227	ug/L
Diethyl phthalate	MW-1	5/05/2014		.361	.274	ug/L
Diethyl phthalate	MW-1	11/07/2014		1.060	.289	ug/L
Diethyl phthalate	MW-1	12/22/2014		.348	.263	ug/L
Diethyl phthalate	MW-1	9/16/2015		.453	.274	ug/L
Di-n-octyl phthalate	MW-1	5/05/2014		.255	.242	ug/L
Di-n-octyl phthalate	MW-1	5/01/2015		1.080	.235	ug/L
Di-n-octyl phthalate	MW-1	11/11/2016		1.790	.253	ug/L
Endosulfan ii	MW-1	5/05/2014		.00375	.00202	ug/L
Endosulfan ii	MW-1	11/07/2014		.00589	.00218	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
Endosulfan sulfate	MW-1	9/16/2015		.00544	.00284	ug/L
Endosulfan sulfate	MW-1	12/09/2015		.00772	.00278	ug/L
Endrin	MW-1	9/16/2015		.00247	.00216	ug/L
Gamma-bhc (lindane)	MW-1	9/16/2015		.00267	.00216	ug/L
Heptachlor	MW-1	9/16/2015		.00335	.00295	ug/L
Heptachlor	MW-1	12/09/2015		.00490	.00289	ug/L
Methoxychlor	MW-1	5/05/2014		.01710	.00223	ug/L
Methoxychlor	MW-1	12/22/2014		.00889	.00228	ug/L
Methoxychlor	MW-1	5/01/2015		.01170	.00214	ug/L
Styrene	MW-1	10/26/2012		.11	.10	ug/L
Xylenes	MW-1	10/26/2012		.32	.13	ug/L
1,2-dibromo-3-chloropropane	MW-24A	2/21/2012		.12	.12	ug/L
1,4-dichlorobenzene	MW-24A	4/08/2013		.246	.200	ug/L
2-butanone	MW-24A	12/07/2011		1.29	.47	ug/L
2-butanone	MW-24A	4/24/2012		2.96	.47	ug/L
Acetone	MW-24A	2/21/2012		1.89	1.79	ug/L
Acetone	MW-24A	4/24/2012		3.97	1.79	ug/L
Acetone	MW-24A	4/04/2016		1.94	1.79	ug/L
Bromomethane	MW-24A	2/21/2012		.30	.22	ug/L
Carbon disulfide	MW-24A	10/24/2012		.160	.150	ug/L
Carbon disulfide	MW-24A	11/03/2014		.451	.150	ug/L
Chloroethane	MW-24A	12/07/2011		.45	.15	ug/L
Dichloromethane	MW-24A	2/21/2012		.63	.17	ug/L
Toluene	MW-24A	4/08/2013		.184	.150	ug/L
2-butanone	MW-25A	10/18/2011		.97	.47	ug/L
2-butanone	MW-25A	4/24/2012		1.51	.47	ug/L
Acetone	MW-25A	4/24/2012		2.55	1.79	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Acetone	MW-25A	11/06/2017		2.39	1.79	ug/L
Benzene	MW-25A	12/07/2011		.11	.11	ug/L
Carbon disulfide	MW-25A	11/03/2014		.751	.150	ug/L
Chloroethane	MW-25A	10/18/2011		.27	.15	ug/L
Chloroethane	MW-25A	12/07/2011		.19	.15	ug/L
Dichloromethane	MW-25A	10/18/2011		.210	.170	ug/L
Dichloromethane	MW-25A	4/15/2013		.179	.170	ug/L
Dichloromethane	MW-25A	11/15/2016		.608	.170	ug/L
Dichloromethane	MW-25A	11/06/2017		.494	.170	ug/L
Toluene	MW-25A	11/15/2023		2.86	.43	ug/L
Tribromomethane	MW-25A	4/15/2013		.215	.140	ug/L
Acetone	MW-2R	11/30/2016		2.01	1.79	ug/L
Bromomethane	MW-2R	5/07/2015		.313	.220	ug/L
Bromomethane	MW-2R	11/30/2016		.404	.220	ug/L
Carbon disulfide	MW-2R	11/04/2014		1.97	.15	ug/L
Dichloromethane	MW-2R	10/26/2012		.250	.170	ug/L
Dichloromethane	MW-2R	11/06/2013		.361	.170	ug/L
Dichloromethane	MW-2R	11/30/2016		1.050	.170	ug/L
Dichloromethane	MW-2R	11/17/2017		.293	.170	ug/L
Toluene	MW-2R	11/20/2023		1.42	.43	ug/L
Acetone	MW-3	11/30/2016		2.41	1.79	ug/L
Benzene	MW-3	11/06/2014		.613	.110	ug/L
Bromomethane	MW-3	11/30/2016		.487	.220	ug/L
Bromomethane	MW-3	11/21/2017		.676	.220	ug/L
Carbon disulfide	MW-3	11/06/2014		1.08	.15	ug/L
Chloromethane	MW-3	11/30/2016		.366	.310	ug/L
Dichloromethane	MW-3	4/24/2012		.380	.170	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
Dichloromethane	MW-3	10/26/2012		.380	.170	ug/L
Dichloromethane	MW-3	11/06/2013		.352	.170	ug/L
Dichloromethane	MW-3	11/30/2016		.803	.170	ug/L
Toluene	MW-3	11/06/2014		.58	.15	ug/L
Toluene	MW-3	11/20/2023		1.20	.43	ug/L
1,1-dichloroethane	MW-31A	11/05/2019		1.26	.22	ug/L
1,1-dichloroethane	MW-31A	8/26/2020		1.40	.22	ug/L
1,1-dichloroethane	MW-31A	6/20/2023		1.23	.22	ug/L
Acetone	MW-31A	6/18/2020		11.8	3.1	ug/L
Endosulfan i	MW-31A	11/18/2020		.05310	.00244	ug/L
Endosulfan i	MW-31A	9/29/2021		.05800	.01200	ug/L
2-butanone	MW-33A	6/02/2025		10.6	2.1	ug/L
Acetone	MW-33A	6/12/2024		37.7	3.1	ug/L
Acetone	MW-33A	6/02/2025		240.0	3.1	ug/L
Benzene	MW-33A	11/03/2020		.614	.220	ug/L
Benzene	MW-33A	12/05/2024		2.450	.220	ug/L
Chlorobenzene	MW-33A	11/03/2020		1.27	.40	ug/L
Chlorobenzene	MW-33A	12/05/2024		2.37	.40	ug/L
Chloroethane	MW-34A	2/17/2020		4.44	.79	ug/L
Acetone	MW-37A	6/12/2024		18.1	3.1	ug/L
Benzene	MW-37A	12/03/2024		6.01	.22	ug/L
1,1,1-trichloroethane	MW-4	9/05/1990		1.0	1.0	ug/L
1,1,1-trichloroethane	MW-4	11/19/1990		4.8	1.0	ug/L
1,1,1-trichloroethane	MW-4	6/18/1991		4.0	1.0	ug/L
1,1,1-trichloroethane	MW-4	10/03/1991		7.1	1.0	ug/L
1,1,1-trichloroethane	MW-4	1/22/1992		5.5	1.0	ug/L
1,1,1-trichloroethane	MW-4	4/27/1992		5.6	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,1,1-trichloroethane	MW-4	10/16/1992		3.2	1.0	ug/L
1,1,1-trichloroethane	MW-4	1/05/1993		13.7	1.0	ug/L
1,1,1-trichloroethane	MW-4	4/21/1994		1.8	1.0	ug/L
1,1,1-trichloroethane	MW-4	1/25/1995		1.1	1.0	ug/L
1,1,1-trichloroethane	MW-4	10/27/1995		1.5	1.0	ug/L
1,1,1-trichloroethane	MW-4	1/01/1996		1.2	1.0	ug/L
1,1-dichloroethane	MW-4	10/13/2007		2.940	1.000	ug/L
1,1-dichloroethane	MW-4	1/09/2008		2.240	1.000	ug/L
1,1-dichloroethane	MW-4	4/08/2008		1.500	1.000	ug/L
1,1-dichloroethane	MW-4	7/16/2008		1.180	1.000	ug/L
1,1-dichloroethane	MW-4	2/25/2010		1.670	1.000	ug/L
1,1-dichloroethane	MW-4	4/21/2010		1.010	1.000	ug/L
1,1-dichloroethane	MW-4	10/18/2011		.580	.210	ug/L
1,1-dichloroethane	MW-4	4/24/2012		.560	.210	ug/L
1,1-dichloroethane	MW-4	10/24/2012		.340	.210	ug/L
1,1-dichloroethane	MW-4	4/08/2013		.812	.210	ug/L
1,1-dichloroethane	MW-4	3/31/2016		.320	.210	ug/L
1,1-dichloroethylene	MW-4	9/05/1990		1.0	1.0	ug/L
1,1-dichloroethylene	MW-4	10/03/1991		1.2	1.0	ug/L
1,1-dichloroethylene	MW-4	4/27/1992		1.3	1.0	ug/L
1,1-dichloroethylene	MW-4	10/16/1992		1.2	1.0	ug/L
1,1-dichloroethylene	MW-4	10/05/1993		51.2	1.0	ug/L
1,1-dichloroethylene	MW-4	4/21/1994		1.0	1.0	ug/L
1,2-dichlorobenzene	MW-4	4/08/2013		.38	.14	ug/L
1,2-dichloroethane	MW-4	9/05/1990		1.000	1.000	ug/L
1,2-dichloroethane	MW-4	11/19/1990		1.500	1.000	ug/L
1,2-dichloroethane	MW-4	4/25/1991		1.700	1.000	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,2-dichloroethane	MW-4	4/27/1992		1.500	1.000	ug/L
1,2-dichloroethane	MW-4	10/16/1992		4.500	1.000	ug/L
1,2-dichloroethane	MW-4	4/21/1994		3.000	1.000	ug/L
1,2-dichloroethane	MW-4	1/25/1995		2.200	1.000	ug/L
1,2-dichloroethane	MW-4	4/24/1995		2.200	1.000	ug/L
1,2-dichloroethane	MW-4	10/27/1995		3.900	1.000	ug/L
1,2-dichloroethane	MW-4	1/01/1996		3.100	1.000	ug/L
1,2-dichloroethane	MW-4	4/01/1996		3.100	1.000	ug/L
1,2-dichloroethane	MW-4	7/01/1996		2.200	.400	ug/L
1,2-dichloroethane	MW-4	10/01/1996		3.200	.400	ug/L
1,2-dichloroethane	MW-4	1/16/1997		3.000	.400	ug/L
1,2-dichloroethane	MW-4	2/01/1997		3.000	.400	ug/L
1,2-dichloroethane	MW-4	4/01/1997		3.000	.400	ug/L
1,2-dichloroethane	MW-4	7/01/1997		3.200	.800	ug/L
1,2-dichloroethane	MW-4	10/27/1997		3.300	.400	ug/L
1,2-dichloroethane	MW-4	1/01/1998		3.400	.400	ug/L
1,2-dichloroethane	MW-4	4/01/1998		32.600	.400	ug/L
1,2-dichloroethane	MW-4	2/18/1999		2.200	.800	ug/L
1,2-dichloroethane	MW-4	5/25/1999		2.100	.400	ug/L
1,2-dichloroethane	MW-4	10/21/1999		1.600	.400	ug/L
1,2-dichloroethane	MW-4	4/27/2000		1.100	.400	ug/L
1,2-dichloroethane	MW-4	10/27/2000		1.300	.400	ug/L
1,2-dichloroethane	MW-4	4/25/2001		1.400	.400	ug/L
1,2-dichloroethane	MW-4	11/09/2001		.800	.400	ug/L
1,2-dichloroethane	MW-4	10/18/2002		1.000	.400	ug/L
1,2-dichloroethane	MW-4	5/19/2004		.900	.400	ug/L
1,2-dichloroethane	MW-4	4/14/2005		.510	.400	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,2-dichloroethane	MW-4	4/08/2013		.208	.180	ug/L
1,2-dichloropropane	MW-4	10/13/2007		1.21	1.00	ug/L
1,4-dichlorobenzene	MW-4	9/05/1990		1.20	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/25/1991		1.10	1.00	ug/L
1,4-dichlorobenzene	MW-4	10/03/1991		2.00	1.00	ug/L
1,4-dichlorobenzene	MW-4	1/22/1992		2.60	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/21/1994		3.10	1.00	ug/L
1,4-dichlorobenzene	MW-4	1/25/1995		3.30	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/24/1995		2.70	1.00	ug/L
1,4-dichlorobenzene	MW-4	10/27/1995		4.50	1.00	ug/L
1,4-dichlorobenzene	MW-4	1/01/1996		3.00	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/01/1996		4.80	1.00	ug/L
1,4-dichlorobenzene	MW-4	7/01/1996		2.80	1.00	ug/L
1,4-dichlorobenzene	MW-4	10/01/1996		7.30	1.00	ug/L
1,4-dichlorobenzene	MW-4	1/16/1997		4.90	1.00	ug/L
1,4-dichlorobenzene	MW-4	2/01/1997		5.00	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/01/1997		5.20	1.00	ug/L
1,4-dichlorobenzene	MW-4	10/27/1997		4.50	1.00	ug/L
1,4-dichlorobenzene	MW-4	1/01/1998		4.50	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/01/1998		4.90	1.00	ug/L
1,4-dichlorobenzene	MW-4	7/01/1998		4.70	1.00	ug/L
1,4-dichlorobenzene	MW-4	10/01/1998		2.20	1.00	ug/L
1,4-dichlorobenzene	MW-4	5/25/1999		3.40	1.00	ug/L
1,4-dichlorobenzene	MW-4	10/21/1999		2.90	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/27/2000		2.40	1.00	ug/L
1,4-dichlorobenzene	MW-4	10/27/2000		3.20	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/25/2001		2.70	1.00	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,4-dichlorobenzene	MW-4	11/09/2001		3.10	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/23/2003		4.40	1.00	ug/L
1,4-dichlorobenzene	MW-4	5/19/2004		3.44	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/14/2005		4.19	1.00	ug/L
1,4-dichlorobenzene	MW-4	10/14/2005		4.50	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/11/2006		1.43	1.00	ug/L
1,4-dichlorobenzene	MW-4	10/10/2006		4.49	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/30/2007		4.07	1.00	ug/L
1,4-dichlorobenzene	MW-4	10/13/2007		3.41	1.00	ug/L
1,4-dichlorobenzene	MW-4	1/09/2008		2.66	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/08/2008		4.37	1.00	ug/L
1,4-dichlorobenzene	MW-4	7/16/2008		2.14	1.00	ug/L
1,4-dichlorobenzene	MW-4	10/23/2008		2.54	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/09/2009		2.93	1.00	ug/L
1,4-dichlorobenzene	MW-4	10/05/2009		3.35	1.00	ug/L
1,4-dichlorobenzene	MW-4	2/25/2010		4.88	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/21/2010		3.12	1.00	ug/L
1,4-dichlorobenzene	MW-4	10/14/2010		3.77	1.00	ug/L
1,4-dichlorobenzene	MW-4	4/13/2011		3.68	1.00	ug/L
1,4-dichlorobenzene	MW-4	10/18/2011		3.83	.20	ug/L
1,4-dichlorobenzene	MW-4	4/24/2012		4.33	.20	ug/L
1,4-dichlorobenzene	MW-4	10/24/2012		2.62	.20	ug/L
1,4-dichlorobenzene	MW-4	4/08/2013		4.84	.20	ug/L
1,4-dichlorobenzene	MW-4	11/05/2013		1.72	.20	ug/L
1,4-dichlorobenzene	MW-4	11/16/2017		.55	.20	ug/L
2-butanone	MW-4	4/08/2013		.816	.470	ug/L
Benzene	MW-4	9/05/1990		7.600	1.000	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Benzene	MW-4	11/19/1990		2.800	1.000	ug/L
Benzene	MW-4	4/25/1991		9.200	1.000	ug/L
Benzene	MW-4	6/18/1991		5.900	1.000	ug/L
Benzene	MW-4	10/03/1991		3.100	1.000	ug/L
Benzene	MW-4	1/22/1992		5.700	1.000	ug/L
Benzene	MW-4	4/27/1992		7.200	1.000	ug/L
Benzene	MW-4	10/16/1992		16.800	1.000	ug/L
Benzene	MW-4	2/01/1994		10.500	1.000	ug/L
Benzene	MW-4	4/21/1994		11.500	1.000	ug/L
Benzene	MW-4	7/12/1994		4.300	1.000	ug/L
Benzene	MW-4	10/10/1994		9.600	1.000	ug/L
Benzene	MW-4	1/25/1995		10.200	1.000	ug/L
Benzene	MW-4	4/24/1995		8.800	1.000	ug/L
Benzene	MW-4	7/27/1995		11.600	1.000	ug/L
Benzene	MW-4	10/27/1995		13.300	1.000	ug/L
Benzene	MW-4	1/01/1996		10.900	1.000	ug/L
Benzene	MW-4	4/01/1996		12.900	1.000	ug/L
Benzene	MW-4	7/01/1996		9.100	1.000	ug/L
Benzene	MW-4	10/01/1996		16.000	1.000	ug/L
Benzene	MW-4	1/16/1997		10.900	.500	ug/L
Benzene	MW-4	2/01/1997		12.100	.500	ug/L
Benzene	MW-4	4/01/1997		11.400	.500	ug/L
Benzene	MW-4	7/01/1997		9.600	.500	ug/L
Benzene	MW-4	10/27/1997		10.900	.500	ug/L
Benzene	MW-4	1/01/1998		9.800	.500	ug/L
Benzene	MW-4	4/01/1998		8.900	.500	ug/L
Benzene	MW-4	7/01/1998		7.400	.500	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Benzene	MW-4	10/01/1998		4.500	.500	ug/L
Benzene	MW-4	2/18/1999		4.500	.500	ug/L
Benzene	MW-4	5/25/1999		4.500	.500	ug/L
Benzene	MW-4	10/21/1999		3.300	.500	ug/L
Benzene	MW-4	4/27/2000		2.800	.500	ug/L
Benzene	MW-4	10/27/2000		2.800	.500	ug/L
Benzene	MW-4	4/25/2001		1.400	.500	ug/L
Benzene	MW-4	11/09/2001		2.400	.500	ug/L
Benzene	MW-4	5/15/2002		2.000	.500	ug/L
Benzene	MW-4	10/18/2002		1.500	.500	ug/L
Benzene	MW-4	4/23/2003		3.000	.500	ug/L
Benzene	MW-4	10/22/2003		3.540	.500	ug/L
Benzene	MW-4	5/19/2004		3.500	.500	ug/L
Benzene	MW-4	4/14/2005		2.460	.500	ug/L
Benzene	MW-4	10/14/2005		2.870	.500	ug/L
Benzene	MW-4	4/11/2006		.870	.500	ug/L
Benzene	MW-4	10/10/2006		3.630	.500	ug/L
Benzene	MW-4	4/30/2007		2.820	.500	ug/L
Benzene	MW-4	10/13/2007		2.290	.500	ug/L
Benzene	MW-4	1/09/2008		1.450	.500	ug/L
Benzene	MW-4	4/08/2008		1.630	.500	ug/L
Benzene	MW-4	7/16/2008		.580	.500	ug/L
Benzene	MW-4	10/23/2008		.610	.500	ug/L
Benzene	MW-4	4/09/2009		.650	.500	ug/L
Benzene	MW-4	10/05/2009		.920	.500	ug/L
Benzene	MW-4	2/25/2010		2.010	.500	ug/L
Benzene	MW-4	4/21/2010		1.070	.500	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Benzene	MW-4	10/14/2010		1.700	.500	ug/L
Benzene	MW-4	4/13/2011		1.300	.500	ug/L
Benzene	MW-4	10/18/2011		.950	.110	ug/L
Benzene	MW-4	4/24/2012		1.080	.110	ug/L
Benzene	MW-4	10/24/2012		.480	.110	ug/L
Benzene	MW-4	4/08/2013		1.480	.110	ug/L
Benzene	MW-4	11/05/2013		.459	.110	ug/L
Benzene	MW-4	5/02/2014		.480	.110	ug/L
Benzene	MW-4	3/31/2016		.269	.110	ug/L
Benzene	MW-4	11/28/2016		.138	.110	ug/L
Benzene	MW-4	11/16/2017		.156	.110	ug/L
Carbon tetrachloride	MW-4	9/05/1990		1.0	.5	ug/L
Carbon tetrachloride	MW-4	4/27/1992		1.0	1.0	ug/L
Carbon tetrachloride	MW-4	10/16/1992		1.0	1.0	ug/L
Carbon tetrachloride	MW-4	4/21/1994		1.0	1.0	ug/L
Chlorobenzene	MW-4	10/13/2007		3.430	1.000	ug/L
Chlorobenzene	MW-4	1/09/2008		1.950	1.000	ug/L
Chlorobenzene	MW-4	4/08/2008		2.930	1.000	ug/L
Chlorobenzene	MW-4	7/16/2008		1.040	1.000	ug/L
Chlorobenzene	MW-4	10/23/2008		1.030	1.000	ug/L
Chlorobenzene	MW-4	4/09/2009		1.210	1.000	ug/L
Chlorobenzene	MW-4	10/05/2009		2.010	1.000	ug/L
Chlorobenzene	MW-4	2/25/2010		3.950	1.000	ug/L
Chlorobenzene	MW-4	4/21/2010		1.980	1.000	ug/L
Chlorobenzene	MW-4	10/14/2010		2.190	1.000	ug/L
Chlorobenzene	MW-4	4/13/2011		2.050	1.000	ug/L
Chlorobenzene	MW-4	10/18/2011		1.620	.190	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Chlorobenzene	MW-4	4/24/2012		2.200	.190	ug/L
Chlorobenzene	MW-4	10/24/2012		1.080	.190	ug/L
Chlorobenzene	MW-4	4/08/2013		2.460	.190	ug/L
Chlorobenzene	MW-4	11/04/2014		.236	.190	ug/L
Chlorobenzene	MW-4	11/16/2017		.205	.190	ug/L
Chloroethane	MW-4	10/18/2011		.82	.15	ug/L
Chloroethane	MW-4	4/24/2012		.53	.15	ug/L
Chloroethane	MW-4	4/08/2013		1.01	.15	ug/L
Cis-1,2-dichloroethylene	MW-4	10/18/2011		.370	.130	ug/L
Cis-1,2-dichloroethylene	MW-4	4/24/2012		.190	.130	ug/L
Cis-1,2-dichloroethylene	MW-4	10/24/2012		.210	.130	ug/L
Cis-1,2-dichloroethylene	MW-4	4/08/2013		.302	.130	ug/L
Dichloromethane	MW-4	11/28/2016		.355	.170	ug/L
Dichloromethane	MW-4	11/16/2017		.226	.170	ug/L
Diethyl phthalate	MW-4	5/02/2014		.504	.280	ug/L
Diethyl phthalate	MW-4	6/26/2014		.735	.277	ug/L
Di-n-octyl phthalate	MW-4	11/28/2016		1.380	.253	ug/L
Endosulfan sulfate	MW-4	11/16/2017		.00282	.00272	ug/L
Endrin aldehyde	MW-4	11/16/2017		.00884	.00793	ug/L
Tetrachloroethylene	MW-4	1/09/2008		1.160	1.000	ug/L
Tetrachloroethylene	MW-4	10/18/2011		.390	.180	ug/L
Tetrachloroethylene	MW-4	4/24/2012		.360	.180	ug/L
Tetrachloroethylene	MW-4	10/24/2012		.250	.180	ug/L
Tetrachloroethylene	MW-4	4/08/2013		.265	.180	ug/L
Tetrachloroethylene	MW-4	11/05/2013		.766	.180	ug/L
Tetrachloroethylene	MW-4	5/02/2014		.531	.180	ug/L
Tetrachloroethylene	MW-4	11/04/2014		.507	.180	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
Tetrachloroethylene	MW-4	5/06/2015		.648	.180	ug/L
Tetrachloroethylene	MW-4	9/18/2015		.453	.180	ug/L
Tetrachloroethylene	MW-4	3/31/2016		.532	.180	ug/L
Tetrachloroethylene	MW-4	11/28/2016		.598	.180	ug/L
Tetrachloroethylene	MW-4	11/16/2017		.491	.180	ug/L
Toluene	MW-4	4/08/2013		.319	.150	ug/L
Toluene	MW-4	11/13/2023		2.090	.430	ug/L
Trans-1,2-dichloroethylene	MW-4	4/08/2013		.23	.21	ug/L
Trichloroethylene	MW-4	9/05/1990		3.60	1.00	ug/L
Trichloroethylene	MW-4	11/19/1990		5.70	1.00	ug/L
Trichloroethylene	MW-4	4/25/1991		2.60	1.00	ug/L
Trichloroethylene	MW-4	6/18/1991		4.30	1.00	ug/L
Trichloroethylene	MW-4	10/03/1991		20.30	1.00	ug/L
Trichloroethylene	MW-4	1/22/1992		26.40	1.00	ug/L
Trichloroethylene	MW-4	4/27/1992		28.90	1.00	ug/L
Trichloroethylene	MW-4	7/15/1992		26.90	1.00	ug/L
Trichloroethylene	MW-4	10/16/1992		30.50	1.00	ug/L
Trichloroethylene	MW-4	1/05/1993		26.80	1.00	ug/L
Trichloroethylene	MW-4	5/10/1993		29.60	1.00	ug/L
Trichloroethylene	MW-4	10/05/1993		12.90	1.00	ug/L
Trichloroethylene	MW-4	2/01/1994		11.30	1.00	ug/L
Trichloroethylene	MW-4	4/21/1994		11.90	1.00	ug/L
Trichloroethylene	MW-4	7/12/1994		8.00	1.00	ug/L
Trichloroethylene	MW-4	10/10/1994		9.40	1.00	ug/L
Trichloroethylene	MW-4	1/25/1995		7.80	1.00	ug/L
Trichloroethylene	MW-4	4/24/1995		6.90	1.00	ug/L
Trichloroethylene	MW-4	7/27/1995		8.50	5.00	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Trichloroethylene	MW-4	10/27/1995		11.90	1.00	ug/L
Trichloroethylene	MW-4	1/01/1996		9.10	1.00	ug/L
Trichloroethylene	MW-4	4/01/1996		9.40	1.00	ug/L
Trichloroethylene	MW-4	7/01/1996		5.60	1.00	ug/L
Trichloroethylene	MW-4	10/01/1996		7.10	1.00	ug/L
Trichloroethylene	MW-4	1/16/1997		7.90	1.00	ug/L
Trichloroethylene	MW-4	2/01/1997		6.60	1.00	ug/L
Trichloroethylene	MW-4	4/01/1997		6.90	1.00	ug/L
Trichloroethylene	MW-4	7/01/1997		7.20	1.00	ug/L
Trichloroethylene	MW-4	10/27/1997		9.30	1.00	ug/L
Trichloroethylene	MW-4	1/01/1998		8.00	1.00	ug/L
Trichloroethylene	MW-4	4/01/1998		5.00	1.00	ug/L
Trichloroethylene	MW-4	7/01/1998		9.60	1.00	ug/L
Trichloroethylene	MW-4	10/01/1998		6.60	1.00	ug/L
Trichloroethylene	MW-4	2/18/1999		5.90	1.00	ug/L
Trichloroethylene	MW-4	5/25/1999		5.10	1.00	ug/L
Trichloroethylene	MW-4	10/21/1999		4.80	1.00	ug/L
Trichloroethylene	MW-4	4/27/2000		2.10	1.00	ug/L
Trichloroethylene	MW-4	10/27/2000		4.00	1.00	ug/L
Trichloroethylene	MW-4	4/25/2001		4.00	1.00	ug/L
Trichloroethylene	MW-4	11/09/2001		3.00	1.00	ug/L
Trichloroethylene	MW-4	10/18/2002		3.00	1.00	ug/L
Trichloroethylene	MW-4	4/23/2003		1.30	1.00	ug/L
Trichloroethylene	MW-4	4/11/2006		1.16	1.00	ug/L
Vinyl chloride	MW-4	1/01/1996		12.200	.300	ug/L
Vinyl chloride	MW-4	4/01/1996		10.200	2.000	ug/L
Vinyl chloride	MW-4	7/01/1996		9.000	.300	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Vinyl chloride	MW-4	10/01/1996		13.000	2.000	ug/L
Vinyl chloride	MW-4	1/16/1997		10.800	1.000	ug/L
Vinyl chloride	MW-4	2/01/1997		9.000	1.000	ug/L
Vinyl chloride	MW-4	4/01/1997		9.400	1.000	ug/L
Vinyl chloride	MW-4	7/01/1997		8.200	.300	ug/L
Vinyl chloride	MW-4	10/27/1997		14.500	.300	ug/L
Vinyl chloride	MW-4	1/01/1998		12.400	.300	ug/L
Vinyl chloride	MW-4	4/01/1998		9.300	.300	ug/L
Vinyl chloride	MW-4	7/01/1998		11.300	.300	ug/L
Vinyl chloride	MW-4	2/18/1999		5.900	.300	ug/L
Vinyl chloride	MW-4	5/25/1999		8.400	.300	ug/L
Vinyl chloride	MW-4	10/21/1999		5.200	.300	ug/L
Vinyl chloride	MW-4	4/27/2000		3.500	.300	ug/L
Vinyl chloride	MW-4	10/27/2000		3.800	.300	ug/L
Vinyl chloride	MW-4	4/25/2001		3.400	.300	ug/L
Vinyl chloride	MW-4	11/09/2001		2.600	.300	ug/L
Vinyl chloride	MW-4	4/23/2003		2.040	.470	ug/L
Vinyl chloride	MW-4	5/19/2004		1.340	.470	ug/L
Vinyl chloride	MW-4	4/14/2005		1.100	.470	ug/L
Vinyl chloride	MW-4	10/14/2005		1.110	.470	ug/L
Vinyl chloride	MW-4	4/30/2007		1.290	1.000	ug/L
Vinyl chloride	MW-4	10/18/2011		.320	.100	ug/L
Vinyl chloride	MW-4	4/24/2012		.260	.100	ug/L
Vinyl chloride	MW-4	10/24/2012		.170	.100	ug/L
Vinyl chloride	MW-4	4/08/2013		.524	.100	ug/L
Benzene	MW-40A	9/23/2021		.543	.220	ug/L
Benzene	MW-40A	12/14/2021		.768	.220	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Benzene	MW-40A	12/06/2022		.994	.220	ug/L
Benzene	MW-40A	11/06/2023		.521	.220	ug/L
Benzene	MW-42A	12/06/2022		.539	.220	ug/L
1,1,1-trichloroethane	MW-4B	4/01/1992		7.4	1.0	ug/L
1,1,1-trichloroethane	MW-4B	7/16/1992		4.1	1.0	ug/L
1,1,1-trichloroethane	MW-4B	10/16/1992		3.1	1.0	ug/L
1,1,1-trichloroethane	MW-4B	1/05/1993		3.9	1.0	ug/L
1,1,1-trichloroethane	MW-4B	5/10/1993		3.6	1.0	ug/L
1,1,1-trichloroethane	MW-4B	7/14/1993		5.7	1.0	ug/L
1,1,1-trichloroethane	MW-4B	10/05/1993		4.5	1.0	ug/L
1,1,1-trichloroethane	MW-4B	4/21/1994		3.7	1.0	ug/L
1,1,1-trichloroethane	MW-4B	7/12/1994		2.4	1.0	ug/L
1,1-dichloroethane	MW-4B	4/09/2009		1.28	1.00	ug/L
1,1-dichloroethane	MW-4B	10/05/2009		1.81	1.00	ug/L
1,1-dichloroethane	MW-4B	10/18/2011		1.87	.21	ug/L
1,1-dichloroethane	MW-4B	4/24/2012		1.97	.21	ug/L
1,1-dichloroethane	MW-4B	10/24/2012		1.94	.21	ug/L
1,1-dichloroethane	MW-4B	4/08/2013		2.28	.21	ug/L
1,1-dichloroethane	MW-4B	5/02/2014		1.52	.21	ug/L
1,1-dichloroethane	MW-4B	3/31/2016		.58	.21	ug/L
1,1-dichloroethylene	MW-4B	7/14/1993		20.1	1.0	ug/L
1,1-dichloroethylene	MW-4B	4/21/1994		1.0	1.0	ug/L
1,2-dichlorobenzene	MW-4B	4/08/2013		.292	.140	ug/L
1,2-dichloroethane	MW-4B	7/16/1992		2.100	1.000	ug/L
1,2-dichloroethane	MW-4B	4/21/1994		1.000	1.000	ug/L
1,2-dichloroethane	MW-4B	10/27/1995		2.900	1.000	ug/L
1,2-dichloroethane	MW-4B	4/01/1996		1.600	1.000	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,2-dichloroethane	MW-4B	10/01/1996		1.400	.400	ug/L
1,2-dichloroethane	MW-4B	1/16/1997		1.300	.400	ug/L
1,2-dichloroethane	MW-4B	2/01/1997		1.000	.400	ug/L
1,2-dichloroethane	MW-4B	10/27/1997		.840	.400	ug/L
1,2-dichloroethane	MW-4B	1/01/1998		.790	.400	ug/L
1,2-dichloroethane	MW-4B	4/01/1998		9.900	.400	ug/L
1,2-dichloroethane	MW-4B	5/25/1999		.410	.400	ug/L
1,2-dichloroethane	MW-4B	10/21/1999		.460	.400	ug/L
1,2-dichloroethane	MW-4B	4/27/2000		.780	.400	ug/L
1,2-dichloroethane	MW-4B	10/23/2003		.970	.400	ug/L
1,2-dichloroethane	MW-4B	5/19/2004		.410	.400	ug/L
1,2-dichloroethane	MW-4B	4/24/2012		.180	.180	ug/L
1,2-dichloroethane	MW-4B	4/08/2013		.204	.180	ug/L
1,4-dichlorobenzene	MW-4B	4/21/1994		1.00	1.00	ug/L
1,4-dichlorobenzene	MW-4B	10/27/1995		2.10	1.00	ug/L
1,4-dichlorobenzene	MW-4B	4/01/1996		1.10	1.00	ug/L
1,4-dichlorobenzene	MW-4B	10/01/1996		2.60	1.00	ug/L
1,4-dichlorobenzene	MW-4B	1/16/1997		1.50	1.00	ug/L
1,4-dichlorobenzene	MW-4B	10/27/1997		1.10	1.00	ug/L
1,4-dichlorobenzene	MW-4B	4/27/2000		1.20	1.00	ug/L
1,4-dichlorobenzene	MW-4B	10/23/2003		2.85	1.00	ug/L
1,4-dichlorobenzene	MW-4B	10/01/2005		1.30	1.00	ug/L
1,4-dichlorobenzene	MW-4B	4/09/2009		1.17	1.00	ug/L
1,4-dichlorobenzene	MW-4B	10/05/2009		1.57	1.00	ug/L
1,4-dichlorobenzene	MW-4B	10/18/2011		2.31	.20	ug/L
1,4-dichlorobenzene	MW-4B	4/24/2012		2.55	.20	ug/L
1,4-dichlorobenzene	MW-4B	10/24/2012		3.78	.20	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,4-dichlorobenzene	MW-4B	4/08/2013		3.36	.20	ug/L
2,4-dinitrophenol	MW-4B	11/21/2017		2.34	1.46	ug/L
2-butanone	MW-4B	4/24/2012		.540	.470	ug/L
2-butanone	MW-4B	4/08/2013		.635	.470	ug/L
Acetone	MW-4B	4/24/2012		2.04	1.79	ug/L
Acetone	MW-4B	10/24/2012		2.04	1.79	ug/L
Benzene	MW-4B	4/01/1992		5.700	1.000	ug/L
Benzene	MW-4B	7/16/1992		12.800	1.000	ug/L
Benzene	MW-4B	10/16/1992		15.000	1.000	ug/L
Benzene	MW-4B	1/05/1993		12.900	10.000	ug/L
Benzene	MW-4B	5/10/1993		6.800	1.000	ug/L
Benzene	MW-4B	7/14/1993		2.600	1.000	ug/L
Benzene	MW-4B	2/01/1994		6.200	1.000	ug/L
Benzene	MW-4B	4/21/1994		3.700	1.000	ug/L
Benzene	MW-4B	7/12/1994		12.200	1.000	ug/L
Benzene	MW-4B	10/10/1994		13.300	1.000	ug/L
Benzene	MW-4B	4/24/1995		16.700	1.000	ug/L
Benzene	MW-4B	7/27/1995		12.200	1.000	ug/L
Benzene	MW-4B	10/27/1995		13.700	1.000	ug/L
Benzene	MW-4B	1/01/1996		10.700	1.000	ug/L
Benzene	MW-4B	4/01/1996		7.400	1.000	ug/L
Benzene	MW-4B	10/01/1996		10.000	1.000	ug/L
Benzene	MW-4B	1/16/1997		7.500	.500	ug/L
Benzene	MW-4B	2/01/1997		6.200	.500	ug/L
Benzene	MW-4B	4/01/1997		1.600	.500	ug/L
Benzene	MW-4B	7/01/1997		6.400	.500	ug/L
Benzene	MW-4B	10/27/1997		5.700	.500	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Benzene	MW-4B	1/01/1998		5.100	.500	ug/L
Benzene	MW-4B	4/01/1998		1.300	.500	ug/L
Benzene	MW-4B	7/01/1998		.680	.500	ug/L
Benzene	MW-4B	10/01/1998		4.800	.500	ug/L
Benzene	MW-4B	2/18/1999		5.100	.500	ug/L
Benzene	MW-4B	5/25/1999		2.000	.500	ug/L
Benzene	MW-4B	10/21/1999		3.000	.500	ug/L
Benzene	MW-4B	4/27/2000		4.500	.500	ug/L
Benzene	MW-4B	10/27/2000		2.200	.500	ug/L
Benzene	MW-4B	10/22/2002		.600	.500	ug/L
Benzene	MW-4B	4/23/2003		1.700	.500	ug/L
Benzene	MW-4B	10/23/2003		4.610	.500	ug/L
Benzene	MW-4B	5/19/2004		1.350	.500	ug/L
Benzene	MW-4B	10/04/2004		.710	.500	ug/L
Benzene	MW-4B	4/01/2005		1.170	.500	ug/L
Benzene	MW-4B	10/01/2005		2.130	.500	ug/L
Benzene	MW-4B	10/10/2006		.630	.500	ug/L
Benzene	MW-4B	10/23/2008		.500	.500	ug/L
Benzene	MW-4B	10/05/2009		1.040	.500	ug/L
Benzene	MW-4B	2/25/2010		.560	.500	ug/L
Benzene	MW-4B	10/18/2011		.890	.110	ug/L
Benzene	MW-4B	4/24/2012		.980	.110	ug/L
Benzene	MW-4B	10/24/2012		1.250	.110	ug/L
Benzene	MW-4B	4/08/2013		1.150	.110	ug/L
Benzene	MW-4B	11/05/2013		.313	.110	ug/L
Benzene	MW-4B	5/02/2014		.724	.110	ug/L
Benzene	MW-4B	5/06/2015		.481	.110	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Benzene	MW-4B	3/31/2016		.496	.110	ug/L
Benzo (a) pyrene	MW-4B	10/31/2014		.535	.278	ug/L
Benzo (b) fluoranthene	MW-4B	10/31/2014		.514	.344	ug/L
Benzo (g,h,i) perylene	MW-4B	10/31/2014		.394	.256	ug/L
Benzo (k) fluoranthene	MW-4B	10/31/2014		.723	.222	ug/L
Bromomethane	MW-4B	11/21/2017		.549	.220	ug/L
Butyl benzyl phthalate	MW-4B	10/31/2014		.466	.378	ug/L
Carbon tetrachloride	MW-4B	4/21/1994		1	1	ug/L
Chlorobenzene	MW-4B	4/09/2009		1.060	1.000	ug/L
Chlorobenzene	MW-4B	10/05/2009		1.910	1.000	ug/L
Chlorobenzene	MW-4B	10/18/2011		2.510	.190	ug/L
Chlorobenzene	MW-4B	4/24/2012		2.870	.190	ug/L
Chlorobenzene	MW-4B	10/24/2012		3.660	.190	ug/L
Chlorobenzene	MW-4B	4/08/2013		3.200	.190	ug/L
Chlorobenzene	MW-4B	5/06/2015		1.290	.190	ug/L
Chlorobenzene	MW-4B	11/21/2017		.254	.190	ug/L
Chloroethane	MW-4B	10/18/2011		.450	.150	ug/L
Chloroethane	MW-4B	4/24/2012		.400	.150	ug/L
Chloroethane	MW-4B	4/08/2013		.487	.150	ug/L
Dibenzo (a,h) anthracene	MW-4B	10/31/2014		.364	.278	ug/L
Dichloromethane	MW-4B	10/24/2012		.280	.170	ug/L
Dichloromethane	MW-4B	4/08/2013		.171	.170	ug/L
Dichloromethane	MW-4B	5/02/2014		.380	.170	ug/L
Dichloromethane	MW-4B	10/31/2014		1.600	.170	ug/L
Dichloromethane	MW-4B	11/29/2016		.197	.170	ug/L
Di-n-octyl phthalate	MW-4B	10/31/2014		1.360	.256	ug/L
Di-n-octyl phthalate	MW-4B	11/29/2016		1.430	.253	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
Endosulfan i	MW-4B	9/15/2015		.00257	.00222	ug/L
Endosulfan i	MW-4B	12/09/2015		.01490	.00227	ug/L
Indeno (1,2,3-cd) pyrene	MW-4B	10/31/2014		.403	.267	ug/L
Pentachlorophenol	MW-4B	11/21/2017		1.700	.261	ug/L
Tetrachloroethylene	MW-4B	10/18/2011		.29	.18	ug/L
Toluene	MW-4B	4/24/2012		.210	.150	ug/L
Toluene	MW-4B	4/08/2013		.394	.150	ug/L
Trichloroethylene	MW-4B	4/01/1992		18.6	1.0	ug/L
Trichloroethylene	MW-4B	7/16/1992		24.4	1.0	ug/L
Trichloroethylene	MW-4B	10/16/1992		26.5	1.0	ug/L
Trichloroethylene	MW-4B	1/05/1993		26.2	1.0	ug/L
Trichloroethylene	MW-4B	5/10/1993		20.3	1.0	ug/L
Trichloroethylene	MW-4B	7/14/1993		7.0	1.0	ug/L
Trichloroethylene	MW-4B	10/05/1993		2.3	1.0	ug/L
Trichloroethylene	MW-4B	2/01/1994		9.4	1.0	ug/L
Trichloroethylene	MW-4B	4/21/1994		8.6	1.0	ug/L
Trichloroethylene	MW-4B	7/12/1994		15.3	1.0	ug/L
Trichloroethylene	MW-4B	10/10/1994		13.2	1.0	ug/L
Trichloroethylene	MW-4B	10/27/1995		2.0	1.0	ug/L
Trichloroethylene	MW-4B	4/01/1996		2.0	1.0	ug/L
Trichloroethylene	MW-4B	1/16/1997		2.0	1.0	ug/L
Trichloroethylene	MW-4B	2/01/1997		1.5	1.0	ug/L
Trichloroethylene	MW-4B	4/01/1997		2.1	1.0	ug/L
Trichloroethylene	MW-4B	10/27/1997		1.4	1.0	ug/L
Trichloroethylene	MW-4B	1/01/1998		1.2	1.0	ug/L
Trichloroethylene	MW-4B	4/01/1998		1.4	1.0	ug/L
Trichloroethylene	MW-4B	7/01/1998		1.7	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Trichloroethylene	MW-4B	5/25/1999		1.2	1.0	ug/L
Vinyl chloride	MW-4B	4/01/1996		1.900	2.000	ug/L
Vinyl chloride	MW-4B	1/16/1997		1.500	1.000	ug/L
Vinyl chloride	MW-4B	2/01/1997		1.400	1.000	ug/L
Vinyl chloride	MW-4B	7/01/1997		.840	.300	ug/L
Vinyl chloride	MW-4B	10/27/1997		1.100	.300	ug/L
Vinyl chloride	MW-4B	1/01/1998		.980	.300	ug/L
Vinyl chloride	MW-4B	4/01/1998		.480	.300	ug/L
Vinyl chloride	MW-4B	10/01/1998		.440	.300	ug/L
Vinyl chloride	MW-4B	5/25/1999		.930	.300	ug/L
Vinyl chloride	MW-4B	10/21/1999		.450	.300	ug/L
Vinyl chloride	MW-4B	10/23/2003		.550	.470	ug/L
Vinyl chloride	MW-4B	10/18/2011		.170	.100	ug/L
Vinyl chloride	MW-4B	4/24/2012		.270	.100	ug/L
Vinyl chloride	MW-4B	10/24/2012		.280	.100	ug/L
Vinyl chloride	MW-4B	4/08/2013		.284	.100	ug/L
1,2-dichlorobenzene	MW-7A	4/08/2013		.15	.14	ug/L
1,4-dichlorobenzene	MW-7A	4/08/2013		.236	.200	ug/L
2-butanone	MW-7A	4/24/2012		1.27	.47	ug/L
Acetone	MW-7A	4/04/2016		2.04	1.79	ug/L
Acetone	MW-7A	11/01/2017		2.20	1.79	ug/L
Carbon disulfide	MW-7A	10/24/2012		.150	.150	ug/L
Carbon disulfide	MW-7A	10/31/2014		.642	.150	ug/L
Chloroethane	MW-7A	10/18/2011		.21	.15	ug/L
Dichloromethane	MW-7A	10/24/2012		.250	.170	ug/L
Dichloromethane	MW-7A	11/16/2016		.301	.170	ug/L
Dichloromethane	MW-7A	11/01/2017		.780	.170	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
Toluene	MW-7A	11/13/2023		2.00	.43	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 9

Analytical Data Summary for MW-11

Constituents	Units	10/28/2018 10/31/2018	12/17/2018	5/17/2021 6/8/2021	8/2/2021 8/3/2021	8/16/2022 9/13/2022	6/6/2023 6/27/2023	6/11/2024 7/3/2024
Antimony	ug/L	<.420 .778J		<1.100		<.690	<1.000	<1.000
Arsenic	ug/L	<.57		<.75		<.75	<.53	<.53
Barium	ug/L	16.9		18.7		17.7	15.4	14.3
Beryllium	ug/L	<.19		<.27		<.27	<.33	<.33
Cadmium	ug/L	<.060		<.051		<.055 .056J	<.100	<.100
Chromium	ug/L	<.760 .795J		<1.100		<1.100	<1.100	<1.200
Cobalt	ug/L	7.890	2.570	<.091 .285J		<.190 .244J	<.170	<.170
Copper	ug/L	<1.6		<1.4		<1.8	<1.8	<1.8
Lead	ug/L	<.25		<.21		<.24	<.24	<.26
Mercury	ug/L						<.14	<.11
Nickel	ug/L	43.3	35.1	34.1	22.6	30.2	21.6	16.3
Selenium	ug/L	<.90		<.96 2.51J		<.96 2.87J	<1.40 2.16J	<1.40 1.91J
Silver	ug/L	<.30		<.42		<.49	<.50	<.50
Thallium	ug/L	<.17		<.26		<.26	<.26	<.57
Vanadium	ug/L	<.52		<1.10		<1.10	<1.10	<1.10
Zinc	ug/L	119.0	82.8	140.0	70.1	146.0	98.5	60.0

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

Table 9

Analytical Data Summary for MW-22

Constituents	Units	6/4/2019 6/13/2019	8/13/2019 8/15/2019	10/30/2019 11/20/2019	6/16/2020 7/7/2020	8/24/2020 8/26/2020	11/3/2020 11/23/2020	5/17/2021 6/8/2021
Antimony	ug/L	<1.32	<1.32	<.53	<.51	<.51	1.23	<1.10
Arsenic	ug/L	1.160	<.232 .899J	<.750 1.040J	<.880	<.880	<.880	<.750 .872J
Barium	ug/L	146	176	161	144	174	154	147
Beryllium	ug/L	<.53	<.53	<.27	<.27	<.27	<.27	<.27
Cadmium	ug/L	<.167	<.167	<.039	<.049	<.049	<.049	<.051 .056J
Chromium	ug/L	<1.14	<1.14	<.98	<1.10	<1.10	<1.10	<1.10
Cobalt	ug/L	<.402	<.402	<.091 .099J	<.091	<.091 .115J	<.091	<.091 .122J
Copper	ug/L	<.497 .813J	<.497 .908J	<2.000	<1.500	<1.500	<1.500	<1.400
Lead	ug/L	<.186	<.186	<.270	<.110	<.110 .207J	<.110 .121J	<.210
Nickel	ug/L	6.61	8.64	9.21	7.25	9.85	9.21	6.72
Selenium	ug/L	<.982	<.982	<1.000	<1.000	<1.000	<1.000	<.960
Silver	ug/L	<.115	<.115	<.370	<.370	<.370	<.370	<.420
Thallium	ug/L	<.57	<.57	<.27	<.26	<.26	<.26	<.26
Vanadium	ug/L	<2.150 2.670J	<2.150	<.820	<.850	<.850	<.850 .923J	<1.100
Zinc	ug/L	<6.92 11.00J	<6.92 11.70J	<10.00	<10.00	<10.00	<10.00	<10.00

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

Table 9

Analytical Data Summary for MW-22

Constituents	9/21/2021 9/29/2021	3/2/2022 3/29/2022	8/16/2022 9/13/2022	6/6/2023 6/27/2023	11/1/2023 11/20/2023	6/11/2024 7/3/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	<1.10	<.69	<.69	<1.00	<1.00	<1.00	<1.00	<1.00
Arsenic	<.750	<.750	<.750	<.530 .618J	<.530 .834J	<.530 .801J	<.530 .864J	<.530 .660J
Barium	151	133	156	148	159	137	146	155
Beryllium	<.27	<.27	<.27	<.33	<.33	<.33	<.33	<.33
Cadmium	<.051	<.055	<.055 .057J	<.100	<.100	<.100	<.100	<.100
Chromium	<1.10	<1.10	<1.10	<1.10	<1.10	<1.20	<1.20	<1.80
Cobalt	<.190	<.190	<.190	<.170	<.170	<.170	<.170	<.170
Copper	<1.400	<1.800	<1.800	<1.800	<1.800	<1.800	<1.800	<3.200
Lead	<.210	<.240	<.240	<.240	<.240	<.260	<.260 .293J	<.330
Nickel	7.71	5.54	7.64	<1.90 4.45J	9.26	6.65	7.63	5.24
Selenium	<.960	<.960	<.960	<1.400	<1.400	<1.400	<1.400	<1.400
Silver	<.420	<.490	<.490	<.500	<.500	<.500	<.500	<.500
Thallium	<.26	<.26	<.26	<.26	<.26	<.57	<.57	<.57
Vanadium	<1.100	<1.100 1.490J	<1.100	<1.100	<1.100	<1.100	<1.100	<1.700
Zinc	<10.00	<10.00	<10.00	<6.40 9.53J	<6.40 9.94J	<9.70	<9.70	<13.00

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

Table 9

Analytical Data Summary for MW-35

Constituents	Units	10/30/2019 11/20/2019	2/3/2020 2/17/2020	6/16/2020 7/7/2020	8/24/2020 8/26/2020	11/3/2020 11/23/2020	5/17/2021 6/8/2021	9/21/2021 9/29/2021
Antimony	ug/L	<.53	<.58	<.51	<.51	<.51	<1.10	<1.10
Arsenic	ug/L	<.750	<.880	<.880	<.880	<.880	<.750	<.750
Barium	ug/L	326	294	337	288	278	276	301
Beryllium	ug/L	<.27	<.27	<.27	<.27	<.27	<.27	<.27
Cadmium	ug/L	<.039	<.039	<.049	<.049	<.049	<.051	<.051
Chromium	ug/L	<.98	<1.10	<1.10	<1.10	<1.10	<1.10	<1.10
Cobalt	ug/L	8.27	6.60	7.03	5.98	5.97	5.51	6.33
Copper	ug/L	<2.0	<3.2	<1.5	<1.5	<1.5	<1.4	<1.4
Lead	ug/L	<.27	<.27	<.11	<.11	<.11	<.21	<.21
Mercury	ug/L					<.100000	<.150000	
Nickel	ug/L	27.4	23.2	27.9	22.0	19.5	18.8	22.5
Selenium	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<.96	<.96
Silver	ug/L	<.370	<.370	<.370	<.370	<.370	<.420	<.420
Thallium	ug/L	<.270 .386J	<.260 .304J	<.260 .357J	<.260 .339J	<.260 .273J	<.260 .307J	<.260 .340J
Vanadium	ug/L	<.82	<.82	<.85	<.85	<.85	<1.10	<1.10
Zinc	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0

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

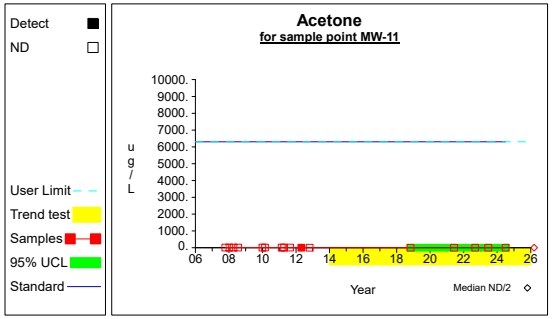
Table 9

Analytical Data Summary for MW-35

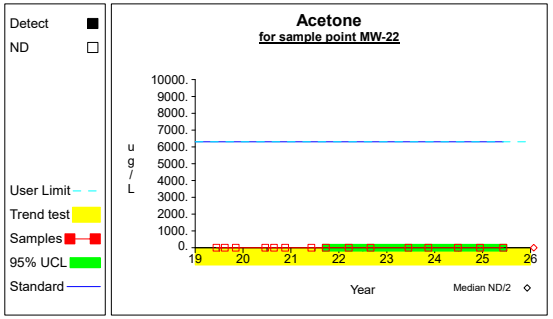
Constituents	3/2/2022 3/29/2022	8/16/2022 9/13/2022	6/6/2023 6/27/2023	11/1/2023 11/20/2023	6/11/2024 7/3/2024	8/27/2024 9/5/2024	11/19/2024 12/18/2024	6/2/2025 6/9/2025
Antimony	<.69	<.69	<1.00	<1.00	<1.00		<1.00	<1.00
Arsenic	<.750 1.010J	<.750 1.130J	<.530 .761J	<.530 1.730J	<.530 .767J		<.530 1.090J	<.530 .786J
Barium	316	345	264	467	280		186	279
Beryllium	<.27	<.27	<.33	<.33	<.33		<.33	<.33
Cadmium	<.055	<.055	<.100	<.100	<.100		<.100	<.100
Chromium	<1.10	<1.10	<1.10	<1.10	<1.20		<1.20	<1.80
Cobalt	6.39	6.74	5.33	10.80	4.96		1.98	4.82
Copper	<1.8	<1.8	<1.8	<1.8	<1.8		<1.8	<3.2
Lead	<.24	<.24	<.24	<.24	<.26		<.26	<.33
Mercury								
Nickel	24.9	26.5	18.7	32.7	17.6		11.8	18.0
Selenium	<.96	<.96	<1.40	<1.40	<1.40		<1.40	<1.40
Silver	<.490	<.490 .759J	<.500	<.500	<.500		<.500	<.500
Thallium	<.260 .361J	<.260 .408J	<.260 .337J	<.260 .371J	1.140	<.570	<.570	<.570
Vanadium	<1.10	<1.10	<1.10	<1.10	<1.10		<1.10	<1.70
Zinc	<10.0	<10.0	<6.4	<6.4	<9.7		<9.7	<13.0

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

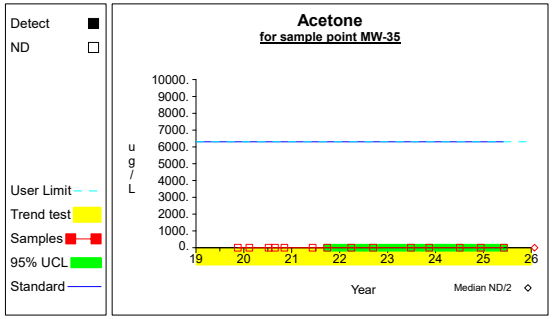
Confidence Limits (Assessment)



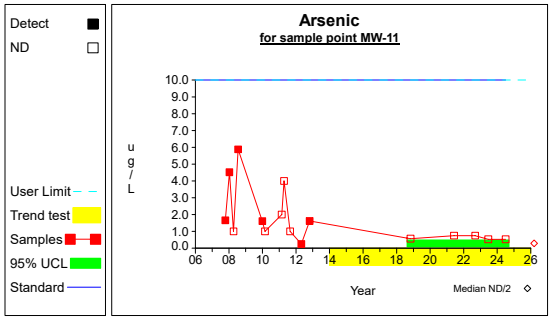
Graph 1



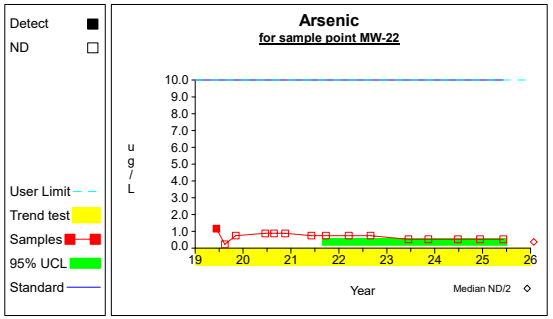
Graph 2



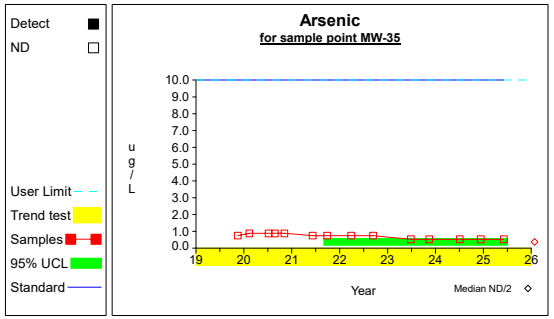
Graph 3



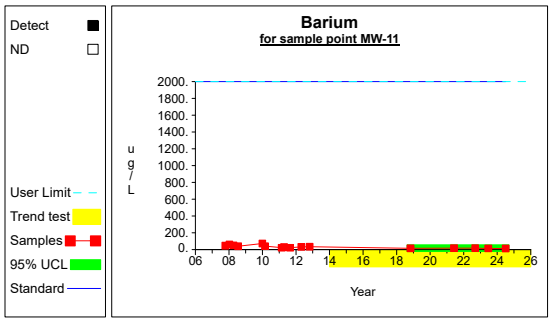
Graph 4



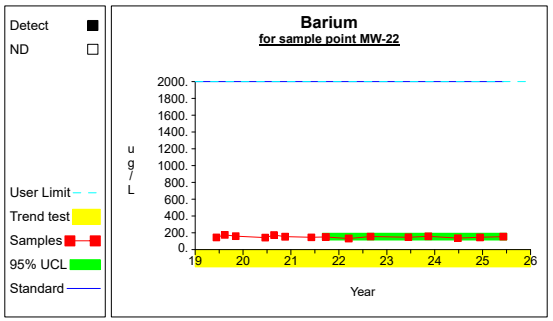
Graph 5



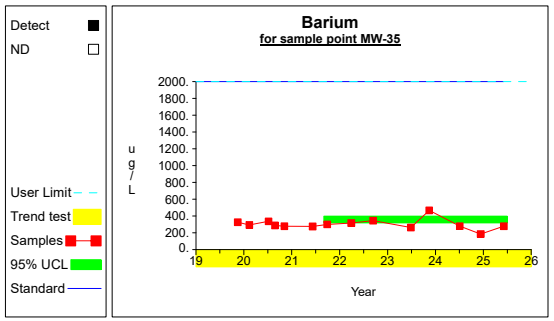
Graph 6



Graph 7

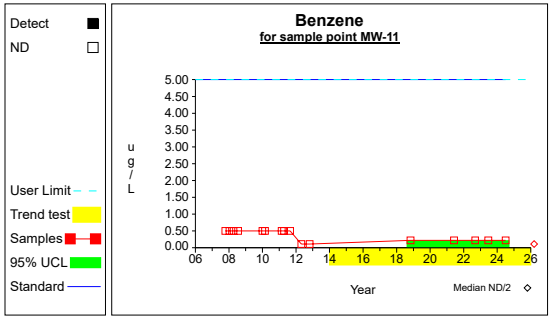


Graph 8

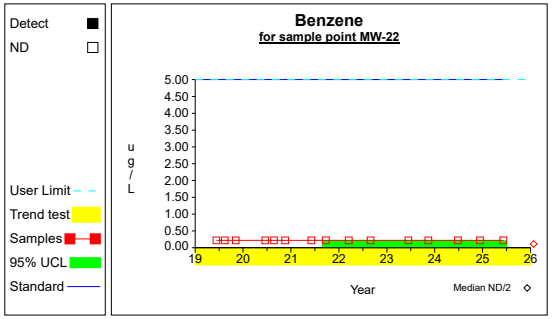


Graph 9

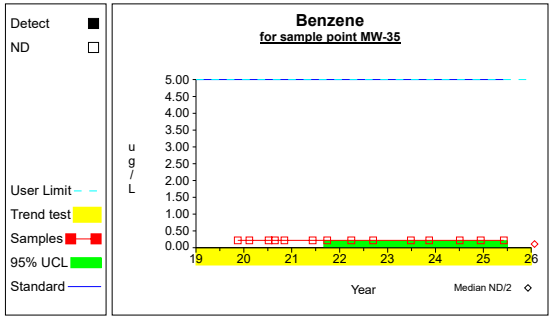
Confidence Limits (Assessment)



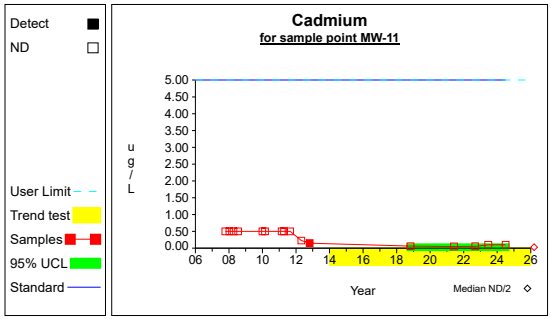
Graph 10



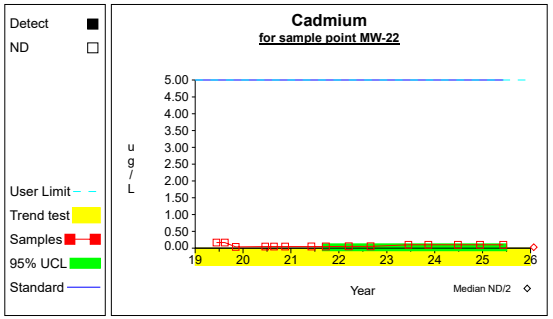
Graph 11



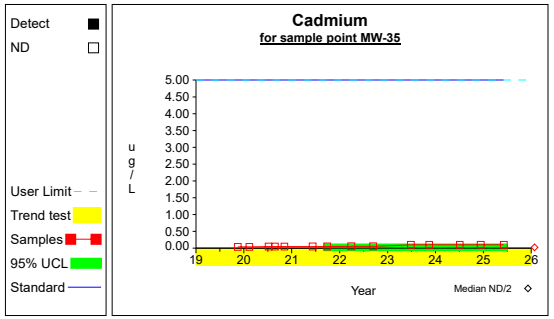
Graph 12



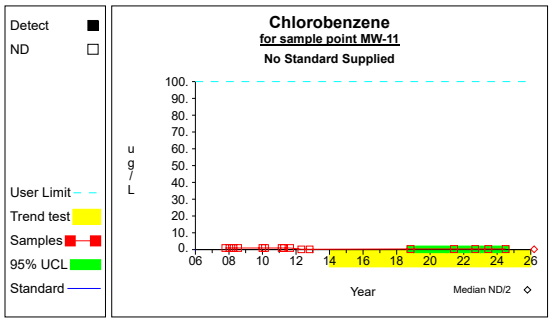
Graph 13



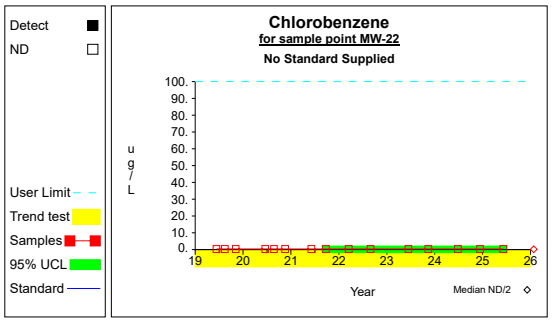
Graph 14



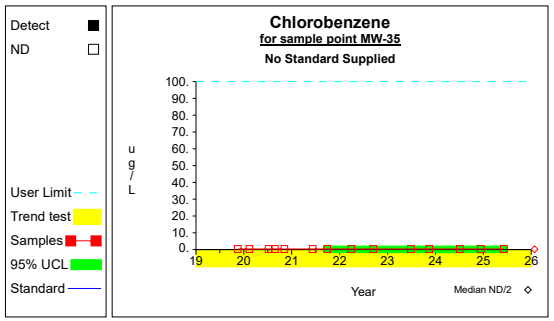
Graph 15



Graph 16

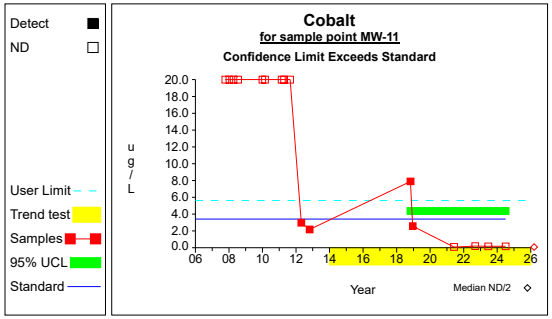


Graph 17

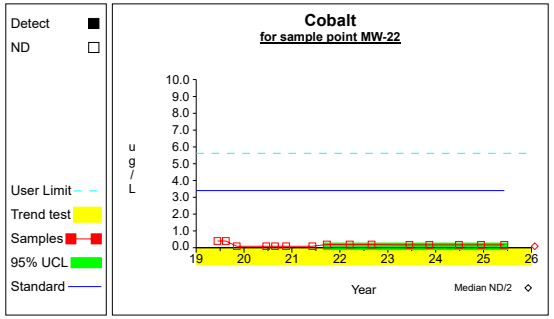


Graph 18

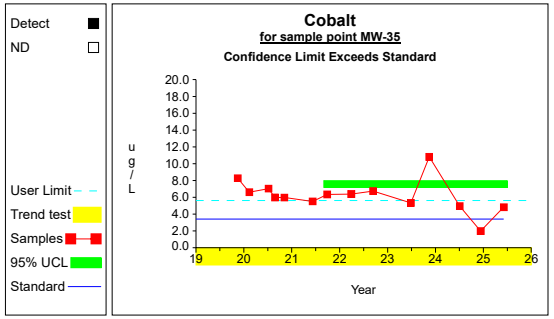
Confidence Limits (Assessment)



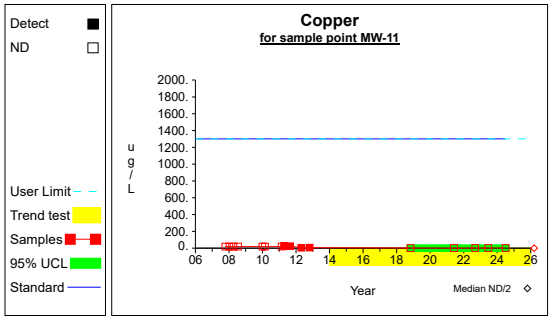
Graph 19



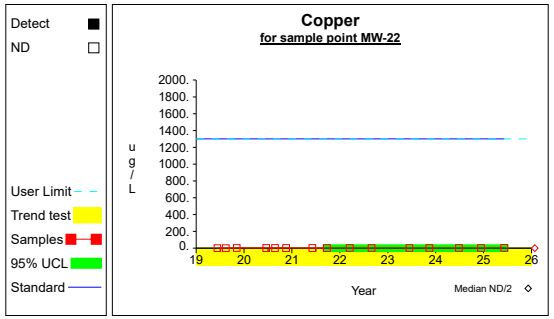
Graph 20



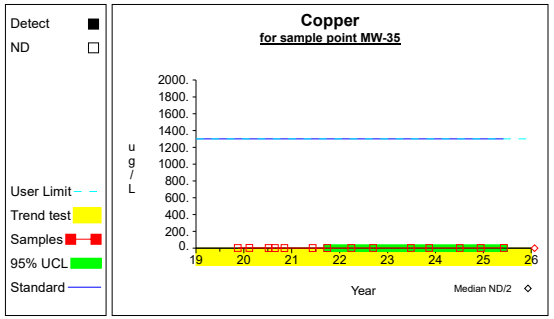
Graph 21



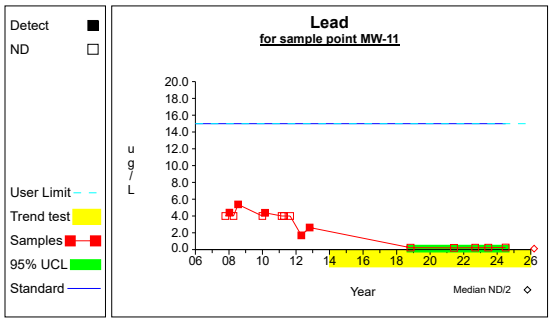
Graph 22



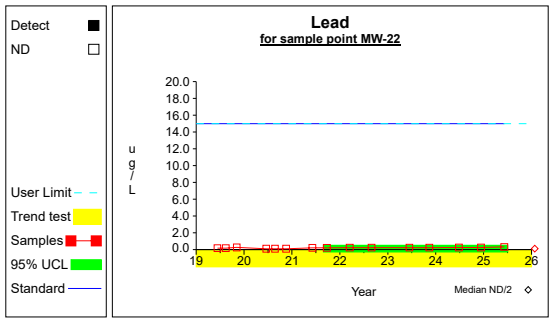
Graph 23



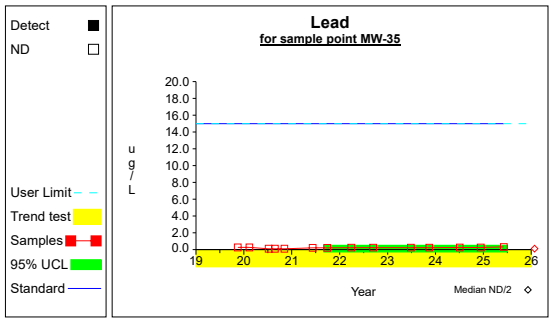
Graph 24



Graph 25

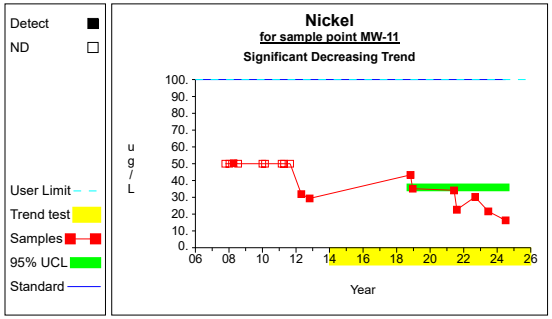


Graph 26

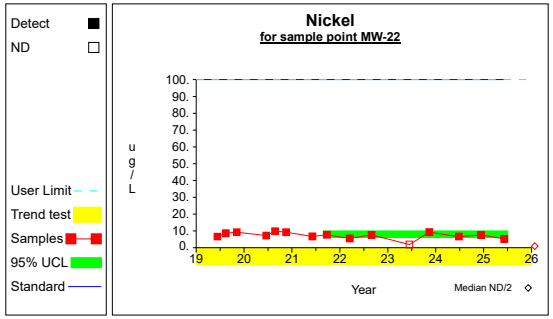


Graph 27

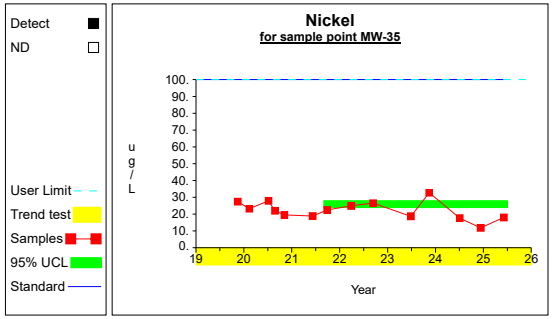
Confidence Limits (Assessment)



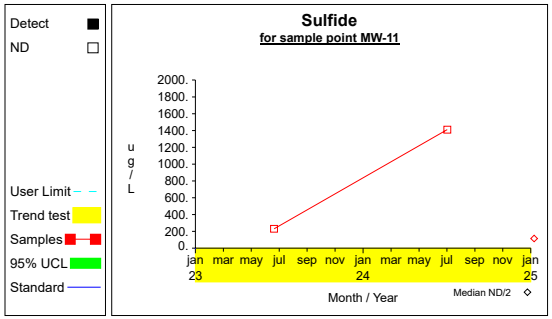
Graph 28



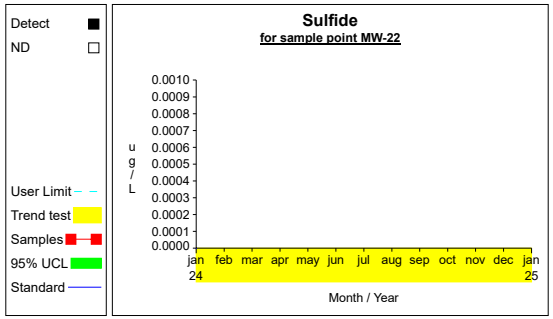
Graph 29



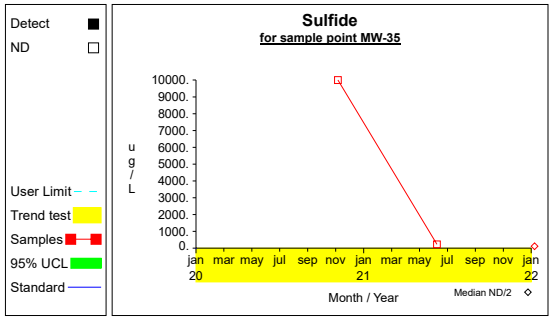
Graph 30



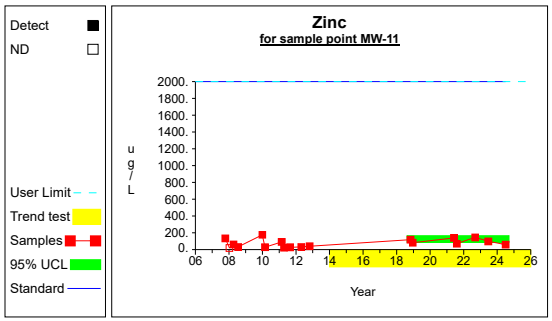
Graph 31



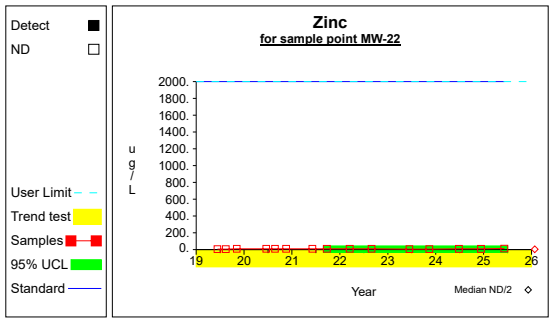
Graph 32



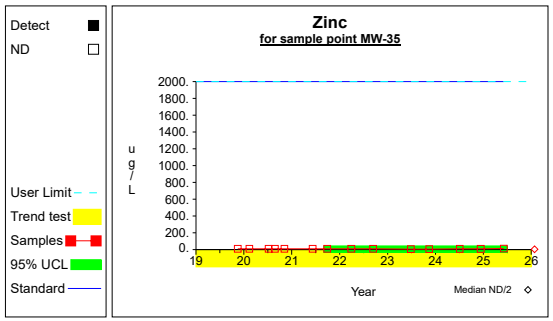
Graph 33



Graph 34



Graph 35



Graph 36

Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Acetone	ug/L	MW-11	5	1.550	0.000	0.953	1.550	1.550	6300.000		
Acetone	ug/L	MW-22	8	1.550	0.000	0.670	1.550	1.550	6300.000		
Acetone	ug/L	MW-35	8	1.550	0.000	0.670	1.550	1.550	6300.000		
Arsenic	ug/L	MW-11	5	0.285	0.000	0.953	0.285	0.285	10.000		
Arsenic	ug/L	MW-22	8	0.375	0.000	0.670	0.375	0.375	10.000		
Arsenic	ug/L	MW-35	8	0.375	0.000	0.670	0.375	0.375	10.000		
Barium	ug/L	MW-11	5	16.600	1.764	0.953	14.919	18.281	2000.000		
Barium	ug/L	MW-22	8	148.125	9.203	0.670	141.961	154.289	2000.000		
Barium	ug/L	MW-35	8	304.750	80.288	0.670	250.972	358.528	2000.000		
Benzene	ug/L	MW-11	5	0.110	0.000	0.953	0.110	0.110	5.000		
Benzene	ug/L	MW-22	8	0.110	0.000	0.670	0.110	0.110	5.000		
Benzene	ug/L	MW-35	8	0.110	0.000	0.670	0.110	0.110	5.000		
Cadmium	ug/L	MW-11	5	0.030	0.000	0.953	0.030	0.030	5.000		
Cadmium	ug/L	MW-22	8	0.028	0.000	0.670	0.028	0.028	5.000		
Cadmium	ug/L	MW-35	8	0.026	0.000	0.670	0.026	0.026	5.000		
Chlorobenzene	ug/L	MW-11	5	0.200	0.000	0.953	0.200	0.200			
Chlorobenzene	ug/L	MW-22	8	0.200	0.000	0.670	0.200	0.200			
Chlorobenzene	ug/L	MW-35	8	0.200	0.000	0.670	0.200	0.200			
Cobalt	ug/L	MW-11	6	1.800	3.145	0.822	0.000	4.386	3.400		**
Cobalt	ug/L	MW-22	8	0.085	0.000	0.670	0.085	0.085	3.400		
Cobalt	ug/L	MW-35	8	5.919	2.475	0.670	4.261	7.577	3.400		**
Copper	ug/L	MW-11	5	0.900	0.000	0.953	0.900	0.900	1300.000		
Copper	ug/L	MW-22	8	0.900	0.000	0.670	0.900	0.900	1300.000		
Copper	ug/L	MW-35	8	0.900	0.000	0.670	0.900	0.900	1300.000		

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

Table 1

Confidence Intervals for Comparing the Mean of the Last 8 Measurements to an Assessment Monitoring Standard

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Lead	ug/L	MW-11	5	0.120	0.000	0.953	0.120	0.120	15.000		
Lead	ug/L	MW-22	8	0.120	0.000	0.670	0.120	0.120	15.000		
Lead	ug/L	MW-35	8	0.120	0.000	0.670	0.120	0.120	15.000		
Nickel	ug/L	MW-11	7	29.029	9.364	0.734	22.154	35.903	100.000	dec	
Nickel	ug/L	MW-22	8	6.328	2.529	0.670	4.634	8.021	100.000		
Nickel	ug/L	MW-35	8	21.588	6.462	0.670	17.259	25.916	100.000		
Sulfide	ug/L	MW-11	2								*
Sulfide	ug/L	MW-22	0								*
Sulfide	ug/L	MW-35	2								*
Zinc	ug/L	MW-11	7	102.343	33.741	0.734	77.573	127.112	2000.000		
Zinc	ug/L	MW-22	8	5.000	0.000	0.670	5.000	5.000	2000.000		
Zinc	ug/L	MW-35	8	5.000	0.000	0.670	5.000	5.000	2000.000		

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

Worksheet 6 - Assessment Monitoring
Acetone (ug/L) at MW-11

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **7.75** / **5** = **1.55**	Compute the mean of the last 5 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))$^{1/2}$ = ((**12.013** - **60.063**/**5**) / (**5**-1))$^{1/2}$ = **1.63**x**10**$^{-8}$	Compute sd of the last 5 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**$^{1/2}$ = **1.55** - **2.132** * **1.63**x**10**$^{-8}$/**5**$^{1/2}$ = **1.55**	Compute lower confidence limit for the mean of the last 5 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**$^{1/2}$ = **1.55** + **2.132** * **1.63**x**10**$^{-8}$/**5**$^{1/2}$ = **1.55**	Compute upper confidence limit for the mean of the last 5 measurements.
5	N' = **N** * (**N**-1) / 2 = **5** * (**5**-1) / 2 = **10**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**10** ± **2.576** * **0.0**$^{1/2}$) / 2 = [**5.0**, **5.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Acetone (ug/L) at MW-22

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **12.4** / **8** = **1.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**19.22** - **153.76**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1.55** - **1.895** * **0.0**/**8**^{½} = **1.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1.55** + **1.895** * **0.0**/**8**^{½} = **1.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **15** * (**15**-1) / 2 = **105**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**105** ± **2.576** * **0.0**^{½}) / 2 = [**52.5**, **52.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Acetone (ug/L) at MW-35

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **12.4** / **8** = **1.55**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**19.22** - **153.76**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1.55** - **1.895** * **0.0**/**8**^{½} = **1.55**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1.55** + **1.895** * **0.0**/**8**^{½} = **1.55**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic (ug/L) at MW-11

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.425** / **5** = **0.285**	Compute the mean of the last 5 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.406** - **2.031**/**5**) / (**5**-1))^{½} = **3.86x10^{-9}**	Compute sd of the last 5 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.285** - **2.132** * **3.86x10^{-9}**/**5**^{½} = **0.285**	Compute lower confidence limit for the mean of the last 5 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.285** + **2.132** * **3.86x10^{-9}**/**5**^{½} = **0.285**	Compute upper confidence limit for the mean of the last 5 measurements.
5	N' = **N** * (**N**-1) / 2 = **5** * (**5**-1) / 2 = **10**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**10** ± **2.576** * **0.0**^{½}) / 2 = [**5.0**, **5.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic (ug/L) at MW-22

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **3.0** / **8** = **0.375**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.125** - **9.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.375** - **1.895** * **0.0**/**8**^{½} = **0.375**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.375** + **1.895** * **0.0**/**8**^{½} = **0.375**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **15** * (**15**-1) / 2 = **105**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **74.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**105** ± **2.576** * **74.667**^{½}) / 2 = [**41.37**, **63.63**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic (ug/L) at MW-35

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **3.0** / **8** = **0.375**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1.125** - **9.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.375** - **1.895** * **0.0**/**8**^{½} = **0.375**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.375** + **1.895** * **0.0**/**8**^{½} = **0.375**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium (ug/L) at MW-11

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **83.0** / **5** = **16.6**	Compute the mean of the last 5 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**1390.24** - **6889.0**/**5**) / (**5**-1))^{½} = **1.764**	Compute sd of the last 5 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **16.6** - **2.132** * **1.764**/**5**^{½} = **14.919**	Compute lower confidence limit for the mean of the last 5 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **16.6** + **2.132** * **1.764**/**5**^{½} = **18.281**	Compute upper confidence limit for the mean of the last 5 measurements.
5	N' = **N** * (**N**-1) / 2 = **5** * (**5**-1) / 2 = **10**	Number of sample pairs during trend detection period.
6	S = **-0.929**	Sen's estimator of trend.
7	var(S) = **16.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**10** ± **2.576** * **16.667**^{½}) / 2 = [**-0.258**, **10.258**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-2.935**, **0.695**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium (ug/L) at MW-22

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1185.0** / **8** = **148.125**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**176121.0** - **1.40**x**10^6**/**8**) / (**8**-1))^{½} = **9.203**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **148.125** - **1.895** * **9.203**/**8**^{½} = **141.961**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **148.125** + **1.895** * **9.203**/**8**^{½} = **154.289**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **15** * (**15**-1) / 2 = **105**	Number of sample pairs during trend detection period.
6	S = **-1.775**	Sen's estimator of trend.
7	var(S) = **407.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**105** ± **2.576** * **407.333**^{½}) / 2 = [**26.505**, **78.495**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-7.653**, **3.019**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Barium (ug/L) at MW-35

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **2438.0** / **8** = **304.75**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**788104.0** - **5.94**x**10^6**/**8**) / (**8**-1))^{½} = **80.288**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **304.75** - **1.895** * **80.288**/**8**^{½} = **250.972**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **304.75** + **1.895** * **80.288**/**8**^{½} = **358.528**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **-5.975**	Sen's estimator of trend.
7	var(S) = **333.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **333.667**^{½}) / 2 = [**21.973**, **69.027**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-27.652**, **19.921**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Benzene (ug/L) at MW-11

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.55** / **5** = **0.11**	Compute the mean of the last 5 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.061** - **0.303**/**5**) / (**5**-1))^{½} = **0.0**	Compute sd of the last 5 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.11** - **2.132** * **0.0**/**5**^{½} = **0.11**	Compute lower confidence limit for the mean of the last 5 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.11** + **2.132** * **0.0**/**5**^{½} = **0.11**	Compute upper confidence limit for the mean of the last 5 measurements.
5	N' = **N** * (**N**-1) / 2 = **5** * (**5**-1) / 2 = **10**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**10** ± **2.576** * **0.0**^{½}) / 2 = [**5.0**, **5.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Benzene (ug/L) at MW-22

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.88** / **8** = **0.11**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.097** - **0.774**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.11** - **1.895** * **0.0**/**8**^{½} = **0.11**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.11** + **1.895** * **0.0**/**8**^{½} = **0.11**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **15** * (**15**-1) / 2 = **105**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**105** ± **2.576** * **0.0**^{½}) / 2 = [**52.5**, **52.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Benzene (ug/L) at MW-35

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.88** / **8** = **0.11**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.097** - **0.774**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.11** - **1.895** * **0.0**/**8**^{½} = **0.11**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.11** + **1.895** * **0.0**/**8**^{½} = **0.11**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium (ug/L) at MW-11

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.15** / **5** = **0.03**	Compute the mean of the last 5 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.005** - **0.023**/**5**) / (**5**-1))^{½} = **0.0**	Compute sd of the last 5 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.03** - **2.132** * **0.0**/**5**^{½} = **0.03**	Compute lower confidence limit for the mean of the last 5 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.03** + **2.132** * **0.0**/**5**^{½} = **0.03**	Compute upper confidence limit for the mean of the last 5 measurements.
5	N' = **N** * (**N**-1) / 2 = **5** * (**5**-1) / 2 = **10**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**10** ± **2.576** * **0.0**^{½}) / 2 = [**5.0**, **5.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium (ug/L) at MW-22

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.22** / **8** = **0.028**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.006** - **0.048**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.028** - **1.895** * **0.0**/**8**^{½} = **0.028**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.028** + **1.895** * **0.0**/**8**^{½} = **0.028**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **15** * (**15**-1) / 2 = **105**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**105** ± **2.576** * **0.0**^{½}) / 2 = [**52.5**, **52.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cadmium (ug/L) at MW-35

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.204** / **8** = **0.026**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.005** - **0.042**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.026** - **1.895** * **0.0**/**8**^{½} = **0.026**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.026** + **1.895** * **0.0**/**8**^{½} = **0.026**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chlorobenzene (ug/L) at MW-11

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.0** / **5** = **0.2**	Compute the mean of the last 5 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.2** - **1.0**/**5**) / (**5**-1))^{½} = **3.12**x**10**$^{-9}$	Compute sd of the last 5 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.2** - **2.132** * **3.12**x**10**$^{-9}$/**5**^{½} = **0.2**	Compute lower confidence limit for the mean of the last 5 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.2** + **2.132** * **3.12**x**10**$^{-9}$/**5**^{½} = **0.2**	Compute upper confidence limit for the mean of the last 5 measurements.
5	N' = **N** * (**N**-1) / 2 = **5** * (**5**-1) / 2 = **10**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**10** ± **2.576** * **0.0**^{½}) / 2 = [**5.0**, **5.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chlorobenzene (ug/L) at MW-22

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.6** / **8** = **0.2**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.32** - **2.56**/**8**) / (**8**-1))^{½} = **2.93**x**10**$^{-9}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.2** - **1.895** * **2.93**x**10**$^{-9}$/**8**^{½} = **0.2**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.2** + **1.895** * **2.93**x**10**$^{-9}$/**8**^{½} = **0.2**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **15** * (**15**-1) / 2 = **105**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**105** ± **2.576** * **0.0**^{½}) / 2 = [**52.5**, **52.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chlorobenzene (ug/L) at MW-35

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **1.6** / **8** = **0.2**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.32** - **2.56**/**8**) / (**8**-1))^{½} = **2.93**x**10**$^{-9}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.2** - **1.895** * **2.93**x**10**$^{-9}$/**8**^{½} = **0.2**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.2** + **1.895** * **2.93**x**10**$^{-9}$/**8**^{½} = **0.2**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at MW-11

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **10.8** / **6** = **1.8**	Compute the mean of the last 6 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**68.886** - **116.64**/**6**) / (**6**-1))^{½} = **3.145**	Compute sd of the last 6 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **1.8** - **2.014** * **3.145**/**6**^{½} = **0.0**	Compute lower confidence limit for the mean of the last 6 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **1.8** + **2.014** * **3.145**/**6**^{½} = **4.386**	Compute upper confidence limit for the mean of the last 6 measurements.
5	N' = **N** * (**N**-1) / 2 = **6** * (**6**-1) / 2 = **15**	Number of sample pairs during trend detection period.
6	S = **-0.551**	Sen's estimator of trend.
7	var(S) = **19.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**15** ± **2.576** * **19.667**^{½}) / 2 = [**1.788**, **13.212**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-11.131**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at MW-22

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.68** / **8** = **0.085**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.058** - **0.462**/**8**) / (**8**-1))^{½} = **1.76**x**10**$^{-9}$	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.085** - **1.895** * **1.76**x**10**$^{-9}$/**8**^{½} = **0.085**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.085** + **1.895** * **1.76**x**10**$^{-9}$/**8**^{½} = **0.085**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **15** * (**15**-1) / 2 = **105**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**105** ± **2.576** * **0.0**^{½}) / 2 = [**52.5**, **52.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt (ug/L) at MW-35

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **47.35** / **8** = **5.919**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**323.132** - **2242.023**/**8**) / (**8**-1))^{½} = **2.475**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **5.919** - **1.895** * **2.475**/**8**^{½} = **4.261**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **5.919** + **1.895** * **2.475**/**8**^{½} = **7.577**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **-0.41**	Sen's estimator of trend.
7	var(S) = **333.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **333.667**^{½}) / 2 = [**21.973**, **69.027**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-1.007**, **0.259**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper (ug/L) at MW-11

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4.5** / **5** = **0.9**	Compute the mean of the last 5 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**4.05** - **20.25**/**5**) / (**5**-1))^{½} = **0.0**	Compute sd of the last 5 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.9** - **2.132** * **0.0**/**5**^{½} = **0.9**	Compute lower confidence limit for the mean of the last 5 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.9** + **2.132** * **0.0**/**5**^{½} = **0.9**	Compute upper confidence limit for the mean of the last 5 measurements.
5	N' = **N** * (**N**-1) / 2 = **5** * (**5**-1) / 2 = **10**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**10** ± **2.576** * **0.0**^{½}) / 2 = [**5.0**, **5.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper (ug/L) at MW-22

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **7.2** / **8** = **0.9**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**6.48** - **51.84**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.9** - **1.895** * **0.0**/**8**^{½} = **0.9**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.9** + **1.895** * **0.0**/**8**^{½} = **0.9**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **15** * (**15**-1) / 2 = **105**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**105** ± **2.576** * **0.0**^{½}) / 2 = [**52.5**, **52.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Copper (ug/L) at MW-35

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **7.2** / **8** = **0.9**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**6.48** - **51.84**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.9** - **1.895** * **0.0**/**8**^{½} = **0.9**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.9** + **1.895** * **0.0**/**8**^{½} = **0.9**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Lead (ug/L) at MW-11

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.6** / **5** = **0.12**	Compute the mean of the last 5 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.072** - **0.36**/**5**) / (**5**-1))^{½} = **0.0**	Compute sd of the last 5 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.12** - **2.132** * **0.0**/**5**^{½} = **0.12**	Compute lower confidence limit for the mean of the last 5 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.12** + **2.132** * **0.0**/**5**^{½} = **0.12**	Compute upper confidence limit for the mean of the last 5 measurements.
5	N' = **N** * (**N**-1) / 2 = **5** * (**5**-1) / 2 = **10**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**10** ± **2.576** * **0.0**^{½}) / 2 = [**5.0**, **5.0**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Lead (ug/L) at MW-22

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.96** / **8** = **0.12**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.115** - **0.922**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.12** - **1.895** * **0.0**/**8**^{½} = **0.12**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.12** + **1.895** * **0.0**/**8**^{½} = **0.12**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **15** * (**15**-1) / 2 = **105**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**105** ± **2.576** * **0.0**^{½}) / 2 = [**52.5**, **52.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Lead (ug/L) at MW-35

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **0.96** / **8** = **0.12**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**0.115** - **0.922**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **0.12** - **1.895** * **0.0**/**8**^{½} = **0.12**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **0.12** + **1.895** * **0.0**/**8**^{½} = **0.12**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel (ug/L) at MW-11

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **203.2** / **7** = **29.029**	Compute the mean of the last 7 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**6424.76** - **41290.24**/**7**) / (**7**-1))^{½} = **9.364**	Compute sd of the last 7 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **29.029** - **1.942** * **9.364**/**7**^{½} = **22.154**	Compute lower confidence limit for the mean of the last 7 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **29.029** + **1.942** * **9.364**/**7**^{½} = **35.903**	Compute upper confidence limit for the mean of the last 7 measurements.
5	N' = **N** * (**N**-1) / 2 = **7** * (**7**-1) / 2 = **21**	Number of sample pairs during trend detection period.
6	S = **-4.681**	Sen's estimator of trend.
7	var(S) = **44.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**21** ± **2.576** * **44.333**^{½}) / 2 = [**1.924**, **19.076**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-64.07**, **-0.523**]	Two-sided confidence interval for slope.
10	UCL(S) < 0	**Significant decreasing trend.**

Worksheet 6 - Assessment Monitoring
Nickel (ug/L) at MW-22

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **50.62** / **8** = **6.328**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**365.052** - **2562.384**/**8**) / (**8**-1))^{½} = **2.529**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **6.328** - **1.895** * **2.529**/**8**^{½} = **4.634**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **6.328** + **1.895** * **2.529**/**8**^{½} = **8.021**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **15** * (**15**-1) / 2 = **105**	Number of sample pairs during trend detection period.
6	S = **-0.384**	Sen's estimator of trend.
7	var(S) = **407.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**105** ± **2.576** * **407.333**^{½}) / 2 = [**26.505**, **78.495**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-1.503**, **0.466**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel (ug/L) at MW-35

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **172.7** / **8** = **21.588**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**4020.49** - **29825.29**/**8**) / (**8**-1))^{½} = **6.462**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **21.588** - **1.895** * **6.462**/**8**^{½} = **17.259**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **21.588** + **1.895** * **6.462**/**8**^{½} = **25.916**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **-1.222**	Sen's estimator of trend.
7	var(S) = **333.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **333.667**^{½}) / 2 = [**21.973**, **69.027**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-3.645**, **1.329**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Zinc (ug/L) at MW-11

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **716.4** / **7** = **102.343**	Compute the mean of the last 7 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**80149.1** - **513228.96**/**7**) / (**7**-1))^{½} = **33.741**	Compute sd of the last 7 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **102.343** - **1.942** * **33.741**/**7**^{½} = **77.573**	Compute lower confidence limit for the mean of the last 7 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **102.343** + **1.942** * **33.741**/**7**^{½} = **127.112**	Compute upper confidence limit for the mean of the last 7 measurements.
5	N' = **N** * (**N**-1) / 2 = **7** * (**7**-1) / 2 = **21**	Number of sample pairs during trend detection period.
6	S = **-4.422**	Sen's estimator of trend.
7	var(S) = **44.333**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**21** ± **2.576** * **44.333**^{½}) / 2 = [**1.924**, **19.076**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-291.539**, **17.451**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

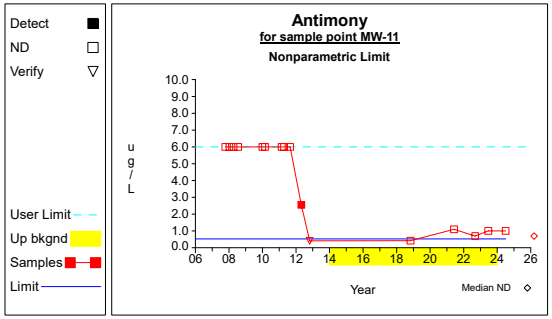
Worksheet 6 - Assessment Monitoring
Zinc (ug/L) at MW-22

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **40.0** / **8** = **5.0**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**200.0** - **1600.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **5.0** - **1.895** * **0.0**/**8**^{½} = **5.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **5.0** + **1.895** * **0.0**/**8**^{½} = **5.0**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **15** * (**15**-1) / 2 = **105**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**105** ± **2.576** * **0.0**^{½}) / 2 = [**52.5**, **52.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

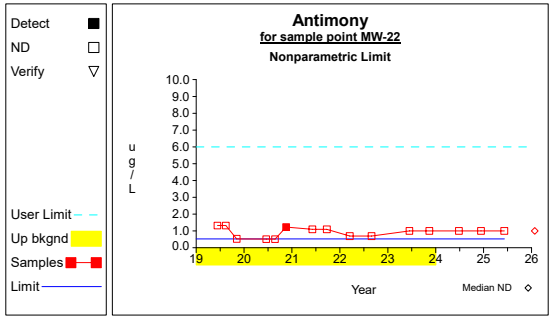
Worksheet 6 - Assessment Monitoring
Zinc (ug/L) at MW-35

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **40.0** / **8** = **5.0**	Compute the mean of the last 8 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**200.0** - **1600.0**/**8**) / (**8**-1))^{½} = **0.0**	Compute sd of the last 8 measurements.
3	LCL = $\overline{\mathbf{X}}$ - **tS**/**N**^{½} = **5.0** - **1.895** * **0.0**/**8**^{½} = **5.0**	Compute lower confidence limit for the mean of the last 8 measurements.
4	UCL = $\overline{\mathbf{X}}$ + **tS**/**N**^{½} = **5.0** + **1.895** * **0.0**/**8**^{½} = **5.0**	Compute upper confidence limit for the mean of the last 8 measurements.
5	N' = **N** * (**N**-1) / 2 = **14** * (**14**-1) / 2 = **91**	Number of sample pairs during trend detection period.
6	S = **0.0**	Sen's estimator of trend.
7	var(S) = **0.0**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**^{½}) / 2 = (**91** ± **2.576** * **0.0**^{½}) / 2 = [**45.5**, **45.5**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**0.0**, **0.0**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

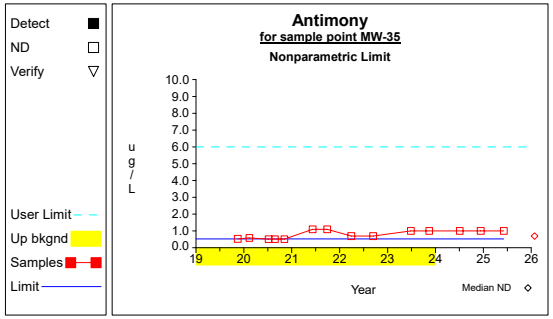
Up vs. Down Prediction Limits



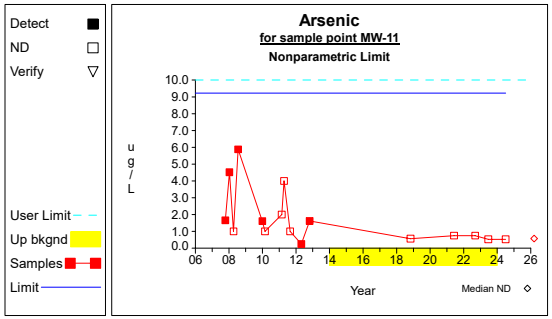
Graph 1



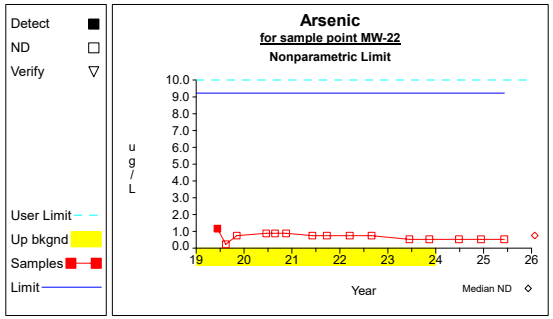
Graph 2



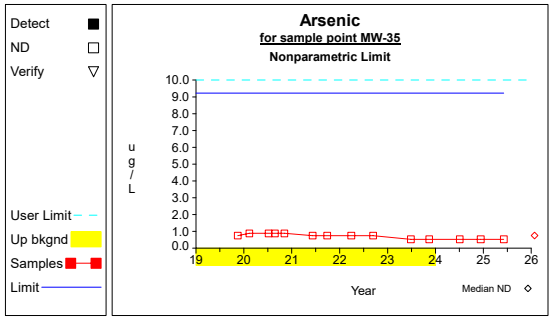
Graph 3



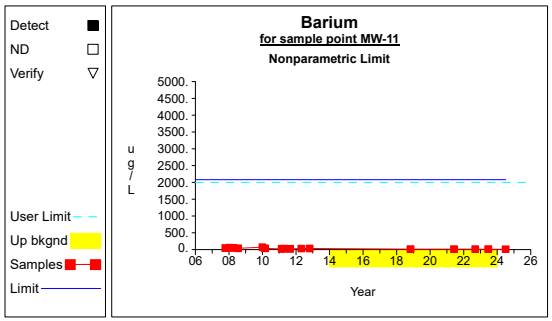
Graph 4



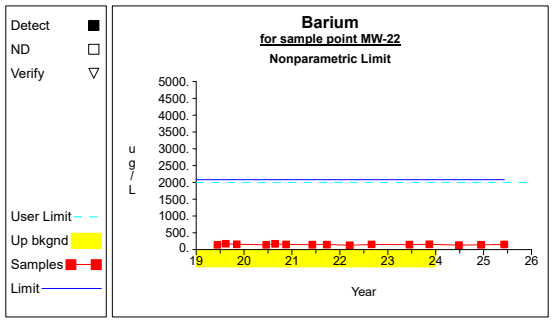
Graph 5



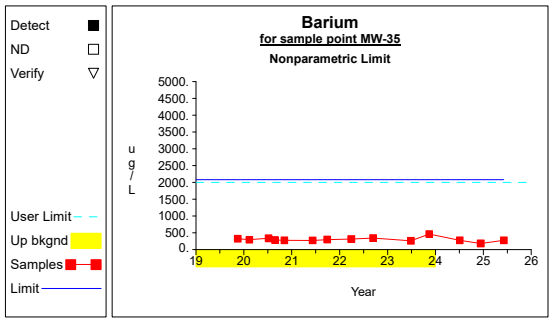
Graph 6



Graph 7

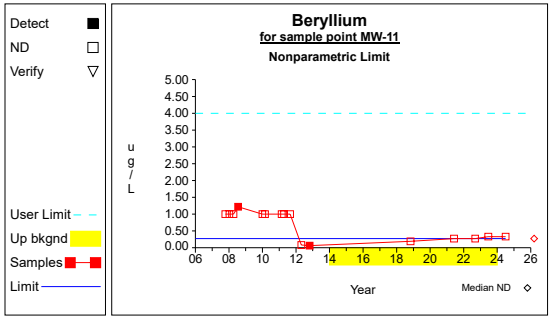


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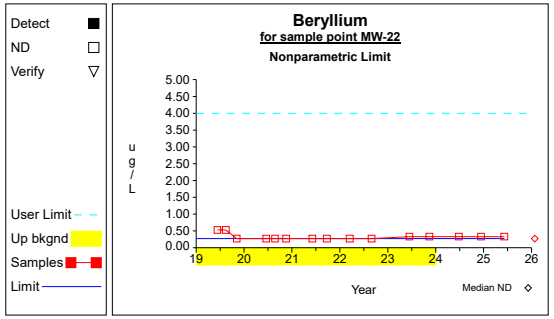


Graph 9

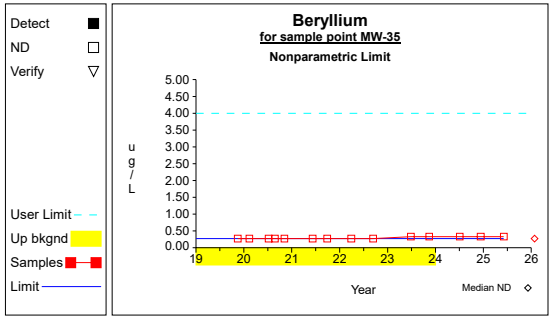
Up vs. Down Prediction Limits



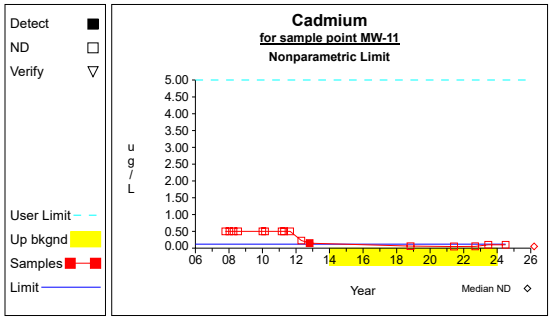
Graph 10



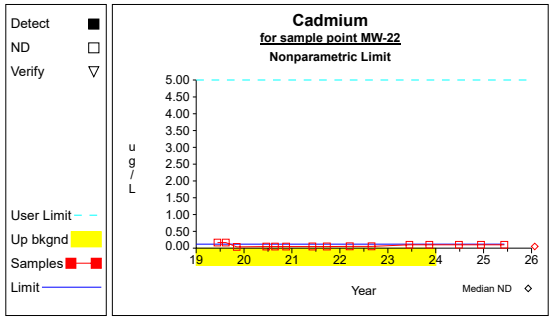
Graph 11



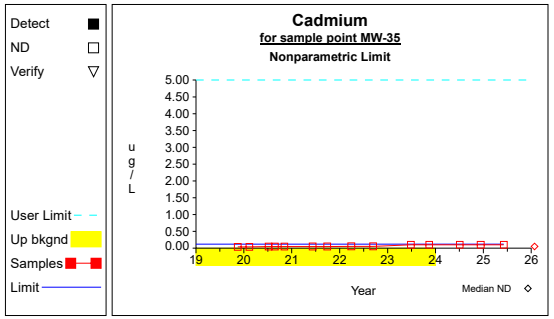
Graph 12



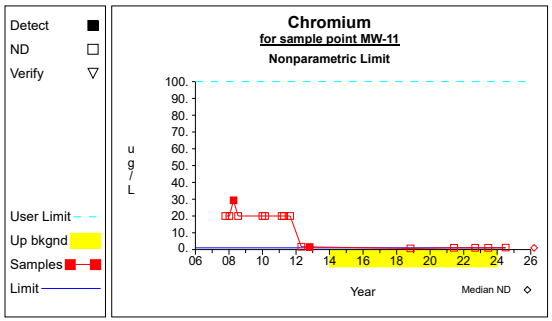
Graph 13



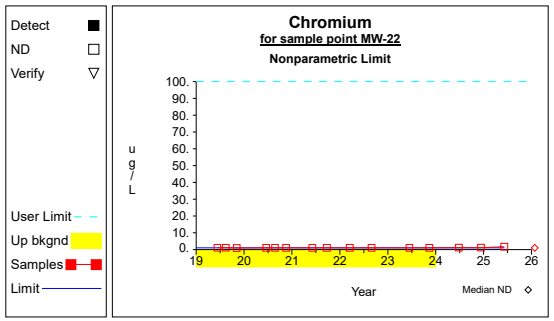
Graph 14



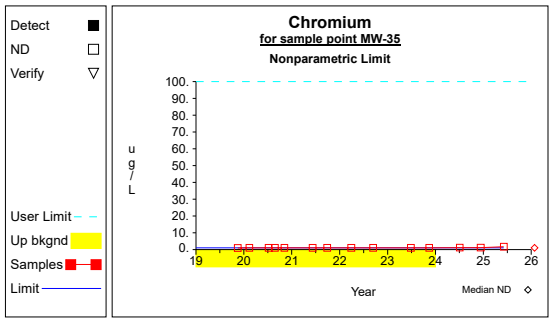
Graph 15



Graph 16

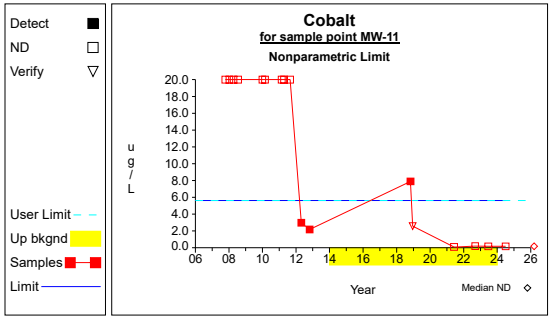


Graph 17

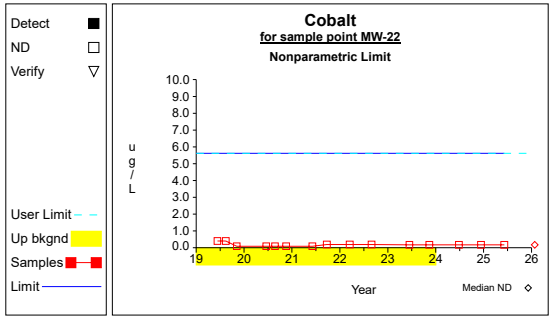


Graph 18

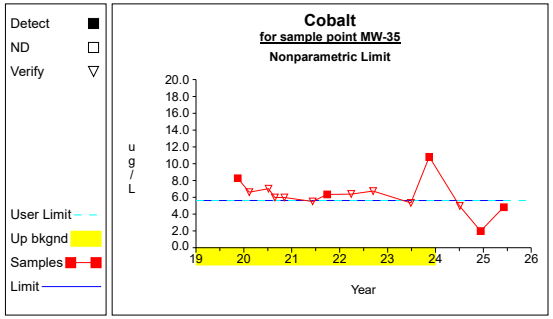
Up vs. Down Prediction Limits



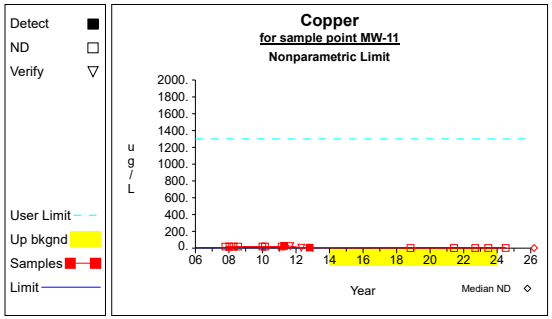
Graph 19



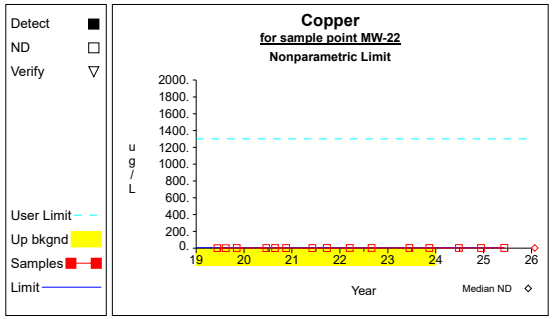
Graph 20



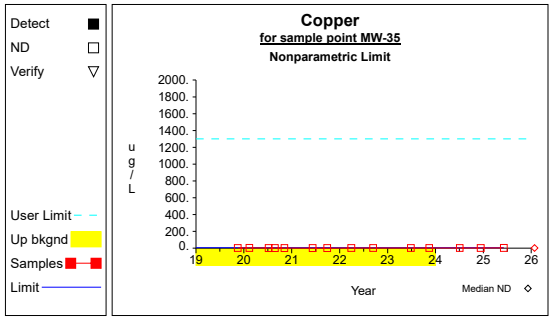
Graph 21



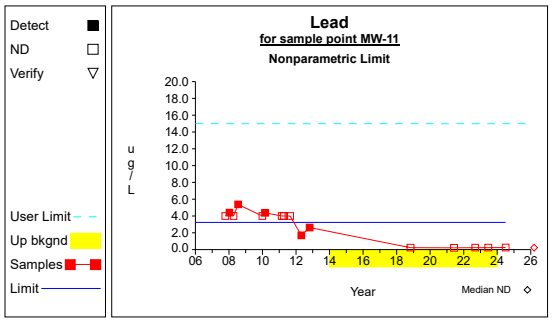
Graph 22



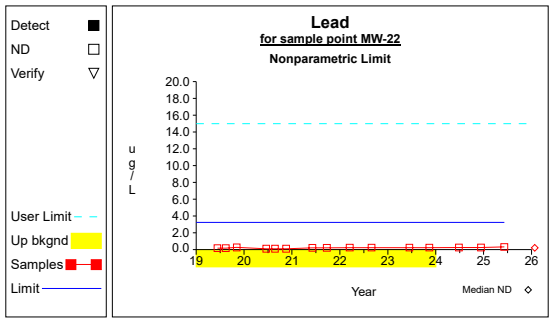
Graph 23



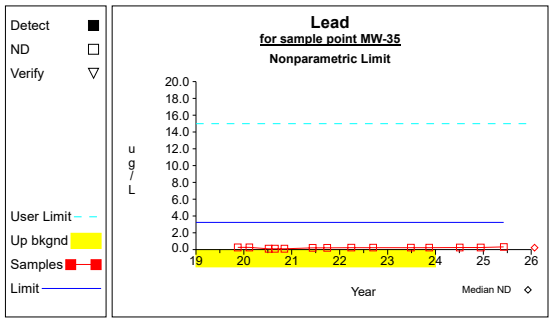
Graph 24



Graph 25

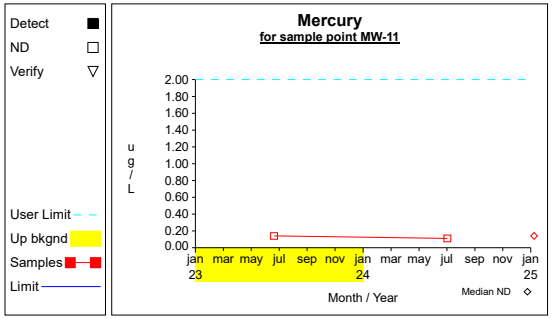


Graph 26

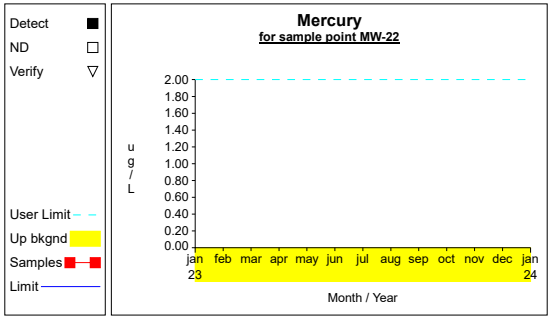


Graph 27

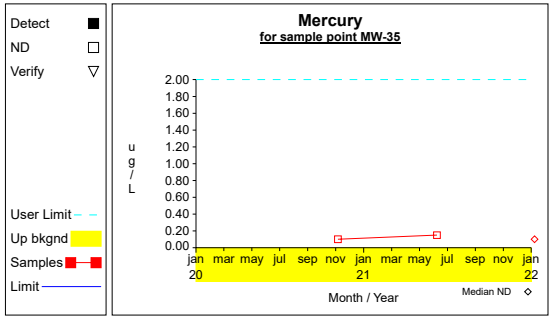
Up vs. Down Prediction Limits



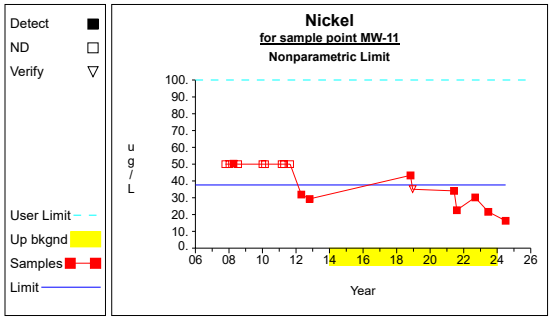
Graph 28



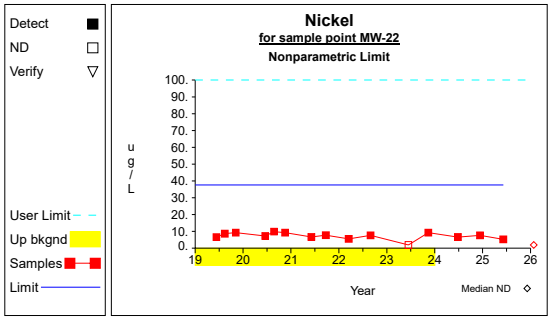
Graph 29



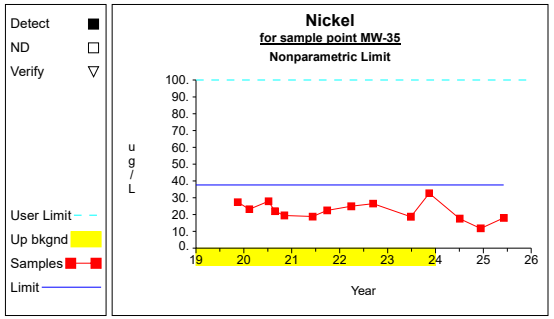
Graph 30



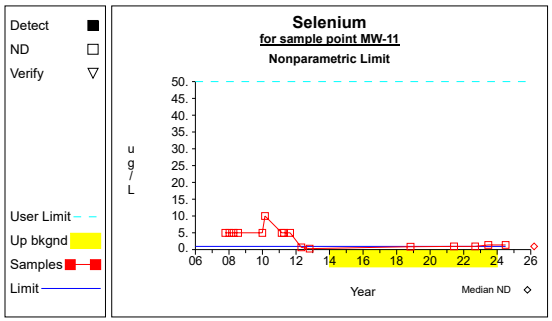
Graph 31



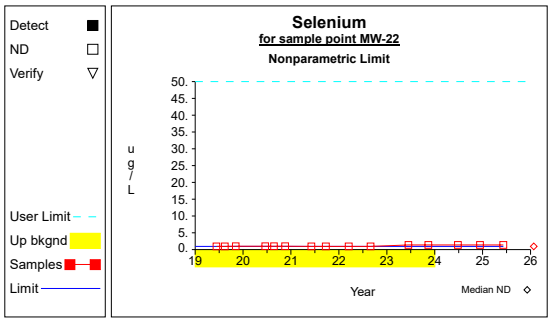
Graph 32



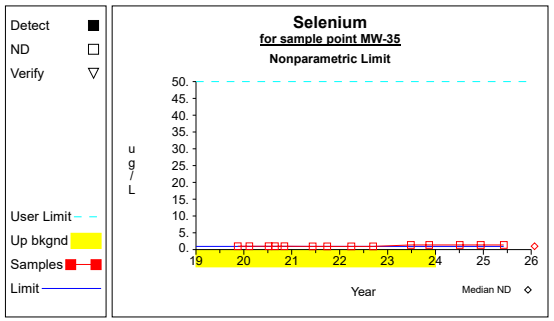
Graph 33



Graph 34

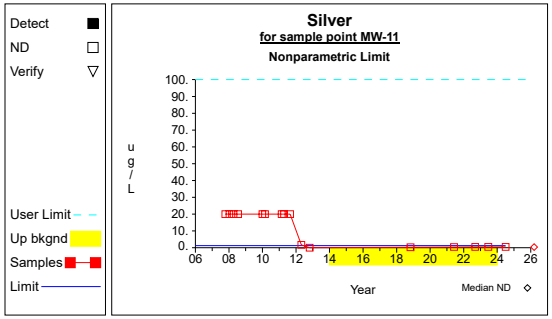


Graph 35

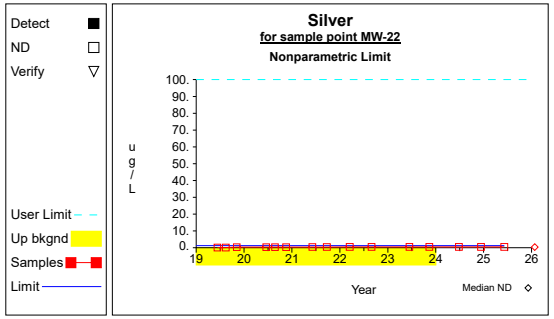


Graph 36

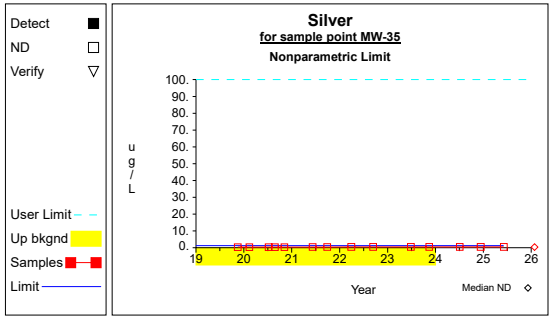
Up vs. Down Prediction Limits



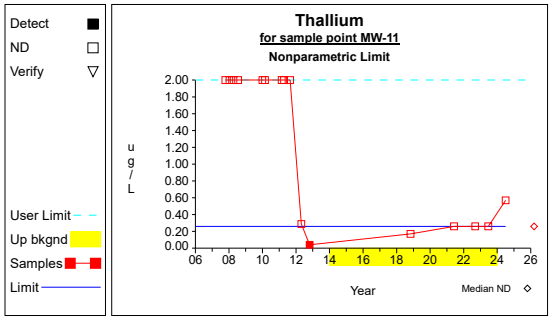
Graph 37



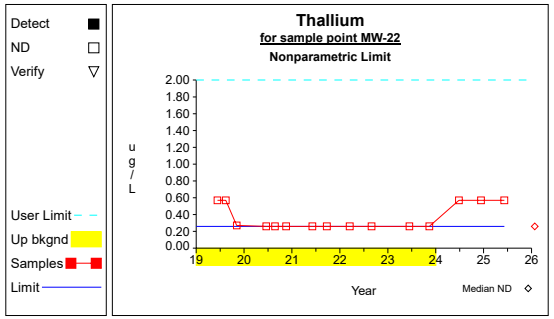
Graph 38



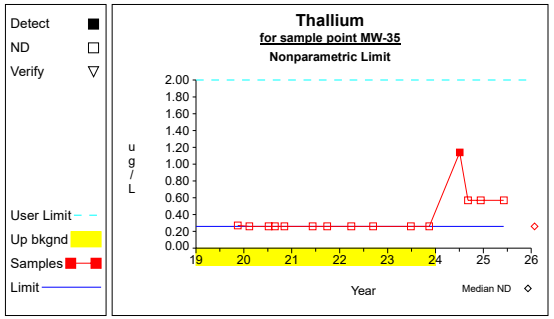
Graph 39



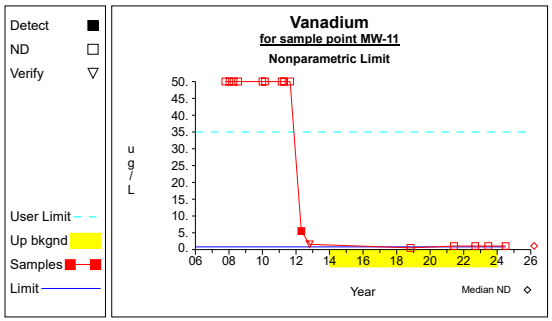
Graph 40



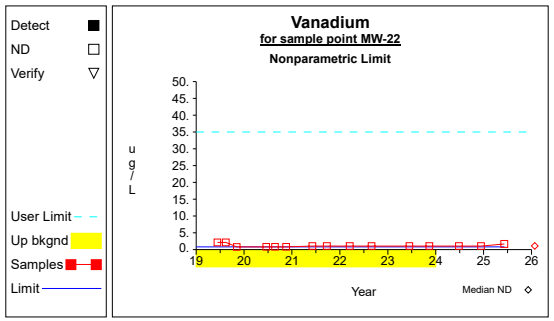
Graph 41



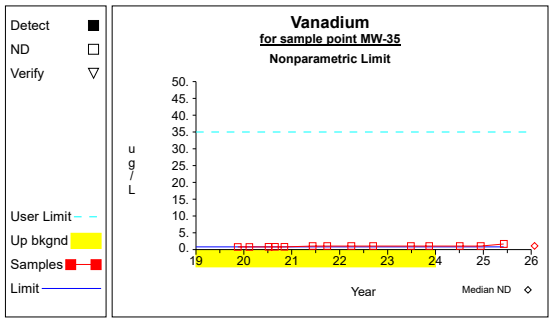
Graph 42



Graph 43

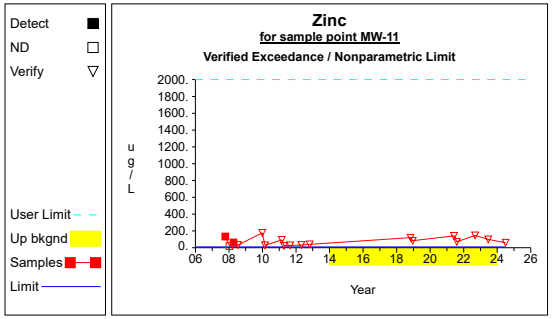


Graph 44

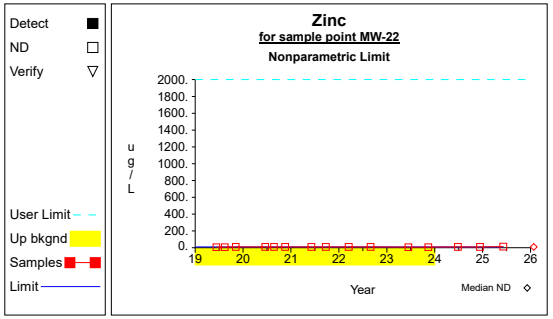


Graph 45

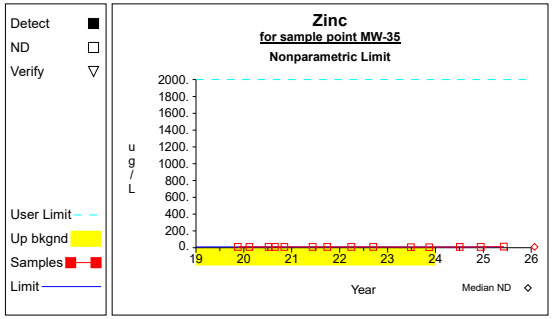
Up vs. Down Prediction Limits



Graph 46



Graph 47



Graph 48

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

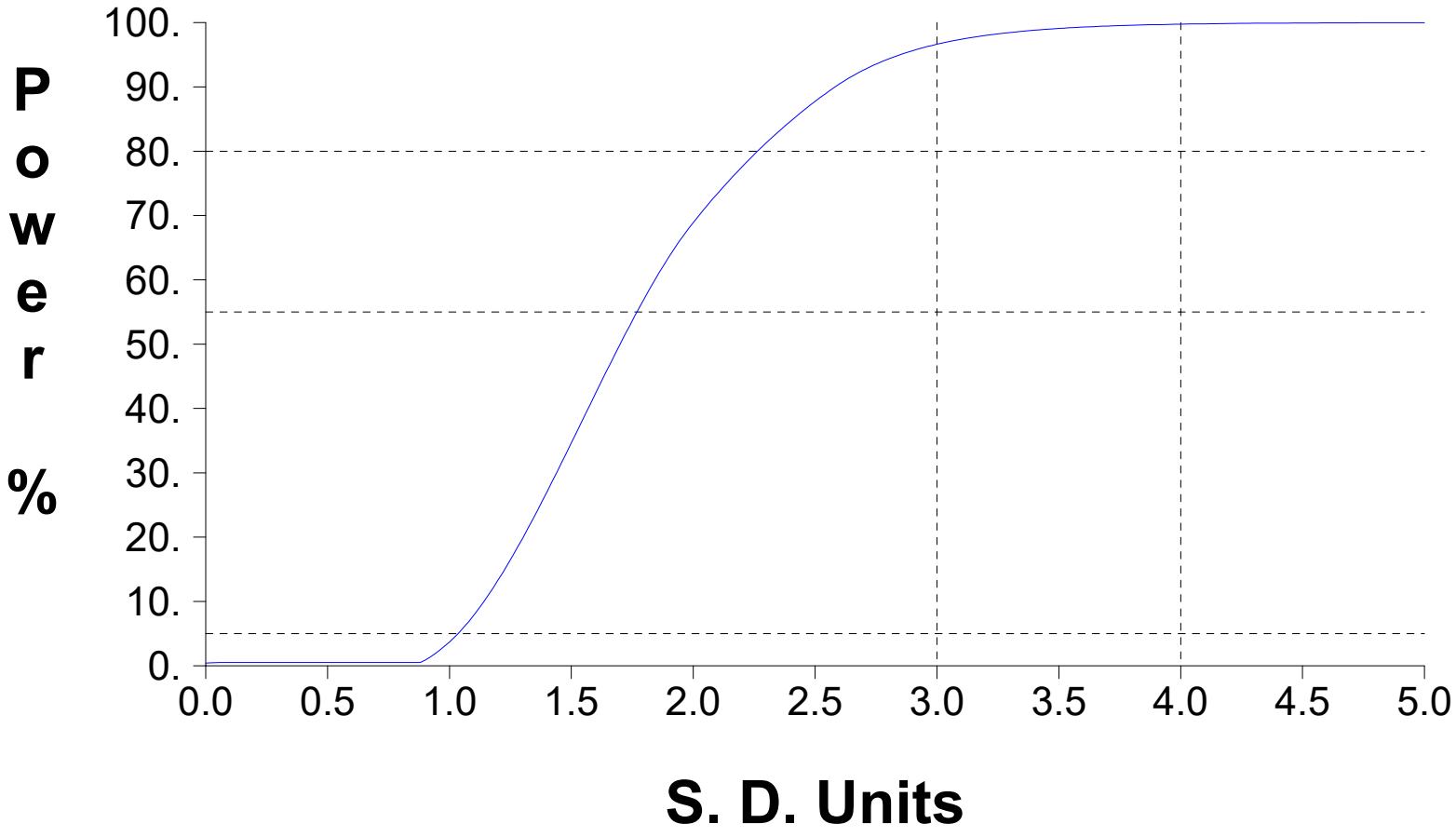


Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony	ug/L	MW-19	05/06/2014	ND	0.4000	0.5300	**
Antimony	ug/L	MW-19	10/31/2014	ND	0.1610	0.5300	**
Antimony	ug/L	MW-19	05/01/2015	ND	0.1610	0.5300	**
Antimony	ug/L	MW-19	09/16/2015	ND	0.1610	0.5300	**
Antimony	ug/L	MW-19	04/11/2016	ND	0.2370	0.5300	**
Antimony	ug/L	MW-19	11/11/2016	ND	0.2370	0.5300	**
Antimony	ug/L	MW-19	05/05/2017	ND	0.1850	0.5300	**
Antimony	ug/L	MW-19	11/14/2017	ND	0.1850	0.5300	**
Antimony	ug/L	MW-19	06/06/2018	ND	0.4200	0.5300	**
Antimony	ug/L	MW-19	10/31/2018	ND	0.4200	0.5300	**
Antimony	ug/L	MW-19	06/04/2019	ND	1.3200	0.5300	**
Antimony	ug/L	MW-19	08/14/2019	ND	1.3200	0.5300	**
Antimony	ug/L	MW-19	11/01/2019	ND	0.5300		
Antimony	ug/L	MW-19	06/16/2020	ND	0.5100	0.5300	**
Antimony	ug/L	MW-19	08/24/2020	ND	2.0400	0.5300	**
Antimony	ug/L	MW-19	11/03/2020	ND	0.5100	0.5300	**
Antimony	ug/L	MW-19	05/17/2021	ND	1.1000	0.5300	**
Antimony	ug/L	MW-19	09/22/2021	ND	1.1000	0.5300	**
Antimony	ug/L	MW-19	12/14/2021	ND	1.1000	0.5300	**
Antimony	ug/L	MW-19	03/16/2022	ND	0.6900	0.5300	**
Antimony	ug/L	MW-19	06/27/2022	ND	0.6900	0.5300	**
Antimony	ug/L	MW-19	08/31/2022	ND	0.6900	0.5300	**
Antimony	ug/L	MW-19	12/07/2022	ND	0.6900	0.5300	**
Antimony	ug/L	MW-19	06/14/2023	ND	1.0000	0.5300	**
Antimony	ug/L	MW-19	11/09/2023	ND	1.0000	0.5300	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Arsenic	ug/L	MW-19	05/06/2014		0.4200		
Arsenic	ug/L	MW-19	10/31/2014	ND	0.9450	0.7500	**
Arsenic	ug/L	MW-19	05/01/2015	ND	0.9450	0.7500	**
Arsenic	ug/L	MW-19	09/16/2015	ND	0.9450	0.7500	**
Arsenic	ug/L	MW-19	04/11/2016	ND	0.6720	0.7500	**
Arsenic	ug/L	MW-19	11/11/2016	ND	0.6720	0.7500	**
Arsenic	ug/L	MW-19	05/05/2017	ND	0.5050	0.7500	**
Arsenic	ug/L	MW-19	11/14/2017	ND	0.5050	0.7500	**
Arsenic	ug/L	MW-19	06/06/2018	ND	0.5700	0.7500	**
Arsenic	ug/L	MW-19	10/31/2018	ND	0.5700	0.7500	**
Arsenic	ug/L	MW-19	06/04/2019		1.5500		
Arsenic	ug/L	MW-19	08/14/2019		1.8900		
Arsenic	ug/L	MW-19	11/01/2019	ND	0.7500		
Arsenic	ug/L	MW-19	06/16/2020		2.0100		
Arsenic	ug/L	MW-19	08/24/2020		9.2300		
Arsenic	ug/L	MW-19	11/03/2020		2.4700		
Arsenic	ug/L	MW-19	05/17/2021		2.4800		
Arsenic	ug/L	MW-19	09/22/2021	ND	0.7500		
Arsenic	ug/L	MW-19	12/14/2021	ND	0.7500		
Arsenic	ug/L	MW-19	03/16/2022	ND	0.7500		
Arsenic	ug/L	MW-19	06/27/2022	ND	0.7500		
Arsenic	ug/L	MW-19	08/31/2022	ND	0.7500		
Arsenic	ug/L	MW-19	12/07/2022	ND	0.7500		
Arsenic	ug/L	MW-19	06/14/2023	ND	0.5300	0.7500	**
Arsenic	ug/L	MW-19	11/09/2023	ND	0.5300	0.7500	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Barium	ug/L	MW-19	05/06/2014		154.0000		
Barium	ug/L	MW-19	10/31/2014		179.0000		
Barium	ug/L	MW-19	05/01/2015		142.0000		
Barium	ug/L	MW-19	09/16/2015		149.0000		
Barium	ug/L	MW-19	04/11/2016		153.0000		
Barium	ug/L	MW-19	11/11/2016		171.0000		
Barium	ug/L	MW-19	05/05/2017		162.0000		
Barium	ug/L	MW-19	11/14/2017		156.0000		
Barium	ug/L	MW-19	06/06/2018		156.0000		
Barium	ug/L	MW-19	10/31/2018		156.0000		
Barium	ug/L	MW-19	06/04/2019		528.0000		
Barium	ug/L	MW-19	08/14/2019		554.0000		
Barium	ug/L	MW-19	11/01/2019		554.0000		
Barium	ug/L	MW-19	06/16/2020		572.0000		
Barium	ug/L	MW-19	08/24/2020		2080.0000		
Barium	ug/L	MW-19	11/03/2020		498.0000		
Barium	ug/L	MW-19	05/17/2021		616.0000		
Barium	ug/L	MW-19	09/22/2021		190.0000		
Barium	ug/L	MW-19	12/14/2021		100.0000		
Barium	ug/L	MW-19	03/16/2022		139.0000		
Barium	ug/L	MW-19	06/27/2022		72.3000		
Barium	ug/L	MW-19	08/31/2022		168.0000		
Barium	ug/L	MW-19	12/07/2022		152.0000		
Barium	ug/L	MW-19	06/14/2023		82.4000		
Barium	ug/L	MW-19	11/09/2023		84.1000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Beryllium	ug/L	MW-19	05/06/2014	ND	0.0800	0.2700	**
Beryllium	ug/L	MW-19	10/31/2014	ND	0.0390	0.2700	**
Beryllium	ug/L	MW-19	05/01/2015	ND	0.0390	0.2700	**
Beryllium	ug/L	MW-19	09/16/2015		0.0400		
Beryllium	ug/L	MW-19	04/11/2016	ND	0.2210	0.2700	**
Beryllium	ug/L	MW-19	11/11/2016	ND	0.2210	0.2700	**
Beryllium	ug/L	MW-19	05/05/2017	ND	0.1250	0.2700	**
Beryllium	ug/L	MW-19	11/14/2017	ND	0.1250	0.2700	**
Beryllium	ug/L	MW-19	06/06/2018	ND	0.1900	0.2700	**
Beryllium	ug/L	MW-19	10/31/2018	ND	0.1900	0.2700	**
Beryllium	ug/L	MW-19	06/04/2019	ND	0.5300	0.2700	**
Beryllium	ug/L	MW-19	08/14/2019	ND	0.5300	0.2700	**
Beryllium	ug/L	MW-19	11/01/2019	ND	0.2700		
Beryllium	ug/L	MW-19	06/16/2020	ND	0.2700		
Beryllium	ug/L	MW-19	08/24/2020	ND	1.0800	0.2700	**
Beryllium	ug/L	MW-19	11/03/2020	ND	0.2700		
Beryllium	ug/L	MW-19	05/17/2021	ND	0.2700		
Beryllium	ug/L	MW-19	09/22/2021	ND	0.2700		
Beryllium	ug/L	MW-19	12/14/2021	ND	0.2700		
Beryllium	ug/L	MW-19	03/16/2022	ND	0.2700		
Beryllium	ug/L	MW-19	06/27/2022	ND	0.2700		
Beryllium	ug/L	MW-19	08/31/2022	ND	0.2700		
Beryllium	ug/L	MW-19	12/07/2022	ND	0.2700		
Beryllium	ug/L	MW-19	06/14/2023	ND	0.3300	0.2700	**
Beryllium	ug/L	MW-19	11/09/2023	ND	0.3300	0.2700	**

* - 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	ug/L	MW-19	05/06/2014	ND	0.1000	0.0550	**
Cadmium	ug/L	MW-19	10/31/2014	ND	0.1120	0.0550	**
Cadmium	ug/L	MW-19	05/01/2015	ND	0.1120	0.0550	**
Cadmium	ug/L	MW-19	09/16/2015	ND	0.1120	0.0550	**
Cadmium	ug/L	MW-19	04/11/2016	ND	0.0351	0.0550	**
Cadmium	ug/L	MW-19	11/11/2016	ND	0.0351	0.0550	**
Cadmium	ug/L	MW-19	05/05/2017	ND	0.0441	0.0550	**
Cadmium	ug/L	MW-19	11/14/2017	ND	0.0441	0.0550	**
Cadmium	ug/L	MW-19	06/06/2018	ND	0.0600	0.0550	**
Cadmium	ug/L	MW-19	10/31/2018	ND	0.0600	0.0550	**
Cadmium	ug/L	MW-19	06/04/2019	ND	0.1670	0.0550	**
Cadmium	ug/L	MW-19	08/14/2019	ND	0.1670	0.0550	**
Cadmium	ug/L	MW-19	11/01/2019	ND	0.0390	0.0550	**
Cadmium	ug/L	MW-19	06/16/2020	ND	0.0490	0.0550	**
Cadmium	ug/L	MW-19	08/24/2020	ND	0.1960	0.0550	**
Cadmium	ug/L	MW-19	11/03/2020	ND	0.0490	0.0550	**
Cadmium	ug/L	MW-19	05/17/2021	ND	0.0510	0.0550	**
Cadmium	ug/L	MW-19	09/22/2021	ND	0.0510	0.0550	**
Cadmium	ug/L	MW-19	12/14/2021	ND	0.0510	0.0550	**
Cadmium	ug/L	MW-19	03/16/2022		0.1200		
Cadmium	ug/L	MW-19	06/27/2022	ND	0.0550		
Cadmium	ug/L	MW-19	08/31/2022	ND	0.0550		
Cadmium	ug/L	MW-19	12/07/2022	ND	0.0550		
Cadmium	ug/L	MW-19	06/14/2023	ND	0.1000	0.0550	**
Cadmium	ug/L	MW-19	11/09/2023	ND	0.1000	0.0550	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Chromium	ug/L	MW-19	05/06/2014		1.0700		
Chromium	ug/L	MW-19	10/31/2014	ND	1.2400	1.1000	**
Chromium	ug/L	MW-19	05/01/2015	ND	1.2400	1.1000	**
Chromium	ug/L	MW-19	09/16/2015	ND	1.2400	1.1000	**
Chromium	ug/L	MW-19	04/11/2016	ND	0.3550	1.1000	**
Chromium	ug/L	MW-19	11/11/2016	ND	0.3550	1.1000	**
Chromium	ug/L	MW-19	05/05/2017	ND	0.7290	1.1000	**
Chromium	ug/L	MW-19	11/14/2017	ND	0.7290	1.1000	**
Chromium	ug/L	MW-19	06/06/2018	ND	0.7600	1.1000	**
Chromium	ug/L	MW-19	10/31/2018	ND	0.7600	1.1000	**
Chromium	ug/L	MW-19	06/04/2019	ND	1.1400	1.1000	**
Chromium	ug/L	MW-19	08/14/2019	ND	1.1400	1.1000	**
Chromium	ug/L	MW-19	11/01/2019	ND	0.9800	1.1000	**
Chromium	ug/L	MW-19	06/16/2020	ND	1.1000		
Chromium	ug/L	MW-19	08/24/2020	ND	4.4000	1.1000	**
Chromium	ug/L	MW-19	11/03/2020	ND	1.1000		
Chromium	ug/L	MW-19	05/17/2021	ND	1.1000		
Chromium	ug/L	MW-19	09/22/2021	ND	1.1000		
Chromium	ug/L	MW-19	12/14/2021	ND	1.1000		
Chromium	ug/L	MW-19	03/16/2022	ND	1.1000		
Chromium	ug/L	MW-19	06/27/2022	ND	1.1000		
Chromium	ug/L	MW-19	08/31/2022	ND	1.1000		
Chromium	ug/L	MW-19	12/07/2022	ND	1.1000		
Chromium	ug/L	MW-19	06/14/2023	ND	1.1000		
Chromium	ug/L	MW-19	11/09/2023	ND	1.1000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cobalt	ug/L	MW-19	05/06/2014		0.1000		
Cobalt	ug/L	MW-19	10/31/2014		0.3640		
Cobalt	ug/L	MW-19	05/01/2015	ND	0.0528	0.0610	**
Cobalt	ug/L	MW-19	09/16/2015		0.0930		
Cobalt	ug/L	MW-19	04/11/2016	ND	0.0274	0.0610	**
Cobalt	ug/L	MW-19	11/11/2016		0.1660		
Cobalt	ug/L	MW-19	05/05/2017	ND	0.0453	0.0610	**
Cobalt	ug/L	MW-19	11/14/2017	ND	0.0453	0.0610	**
Cobalt	ug/L	MW-19	06/06/2018	ND	0.0610		
Cobalt	ug/L	MW-19	10/31/2018	ND	0.0610		
Cobalt	ug/L	MW-19	06/04/2019		3.0800		
Cobalt	ug/L	MW-19	08/14/2019		2.1100		
Cobalt	ug/L	MW-19	11/01/2019		2.3800		
Cobalt	ug/L	MW-19	06/16/2020		1.5100		
Cobalt	ug/L	MW-19	08/24/2020		5.6200		
Cobalt	ug/L	MW-19	11/03/2020		1.8000		
Cobalt	ug/L	MW-19	05/17/2021		1.4900		
Cobalt	ug/L	MW-19	09/22/2021		1.4300		
Cobalt	ug/L	MW-19	12/14/2021		0.6240		
Cobalt	ug/L	MW-19	03/16/2022		3.4000		
Cobalt	ug/L	MW-19	06/27/2022	ND	0.1900	0.0610	**
Cobalt	ug/L	MW-19	08/31/2022	ND	0.1900	0.0610	**
Cobalt	ug/L	MW-19	12/07/2022	ND	0.1900	0.0610	**
Cobalt	ug/L	MW-19	06/14/2023	ND	0.1700	0.0610	**
Cobalt	ug/L	MW-19	11/09/2023	ND	0.1700	0.0610	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Copper	ug/L	MW-18	06/18/2018	ND	6.0000	1.5000	**
Copper	ug/L	MW-19	05/06/2014	ND	0.5600	1.5000	**
Copper	ug/L	MW-19	10/31/2014	ND	0.4850	1.5000	**
Copper	ug/L	MW-19	05/01/2015	ND	0.4850	1.5000	**
Copper	ug/L	MW-19	09/16/2015	ND	0.4850	1.5000	**
Copper	ug/L	MW-19	04/11/2016	ND	1.2200	1.5000	**
Copper	ug/L	MW-19	11/11/2016	ND	1.2200	1.5000	**
Copper	ug/L	MW-19	05/05/2017	ND	2.1900	1.5000	**
Copper	ug/L	MW-19	11/14/2017	ND	2.1900	1.5000	**
Copper	ug/L	MW-19	06/06/2018	ND	3.8000	1.5000	**
Copper	ug/L	MW-19	10/31/2018	ND	1.6000	1.5000	**
Copper	ug/L	MW-19	06/04/2019	ND	0.4970	1.5000	**
Copper	ug/L	MW-19	08/14/2019	ND	0.4970	1.5000	**
Copper	ug/L	MW-19	11/01/2019	ND	2.0000	1.5000	**
Copper	ug/L	MW-19	06/16/2020	ND	1.5000		
Copper	ug/L	MW-19	08/24/2020	ND	6.0000	1.5000	**
Copper	ug/L	MW-19	11/03/2020	ND	1.5000		
Copper	ug/L	MW-19	05/17/2021	ND	1.4000	1.5000	**
Copper	ug/L	MW-19	09/22/2021	ND	1.4000	1.5000	**
Copper	ug/L	MW-19	12/14/2021	ND	1.4000	1.5000	**
Copper	ug/L	MW-19	03/16/2022		7.6400		
Copper	ug/L	MW-19	06/27/2022	ND	1.8000	1.5000	**
Copper	ug/L	MW-19	08/31/2022	ND	1.8000	1.5000	**
Copper	ug/L	MW-19	12/07/2022	ND	1.8000	1.5000	**
Copper	ug/L	MW-19	06/14/2023	ND	1.8000	1.5000	**

* - 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	ug/L	MW-19	11/09/2023	ND	1.8000	1.5000	**
Lead	ug/L	MW-19	05/06/2014		0.4680		
Lead	ug/L	MW-19	10/31/2014		0.1710		
Lead	ug/L	MW-19	05/01/2015	ND	0.0967	0.2400	**
Lead	ug/L	MW-19	09/16/2015		0.1020		
Lead	ug/L	MW-19	04/11/2016	ND	0.2110	0.2400	**
Lead	ug/L	MW-19	11/11/2016	ND	0.2110	0.2400	**
Lead	ug/L	MW-19	05/05/2017	ND	0.3240	0.2400	**
Lead	ug/L	MW-19	11/14/2017	ND	0.3240	0.2400	**
Lead	ug/L	MW-19	06/06/2018	ND	0.2500	0.2400	**
Lead	ug/L	MW-19	10/31/2018	ND	0.2500	0.2400	**
Lead	ug/L	MW-19	06/04/2019	ND	0.1860	0.2400	**
Lead	ug/L	MW-19	08/14/2019	ND	0.1860	0.2400	**
Lead	ug/L	MW-19	11/01/2019	ND	0.2700	0.2400	**
Lead	ug/L	MW-19	06/16/2020	ND	0.1100	0.2400	**
Lead	ug/L	MW-19	08/24/2020	ND	0.4400	0.2400	**
Lead	ug/L	MW-19	11/03/2020	ND	0.1100	0.2400	**
Lead	ug/L	MW-19	05/17/2021	ND	0.2100	0.2400	**
Lead	ug/L	MW-19	09/22/2021		0.5810		
Lead	ug/L	MW-19	12/14/2021	ND	0.2100	0.2400	**
Lead	ug/L	MW-19	03/16/2022		3.2500		
Lead	ug/L	MW-19	06/27/2022	ND	0.2400		
Lead	ug/L	MW-19	08/31/2022	ND	0.2400		
Lead	ug/L	MW-19	12/07/2022	ND	0.2400		
Lead	ug/L	MW-19	06/14/2023	ND	0.2400		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Lead	ug/L	MW-19	11/09/2023	ND	0.2400		
Mercury	ug/L	MW-19	11/01/2019	ND	0.1000		
Mercury	ug/L	MW-19	06/16/2020	ND	0.1000		
Mercury	ug/L	MW-19	05/17/2021	ND	0.1500	0.1000	**
Nickel	ug/L	MW-19	05/06/2014		0.9690		
Nickel	ug/L	MW-19	10/31/2014		1.1400		
Nickel	ug/L	MW-19	05/01/2015		0.6620		
Nickel	ug/L	MW-19	09/16/2015		0.7750		
Nickel	ug/L	MW-19	04/11/2016	ND	1.5300	1.9000	**
Nickel	ug/L	MW-19	11/11/2016	ND	1.5300	1.9000	**
Nickel	ug/L	MW-19	05/05/2017	ND	0.9290	1.9000	**
Nickel	ug/L	MW-19	11/14/2017	ND	0.9290	1.9000	**
Nickel	ug/L	MW-19	06/06/2018	ND	1.0000	1.9000	**
Nickel	ug/L	MW-19	10/31/2018	ND	1.0000	1.9000	**
Nickel	ug/L	MW-19	06/04/2019		18.8000		
Nickel	ug/L	MW-19	08/14/2019		10.1000		
Nickel	ug/L	MW-19	11/01/2019		10.5000		
Nickel	ug/L	MW-19	06/16/2020		9.2300		
Nickel	ug/L	MW-19	08/24/2020		37.6000		
Nickel	ug/L	MW-19	11/03/2020		13.8000		
Nickel	ug/L	MW-19	05/17/2021		12.2000		
Nickel	ug/L	MW-19	09/22/2021	ND	1.9000		
Nickel	ug/L	MW-19	12/14/2021	ND	1.9000		
Nickel	ug/L	MW-19	03/16/2022		6.5200		
Nickel	ug/L	MW-19	06/27/2022	ND	1.9000		

* - 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	
Nickel	ug/L	MW-19	08/31/2022	ND	1.9000		
Nickel	ug/L	MW-19	12/07/2022	ND	1.9000		
Nickel	ug/L	MW-19	06/14/2023	ND	1.9000		
Nickel	ug/L	MW-19	11/09/2023	ND	1.9000		
Selenium	ug/L	MW-19	05/06/2014	ND	0.7000	0.9600	**
Selenium	ug/L	MW-19	10/31/2014	ND	3.3400	0.9600	**
Selenium	ug/L	MW-19	05/01/2015	ND	3.3400	0.9600	**
Selenium	ug/L	MW-19	09/16/2015	ND	3.3400	0.9600	**
Selenium	ug/L	MW-19	04/11/2016	ND	0.6300	0.9600	**
Selenium	ug/L	MW-19	11/11/2016	ND	0.6300	0.9600	**
Selenium	ug/L	MW-19	05/05/2017	ND	0.9280	0.9600	**
Selenium	ug/L	MW-19	11/14/2017	ND	0.9280	0.9600	**
Selenium	ug/L	MW-19	06/06/2018	ND	0.9000	0.9600	**
Selenium	ug/L	MW-19	10/31/2018	ND	0.9000	0.9600	**
Selenium	ug/L	MW-19	06/04/2019	ND	0.9820	0.9600	**
Selenium	ug/L	MW-19	08/14/2019	ND	0.9820	0.9600	**
Selenium	ug/L	MW-19	11/01/2019	ND	1.0000	0.9600	**
Selenium	ug/L	MW-19	06/16/2020	ND	1.0000	0.9600	**
Selenium	ug/L	MW-19	08/24/2020	ND	4.0000	0.9600	**
Selenium	ug/L	MW-19	11/03/2020	ND	1.0000	0.9600	**
Selenium	ug/L	MW-19	05/17/2021	ND	0.9600		
Selenium	ug/L	MW-19	09/22/2021	ND	0.9600		
Selenium	ug/L	MW-19	12/14/2021	ND	0.9600		
Selenium	ug/L	MW-19	03/16/2022	ND	0.9600		
Selenium	ug/L	MW-19	06/27/2022	ND	0.9600		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Selenium	ug/L	MW-19	08/31/2022	ND	0.9600		
Selenium	ug/L	MW-19	12/07/2022	ND	0.9600		
Selenium	ug/L	MW-19	06/14/2023	ND	1.4000	0.9600	**
Selenium	ug/L	MW-19	11/09/2023	ND	1.4000	0.9600	**
Silver	ug/L	MW-19	05/06/2014	ND	0.0330	0.3700	**
Silver	ug/L	MW-19	10/31/2014	ND	0.0420	0.3700	**
Silver	ug/L	MW-19	05/01/2015	ND	0.0420	0.3700	**
Silver	ug/L	MW-19	09/16/2015		0.1220		
Silver	ug/L	MW-19	04/11/2016	ND	0.1530	0.3700	**
Silver	ug/L	MW-19	11/11/2016	ND	0.1530	0.3700	**
Silver	ug/L	MW-19	05/05/2017	ND	0.1400	0.3700	**
Silver	ug/L	MW-19	11/14/2017		0.1520		
Silver	ug/L	MW-19	06/06/2018	ND	0.3000	0.3700	**
Silver	ug/L	MW-19	10/31/2018	ND	0.3000	0.3700	**
Silver	ug/L	MW-19	06/04/2019	ND	0.1150	0.3700	**
Silver	ug/L	MW-19	08/14/2019	ND	0.1150	0.3700	**
Silver	ug/L	MW-19	11/01/2019	ND	0.3700		
Silver	ug/L	MW-19	06/16/2020	ND	0.3700		
Silver	ug/L	MW-19	08/24/2020	ND	1.4800	0.3700	**
Silver	ug/L	MW-19	11/03/2020	ND	0.3700		
Silver	ug/L	MW-19	05/17/2021	ND	0.4200	0.3700	**
Silver	ug/L	MW-19	09/22/2021	ND	0.4200	0.3700	**
Silver	ug/L	MW-19	12/14/2021	ND	0.4200	0.3700	**
Silver	ug/L	MW-19	03/16/2022	ND	0.4900	0.3700	**
Silver	ug/L	MW-19	06/27/2022	ND	0.4900	0.3700	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Silver	ug/L	MW-19	08/31/2022	ND	0.4900	0.3700	**
Silver	ug/L	MW-19	12/07/2022		1.2400		
Silver	ug/L	MW-19	06/14/2023	ND	0.5000	0.3700	**
Silver	ug/L	MW-19	11/09/2023	ND	0.5000	0.3700	**
Thallium	ug/L	MW-19	05/06/2014	ND	0.0500	0.2600	**
Thallium	ug/L	MW-19	10/31/2014	ND	0.0325	0.2600	**
Thallium	ug/L	MW-19	05/01/2015	ND	0.0325	0.2600	**
Thallium	ug/L	MW-19	09/16/2015	ND	0.0325	0.2600	**
Thallium	ug/L	MW-19	04/11/2016	ND	0.0255	0.2600	**
Thallium	ug/L	MW-19	11/11/2016		0.0280		
Thallium	ug/L	MW-19	05/05/2017	ND	0.0644	0.2600	**
Thallium	ug/L	MW-19	11/14/2017	ND	0.0644	0.2600	**
Thallium	ug/L	MW-19	06/06/2018	ND	0.1700	0.2600	**
Thallium	ug/L	MW-19	10/31/2018	ND	0.1700	0.2600	**
Thallium	ug/L	MW-19	06/04/2019	ND	0.5700	0.2600	**
Thallium	ug/L	MW-19	08/14/2019	ND	0.5700	0.2600	**
Thallium	ug/L	MW-19	11/01/2019	ND	0.2700	0.2600	**
Thallium	ug/L	MW-19	06/16/2020	ND	0.2600		
Thallium	ug/L	MW-19	08/24/2020	ND	1.0400	0.2600	**
Thallium	ug/L	MW-19	11/03/2020	ND	0.2600		
Thallium	ug/L	MW-19	05/17/2021	ND	0.2600		
Thallium	ug/L	MW-19	09/22/2021	ND	0.2600		
Thallium	ug/L	MW-19	12/14/2021	ND	0.2600		
Thallium	ug/L	MW-19	03/16/2022	ND	0.2600		
Thallium	ug/L	MW-19	06/27/2022	ND	0.2600		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Thallium	ug/L	MW-19	08/31/2022	ND	0.2600		
Thallium	ug/L	MW-19	12/07/2022	ND	0.2600		
Thallium	ug/L	MW-19	06/14/2023	ND	0.2600		
Thallium	ug/L	MW-19	11/09/2023	ND	0.2600		
Vanadium	ug/L	MW-19	05/06/2014	ND	0.5000	0.8500	**
Vanadium	ug/L	MW-19	10/31/2014	ND	0.4490	0.8500	**
Vanadium	ug/L	MW-19	05/01/2015	ND	0.4490	0.8500	**
Vanadium	ug/L	MW-19	09/16/2015	ND	0.4490	0.8500	**
Vanadium	ug/L	MW-19	04/11/2016	ND	0.2550	0.8500	**
Vanadium	ug/L	MW-19	11/11/2016	ND	0.2550	0.8500	**
Vanadium	ug/L	MW-19	05/05/2017	ND	0.8400	0.8500	**
Vanadium	ug/L	MW-19	11/14/2017	ND	0.8400	0.8500	**
Vanadium	ug/L	MW-19	06/06/2018	ND	0.5200	0.8500	**
Vanadium	ug/L	MW-19	10/31/2018	ND	0.5200	0.8500	**
Vanadium	ug/L	MW-19	06/04/2019	ND	2.1500	0.8500	**
Vanadium	ug/L	MW-19	08/14/2019	ND	2.1500	0.8500	**
Vanadium	ug/L	MW-19	11/01/2019	ND	0.8200	0.8500	**
Vanadium	ug/L	MW-19	06/16/2020	ND	0.8500		
Vanadium	ug/L	MW-19	08/24/2020	ND	3.4000	0.8500	**
Vanadium	ug/L	MW-19	11/03/2020	ND	0.8500		
Vanadium	ug/L	MW-19	05/17/2021	ND	1.1000	0.8500	**
Vanadium	ug/L	MW-19	09/22/2021	ND	1.1000	0.8500	**
Vanadium	ug/L	MW-19	12/14/2021	ND	1.1000	0.8500	**
Vanadium	ug/L	MW-19	03/16/2022	ND	1.1000	0.8500	**
Vanadium	ug/L	MW-19	06/27/2022	ND	1.1000	0.8500	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Vanadium	ug/L	MW-19	08/31/2022	ND	1.1000	0.8500	**
Vanadium	ug/L	MW-19	12/07/2022	ND	1.1000	0.8500	**
Vanadium	ug/L	MW-19	06/14/2023	ND	1.1000	0.8500	**
Vanadium	ug/L	MW-19	11/09/2023	ND	1.1000	0.8500	**
Zinc	ug/L	MW-19	05/06/2014	ND	2.0000	10.0000	**
Zinc	ug/L	MW-19	10/31/2014	ND	6.9500	10.0000	**
Zinc	ug/L	MW-19	05/01/2015	ND	6.9500	10.0000	**
Zinc	ug/L	MW-19	09/16/2015	ND	6.9500	10.0000	**
Zinc	ug/L	MW-19	04/11/2016	ND	5.2100	10.0000	**
Zinc	ug/L	MW-19	11/11/2016	ND	5.2100	10.0000	**
Zinc	ug/L	MW-19	05/05/2017	ND	11.5000	10.0000	**
Zinc	ug/L	MW-19	11/14/2017	ND	11.5000	10.0000	**
Zinc	ug/L	MW-19	06/06/2018	ND	10.0000		
Zinc	ug/L	MW-19	10/31/2018	ND	10.0000		
Zinc	ug/L	MW-19	06/04/2019	ND	6.9200	10.0000	**
Zinc	ug/L	MW-19	08/14/2019	ND	6.9200	10.0000	**
Zinc	ug/L	MW-19	11/01/2019	ND	10.0000		
Zinc	ug/L	MW-19	06/16/2020	ND	10.0000		
Zinc	ug/L	MW-19	08/24/2020	ND	40.0000	10.0000	**
Zinc	ug/L	MW-19	11/03/2020	ND	10.0000		
Zinc	ug/L	MW-19	05/17/2021	ND	10.0000		
Zinc	ug/L	MW-19	09/22/2021	ND	10.0000		
Zinc	ug/L	MW-19	12/14/2021	ND	10.0000		
Zinc	ug/L	MW-19	03/16/2022	ND	10.0000		
Zinc	ug/L	MW-19	06/27/2022	ND	10.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Zinc	ug/L	MW-19	08/31/2022	ND	10.0000		
Zinc	ug/L	MW-19	12/07/2022	ND	10.0000		
Zinc	ug/L	MW-19	06/14/2023	ND	6.4000	10.0000	**
Zinc	ug/L	MW-19	11/09/2023	ND	6.4000	10.0000	**

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Antimony	ug/L	MW-11	07/01/2024	ND	1.0000		0.5300
Antimony	ug/L	MW-22	06/06/2025	ND	1.0000		0.5300
Antimony	ug/L	MW-35	06/04/2025	ND	1.0000		0.5300
Arsenic	ug/L	MW-11	07/01/2024	ND	0.5300		9.2300
Arsenic	ug/L	MW-22	06/06/2025	ND	0.5300		9.2300
Arsenic	ug/L	MW-35	06/04/2025	ND	0.5300		9.2300
Barium	ug/L	MW-11	07/01/2024		14.3000		2080.0000
Barium	ug/L	MW-22	06/06/2025		155.0000		2080.0000
Barium	ug/L	MW-35	06/04/2025		279.0000		2080.0000
Beryllium	ug/L	MW-11	07/01/2024	ND	0.3300		0.2700
Beryllium	ug/L	MW-22	06/06/2025	ND	0.3300		0.2700
Beryllium	ug/L	MW-35	06/04/2025	ND	0.3300		0.2700
Cadmium	ug/L	MW-11	07/01/2024	ND	0.1000		0.1200
Cadmium	ug/L	MW-22	06/06/2025	ND	0.1000		0.1200
Cadmium	ug/L	MW-35	06/04/2025	ND	0.1000		0.1200
Chromium	ug/L	MW-11	07/01/2024	ND	1.2000		1.1000
Chromium	ug/L	MW-22	06/06/2025	ND	1.8000		1.1000
Chromium	ug/L	MW-35	06/04/2025	ND	1.8000		1.1000
Cobalt	ug/L	MW-11	07/01/2024	ND	0.1700		5.6200
Cobalt	ug/L	MW-22	06/06/2025	ND	0.1700		5.6200
Cobalt	ug/L	MW-35	06/04/2025		4.8200		5.6200
Copper	ug/L	MW-11	07/01/2024	ND	1.8000		7.6400
Copper	ug/L	MW-22	06/06/2025	ND	3.2000		7.6400

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Copper	ug/L	MW-35	06/04/2025	ND	3.2000		7.6400
Lead	ug/L	MW-11	07/01/2024	ND	0.2600		3.2500
Lead	ug/L	MW-22	06/06/2025	ND	0.3300		3.2500
Lead	ug/L	MW-35	06/04/2025	ND	0.3300		3.2500
Mercury	ug/L	MW-11	07/01/2024	ND	0.1100		*****
Mercury	ug/L	MW-35	06/08/2021	ND	0.1500		*****
Nickel	ug/L	MW-11	07/01/2024		16.3000		37.6000
Nickel	ug/L	MW-22	06/06/2025		5.2400		37.6000
Nickel	ug/L	MW-35	06/04/2025		18.0000		37.6000
Selenium	ug/L	MW-11	07/01/2024	ND	1.4000		0.9600
Selenium	ug/L	MW-22	06/06/2025	ND	1.4000		0.9600
Selenium	ug/L	MW-35	06/04/2025	ND	1.4000		0.9600
Silver	ug/L	MW-11	07/01/2024	ND	0.5000		1.2400
Silver	ug/L	MW-22	06/06/2025	ND	0.5000		1.2400
Silver	ug/L	MW-35	06/04/2025	ND	0.5000		1.2400
Thallium	ug/L	MW-11	07/01/2024	ND	0.5700		0.2600
Thallium	ug/L	MW-22	06/06/2025	ND	0.5700		0.2600
Thallium	ug/L	MW-35	06/04/2025	ND	0.5700		0.2600
Vanadium	ug/L	MW-11	07/01/2024	ND	1.1000		0.8500
Vanadium	ug/L	MW-22	06/06/2025	ND	1.7000		0.8500
Vanadium	ug/L	MW-35	06/04/2025	ND	1.7000		0.8500
Zinc	ug/L	MW-11	07/01/2024		60.0000	***	10.0000
Zinc	ug/L	MW-22	06/06/2025	ND	13.0000		10.0000

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Zinc	ug/L	MW-35	06/04/2025	ND	13.0000		10.0000

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

Table 3

Detection Frequencies in Upgradient and Downgradient Wells

Constituent	Upgradient Detect	Upgradient N	Upgradient Proportion	Downgradient Detect	Downgradient N	Downgradient Proportion
Antimony	0	25	0.000	3	45	0.067
Arsenic	7	25	0.280	7	45	0.156
Barium	25	25	1.000	45	45	1.000
Beryllium	1	25	0.040	2	45	0.044
Cadmium	1	25	0.040	1	45	0.022
Chromium	1	25	0.040	2	45	0.044
Cobalt	14	25	0.560	18	46	0.391
Copper	1	26	0.038	4	45	0.089
Lead	5	25	0.200	5	45	0.111
Mercury	0	3	0.000	0	4	0.000
Nickel	12	25	0.480	38	47	0.809
Selenium	0	25	0.000	0	45	0.000
Silver	3	25	0.120	0	45	0.000
Thallium	1	25	0.040	2	46	0.043
Vanadium	0	25	0.000	2	45	0.044
Zinc	0	25	0.000	17	47	0.362

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

Table 4

Shapiro-Wilk Multiple Group Test of Normality

Constituent	Detect	N	Detect Freq	G raw	G log	G cbrt	G sqrt	G sqr	G cub	Crit Value	Dist Form	Model Type
Antimony	0	25	0.000	5.704	5.704					2.326	non-norm	nonpar
Arsenic	7	25	0.280	7.645	5.262					2.326	non-norm	nonpar
Barium	25	25	1.000	6.356	3.013					2.326	non-norm	nonpar
Beryllium	1	25	0.040	5.704	5.704					2.326	non-norm	nonpar
Cadmium	1	25	0.040	5.704	5.704					2.326	non-norm	nonpar
Chromium	1	25	0.040	5.704	5.704					2.326	non-norm	nonpar
Cobalt	14	25	0.560	4.580	3.831					2.326	non-norm	nonpar
Copper	1	26	0.038	5.704	5.704					2.326	non-norm	nonpar
Lead	5	25	0.200	9.832	6.593					2.326	non-norm	nonpar
Mercury	0	3	0.000	0.495	0.495					2.326	normal	too few
Nickel	12	25	0.480	5.527	3.056					2.326	non-norm	nonpar
Selenium	0	25	0.000	5.704	5.704					2.326	non-norm	nonpar
Silver	3	25	0.120	8.222	6.782					2.326	non-norm	nonpar
Thallium	1	25	0.040	5.704	5.704					2.326	non-norm	nonpar
Vanadium	0	25	0.000	5.704	5.704					2.326	non-norm	nonpar
Zinc	0	25	0.000	5.704	5.704					2.326	non-norm	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	ug/L	0	25					0.5300	nonpar	***	0.99
Arsenic	ug/L	7	25					9.2300	nonpar		0.99
Barium	ug/L	25	25					2080.0000	nonpar		0.99
Beryllium	ug/L	1	25					0.2700	nonpar	***	0.99
Cadmium	ug/L	1	25					0.1200	nonpar		0.99
Chromium	ug/L	1	25					1.1000	nonpar	***	0.99
Cobalt	ug/L	14	25					5.6200	nonpar		0.99
Copper	ug/L	1	26					7.6400	nonpar		0.99
Lead	ug/L	5	25					3.2500	nonpar		0.99
Mercury	ug/L	0	3							*	
Nickel	ug/L	12	25					37.6000	nonpar		0.99
Selenium	ug/L	0	25					0.9600	nonpar	***	0.99
Silver	ug/L	3	25					1.2400	nonpar		0.99
Thallium	ug/L	1	25					0.2600	nonpar	***	0.99
Vanadium	ug/L	0	25					0.8500	nonpar	***	0.99
Zinc	ug/L	0	25					10.0000	nonpar	***	0.99

Conf = confidence level for passing initial test or one of two verification resamples 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

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 7

Censored Data Outliers Test
for datasets with 75% or more NDs

Constituent	Units	Well	Date	Result	Detects	N	% >= PQL	% >= MDL	Manual RL	Median	>= Med
Beryllium	ug/L	MW-19	09/16/2015	0.0400	1	25	4	4	no	0.2700	no
Cadmium	ug/L	MW-19	03/16/2022	0.1200	1	25	4	4	no	0.0550	yes
Chromium	ug/L	MW-19	05/06/2014	1.0700	1	25	4	16	no	1.1000	no
Copper	ug/L	MW-19	03/16/2022	7.6400	1	25	4	16	no	1.5000	yes
Lead	ug/L	MW-19	05/06/2014	0.4680	5	25	20	40	no	0.2400	
Lead	ug/L	MW-19	10/31/2014	0.1710	5	25	20	40	no	0.2400	
Lead	ug/L	MW-19	09/16/2015	0.1020	5	25	20	40	no	0.2400	
Lead	ug/L	MW-19	09/22/2021	0.5810	5	25	20	40	no	0.2400	
Lead	ug/L	MW-19	03/16/2022	3.2500	5	25	20	40	no	0.2400	
Silver	ug/L	MW-19	09/16/2015	0.1220	3	25	12	12	no	0.3700	
Silver	ug/L	MW-19	11/14/2017	0.1520	3	25	12	12	no	0.3700	
Silver	ug/L	MW-19	12/07/2022	1.2400	3	25	12	12	no	0.3700	
Thallium	ug/L	MW-19	11/11/2016	0.0280	1	25	4	4	no	0.2600	no

* Failed test - potential outlier.
Potential outliers are not removed from statistical analyses.
>= Med - indicates if the result is greater than or equal to the median PQL value.
>= 2x - indicates if the result is greater than or equal to 2 x the median PQL value.
>= 3x - indicates if the result is greater than or equal to 3 x the median PQL value.

Table 7

Censored Data Outliers Test
for datasets with 75% or more NDs

Constituent	>= 2x	>= 3x	
Beryllium			
Cadmium			*
Chromium			
Copper			*
Lead	no		
Lead	no		
Lead	no		
Lead	yes		*
Lead	yes		*
Silver	no		
Silver	no		
Silver	yes		*
Thallium			

* Failed test - potential outlier.
Potential outliers are not removed from statistical analyses.
>= Med - indicates if the result is greater than or equal to the median PQL value.
>= 2x - indicates if the result is greater than or equal to 2 x the median PQL value.
>= 3x - indicates if the result is greater than or equal to 3 x the median PQL 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
Zinc	ug/L	MW-11	10/12/2007		134.0000	*	10.0000
Zinc	ug/L	MW-11	01/09/2008	ND	20.0000		10.0000
Zinc	ug/L	MW-11	04/08/2008		61.6000	*	10.0000
Zinc	ug/L	MW-11	07/16/2008		31.8000	*	10.0000
Zinc	ug/L	MW-11	12/28/2009		177.0000	*	10.0000
Zinc	ug/L	MW-11	02/25/2010		28.8000	*	10.0000
Zinc	ug/L	MW-11	02/25/2011		92.9000	*	10.0000
Zinc	ug/L	MW-11	04/13/2011		23.5000	*	10.0000
Zinc	ug/L	MW-11	08/25/2011		28.3000	*	10.0000
Zinc	ug/L	MW-11	04/24/2012		32.1000	*	10.0000
Zinc	ug/L	MW-11	10/24/2012		40.7000	*	10.0000
Zinc	ug/L	MW-11	10/31/2018		119.0000	*	10.0000
Zinc	ug/L	MW-11	12/17/2018		82.8000	*	10.0000
Zinc	ug/L	MW-11	06/03/2021		140.0000	*	10.0000
Zinc	ug/L	MW-11	08/03/2021		70.1000	*	10.0000
Zinc	ug/L	MW-11	09/07/2022		146.0000	*	10.0000
Zinc	ug/L	MW-11	06/20/2023		98.5000	*	10.0000
Zinc	ug/L	MW-11	07/01/2024		60.0000	*	10.0000

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

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

Step	Equation	Description
1	PL = median(X) = **0.53**	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **9.23**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

Worksheet 1 - Upgradient vs. Downgradient Comparisons
Barium (ug/L)
Nonparametric Prediction Limit

Step	Equation	Description
1	PL = max(X) = **2080.0**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **0.27**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **0.12**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **1.1**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **5.62**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **7.64**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **3.25**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **37.6**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = median(X) = **0.96**	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **1.24**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	PL = max(X) = **0.26**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

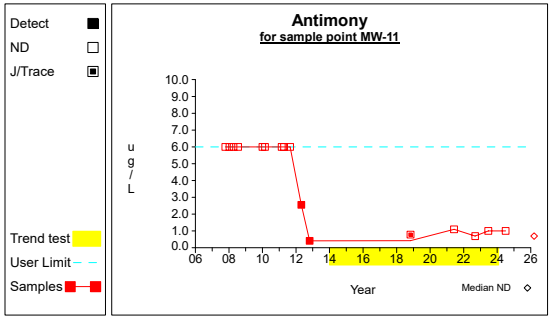
Worksheet 1 - Upgradient vs. Downgradient Comparisons
Vanadium (ug/L)
Nonparametric Prediction Limit

Step	Equation	Description
1	PL = median(X) = **0.85**	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

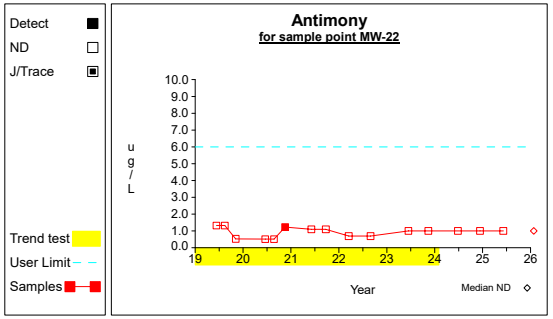
Worksheet 1 - Upgradient vs. Downgradient Comparisons
Zinc (ug/L)
Nonparametric Prediction Limit

Step	Equation	Description
1	PL = median(X) = **10.0**	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

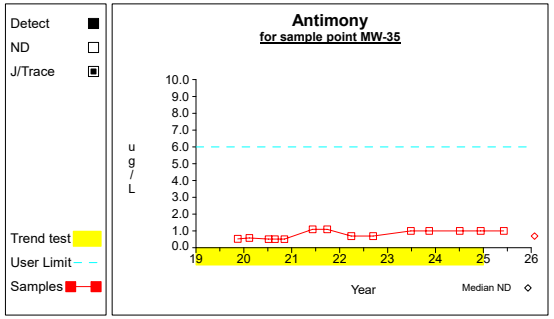
Time Series



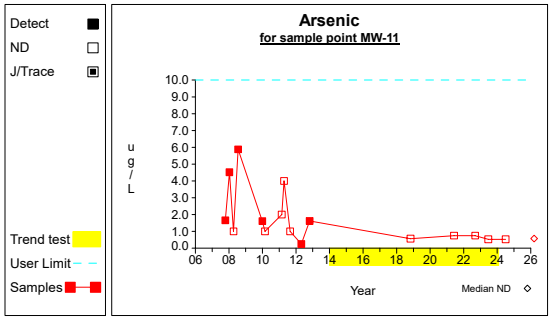
Graph 1



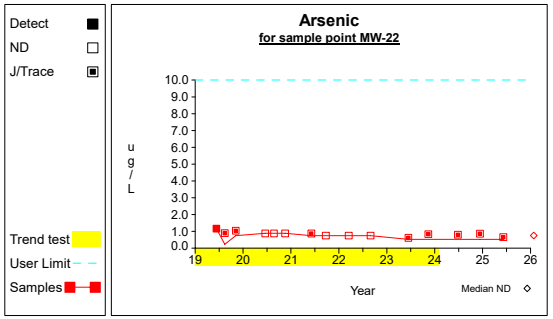
Graph 2



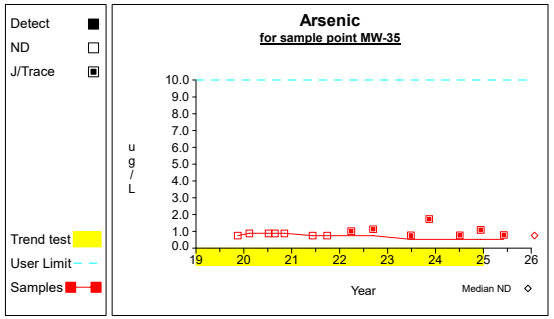
Graph 3



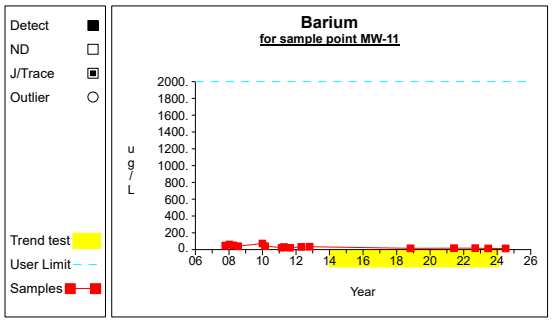
Graph 4



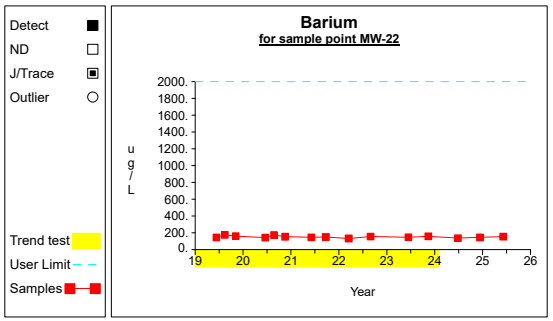
Graph 5



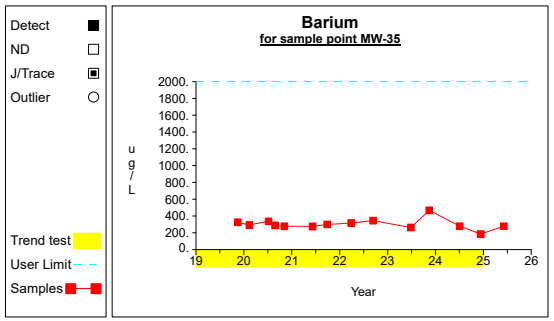
Graph 6



Graph 7

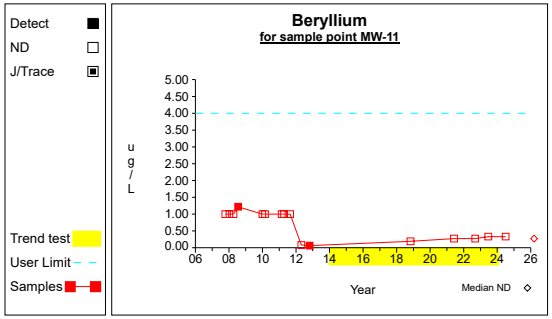


Graph 8

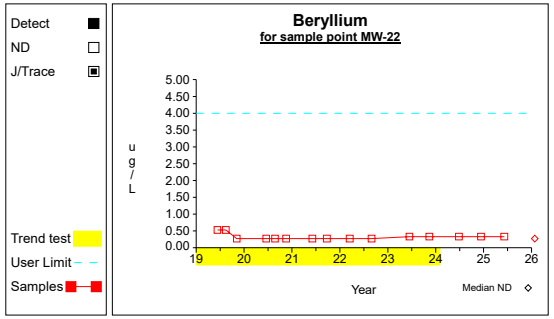


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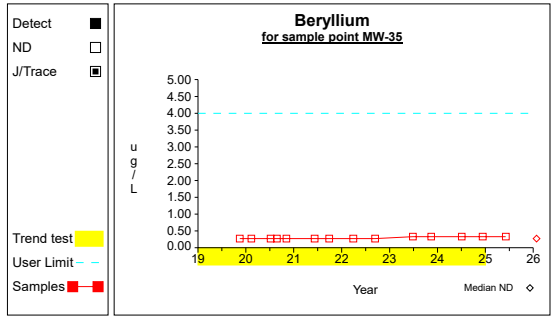
Time Series



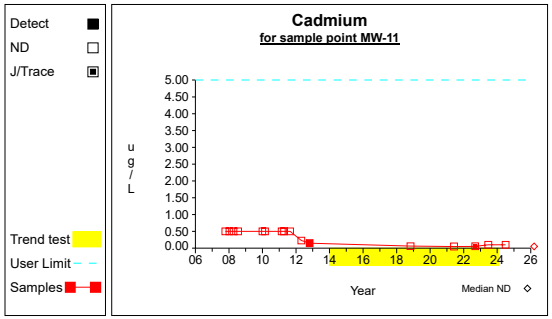
Graph 10



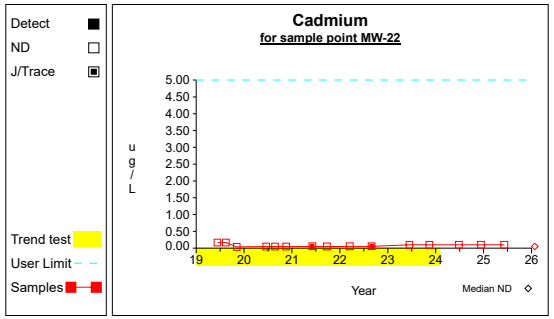
Graph 11



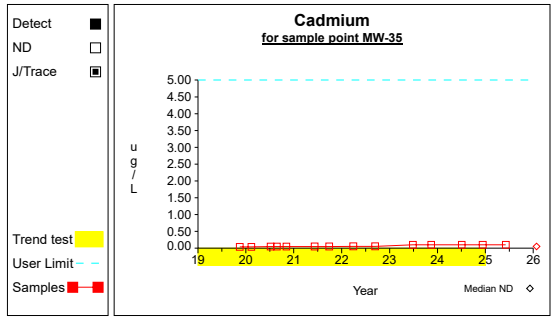
Graph 12



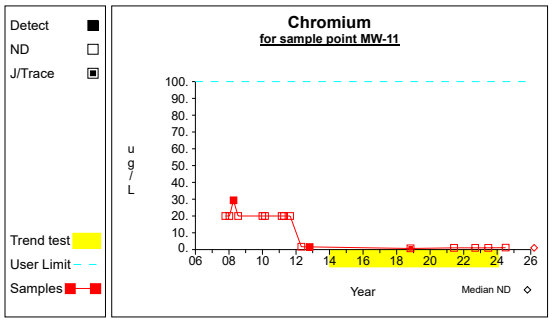
Graph 13



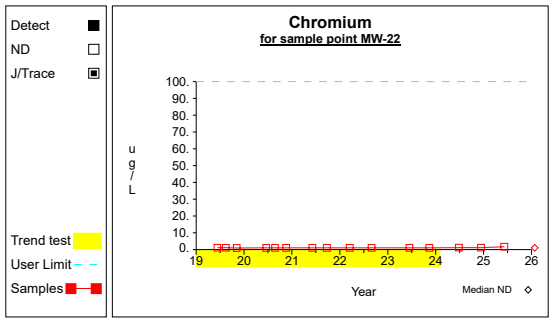
Graph 14



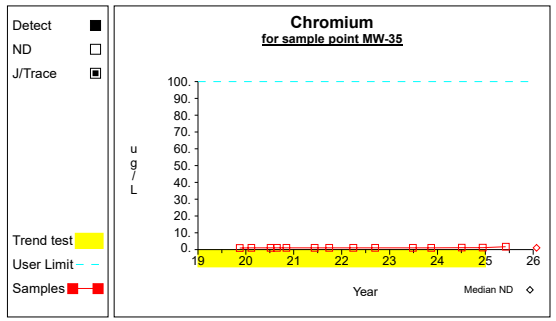
Graph 15



Graph 16

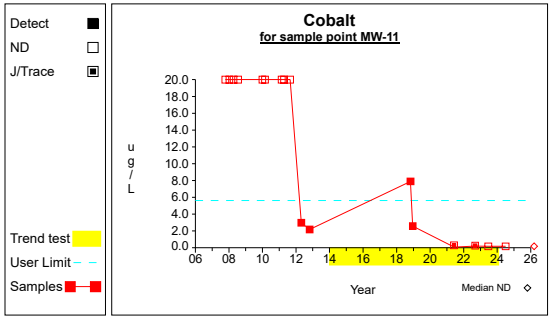


Graph 17

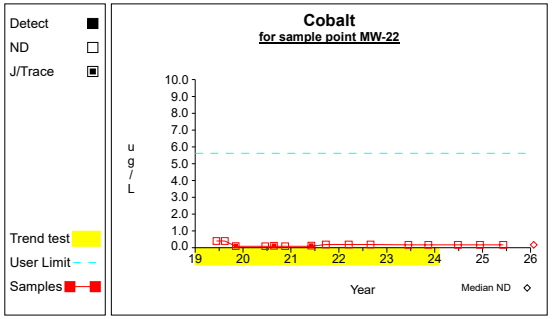


Graph 18

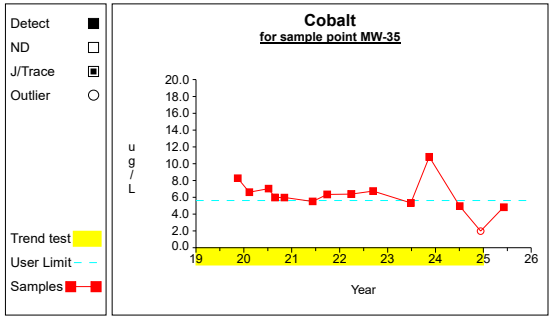
Time Series



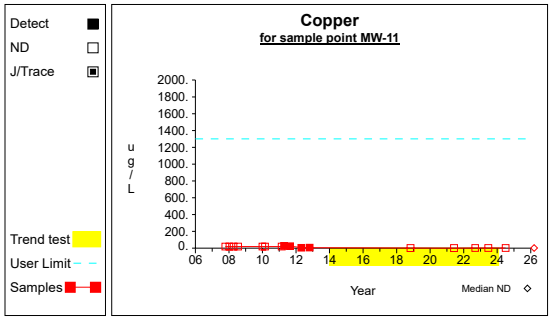
Graph 19



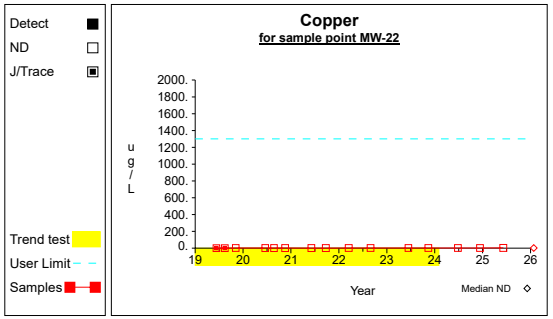
Graph 20



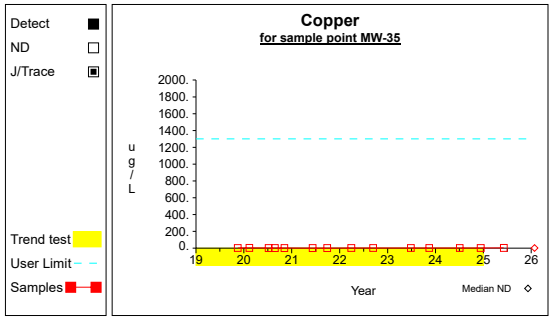
Graph 21



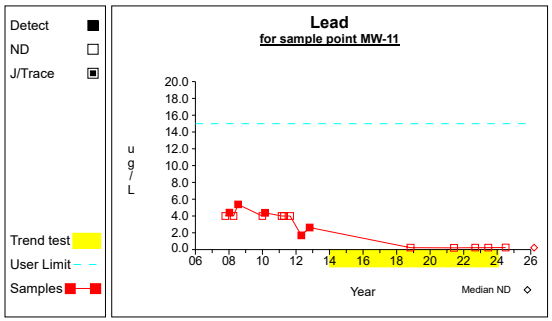
Graph 22



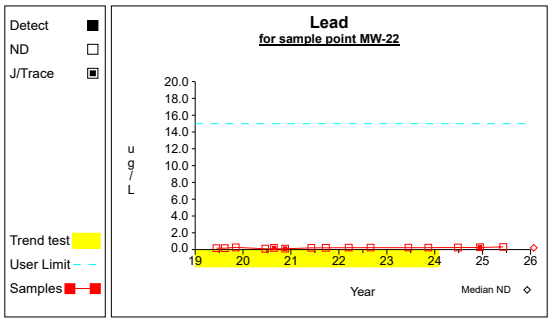
Graph 23



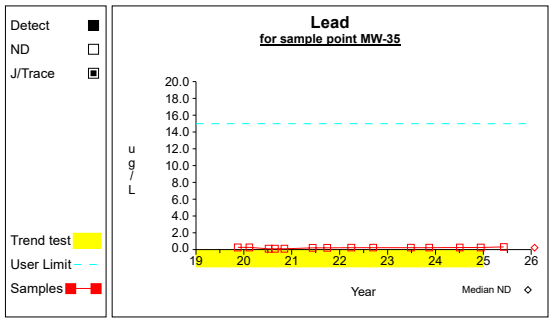
Graph 24



Graph 25

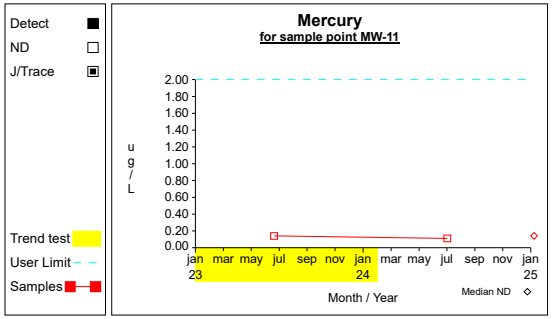


Graph 26

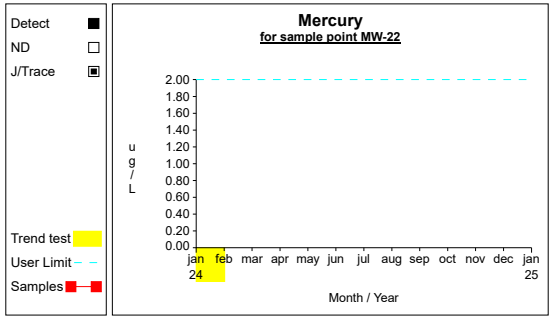


Graph 27

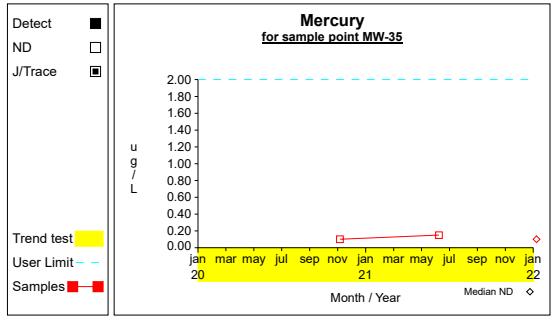
Time Series



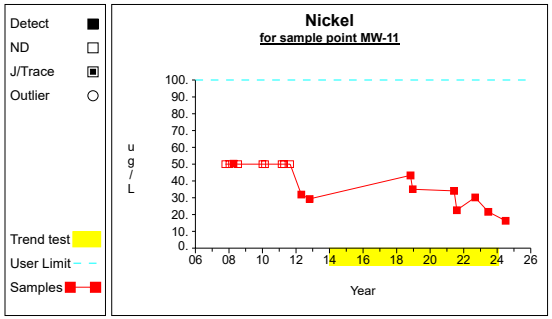
Graph 28



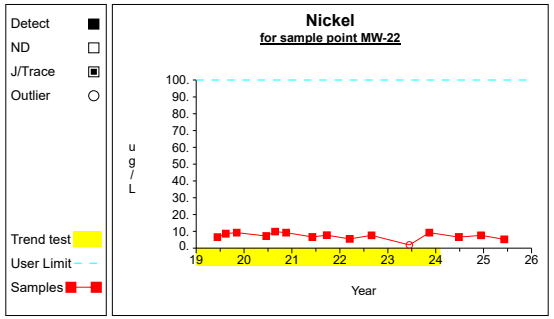
Graph 29



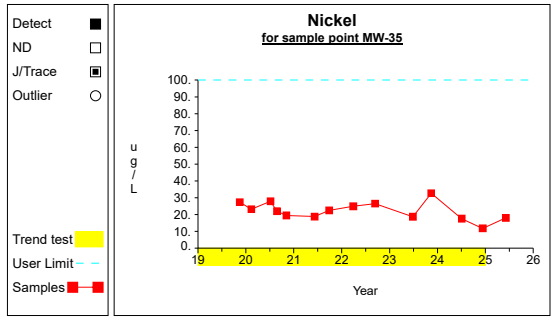
Graph 30



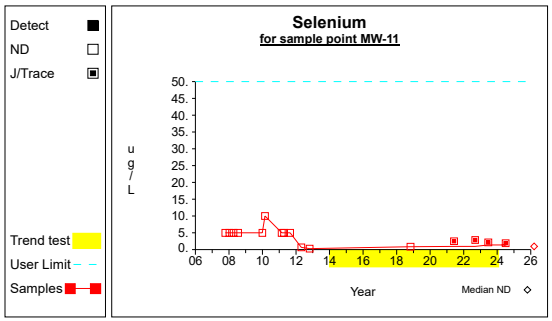
Graph 31



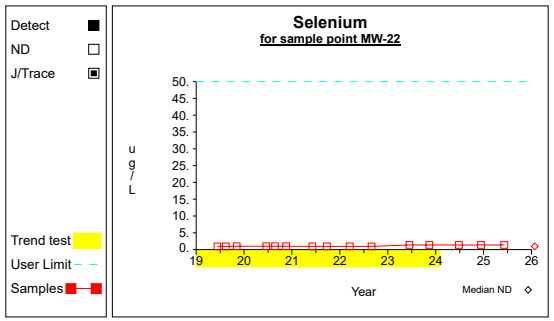
Graph 32



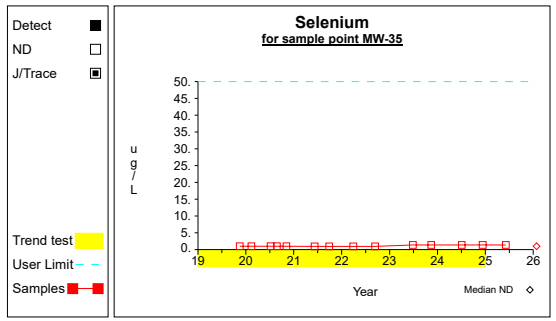
Graph 33



Graph 34

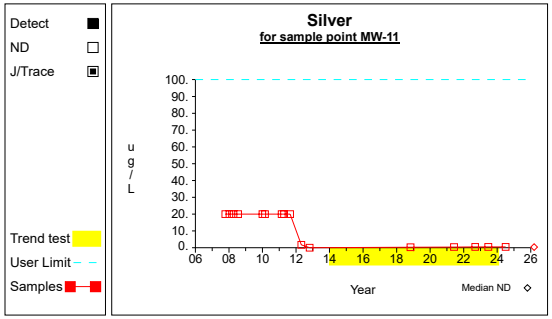


Graph 35

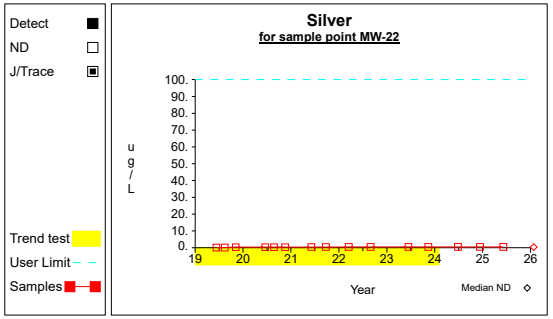


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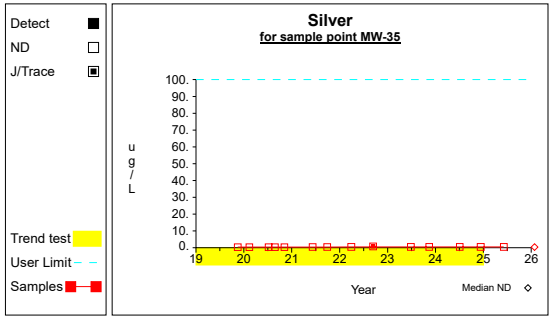
Time Series



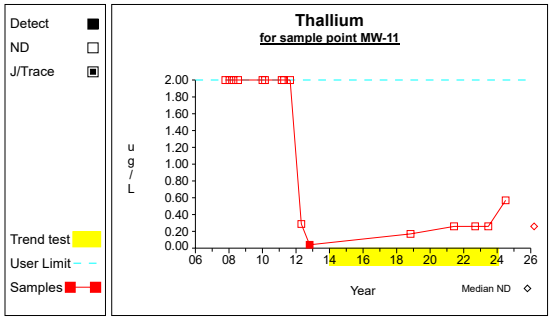
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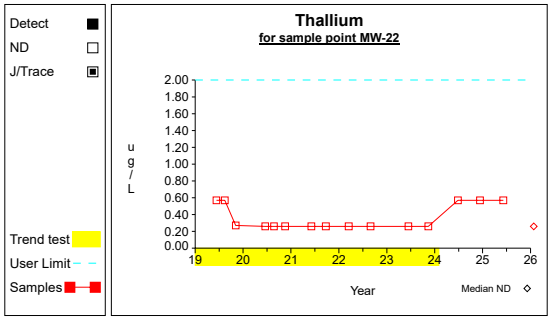
Graph 38



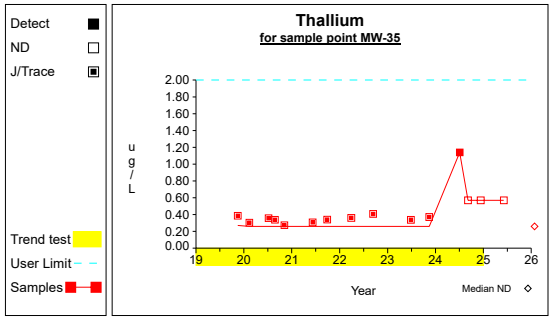
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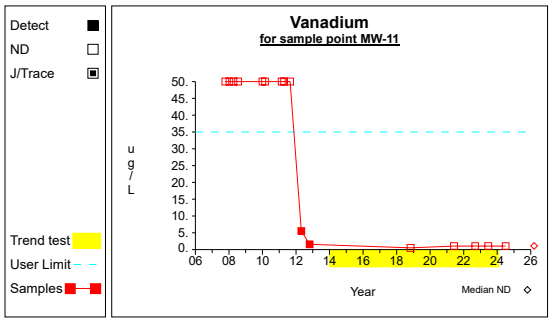
Graph 40



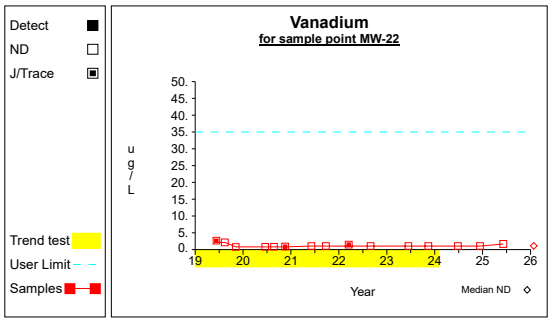
Graph 41



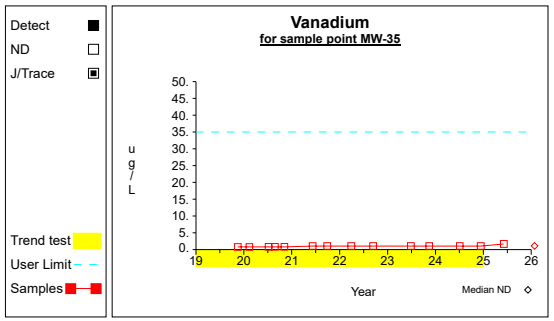
Graph 42



Graph 43

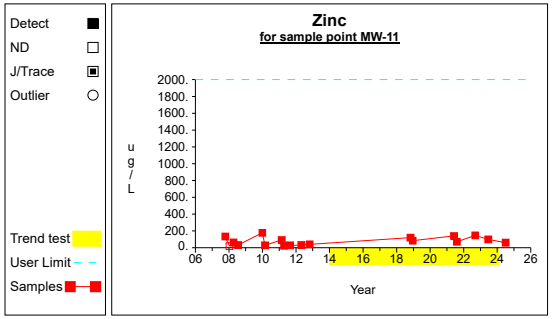


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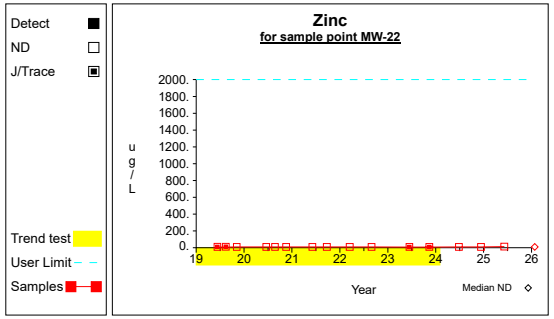


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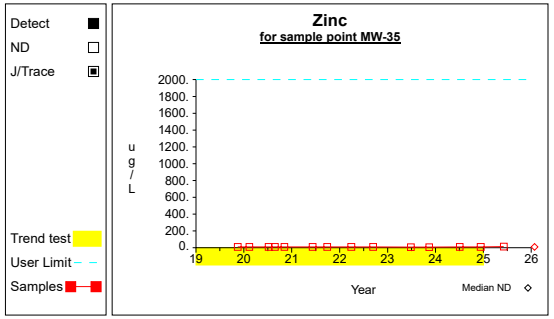
Time Series



Graph 46



Graph 47



Graph 48

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
2-butanone	MW-11	4/24/2012		2.29	.47	ug/L
Acetone	MW-11	4/24/2012		3.82	1.79	ug/L
Carbon disulfide	MW-11	10/24/2012		.78	.15	ug/L
Chloromethane	MW-11	10/24/2012		.31	.31	ug/L
2-butanone	MW-19	4/24/2012		1.10	.47	ug/L
2-butanone	MW-19	5/06/2014		2.38	.47	ug/L
Acetone	MW-19	4/24/2012		2.08	1.79	ug/L
Acetone	MW-19	11/14/2017		2.22	1.79	ug/L
Acetone	MW-19	9/22/2021		10.30	3.10	ug/L
Benzene	MW-19	6/04/2019		13.00	.22	ug/L
Benzene	MW-19	8/14/2019		7.29	.22	ug/L
Benzene	MW-19	11/01/2019		6.80	.22	ug/L
Benzene	MW-19	6/16/2020		4.27	.22	ug/L
Benzene	MW-19	8/24/2020		4.11	.22	ug/L
Benzene	MW-19	11/03/2020		6.00	.22	ug/L
Benzene	MW-19	5/17/2021		4.33	.22	ug/L
Bromomethane	MW-19	10/26/2012		.32	.22	ug/L
Carbon disulfide	MW-19	10/31/2014		.914	.150	ug/L
Chlorobenzene	MW-19	6/04/2019		2.06	.40	ug/L
Chlorobenzene	MW-19	8/14/2019		2.31	.40	ug/L
Chlorobenzene	MW-19	11/01/2019		2.51	.40	ug/L
Chlorobenzene	MW-19	6/16/2020		2.30	.40	ug/L
Chlorobenzene	MW-19	8/24/2020		1.88	.40	ug/L
Chlorobenzene	MW-19	11/03/2020		2.03	.40	ug/L
Chlorobenzene	MW-19	5/17/2021		2.72	.40	ug/L
Chloroethane	MW-19	10/18/2011		.15	.15	ug/L
Dichloromethane	MW-19	11/11/2016		.67	.17	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
Tetrachloroethylene	MW-19	5/06/2014		.471	.180	ug/L
Toluene	MW-19	4/15/2013		.266	.150	ug/L
Toluene	MW-19	4/11/2016		.255	.150	ug/L
Tribromomethane	MW-19	4/15/2013		.145	.140	ug/L
1,2-dichlorobenzene	MW-23	10/18/2011		.26	.14	ug/L
2,4-dimethylphenol	MW-23	11/07/2017		3.52	2.36	ug/L
2-butanone	MW-23	10/18/2011		.92	.47	ug/L
2-butanone	MW-23	4/24/2012		1.78	.47	ug/L
2-butanone	MW-23	5/06/2014		6.24	.47	ug/L
3/4-methylphenol	MW-23	11/21/2016		.323	.196	ug/L
3/4-methylphenol	MW-23	11/07/2017		10.600	2.020	ug/L
4,4'-ddt	MW-23	11/21/2016		.02310	.00409	ug/L
4-methyl-2-pentanone	MW-23	11/07/2017		.391	.220	ug/L
Acetone	MW-23	4/24/2012		3.07	1.79	ug/L
Acetone	MW-23	5/25/2017		10.80	1.79	ug/L
Acetonitrile	MW-23	4/15/2013		143	126	ug/L
Acetonitrile	MW-23	11/21/2016		147	126	ug/L
Alpha-bhc	MW-23	11/21/2016		.00556	.00183	ug/L
Benzene	MW-23	11/21/2016		.122	.110	ug/L
Benzyl alcohol	MW-23	11/07/2017		11.20	2.02	ug/L
Beta-bhc	MW-23	11/07/2017		.0311	.0289	ug/L
Bis(2-chloroethyl)ether	MW-23	11/07/2017		112.00	2.02	ug/L
Bis(2-ethylhexyl)phthalate	MW-23	11/21/2016		.792	.424	ug/L
Bromomethane	MW-23	10/26/2012		.36	.22	ug/L
Carbon disulfide	MW-23	11/04/2014		2.45	.15	ug/L
Chloroethane	MW-23	10/18/2011		.20	.15	ug/L
Delta-bhc	MW-23	11/21/2016		.00411	.00247	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
Dichloromethane	MW-23	10/18/2011		.240	.170	ug/L
Dichloromethane	MW-23	10/26/2012		.300	.170	ug/L
Dichloromethane	MW-23	11/21/2016		.544	.170	ug/L
Di-n-octyl phthalate	MW-23	11/21/2016		1.81	.25	ug/L
Endosulfan i	MW-23	4/15/2013		.00349	.00200	ug/L
Endosulfan i	MW-23	6/03/2013		.00367	.00222	ug/L
Endosulfan i	MW-23	8/27/2013		.00612	.00204	ug/L
Endosulfan i	MW-23	11/06/2013		.00312	.00225	ug/L
Endosulfan i	MW-23	5/06/2014		.00631	.00227	ug/L
Endosulfan i	MW-23	5/08/2015		.00233	.00220	ug/L
Endosulfan i	MW-23	11/21/2016		.03920	.00215	ug/L
Endosulfan i	MW-23	11/07/2017		.13500	.01200	ug/L
Endosulfan i	MW-23	10/30/2018		.07360	.00208	ug/L
Endrin	MW-23	11/07/2017		.0127	.0114	ug/L
Endrin aldehyde	MW-23	11/21/2016		.01410	.00785	ug/L
N-nitrosodimethylamine	MW-23	11/07/2017		2.94	1.57	ug/L
Pentachlorophenol	MW-23	11/07/2017		23.4	2.7	ug/L
Phenol	MW-23	11/07/2017		895	27	ug/L
Tetrachloroethylene	MW-23	5/06/2014		.193	.180	ug/L

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

Memorandum

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December 23, 2025

TO: Iowa Department of Natural Resources

FR: Hannah Dubbs; Gina Wilming

RE: Winneshiek Statistical Analysis - Fall 2025 Evaluation

1 Memorandum Organization

This memo addresses the statistical analysis of the groundwater monitoring data collected in October 2025. The statistical methods and results are summarized, with the memo organization given as follows:

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2 Background

The groundwater monitoring locations and status of the Appendix I and II sampling schedules are summarized in Table 1. The Appendix I and II analytical results will be provided in the 2025 Annual Water Quality Report (AWQR).

Table 1
Surface Water Monitoring Locations and Sampling Schedule
Oct./Nov. 2014 – Oct. 2025 Appendix I Data

Monitoring Location	Monitoring Program	Current Schedule [1] (Oct. 2025)	Appendix I Initiated	# Events to Complete Baseline Appendix I or Completion Date [113.10(5)b]	Appendix II Initiated
Downstream Monitoring Locations					
SW-2	Detection	Appendix I	Dec-11	Aug-12	N/A
SW-5	Detection	Appendix I	Jun-23	Jun-24	N/A
Upstream Monitoring Locations					
SW-1	Background	Dry	Apr-12	Jun-14	N/A

N/A = not applicable

[1] In addition to the Appendix I list, surface water locations were also analyzed for the geochemical parameters as outlined in the *2024 ACM Report* (AECOM, 2025) in Oct. 2025. As indicated in the *Remedial Selection Report* (Foth, 2025), continued monitoring of geochemical parameters at the surface water monitoring locations was not recommended.

Table 2
Shallow Groundwater Locations and Sampling Schedule
Oct./Nov. 2014 – Oct. 2025 Appendix I & II Data

Monitoring Location	Monitoring Program	Current Schedule [1,2] (Oct. 2025)	Appendix I Initiated	# Events to Complete Baseline Appendix I or Completion Date [113.10(5)b]	Appendix II Initiated
Groundwater Underdrain Monitoring Locations					
GU-1	Detection	Dry	Jul-09	Jun-10	N/A
GU-2	Detection	Dry	Jun-18	Aug-19	N/A
Downgradient Monitoring Locations					
MW-2R	Detection	Appendix I	Oct-07	Oct-08	N/A
			Nov-14 [3]	Nov-16 [3]	
MW-3	Detection	Appendix I	Oct-07	Oct-08	N/A
			Nov-14 [3]	Nov-16 [3]	
MW-4	Assessment	Appendix II	Oct-07	Oct-08	Apr-09
			Nov-14 [3]	Nov-16 [3]	May-14
MW-4B	Detection	Appendix I	Oct-07	Oct-08	Feb-10
			Oct-14[3]	Nov-16[3]	Oct-14
					Sep-15
MW-7A	Assessment	Appendix II	Oct-07	Oct-08	Jun-24 [4]
			Oct-14 [3]	Nov-16 [3]	
MW-24A	Assessment	Dry	Feb-11	Feb-12	N/A
			Nov-14 [3]	Jun-18 [3]	Jun-20
MW-25A	Detection	Appendix I	Dec-10	Aug-11	N/A
			Nov-14 [3]	May-17 [3]	
MW-29A	Corrective Action	Appendix II	Nov-19	Nov-20	Nov-20
					May-21

Table 2 Continued
Shallow Groundwater Locations and Sampling Schedule
Oct./Nov. 2014 – Oct. 2025 Appendix I & II Data

Monitoring Location	Monitoring Program	Current Schedule [1,2] (Oct. 2025)	Appendix I Initiated	# Events to Complete Baseline Appendix I or Completion Date [113.10(5)b]	Appendix II Initiated
Downgradient Monitoring Locations Continued					
MW-31A	Corrective Action	Appendix II	Nov-19	Nov-20	Nov-20
MW-33A	Corrective Action	Appendix II	Nov-19	Nov-20	Sep-21
MW-34A	Detection	Appendix I	Nov-19	Nov-20	N/A
MW-38A	Detection	Appendix I	Sep-21	Aug-22	N/A
MW-40A	Assessment	Appendix II	Sep-21	Aug-22	Nov-23
MW-41A	Detection	Appendix I	Sep-22	Nov-23	N/A
MW-45A	Detection	Appendix I	Nov-23	Nov-24	N/A
MW-46A	Assessment	Appendix II	Nov-23	Dec-24	Oct-25 [5]
MW-101	Detection	Dry	Jun-19	Jun-20	N/A
Delineation Monitoring Locations					
MW-39A	Delineation	Appendix I	Sep-21 [6]	Aug-22 [6]	N/A
MW-42A	Delineation	Appendix I	Aug-22 [6]	Nov-23 [6]	Jun-24 [6]
MW-43A	Delineation	Appendix I	Sep-22 [6]	Nov-23 [6]	Jul-24 [6]
MW-44A	Delineation	Appendix I	Sep-22 [6]	Nov-23 [6]	Jun-24 [6]
Background Monitoring Locations					
MW-1	Background [8]	Appendix II	Oct-07	Oct-08	Jul-09 [7]
			Nov-14 [3]	Nov-16 [3]	May-14 [7]
					Sep-15 [7]
MW-37A	Background	Appendix II	Sep-21	Aug-22	N/A

N/A = not applicable

[1] GU-1, GU-2, MW-24A, and MW-101 were dry or had insufficient volume for sample collection; therefore, GU-1, GU-2, MW-24, and MW-101 were not included in this Fall 2025 statistical evaluation. Appendix II locations were sampled for the Appendix I and detected Appendix II constituents in Oct. 2025, with the exceptions of MW-7A and MW-46. MW-7A and MW-46A moved to assessment monitoring in Summer 2023 and Fall 2024, respectively; however, MW-7A has only undergone one complete Appendix II sampling event, and MW-46A had yet to be sampled for the full Appendix II list. Therefore, MW-7A and MW-46A were sampled for the full Appendix II list in Oct. 2025. The Appendix II resampling event schedule will be provided in Table 2 of the 2025 AWQR.

[2] In Oct. 2025, groundwater monitoring locations sampled were also analyzed for the geochemical parameters as outlined in the 2024 ACM Report (AECOM, 2025). As indicated in the *Remedial Selection Report* (Foth, 2025), biennial monitoring of geochemical parameters will be conducted at the corrective action, delineation, and background monitoring locations. The Iowa Department of Natural Resources (IDNR) approved the *Remedial Selection Report* (Foth, 2025) in their letter dated Jan. 6, 2026 (IDNR, 2026). The next biennial geochemical monitoring event will occur in Fall 2027.

[3] For the downgradient and background monitoring locations where monitoring was initiated before 2014, sampling methods were modified from high-volume to low-flow sampling starting in Oct./Nov. 2014. Five rounds of baseline Appendix I monitoring were re-initiated between Oct./Nov. 2014 and Nov. 2016, with the exceptions of MW-24A and MW-25A. MW-24A and MW-25A were dry in Sep. 2015, and MW-24A was dry again in Nov. 2017; therefore, MW-24A and MW-25A completed baseline Appendix I monitoring in Jun. 2018 and May 2017, respectively. The high-volume results collected before Oct./Nov. 2014 were removed before conducting statistical analyses.

[4] MW-7 triggered assessment monitoring in Summer 2023. One round of baseline assessment monitoring for the full Appendix II list was conducted in Jun. 2024, and none of the Appendix II constituents not in the Appendix I list were detected during the initial assessment monitoring event. MW-7A was sampled for the annual full Appendix II list in Oct. 2025.

[5] MW-46A triggered assessment monitoring in Fall 2024. One round of baseline assessment monitoring for the full Appendix II list was conducted in Oct. 2025.

[6] Baseline Appendix I and Appendix II monitoring is not applicable for delineation monitoring wells; however, MW-39A, MW-42A, MW-43A, and MW-44A were previously sampled as part of the detection/assessment monitoring programs. These locations moved to delineation monitoring in the Fall 2025 sampling event as requested in the *Remedial Selection Report* (Foth, 2025) and approved by the IDNR in their letter dated Jan. 6, 2026 (IDNR, 2026).

[7] MW-1 was in background monitoring until chlorobenzene was detected at MW-1 in Oct. 2008, triggering assessment monitoring. One round of baseline assessment monitoring for the full Appendix II list was conducted in Jul. 2010, and none of the Appendix II constituents not in the Appendix I list were detected during the initial assessment monitoring. MW-1 was sampled for the Appendix II list again in May 2014, and several constituents were detected at low levels (beta-BHC, endosulfan II, diethyl phthalate, and di-n-octyl phthalate), and one constituent was detected above the PQL (methoxychlor). Quarterly monitoring for only the detected Appendix II constituents (beta-BHC, endosulfan II, methoxychlor, diethyl phthalate, and di-n-octyl phthalate) was conducted in Jun. 2014, Nov. 2014, and Dec. 2014. The full Appendix II list was sampled at MW-1 in Sep. 2015 for annual monitoring, and one quarterly sample for the additional low-level detected Appendix II constituents (4,4'-DDE, 4,4'-DDT, alpha-BHC, delta-BHC, dieldrin, endosulfan sulfate, endrin, gamma-BHC, and heptachlor) was conducted in Dec. 2015. MW-1 moved back to detection monitoring in 2018 in accordance with 567 IAC 113.10(6)e, and returned to background monitoring in 2020.

Table 3
Deep Groundwater Locations and Sampling Schedule
Oct./Nov. 2014 – Oct. 2025 Appendix I & II Data

Monitoring Location	Monitoring Program	Current Schedule [1,2] (Oct. 2025)	Appendix I Initiated	# Events to Complete Baseline Appendix I or Completion Date [113.10(5)b]	Appendix II Initiated
Downgradient Monitoring Locations					
MW-11	Assessment	Dry	Oct-07	Dec-09	N/A
			Oct-18 [3]	Jul-24 [3]	Jun-23 [4]
MW-22	Detection	Dry	Jun-19	Aug-20	N/A
MW-35	Corrective Action	Appendix II	Nov-19	Nov-20	Nov-20
Background Monitoring Locations					
MW-18	Background	Appendix I	Jul-24	Oct-25	N/A
MW-19R [5]	Background	Appendix II	Sep-21	Aug-22	N/A

[1] MW-11 and MW-22 were dry or had insufficient volume for sample collection; therefore, MW-11 and MW-22 were not included in this Fall 2025 statistical evaluation. Appendix II locations were sampled for the Appendix I and detected Appendix II constituents in Oct. 2025. The Appendix II resampling event schedule will be provided in Table 2 of the 2025 AWQR.

[2] In Oct. 2025, groundwater monitoring locations sampled were also analyzed for the geochemical parameters as outlined in the 2024 ACM Report (AECOM, 2025). As indicated in the *Remedial Selection Report* (Foth, 2025), biennial monitoring of geochemical parameters will be conducted at the corrective action, delineation, and background monitoring locations. The IDNR approved the *Remedial Selection Report* (Foth, 2025) in their letter dated Jan. 6, 2026 (IDNR, 2026). The next biennial geochemical monitoring event will occur in Fall 2027.

[3] For the downgradient and background monitoring locations where monitoring was initiated before 2014, sampling methods were modified from high-volume to low-flow sampling starting in Oct./Nov. 2014, with the exception of MW-11. Five rounds of baseline Appendix I monitoring were re-initiated between Oct/Nov. 2014 and Nov. 2016, with the exception of MW-11. MW-11 was dry Apr. 2013 through Jun. 2018, Jun. 2019 through Nov. 2020, Sep. 2021 through June. 22, and Nov. 2024 through Oct. 2025 (see footnote 4); therefore, baseline Appendix I monitoring could not be initiated until Oct. 2018 and was completed in Jul. 2024. The high-volume results collected before Oct./Nov. 2014 were removed before conducting statistical analyses.

[4] MW-11 moved to assessment monitoring in Apr. 2013; however, the well was dry and remained dry through Jun. 2018. MW-11 was sampled for the first time since moving to assessment monitoring in Oct. 2018 for the Appendix I list. AECOM requested continued Appendix I monitoring for four additional semiannual events to collect sufficient sampling data to determine whether the concentrations are due to the landfill or are naturally occurring (AECOM, 2019), and the IDNR approved the request in their letter dated Jun. 14, 2019 (IDNR, 2019). Baseline assessment monitoring for the full Appendix II list was initiated in Jun. 2023, and none of the Appendix II constituents not in the Appendix I list were detected during the initial monitoring event.

[5] MW-19R was installed in Sep. 2021 to replace MW-19, which was abandoned due to failure of the annular space seal. MW-19R was installed adjacent to MW-19. The MW-19 and MW-19R data sets were initially combined. See Section 3.1 for more details on the background data set.

In October 2025, semiannual detection, assessment, corrective action, delineation, and background monitoring were conducted at the surface water, shallow groundwater, and deep groundwater locations listed in Tables 1, 2, and 3, respectively. Assessment, corrective action monitoring, and background locations were sampled for the Appendix I and detected Appendix II constituents in October 2025, with the exception of background location MW-18. MW-18 was sampled for the Appendix I list in October 2025 and will be sampled for the Appendix I and detected Appendix II constituents going forward. In accordance with 567 Iowa Administrative Code (IAC) 113.10(6)b and Permit Special Provision X.4.b, MW-7A and MW-46A were sampled for the full Appendix II list in

October 2025. In accordance with Permit Special Provision X.4.b, resampling for the full Appendix II list at the assessment, corrective action, and background monitoring wells is conducted every five years. The next full Appendix II resampling dates will be provided in Table 2 of the 2025 AWQR.

Under the detection and assessment monitoring programs of 567 IAC 113.10(5) and 113.10(6), Appendix I and II monitoring results are statistically compared to background levels as given in 567 IAC 113.10(6)e and to the groundwater protection standard (GWPS) as given in 567 IAC 113.10(6)g and h. A well may return to detection monitoring when all Appendix II constituents are "shown to be at or below background values, using the statistical procedures in paragraph 113.10(4)g for two consecutive sampling events." Consequently, to return to detection monitoring in accordance with 567 IAC 113.10(6)e, all Appendix II constituents must be below the interwell prediction limit (for constituents that are detected in the background data set) or below the laboratory reporting limit (for constituents which are not detected in the background data set) during two consecutive sampling events. However, three consecutive sampling events may be utilized to determine whether to return to detection monitoring to limit the frequent fluctuation of wells moving between the detection and assessment monitoring programs. Assessment monitoring continues when Appendix II concentrations are above background values but below the GWPS using the statistical procedures in paragraph 113.10(4)g.

If Appendix II constituents are detected at statistically significant levels (SSLs) above the GWPS, characterization [567 IAC 113.10(6)g] is initiated and the owners or operators are required to begin an assessment of corrective measures, select a remedy, and implement a remedy in accordance with 567 IAC 113.10(7), (8), and (9). For remedy completion [567 IAC 113.10(9)e(2)], compliance with the GWPS is considered achieved by demonstrating that concentrations of Appendix II constituents have not exceeded the GWPS for a period of three consecutive years or an alternate length of time established by the IDNR.

Based on the October 2014 through October 2025 results, this memo presents an evaluation of statistically significant increases (SSIs) and SSLs under the requirements of paragraphs 113.10(4)g and h of 567 IAC.

3 Statistical Methodology

The statistical methods utilized for locations in detection, assessment, corrective action, and delineation monitoring were consistent with the methods outlined in the approved *2024 UPDATE Winneshiek Hydrologic Monitoring System Plan* (HMSP) (AECOM, 2024). Deviations from the HMSP are listed below. The HMSP will be updated with the permit renewal application in 2026 to reflect these changes. Detailed descriptions of the statistical methods are provided in Attachment 1. Sanitas® v10.1 (Sanitas Technologies) software was utilized to complete statistical comparisons.

The following deviations from the HMSP were implemented during this statistical evaluation (Fall 2025):

- As further discussed in Section 3.3.1, MW-1 and MW-19 were removed from the shallow and deep groundwater background data sets, respectively.
- As further addressed in Section 3.1, background for interwell prediction limits was pooled from October/November 2014 through the most recent monitoring event.
- As addressed in Section 3.3.4, the PQL was used as the reporting limit.

- Per the *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities* (USEPA, 2009), to check distributional assumptions when calculating prediction limits and confidence intervals, the Kaplan-Meier adjustment will be applied when there are 50% to 85% detects in the background data set. Statistical Methodology is provided as Attachment 1.

Note that statistical comparisons were not conducted at shallow groundwater locations GU-1, GU-2, MW-24A, and MW-101 and at deep groundwater locations MW-11 and MW-22 since these locations were dry or had insufficient volume for sample collection in October 2025.

3.1 Background Data Set

The interwell background data sets consist of upgradient surface water monitoring location SW-1, shallow groundwater background locations MW-1 and MW-37A, and deep groundwater background locations MW-18 and MW-19R.

As further addressed in Section 3.3.1, MW-1R and MW-19 were previously included in the shallow and deep groundwater background data sets, respectively. However, MW-1R and MW-19 are recommended for removal from their respective background data sets.

As further addressed in Section 3.2, the background data sets previously included data from October/November 2014 through the end of the preceding year. Hereafter, utilizing background from October/November 2014 through the most recent monitoring event is recommended. Background data set adjustments are addressed in Section 3.3.

3.2 Data Set Adjustments Due to Changes in Sampling Methods

For the downgradient and background monitoring locations where monitoring was initiated before October/November 2014, the sampling methodology was modified from high-volume to low-flow or no-purge sampling starting in October/November 2014. The high-volume results collected before October/November 2014 were removed before conducting statistical analyses. These data set removals were maintained in the current statistical evaluation. The removed data will be listed as crossed-out concentrations in Table 14 of the 2025 AWQR.

3.3 Background Data Set Adjustments

3.3.1 Data Set Adjustments due to Replacement

MW-1R Removal from Background

Previously, historical data from MW-1R was included in the shallow groundwater background data set. MW-1R was installed in April 2010 after MW-1 moved to assessment monitoring. However, MW-1R was installed in a crop field on the adjoining property to the west and was mostly inaccessible from November 2017 through September 2021, when MW-1R was abandoned. MW-37A was installed in September 2021 to replace MW-1R. Since MW-1R's contribution to shallow groundwater background is minimal due to inaccessibility, and further data set removals would likely be required due to volatile organic compound (VOC) detections, removal of the historical MW-1R data from the combined shallow groundwater background data set is recommended.

MW-19 Removal from Background

From June to October 2019, groundwater levels at MW-19 increased approximately 15 feet, which was attributed to annular seal failure. MW-19 was abandoned in August 2021, and MW-19R was installed in September 2021 as its replacement. The data sets for MW-19 and MW-19R were initially

combined; however, due to the seal failure, removal of the June 2019 through May 2021 metals data at MW-19 was recommended and approved by the IDNR in their letter dated May 2, 2023 (IDNR, 2023). With four years of monitoring data now available from MW-19R, retaining the limited historical MW-19 data no longer provides meaningful ongoing value. Therefore, removal of the historical MW-19 data from the combined deep groundwater background data set is recommended.

3.3.2 Adjustments Associated with Total Suspended Solids

A review of the total suspended solids (TSS) results in background was completed for the October/November 2014 through current (October 2025) sampling event data at MW-1, MW-18, MW-19R, and MW-37A. The evaluation was conducted by identifying elevated TSS results (above 100 mg/L) and examining corresponding metal results to determine whether a correlation was present. When a correlation was evident, the detected metals for the event were considered for removal.

Based on this review, no background data set adjustments are recommended for background wells MW-18 based on a review of TSS data. The following data set adjustments are recommended based on the evaluation. The removed background data will be listed as crossed-out concentrations in Table 14 of the 2025 AWQR.

- Removal of the September 2021 barium, cobalt, lead, and nickel concentrations in MW-19R due to elevated TSS (182 mg/L) and the potential for turbidity to contribute to the higher metal concentrations identified.

- Removal of the September 2021 arsenic, barium, cadmium, chromium, cobalt, copper, lead, silver, and vanadium concentration in MW-37A due to the elevated TSS (159 mg/L) and the potential for turbidity to contribute to the higher metal concentrations identified.

- Removal of the March 2022 arsenic, barium, cadmium, chromium, cobalt, copper, lead, nickel, and vanadium concentrations in MW-19R due to the elevated TSS (834 mg/L) and the potential for turbidity to contribute to the higher metal concentrations identified.

- Removal of the June 2023 barium, cobalt, and copper concentrations in MW-19R due to elevated TSS (109 mg/L) and the potential for turbidity to contribute to the higher metal concentrations identified.

- Removal of the November 2023 arsenic, barium, cadmium, cobalt, copper, lead, nickel, and vanadium concentrations in MW-1 due to elevated TSS (276 mg/L) and the potential for turbidity to contribute to the higher metal concentrations identified.

- Removal of the October 2025 arsenic, barium, cobalt, and lead concentrations in MW-19R due to the elevated TSS (151 mg/L) and the potential for turbidity to contribute to the higher metal concentrations identified.

3.3.3 Review of Single Background Detections

<u>Shallow Groundwater</u>
A VOC detection was identified for chlorobenzene at MW-1 in November 2014. The November 2014 detected metals data (barium, cobalt, copper, nickel, and vanadium) at MW-1 were removed from the background data set due to the potential impact indicated by the VOC detection. A single VOC detection was identified for chlorobenzene in November 2023. In January 2024, a retest sample was collected, which confirmed the November 2023 detection. The November 2023 detected metals

(arsenic, barium, cadmium, cobalt, copper, lead, nickel, and vanadium) were previously removed due to elevated TSS observed during the event. Only one confirmed detection has been observed at MW-1, indicating MW-1 remains suitable for continued use as a background well. If chlorobenzene continues to be detected at MW-1, further assessment will be provided. VOCs are considered "never detected" constituents; therefore, chlorobenzene was not added as a prediction limit constituent. Downgradient chlorobenzene results continue to be evaluated using the Double Quantification Rule (DQR).

A single VOC detection was identified for acetone in MW-37A during the June 2024 sampling event. The June 2024 detected metals data (arsenic, barium, and cobalt) were considered for removal; however, acetone is a common laboratory contaminant, and arsenic, barium, and cobalt concentrations at MW-37 were within the historical range for the constituents. Therefore, arsenic, barium, and cobalt results at MW-37A during the June 2024 event were not removed from background. Acetone has not been observed at MW-37A outside of this event, indicating that MW-37A remains suitable for continued use as a background well. VOCs are considered "never detected" constituents; therefore, acetone was not added as a prediction limit constituent. Downgradient acetone results continue to be evaluated using the DQR.

A single VOC detection was identified for benzene in MW-37A during the December 2024 sampling event. The December 2024 detected metals data (arsenic, barium, cobalt, and nickel) were removed from the background data set due to the potential impact indicated by the VOC detection. Benzene was not detected at MW-37A during subsequent events, indicating that MW-37A remains suitable for continued use as a background well for shallow groundwater. VOCs are considered "never detected" constituents; therefore, benzene was not added as a prediction limit constituent. Downgradient benzene results continue to be evaluated using the DQR.

Deep Groundwater

A single VOC detection was identified for acetone in MW-19R during the September 2021 sampling event. The September 2021 detected metals data (barium, cobalt, lead, and nickel) were previously removed due to elevated TSS observed during the event. Acetone has not been observed at MW-19R outside of this event, indicating that MW-19R remains suitable for continued use as a background well. VOCs are considered "never detected" constituents; therefore, acetone was not added as a prediction limit constituent. Downgradient acetone results continue to be evaluated using the DQR.

3.3.4 Adjustments Associated with Reporting Limits

During prior statistical evaluations, the method detection limit (MDL) was utilized as the reporting limit. Starting with the current (Fall 2025) statistical evaluation, the reporting limit was used as the PQL. This change is consistent with the protocols for handling non-detect data outlined in the United States Environmental Protection Agency (USEPA) *Unified Guidance* (USEPA, 2009). Specifically, Section 6.3.4 of *Unified Guidance* (USEPA, 2009) indicates that "non-detect concentrations should not be assumed to be bounded above by the MDL" and suggests the use of the PQL for handling non-detect data. Note that while the laboratory PQL is utilized as the reporting limit for non-detect data, the laboratory continues to report actual estimated detections (i.e., detections above the MDL but below the PQL or J-flagged concentrations). Per USEPA recommendations (USEPA, 2009), substitutions are not conducted for J-flagged or estimated concentrations. These results are utilized at the reported estimated concentration even though the degree of uncertainty is probably greater than that associated with detections above the PQL (USEPA, 2009).

Note that Section 7.3 of the approved *2024 UPDATE Winneshiek Hydrologic Monitoring System Plan* indicates that "if a monitoring well's background for a given parameter contains more than 50 percent non-detects, a nonparametric prediction limit will be used to test the interwell compliance data against interwell background, and the reporting limit (RL) will be used for non-detect values to account for non-detects." This specifies the use of the PQL as the reporting limit for non-detect data. However, as described above and in Attachment 1, half the reporting limit was used for non-detect data starting with the current (Fall 2025) statistical evaluation. This method follows the Unified Guidance recommendations and is given in detail in Unified Guidance Chapter 15 (USEPA, 2009). The HMSP will be updated with the permit renewal application in 2026 to reflect this change.

The background data set and PQLs were reviewed in the current (Fall 2025) statistical evaluation. This consisted of reviewing the PQLs for metals constituents used in the interwell prediction limit evaluation to determine whether PQLs have been lowered over time and whether some of the earlier non-detect data with elevated PQLs should be removed from the background data due to the increased uncertainty it added. Non-detect background samples with a PQL of at least two times the maximum detected background concentration are recommended for removal. The background data set adjustments recommended and incorporated based on the review of PQLs includes:

- Removal of the non-detect cadmium results with a PQL of 0.0005 mg/L at SW-1.

The removed background data will be listed as a crossed-out concentration in Table 14 of the 2025 AWQR.

3.4 Outliers

The outliers flagged during prior statistical evaluations were maintained in the current (Fall 2025) evaluation. Outliers will be listed as o-flagged and as crossed-out concentrations in Table 14 of the 2025 AWQR. The outliers removed from the evaluation include:

- Barium at MW-4 in November 2017 (0.0406 mg/L);
- Cobalt at MW-35 in December 2024 (0.00198 mg/L);
- Cobalt at MW-44A June 2023 (0.000251 mg/L);
- Cobalt at MW-44A in November 2023 (0.000327 mg/L);
- Nickel at MW-101 in June 2020 (0.00461 mg/L);
- Nickel at MW-101 in September 2022 (0.000373 mg/L); and
- Nickel at MW-22 in June 2023 (0.00445 mg/L).

No outliers were flagged during the current (Fall 2025 statistical evaluation).

3.5 Corrective Action Constituents

In accordance with the Unified Guidance (USEPA, 2009), corrective action statistics are conducted for analyte/well pairs with previously identified SSLs, as listed in Table 4. No new corrective action constituents were added based on the results of the previous Spring 2025 statistical evaluation. In addition, no corrective action constituents exited corrective action and returned to an assessment constituent in Spring 2025.

Table 4
Corrective Action Constituents

Monitoring Location	Corrective Action Constituents [1]
Shallow Monitoring Locations	
MW-29A	Cobalt
MW-31A	Cobalt
MW-33A	Arsenic
MW-43A	Cobalt
Deep Monitoring Locations	
MW-35	Cobalt

[1] Corrective action constituents are analyte/well pairs with SSLs over the GWPS identified during previous statistical evaluations and have not achieved compliance with the GWPS for three consecutive years in accordance with 567 IAC 113.10(9)e(2).

Under corrective action statistics, comparisons to background are not conducted (unless the GWPS is the background value); therefore, the analyte/well pairs listed in Table 4 are not included in the Section 4 comparisons to background. As detailed in Attachment 1, corrective action statistics compare the upper confidence limit to the compliance standard to determine whether concentration levels are in compliance with the GWPS. In the case of decreasing concentrations, the upper confidence limit on a regression trend line is utilized. All other compliance constituents in the corrective action monitoring locations (i.e., those without SSLs over the GWPS during prior statistical evaluations) are evaluated using the assessment monitoring procedures.

4 Comparison to Background Levels

Comparisons to background levels were conducted using interwell prediction limits and the DQR. As noted in Section 3.4, comparisons to background were not conducted for the corrective action constituents listed in Table 4.

4.1 Interwell Prediction Limits

Interwell prediction limits were used for formal statistical assessment of SSIs over background at downgradient monitoring locations for analytes that have been detected above the reporting limit in the combined background data set (SW-1 for the surface water system; MW-1 and MW-37A in the shallow water table system; and MW-18 and MW-19R for the deep bedrock system). For surface water, these analytes included arsenic, barium, cadmium, cobalt, copper, lead, nickel, silver, thallium, vanadium, and zinc. For shallow groundwater, these analytes included arsenic, barium, cobalt, and nickel. For deep groundwater, these analytes included barium, cobalt, and silver.

4.1.1 Surface Water

The surface water prediction limits calculated utilizing the October/November 2014 through October 2025 sample data are summarized in Table 5. Detailed prediction limit output for each analyte/well pair is included in Attachment 2.

Table 5
Interwell Prediction Limit Summary – Surface Water
Oct./Nov. 2014 – Oct. 2025 Interwell Data [(1)]

Chemical Name	Prediction Limit	Units	Interwell Prediction Limit Type	Retesting Plan	Prediction Limit Method
Arsenic	0.00254	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Barium	0.201	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Cadmium	0.000228	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Cobalt	0.00436	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Copper	0.0115	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Lead	0.00708	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Nickel	0.00785	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Silver	0.00136	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Thallium	0.00467	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Vanadium	0.007742	mg/L	Parametric (Lognormal with Kaplan-Meier Adjustment)	1-of-2	$\exp(\hat{\mu}_{KM} + k \cdot \hat{\sigma}_{KM})$
Zinc	0.0207	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic

(1) Interwell data consists of the Appendix I parameters that have been detected in the background data set (SW-1). Note that background data set adjustments were incorporated in accordance with Sections 3.2 and 3.3.

Non-parametric prediction limits were used for arsenic, barium, cadmium, cobalt, copper, lead, nickel, silver, thallium, and zinc since either normality assumptions could not be met or there were less than 50% detects in the combined background data. A parametric lognormal prediction limit was used for vanadium since there were greater than 50% detects in the combined background data set, the assumptions of normality were met with a lognormal transformation, and the lognormal limit was accepted as being representative of the background distribution.

4.1.2 Shallow Groundwater

The shallow groundwater prediction limits calculated utilizing the October/November 2014 through October 2025 sample data are summarized in Table 6. Detailed prediction limit output for each analyte/well pair is included in Attachment 2.

Table 6
Interwell Prediction Limit Summary – Shallow Groundwater
Oct./Nov. 2014 – Oct. 2025 Interwell Data [(1)]

Chemical Name	Prediction Limit	Units	Interwell Prediction Limit Type	Retesting Plan	Prediction Limit Method
Arsenic	0.22	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Barium	0.63	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Cobalt	0.00272	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic
Nickel	0.00927	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic

(1) Interwell data consists of the Appendix I and II parameters that have been detected in the combined background data set (MW-1 and MW-37A). Note that background data set adjustments were incorporated in accordance with Sections 3.2 and 3.3.

Non-parametric prediction limits were used for arsenic, barium, cobalt, and nickel since either normality assumptions could not be met or there were less than 50% detects in the combined background data.

4.1.3 Deep Groundwater

The deep groundwater prediction limits calculated utilizing the October/November 2014 through October 2025 sample data are summarized in Table 7. Detailed prediction limit output for each analyte/well pair is included in Attachment 2.

Table 7
Interwell Prediction Limit Summary – Deep Groundwater
Oct./Nov. 2014 – Oct. 2025 Interwell Data [1]

Chemical Name [2]	Prediction Limit	Units	Interwell Prediction Limit Type	Retesting Plan	Prediction Limit Method
Barium	0.1906	mg/L	Parametric (Lognormal)	1-of-2	$exp(\bar{y} + k \cdot s_y)$
Silver	0.00124	mg/L	Non-Parametric	1-of-2	Maximum Order Statistic

[1] Interwell data consists of the Appendix I and II parameters that have been detected in the combined background data set (MW-18 and MW-19R). Note that background data set adjustments were incorporated in accordance with Sections 3.2 and 3.3.
[2] Cobalt is detected in the deep groundwater background data set; however, cobalt was not analyzed using interwell prediction limits this event, since downgradient wells MW-11 and MW-22 were not sampled, and cobalt is a corrective action constituent at MW-35 and is analyzed using confidence intervals in Section 5.

A non-parametric prediction limit was used for silver since there were less than 50% detects in the combined background data. A parametric lognormal prediction limit was used for barium since there were greater than 50% detects in the combined background data set, the assumptions of normality were met with a lognormal transformation, and the lognormal limit was accepted as being representative of the background distribution.

4.1.4 Prediction Limit Exceedances

No prediction limit exceedances were observed at the surface water monitoring locations during the October 2025 event. A summary of the monitoring locations exhibiting a prediction limit exceedance during the October 2025 event is given in Table 8 for the shallow groundwater system and Table 9 for the deep groundwater system. Detailed prediction limit output for each analyte/well pair is included in Attachment 2.

Table 8
Oct. 2025 Interwell Prediction Limit Exceedances – Shallow Groundwater

	Nickel (mg/L)
Prediction Limit	**0.00927**
Detection Monitoring Locations	
None	
Delineation Monitoring Locations - Assessment Constituents	
None	
Assessment Monitoring Locations	
MW-4	0.0101
MW-7A	0.0108
MW-40A	0.026
MW-46A	0.0322
Corrective Action Monitoring Locations – Assessment Constituents	
MW-29A	0.071
MW-31A	0.0287

Table 9
Oct. 2025 Interwell Prediction Limit Exceedances – Deep Groundwater

	Barium (mg/L)
Prediction Limit	**0.1906**
Corrective Action Monitoring Locations – Assessment Constituents	
MW-35	0.256

4.2 Double Quantification Rule

The DQR was used to evaluate SSIs over background for the remaining Appendix I and II constituents (i.e., constituents not evaluated using interwell prediction limits and which have not been detected above the PQL in the interwell background data sets). The DQR output is included in Attachment 3, with a summary of the October 2025 DQR detections provided in Table 10 for surface water, Table 11 for shallow groundwater, and Table 12 for deep groundwater.

Table 10
Double Quantification Rule – Surface Water
Oct. 2025 Detections

Well	Constituent(s)
Downstream Monitoring Locations	
None	

Table 11
Double Quantification Rule – Shallow Groundwater
Oct. 2025 Detections

Well [1]	Constituent(s)
Detection Monitoring Locations	
None	
Assessment Monitoring Locations	
MW-4	Cadmium
MW-7A	Chromium
Corrective Action Monitoring Locations - Assessment Constituents	
MW-29A	Sulfide

Table 12
Double Quantification Rule – Deep Groundwater
Oct. 2025 Detections

Well	Constituent(s)
Corrective Action Monitoring Locations - Assessment Constituents	
MW-35	Nickel

4.3 Summary of Comparison to Background

4.3.1 Surface Water Locations

No interwell prediction limit exceedances or DQR detections were identified at the downstream surface water monitoring locations SW-2 or SW-5 in October 2025.

4.3.2 Detection Monitoring Locations

For the shallow groundwater system, no interwell prediction limit exceedances or DQR detections were identified at MW-2R, MW-3, MW-4B, MW-25A, MW-34A, MW-38A, MW-41A, and MW-45A.

For the deep groundwater system, detection monitoring well MW-22 was not sampled in October 2025 as described in Table 3.

4.3.3 Assessment Monitoring Locations

For the shallow groundwater system, interwell prediction limit exceedances were identified at MW-4, MW-7A, MW-40A, and MW-46A as listed in Table 8. DQR detections were identified at MW-4 and MW-7A as listed in Table 11.

For the deep groundwater system, assessment monitoring well MW-11 was not sampled in October 2025 as described in Table 3.

4.3.3.1 Exiting Assessment Monitoring

As discussed in Section 1, assessment monitoring locations may return to detection monitoring when Appendix II constituents fall below the current interwell prediction limit (for constituents which are detected in the respective background data set) and below the laboratory reporting limit (for constituents which are not detected in the background data set) for three consecutive sampling events. Exiting assessment monitoring will be evaluated starting in the Spring 2026 statistical evaluation.

4.3.4 Corrective Action Monitoring Locations – Assessment Constituents

For the shallow groundwater system, no interwell prediction limit exceedances or DQR detections were identified for the assessment constituents at MW-33. Interwell prediction limit exceedances and/or DQR detections were identified for the assessment constituents in MW-29A and MW-31A as listed in Tables 8 and 11, respectively.

For the deep groundwater system, an interwell prediction limit exceedance and DQR detection were identified for assessment constituents in MW-35 as listed in Tables 9 and 12, respectively.

In lieu of retesting for the prediction limit exceedances and DQR detections, SSIs were declared and evaluated for SSLs in Section 5.

4.3.5 Delineation Monitoring Locations

Note: MW-39A, MW-42A, MW-43A, and MW-44A moved to delineation monitoring this Fall 2025 sampling event as requested in the *Remedial Selection Report* (Foth, 2025) and approved by the IDNR in their letter dated January 6, 2026 (IDNR, 2026). While these locations were sampled for the Appendix I list in October 2025, statistical comparisons were only conducted for the constituent the wells are delineating: cobalt. As previously noted, comparisons to background were not conducted for the corrective action constituents listed in Table 4, which included cobalt in MW-43A.

For the shallow groundwater system, no prediction limit exceedances were identified for cobalt at MW-39A, MW-42A, and MW-44A.

5 Comparison to Groundwater Protection Standard

The interwell prediction limit exceedances and DQR detections listed in Tables 8 through 12 were declared SSIs and evaluated for SSLs over the GWPS per 567 IAC 113.10(6)f and g. Comparisons to the GWPS were evaluated through statistical confidence intervals under the assessment monitoring null hypothesis. SSLs were declared to exist with statistical certainty when the lower confidence limit exceeds the GWPS.

In contrast, corrective action analyte/well pairs (i.e., those where SSLs have been previously declared) were evaluated to determine compliance with the GWPS per 567 IAC 113.10(9)e. A summary of the corrective action constituents was provided in Table 4. Comparisons to the GWPS in this case were evaluated through statistical confidence intervals under the corrective action monitoring null hypothesis. When downward trending data is identified, confidence bands (upper 95% confidence limits) placed around the linear trend line can be used for comparisons to the GWPS; however, significant decreasing linear trends were not identified at the corrective action constituent/well pairs during this (Fall 2025) evaluation. For corrective action constituents, compliance with the GWPS has been achieved with statistical certainty when the UCL or the upper 95% confidence limit on the trend line is lower than the GWPS for a period of three consecutive years or an alternate length of time established by the IDNR.

Statistical outputs for confidence intervals in assessment mode and confidence intervals in corrective action mode are included in Attachment 4.

5.1 Shallow Groundwater Background as the Arsenic and Cobalt GWPSs

With arsenic and cobalt, the concentrations in the interwell shallow groundwater background data set exceed the health-based GWPS values (i.e., the 40 Code of Federal Regulations [CFR] Part 141 Safe Drinking Water Act Maximum Contaminant Level [MCL] or the 567 IAC Chapter 137 Statewide Standard for a Protected Groundwater Source). Therefore, the GWPS for arsenic and cobalt in shallow groundwater is taken as background in accordance with 567 IAC 113.10(6)h.

Pursuant to 567 IAC 113.10(6)h, the GWPS for arsenic is taken as background and evaluated with the statistical methods described in Attachment 1 and as recommended in the *Unified Guidance* (USEPA, 2009). With background serving as the GWPS, the confidence limit is compared to the combined MW-1 and MW-37A background upper tolerance limit with 95% confidence and 95% coverage. Statistical output for the arsenic tolerance limit is included in Attachment 5. Using the described methods, the shallow groundwater arsenic GWPS was calculated to be 0.22 mg/L. Therefore, it is recommended that the background GWPS for arsenic in the shallow groundwater system be established at 0.22 mg/L.

A site-specific GWPS of 0.0034 mg/L for cobalt has been established and is detailed in the *2024 UPDATE Winneshiek Hydrologic Monitoring System Plan* (HMSP) (AECOM, 2024), which was approved by the IDNR in their letter dated October 29, 2024 (IDNR, 2024). Previously, the site-specific GWPS was applied to the deep groundwater system in addition to the shallow groundwater system; however, the cobalt prediction limit in the deep groundwater system is below the 567 IAC Chapter 137 Statewide Standard for a Protected Groundwater Source of 0.0021 mg/L. Therefore, it is recommended that the health-based GWPS (i.e., 0.0021 mg/L) be used as the GWPS for the deep groundwater system.

5.2 First Order Regression Calculations

Table 11 of the AWQR lists a projected year to completion for each analyte/well pair in corrective action (i.e., those listed in Table 4 of this memo). Remedy completion timeframes were estimated for the individual analyte/well pairs in corrective action for inclusion in Table 11 of the 2025 AWQR.

For the corrective action constituents that have achieved compliance with the GWPS (i.e., arsenic in MW-33), first order regression calculations were not utilized. The projected year to completion is three years after compliance with the GWPS was first statistically achieved and will remain that date as long as concentrations remain statistically below the GWPS during the interim statistical evaluations.

For corrective constituents that have not achieved compliance with the GWPS, the projected year to completion was based on the first-order regression calculations for each individual analyte/well pair. The projected years to completion are three years after the first order regression calculations projected initial compliance with the GWPS. The first order regression calculations for these corrective action constituents are included in "Sample Values and Corresponding 1st-Order Regression Calculations for Date to Completion" table in Attachment 5.

5.3 SSL Summary

Confidence interval output for the shallow and deep groundwater assessment and corrective action constituents are included in Attachments 4 and 5, respectively. The results of the shallow and deep groundwater evaluations are included in Tables 13 and 14, respectively.

Table 13
Shallow Groundwater SSL Summary
Oct./Nov. 2014 – Oct. 2025 Appendix II Data

Chemical Name	Wells with SSL [1]	SSL Not Identified or Rejected [1]	GWPS [2]
Assessment Monitoring Locations			
Cadmium (mg/L)		MW-4	0.005
Chromium (mg/L)		MW-7A	0.1
Nickel (mg/L)		MW-4, MW-7A, MW-40A, MW-46A	0.1
Corrective Action Monitoring Locations - Assessment Constituents			
Nickel (mg/L)		MW-29A, MW-31A	0.1
Sulfide (mg/L)		MW-29A	3
Delineation and Corrective Action Monitoring Locations – Corrective Action Constituents			
Arsenic (mg/L)		MW-33	0.22
Cobalt (mg/L)	MW-29A, MW-31A, MW-43A		0.0034

[1] Under the assessment null hypothesis, an SSL is indicated when the lower confidence limit exceeds the GWPS. Under corrective action null hypothesis, an SSL remains when the upper confidence limit exceeds the GWPS.

[2] Values are the 40 CFR Part 141 Safe Drinking Water Act MCL, the IAC 567 Chapter 137 Statewide Standard for a Protected Groundwater Source, or background in the case of arsenic, cobalt, and sulfide. Discussion regarding the site-specific background GWPS values for arsenic and cobalt is provided in Section 5.1. Sulfide does not have an MCL or Statewide Standard; therefore, the GWPS is background. Since sulfide has not been detected in the shallow groundwater background data set, background is currently taken as the laboratory reporting limit.

Table 14
Deep Groundwater SSL Summary
Oct./Nov. 2014 – Oct. 2025 Appendix II Data

Chemical Name	Wells with SSL [1]	SSL Not Identified or Rejected [1]	GWPS [2]
Corrective Action Monitoring Locations – Assessment Constituents			
Barium (mg/L)		MW-35	2
Nickel (mg/L)		MW-35	0.1
Corrective Action Monitoring Locations – Corrective Action Constituents			
Cobalt (mg/L)	MW-35		0.0021

[1] Under the assessment null hypothesis, an SSL is indicated when the lower confidence limit exceeds the GWPS. Under corrective action null hypothesis, an SSL remains when the upper confidence limit exceeds the GWPS.
[2] Values are the 40 CFR Part 141 Safe Drinking Water Act MCL or the IAC 567 Chapter 137 Statewide Standard for a Protected Groundwater Source.

5.4 Summary of Comparison to Groundwater Protection Standard

5.4.1 Assessment Monitoring Locations

No SSLs were identified in the shallow and deep groundwater assessment monitoring locations.

5.4.2 Corrective Action Monitoring Locations

No SSLs were identified for the assessment constituents in the shallow and deep groundwater corrective action monitoring locations.

For the shallow groundwater corrective action constituents listed in Table 4, SSLs over the GWPS remained for cobalt in MW-29A and MW-31A. Compliance with the GWPS was newly achieved for arsenic in MW-33 during the current (Fall 2025) statistical evaluation. In accordance with 567 IAC 113.10(9)e(2), arsenic in MW-33A will return to assessment constituents in Fall 2028, as long as concentrations remain below the GWPS during interim statistical evaluations. In addition, since arsenic is the only corrective action constituent at MW-33A, MW-33A will return to assessment monitoring when arsenic returns to an assessment constituent.

For the deep groundwater corrective action constituent listed in Table 4, an SSL continued to be identified for cobalt in MW-35.

5.4.1 Delineation Monitoring Locations

No SSLs were identified for the assessment constituents in the shallow groundwater delineation monitoring locations. Cobalt in MW-43 was evaluated as a corrective action constituent. An SSL continued to be identified for cobalt in MW43; therefore, compliance with the GWPS has not been achieved.

6 Effective Power and Site-Wide False Positive Rate

Statistical power calculations, effective power curves for the 1-of-2 prediction limit plan, and the current site-wide false positive rate (SWFPR) will be evaluated starting in the Spring or Fall 2026 statistical evaluation.

Statistical power calculations for confidence limits compared to the GWPS under assessment monitoring (or assessment mode under corrective action) are included in the confidence interval output of Attachment 4. Details regarding the purpose and procedures for these calculations are provided in Attachment 1. Confidence limits are calculated to meet statistical power levels of 50%

for increases in the true concentration mean of 1.5 times a fixed standard, and 80% for increases in the true concentration mean of 2.0 times a fixed standard, as discussed in *Unified Guidance* (USEPA, 2009) Chapter 22.

7 Conclusions

The methodology described in Attachment 1 was utilized to conduct the statistical evaluations for the surface water, shallow groundwater, and deep groundwater system locations in the detection, assessment, corrective action, and delineation monitoring programs.

7.1 Surface Water Monitoring Locations

A summary of the Fall 2025 statistical results for the surface water system is presented in Table 15.

Table 15
Summary of the Fall 2025 Evaluation – Surface Water

Monitoring Location	Monitoring Program	Current Schedule [1] (Oct. 2025)	Current SSIs	Corrective Action Constituents [2]		Retesting Parameter [3]	Monitoring Program Changes
				Current SSLs	Achieved Compliance with GWPS		
Downstream Monitoring Locations							
SW-2	Detection	Appendix I					
SW-5	Detection	Appendix I					
Upstream Monitoring Locations							
SW-1	Background	Appendix I					

[1] In addition to the Appendix I list, surface water locations were also analyzed for the geochemical parameters as outlined in the *2024 ACM Report* (AECOM, 2025) in Oct. 2025. As indicated in the *Remedial Selection Report* (Foth, 2025), continued monitoring of geochemical parameters at the surface water monitoring locations was not recommended.
[2] Analyte/well pairs with SSLs over the GWPS identified during previous statistical evaluations and have not achieved compliance with the GWPS for 3 consecutive years in accordance with 567 IAC 113.10(9)e(2).
[3] Retest samples will be collected prior to the next semiannual sampling event and will be utilized to determine if any monitoring program changes will be initiated.

7.1.1 Detection Monitoring Locations

In October 2025, semiannual detection monitoring for the Appendix I list was conducted at SW-2 and SW-5. No SSIs were identified at the detection monitoring locations in the surface water system.

Semiannual detection monitoring for cobalt will be conducted at SW-2 and SW-5 in Spring 2026. As indicated in the *Remedial Selection Report* (Foth, 2025), it was recommended that surface water locations be analyzed only for cobalt. The *Remedial Selection Report* (Foth, 2025) was approved by the IDNR in their letter dated January 6, 2026 (IDNR, 2026).

7.1.1 Background Monitoring Locations

Semiannual background monitoring was not conducted at SW-1 in October 2025 due to dry conditions. Therefore, surface water background included the October/November through June 2025 data.

Semiannual background monitoring for cobalt will be conducted at SW-1 in Spring 2026. As indicated in the *Remedial Selection Report* (Foth, 2025), it was recommended that surface water locations be analyzed only for cobalt. The *Remedial Selection Report* (Foth, 2025) was approved by the IDNR in their letter dated January 6, 2026 (IDNR, 2026).

7.2 Shallow Groundwater Monitoring Locations

A summary of the Fall 2025 statistical results for the shallow groundwater system is presented in Table 16.

Table 16
Summary of the Fall 2025 Evaluation – Shallow Groundwater

Monitoring Location	Monitoring Program	Current Schedule [1,2] (Oct. 2025)	Current SSIs	Corrective Action Constituents [3]		Retesting Parameter [4]	Monitoring Program Changes
				Current SSLs	Achieved Compliance with GWPS		
Groundwater Underdrain Monitoring Locations							
GU-1	Detection	Dry					
GU-2	Detection	Dry					
Downgradient Monitoring Locations							
MW-2R	Detection	Appendix I					
MW-3	Detection	Appendix I					
MW-4	Assessment	Appendix II	Cadmium; Nickel				
MW-4B	Detection	Appendix I					
MW-7A	Assessment	Appendix II	Chromium; Nickel				
MW-24A	Assessment	Dry					
MW-25A	Detection	Appendix I					
MW-29A	Corrective Action	Appendix II	Nickel; Sulfide	Cobalt			
MW-31A	Corrective Action	Appendix II	Nickel	Cobalt			
MW-33A	Corrective Action	Appendix II			Arsenic		
MW-34A	Detection	Appendix I					
MW-38A	Detection	Appendix I					
MW-40A	Assessment	Appendix II	Nickel				
MW-41A	Detection	Appendix I					
MW-45A	Detection	Appendix I					
MW-46A	Assessment	Appendix II	Nickel				
MW-101	Detection	Dry					
Delineation Monitoring Locations							
MW-39A	Delineation	Appendix I					
MW-42A	Delineation	Appendix I					
MW-43A	Delineation	Appendix I		Cobalt			
MW-44A	Delineation	Appendix I					

[1] GU-1, GU-2, MW-24, and MW-101 were dry or had insufficient volume for sample collection; therefore, GU-1, GU-2, MW-24, and MW-101 were not included in this Fall 2025 statistical evaluation. Appendix II locations were sampled for the Appendix I and detected Appendix II constituents in Oct. 2025, with the exceptions of MW-7A and MW-46. MW-7A and MW-46A moved to assessment monitoring in Summer 2023 and Fall 2024, respectively; however, MW-7A has only undergone one complete Appendix II sampling event, and MW-46A had yet to be sampled for the full Appendix II list. Therefore, MW-7A and MW-46A were sampled for the full Appendix II list in Oct. 2025.

[2] In Oct. 2025, groundwater monitoring locations sampled were also analyzed for the geochemical parameters as outlined in the 2024 ACM Report (AECOM, 2025). As indicated in the Remedial Selection Report (Foth, 2025), biennial monitoring of geochemical parameters will be conducted at the corrective action, delineation, and background monitoring. The IDNR approved the Remedial Selection Report (Foth, 2025) in their letter dated Jan. 6, 2026 (IDNR, 2026). The next biennial geochemical monitoring event will occur in Fall 2027.

[3] Analyte/well pairs with SSLs over the GWPS identified during previous statistical evaluations and have not achieved compliance with the GWPS for 3 consecutive years in accordance with 567 IAC 113.10(9)e(2).

[4] Retest samples will be collected prior to the next semiannual sampling event and will be utilized to determine if any monitoring program changes will be initiated.

7.2.1 Detection Monitoring Locations

In October 2025, semiannual detection monitoring for the Appendix I constituents was conducted at MW-2R, MW-3, MW-4B, MW-25A, MW-34A, MW-38A, MW-41, and MW-45A. GU-1, GU-2, MW-24, and MW-101 were dry or had insufficient volume for sample collection; therefore, GU-1, GU-2, MW-24, and MW-101 were not included in this Fall 2025 statistical evaluation. No SSIs were identified at the detection monitoring locations that were sampled in the shallow groundwater system in October 2025.

Semiannual detection monitoring for the Appendix I constituents will be conducted at GU-1, GU-2, MW-2R, MW-3, MW-4B, MW-24, MW-25A, MW-34A, MW-38A, MW-41, MW-45A, and MW-101 in Spring 2026 as long as there is sufficient volume for sample collection.

7.2.2 Assessment Monitoring Locations

In October 2025, semiannual assessment monitoring was conducted at MW-4 and MW-40A for the Appendix I and detected Appendix II constituents, and semiannual assessment monitoring was conducted at MW-7A and MW-46A for the full Appendix II list. Assessment monitoring location MW-24A was dry or had insufficient volume for sample collection; therefore, MW-24A was not included in this Fall 2025 statistical evaluation.

The SSIs identified at the shallow groundwater assessment monitoring locations are summarized in Table 16. No SSLs were identified for the shallow groundwater assessment monitoring locations.

As further addressed in Section 4.3.2.1, an evaluation to exit assessment monitoring was not conducted in this Fall 2025 statistical evaluation. Exiting assessment monitoring will be evaluated starting in the Spring 2026 statistical evaluation.

Semiannual assessment monitoring for the Appendix I and detected Appendix II list will be conducted at MW-4A, MW-7A, MW-40A, and MW-46A in Spring 2026. No Appendix II constituents not included in Appendix I were detected above the PQL at MW-7A during the initial full Appendix II sampling events; therefore, no new constituents will be added to the detected Appendix II constituents during semiannual assessment monitoring events. In accordance with 567 IAC 113.10(6)b and Permit Special Provision X.4.b, MW-7A will be sampled for the full Appendix II list again in Fall 2030. MW-46 was sampled for the full Appendix II list for the first time in October 2025, and no Appendix II constituents not in Appendix I were detected above the PQL. Therefore, in accordance with 567 IAC 113.10(6)b, annual monitoring for the full Appendix II list will be conducted at MW-46A again in Fall 2026. For the remaining assessment monitoring locations, at least two sampling events for the full Appendix II list have been completed; therefore, in accordance with Permit Special Provision X.4.b, resampling for the full Appendix II list will be conducted every five years. The Appendix II resampling event schedule will be provided in Table 2 of the AWQR.

7.2.3 Corrective Action Monitoring Locations

In October 2025, semiannual corrective action monitoring was conducted at MW-29A, MW-31A, and MW-33A for the Appendix I and detected Appendix II constituents.

The SSIs identified for the assessment constituents in the shallow groundwater corrective action monitoring locations are summarized in Table 16. No SSLs were identified for the assessment constituents in the shallow groundwater corrective action monitoring locations.

Confidence intervals in corrective action mode were utilized to evaluate the corrective action constituents in the shallow groundwater system listed in Table 4. For arsenic and cobalt, the site-specific background GWPS values discussed in Section 5.1 were utilized. As shown in Table 17, SSLs over the GWPS remained for cobalt in MW-29A and MW-31. Compliance with the GWPS was newly achieved for arsenic in MW-33 during the current (Fall 2025) statistical evaluation. In accordance with 567 IAC 113.10(9)e(2), arsenic in MW-33A will return to assessment constituents in Fall 2028, as long as concentrations remain below the GWPS during interim statistical evaluations. In addition, since arsenic is the only corrective action constituent at MW-33A, MW-33A will return to assessment monitoring when arsenic returns to an assessment constituent.

Semiannual corrective action monitoring for the Appendix I and detected Appendix II constituents will be conducted at MW-29A, MW-31A, and MW-33A in Spring 2026. In accordance with Permit Special Provision X.4.b, resampling for the full Appendix II list at the corrective action monitoring wells will be conducted every five years. The Appendix II resampling event schedule will be provided in Table 2 of the 2025 AWQR.

7.2.4 Delineation Monitoring Locations

In October 2025, semiannual delineation monitoring for the Appendix I constituents was conducted at MW-39A, MW-42A, MW-43A, and MW-44A. While these locations were sampled for the Appendix I list in October 2025, statistical comparisons were only conducted for the constituent the wells are delineating: cobalt.

No SSIs were identified for cobalt at MW-39A, MW-42A, and MW-44A.

Cobalt in MW-43A was evaluated as a corrective action constituent due to a previously identified SSL for this analyte/well pair. An SSL continued to be identified for cobalt in MW43; therefore, compliance with the GWPS has not been achieved.

Semiannual delineation monitoring will continue at MW-39A, MW-42A, MW-43A, and MW-44A in Spring 2026. These wells were previously analyzed for the Appendix I list; however, MW-39A, MW-42A, MW-43A, and MW-44A moved to delineation monitoring this Fall 2025 sampling event as requested in the *Remedial Selection Report* (Foth, 2025) and approved by the IDNR in their letter dated January 6, 2026 (IDNR, 2026). Therefore, beginning in Spring 2026, MW-39A, MW-43A, and MW-44A will only be analyzed for the constituent the wells are delineating: cobalt.

7.2.5 Background Monitoring Locations

Semiannual background monitoring for the Appendix I list and Appendix II constituents detected in the downgradient monitoring wells was conducted at MW-1 and MW-37A in October 2025, and will be conducted again in Spring 2026.

7.3 Deep Groundwater Monitoring Locations

A summary of the Fall 2025 statistical results for the deep groundwater system is presented in Table 17.

Table 17
Summary of the Fall 2025 Evaluation – Deep Groundwater

Monitoring Location	Monitoring Program	Current Schedule [1,2] (Oct. 2025)	Current SSIs	Corrective Action Constituents [2]		Retesting Parameter [3]	Monitoring Program Changes
				Current SSLs	Achieved Compliance with GWPS		
Downgradient Monitoring Locations							
MW-11	Assessment	Dry					
MW-22	Detection	Dry					
MW-35	Corrective Action	Appendix II	Barium; Nickel	Cobalt			
Background Monitoring Locations							
MW-18	Background	Appendix I					
MW-19R	Background	Appendix II					

[1] MW-11 and MW-22 were dry or had insufficient volume for sample collection; therefore, MW-11 and MW-22 were not included in this Fall 2025 statistical evaluation. Appendix II locations were sampled for the Appendix I and detected Appendix II constituents in Oct. 2025.

[2] In Oct. 2025, groundwater monitoring locations sampled were also analyzed for the geochemical parameters as outlined in the *2024 ACM Report* (AECOM, 2025). As indicated in the *Remedial Selection Report* (Foth, 2025), biennial monitoring of geochemical parameters will be conducted at the corrective action, delineation, and background monitoring locations. The IDNR approved the *Remedial Selection Report* (Foth, 2025) in their letter dated Jan. 6, 2026 (IDNR, 2026). The next biennial geochemical monitoring event will occur in Fall 2027.

[3] Analyte/well pairs with SSLs over the GWPS identified during previous statistical evaluations and have not achieved compliance with the GWPS for 3 consecutive years in accordance with 567 IAC 113.10(9)e(2).

[4] Retest samples will be collected prior to the next semiannual sampling event and will be utilized to determine if any monitoring program changes will be initiated

7.3.1 Detection Monitoring Locations

Detection monitoring well MW-22 was not sampled in October 2025 as described in Table 17.

Semiannual detection monitoring for the Appendix I constituents will be conducted at MW-22 in Spring 2026 as long as there is sufficient volume for sample collection.

7.3.2 Assessment Monitoring

Assessment monitoring well MW-11 was not sampled in October 2025 as described in Table 17.

Semiannual detection monitoring for the Appendix I and detected II constituents will be conducted at MW-11 in Spring 2026 as long as there is sufficient volume for sample collection. In accordance with Permit Special Provision X.4.b, resampling for the full Appendix II list at MW-11 will be conducted every five years. The Appendix II resampling event schedule will be provided in Table 2 of the 2025 AWQR.

7.3.3 Corrective Action Monitoring

In October 2025, semiannual corrective action monitoring for Appendix I and detected Appendix II constituents was conducted at MW-35.

The SSIs identified for the assessment constituents in MW-35 are summarized in Table 17. No SSLs were identified for the assessment constituents in MW-35.

A confidence interval in corrective action mode was utilized to evaluate the deep groundwater corrective action constituent listed in Table 4. As shown in Table 18, an SSL over the GWPS remained for cobalt in MW-35.

Semiannual corrective action monitoring for the Appendix I and detected Appendix II constituents will be conducted at MW-35 in Spring 2026. In accordance with Permit Special Provision X.4.b, resampling for the full Appendix II list at the corrective action monitoring wells will be conducted every five years. The Appendix II resampling event schedule will be provided in Table 2 of the 2025 AWQR.

7.3.4 Background Monitoring

Semiannual background monitoring for the Appendix I and Appendix II constituents detected in the downgradient monitoring wells was conducted at MW-18 and MW-19R in October 2025, and will be conducted again in Spring 2026.

Attachment 1

Detailed Discussion of Statistical Methods

Foth

Memorandum

Statistical Methodology

1. Comparison to Background

For determining which parameters will need a formal statistical treatment, the Unified Guidance (USEPA, 2009) suggests splitting monitoring parameters into three distinct groups: a) reliable indicators selected for formal testing; b) other analytes which are monitored for general groundwater quality information but not statistically tested; and c) those meeting the "never-detected" criteria. Only those parameters with some historically detected presence in background need to be included in the first group and treated with a formal statistical test. Any parameter that has never been detected in background is eligible for the third group of "never-detected" constituents. Constituents with detections below the reporting limit (J-flagged data) will be considered "never-detected." As a means of evaluating the third group, the Unified Guidance suggests the Double Quantification Rule (DQR). The DQR is stated in the Unified Guidance as:

"A confirmed exceedance is registered if any well-constituent pair in the '100% non-detect' group exhibits quantified measurements [i.e., at or above the reporting limit (RL)] in two consecutive sample and resample events."

The Unified Guidance also recommends establishing background sample sizes as large as feasible. The guidance recognizes that small sample sizes in background can be "particularly" troublesome, especially in controlling statistical test false positive and negative rates. With parametric tests (such as parametric prediction limits), the false positive rate may be controlled, but at the expense of statistical power. With non-parametric tests (such as non-parametric prediction limits or the "quasi-statistical" DQR), the false positive rate may be unacceptably high. The Unified Guidance suggests that generally at least 8 to 10 separate background measurements be available, recognizing that statistical power continues to increase with larger sample sizes.

The statistical analysis methods utilized for comparison to background were the DQR and "1-of-2" intrawell and interwell prediction limits as recommended in the Unified Guidance (USEPA, 2009).

Background Data Set

Surface Water
The interwell surface water background data set comprises the upgradient surface-water monitoring point SW-1, from October/November 2014, when low-flow sampling began, through the most recent monitoring result with the adjustment addressed in Section 3.2 and 3.3.

Shallow Groundwater
The interwell shallow background data set comprises MW-1 and MW-37A from October/November 2014, when low-flow sampling began, through the most recent monitoring results with the adjustments addressed in Sections 3.2 and 3.3.

Deep Groundwater

The interwell deep background data set comprises MW-18 and MW-19R from October/November 2014, when low-flow sampling began, through the most recent monitoring results with the adjustments addressed in Section 3.2 and 3.3.

Double Quantification Rule

The DQR will be used to evaluate SSIs over background for the Appendix I and II constituents that were not detected above the reporting limit in the background data sets. An SSI will be indicated for any well-constituent pair with quantified measurements at or above the reporting limit noted for two consecutive sample and resample events. If applicable, the resample will be collected prior to next semiannual sampling event.

Interwell Prediction Limits

Interwell prediction limits will be used to statistically evaluate SSIs over background for the Appendix I and II constituents which have been detected above the reporting limit in the background data set. A "1-of-2" retesting plan will be utilized on individual sample results. The 1-of-2 retesting plan as defined in the Unified Guidance concludes that an SSI has occurred when two out of two sample results exceed the prediction limit, while no SSI is concluded if 1-of-2 are below the limit. If applicable, the resample will be collected prior to next semiannual sampling event. The prediction limit for each constituent will be recalculated semiannually.

For interwell constituents with less than or equal to 50% detects in the background data set, a non-parametric prediction limit will be utilized. The non-parametric prediction limit will be taken as the maximum order statistic (maximum value) of the background data.

For interwell constituents with greater than 50% detects in the background data set, normality assumptions will be verified using the Shapiro-Wilk normality test. If the background data is not normally distributed, a non-parametric prediction limit will be utilized (as described in the paragraph above). If the background data is normally distributed or can be fit to a normal distribution utilizing a normalizing transformation, then a normal-based parametric prediction limit will be applied.

When considering a lognormal prediction limit, a comparison will be made to the maximum order statistic for the background data set. Lognormal prediction limits can be sensitive to smaller departures from lognormality. That is, if data are not truly lognormal, but also not rejected as lognormal, the prediction limit may be inflated because of the transformation. In choosing a lognormal limit, in addition to the percent detections and lognormal goodness of fit criteria, an additional convention will be applied. If the lognormal limit exceeds the level of twice the maximum background concentration, it is assumed that the lognormal model does not adequately fit the background distribution and a non-parametric prediction limit will be selected.

For interwell constituents with 50% to 85% detects in the background data set, Kaplan-Meier estimation will be applied to manage statistical bias introduced by non-detects. For interwell constituents with over 85% detects in the background data set, half the reporting limit will be used for non-detect data. These estimation methods follow Unified Guidance recommendations and are given in detail in Unified Guidance Chapter 15 (USEPA, 2009).

The parametric prediction limit will be calculated as:

$$PL = \bar{x} + k \cdot s$$

where $\bar{x}$ is the sample mean of the October/November 2014 through current event background data, *s* is the sample standard deviation, and *k* is the multiplier obtained from the Unified Guidance Table 19-1 (USEPA, 2009) for 1-of-2 interwell prediction limits on observations. In determining *k*, the number of constituents of concern (COCs) for formal statistical evaluation along with the number of downgradient wells need to be identified. Per the basic subdivision discussion presented in Section 19.2.1 of the Unified Guidance, along with the discussion regarding the use of the appendix tables for parametric retesting plans given on pages 19-13 through 19-15 of the Unified Guidance (USEPA, 2009), the *k*-multiplier is chosen based on the number of constituents, wells, and evaluations performed annually. When an exact well and COC configuration is not given in the appendix tables, the *k*-multiplier is linearly interpolated as described on page 19-14 of the Unified Guidance (USEPA, 2009).

Sanitas® v10.1. software (Sanitas Technologies) will be used to check distributional assumptions, perform Kaplan-Meier in the case of 50% to 85% detects in the background data set, and calculate the *k*-multipliers and subsequent prediction limits.

Intrawell Prediction Limits

Intrawell prediction limits are calculated in a similar manner to that described above for the interwell case. A main difference between the two methods is the intrawell limit is calculated from a collection of background measurements within the compliance well. A minimum of eight compliance well background samples will be used when calculating the limit.

A second difference is for the parametric prediction limit, in which the *k*-multiplier is modified from the interwell case, as given in Appendix D Tables 19-10 through 19-18 of the Unified Guidance (USEPA, 2009).

Updating intrawell background is performed periodically. The Unified Guidance (Section 5.3.2) recommends that 4 to 8 new compliance observations be collected prior to updating the background data set. The guidance also states that "a potential update is predicated on there being no statistically significant increase [SSI] recorded for that well constituent, including since the last update." A two-sample t-test or Wilcoxon rank-sum test between existing intrawell background data and the potential set of newer background data is performed, and a non-significant result (α = 0.05) implies that the newer compliance data can be re-classified as background measurements.

For Wilcoxon rank-sum tests, non-detect results cannot be ranked with certainty and the problem is compounded with multiple PQLs and/or J-flagged values (USEPA, 2009). In comparisons where a substantial fraction of non-detect and/or J-flagged measurements or changing PQLs occur, professional judgment will be utilized for evaluating significant differences between the existing intrawell background data and the potential newer set of background data. Consideration will be given to whether significant differences are due to artificial variation introduced by censored data.

2. Comparison to Groundwater Protection Standard – Assessment Monitoring

According to 567 IAC 113.10(6)f and g, under the assessment monitoring program Appendix II results which have been determined to be statistically above background are also statistically compared to the GWPS. If "Appendix II constituents are detected at statistically significant levels above the GWPS" a notice is placed in the operating record and characterization is begun.

Under 567 IAC 113.10(6)h, the GWPS is the maximum contaminant level (MCL) promulgated under Section 1412 of the Safe Drinking Water Act in 40 Code of Federal Regulations (CFR) Part 141. If no MCL exists, or if background concentrations are higher than the MCL, the GWPS is defined as background. Also, per 567 IAC 113.10(6)i, an alternative GWPS may be established by the department for constituents for which there is no MCL such as the "health-based concentrations that comply with the statewide standards for groundwater established pursuant to 567 IAC Chapter 137."

When the GWPS is background concentrations, the statistical methods discussed in the above "1. Comparison to Background" are used. When the GWPS is the MCL or an alternative health-based concentration, per the Unified Guidance (USEPA, 2009), "confidence intervals are the recommended general statistical strategy in compliance/assessment or corrective action monitoring." In the case of normally distributed data, a normal-based parametric confidence interval is used. If the data are not normally distributed a non-parametric confidence interval on the median is used. A lower 99% confidence limit falling above the GWPS implies that concentrations are detected at statistically significant levels above the GWPS with an α-level of 0.01, which is the minimum RCRA regulatory limit from §264.97(i)(2) for an individual test false positive error rate.

The Unified Guidance recognizes that statistical power is also of prime concern to USEPA and that there "should be a high probability that the statistical test will positively identify concentrations that have exceeded a fixed regulatory standard." In compliance/assessment monitoring, instead of pre-specifying the false positive rate prior to computing confidence interval limits, the Unified Guidance suggests the desired level of power (1-β) should be set as an initial target.

For compliance/assessment monitoring purposes, the Unified Guidance (Chapter 22) suggests evaluating increases in the true concentration mean of 1.5 and 2.0 times a fixed standard. (This is similar in concept to the critical power targets in detection monitoring, i.e., 55-60% power at 3σ above background and 80-85% power at 4σ over background). As a general guide, the Unified Guidance suggests there should be at least 70-80% statistical power for detecting increases of 2 times a fixed standard. Specifically, the Unified Guidance recommends there be 50% power of detecting increases in the true concentration mean of 1.5 times a fixed standard (risk ratio of 1.5) and 80% power of detecting increases in the true concentration mean of 2.0 times a fixed standard (risk ratio of 2.0).

To meet these levels of statistical power, α is chosen based on either Unified Guidance Equation 22.1:

$$1 - \beta = G_{T,n-1}\left(t_{1-\alpha,n-1}\middle|\Delta - \sqrt{n}(R-1)\right);$$

where R is the desired risk ratio, $t_{(1-\alpha,n-1)}$ is the (1−α) Student's t-quantile with (n−1) degrees of freedom and G represents the cumulative non-central t-distribution with (n−1) degrees of freedom and noncentrality parameter Δ;

or Unified Guidance Equation 22.2:

$$\alpha \sim 1 - F_{T,n-1}\left(\frac{(R-1)\sqrt{n}}{R \cdot \widehat{CV}} - t_{1-\beta,n-1}\right);$$

where R is the desired risk ratio, n is the sample size, CV is the estimated sample coefficient of variation, $t_{(1-\beta,n-1)}$ is the (1−β) Student's t-quantile with (n−1) degrees of freedom, and F is the cumulative (central) Student's t-distribution function.

The first equation (Unified Guidance Equation 22.1) assumes a coefficient of variation (CV) =1. This version is used if only poorer estimates of the true CV are available. In practice, a convention has been adopted with the statistical updates to utilize Unified Guidance Equation 22.2 in all cases where a parametric confidence interval is calculated and use Unified Guidance Equation 22.1 when non-parametric confidence intervals are calculated. Since a non-parametric confidence interval is based on the median, it is not as sensitive to departures from normality, and the assumption of a CV=1 in Unified Guidance Equation 22.1 should provide a conservative estimate.

Since 0.01 is the minimum RCRA regulatory limit for α, it is never set lower than this. Conversely, the Unified Guidance recognizes the "difficulty of simultaneously attaining the recommended level of power while controlling the false positive rate, especially for small sample sizes and highly variable data." The Unified Guidance suggests a maximum false positive rate of α=0.2 is a reasonable upper bound.

Finally, like the need for defining a SWFPR under detection monitoring, the Unified Guidance (Chapter 7) recognizes there may be concern about the "use of relatively high individual test-wise false positive rates (α) in order to meet a pre-specified power, especially when considering the cumulative false positive error rate across multiple wells and/or constituents." However, "the Unified Guidance considers computation of cumulative SWFPRs in compliance/ assessment testing to be problematic, and reliance on individual test false positive rates preferable." Notwithstanding, if several confidence limit calculations are compared to the GWPS with high α-levels, caution should be taken in the interpretation.

For calculation of confidence intervals, Sanitas® v10.1 software is again used to check distributional assumptions, perform Kaplan-Meier estimation in the case of 50% to 85% detects, and calculate either parametric or nonparametric confidence limits.

3. Comparison to Groundwater Protection Standard – Corrective Action Monitoring

As stated above, if "Appendix II constituents are detected at statistically significant levels above the GWPS" a notice is placed in the operating record and characterization is begun. Owners or operators are required to initiate an assessment of corrective measures, select a remedy, and implement a remedy in accordance with 567 IAC 113.10(7), (8), and (9). For remedy completion in accordance with 567 IAC 113.10(9)e(2), compliance with the GWPS is considered achieved by demonstrating that concentrations of Appendix II constituents have not exceeded the GWPS

for a period of three consecutive years or an alternate length of time established by the Department.

Individual analyte/well pairs may return to assessment constituents (at the corrective action monitoring location) once compliance with the GWPS has been achieved for a period of 3 years. Note that monitoring wells will not move out of the corrective action monitoring program until all Appendix II constituents have achieved compliance with the GWPS for a period of three consecutive years.

Confidence Intervals in Corrective Action Mode

In the case of the GWPS being a fixed standard as either the 40 CFR Part 141 Safe Drinking Water Act MCL or the 567 IAC Chapter 137 Statewide Standard for a Protected Groundwater Source, "confidence intervals are the recommended general statistical strategy in compliance/assessment or corrective action monitoring" (USEPA, 2009). However, a primary difference between confidence intervals as used under assessment monitoring and confidence intervals used under corrective action is reversal of the null hypothesis. As detailed in Section 7.2 of the Unified Guidance (USEPA, 2009), the hypothesis testing structure under assessment monitoring is to presume compliance point concentrations do not to exceed the fixed standard unless sampling data indicates otherwise. As a formal statistical hypothesis, this is written as:

$$H_0: \Theta \leq G \quad \text{vs.} \quad H_A: \Theta > G$$

In corrective action mode, the hypothesis is reversed. Namely, compliance point concentrations are presumed to exceed the fixed standard and evidence must be presented to demonstrate regulatory compliance. In the case of corrective action, the statistical hypothesis is written as:

$$H_0: \Theta > G \quad \text{vs.} \quad H_A: \Theta \leq G$$

For testing under assessment monitoring, a lower confidence limit (LCL) is compared to the compliance standard *G*. If the LCL is larger than the standard *G*, it is concluded that the compliance standard has been violated.

However, under corrective action monitoring, the upper confidence limit (UCL) is compared to the compliance standard G. In this case, the UCL should lie below the standard to accept the alternative hypothesis that concentration levels are in compliance.

The UCL α-level under corrective action monitoring is set so that a high degree of confidence is achieved in declaring successful remediation. Per the Unified Guidance (Section 7.4.2) "USEPA's overriding concern in corrective action is that remediation efforts are not declared successful without sufficient statistical proof." The Unified Guidance "recommends the use of a reasonably low, fixed test-wide false positive rate (e.g., α = 0.05 or 0.10)." In this case, α = 0.10 corresponds to a 90% UCL.

GWPS as Background

Pursuant to 567 IAC 113.10(6)h, when background concentrations of an analyte exceed the applicable MCL or 567 IAC Statewide Standard for a Protected Groundwater Source, the GWPS is the background concentration. In this case, the GWPS is not a fixed standard but based on a distribution of background sample results.

Section 7.5 of the Unified Guidance (USEPA, 2009) details statistical hypothesis testing under corrective action when the GWPS is background. The Unified Guidance offers two alternative statistical approaches to hypothesis testing in this case. These alternatives are as follows:

A. The first represents a *two-sample* test of two distinct populations, namely the compliance well to background populations. Similar to the statistical tests used under detection and assessment monitoring, with this alternative under corrective action, the Unified Guidance states that "one highly recommended statistical test approach is a prediction limit." The Unified Guidance also states, "whatever the critical value for a selected background test, it becomes the GWPS under compliance/assessment or corrective action monitoring." Further, "the only allowable hypothesis test structure for the two-sample approach follows that of detection and compliance monitoring. Once exceeded and in corrective action, a return to compliance is through evidence that future samples lie below the GWPS using the same hypothesis structure." Therefore, with this approach in corrective action, prediction limits are calculated similarly as in assessment monitoring. Compliance well concentrations below a prediction limit indicate a return to concentrations below the background GWPS.

B. The second involves computation of a fixed statistic from the background data as the GWPS. The Unified Guidance recommendation in this case is to define a fixed GWPS based on a background upper tolerance limit with 95% confidence and 95% coverage. This is designed to be a "reasonable maximum on the likely range of background concentrations." This upper tolerance limit based on background data is then used as a fixed standard in statistical comparisons with 90% or 95% UCLs from compliance wells as discussed previously. Also, with the UCL method, the null hypothesis is reversed from that of assessment monitoring, assuming contamination is above the GWPS. A UCL falling below the background GWPS offers evidence of a return to concentrations below the GWPS. The Unified Guidance refers to this approach as a *single-sample* testing method, since the compliance well population is tested against a defined fixed standard.

The Unified Guidance discusses tradeoffs between the two approaches and does not necessarily prescribe either approach over the other. The Unified Guidance suggests that both approaches may be used, where "the background GWPS would be a range based on the two testing methods rather than a single value."

Normality

For calculation of confidence intervals, Sanitas® v10.1 software is again used to check distributional assumptions, perform Kaplan-Meier estimation in the case of 50% to 85% detects, and calculate either parametric or nonparametric confidence limits. "Corrective Action Mode" is selected for this analysis.

Non-Corrective Action Constituents

As recommended in the Unified Guidance (USEPA, 2009), confidence intervals in corrective action mode will be utilized to evaluate only constituents and monitoring locations with previously identified SSLs over the GWPS. Other compliance constituents (i.e., those without SSLs over the GWPS during prior statistical evaluations) will continue to be evaluated using the "1. Comparison to Background" and "2. Comparison to Groundwater Protection Standard – Assessment Monitoring" methods described above.

Note: The Unified Guidance (USEPA, 2009) states: "it should be recognized that once corrective action or remediation activities are initiated, there will be a considerable time during which the GWPS may still be exceeded. As provided in the RCRA regulations, it is at the conclusion of remediation activities that formal corrective action monitoring evaluation is appropriate. However, in the intervening period of remedial activity, well constituents can still be monitored, and the relative efficacy of remediation measures tracked. The same corrective action hypothesis can be assumed for the targeted constituents; techniques such as trend testing may be appropriate interim applications." Given the statement above and the intentions of 567 IAC 113.10(6)g, as soon as an SSL is identified for an assessment monitoring constituent/location, then the next statistical evaluation will utilize corrective action monitoring (confidence intervals in corrective action mode).

Data Concentration Shifts During Corrective Action

Confidence intervals assume that the population is stable over time. As a result, confidence intervals may not accurately represent the current well concentrations if increasing or decreasing trends are observed (i.e., during a release or under active remediation). Per the Unified Guidance (USEPA, 2009), lower or upper confidence limits constructed on accumulated data may be overly wide (due to high sample variability caused by combining pre- and post-shift data) and may not be reflective of more recent upward/downward shifts in the contaminant distribution.

Alternative procedures may be applied to data sets with shifting distributions. For example, where trends tests are significant, pre-shift data may be removed from the well/parameter data set for the purposes of constructing the confidence interval. "The reduction in sample size will often be more than offset by the gain in statistical power. More recent measurements may exhibit less variation around the shifted mean value, resulting in a shorter confidence interval" (USEPA, 2009).

Another alternative is to construct confidence bands around the trend line to track progress towards exceeding or meeting a fixed standard. As suggested in the Unified Guidance (Chapter 22), if a trend is present, a 90% confidence band (upper 95% confidence limit) is placed on the linear trend line. If the upper 95% confidence limit on the trend line falls below the GWPS, the well is found to have reduced to levels statistically below the GWPS.

As the discussed in the Unified Guidance, "inferences concerning a linear regression are generally appropriate when two conditions hold: 1) the residuals from the regression are approximately normal or at least reasonably symmetric in distribution; and 2) a plot of residuals versus concentrations indicates a scatter cloud of essentially uniform vertical thickness or width." These conditions are assessed through normal probability plots of the regression residuals and plots of residuals against the predicted concentrations.

Data Adjustments Due to Exiting Corrective Action

When analyte/well pairs exit corrective action and return to assessment constituents, the hypothesis testing structure is reversed again. In corrective action mode, compliance point concentrations were presumed to exceed the GWPS, and evidence must be presented to demonstrated regulatory compliance (i.e., UCLs below the GWPS for three consecutive years). With the return to assessment constituents, analyte/well pairs have demonstrated regulatory compliance. The hypothesis testing structure reverts to the assessment monitoring structure where compliance point concentrations are presumed to not exceed the GWPS unless sampling

data indicates otherwise (i.e., LCL is above the GWPS). With this reversion in hypothesis, the focus shifts to evaluating concentration changes in the analyte/well pair that would indicate an increase over the GWPS and re-trigger corrective action. For constituents with historical SSLs, earlier concentrations that had previously triggered corrective action are no longer providing useful information regarding the current assessment monitoring hypothesis. Retaining the historical data during the timeframe in which the GWPS was exceeded will result in the regression or confidence interval methods being slower to respond to new increases. As a result, the historical data prior to when statistical compliance with the GWPS was first achieved will be removed when analyte/well pairs exit corrective action and return to assessment constituents.

Attachment 2

Sanitas Report Output for Prediction Limit Calculations

Surface Water

Interwell Prediction Limit [1]

Constituent	Well	Upper Limit	Date	Observation	Exceed	Background N	Background Mean	Standard Deviation	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Downstream Monitoring Locations													
Arsenic (mg/L)	SW-2	0.00254	10/22/2025	0.000693J	No	20	n/a	n/a	80	n/a	n/a	0.003316	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	SW-5	0.00254	10/22/2025	0.00086J	No	20	n/a	n/a	80	n/a	n/a	0.003316	NP Inter (NDs) 1 of 2
Barium (mg/L)	SW-2	0.201	10/22/2025	0.0917	No	20	n/a	n/a	0	n/a	n/a	0.003316	NP Inter (normality) 1 of 2
Barium (mg/L)	SW-5	0.201	10/22/2025	0.103	No	20	n/a	n/a	0	n/a	n/a	0.003316	NP Inter (normality) 1 of 2
Cadmium (mg/L)	SW-2	0.000228	10/22/2025	0.0001ND	No	12	n/a	n/a	75	n/a	n/a	0.006734	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	SW-5	0.000228	10/22/2025	0.0001ND	No	12	n/a	n/a	75	n/a	n/a	0.006734	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	SW-2	0.00436	10/22/2025	0.00025ND	No	20	n/a	n/a	25	n/a	n/a	0.003316	NP Inter (normality) 1 of 2
Cobalt (mg/L)	SW-5	0.00436	10/22/2025	0.000663	No	20	n/a	n/a	25	n/a	n/a	0.003316	NP Inter (normality) 1 of 2
Copper (mg/L)	SW-2	0.0115	10/22/2025	0.0025ND	No	20	n/a	n/a	70	n/a	n/a	0.003316	NP Inter (NDs) 1 of 2
Copper (mg/L)	SW-5	0.0115	10/22/2025	0.0025ND	No	20	n/a	n/a	70	n/a	n/a	0.003316	NP Inter (NDs) 1 of 2
Lead (mg/L)	SW-2	0.00708	10/22/2025	0.00025ND	No	20	n/a	n/a	60	n/a	n/a	0.003316	NP Inter (NDs) 1 of 2
Lead (mg/L)	SW-5	0.00708	10/22/2025	0.000594	No	20	n/a	n/a	60	n/a	n/a	0.003316	NP Inter (NDs) 1 of 2
Nickel (mg/L)	SW-2	0.00785	10/22/2025	0.0025ND	No	20	n/a	n/a	85	n/a	n/a	0.003316	NP Inter (NDs) 1 of 2
Nickel (mg/L)	SW-5	0.00785	10/22/2025	0.00343J	No	20	n/a	n/a	85	n/a	n/a	0.003316	NP Inter (NDs) 1 of 2
Silver (mg/L)	SW-2	0.00136	10/22/2025	0.0005ND	No	21	n/a	n/a	90	n/a	n/a	0.003118	NP Inter (NDs) 1 of 2
Silver (mg/L)	SW-5	0.00136	10/22/2025	0.0005ND	No	21	n/a	n/a	90	n/a	n/a	0.003118	NP Inter (NDs) 1 of 2
Thallium (mg/L)	SW-2	0.00467	10/22/2025	0.0005ND	No	21	n/a	n/a	86	n/a	n/a	0.003118	NP Inter (NDs) 1 of 2
Thallium (mg/L)	SW-5	0.00467	10/22/2025	0.0005ND	No	21	n/a	n/a	86	n/a	n/a	0.003118	NP Inter (NDs) 1 of 2
Vanadium (mg/L)	SW-2	0.007742	10/22/2025	0.0025ND	No	20	-6.733	0.8166	40	Kaplan-Meier	ln(x)	0.0006269	Param Inter 1 of 2
Vanadium (mg/L)	SW-5	0.007742	10/22/2025	0.00178J	No	20	-6.733	0.8166	40	Kaplan-Meier	ln(x)	0.0006269	Param Inter 1 of 2
Zinc (mg/L)	SW-2	0.0207	10/22/2025	0.01ND	No	20	n/a	n/a	90	n/a	n/a	0.003316	NP Inter (NDs) 1 of 2
Zinc (mg/L)	SW-5	0.0207	10/22/2025	0.01ND	No	20	n/a	n/a	90	n/a	n/a	0.003316	NP Inter (NDs) 1 of 2

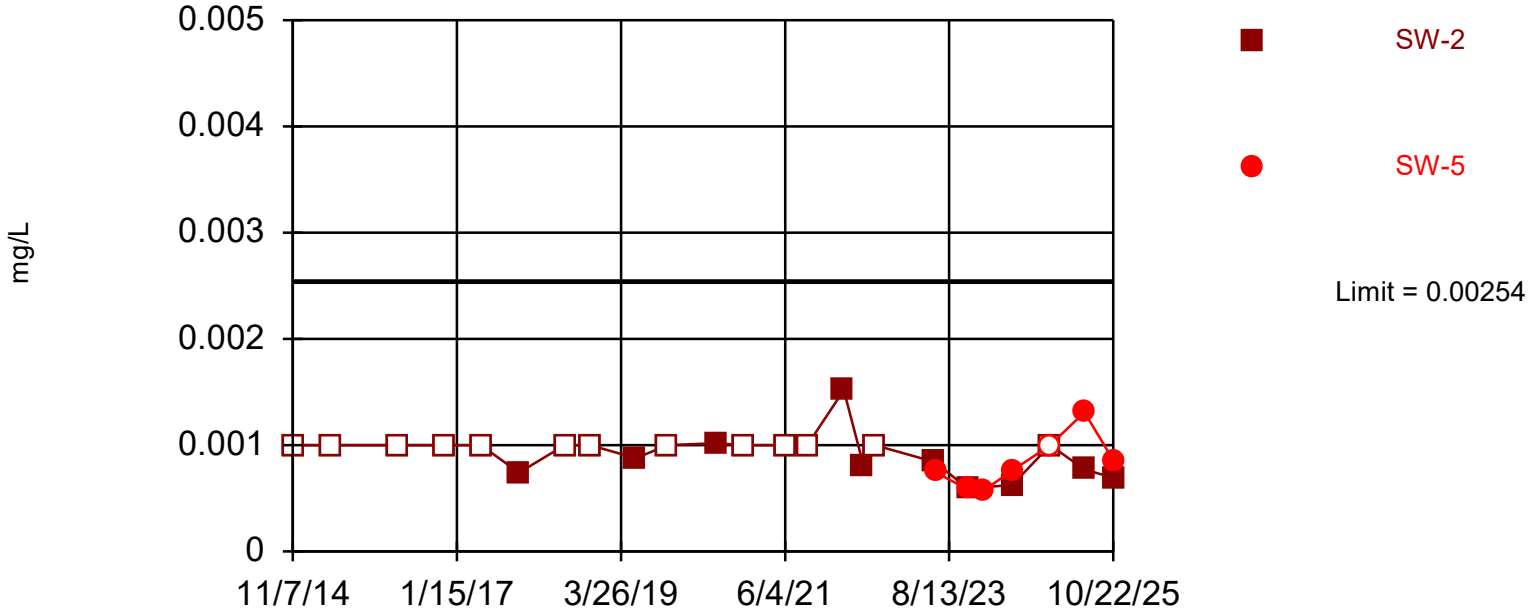
[1] Interwell prediction limit data consists of the detected Appendix I parameters in SW-1. Note that background data set adjustments were incorporated in accordance with Sections 3.2 and 3.3 of the Fall 2025 Statistical Evaluation memo.

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Annual per-constituent alpha = 0.1302. Individual comparison alpha = 0.003316 (1 of 2).

Constituent: Arsenic Analysis Run 12/19/2025 10:02 AM

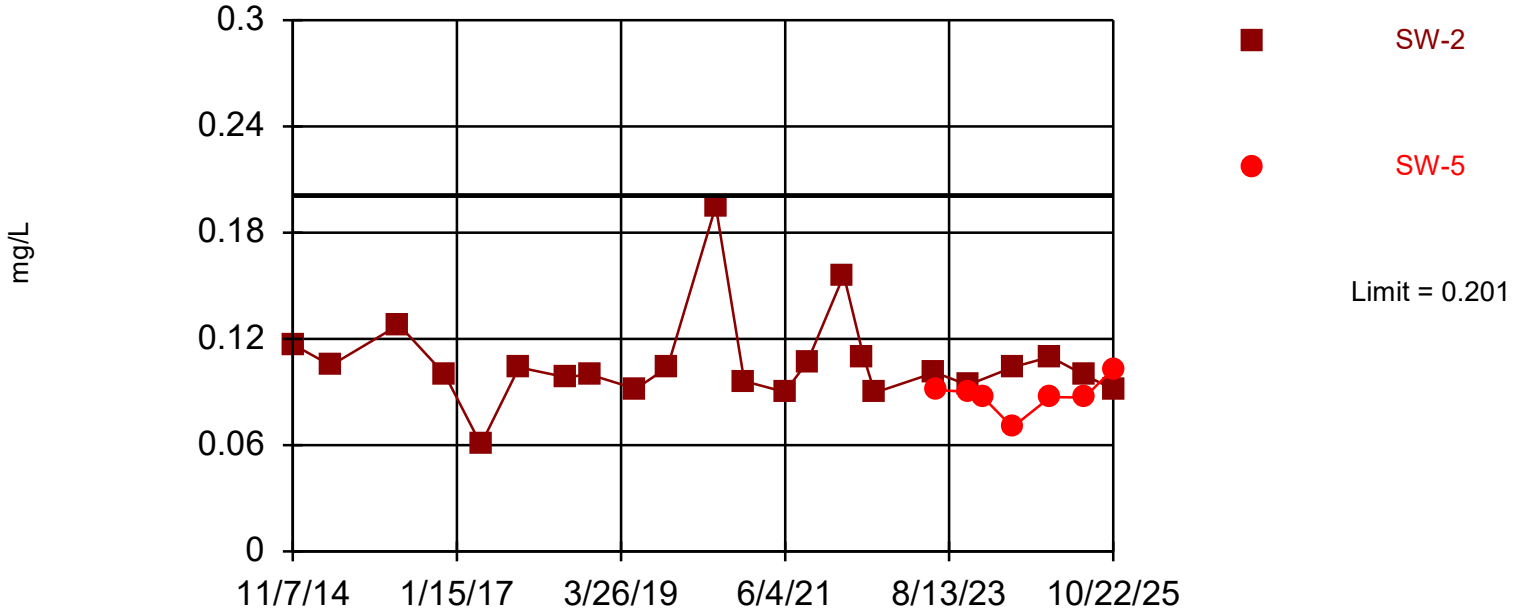
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Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. Annual per-constituent alpha = 0.1302. Individual comparison alpha = 0.003316 (1 of 2).

Constituent: Barium Analysis Run 12/19/2025 10:02 AM

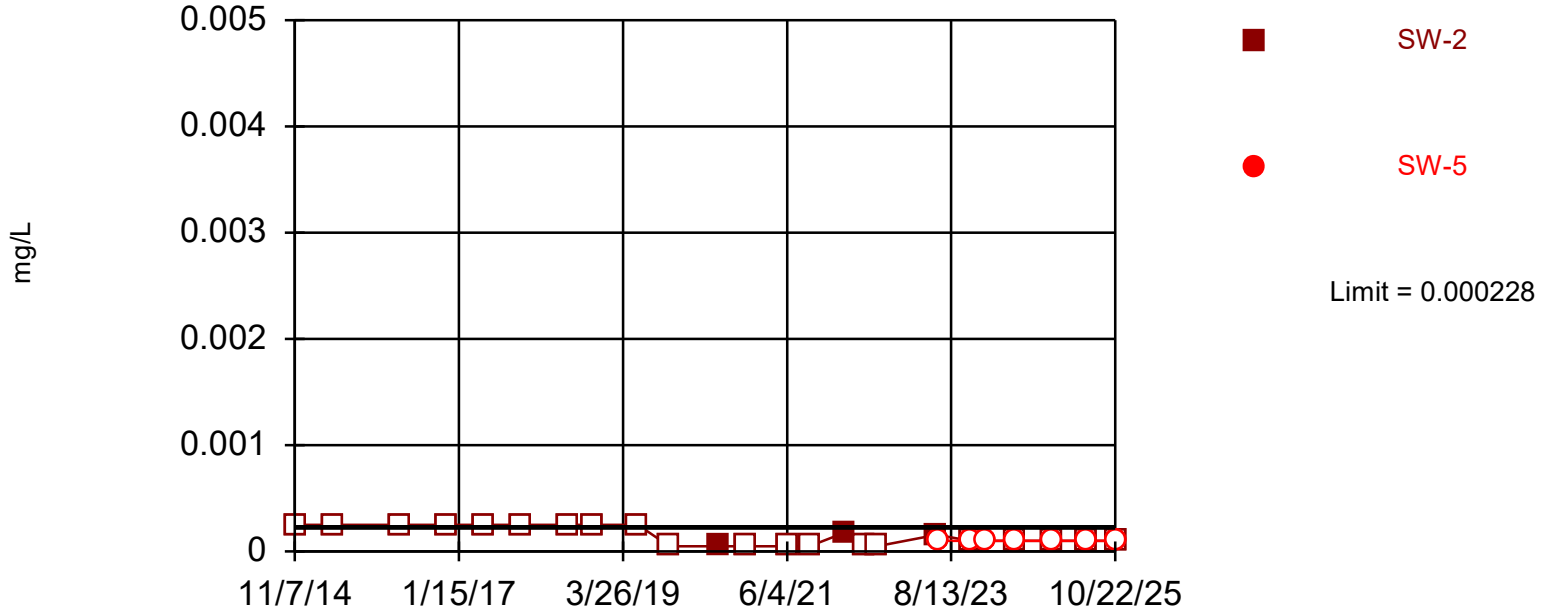
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Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 75% NDs. Annual per-constituent alpha = 0.2471. Individual comparison alpha = 0.006734 (1 of 2).

Constituent: Cadmium Analysis Run 12/19/2025 10:02 AM

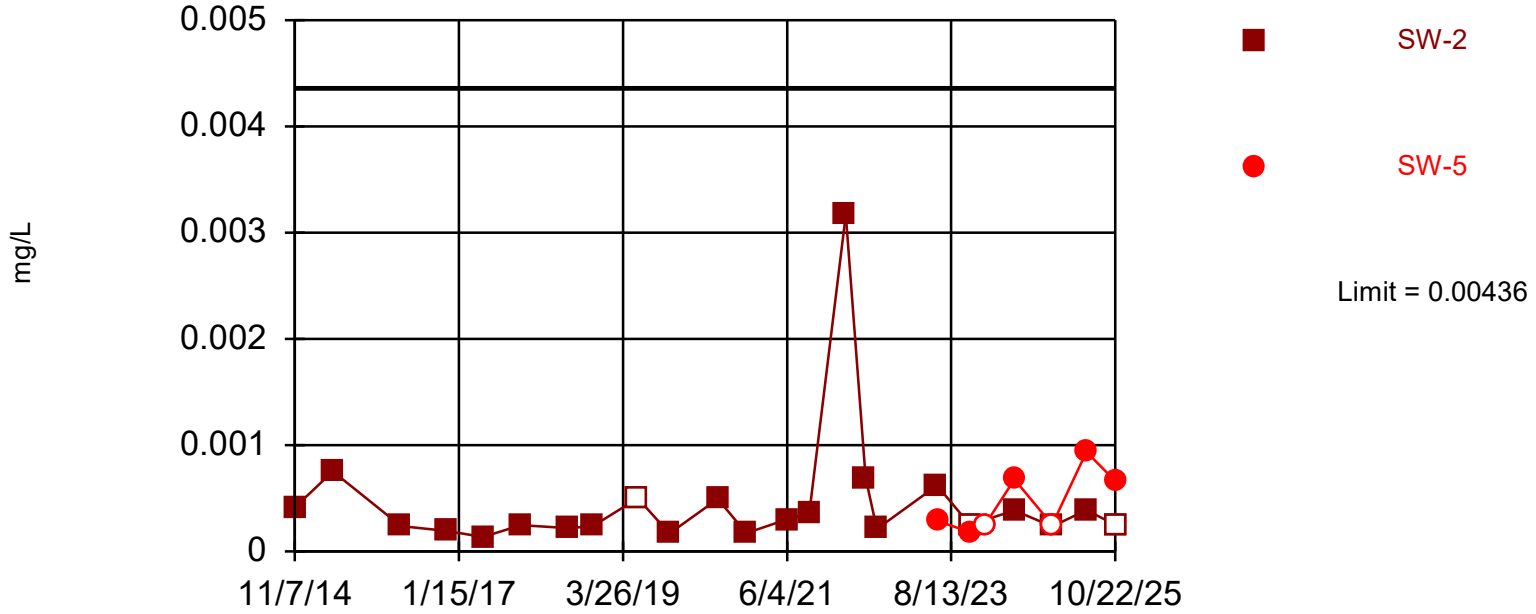
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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 25% NDs. Annual per-constituent alpha = 0.1302. Individual comparison alpha = 0.003316 (1 of 2).

Constituent: Cobalt Analysis Run 12/19/2025 10:02 AM

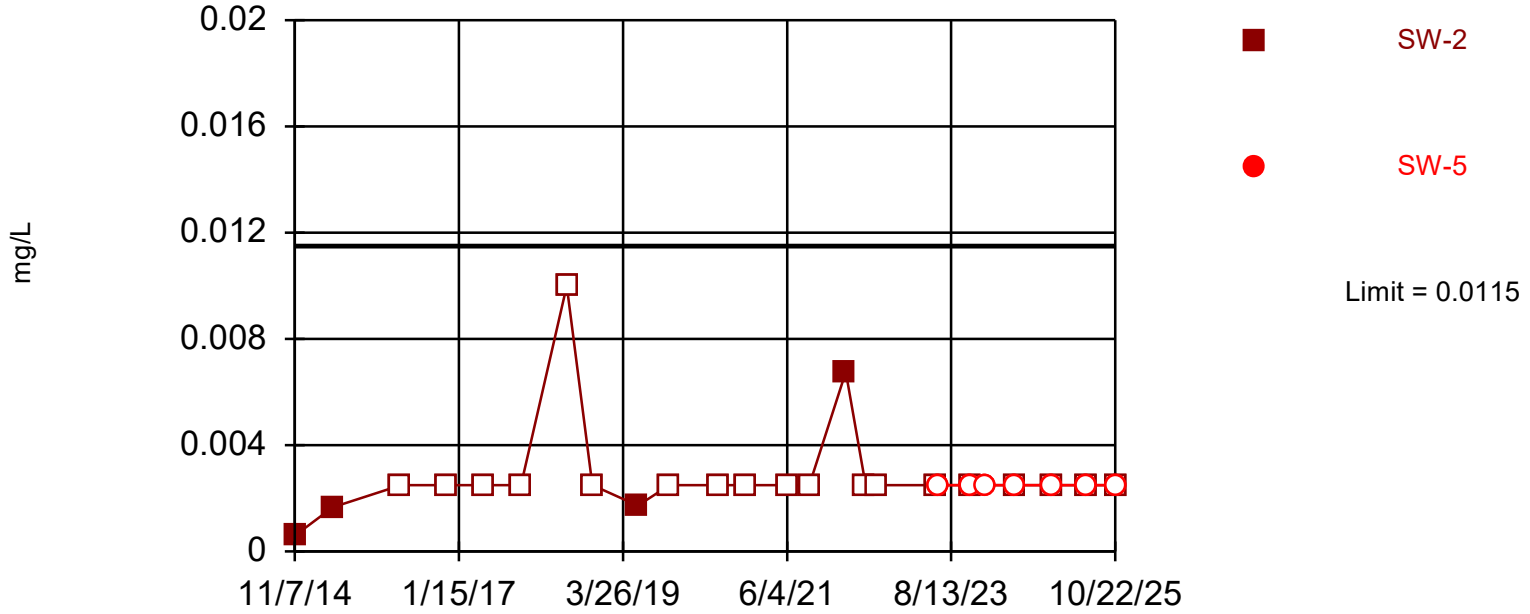
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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 70% NDs. Annual per-constituent alpha = 0.1302. Individual comparison alpha = 0.003316 (1 of 2).

Constituent: Copper Analysis Run 12/19/2025 10:02 AM

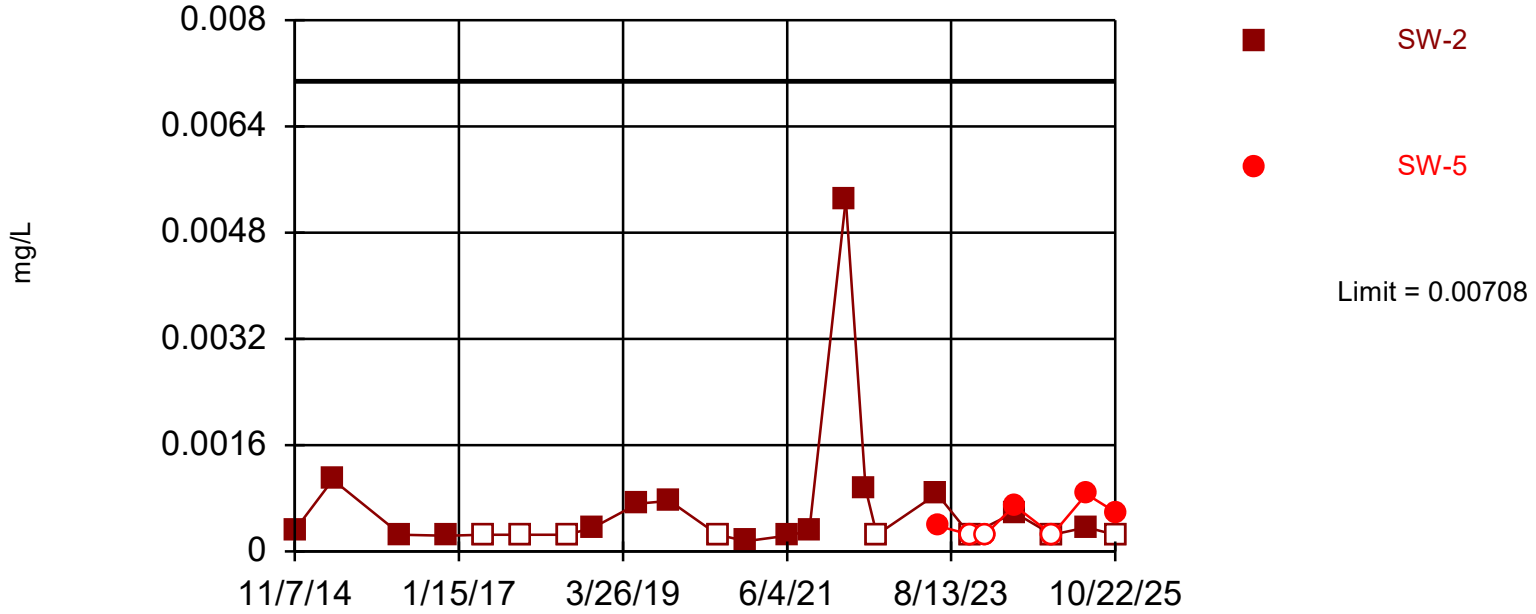
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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 60% NDs. Annual per-constituent alpha = 0.1302. Individual comparison alpha = 0.003316 (1 of 2).

Constituent: Lead Analysis Run 12/19/2025 10:02 AM

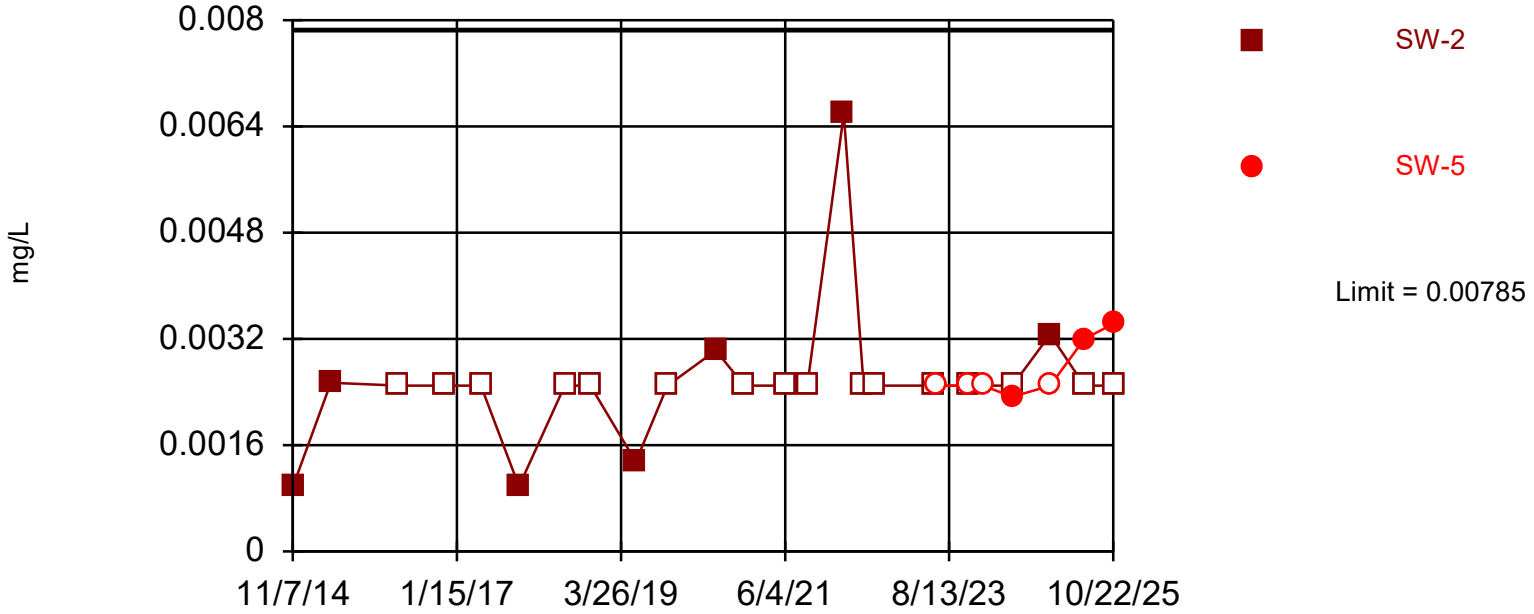
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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Annual per-constituent alpha = 0.1302. Individual comparison alpha = 0.003316 (1 of 2).

Constituent: Nickel Analysis Run 12/19/2025 10:02 AM

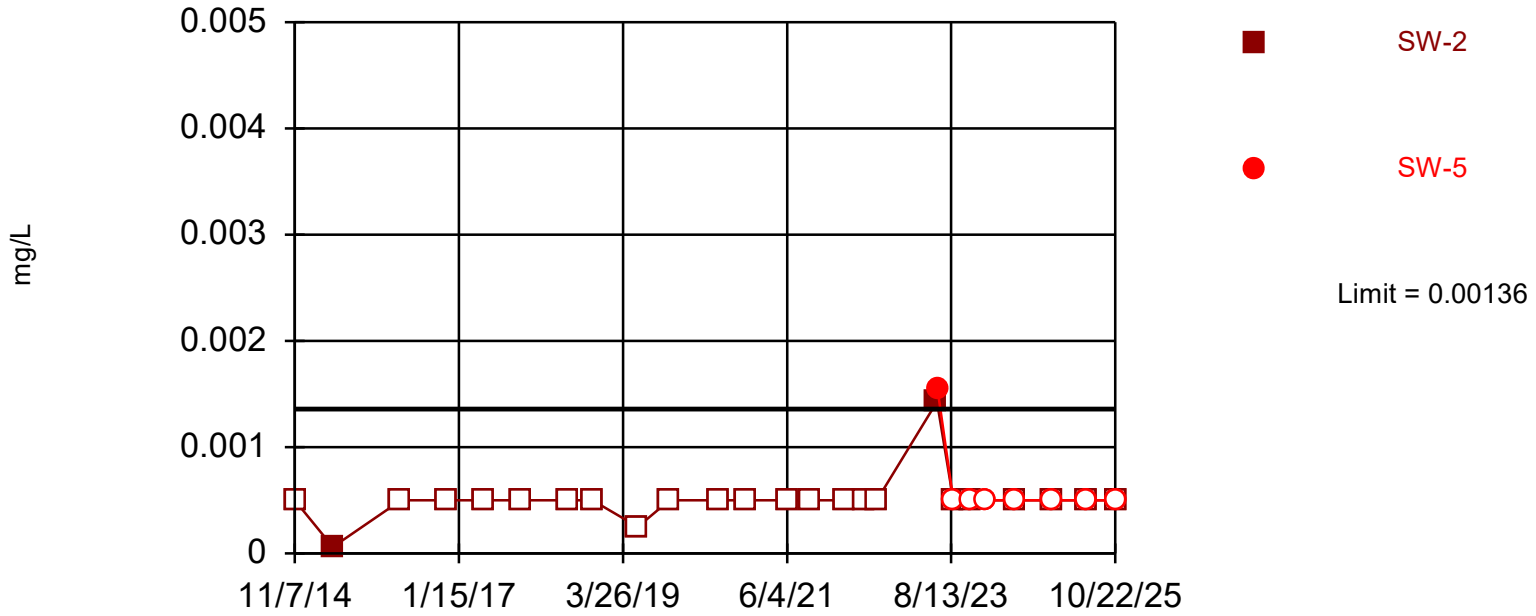
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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 90.48% NDs. Annual per-constituent alpha = 0.1229. Individual comparison alpha = 0.003118 (1 of 2).

Constituent: Silver Analysis Run 12/19/2025 10:02 AM

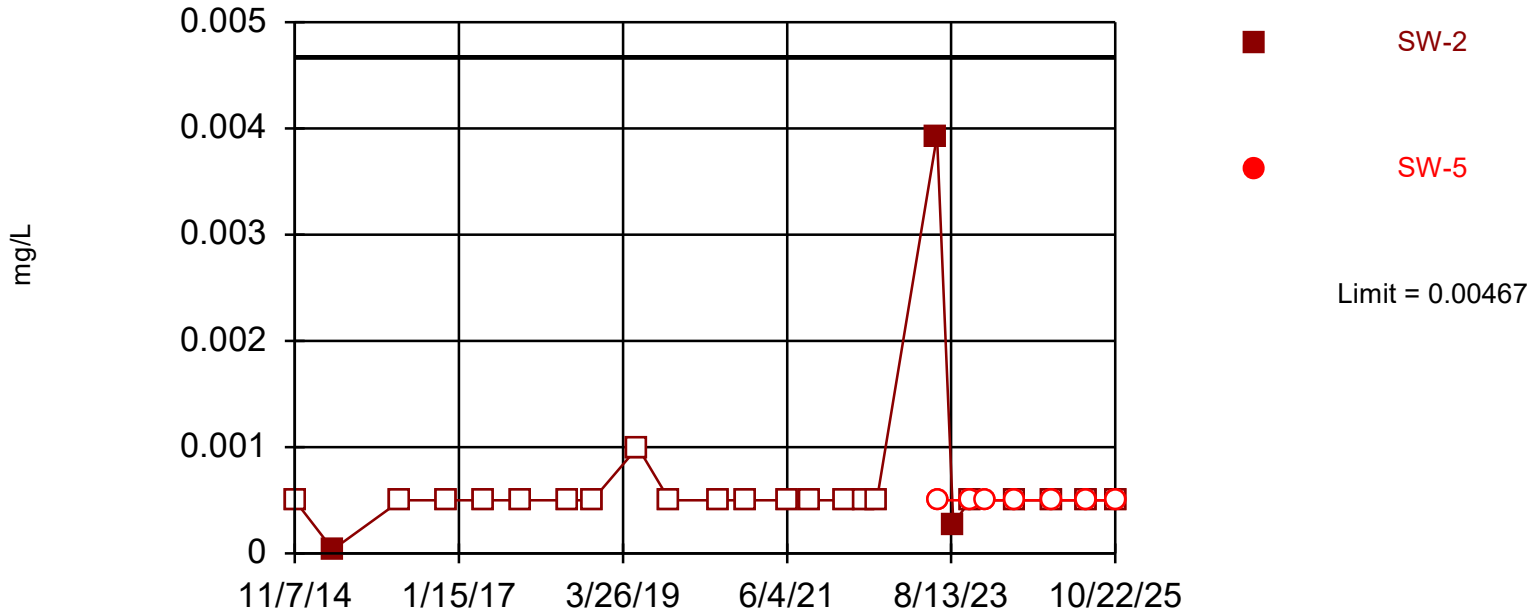
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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 85.71% NDs. Annual per-constituent alpha = 0.1229. Individual comparison alpha = 0.003118 (1 of 2).

Constituent: Thallium Analysis Run 12/19/2025 10:02 AM

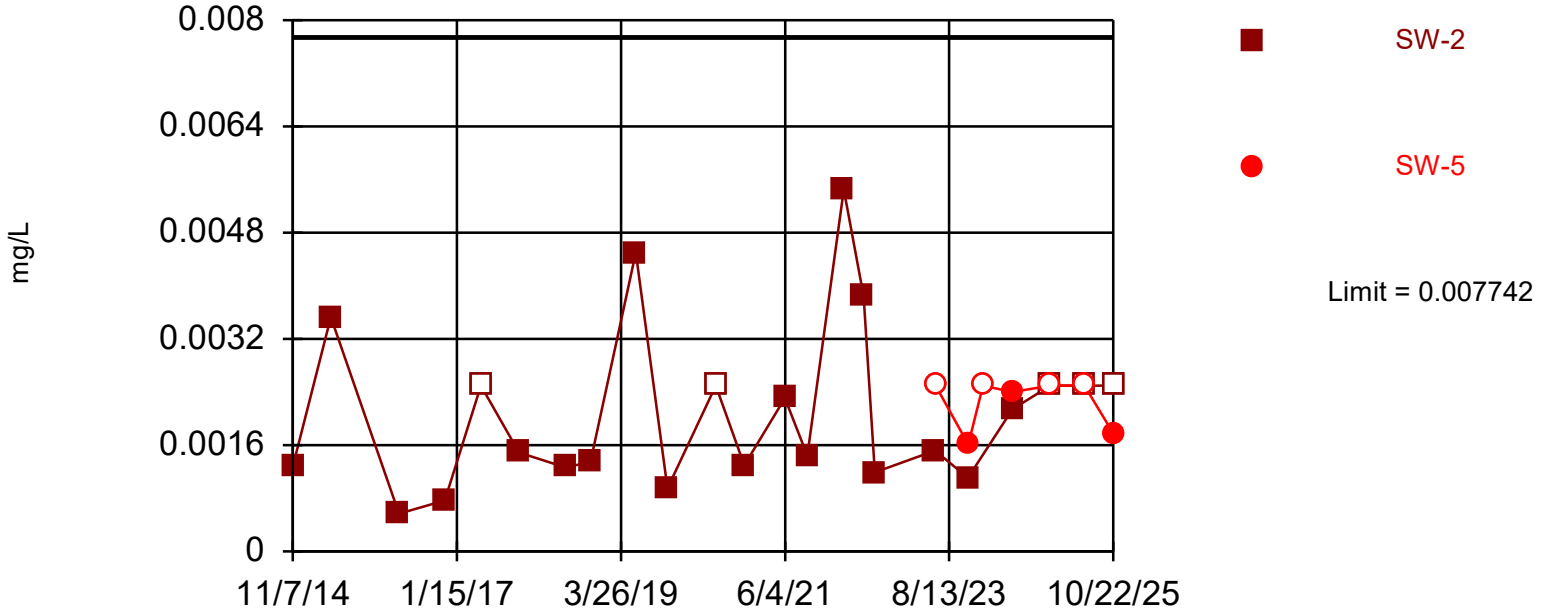
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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Parametric



Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-6.733, Std. Dev.=0.8166, n=20, 40% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9155, critical = 0.868. Kappa = 2.292 (c=4, w=21, 1 of 2, event alpha = 0.05132). Report alpha = 0.01308. Individual comparison alpha = 0.0006269.

Constituent: Vanadium Analysis Run 12/19/2025 10:02 AM

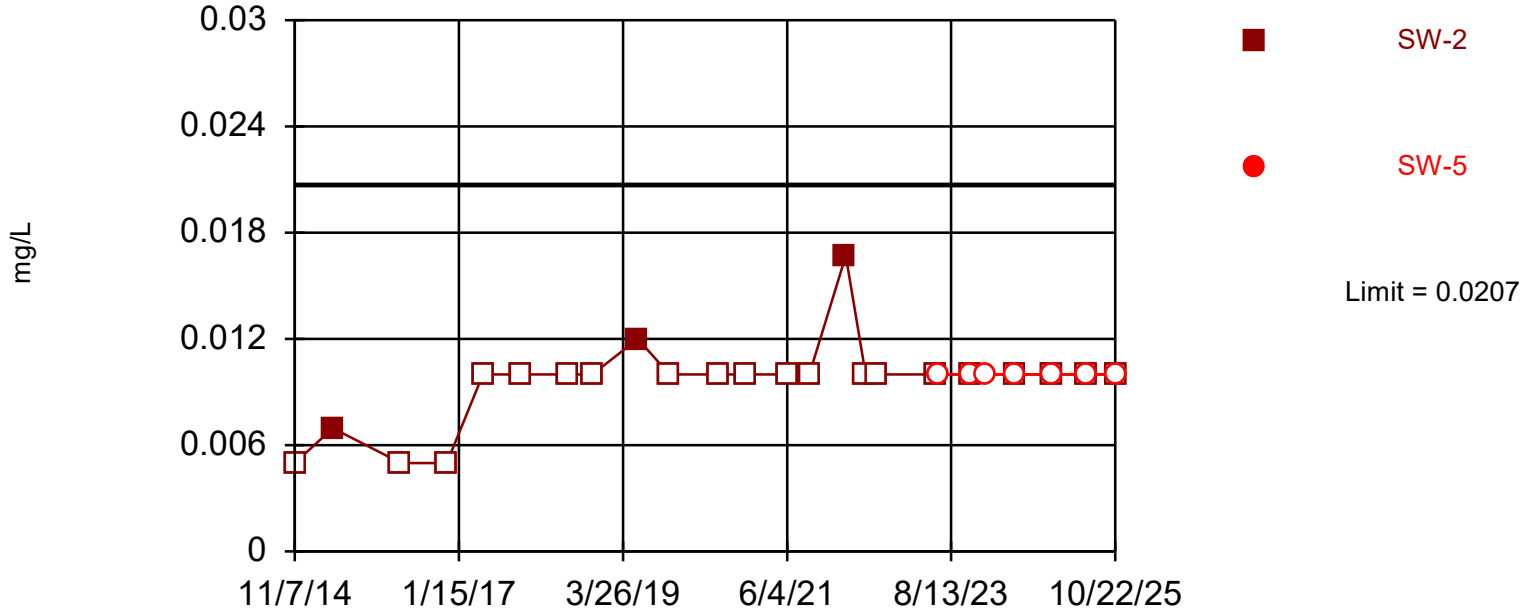
Winneshiek County SLF Client: Foth Data: Winneshiek Surface Water - Fall 2025 Evaluation

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Annual per-constituent alpha = 0.1302. Individual comparison alpha = 0.003316 (1 of 2).

Constituent: Zinc Analysis Run 12/19/2025 10:02 AM

Winneshiek County SLF Client: Foth Data: Winneshiek Surface Water - Fall 2025 Evaluation

Shallow Groundwater

Interwell Prediction Limit [1]

Constituent	Well	Upper Limit	Date	Observation	Exceed	Background N	Background Mean	Standard Deviation	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Detection Monitoring Locations													
Arsenic (mg/L)	MW-2R	0.22	10/22/2025	0.001ND	No	31	n/a	n/a	74	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-3	0.22	10/21/2025	0.00142J	No	31	n/a	n/a	74	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-4B	0.22	10/20/2025	0.001ND	No	31	n/a	n/a	74	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-25A	0.22	10/20/2025	0.001ND	No	31	n/a	n/a	74	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-34A	0.22	10/21/2025	0.001ND	No	31	n/a	n/a	74	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-38A	0.22	10/21/2025	0.001ND	No	31	n/a	n/a	74	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-41A	0.22	10/21/2025	0.000665J	No	31	n/a	n/a	74	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-45A	0.22	10/22/2025	0.001ND	No	31	n/a	n/a	74	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2
Barium (mg/L)	MW-2R	0.63	10/22/2025	0.13	No	30	n/a	n/a	0	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-3	0.63	10/21/2025	0.178	No	30	n/a	n/a	0	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-4B	0.63	10/20/2025	0.189	No	30	n/a	n/a	0	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-25A	0.63	10/20/2025	0.203	No	30	n/a	n/a	0	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-34A	0.63	10/21/2025	0.0667	No	30	n/a	n/a	0	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-38A	0.63	10/21/2025	0.142	No	30	n/a	n/a	0	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-41A	0.63	10/21/2025	0.157	No	30	n/a	n/a	0	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-45A	0.63	10/22/2025	0.133	No	30	n/a	n/a	0	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-2R	0.00272	10/22/2025	0.00025ND	No	30	n/a	n/a	50	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-3	0.00272	10/21/2025	0.00025ND	No	30	n/a	n/a	50	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-4B	0.00272	10/20/2025	0.00025ND	No	30	n/a	n/a	50	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-25A	0.00272	10/20/2025	0.00025ND	No	30	n/a	n/a	50	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-34A	0.00272	10/21/2025	0.00025ND	No	30	n/a	n/a	50	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-38A	0.00272	10/21/2025	0.00025ND	No	30	n/a	n/a	50	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-41A	0.00272	10/21/2025	0.00025ND	No	30	n/a	n/a	50	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-45A	0.00272	10/22/2025	0.000299J	No	30	n/a	n/a	50	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Nickel (mg/L)	MW-2R	0.00927	10/22/2025	0.0025ND	No	31	n/a	n/a	65	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-3	0.00927	10/21/2025	0.0025ND	No	31	n/a	n/a	65	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-4B	0.00927	10/20/2025	0.0025ND	No	31	n/a	n/a	65	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-25A	0.00927	10/20/2025	0.00247J	No	31	n/a	n/a	65	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-34A	0.00927	10/21/2025	0.0025ND	No	31	n/a	n/a	65	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-38A	0.00927	10/21/2025	0.00299J	No	31	n/a	n/a	65	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-41A	0.00927	10/21/2025	0.0025ND	No	31	n/a	n/a	65	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-45A	0.00927	10/22/2025	0.0025ND	No	31	n/a	n/a	65	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2
Assessment Monitoring Locations													
Arsenic (mg/L)	MW-4	0.22	10/22/2025	0.00105J	No	31	n/a	n/a	74	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-7A	0.22	10/22/2025	0.001ND	No	31	n/a	n/a	74	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-40A	0.22	10/21/2025	0.00064J	No	31	n/a	n/a	74	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-46A	0.22	10/22/2025	0.000837J	No	31	n/a	n/a	74	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2
Barium (mg/L)	MW-4	0.63	10/22/2025	0.476	No	30	n/a	n/a	0	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-7A	0.63	10/22/2025	0.319	No	30	n/a	n/a	0	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-40A	0.63	10/21/2025	0.229	No	30	n/a	n/a	0	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-46A	0.63	10/22/2025	0.277	No	30	n/a	n/a	0	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-4	0.00272	10/22/2025	0.00221	No	30	n/a	n/a	50	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-7A	0.00272	10/22/2025	0.000192J	No	30	n/a	n/a	50	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-40A	0.00272	10/21/2025	0.00257	No	30	n/a	n/a	50	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-46A	0.00272	10/22/2025	0.000222J	No	30	n/a	n/a	50	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Nickel (mg/L)	MW-4	0.00927	10/22/2025	0.0101	Yes	31	n/a	n/a	65	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-7A	0.00927	10/22/2025	0.0108	Yes	31	n/a	n/a	65	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2

Shallow Groundwater

Interwell Prediction Limit [1]

Constituent	Well	Upper Limit	Date	Observation	Exceed	Background N	Background Mean	Standard Deviation	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Assessment Monitoring Locations Continued													
Nickel (mg/L)	MW-40A	0.00927	10/21/2025	0.026	Yes	31	n/a	n/a	65	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-46A	0.00927	10/22/2025	0.0322	Yes	31	n/a	n/a	65	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2
Correcitve Action Monitoring Locations - Assessment Constituents													
Arsenic (mg/L)	MW-29A	0.22	10/22/2025	0.0043	No	31	n/a	n/a	74	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-31A	0.22	10/21/2025	0.000751J	No	31	n/a	n/a	74	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2
Barium (mg/L)	MW-29A	0.63	10/22/2025	0.133	No	30	n/a	n/a	0	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-31A	0.63	10/21/2025	0.206	No	30	n/a	n/a	0	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-33A	0.63	10/20/2025	0.209	No	30	n/a	n/a	0	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-33A	0.00272	10/20/2025	0.0016	No	30	n/a	n/a	50	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Nickel (mg/L)	MW-29A	0.00927	10/22/2025	0.071	Yes	31	n/a	n/a	65	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-31A	0.00927	10/21/2025	0.0287	Yes	31	n/a	n/a	65	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-33A	0.00927	10/20/2025	0.0025ND	No	31	n/a	n/a	65	n/a	n/a	0.001655	NP Inter (NDs) 1 of 2
Delineation Monitoring Locations - Assessment Constituents													
Cobalt (mg/L)	MW-39A	0.00272	10/22/2025	0.000335J	No	30	n/a	n/a	50	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-42A	0.00272	10/21/2025	0.000991	No	30	n/a	n/a	50	n/a	n/a	0.001736	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-44A	0.00272	10/21/2025	0.000492J	No	30	n/a	n/a	50	n/a	n/a	0.001736	NP Inter (normality) 1 of 2

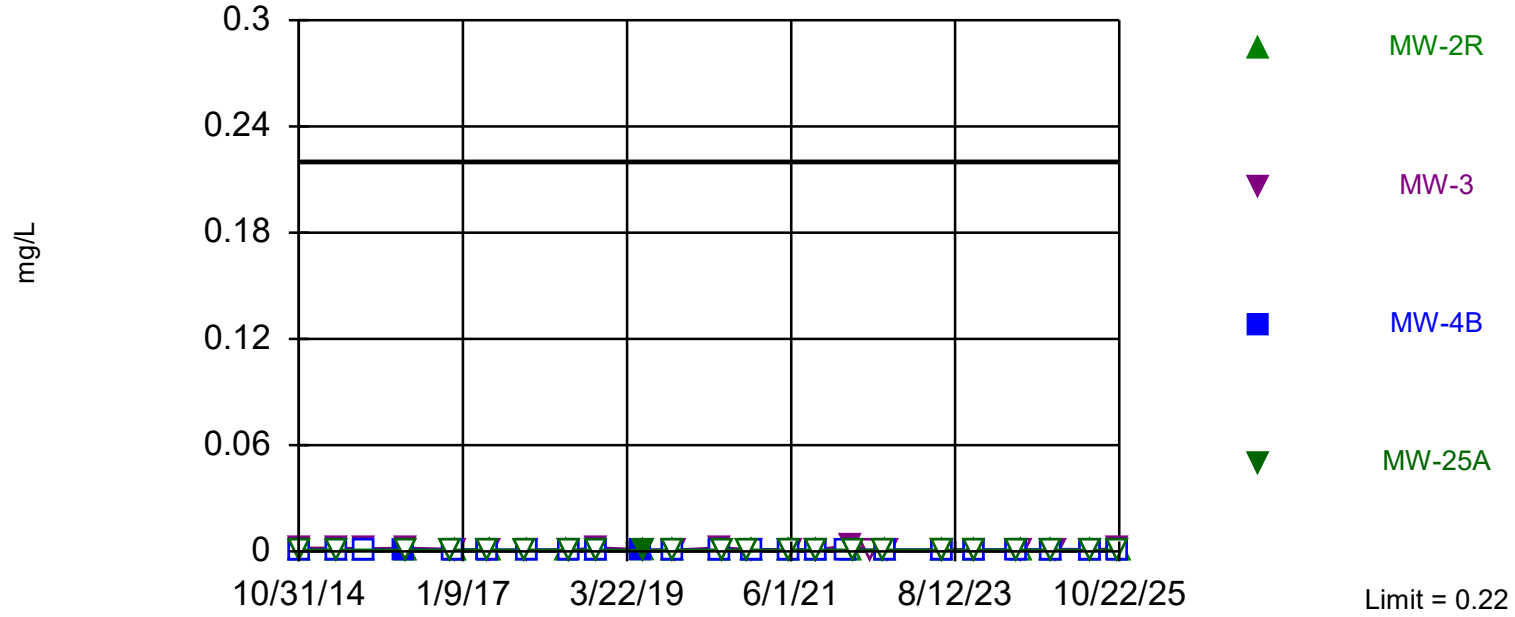
[1] Interwell prediction limit data consists of the detected Appendix I and II parameters in the combined MW-1 and MW-37A data set. Note that background data set adjustments were incorporated in accordance with Sections 3.2 and 3.3 of the Fall 2025 Statistical Evaluation memo.

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Detection Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 74.19% NDs. Annual per-constituent alpha = 0.06721. Individual comparison alpha = 0.001655 (1 of 2).

Constituent: Arsenic Analysis Run 12/19/2025 11:18 AM

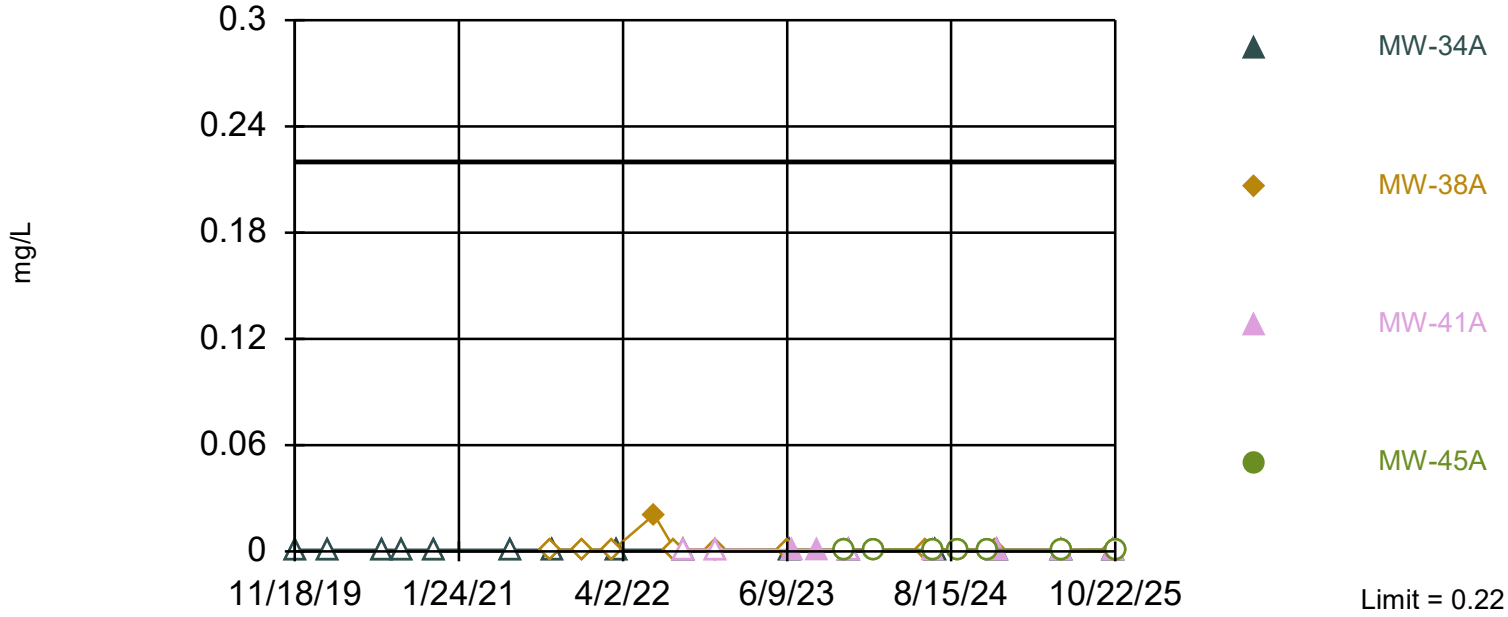
Winneshiek County SLF Client: Foth Data: Winneshiek Shallow Groundwater - Fall 2025 Evaluation

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Detection Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 74.19% NDs. Annual per-constituent alpha = 0.06721. Individual comparison alpha = 0.001655 (1 of 2).

Constituent: Arsenic Analysis Run 12/19/2025 11:19 AM

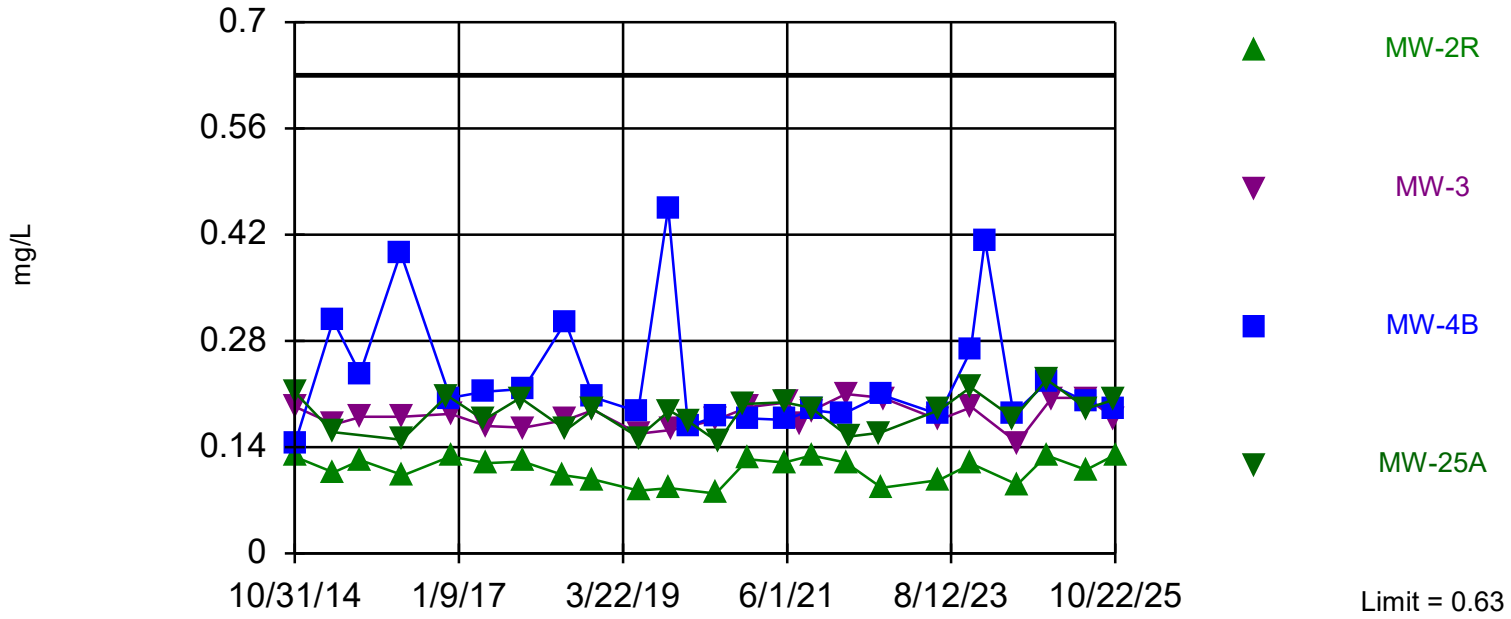
Winneshiek County SLF Client: Foth Data: Winneshiek Shallow Groundwater - Fall 2025 Evaluation

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Within Limit

Prediction Limit - Detection Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 30 background values. Annual per-constituent alpha = 0.07037. Individual comparison alpha = 0.001736 (1 of 2).

Constituent: Barium Analysis Run 12/19/2025 11:18 AM

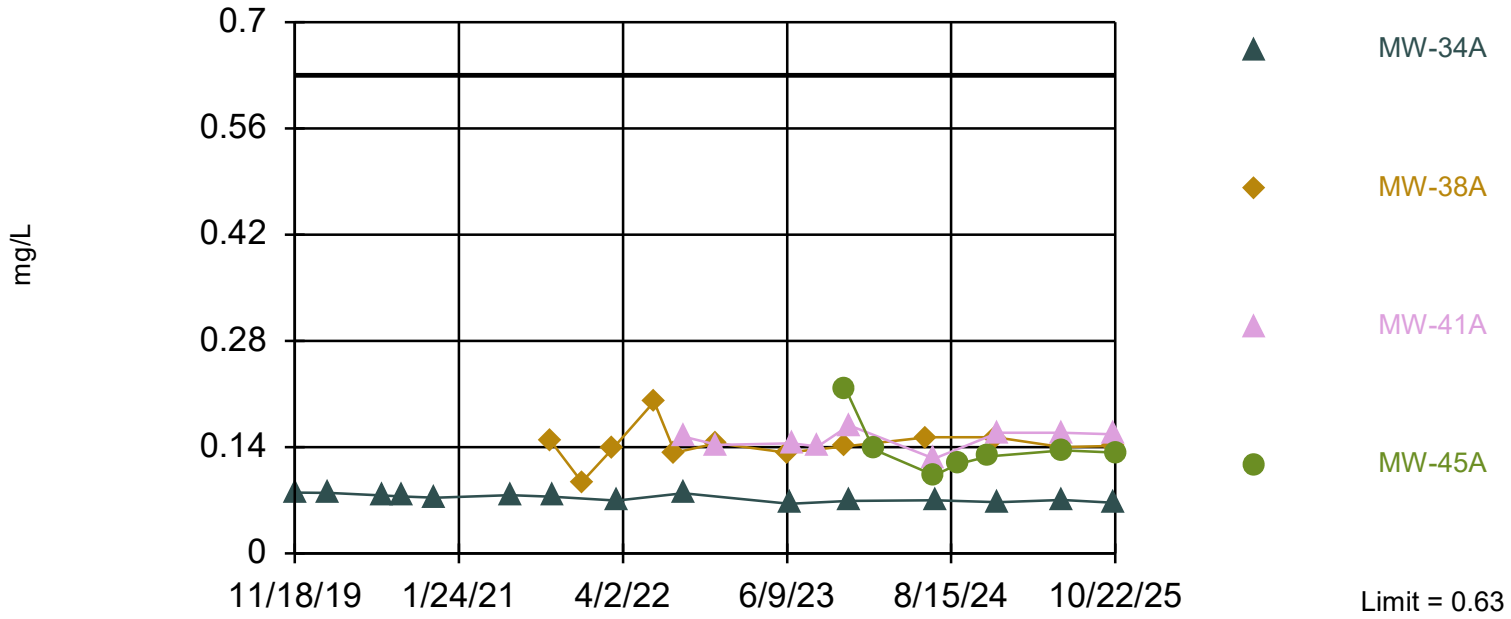
Winneshiek County SLF Client: Foth Data: Winneshiek Shallow Groundwater - Fall 2025 Evaluation

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Within Limit

Prediction Limit - Detection Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 30 background values. Annual per-constituent alpha = 0.07037. Individual comparison alpha = 0.001736 (1 of 2).

Constituent: Barium Analysis Run 12/19/2025 11:19 AM

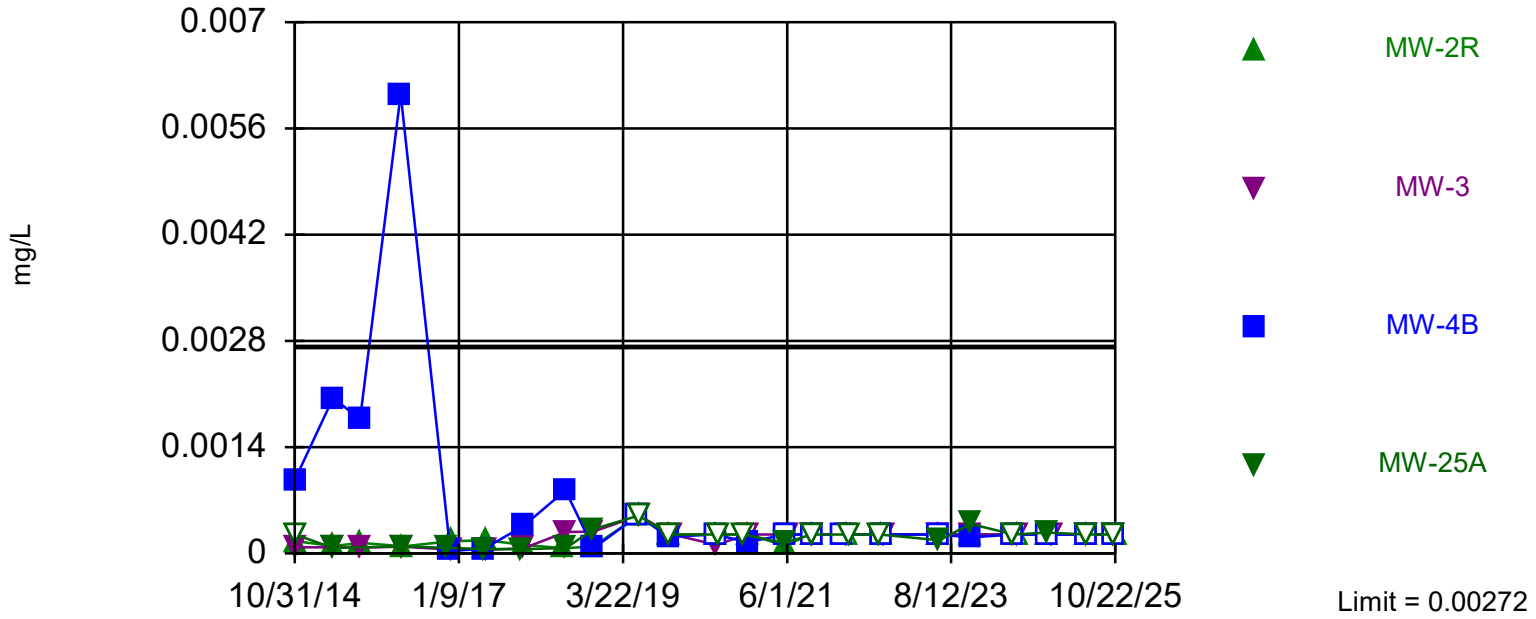
Winneshiek County SLF Client: Foth Data: Winneshiek Shallow Groundwater - Fall 2025 Evaluation

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Detection Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 30 background values. 50% NDs. Annual per-constituent alpha = 0.07037. Individual comparison alpha = 0.001736 (1 of 2).

Constituent: Cobalt Analysis Run 12/19/2025 11:18 AM

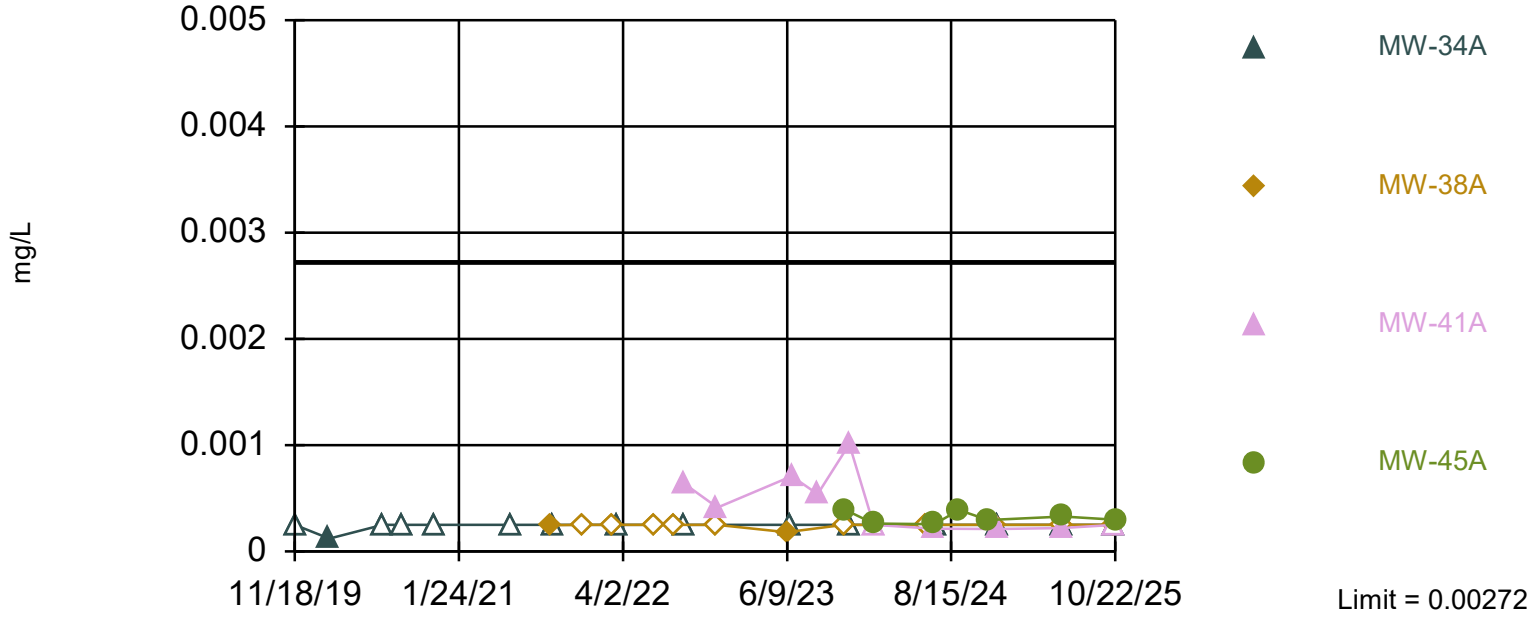
Winneshiek County SLF Client: Foth Data: Winneshiek Shallow Groundwater - Fall 2025 Evaluation

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Detection Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 30 background values. 50% NDs. Annual per-constituent alpha = 0.07037. Individual comparison alpha = 0.001736 (1 of 2).

Constituent: Cobalt Analysis Run 12/19/2025 11:19 AM

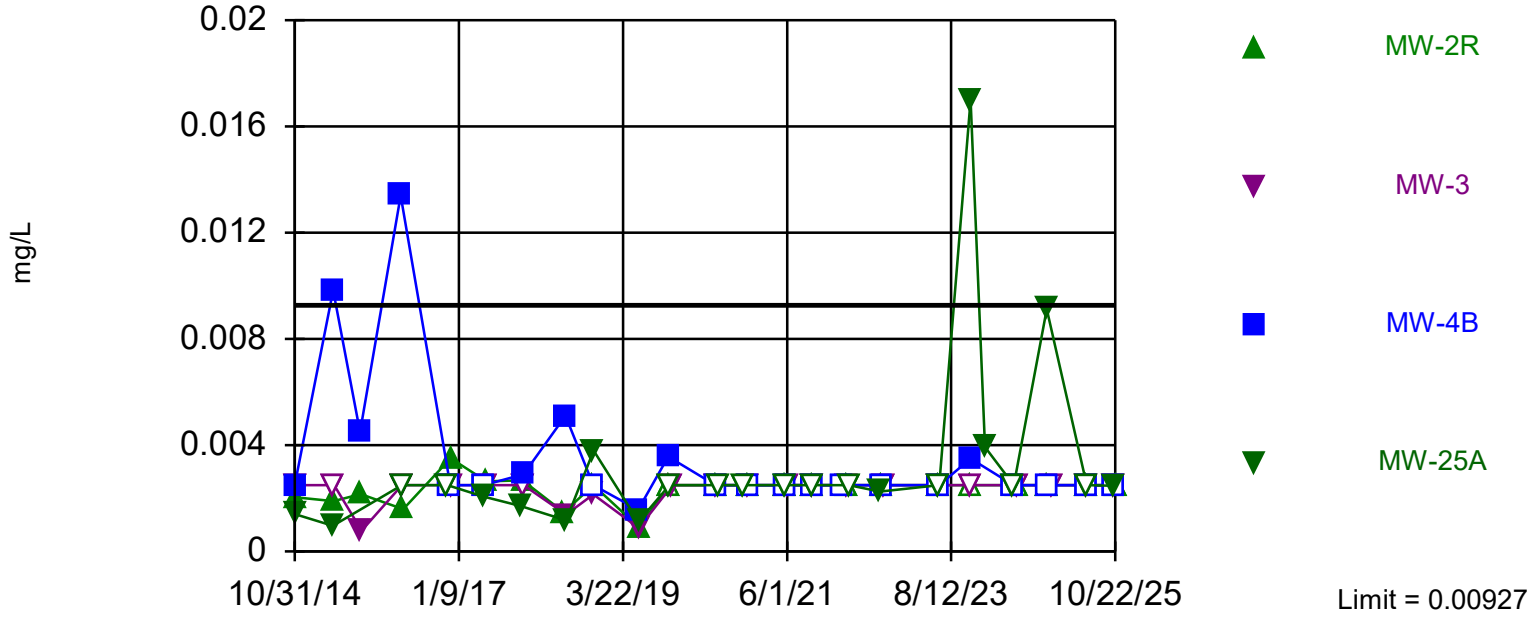
Winneshiek County SLF Client: Foth Data: Winneshiek Shallow Groundwater - Fall 2025 Evaluation

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Detection Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 64.52% NDs. Annual per-constituent alpha = 0.06721. Individual comparison alpha = 0.001655 (1 of 2).

Constituent: Nickel Analysis Run 12/19/2025 11:18 AM

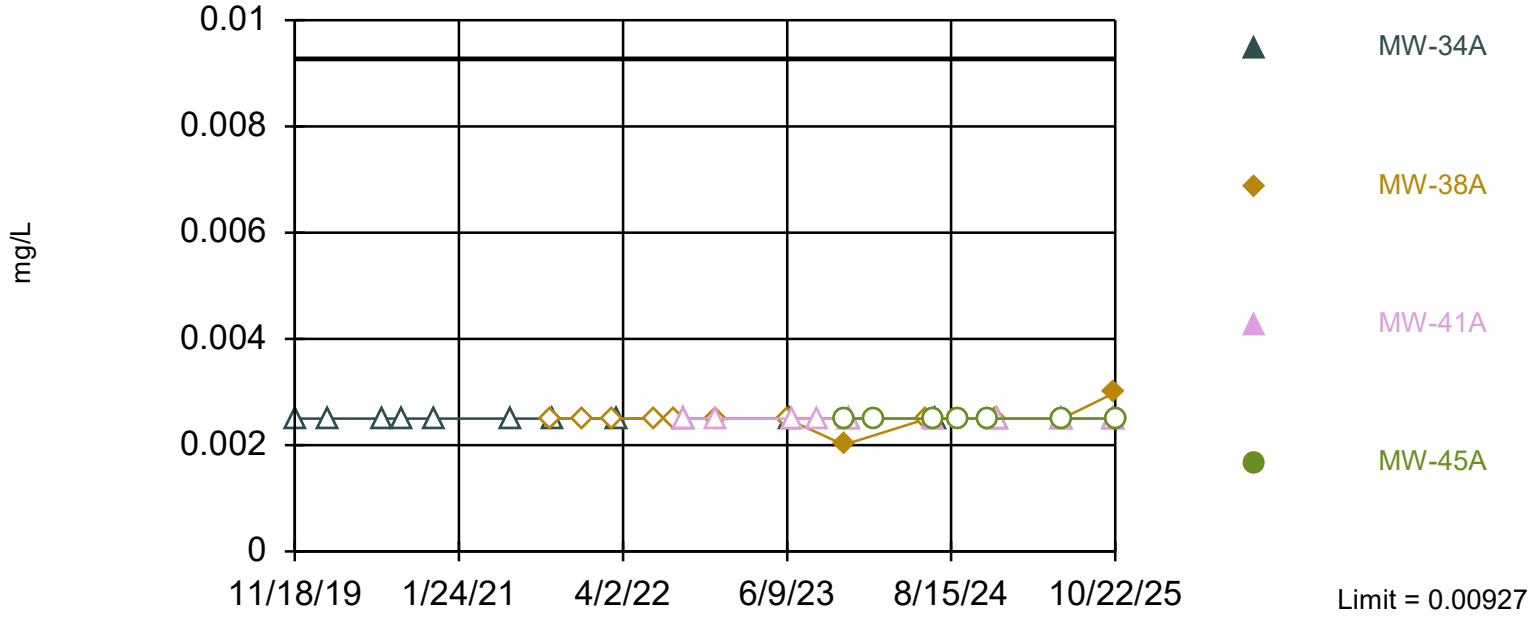
Winneshiek County SLF Client: Foth Data: Winneshiek Shallow Groundwater - Fall 2025 Evaluation

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Detection Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 64.52% NDs. Annual per-constituent alpha = 0.06721. Individual comparison alpha = 0.001655 (1 of 2).

Constituent: Nickel Analysis Run 12/19/2025 11:19 AM

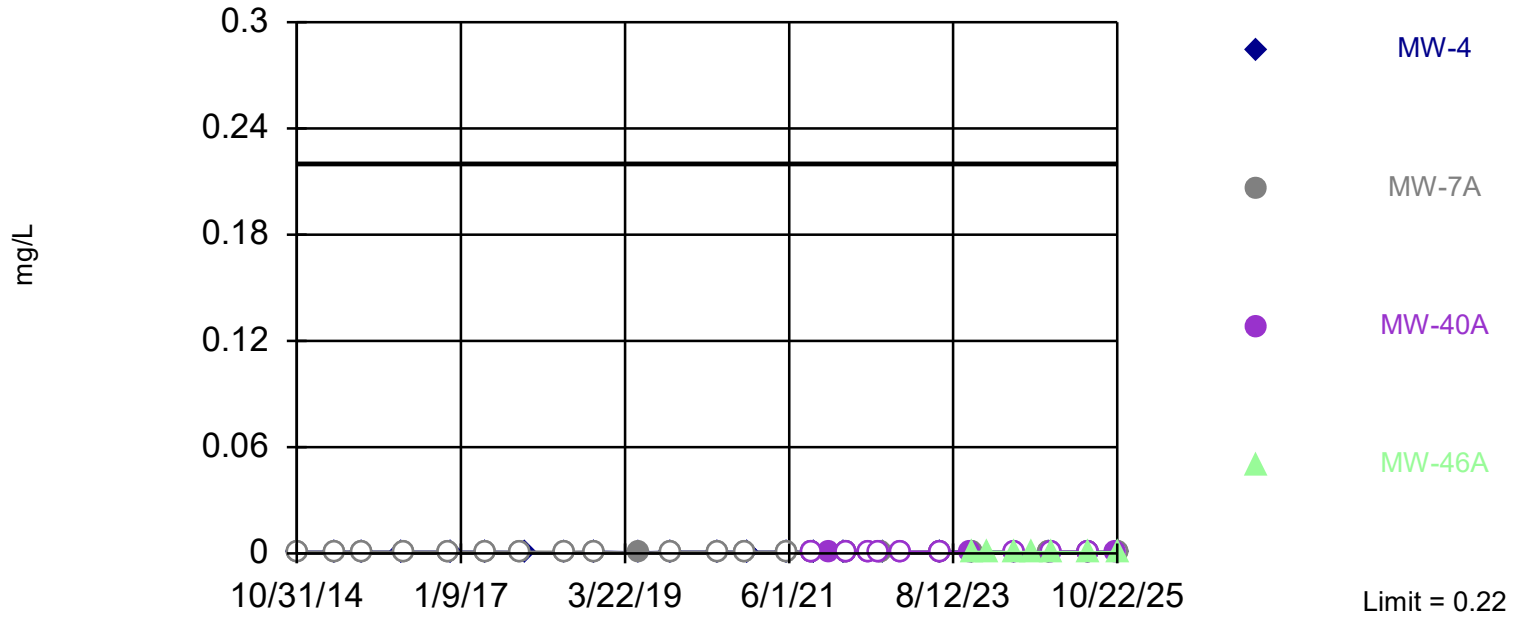
Winneshiek County SLF Client: Foth Data: Winneshiek Shallow Groundwater - Fall 2025 Evaluation

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 74.19% NDs. Annual per-constituent alpha = 0.06721. Individual comparison alpha = 0.001655 (1 of 2).

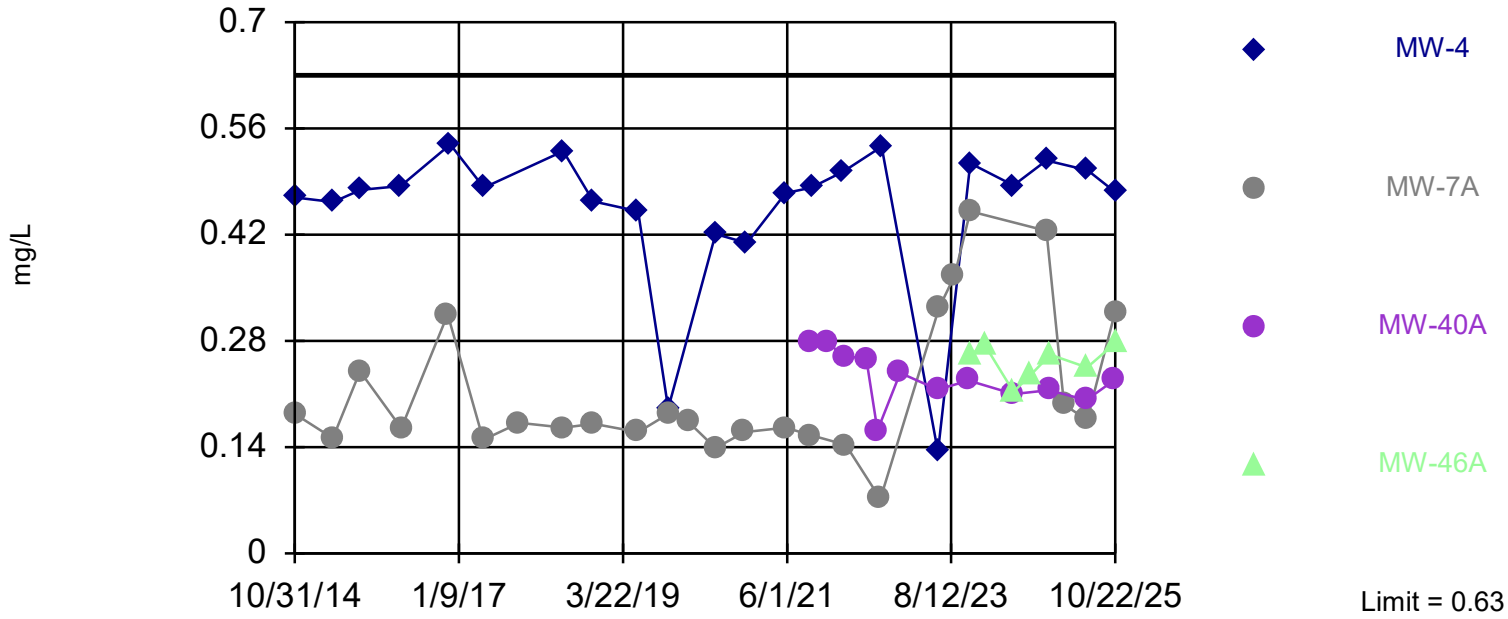
Constituent: Arsenic Analysis Run 12/19/2025 12:09 PM

Winneshiek County SLF Client: Foth Data: Winneshiek Shallow Groundwater - Fall 2025 Evaluation

Within Limit

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 30 background values. Annual per-constituent alpha = 0.07037. Individual comparison alpha = 0.001736 (1 of 2).

Constituent: Barium Analysis Run 12/19/2025 12:09 PM

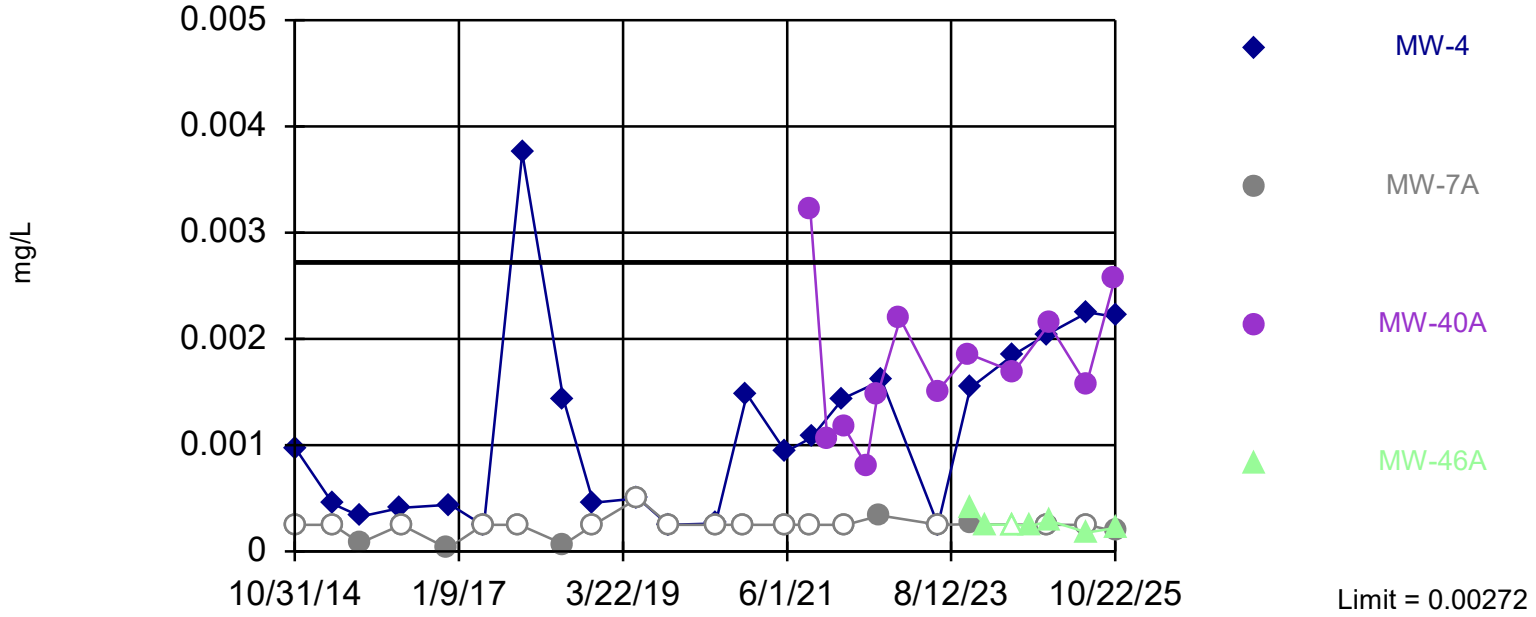
Winneshiek County SLF Client: Foth Data: Winneshiek Shallow Groundwater - Fall 2025 Evaluation

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 30 background values. 50% NDs. Annual per-constituent alpha = 0.07037. Individual comparison alpha = 0.001736 (1 of 2).

Constituent: Cobalt Analysis Run 12/19/2025 12:09 PM

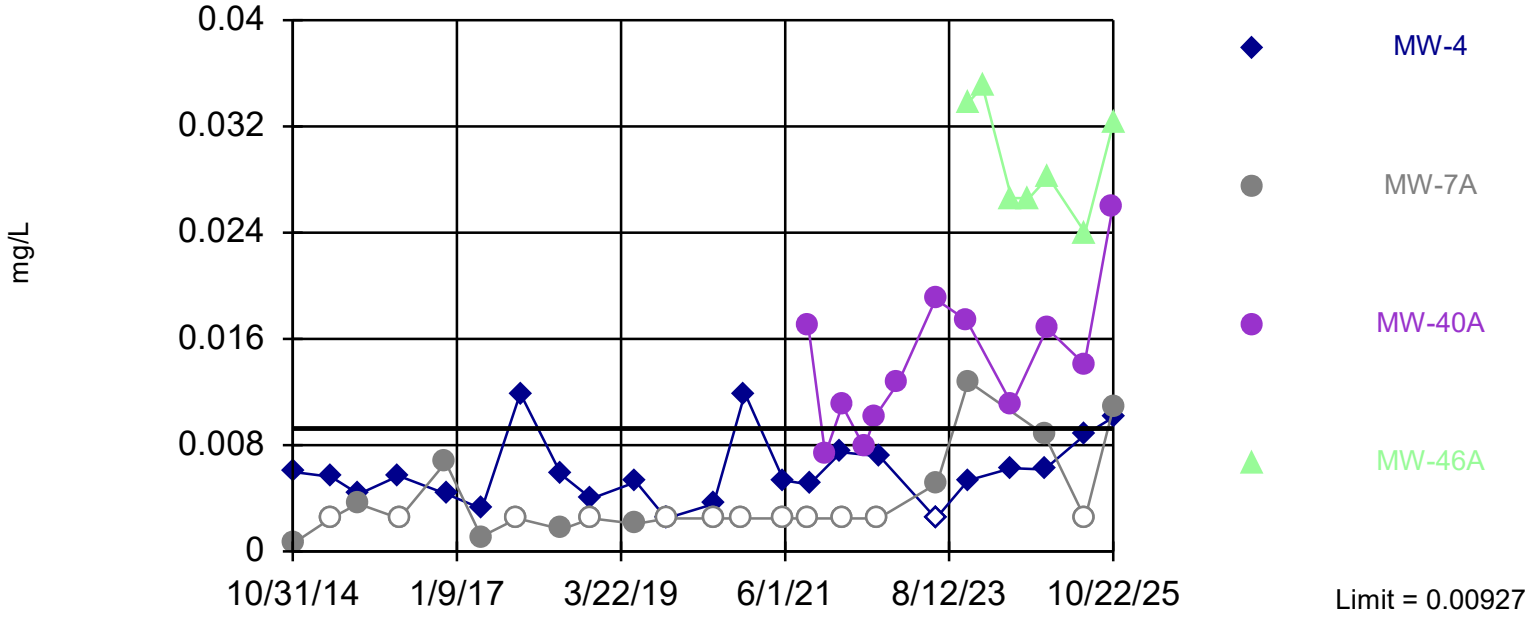
Winneshiek County SLF Client: Foth Data: Winneshiek Shallow Groundwater - Fall 2025 Evaluation

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Hollow symbols indicate censored values.

Exceeds Limit: MW-4, MW-7A, MW-40A, MW-46A

Prediction Limit - Assessment Monitoring

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 64.52% NDs. Annual per-constituent alpha = 0.06721. Individual comparison alpha = 0.001655 (1 of 2).

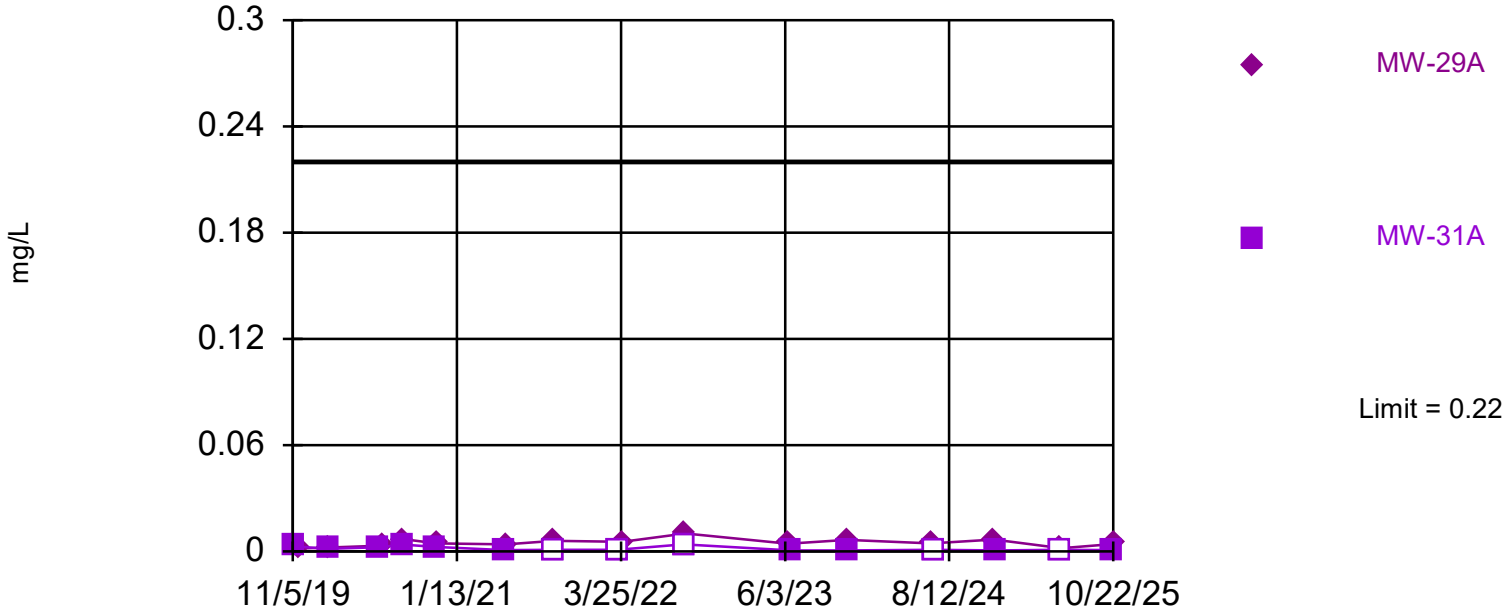
Constituent: Nickel Analysis Run 12/19/2025 12:09 PM

Winneshiek County SLF Client: Foth Data: Winneshiek Shallow Groundwater - Fall 2025 Evaluation

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring
Interwell Non-parametric - Assessment Constituents



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 74.19% NDs. Annual per-constituent alpha = 0.06721. Individual comparison alpha = 0.001655 (1 of 2).

Constituent: Arsenic Analysis Run 12/19/2025 12:49 PM

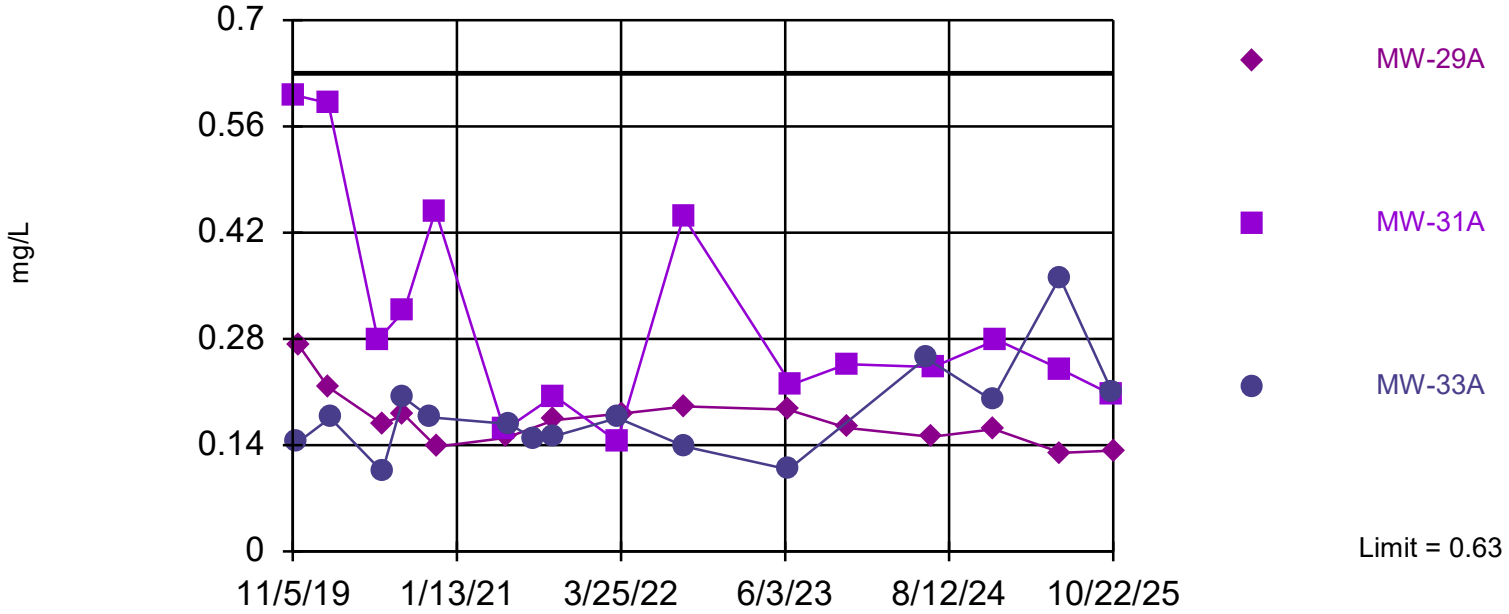
Winneshiek County SLF Client: Foth Data: Winneshiek Shallow Groundwater - Fall 2025 Evaluation

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Within Limit

Prediction Limit - Corrective Action Monitoring - Assessment Constituents

Interwell Non-parametric



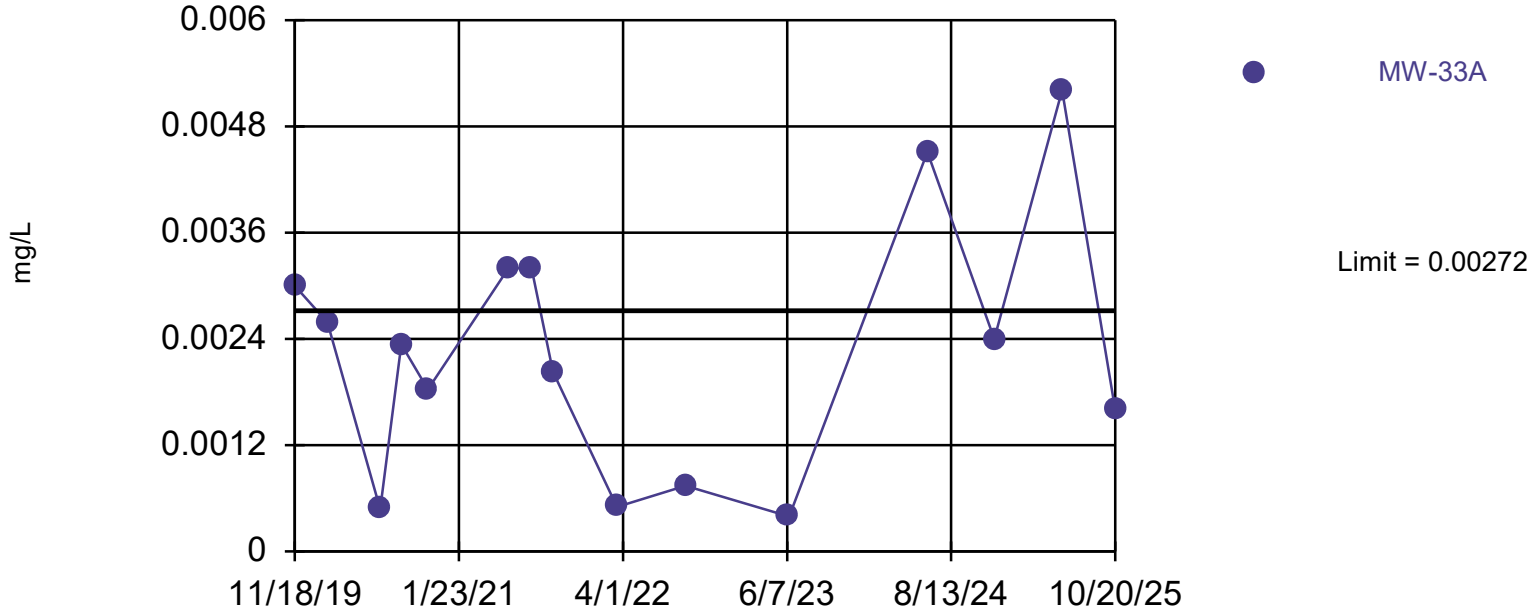
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 30 background values. Annual per-constituent alpha = 0.07037. Individual comparison alpha = 0.001736 (1 of 2).

Constituent: Barium Analysis Run 12/19/2025 12:49 PM

Winneshiek County SLF Client: Foth Data: Winneshiek Shallow Groundwater - Fall 2025 Evaluation

Within Limit

Prediction Limit - Corrective Action Monitoring
Interwell Non-parametric - Assessment Constituents



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 30 background values. 50% NDs. Annual per-constituent alpha = 0.07037. Individual comparison alpha = 0.001736 (1 of 2).

Constituent: Cobalt Analysis Run 12/19/2025 12:49 PM

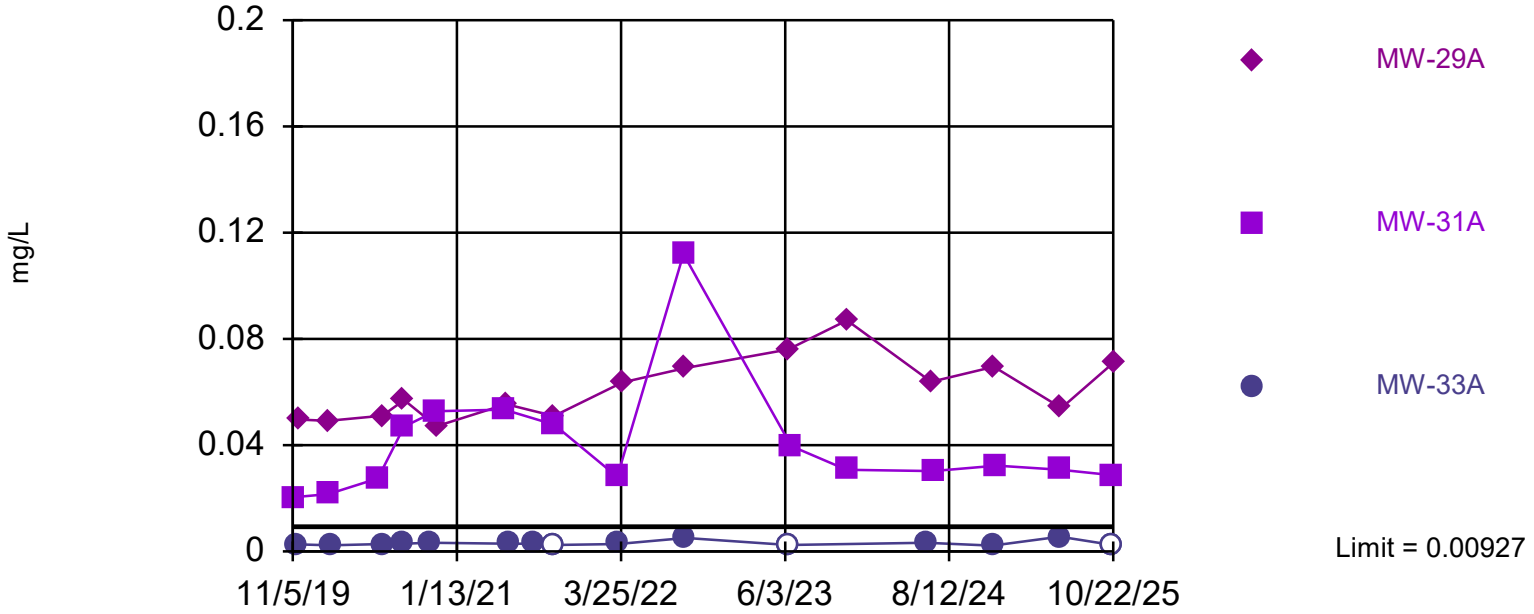
Winneshiek County SLF Client: Foth Data: Winneshiek Shallow Groundwater - Fall 2025 Evaluation

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Hollow symbols indicate censored values.

Exceeds Limit: MW-29A, MW-31A

Prediction Limit - Corrective Action Monitoring

Interwell Non-parametric - Assessment Constituents



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 64.52% NDs. Annual per-constituent alpha = 0.06721. Individual comparison alpha = 0.001655 (1 of 2).

Constituent: Nickel Analysis Run 12/19/2025 12:49 PM

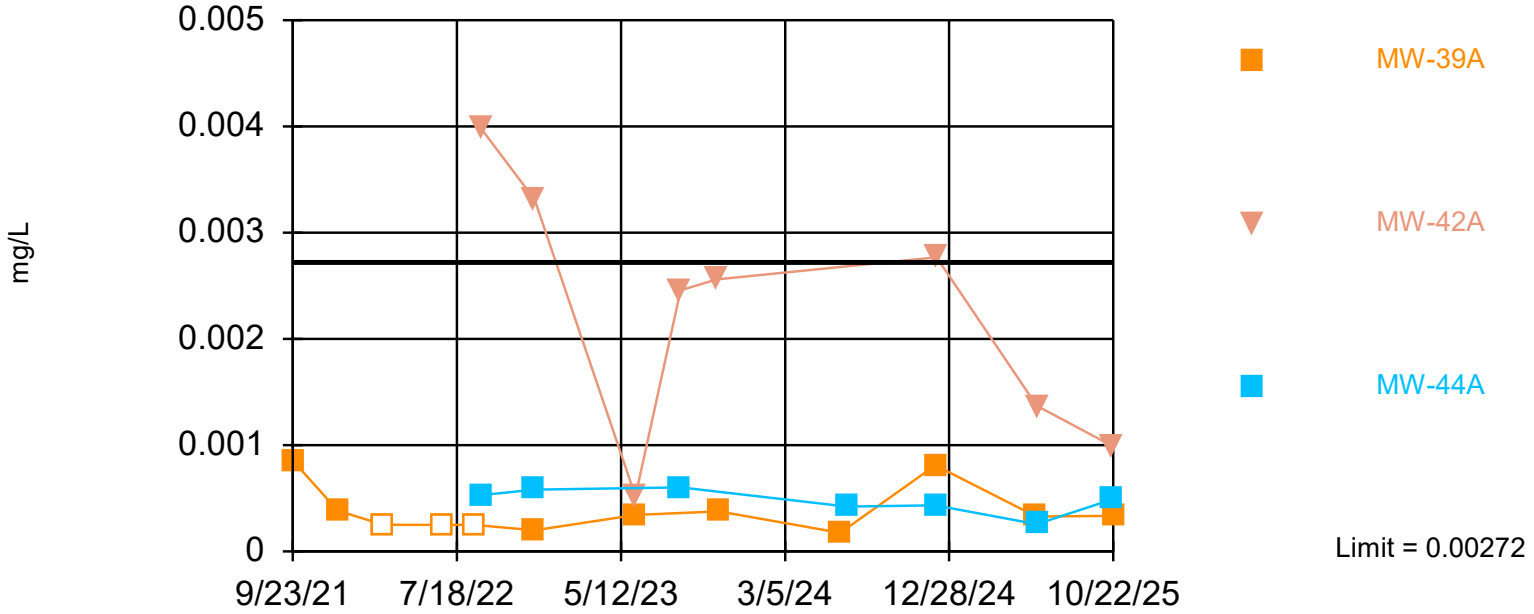
Winneshiek County SLF Client: Foth Data: Winneshiek Shallow Groundwater - Fall 2025 Evaluation

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Delineation Monitoring - Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 30 background values. 50% NDs. Annual per-constituent alpha = 0.07037. Individual comparison alpha = 0.001736 (1 of 2).

Constituent: Cobalt Analysis Run 12/19/2025 4:11 PM

Winneshiek County SLF Client: Foth Data: Winneshiek Shallow Groundwater - Fall 2025 Evaluation

Deep Groundwater

Interwell Prediction Limit [1]

Constituent	Well	Upper Limit	Date	Observation	Exceed	Background N	Background Mean	Standard Deviation	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Corrective Action Monitoring Locations - Assessment Constituents													
Barium (mg/L)	MW-35	0.1906	10/21/2025	0.256	Yes	13	-2.468	0.3204	0	None	ln(x)	0.0006269	Param Inter 1 of 2
Silver (mg/L)	MW-35	0.00124	10/21/2025	0.0005ND	No	17	n/a	n/a	94	n/a	n/a	0.004264	NP Inter (NDs) 1 of 2

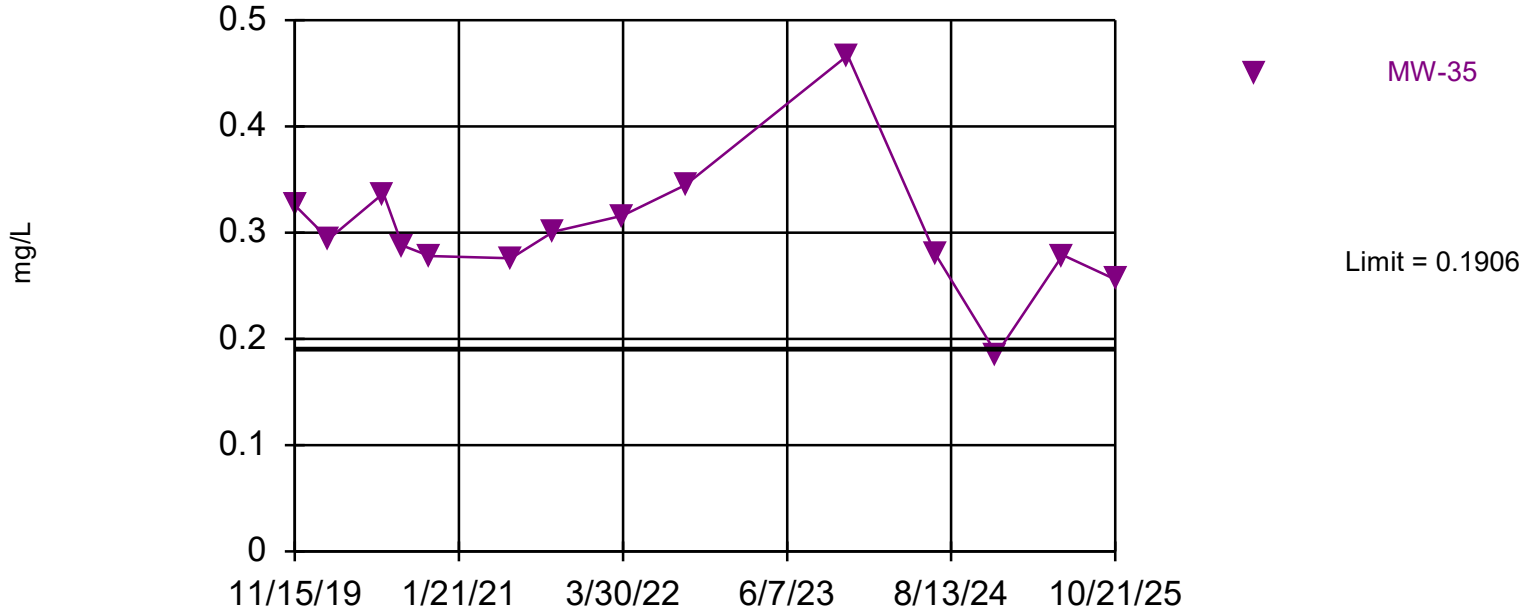
[1] Interwell prediction limit data consists of the detected Appendix I and II parameters in the combined MW-18 and MW-19R data set. Note that background data set adjustments were incorporated in accordance with Sections 3.2 and 3.3 of the Fall 2025 Statistical Evaluation memo.

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Exceeds Limit: MW-35

Prediction Limit - Corrective Action Monitoring - Assessment Constituents

Interwell Parametric



Background Data Summary (based on natural log transformation): Mean=-2.468, Std. Dev.=0.3204, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8558, critical = 0.814. Kappa = 2.529 (c=4, w=21, 1 of 2, event alpha = 0.05132). Report alpha = 0.01308. Individual comparison alpha = 0.0006269.

Constituent: Barium Analysis Run 12/19/2025 2:00 PM

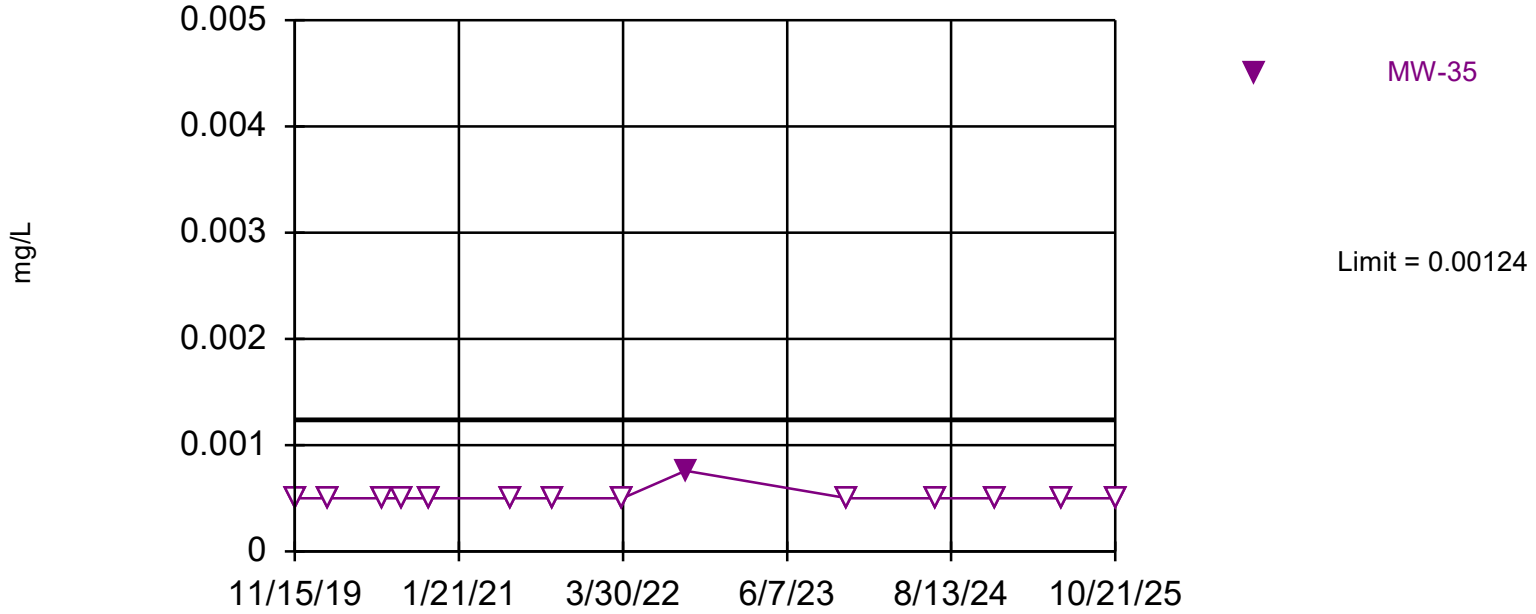
Winneshiek County SLF Client: Foth Data: Winneshiek Deep Groundwater - Fall 2025 Evaluation

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit - Corrective Action Monitoring - Assessment Constituents

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 94.12% NDs. Annual per-constituent alpha = 0.1643. Individual comparison alpha = 0.004264 (1 of 2).

Constituent: Silver Analysis Run 12/19/2025 2:00 PM

Winneshiek County SLF Client: Foth Data: Winneshiek Deep Groundwater - Fall 2025 Evaluation

Attachment 3

Sanitas Report Output for Double Quantification Rule Evaluations

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Data Screening - Surface Water

Analysis Run 12/19/2025 2:48 PM

Winneshiek County SLF Client: Foth Data: Winneshiek Surface Water - Fall 2025 Evaluation

A listing of detects for 51 constituents in SW-2 and SW-5 in October 2025:

-none-

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Data Screening - Detection Monitoring

Analysis Run 12/19/2025 3:08 PM

Winneshiek County SLF Client: Foth Data: Winneshiek Shallow Groundwater - Fall 2025 Evaluation

A listing of detects for 214 constituents in MW-2R, MW-3, MW-4B, MW-25A, MW-34A, MW-38A, MW-41A, and MW-45A in October 2025:

-none-

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Data Screening - Assessment Monitoring

Analysis Run 12/19/2025 3:19 PM

Winneshiek County SLF Client: Foth Data: Winneshiek Shallow Groundwater - Fall 2025 Evaluation

A listing of detects for 214 constituents in MW-4, MW-7A, MW-40A, and MW-46 in October 2025:

Cadmium, MW-4, 10/22/2025: 0.000471 mg/L
Chromium, MW-7A, 10/22/2025: 0.00692 mg/L

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Data Screening - Corrective Action Monitoring

- Assessment Constituents

A listing of detects for 214 constituents in MW-29A, MW-31A, and MW-33A in October 2025:

Sulfide, MW-29A, 10/22/2025: 3.07 mg/L

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Data Screening - Corrective Action Monitoring

- Assessment Constituents

A listing of detects for 215 constituents in MW-35 in October 2025:

Nickel, MW-35, 10/21/2025: 0.0186 mg/L

Attachment 4

Sanitas Report Output for Confidence Interval Calculations

Assessment Mode

Shallow Groundwater

Confidence Interval - Assessment Mode [1]

Constituent Name	Well	Upper Limit	Lower Limit	Compliance Limit [2]	Exceed	N	Mean	Standard Deviation	CV	a to Achieve 50% Power at R=1.5 [3,4]	a to Achieve 80% Power at R=2.0 [3,4]	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Assessment Monitoring Locations																
Cadmium (mg/L)	MW-4	0.0002	0.0001	0.005	No	24	0.0002	0.0001	0.6	0.01	<0.01	29	None	No	0.01	NP (normality)
Chromium (mg/L)	MW-7A	0.004	0.003	0.1	No	22	0.003	0.001	0.4	<0.01	<0.01	23	Kaplan-Meier	No	0.01	Param.
Nickel (mg/L)	MW-4	0.007	0.005	0.1	No	23	0.006	0.003	0.4	<0.01	<0.01	9	None	No	0.01	Param.
Nickel (mg/L)	MW-7A	0.004	0.002	0.1	No	22	0.004	0.003	0.8	0.01	<0.01	55	None	No	0.01	NP (NDs)
Nickel (mg/L)	MW-40A	0.018	0.010	0.1	No	12	0.014	0.005	0.4	<0.01	<0.01	0	None	No	0.01	Param.
Nickel (mg/L)	MW-46A	0.034	0.025	0.1	No	7	0.029	0.004	0.1	<0.01	0.06	0	None	No	0.01	Param.
Corrective Action Monitoring Locations - Assessment Constituents																
Nickel (mg/L)	MW-29A	0.069	0.053	0.1	No	15	0.061	0.012	0.2	<0.01	<0.01	0	None	No	0.01	Param.
Nickel (mg/L)	MW-31A	0.048	0.028	0.1	No	15	0.040	0.023	0.6	0.03	<0.01	0	None	No	0.03	NP (normality)
Sulfide (mg/L)	MW-29A	3.07	0.50	3.00	No	12	3.17	5.80	1.8	0.05	0.01	75	None	No	0.05	NP (NDs)

[1] Under assessment mode, an SSL is indicated when the lower confidence limit exceeds the groundwater protection standard (compliance limit).

[2] Value is the 40 CFR Part 141 Safe Drinking Water Act MCL, the IAC 567 Chapter 137 Statewide Standard for a Protected Groundwater Source, or background. Sulfide does not have an MCL or Statewide Standard; therefore, the GWPS is background. Since sulfide has not been detected in the shallow groundwater background dataset, background is currently taken as the laboratory reporting limit.

[3] For parametric confidence intervals: Except where otherwise indicated, based on Unified Guidance Equation 22.2, i.e.,

$$\alpha \sim 1 - F_{T,n-1}\left(\frac{(R-1)\sqrt{n}}{R \cdot \widehat{CV}} - t_{1-\beta,n-1}\right)$$

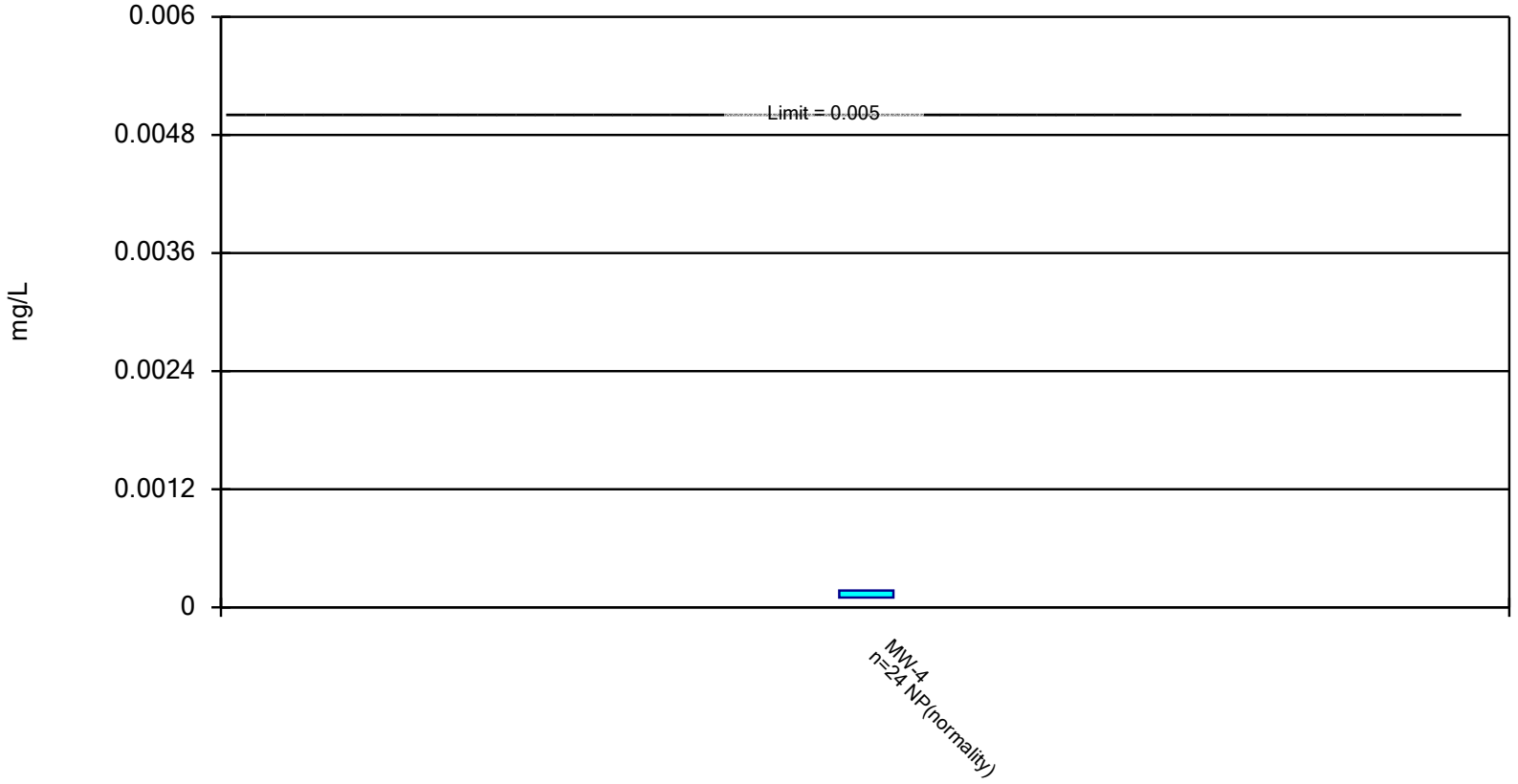
where R is the desired risk ratio, n is the sample size, CV is the estimated sample coefficient of variation, $t_{1-b,n-1}$ is the (1−b) Student's t-quantile with (n−1) degrees of freedom, and F is the cumulative (central) Student's t-distribution function.

[4] For non-parametric confidence intervals: Based on Unified Guidance Equation 22.1, i.e., $1-\beta = G_{T,n-1}\left(t_{1-\alpha,n-1}\middle|\Delta = \sqrt{n}(R-1)\right)$

where R is the desired risk ratio, $t_{1-a,n-1}$ is the (1−a) Student's t-quantile with (n−1) degrees of freedom and G represents the cumulative non-central t-distribution with (n−1) degrees of freedom and noncentrality parameter D.

Non-Parametric Confidence Interval - Assessment Monitoring

Compliance Limit is not exceeded. Per-well alpha = 0.01.

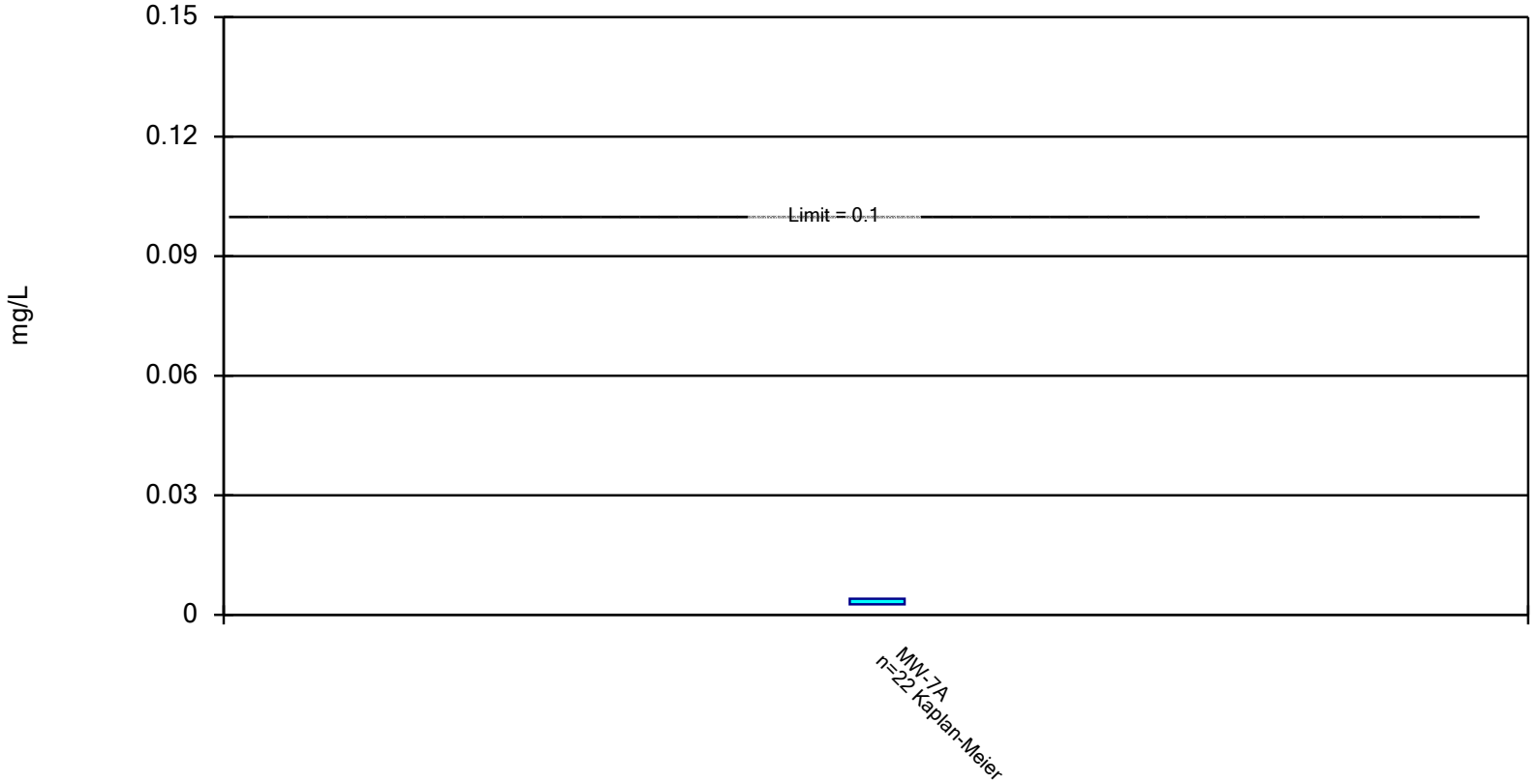


Constituent: Cadmium Analysis Run 12/20/2025 12:02 PM

Winneshiek County SLF Client: Foth Data: Winneshiek Shallow Groundwater - Fall 2025 Evaluation

Parametric Confidence Interval - Assessment Monitoring

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

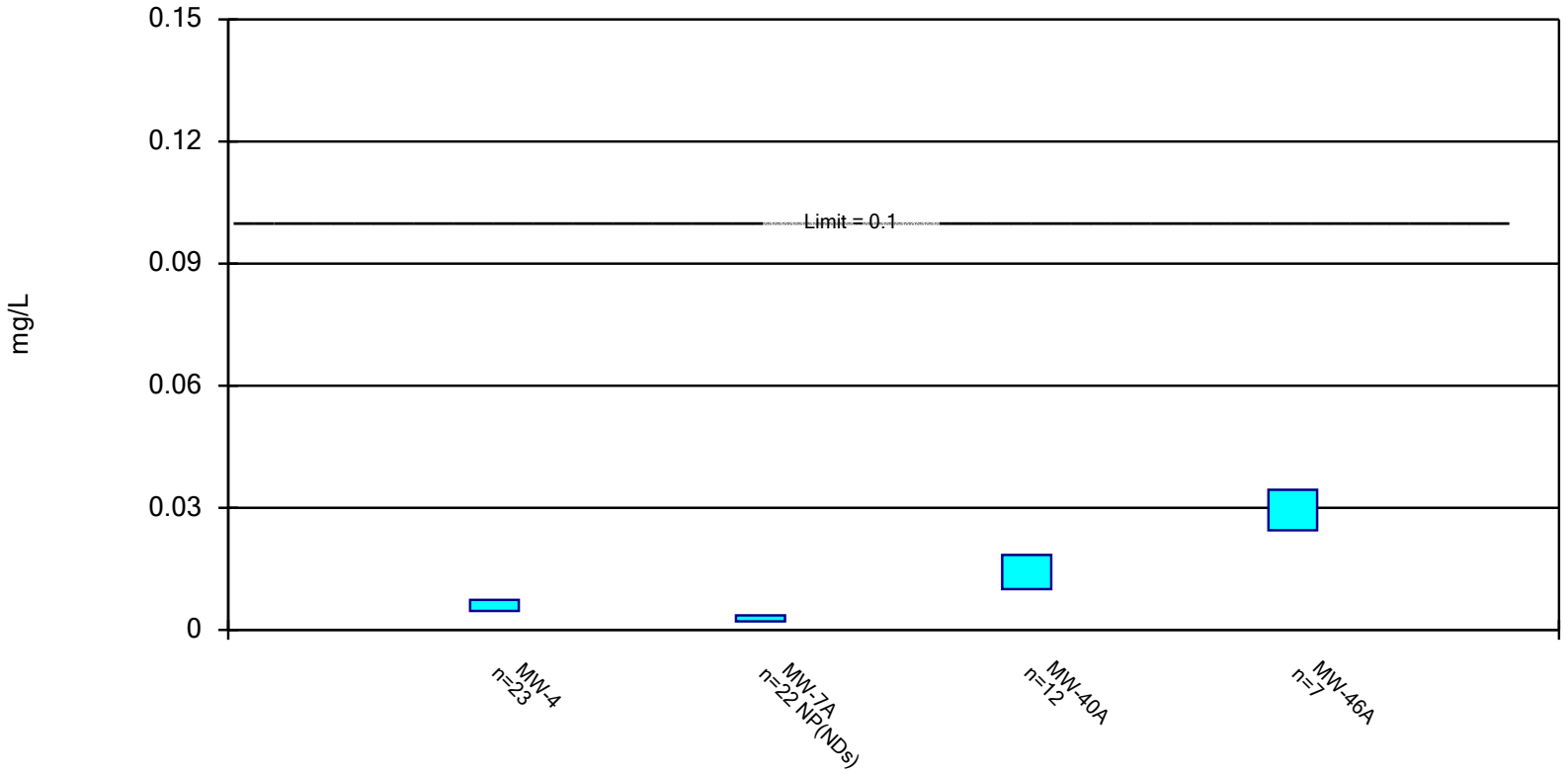


Constituent: Chromium Analysis Run 12/20/2025 12:02 PM

Winneshiek County SLF Client: Foth Data: Winneshiek Shallow Groundwater - Fall 2025 Evaluation

Parametric and Non-Parametric (NP) Confidence Interval - Assessment Monitoring

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



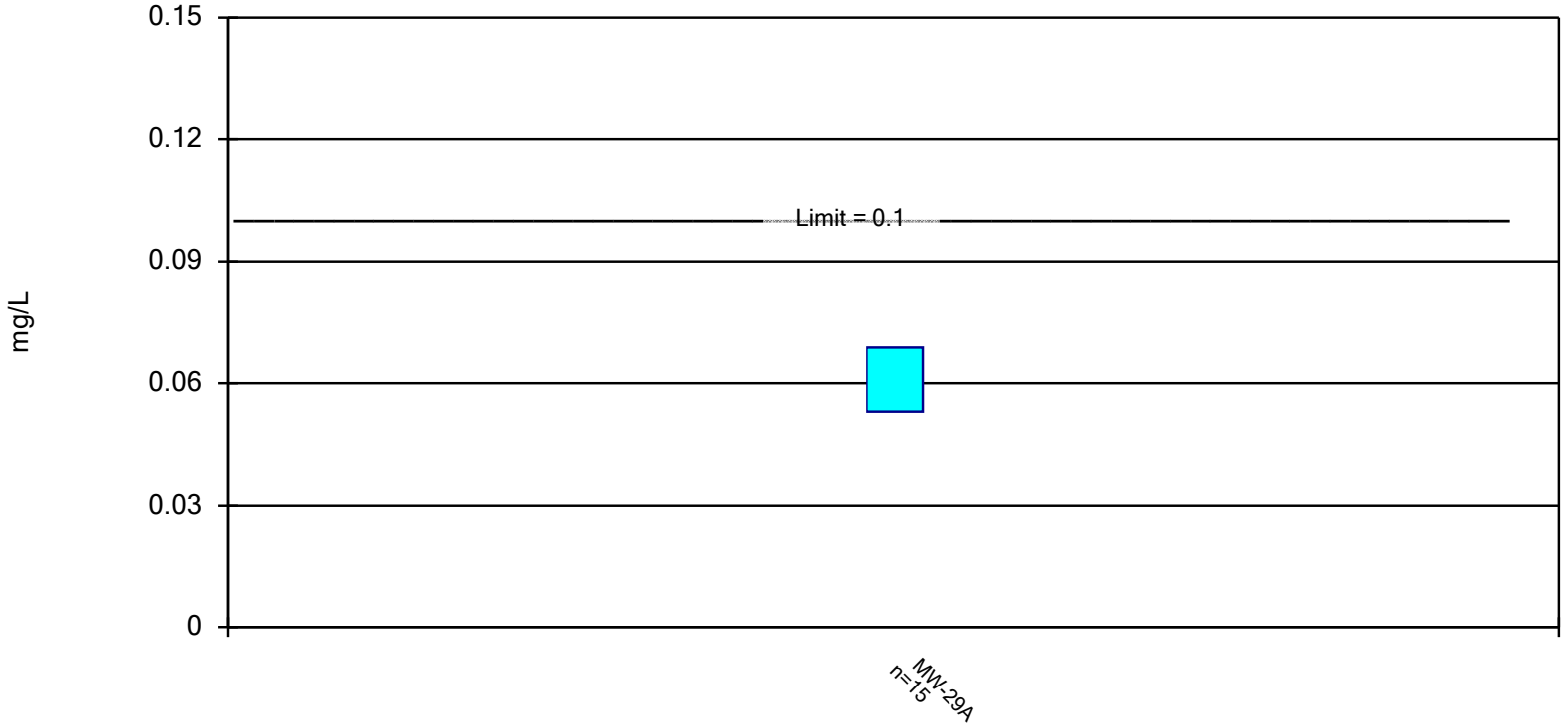
Constituent: Nickel Analysis Run 12/20/2025 12:02 PM

Winneshiek County SLF Client: Foth Data: Winneshiek Shallow Groundwater - Fall 2025 Evaluation

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Parametric Confidence Interval - Corrective Action Monitoring - Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



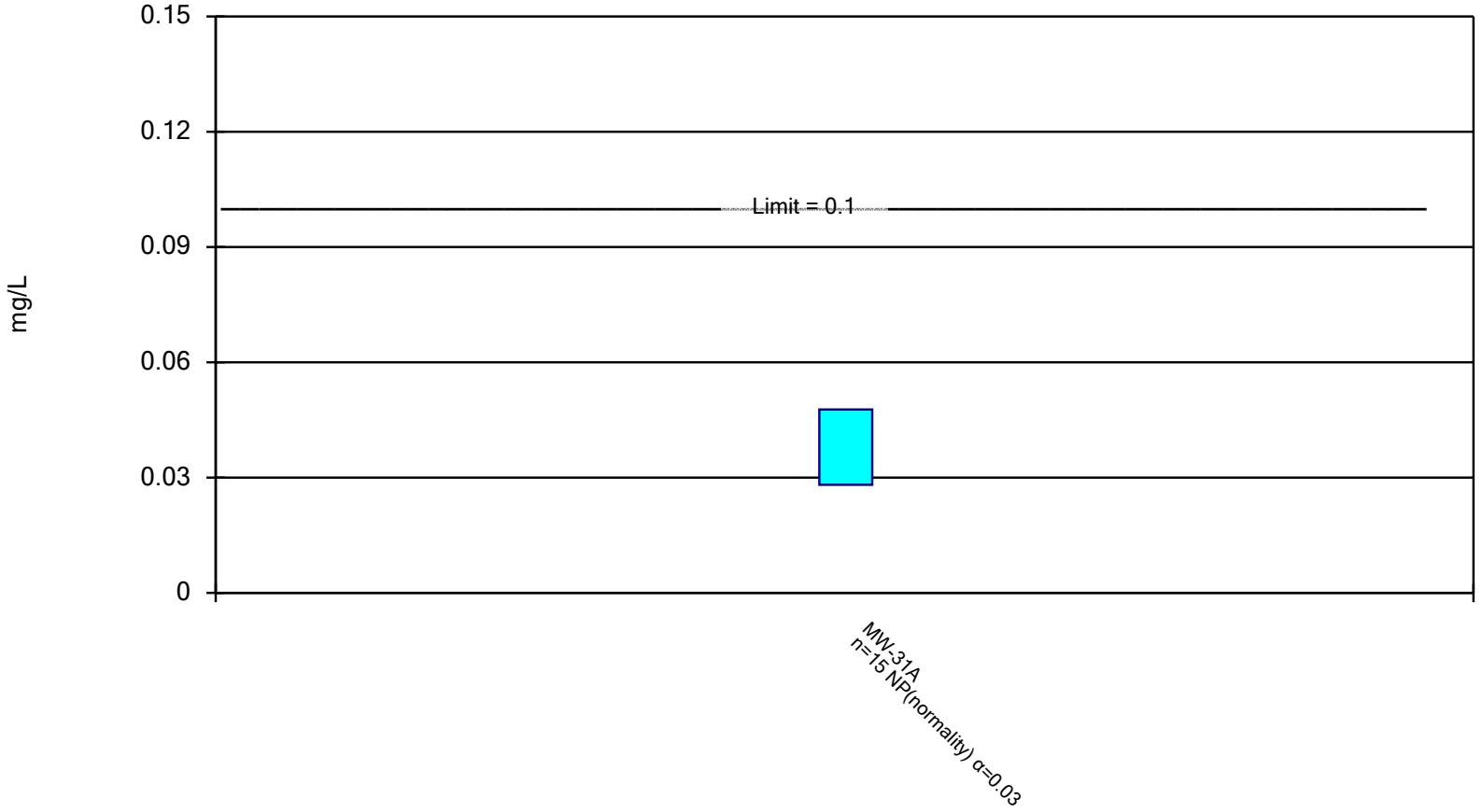
Constituent: Nickel Analysis Run 12/20/2025 1:24 PM

Winneshiek County SLF Client: Foth Data: Winneshiek Shallow Groundwater - Fall 2025 Evaluation

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Non-Parametric Confidence Interval - Corrective Action Monitoring - Assessment Constituents

Compliance Limit is not exceeded.



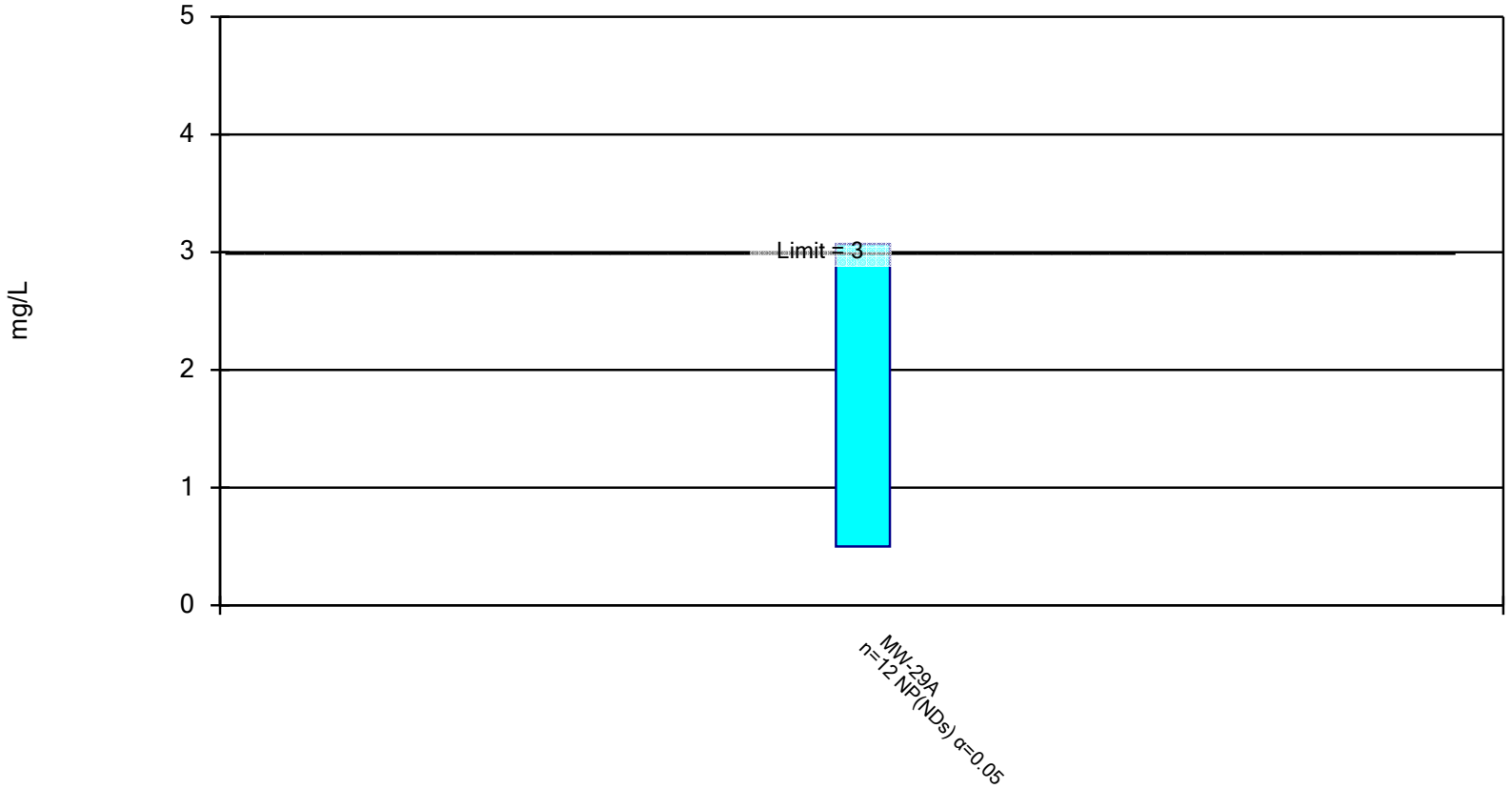
Constituent: Nickel Analysis Run 12/20/2025 1:28 PM

Winneshiek County SLF Client: Foth Data: Winneshiek Shallow Groundwater - Fall 2025 Evaluation

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Non-Parametric Confidence Interval - Corrective Action Monitoring - Assessment Constituents

Compliance Limit is not exceeded.



Constituent: Sulfide Analysis Run 12/20/2025 1:34 PM

Winneshiek County SLF Client: Foth Data: Winneshiek Shallow Groundwater - Fall 2025 Evaluation

Deep Groundwater

Confidence Interval - Assessment Mode [1]

Constituent Name	Well	Upper Limit	Lower Limit	Compliance Limit [2]	Exceed	N	Mean	Standard Deviation	CV	a to Achieve 50% Power at R=1.5 [3,4]	a to Achieve 80% Power at R=2.0 [3,4]	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Corrective Action Monitoring Locations - Assessment Constituents																
Barium (mg/L)	MW-35	0.33	0.28	2	No	15	0.30	0.06	0.2	0.03	<0.01	0	None	No	0.03	NP (normality)
Nickel (mg/L)	MW-35	0.026	0.018	0.1	No	15	0.022	0.005	0.2	<0.01	<0.01	0	None	No	0.01	Param.

[1] Under assessment mode, an SSL is indicated when the lower confidence limit exceeds the groundwater protection standard (compliance limit).

[2] Value is the 40 CFR Part 141 Safe Drinking Water Act MCL or the IAC 567 Chapter 137 Statewide Standard for a Protected Groundwater Source.

[3] For parametric confidence intervals: Except where otherwise indicated, based on Unified Guidance Equation 22.2, i.e., $a \sim 1 - F_{T,n-1}\left(\frac{(R-1)\sqrt{n}}{R \cdot \widehat{CV}} - t_{1-\beta,n-1}\right)$

where R is the desired risk ratio, n is the sample size, CV is the estimated sample coefficient of variation, $t_{1-b,n-1}$ is the (1−b) Student's t-quantile with (n−1) degrees of freedom, and F is the cumulative (central) Student's t-distribution function.

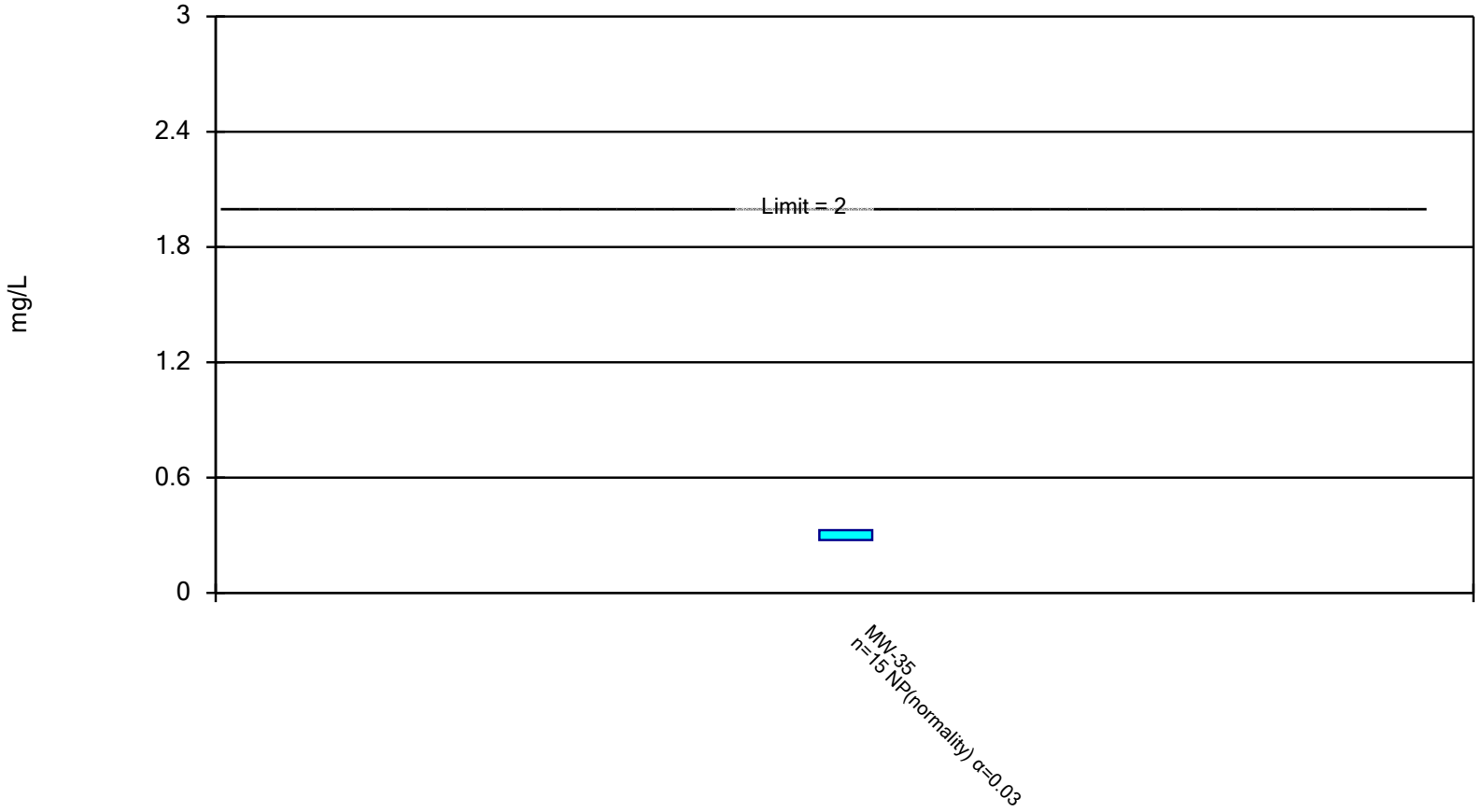
[4] For non-parametric confidence intervals: Based on Unified Guidance Equation 22.1, i.e., $1 - \beta = G_{T,n-1}\left(t_{1-\alpha,n-1} \middle| \Delta = \sqrt{n}(R-1)\right)$

where R is the desired risk ratio, $t_{1-a,n-1}$ is the (1−a) Student's t-quantile with (n−1) degrees of freedom and G represents the cumulative non-central t-distribution with (n−1) degrees of freedom and noncentrality parameter D.

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Non-Parametric Confidence Interval - Corrective Action Monitoring - Assessment Constituents

Compliance Limit is not exceeded.

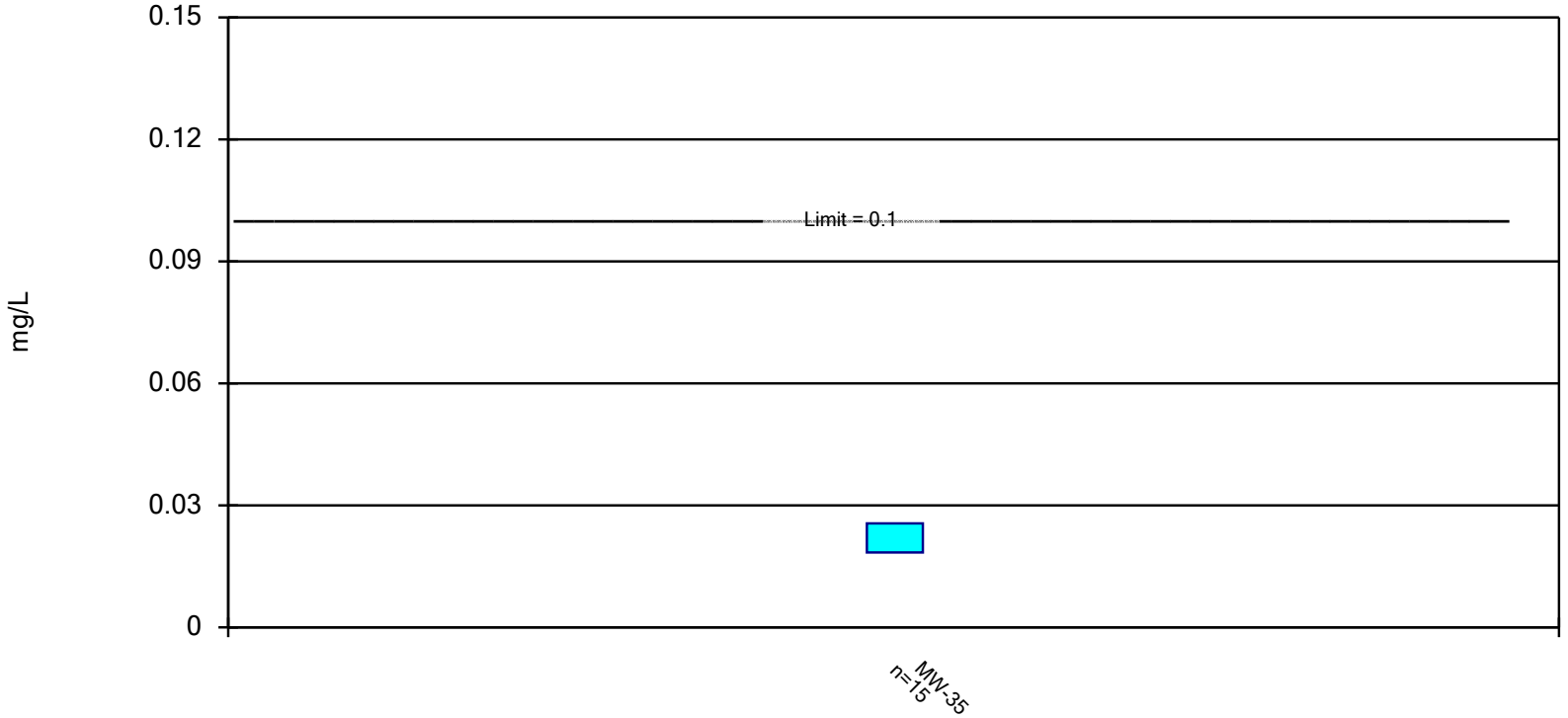


Constituent: Barium Analysis Run 12/20/2025 12:23 PM

Winneshiek County SLF Client: Foth Data: Winneshiek Deep Groundwater - Fall 2025 Evaluation

Parametric Confidence Interval - Corrective Action Monitoring - Assessment Constituents

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Nickel Analysis Run 12/20/2025 12:17 PM

Winneshiek County SLF Client: Foth Data: Winneshiek Deep Groundwater - Fall 2025 Evaluation

Attachment 5

Sanitas Report Output for Confidence Interval Calculations

Corrective Action Mode

Shallow Groundwater Arsenic

GWPS as Background - One-Sample Confidence Interval Testing Method

Calculation of Arsenic Upper Tolerance Limit with 95% Coverage[1] and 95% Confidence

Constituent Name	Upper Limit	Background N	Background Wells	Background Mean	Standard Deviation	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method	Minimum Achieved Coverage
Arsenic (mg/L)	0.22	31	MW-1,MW-37A	n/a	n/a	74	n/a	n/a	0.2039	NP Inter(normality)	91%

[1] Note that a nonparametric tolerance limit was utilized in the cobalt background calculation. The nonparametric limit achieves 90% coverage.

Shallow Groundwater

Confidence Interval - Corrective Action Mode [1]

Constituent Name	Well	Upper Limit	Lower Limit	Compliance Limit [2,3,4]	Exceed	N	Mean	Standard Deviation	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Corrective Action Monitoring Locations													
Arsenic (mg/L)	MW-33A	0.0506	0.0283	0.22	No	16	0.0395	0.0332	0	None	No	0.1	Param.
Cobalt (mg/L)	MW-29A	0.0127	0.0097	0.0034	Yes	15	0.0112	0.0042	0	None	No	0.1	Param.
Cobalt (mg/L)	MW-31A	0.0120	0.0034	0.0034	Yes	15	0.0086	0.0079	0	None	No	0.1	NP (normality)
Delineation Monitoring Locations													
Cobalt (mg/L)	MW-43A	0.0042	0.0036	0.0034	Yes	9	0.00393	0.00067	0	None	No	0.1	Param.

[1] Under corrective action mode, an SSL is rejected when the upper confidence limit lies below the groundwater protection standard (compliance limit).

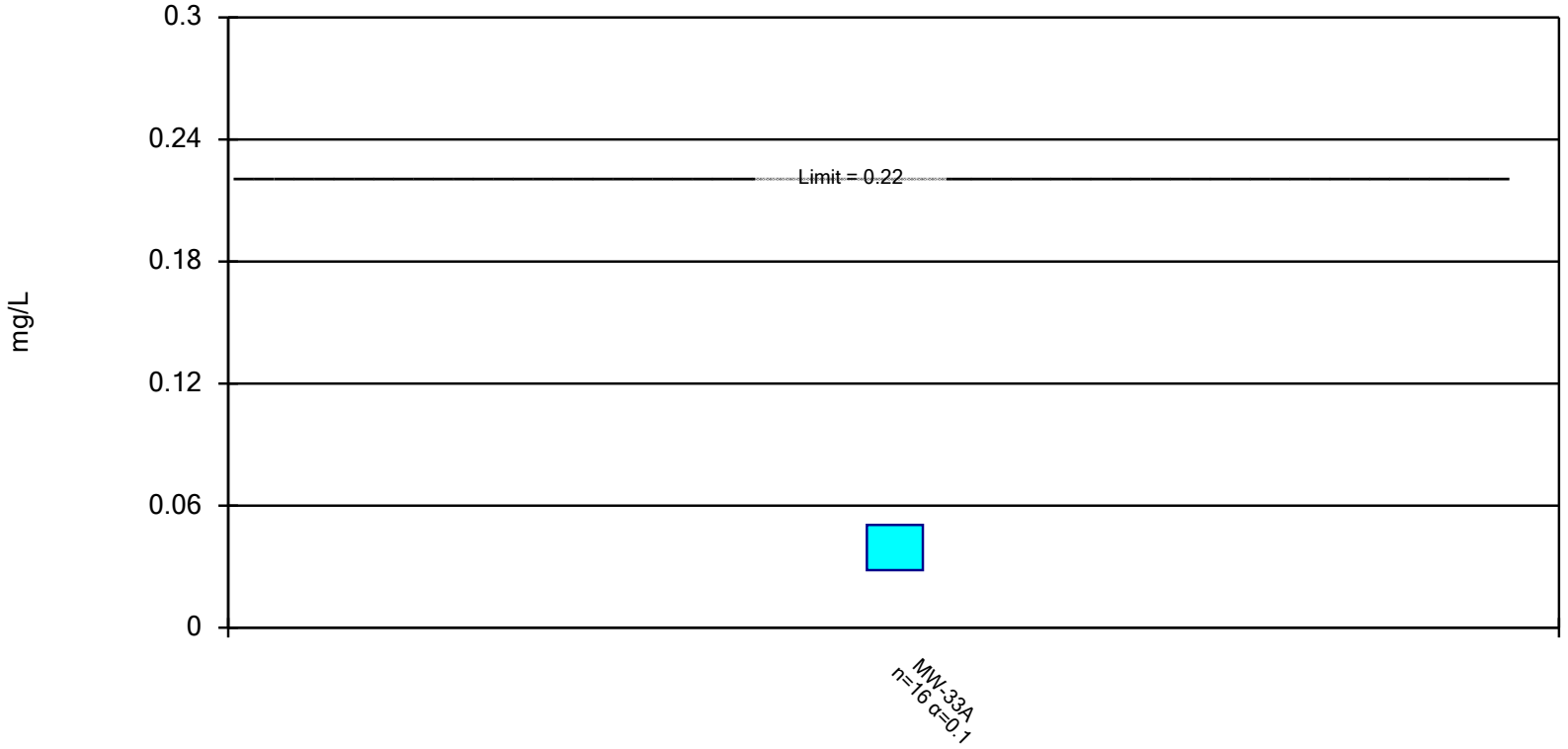
[2] Value is the 40 CFR Part 141 Safe Drinking Water Act MCL or the IAC 567 Chapter 137 Statewide Standard for a Protected Groundwater Source.

[3] Using the one-sample testing method, the fixed GWPS for arsenic was calculated as the background upper tolerance limit with 95% confidence and 95% coverage. Note that a nonparametric tolerance limit was utilized in the arsenic background calculation. The nonparametric limit achieves 90% coverage.

[4] A site-specific GWPS of 0.0034 mg/L for cobalt has been established and is detailed in the *2024 UPDATE Winneshiek Hydrologic Monitoring System Plan* (AECOM, 2024), which was approved by the IDNR in their letter dated October 29, 2024 (IDNR, 2024).

Parametric Confidence Interval, Corrective Action Mode

Compliance Limit is not exceeded. Normality Test: Shapiro Wilk, alpha based on n.

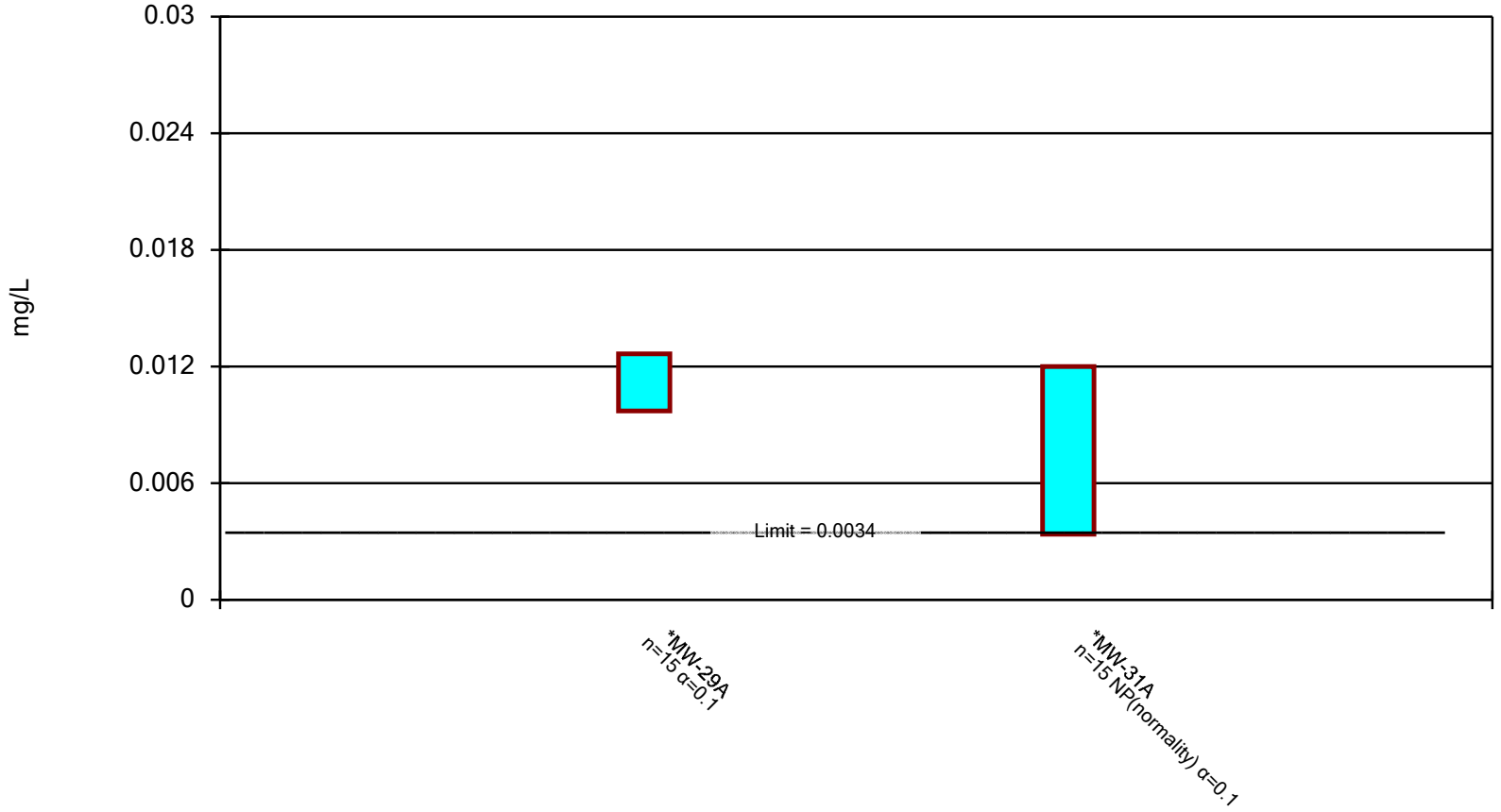


Constituent: Arsenic Analysis Run 12/20/2025 4:32 PM

Winneshiek County SLF Client: Foth Data: Winneshiek Shallow Groundwater - Fall 2025 Evaluation

Parametric and Non-Parametric (NP) Confidence Interval, Corrective Action Mode

Compliance limit is exceeded.* Normality Test: Shapiro Wilk, alpha based on n.



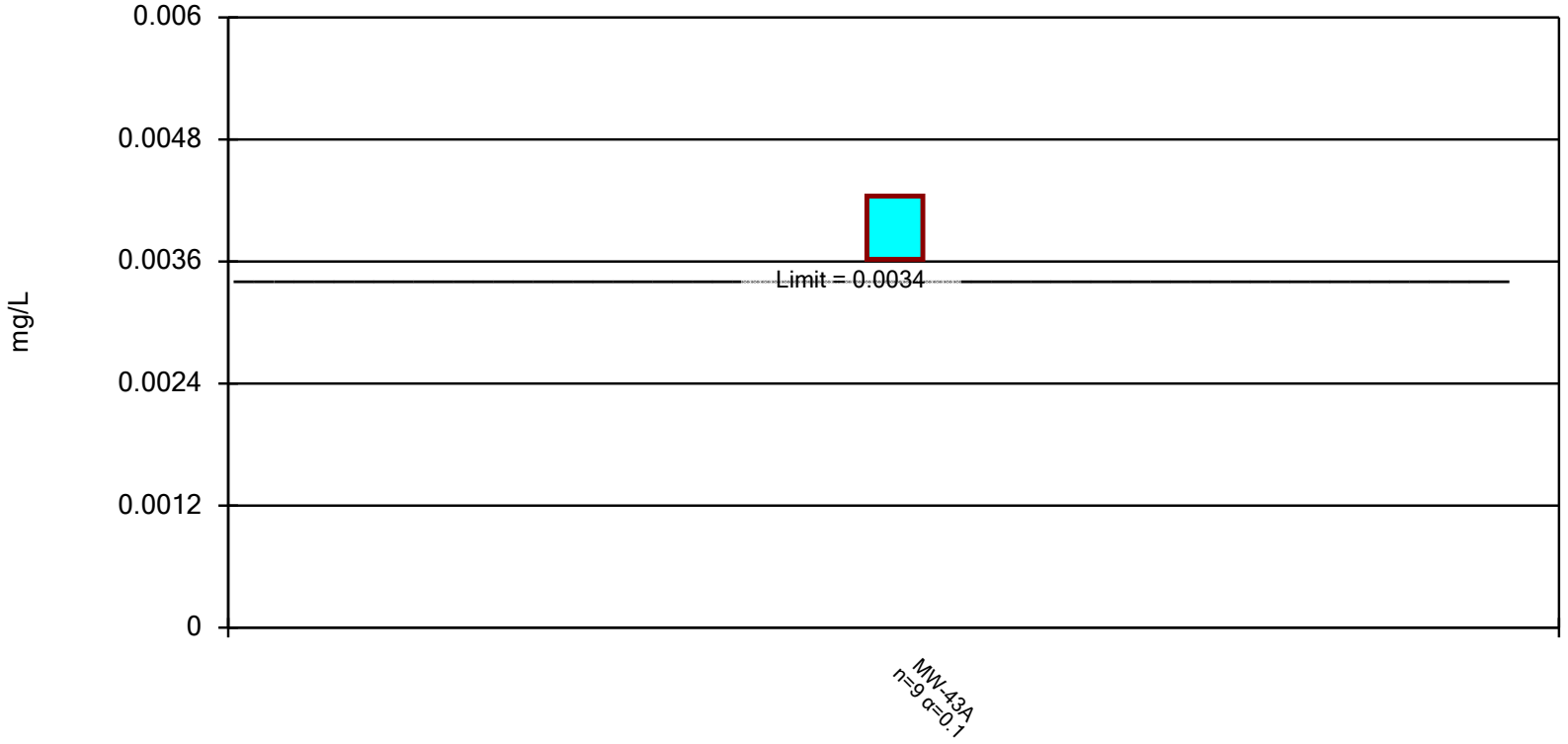
Constituent: Cobalt Analysis Run 12/20/2025 4:32 PM

Winneshiek County SLF Client: Foth Data: Winneshiek Shallow Groundwater - Fall 2025 Evaluation

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Parametric Confidence Interval, Corrective Action Mode

Compliance limit is exceeded. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 12/20/2025 4:11 PM

Winneshiek County SLF Client: Foth Data: Winneshiek Shallow Groundwater - Fall 2025 Evaluation

Deep Groundwater

Confidence Interval - Corrective Action Mode [1]

Constituent Name	Well	Upper Limit	Lower Limit	Compliance Limit [2]	Exceeds	N	Mean	Standard Deviation	% Non-detects	Non-detect Adjustment	Transformation	Alpha	Method
Corrective Action Monitoring Locations													
Cobalt (mg/L)	MW-35	0.0066	0.0055	0.0021	Yes	14	0.0064	0.0016	0	None	No	0.1	NP (normality)

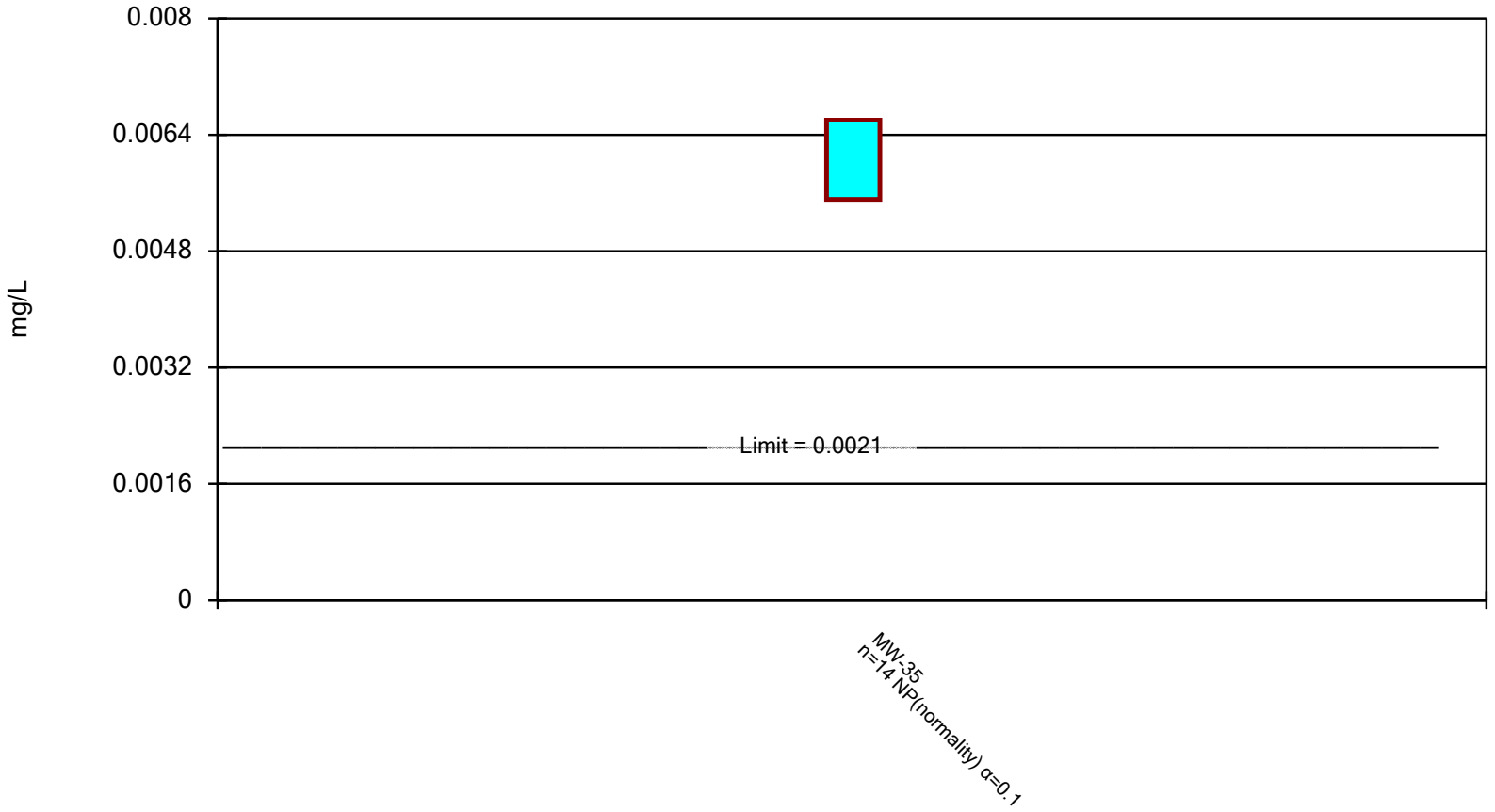
[1] Under corrective action mode, an SSL is rejected when the upper confidence limit lies below the groundwater protection standard (compliance limit).

[2] Value is the 40 CFR Part 141 Safe Drinking Water Act MCL or the IAC 567 Chapter 137 Statewide Standard for a Protected Groundwater Source.

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Non-Parametric Confidence Interval, Corrective Action Mode

Compliance limit is exceeded.



Constituent: Cobalt Analysis Run 12/20/2025 12:49 PM

Winneshiek County SLF Client: Foth Data: Winneshiek Deep Groundwater - Fall 2025 Evaluation

Sample Values and Corresponding 1st-Order Regression Calculations for Date to Completion

Date	MW-29A Cobalt mg/L	MW-31A Cobalt mg/L	MW-43A Cobalt mg/L	MW-35A Cobalt mg/L
2019-11	0.00843	0.0134		0.00827
2020-02	0.00964	0.0124		0.0066
2020-06	0.00998	0.0136		0.00703
2020-08	0.0107	0.012		0.00598
2020-11	0.0101	0.01		0.00597
2021-05	0.0119	0.0104		0.00551
2021-09	0.0079	0.00337		0.00633
2022-03	0.00738	0.00301		0.00639
2022-09	0.0101	0.0322	0.00368	0.00674
2022-12			0.00327	
2023-06	0.0125	0.00375	0.00451	0.00533
2023-08			0.00493	
2023-11	0.0187	0.00462	0.00475	0.0108
2024-06	0.0112	0.00348	0.00349	0.00496
2024-12	0.0165	0.00209	0.00383	
2025-06	0.00347	0.00204	0.00392	0.00482
2025-10	0.0193	0.00263	0.003	0.00473
Oct 2025 Sample	0.0193	0.00263	0.003	0.00473
GWPS	0.0034	0.0034	0.0034	0.0021
Regression Sample Size	15	15	9	14
Regression Slope	9.81742E-05	-0.000846443	-0.000130381	-0.000127914
Regression y-Intercept	-8.960969848	32.78630765	0.359520309	0.639739147
Regression *p* -level	0.539	0.002	0.421	0.141
Estimated Date to Attain GWPS	No Attenuation	6/6/2024	11/26/2026	8/30/2045
Projected Year to Completion	No Attenuation	Jun-2027	Nov-2029	Aug-2048

Attachment 6

References

References

AECOM, 2019. *Letter to Mr. Mike Smith. "2018 Annual Water Quality Report IDNR Comment Letter Response, Winneshiek County Sanitary Landfill, Permit. No. 96-SDP-01-74P, AECOM #60540571."* 12 June 2019. [Doc. No. 95349].

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AECOM, 2025. Letter to Mr. Mike Smith. "IDNR Comment Letter Response (AWQR Document No. 112674; ACM Document No. 112672), Winneshiek County Sanitary Landfill, Permit No. 96-SDP-01-74P, AECOM #60711359." June 6, 2025. [Doc. No. 113221].

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Iowa Department of Natural Resources (Michael W. Smith, P.E.), Letter to Dave Pahlas, 14 Jun 2019. "*Winneshiek County Sanitary Landfill, Permit No. 96-SDP-01-74, 2018 Annual Water Quality Report IDNR Comment Letter Response (Document No. 95349)."* [Doc. No. 95387].

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USEPA, 2006. *On the Computation of a 95% Upper Confidence Limit of the Unknown Population Mean Based Upon Data Sets with Below Detection Limit Observations*. EPA/600/R-06/022. Office of Research and Development, Washington, D.C.

USEPA, 2009. *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance*. EPA 530-R-09-007. Office of Resource Conservation and Recovery, Program Implementation and Information Division, Washington, D.C.

Appendix C
Storm Water Pollution Prevention Documentation

Litter Record
Winneshiek County Area Solid Waste Agency

2025		Litter		Weather Conditions			
				Precipitation - Inches		Temp	
Month	Day	Y/N	Explanation	Rain	Snow	°F	Conditions
January	1			0.00	0.00	20	Overcast
	2	Y		0.00	0.00	10	Overcast
	3	y		0.00	0.00	15	Sunny
	4	y		0.00	0.00	0	
	5			0.00	0.00	0	
	6	y		0.00	0.00	10	Sunny
	7	y		0.00	0.00	20	Overcast
	8	y		0.00	0.00	15	Sunny
	9	y		0.00	0.00	25	Sunny
	10	y		0.00	0.00	25	Overcast
	11			0.00	0.00	0	
	12			0.00	0.00	0	
	13	y		0.00	0.00	5	Sunny
	14	y		0.00	0.00	0	Sunny
	15	y		0.00	0.00	15	Sunny
	16	y		0.00	0.00	30	Sunny
	17	y		0.00	0.00	35	Overcast/windy
	18			0.00	0.00	0	
	19			0.00	0.00	0	
	20	y		0.00	0.00	-5	Overcast
	21	y		0.00	0.00	-15	Overcast
	22	y		0.00	0.00	20	Overcast
	23	y		0.00	0.50	25	Sunny
	24	y		0.00	0.00	25	Overcast
	25			0.00	0.00	0	
	26			0.00	0.00	0	
	27	y		0.00	0.00	40	Sunny/Windy
	28	y		0.00	0.00	45	Sunny/Windy40+
	29	y		0.00	0.00	40	Sunny
	30	y		0.00	0.00	50	Sunny
	31	y		0.00	0.00	45	Sunny

Litter Record
Winneshiek County Area Solid Waste Agency

2025		Litter		Weather Conditions			
				Precipitation - Inches		Temp	
Month	Day	Y/N	Explanation	Rain	Snow	°F	Conditions
February	1			0.00	0.00	0	
	2			0.00	0.00	0	
	3	y		0.00	0.00	40	Overcast
	4	y		0.00	0.00	25	Sunny
	5	y		0.00	0.00	25	Overcast
	6	y		0.00	0.00	30	Sunny
	7	y		0.00	0.00	25	Sunny
	8			0.00	0.00	0	
	9			0.00	0.00	0	
	10	y		0.00	0.00	25	Sunny
	11	y		0.00	0.00	20	Sunny
	12	y		0.00	1.00	10	Overcvast
	13	y		0.00	0.00	0	Sunny
	14	y		0.00	0.00	15	Sunny
	15			0.00	0.00	0	
	16			0.00	0.00	0	
	17	y		0.00	0.00	-10	Sunny
	18	y		0.00	0.00	-15	Sunny
	19	y		0.00	0.00	-10	Sunny
	20	y		0.00	0.00	-10	Sunny
	21	y		0.00	0.00	-5	Sunny
	22			0.00	0.00	0	
	23			0.00	0.00	0	
	24	y		0.00	0.00	40	Sunny
	25	y		0.00	0.00	45	Sunny
	26	y		0.00	0.00	50	Sunny
	27	y		0.00	0.00	50	Sunny
	28	y		0.00	0.00	55	Windy/Closed early
Leap Year	29			0.00	0.00	0	

Litter Record
Winneshiek County Area Solid Waste Agency

2025		Litter		Weather Conditions			
				Precipitation - Inches		Temp	
Month	Day	Y/N	Explanation	Rain	Snow	°F	Conditions
March	1			0.00	0.00	0	
	2			0.00	0.00	0	
	3	y		0.00	0.00	60	Overcast
	4	y		0.00	0.00	50	Overcast
	5	y		2.00	1.00	25	Windy 45-50mph open only8 - 9:30
	6	y		0.00	0.00	45	Sunny
	7	y		0.00	0.00	35	Overcast
	8			0.00	0.00	0	
	9			0.00	0.00	0	
	10	y		0.00	0.00	65	Sunny
	11	y		0.00	0.00	55	Sunny
	12	y		0.00	0.00	55	Sunny
	13	y		0.00	0.00	65	Sunny
	14	y		0.00	0.00	70	Sunny/windy
	15			0.00	0.00	0	
	16			0.00	0.00	0	
	17	y		0.00	0.00	60	Sunny/Windy
	18	y		0.00	0.00	55	Overcast/wind
	19	y		1.00	1.00	30	Windy/rain/snow
	20	y		0.00	0.00	35	Sunny
	21	y		0.00	0.00	40	Sunny
	22			0.00	0.00	0	
	23			0.00	0.00	0	
	24	y		0.00	0.00	35	Windy
	25	y		0.00	0.00	40	Sunny
	26	y		0.00	0.00	45	Sunny
	27	y		0.00	0.00	65	Sunny
	28	y		0.00	0.00	75	Sunny/Windy
	29			0.00	0.00	0	
	30			0.50	0.00	0	
	31	y		0.00	0.00	40	Sunny

Litter Record
Winneshiek County Area Solid Waste Agency

2025		Litter		Weather Conditions			
				Precipitation - Inches		Temp	
Month	Day	Y/N	Explanation	Rain	Snow	°F	Conditions
April	1	y		0.00	0.00	35	Overcast
	2	y		0.00	0.00	35	Overcast
	3	y		0.00	0.00	35	Overcast
	4	y		0.00	0.00	40	Overcast
	5			0.00	0.00	0	
	6			0.00	0.00	0	
	7	y		0.00	0.00	40	Sunny
	8	y		0.00	0.00	45	Sunny
	9	y		0.00	0.00	55	Sunny
	10	y		0.00	0.00	55	Overcast
	11	y		0.00	0.00	50	Sunny
	12			0.00	0.00	0	
	13			0.00	0.00	0	
	14	y		0.00	0.00	60	Sunny/Windy
	15	y		0.00	0.00	60	Sunny/Windy
	16	y		0.00	0.00	65	Sunny/Windy
	17	y		0.00	0.00	60	Windy
	18			1.50	0.00	0	
	19			0.00	0.00	0	
	20			1.00	0.00	0	
	21	y		1.50	0.00	50	Overcast
	22	y		1.00	0.00	65	Sunny
	23	y		0.50	0.00	65	Sunny
	24	y		0.50	0.00	60	Overcast
	25	y		1.00	0.00	50	Overcast
	26			0.00	0.00	0	
	27			0.00	0.00	0	
	28	y		0.00	0.00	65	Sunny
	29	y		0.00	0.00	70	Sunny
	30	y		0.00	0.00	75	Sunny

Litter Record
Winneshiek County Area Solid Waste Agency

2025		Litter		Weather Conditions			
				Precipitation - Inches		Temp	
Month	Day	Y/N	Explanation	Rain	Snow	°F	Conditions
May	1	y		0.50	0.00	60	Overcast
	2	y		0.00	0.00	65	Overcast
	3			0.00	0.00	0	
	4			0.00	0.00	0	
	5	y		0.00	0.00	70	Sunny
	6	y		0.00	0.00	65	Sunny
	7	y		0.00	0.00	65	Sunny
	8	y		0.00	0.00	75	Sunny
	9	y		0.00	0.00	70	Sunny
	10			0.00	0.00	0	
	11			0.00	0.00	0	
	12	y		0.00	0.00	80	Sunny
	13	y		0.00	0.00	80	Sunny
	14	y		0.00	0.00	85	Sunny
	15	y		0.00	0.00	80	Sunyy 35+mphwinds
	16	y		0.00	0.00	80	Sunny
	17			0.00	0.00	0	
	18			0.00	0.00	0	
	19	y		0.00	0.00	55	Overcast windy E
	20	y		1.00	0.00	50	Rain E-wind35mph
	21	y		3.50	0.00	50	Rain overcast
	22	y		0.00	0.00	60	Sunny
	23	y		0.00	0.00	65	Sunny
	24			0.00	0.00	0	
	25			0.00	0.00	0	
	26			0.00	0.00	0	
	27	y		0.00	0.00	65	Overcast
	28	y		0.00	0.00	60	Overcast
	29	y		0.20	0.00	65	Overcast
	30	y		0.00	0.00	65	Overcast
	31			0.00	0.00	0	

Litter Record
Winneshiek County Area Solid Waste Agency

2025		Litter		Weather Conditions			
				Precipitation - Inches		Temp	
Month	Day	Y/N	Explanation	Rain	Snow	°F	Conditions
June	1			0.00	0.00	0	
	2	y		0.00	0.00	80	Sunny
	3	y		0.90	0.00	85	Overcast/Rain
	4	y		0.00	0.00	75	Sunny/Hazy
	5	y		0.00	0.00	80	Sunny
	6	y		0.00	0.00	80	Overcast
	7			0.00	0.00	0	
	8			0.00	0.00	0	
	9	y		0.00	0.00	80	Sunny
	10	y		0.00	0.00	80	Sunny
	11	y		0.00	0.00	85	Sunny
	12	y		1.00	0.00	75	Rain
	13	y		0.00	0.00	80	Sunny
	14			0.00	0.00	0	
	15			1.00	0.00	0	
	16	y		0.30	0.00	85	Overcast
	17	y		0.20	0.00	85	Sunny
	18	y		0.20	0.00	80	Overcast/rain
	19	y		0.00	0.00	90	sunny
	20	y		0.30	0.00	80	overcast/rain
	21			0.00	0.00	0	
	22			0.00	0.00	0	
	23	y		0.00	0.00	85	Overcast
	24	y		0.00	0.00	85	Overcast
	25	y		0.30	0.00	90	Sunny
	26	y		0.00	0.00	90	Sunny
	27	y		0.00	0.00	90	Sunny
	28			0.00	0.00	0	
	29			0.20	0.00	0	
	30	y		0.00	0.00	90	Sunny

Litter Record
Winneshiek County Area Solid Waste Agency

2025		Litter		Weather Conditions			
				Precipitation - Inches		Temp	
Month	Day	Y/N	Explanation	Rain	Snow	°F	Conditions
July	1	y		0.00	0.00	90	Sunny
	2	y		0.00	0.00	90	Sunny
	3	y		0.00	0.00	90	Sunny
	4			0.00	0.00	0	
	5			0.50	0.00	0	
	6			0.00	0.00	0	
	7	y		0.00	0.00	90	Sunny
	8	y		0.00	0.00	90	Sunny
	9	y		0.00	0.00	95	Sunny
	10	y		0.00	0.00	85	overcast
	11	y		0.70	0.00	85	overcast/rain
	12			0.00	0.00	0	
	13			0.00	0.00	0	
	14	y		0.00	0.00	80	Sunny
	15	y		0.00	0.00	85	Sunny
	16	y		0.60	0.00	80	Overcast
	17	y		0.00	0.00	75	Overcast
	18	y		0.00	0.00	75	Overcast
	19			1.00	0.00	0	
	20			0.00	0.00	0	
	21	y		0.00	0.00	80	Sunny
	22	y		0.00	0.00	90	Sunny
	23	y		1.00	0.00	85	Overcast/Sun
	24	y		0.20	0.00	90	Sunny
	25	y		0.00	0.00	90	Sunny
	26			0.00	0.00	0	
	27			0.00	0.00	0	
	28	y		0.70	0.00	90	Sunny
	29	y		0.30	0.00	70	Sunny
	30	y		0.60	0.00	75	Overcast
	31	y		0.00	0.00	75	Overcast

Litter Record
Winneshiek County Area Solid Waste Agency

2025		Litter		Weather Conditions			
				Precipitation - Inches		Temp	
Month	Day	Y/N	Explanation	Rain	Snow	°F	Conditions
August	1	y		0.00	0.00	80	Sunny
	2			0.00	0.00	0	
	3			0.00	0.00	0	
	4	y		0.00	0.00	80	Sunny
	5	y		0.00	0.00	85	Sunny
	6	y		0.00	0.00	85	Sunny
	7	y		0.00	0.00	85	Sunny
	8	y		0.00	0.00	95	Sunny
	9			0.00	0.00	0	
	10			0.75	0.00	0	
	11	y		0.00	0.00	80	Sunny
	12	y		0.00	0.00	85	Sunny
	13	y		0.00	0.00	80	Sunny
	14	y		0.00	0.00	85	Sunny
	15	y		0.00	0.00	95	Sunny
	16			0.50	0.00	0	
	17			0.00	0.00	0	
	18	y		4.50	0.00	80	Rain
	19	y		0.00	0.00	85	Sunny
	20	y		0.00	0.00	80	Sunny
	21	y		0.00	0.00	85	Sunny
	22	y		0.00	0.00	85	Sunny
	23			0.00	0.00	0	
	24			0.00	0.00	0	
	25	y		0.00	0.00	75	Sunny
	26	y		0.00	0.00	80	Sunny
	27	y		0.00	0.00	75	Sunny
	28	y		0.00	0.00	85	Sunny
	29			0.00	0.00	0	
	30			0.00	0.00	0	
	31			0.00	0.00	0	

Litter Record
Winneshiek County Area Solid Waste Agency

2025		Litter		Weather Conditions			
				Precipitation - Inches		Temp	
Month	Day	Y/N	Explanation	Rain	Snow	°F	Conditions
September	1	y		0.00	0.00	75	Sunny
	2	y		0.00	0.00	75	Sunny
	3	y		0.00	0.00	70	Sunny
	4	y		0.00	0.00	65	Sunny
	5	y		0.00	0.00	70	Sunny
	6			0.00	0.00	0	
	7			0.00	0.00	0	
	8	y		0.00	0.00	70	Sunny
	9	y		0.00	0.00	70	Sunny
	10	y		1.00	0.00	75	Sunny
	11	y		0.00	0.00	80	Sunny
	12	y		0.00	0.00	85	Sunny/windy
	13			0.00	0.00	0	
	14			0.00	0.00	0	
	15	y		1.00	0.00	90	Sunny/rain
	16	y		0.00	0.00	80	Sunny
	17	y		1.50	0.00	85	Sunny
	18	y		0.00	0.00	80	Sunny
	19	y		0.00	0.00	85	Sunny
	20			0.20	0.00	0	
	21			0.00	0.00	0	
	22	y		0.00	0.00	85	Overcast
	23	y		0.50	0.00	80	Sunny
	24	y		0.00	0.00	85	Sunny
	25	y		0.00	0.00	85	Sunny
	26	y		0.00	0.00	80	Sunny
	27			0.00	0.00	0	
	28			0.00	0.00	0	
	29	y		0.00	0.00	80	Sunny
	30	y		0.00	0.00	85	Sunny

Litter Record
Winneshiek County Area Solid Waste Agency

2025		Litter		Weather Conditions			
				Precipitation - Inches		Temp	
Month	Day	Y/N	Explanation	Rain	Snow	°F	Conditions
October	1	y		0.00	0.00	85	Sunny
	2	y		0.00	0.00	90	Sunny
	3	y		0.00	0.00	85	Sunny
	4			0.00	0.00	0	
	5			0.00	0.00	0	
	6	y		0.60	0.00	55	Overcast
	7	y		0.00	0.00	60	Overcast
	8	y		0.00	0.00	65	Sunny
	9	y		0.00	0.00	65	Sunny
	10	y		0.00	0.00	70	Sunny
	11			0.00	0.00	0	
	12			0.00	0.00	0	
	13	y		0.00	0.00	70	Sunny
	14	y		0.00	0.00	55	Overcast
	15	y		0.50	0.00	60	Rain
	16	y		0.50	0.00	70	Overcast
	17	y		0.00	0.00	75	Sunny
	18			0.00	0.00	0	
	19			0.00	0.00	0	
	20	y		0.00	0.00	60	Overcast 20-30mphwinds
	21	y		0.10	0.00	55	Overcast 40mphwinds
	22	y		0.00	0.00	55	Overcast 20-30mphwinds
	23	y		0.00	0.00	50	Sunny
	24	y		0.00	0.00	50	Sunny
	25			0.00	0.00	0	
	26			0.00	0.00	0	
	27	y		0.00	0.00	55	Sunny
	28	y		0.00	0.00	60	Sunny
	29	y		0.25	0.00	55	Overcast
	30	y		0.00	0.00	55	Sunny
	31	y		0.00	0.00	60	

Litter Record
Winneshiek County Area Solid Waste Agency

2025		Litter		Weather Conditions			
				Precipitation - Inches		Temp	
Month	Day	Y/N	Explanation	Rain	Snow	°F	Conditions
November	1			0.00	0.00	0	
	2			0.00	0.00	0	
	3	y		0.00	0.00	65	Sunny
	4	y		0.00	0.00	60	Sunny
	5	y		0.00	0.00	60	overcast wind 35-40nw
	6	y		0.00	0.00	60	Overcast
	7	y		0.00	0.00	55	Sunny
	8			0.00	0.00	0	
	9			0.00	0.00	0	
	10	y		0.00	0.00	35	Sunny
	11			0.00	0.00	0	
	12	y		0.00	0.00	50	Windy25-35nw
	13	y		0.00	0.00	60	Sunny
	14	y		0.00	0.00	65	Sunny
	15			0.00	0.00	0	
	16			0.00	0.00	0	
	17	y		0.00	0.00	45	Overcast
	18	y		0.30	0.00	55	Overcast
	19	y		0.00	0.00	50	Overcast
	20	y		0.00	0.00	45	Overcast
	21	y		0.00	0.00	55	Sunny
	22			0.00	0.00	0	
	23			0.00	0.00	0	
	24	y		0.00	0.00	50	Overcast
	25	y		0.00	0.00	45	Overcast
	26	y		0.00	0.00	25	Windy 45-50mph
	27			0.00	0.00	0	
	28			0.00	0.00	0	
	29			0.00	0.00	0	
	30			0.00	0.00	0	

Litter Record
Winneshiek County Area Solid Waste Agency

2025		Litter		Weather Conditions			
				Precipitation - Inches		Temp	
Month	Day	Y/N	Explanation	Rain	Snow	°F	Conditions
December	1	y		0.00	7.00	20	Overcast
	2	y		0.00	0.00	30	Overcast
	3	y		0.00	0.00	20	Overcast
	4	y		0.00	0.00	0	Overcast
	5	y		0.00	0.00	25	Overcast
	6			0.00	4.00	0	
	7			0.00	0.00	0	
	8	y		0.00	0.00	15	Sunny
	9	y		0.00	2.00	25	Overcast
	10	y		0.00	0.00	15	Overcast
	11	y		0.00	0.00	10	Sunny
	12	y		0.00	0.00	10	Overcast
	13			0.00	0.00	0	
	14			0.00	0.00	0	
	15	y		0.00	0.00	20	Overcast
	16	y		0.00	0.00	25	Overcast
	17	y		0.00	0.00	30	sunny
	18	y		0.10	0.00	40	Sunny
	19	y		0.00	0.00	15	Sunny
	20			0.00	0.00	0	
	21			0.00	0.00	0	
	22	y		0.00	0.00	35	Sunny
	23	y		0.00	0.00	35	Sunny
	24			0.00	0.00	0	
	25			0.00	0.00	0	
	26	y		0.20	0.00	40	Sunny
	27			0.00	0.00	0	
	28			0.00	0.00	0	
	29	y		0.00	2.00	15	Overcast
	30	y		0.00	0.00	15	overcast
	31	y		0.00	0.00	20	Overcast

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	1
Completed By	TJ	Date	01/06/25

SHOP		
	Status	Potential Concerns
Used Oil Burner	ok	Leaks
Used Oil Tank	ok	Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks		
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	2
Completed By	TJ	Date	01/13/25

SHOP		
	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage		Leaks and Spills
Remarks	Rebuilding shop	
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	3
Completed By	TJ	Date	01/20/25

SHOP		
	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage		Leaks and Spills
Remarks	No shop	
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	4
Completed By	TJ	Date	01/27/25

SHOP		
	Status	Potential Concerns
Used Oil Burner	ok	Leaks
Used Oil Tank	ok	Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks		
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	5
Completed By	TJ	Date	02/03/25

SHOP		
	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage		Leaks and Spills
Remarks	Rebuilding shop	
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	6
Completed By	TJ	Date	02/10/25

SHOP		
	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage		Leaks and Spills
Remarks	Rebuilding	
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	7
Completed By	TJ	Date	02/17/25

SHOP

	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage		Leaks and Spills
Remarks	Rebuilding shop	
Action Taken		

STORM WATER CULVERTS

	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION

	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS

	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	8
Completed By	TJ	Date	02/24/25

SHOP

	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage		Leaks and Spills
Remarks	Shop Rebuild	
Action Taken		

STORM WATER CULVERTS

	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION

	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS

	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	9
Completed By	TJ	Date	03/03/25

SHOP

	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage		Leaks and Spills
Remarks	Rebuilding	
Action Taken		

STORM WATER CULVERTS

	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION

	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS

	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	10
Completed By	TJ	Date	03/10/25

SHOP

	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage		Leaks and Spills
Remarks	Rebuilding Shop	
Action Taken		

STORM WATER CULVERTS

	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION

	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS

	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	11
Completed By	TJ	Date	03/17/25

SHOP		
	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage		Leaks and Spills
Remarks	Rebuilding shop	
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	12
Completed By	TJ	Date	03/24/25

SHOP		
	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage		Leaks and Spills
Remarks	Rebuilding shop	
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	13
Completed By	TJ	Date	03/31/25

SHOP		
	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage		Leaks and Spills
Remarks		Shop rebuild
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	14
Completed By	TJ	Date	04/07/25

SHOP		
	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage		Leaks and Spills
Remarks		Rebuilding shop
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	15
Completed By	TJ	Date	04/14/25

SHOP

	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage		Leaks and Spills
Remarks	Shop rebuilding	
Action Taken		

STORM WATER CULVERTS

	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION

	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS

	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	16
Completed By	TJ	Date	04/21/25

SHOP

	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage		Leaks and Spills
Remarks	Rebuilding the shop	
Action Taken		

STORM WATER CULVERTS

	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION

	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS

	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	17
Completed By	TJ	Date	04/28/25

SHOP

	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage		Leaks and Spills
Remarks	Rebuilding shop	
Action Taken		

STORM WATER CULVERTS

	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION

	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS

	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	18
Completed By	TJ	Date	05/05/25

SHOP

	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage		Leaks and Spills
Remarks	Shop rebuild	
Action Taken		

STORM WATER CULVERTS

	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION

	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS

	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	19
Completed By	TJ	Date	05/12/25

SHOP		
	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage		Leaks and Spills
Remarks		Shop rebuild
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	20
Completed By	TJ	Date	05/19/25

SHOP		
	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage		Leaks and Spills
Remarks		No shop
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	21
Completed By	TJ	Date	05/26/25

SHOP

	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage		Leaks and Spills
Remarks	Rebuilding shop	
Action Taken		

STORM WATER CULVERTS

	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION

	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS

	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	22
Completed By	TJ	Date	06/02/25

SHOP

	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage		Leaks and Spills
Remarks	Shop rebuild	
Action Taken		

STORM WATER CULVERTS

	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION

	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS

	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	23
Completed By	TJ	Date	06/09/25

SHOP		
	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage		Leaks and Spills
Remarks	shop rebuild	
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	24
Completed By	TJ	Date	06/16/25

SHOP		
	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage		Leaks and Spills
Remarks	Shop rebuilding	
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	25
Completed By	TJ	Date	06/23/25

SHOP		
	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage		Leaks and Spills
Remarks	Shop rebuilding	
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	26
Completed By	TJ	Date	06/30/25

SHOP		
	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks	Just got cabinet for lubs	
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	27
Completed By	TJ	Date	07/07/25

SHOP		
	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks		
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	28
Completed By	TJ	Date	07/14/25

SHOP		
	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks		
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	29
Completed By	TJ	Date	07/21/25

SHOP

	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks		
Action Taken		

STORM WATER CULVERTS

	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION

	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS

	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	30
Completed By	TJ	Date	07/28/25

SHOP

	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks		
Action Taken		

STORM WATER CULVERTS

	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION

	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS

	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	31
Completed By	TJ	Date	08/04/25

SHOP		
	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks		
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	32
Completed By	TJ	Date	08/11/25

SHOP		
	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks		
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	33
Completed By	TJ	Date	08/18/25

SHOP		
	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks		
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	34
Completed By	TJ	Date	08/25/25

SHOP		
	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks		
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	35
Completed By	TJ	Date	09/01/25

SHOP

	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks		
Action Taken		

STORM WATER CULVERTS

	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION

	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS

	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	36
Completed By	TJ	Date	09/08/25

SHOP

	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks		
Action Taken		

STORM WATER CULVERTS

	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION

	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS

	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	37
Completed By	TJ	Date	09/15/25

SHOP		
	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks		
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	38
Completed By	TJ	Date	09/22/25

SHOP		
	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks		
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	39
Completed By	TJ	Date	09/29/25

SHOP		
	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks		
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	40
Completed By	TJ	Date	10/06/25

SHOP		
	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks		
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	41
Completed By	TJ	Date	10/13/25

SHOP		
	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks		
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	42
Completed By	TJ	Date	10/20/25

SHOP		
	Status	Potential Concerns
Used Oil Burner		Leaks
Used Oil Tank		Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks		
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	43
Completed By	TJ	Date	10/27/25

SHOP		
	Status	Potential Concerns
Used Oil Burner	ok	Leaks
Used Oil Tank	ok	Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks	Just installed	
Action Taken	Oil burner Wednesday	

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	44
Completed By	TJ	Date	11/03/25

SHOP		
	Status	Potential Concerns
Used Oil Burner	ok	Leaks
Used Oil Tank	ok	Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks		
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	45
Completed By	TJ	Date	11/10/25

SHOP		
	Status	Potential Concerns
Used Oil Burner	ok	Leaks
Used Oil Tank	ok	Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks		
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	46
Completed By	TJ	Date	11/17/25

SHOP		
	Status	Potential Concerns
Used Oil Burner	ok	Leaks
Used Oil Tank	ok	Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks		
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	47
Completed By	TJ	Date	11/24/25

SHOP

	Status	Potential Concerns
Used Oil Burner	ok	Leaks
Used Oil Tank	ok	Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks		
Action Taken		

STORM WATER CULVERTS

	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION

	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS

	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	48
Completed By	TJ	Date	12/01/25

SHOP

	Status	Potential Concerns
Used Oil Burner	ok	Leaks
Used Oil Tank	ok	Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks	Shop burnt down	
Action Taken		

STORM WATER CULVERTS

	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION

	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS

	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	49
Completed By	TJ	Date	12/08/25

SHOP		
	Status	Potential Concerns
Used Oil Burner	ok	Leaks
Used Oil Tank	ok	Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks		No shop
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	50
Completed By	TJ	Date	12/15/25

SHOP		
	Status	Potential Concerns
Used Oil Burner	ok	Leaks
Used Oil Tank	ok	Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks		no shop
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	51
Completed By	TJ	Date	12/22/25

SHOP		
	Status	Potential Concerns
Used Oil Burner	ok	Leaks
Used Oil Tank	ok	Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks		no shop
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	52
Completed By	TJ	Date	12/29/25

SHOP		
	Status	Potential Concerns
Used Oil Burner	ok	Leaks
Used Oil Tank	ok	Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks		no shop
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

Winneshiek County Landfill
Storm Water Pollution Prevention Plan
Weekly Inspection Checklist

Year	2025	Week	53
Completed By	TJ	Date	01/05/26

SHOP		
	Status	Potential Concerns
Used Oil Burner	ok	Leaks
Used Oil Tank	ok	Leaks
Old & Lubricant Storage	ok	Leaks and Spills
Remarks		
Action Taken		

STORM WATER CULVERTS		
	Status	Potential Concerns
C-01	ok	Blockages
C-02	ok	Blockages
C-03	ok	Blockages
C-04	ok	Blockages
C-05	ok	Blockages
C-06	ok	Blockages
C-07	ok	Blockages
C-08	ok	Blockages
C-09	ok	Blockages
Remarks		
Action Taken		

FUELING STATION		
	Status	Potential Concerns
Fueling Station	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

LEACHATE LOAD OUTS		
	Status	Potential Concerns
Leachate Load Out No.1	ok	Drain Blockage, Holes in Piping, Pump Operation
Remarks		
Action Taken		

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Nick Schrock
AECOM
501 Sycamore Street
Suite #222
Waterloo, Iowa 50703

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JOB DESCRIPTION

Winneshiek SWPPP Sampling

JOB NUMBER

310-307743-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

my EOL

Eurofins Cedar Falls

Job Notes

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Authorization



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Job ID: 310-307743-1 — Eurofins Cedar Falls

Job Narrative
310-307743-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 6/3/2025 3:50 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 10.4°C, 12.6°C and 13.5°C.

GC/MS Semi VOA
Method 8270E: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 310-456568. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: AECOM
Job ID: 310-307743-1
Project/Site: Winneshiek SWPPP Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-307743-1	SW-1 Grab	Ground Water	06/03/25 10:00	06/03/25 15:50
310-307743-2	SW-1 Comp	Ground Water	06/03/25 10:00	06/03/25 15:50
310-307743-3	SW-2 Grab	Groundwater	06/03/25 10:10	06/03/25 15:50
310-307743-4	SW-2 Comp	Ground Water	06/03/25 10:10	06/03/25 15:50
310-307743-5	SW-4 Grab	Ground Water	06/03/25 09:50	06/03/25 15:50
310-307743-6	SW-4 Comp	Ground Water	06/03/25 09:50	06/03/25 15:50

Client: AECOM
Project/Site: Winneshiek SWPPP Sampling

Job ID: 310-307743-1

Client Sample ID: SW-1 Grab

Date Collected: 06/03/25 10:00
Date Received: 06/03/25 15:50

Lab Sample ID: 310-307743-1

Matrix: Ground Water

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Alpha-Terpineol	<10.0		10.0		ug/L		06/16/25 15:55	1	V7YZ
Aniline	<10.0		10.0		ug/L		06/16/25 15:55	1	V7YZ
Benzoic acid	<100		100		ug/L		06/16/25 15:55	1	V7YZ
Naphthalene	<10.0		10.0		ug/L		06/16/25 15:55	1	V7YZ
p-Cresol	<10.0		10.0		ug/L		06/16/25 15:55	1	V7YZ
Phenol	<10.0		10.0		ug/L		06/16/25 15:55	1	V7YZ
Pyridine	<10.0		10.0		ug/L		06/16/25 15:55	1	V7YZ

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Analyzed*	*Dil Fac*	*Analyst*
2-Fluorophenol (Surr)	*48*		*21 - 110*	*06/16/25 15:55*	*1*	*V7YZ*
Phenol-d5 (Surr)	*45*		*21 - 110*	*06/16/25 15:55*	*1*	*V7YZ*
2,4,6-Tribromophenol (Surr)	*67*		*20 - 144*	*06/16/25 15:55*	*1*	*V7YZ*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Chloride	**22.8**		5.00		mg/L		06/10/25 16:05	5	QTZ5
Sulfate	**25.1**		5.00		mg/L		06/10/25 16:05	5	QTZ5

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Aluminum	<0.100		0.100		mg/L		06/06/25 15:04	1	ZRI4
Antimony	<0.100		0.100		mg/L		06/06/25 15:04	1	ZRI4
Arsenic	<0.0800		0.0800		mg/L		06/06/25 15:04	1	ZRI4
Barium	**0.105**		0.0100		mg/L		06/06/25 15:04	1	ZRI4
Beryllium	<0.0100		0.0100		mg/L		06/06/25 15:04	1	ZRI4
Cadmium	<0.0200		0.0200		mg/L		06/06/25 15:04	1	ZRI4
Calcium	**80.7**		1.00		mg/L		06/06/25 15:04	1	ZRI4
Chromium	<0.0200		0.0200		mg/L		06/06/25 15:04	1	ZRI4
Copper	<0.0200		0.0200		mg/L		06/06/25 15:04	1	ZRI4
Iron	<0.500		0.500		mg/L		06/06/25 15:04	1	ZRI4
Lead	<0.100		0.100		mg/L		06/06/25 15:04	1	ZRI4
Magnesium	**35.9**		1.00		mg/L		06/06/25 15:04	1	ZRI4
Nickel	<0.0500		0.0500		mg/L		06/06/25 15:04	1	ZRI4
Potassium	**2.85**		2.00		mg/L		06/09/25 12:03	1	ZRI4
Selenium	<0.100		0.100		mg/L		06/06/25 15:04	1	ZRI4
Silver	<0.0200		0.0200		mg/L		06/06/25 15:04	1	ZRI4
Sodium	**7.50**		2.00		mg/L		06/06/25 15:04	1	ZRI4
Zinc	<0.0400		0.0400		mg/L		06/06/25 15:04	1	ZRI4

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Magnesium	**32.9**		1.00		mg/L		06/11/25 12:48	1	ZRI4

Method: 245.2 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Mercury	<0.000200		0.000200		mg/L		06/06/25 16:25	1	QTZ5

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Total hardness as CaCO3	**349**		4.12		mg/L		06/06/25 15:04	1	HE7K

Client Sample ID: SW-1 Grab
Lab Sample ID: 310-307743-1

Date Collected: 06/03/25 10:00
Matrix: Ground Water
Date Received: 06/03/25 15:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
HEM (Oil & Grease) (1664A)	<5.0		5.0		mg/L		06/09/25 14:00	1	MDU9
Turbidity (180.1)	**2.7**		1.0		NTU		06/03/25 16:59	1	WK2X
Cyanide, Total (335.4)	<0.0100		0.0100		mg/L		06/06/25 21:13	1	ZJX4
Ammonia (350.1)	<0.500		0.500		mg/L		06/05/25 21:53	1	ZJX4
Nitrate Nitrite as N (353.2)	**17.2**		1.00		mg/L		06/10/25 03:59	10	ZJX4
Total Phosphorus as P (365.1)	**0.108**		0.100		mg/L		06/10/25 21:33	1	ZJX4
Total Suspended Solids (I-3765-85)	<5.0		5.0		mg/L		06/04/25 14:07	1	E6KR
Alkalinity, Total (As CaCO3) (SM 2320B)	**294**		5.00		mg/L		06/05/25 09:00	1	WZC8
Alkalinity, Bicarbonate (As CaCO3) (SM 2320B)	**294**		5.00		mg/L		06/05/25 09:00	1	WZC8
Phenolphthalein Alkalinity as CaCO3 (SM 2320B)	<5.00		5.00		mg/L		06/05/25 09:00	1	WZC8
Total Dissolved Solids (SM 2540C)	**426**		50.0		mg/L		06/04/25 12:08	1	MDU9
Biochemical Oxygen Demand (SM 5210B)	<3.00		3.00		mg/L		06/04/25 06:31	1	W9YR
Chemical Oxygen Demand (SM 5220D)	**28.8**		25.0		mg/L		06/06/25 12:16	5	ENB7
Total Organic Carbon (SM 5310C)	**4.62**		1.00		mg/L		06/10/25 02:48	1	HE7K

Analyte	Result	Qualifier	RL	RL	Unit	D	Analyzed	Dil Fac	Analyst
pH (SM 4500 H+ B)	**7.9**	**HF**	1.0		SU		06/03/25 17:26	1	MDU9

Client Sample ID: SW-1 Comp
Lab Sample ID: 310-307743-2

Date Collected: 06/03/25 10:00
Matrix: Ground Water
Date Received: 06/03/25 15:50

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Alpha-Terpineol	<10.0		10.0		ug/L		06/16/25 16:21	1	V7YZ
Aniline	<10.0		10.0		ug/L		06/16/25 16:21	1	V7YZ
Benzoic acid	<100		100		ug/L		06/16/25 16:21	1	V7YZ
Naphthalene	<10.0		10.0		ug/L		06/16/25 16:21	1	V7YZ
p-Cresol	<10.0		10.0		ug/L		06/16/25 16:21	1	V7YZ
Phenol	<10.0		10.0		ug/L		06/16/25 16:21	1	V7YZ
Pyridine	<10.0		10.0		ug/L		06/16/25 16:21	1	V7YZ

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Analyzed*	*Dil Fac*	*Analyst*
2-Fluorophenol (Surr)	*45*		*21 - 110*	*06/16/25 16:21*	*1*	*V7YZ*
Phenol-d5 (Surr)	*42*		*21 - 110*	*06/16/25 16:21*	*1*	*V7YZ*
2,4,6-Tribromophenol (Surr)	*57*		*20 - 144*	*06/16/25 16:21*	*1*	*V7YZ*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Chloride	**23.1**		5.00		mg/L		06/11/25 12:42	5	QTZ5
Sulfate	**24.8**		5.00		mg/L		06/11/25 12:42	5	QTZ5

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Aluminum	<0.100		0.100		mg/L		06/06/25 15:06	1	ZRI4
Antimony	<0.100		0.100		mg/L		06/06/25 15:06	1	ZRI4
Arsenic	<0.0800		0.0800		mg/L		06/06/25 15:06	1	ZRI4
Barium	**0.108**		0.0100		mg/L		06/06/25 15:06	1	ZRI4

Client Sample ID: SW-1 Comp

Date Collected: 06/03/25 10:00
Date Received: 06/03/25 15:50

Lab Sample ID: 310-307743-2

Matrix: Ground Water

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Beryllium	<0.0100		0.0100		mg/L		06/06/25 15:06	1	ZRI4
Cadmium	<0.0200		0.0200		mg/L		06/06/25 15:06	1	ZRI4
Calcium	**82.8**		1.00		mg/L		06/06/25 15:06	1	ZRI4
Chromium	<0.0200		0.0200		mg/L		06/06/25 15:06	1	ZRI4
Copper	<0.0200		0.0200		mg/L		06/06/25 15:06	1	ZRI4
Iron	<0.500		0.500		mg/L		06/06/25 15:06	1	ZRI4
Lead	<0.100		0.100		mg/L		06/06/25 15:06	1	ZRI4
Magnesium	**36.9**		1.00		mg/L		06/06/25 15:06	1	ZRI4
Nickel	<0.0500		0.0500		mg/L		06/06/25 15:06	1	ZRI4
Potassium	**2.86**		2.00		mg/L		06/09/25 12:04	1	ZRI4
Selenium	<0.100		0.100		mg/L		06/06/25 15:06	1	ZRI4
Silver	<0.0200		0.0200		mg/L		06/06/25 15:06	1	ZRI4
Sodium	**7.77**		2.00		mg/L		06/06/25 15:06	1	ZRI4
Zinc	<0.0400		0.0400		mg/L		06/06/25 15:06	1	ZRI4

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Magnesium	**33.0**		1.00		mg/L		06/11/25 12:54	1	ZRI4

Method: 245.2 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Mercury	<0.000200		0.000200		mg/L		06/06/25 16:27	1	QTZ5

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Total hardness as CaCO3	**359**		4.12		mg/L		06/06/25 15:06	1	HE7K

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
HEM (Oil & Grease) (1664A)	<5.0	F1	5.0		mg/L		06/09/25 14:00	1	MDU9
Turbidity (180.1)	**1.8**		1.0		NTU		06/03/25 17:01	1	WK2X
Cyanide, Total (335.4)	<0.0100		0.0100		mg/L		06/06/25 21:16	1	ZJX4
Ammonia (350.1)	<0.500		0.500		mg/L		06/05/25 21:53	1	ZJX4
Nitrate Nitrite as N (353.2)	**17.4**		1.00		mg/L		06/10/25 04:01	10	ZJX4
Total Phosphorus as P (365.1)	<0.100		0.100		mg/L		06/10/25 21:32	1	ZJX4
Total Suspended Solids (I-3765-85)	<5.0		5.0		mg/L		06/04/25 14:07	1	E6KR
Alkalinity, Total (As CaCO3) (SM 2320B)	**291**		5.00		mg/L		06/05/25 09:00	1	WZC8
Alkalinity, Bicarbonate (As CaCO3) (SM 2320B)	**291**		5.00		mg/L		06/05/25 09:00	1	WZC8
Phenolphthalein Alkalinity as CaCO3 (SM 2320B)	<5.00		5.00		mg/L		06/05/25 09:00	1	WZC8
Total Dissolved Solids (SM 2540C)	**408**		50.0		mg/L		06/04/25 12:08	1	MDU9
Biochemical Oxygen Demand (SM 5210B)	<3.00		3.00		mg/L		06/04/25 06:35	1	W9YR
Chemical Oxygen Demand (SM 5220D)	**33.8**		25.0		mg/L		06/06/25 12:16	5	ENB7
Total Organic Carbon (SM 5310C)	**4.58**		1.00		mg/L		06/10/25 03:24	1	HE7K

Analyte	Result	Qualifier	RL	RL	Unit	D	Analyzed	Dil Fac	Analyst
pH (SM 4500 H+ B)	**8.0**	**HF**	1.0		SU		06/03/25 17:03	1	MDU9

Client Sample ID: SW-2 Grab
Lab Sample ID: 310-307743-3

Date Collected: 06/03/25 10:10
Matrix: Groundwater

Date Received: 06/03/25 15:50

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Alpha-Terpineol	<9.80		9.80		ug/L		06/16/25 16:47	1	V7YZ
Aniline	<9.80		9.80		ug/L		06/16/25 16:47	1	V7YZ
Benzoic acid	<98.0		98.0		ug/L		06/16/25 16:47	1	V7YZ
Naphthalene	<9.80		9.80		ug/L		06/16/25 16:47	1	V7YZ
p-Cresol	<9.80		9.80		ug/L		06/16/25 16:47	1	V7YZ
Phenol	<9.80		9.80		ug/L		06/16/25 16:47	1	V7YZ
Pyridine	<9.80		9.80		ug/L		06/16/25 16:47	1	V7YZ

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Analyzed*	*Dil Fac*	*Analyst*
2-Fluorophenol (Surr)	*59*		*21 - 110*	*06/16/25 16:47*	*1*	*V7YZ*
Phenol-d5 (Surr)	*57*		*21 - 110*	*06/16/25 16:47*	*1*	*V7YZ*
2,4,6-Tribromophenol (Surr)	*78*		*20 - 144*	*06/16/25 16:47*	*1*	*V7YZ*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Chloride	**18.9**		5.00		mg/L		06/11/25 08:53	5	QTZ5
Sulfate	**18.1**		5.00		mg/L		06/11/25 08:53	5	QTZ5

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Aluminum	**0.340**		0.100		mg/L		06/06/25 15:07	1	ZRI4
Antimony	<0.100		0.100		mg/L		06/06/25 15:07	1	ZRI4
Arsenic	<0.0800		0.0800		mg/L		06/06/25 15:07	1	ZRI4
Barium	**0.103**		0.0100		mg/L		06/06/25 15:07	1	ZRI4
Beryllium	<0.0100		0.0100		mg/L		06/06/25 15:07	1	ZRI4
Cadmium	<0.0200		0.0200		mg/L		06/06/25 15:07	1	ZRI4
Calcium	**77.7**		1.00		mg/L		06/06/25 15:07	1	ZRI4
Chromium	<0.0200		0.0200		mg/L		06/06/25 15:07	1	ZRI4
Copper	<0.0200		0.0200		mg/L		06/06/25 15:07	1	ZRI4
Iron	<0.500		0.500		mg/L		06/06/25 15:07	1	ZRI4
Lead	<0.100		0.100		mg/L		06/06/25 15:07	1	ZRI4
Magnesium	**29.8**		1.00		mg/L		06/06/25 15:07	1	ZRI4
Nickel	<0.0500		0.0500		mg/L		06/06/25 15:07	1	ZRI4
Potassium	<2.00		2.00		mg/L		06/09/25 12:05	1	ZRI4
Selenium	<0.100		0.100		mg/L		06/06/25 15:07	1	ZRI4
Silver	<0.0200		0.0200		mg/L		06/06/25 15:07	1	ZRI4
Sodium	**6.74**		2.00		mg/L		06/06/25 15:07	1	ZRI4
Zinc	<0.0400		0.0400		mg/L		06/06/25 15:07	1	ZRI4

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Magnesium	**27.8**		1.00		mg/L		06/11/25 12:56	1	ZRI4

Method: 245.2 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Mercury	<0.000200		0.000200		mg/L		06/06/25 16:29	1	QTZ5

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Total hardness as CaCO3	**317**		4.12		mg/L		06/06/25 15:07	1	HE7K

Client Sample ID: SW-2 Grab
Lab Sample ID: 310-307743-3

Date Collected: 06/03/25 10:10
Matrix: Groundwater
Date Received: 06/03/25 15:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
HEM (Oil & Grease) (1664A)	<5.0		5.0		mg/L		06/09/25 14:00	1	MDU9
Turbidity (180.1)	**37**		10		NTU		06/04/25 15:26	10	QTZ5
Cyanide, Total (335.4)	<0.0100		0.0100		mg/L		06/06/25 21:17	1	ZJX4
Ammonia (350.1)	<0.500		0.500		mg/L		06/05/25 21:55	1	ZJX4
Nitrate Nitrite as N (353.2)	**10.1**		1.00		mg/L		06/10/25 04:03	10	ZJX4
Total Phosphorus as P (365.1)	**0.162**		0.100		mg/L		06/10/25 21:32	1	ZJX4
Total Suspended Solids (I-3765-85)	**82.0**		15.0		mg/L		06/04/25 14:07	1	E6KR
Alkalinity, Total (As CaCO3) (SM 2320B)	**284**		5.00		mg/L		06/05/25 09:00	1	WZC8
Alkalinity, Bicarbonate (As CaCO3) (SM 2320B)	**284**		5.00		mg/L		06/05/25 09:00	1	WZC8
Phenolphthalein Alkalinity as CaCO3 (SM 2320B)	<5.00		5.00		mg/L		06/05/25 09:00	1	WZC8
Total Dissolved Solids (SM 2540C)	**360**		50.0		mg/L		06/04/25 12:08	1	MDU9
Biochemical Oxygen Demand (SM 5210B)	**3.52**		3.00		mg/L		06/04/25 06:38	1	W9YR
Chemical Oxygen Demand (SM 5220D)	**30.4**		25.0		mg/L		06/06/25 12:16	5	ENB7
Total Organic Carbon (SM 5310C)	**3.44**		1.00		mg/L		06/10/25 05:13	1	HE7K

Analyte	Result	Qualifier	RL	RL	Unit	D	Analyzed	Dil Fac	Analyst
pH (SM 4500 H+ B)	**8.1**	**HF**	1.0		SU		06/03/25 16:59	1	MDU9

Client Sample ID: SW-2 Comp
Lab Sample ID: 310-307743-4

Date Collected: 06/03/25 10:10
Matrix: Ground Water
Date Received: 06/03/25 15:50

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Alpha-Terpineol	<9.80		9.80		ug/L		06/16/25 17:14	1	V7YZ
Aniline	<9.80		9.80		ug/L		06/16/25 17:14	1	V7YZ
Benzoic acid	<98.0		98.0		ug/L		06/16/25 17:14	1	V7YZ
Naphthalene	<9.80		9.80		ug/L		06/16/25 17:14	1	V7YZ
p-Cresol	<9.80		9.80		ug/L		06/16/25 17:14	1	V7YZ
Phenol	<9.80		9.80		ug/L		06/16/25 17:14	1	V7YZ
Pyridine	<9.80		9.80		ug/L		06/16/25 17:14	1	V7YZ

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Analyzed*	*Dil Fac*	*Analyst*
2-Fluorophenol (Surr)	*59*		*21 - 110*	*06/16/25 17:14*	*1*	*V7YZ*
Phenol-d5 (Surr)	*54*		*21 - 110*	*06/16/25 17:14*	*1*	*V7YZ*
2,4,6-Tribromophenol (Surr)	*73*		*20 - 144*	*06/16/25 17:14*	*1*	*V7YZ*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Chloride	**18.9**		5.00		mg/L		06/11/25 09:05	5	QTZ5
Sulfate	**17.9**		5.00		mg/L		06/11/25 09:05	5	QTZ5

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Aluminum	**0.206**		0.100		mg/L		06/06/25 15:08	1	ZRI4
Antimony	<0.100		0.100		mg/L		06/06/25 15:08	1	ZRI4
Arsenic	<0.0800		0.0800		mg/L		06/06/25 15:08	1	ZRI4

Client Sample ID: SW-2 Comp
Lab Sample ID: 310-307743-4
Date Collected: 06/03/25 10:10
Matrix: Ground Water
Date Received: 06/03/25 15:50

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Barium	**0.0965**		0.0100		mg/L		06/06/25 15:08	1	ZRI4
Beryllium	<0.0100		0.0100		mg/L		06/06/25 15:08	1	ZRI4
Cadmium	<0.0200		0.0200		mg/L		06/06/25 15:08	1	ZRI4
Calcium	**75.3**		1.00		mg/L		06/06/25 15:08	1	ZRI4
Chromium	<0.0200		0.0200		mg/L		06/06/25 15:08	1	ZRI4
Copper	<0.0200		0.0200		mg/L		06/06/25 15:08	1	ZRI4
Iron	<0.500		0.500		mg/L		06/06/25 15:08	1	ZRI4
Lead	<0.100		0.100		mg/L		06/06/25 15:08	1	ZRI4
Magnesium	**29.2**		1.00		mg/L		06/06/25 15:08	1	ZRI4
Nickel	<0.0500		0.0500		mg/L		06/06/25 15:08	1	ZRI4
Potassium	<2.00		2.00		mg/L		06/09/25 12:09	1	ZRI4
Selenium	<0.100		0.100		mg/L		06/06/25 15:08	1	ZRI4
Silver	<0.0200		0.0200		mg/L		06/06/25 15:08	1	ZRI4
Sodium	**6.61**		2.00		mg/L		06/06/25 15:08	1	ZRI4
Zinc	<0.0400		0.0400		mg/L		06/06/25 15:08	1	ZRI4

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Magnesium	**26.2**		1.00		mg/L		06/11/25 12:57	1	ZRI4

Method: 245.2 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Mercury	<0.000200		0.000200		mg/L		06/06/25 16:36	1	QTZ5

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Total hardness as CaCO3	**308**		4.12		mg/L		06/06/25 15:08	1	HE7K

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
HEM (Oil & Grease) (1664A)	<5.0		5.0		mg/L		06/09/25 14:00	1	MDU9
Turbidity (180.1)	**22**		1.0		NTU		06/03/25 17:04	1	WK2X
Cyanide, Total (335.4)	<0.0100		0.0100		mg/L		06/06/25 21:17	1	ZJX4
Ammonia (350.1)	<0.500		0.500		mg/L		06/05/25 21:58	1	ZJX4
Nitrate Nitrite as N (353.2)	**10.3**		1.00		mg/L		06/10/25 04:05	10	ZJX4
Total Phosphorus as P (365.1)	**0.130**		0.100		mg/L		06/10/25 21:32	1	ZJX4
Total Suspended Solids (I-3765-85)	**37.5**		7.5		mg/L		06/04/25 14:07	1	E6KR
Alkalinity, Total (As CaCO3) (SM 2320B)	**282**		5.00		mg/L		06/05/25 09:00	1	WZC8
Alkalinity, Bicarbonate (As CaCO3) (SM 2320B)	**282**		5.00		mg/L		06/05/25 09:00	1	WZC8
Phenolphthalein Alkalinity as CaCO3 (SM 2320B)	<5.00		5.00		mg/L		06/05/25 09:00	1	WZC8
Total Dissolved Solids (SM 2540C)	**360**		50.0		mg/L		06/04/25 12:08	1	MDU9
Biochemical Oxygen Demand (SM 5210B)	**3.22**		3.00		mg/L		06/04/25 06:41	1	W9YR
Chemical Oxygen Demand (SM 5220D)	**43.7**		25.0		mg/L		06/06/25 12:16	5	ENB7
Total Organic Carbon (SM 5310C)	**3.41**		1.00		mg/L		06/10/25 05:49	1	HE7K

Analyte	Result	Qualifier	RL	RL	Unit	D	Analyzed	Dil Fac	Analyst
pH (SM 4500 H+ B)	**8.1**	**HF**	1.0		SU		06/03/25 17:15	1	MDU9

Client Sample ID: SW-4 Grab

Date Collected: 06/03/25 09:50
Date Received: 06/03/25 15:50

Lab Sample ID: 310-307743-5

Matrix: Ground Water

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Alpha-Terpineol	<10.6		10.6		ug/L		06/16/25 17:40	1	V7YZ
Aniline	<10.6		10.6		ug/L		06/16/25 17:40	1	V7YZ
Benzoic acid	<106		106		ug/L		06/16/25 17:40	1	V7YZ
Naphthalene	<10.6		10.6		ug/L		06/16/25 17:40	1	V7YZ
p-Cresol	<10.6		10.6		ug/L		06/16/25 17:40	1	V7YZ
Phenol	<10.6		10.6		ug/L		06/16/25 17:40	1	V7YZ
Pyridine	<10.6		10.6		ug/L		06/16/25 17:40	1	V7YZ

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Analyzed*	*Dil Fac*	*Analyst*
2-Fluorophenol (Surr)	*66*		*21 - 110*	*06/16/25 17:40*	*1*	*V7YZ*
Phenol-d5 (Surr)	*59*		*21 - 110*	*06/16/25 17:40*	*1*	*V7YZ*
2,4,6-Tribromophenol (Surr)	*79*		*20 - 144*	*06/16/25 17:40*	*1*	*V7YZ*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Chloride	**12.2**		5.00		mg/L		06/11/25 09:17	5	QTZ5
Sulfate	**9.35**		5.00		mg/L		06/11/25 09:17	5	QTZ5

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Aluminum	<0.100		0.100		mg/L		06/06/25 15:12	1	ZRI4
Antimony	<0.100		0.100		mg/L		06/06/25 15:12	1	ZRI4
Arsenic	<0.0800		0.0800		mg/L		06/06/25 15:12	1	ZRI4
Barium	**0.0966**		0.0100		mg/L		06/06/25 15:12	1	ZRI4
Beryllium	<0.0100		0.0100		mg/L		06/06/25 15:12	1	ZRI4
Cadmium	<0.0200		0.0200		mg/L		06/06/25 15:12	1	ZRI4
Calcium	**76.2**		1.00		mg/L		06/06/25 15:12	1	ZRI4
Chromium	<0.0200		0.0200		mg/L		06/06/25 15:12	1	ZRI4
Copper	<0.0200		0.0200		mg/L		06/06/25 15:12	1	ZRI4
Iron	<0.500		0.500		mg/L		06/06/25 15:12	1	ZRI4
Lead	<0.100		0.100		mg/L		06/06/25 15:12	1	ZRI4
Magnesium	**26.7**		1.00		mg/L		06/06/25 15:12	1	ZRI4
Nickel	<0.0500		0.0500		mg/L		06/06/25 15:12	1	ZRI4
Potassium	<2.00		2.00		mg/L		06/09/25 12:10	1	ZRI4
Selenium	<0.100		0.100		mg/L		06/06/25 15:12	1	ZRI4
Silver	<0.0200		0.0200		mg/L		06/06/25 15:12	1	ZRI4
Sodium	**7.42**		2.00		mg/L		06/06/25 15:12	1	ZRI4
Zinc	<0.0400		0.0400		mg/L		06/06/25 15:12	1	ZRI4

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Magnesium	**24.2**		1.00		mg/L		06/11/25 12:59	1	ZRI4

Method: 245.2 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Mercury	<0.000200		0.000200		mg/L		06/06/25 16:38	1	QTZ5

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Total hardness as CaCO3	**300**		4.12		mg/L		06/06/25 15:12	1	HE7K

Client Sample ID: SW-4 Grab
Lab Sample ID: 310-307743-5

Date Collected: 06/03/25 09:50
Matrix: Ground Water
Date Received: 06/03/25 15:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
HEM (Oil & Grease) (1664A)	<4.9		4.9		mg/L		06/09/25 14:00	1	MDU9
Turbidity (180.1)	**1.7**		1.0		NTU		06/03/25 17:05	1	WK2X
Cyanide, Total (335.4)	<0.0100		0.0100		mg/L		06/06/25 21:17	1	ZJX4
Ammonia (350.1)	<0.500		0.500		mg/L		06/05/25 21:58	1	ZJX4
Nitrate Nitrite as N (353.2)	**5.97**		1.00		mg/L		06/10/25 04:07	10	ZJX4
Total Phosphorus as P (365.1)	<0.100		0.100		mg/L		06/10/25 22:37	1	ZJX4
Total Suspended Solids (I-3765-85)	<5.0		5.0		mg/L		06/04/25 14:07	1	E6KR
Alkalinity, Total (As CaCO3) (SM 2320B)	**305**		5.00		mg/L		06/06/25 07:56	1	WZC8
Alkalinity, Bicarbonate (As CaCO3) (SM 2320B)	**305**		5.00		mg/L		06/06/25 07:56	1	WZC8
Phenolphthalein Alkalinity as CaCO3 (SM 2320B)	<5.00		5.00		mg/L		06/06/25 07:56	1	WZC8
Total Dissolved Solids (SM 2540C)	**336**		50.0		mg/L		06/04/25 12:08	1	MDU9
Biochemical Oxygen Demand (SM 5210B)	<3.00		3.00		mg/L		06/04/25 06:44	1	W9YR
Chemical Oxygen Demand (SM 5220D)	<25.0		25.0		mg/L		06/06/25 12:16	5	ENB7
Total Organic Carbon (SM 5310C)	**1.31**		1.00		mg/L		06/10/25 06:25	1	HE7K

Analyte	Result	Qualifier	RL	RL	Unit	D	Analyzed	Dil Fac	Analyst
pH (SM 4500 H+ B)	**7.9**	**HF**	1.0		SU		06/03/25 17:11	1	MDU9

Client Sample ID: SW-4 Comp
Lab Sample ID: 310-307743-6

Date Collected: 06/03/25 09:50
Matrix: Ground Water
Date Received: 06/03/25 15:50

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Alpha-Terpineol	<10.2		10.2		ug/L		06/16/25 18:06	1	V7YZ
Aniline	<10.2		10.2		ug/L		06/16/25 18:06	1	V7YZ
Benzoic acid	<102		102		ug/L		06/16/25 18:06	1	V7YZ
Naphthalene	<10.2		10.2		ug/L		06/16/25 18:06	1	V7YZ
p-Cresol	<10.2		10.2		ug/L		06/16/25 18:06	1	V7YZ
Phenol	<10.2		10.2		ug/L		06/16/25 18:06	1	V7YZ
Pyridine	<10.2		10.2		ug/L		06/16/25 18:06	1	V7YZ

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Analyzed*	*Dil Fac*	*Analyst*
2-Fluorophenol (Surr)	*50*		*21 - 110*	*06/16/25 18:06*	*1*	*V7YZ*
Phenol-d5 (Surr)	*47*		*21 - 110*	*06/16/25 18:06*	*1*	*V7YZ*
2,4,6-Tribromophenol (Surr)	*61*		*20 - 144*	*06/16/25 18:06*	*1*	*V7YZ*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Chloride	**12.5**		5.00		mg/L		06/11/25 09:29	5	QTZ5
Sulfate	**9.57**		5.00		mg/L		06/11/25 09:29	5	QTZ5

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Aluminum	<0.100		0.100		mg/L		06/06/25 15:13	1	ZRI4
Antimony	<0.100		0.100		mg/L		06/06/25 15:13	1	ZRI4
Arsenic	<0.0800		0.0800		mg/L		06/06/25 15:13	1	ZRI4
Barium	**0.101**		0.0100		mg/L		06/06/25 15:13	1	ZRI4

Client Sample ID: SW-4 Comp
Date Collected: 06/03/25 09:50
Date Received: 06/03/25 15:50

Lab Sample ID: 310-307743-6
Matrix: Ground Water

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Beryllium	<0.0100		0.0100		mg/L		06/06/25 15:13	1	ZRI4
Cadmium	<0.0200		0.0200		mg/L		06/06/25 15:13	1	ZRI4
Calcium	**79.9**		1.00		mg/L		06/06/25 15:13	1	ZRI4
Chromium	<0.0200		0.0200		mg/L		06/06/25 15:13	1	ZRI4
Copper	<0.0200		0.0200		mg/L		06/06/25 15:13	1	ZRI4
Iron	<0.500		0.500		mg/L		06/06/25 15:13	1	ZRI4
Lead	<0.100		0.100		mg/L		06/06/25 15:13	1	ZRI4
Magnesium	**27.9**		1.00		mg/L		06/06/25 15:13	1	ZRI4
Nickel	<0.0500		0.0500		mg/L		06/06/25 15:13	1	ZRI4
Potassium	<2.00		2.00		mg/L		06/09/25 12:11	1	ZRI4
Selenium	<0.100		0.100		mg/L		06/06/25 15:13	1	ZRI4
Silver	<0.0200		0.0200		mg/L		06/06/25 15:13	1	ZRI4
Sodium	**7.72**		2.00		mg/L		06/06/25 15:13	1	ZRI4
Zinc	<0.0400		0.0400		mg/L		06/06/25 15:13	1	ZRI4

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Magnesium	**25.5**		1.00		mg/L		06/11/25 13:00	1	ZRI4

Method: 245.2 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Mercury	<0.000200		0.000200		mg/L		06/10/25 11:37	1	F5MW

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Total hardness as CaCO3	**314**		4.12		mg/L		06/06/25 15:13	1	HE7K

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
HEM (Oil & Grease) (1664A)	<5.2		5.2		mg/L		06/09/25 14:00	1	MDU9
Turbidity (180.1)	<1.0		1.0		NTU		06/03/25 17:07	1	WK2X
Cyanide, Total (335.4)	<0.0100		0.0100		mg/L		06/06/25 21:21	1	ZJX4
Ammonia (350.1)	<0.500		0.500		mg/L		06/05/25 22:00	1	ZJX4
Nitrate Nitrite as N (353.2)	**6.19**		1.00		mg/L		06/10/25 04:09	10	ZJX4
Total Phosphorus as P (365.1)	<0.100		0.100		mg/L		06/10/25 22:36	1	ZJX4
Total Suspended Solids (I-3765-85)	<5.0		5.0		mg/L		06/04/25 14:07	1	E6KR
Alkalinity, Total (As CaCO3) (SM 2320B)	**294**		5.00		mg/L		06/06/25 08:16	1	WZC8
Alkalinity, Bicarbonate (As CaCO3) (SM 2320B)	**294**		5.00		mg/L		06/06/25 08:16	1	WZC8
Phenolphthalein Alkalinity as CaCO3 (SM 2320B)	<5.00		5.00		mg/L		06/06/25 08:16	1	WZC8
Total Dissolved Solids (SM 2540C)	**342**		50.0		mg/L		06/04/25 12:08	1	MDU9
Biochemical Oxygen Demand (SM 5210B)	<3.00		3.00		mg/L		06/04/25 06:48	1	W9YR
Chemical Oxygen Demand (SM 5220D)	<25.0		25.0		mg/L		06/06/25 12:16	5	ENB7
Total Organic Carbon (SM 5310C)	**1.37**		1.00		mg/L		06/10/25 18:09	1	HE7K

Analyte	Result	Qualifier	RL	RL	Unit	D	Analyzed	Dil Fac	Analyst
pH (SM 4500 H+ B)	**7.4**	**HF**	1.0		SU		06/03/25 17:07	1	MDU9

Accreditation/Certification and Definitions Summary

Client: AECOM
Job ID: 310-307743-1
Project/Site: Winneshiek SWPPP Sampling

Laboratory: Eurofins Cedar Falls

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8270E	3510C	Ground Water	Alpha-Terpineol
8270E	3510C	Ground Water	Aniline
8270E	3510C	Ground Water	Benzoic acid
8270E	3510C	Ground Water	Pyridine
8270E	3510C	Groundwater	Alpha-Terpineol
8270E	3510C	Groundwater	Aniline
8270E	3510C	Groundwater	Benzoic acid
8270E	3510C	Groundwater	Pyridine

Qualifiers

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
MRL	Method Reporting Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
SDL	Sample Detection Limit
SDL	Sample Detection Limit
SDL	Sample Detection Limit
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Method Summary

Client: AECOM
Job ID: 310-307743-1
Project/Site: Winneshiek SWPPP Sampling

Method	Method Description	Protocol	Laboratory
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET CF
300.0	Anions, Ion Chromatography	EPA	EET CF
200.7 Rev 4.4	Metals (ICP)	EPA	EET CF
245.2	Mercury (CVAA)	EPA	EET CF
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	EET CF
1664A	HEM and SGT-HEM	1664A	EET CF
180.1	Turbidity, Nephelometric	EPA	EET CF
335.4	Cyanide, Total	EPA	EET CF
350.1	Nitrogen, Ammonia	EPA	EET CF
353.2	Nitrogen, Nitrate-Nitrite	EPA	EET CF
365.1	Phosphorus, Total	EPA	EET CF
I-3765-85	Residue, Non-filterable (TSS)	USGS	EET CF
SM 2320B	Alkalinity	SM	EET CF
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CF
SM 4500 H+ B	pH	SM	EET CF
SM 5210B	BOD, 5-Day	SM	EET CF
SM 5220D	COD	SM	EET CF
SM 5310C	TOC	SM	EET CF
1664A	HEM and SGT-HEM (Aqueous)	1664A	EET CF
200.7	Preparation, Total Metals	EPA	EET CF
245.1	Preparation, Mercury	EPA	EET CF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CF
365.1	Sample Digestion for Total Phosphorus	MCAWW	EET CF
Distill/Ammonia	Distillation, Ammonia	None	EET CF
Distill/CN	Distillation, Cyanide	None	EET CF
Filtration	Sample Filtration	None	EET CF

Protocol References:

1664A = EPA-821-98-002

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

USGS = "Methods For Analysis Of Water And Fluvial Sediments", USGS, 1989

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

eurofins | Environment Testing America

310-307743 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information					
Client: AECOM					
City/State:	CITY	STATE	Project:		
Receipt Information					
Date/Time Received:	DATE 6.3.25	TIME 1550	Received By: CGC		
Delivery Type: ☐ UPS ☐ FedEx CGC 6.3.25 ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☐ Lab Courier ☐ Lab Field Services ☑ Client Drop-off ☐ Other:					
Condition of Cooler/Containers					
Sample(s) received in Cooler?	☑ Yes	☐ No	*If yes:* Cooler ID:		
Multiple Coolers?	☑ Yes	☐ No	*If yes:* Cooler # 1 of 3		
Cooler Custody Seals Present?	☑ Yes	☐ No	*If yes:* Cooler custody seals intact?	☑ Yes	☐ No
Sample Custody Seals Present?	☐ Yes	☑ No	*If yes:* Sample custody seals intact?	☐ Yes	☐ No
Trip Blank Present?	☐ Yes	☑ No	*If yes:* Which VOA samples are in cooler? ↓		
Temperature Record					
Coolant: ☑ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other. ☐ NONE					
Thermometer ID: AA			Correction Factor (°C): 0		
• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature					
Uncorrected Temp (°C): 11.5			Corrected Temp (°C): 11.5		
• **Sample Container Temperature**					
Container(s) used:	CONTAINER 1: 250mL Plastic HNO3		CONTAINER 2		
Uncorrected Temp (°C):	10.4				
Corrected Temp (°C):	10.4				
Exceptions Noted					
1) If temperature exceeds criteria, was sample(s) received same day of sampling?				☑ Yes	☐ No
a) *If yes:* Is there evidence that the chilling process began?				☑ Yes	☐ No
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?)				☐ Yes	☐ No
NOTE. If yes, contact PM before proceeding If no, proceed with login					
Additional Comments					

eurofins | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: AECOM

City/State. | CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 6.3.25 | TIME 1550 | Received By: CGC

Delivery Type: ☐ UPS ☐ FedEx CGC 6.3.25 ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee
☐ Lab Courier ☐ Lab Field Services ☒ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers

Sample(s) received in Cooler? ☒ Yes ☐ No *If yes:* Cooler ID:

Multiple Coolers? ☒ Yes ☐ No *If yes:* Cooler # 2 of 3

Cooler Custody Seals Present? ☒ Yes ☐ No *If yes:* Cooler custody seals intact? ☒ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☒ No *If yes:* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☐ Yes ☒ No *If yes:* Which VOA samples are in cooler? ↓

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: 1A | Correction Factor (°C): 0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 12.6 | Corrected Temp (°C): 12.6

• **Sample Container Temperature**

Container(s) used.	CONTAINER 1	CONTAINER 2
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☒ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☒ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e g , bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE. If yes, contact PM before proceeding If no, proceed with login

Additional Comments

eurofins | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: AECOM

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 6.3.25 | TIME 1550 | Received By: CGC

Delivery Type: ☐ UPS ☐ FedEx CGC 6.3.25 ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee
☐ Lab Courier ☐ Lab Field Services ☑ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers

Sample(s) received in Cooler? ☑ Yes ☐ No *If yes:* Cooler ID:

Multiple Coolers? ☑ Yes ☐ No *If yes:* Cooler # 3 of 3

Cooler Custody Seals Present? ☑ Yes ☐ No *If yes:* Cooler custody seals intact? ☑ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☑ No *If yes:* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☐ Yes ☑ No *If yes:* Which VOA samples are in cooler? ↓

Temperature Record

Coolant: ☑ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: AA | Correction Factor (°C): 0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 13.5 | Corrected Temp (°C) 13.5

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☑ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☑ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e g , bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE. If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

Chain of Custody Record

Eurofins TestAmerica, Cedar Falls
3019 Venture Way

Cedar Falls IA 50613
phone 319 277.2401 fax 319.277 2425

eurofins Environment America

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other Iowa DNR

Eurofins Environment T

Client Contact	Project Manager: Christopher Oelkers	Site Contact: TJ Schissel	Date:	COC No
AECOM	Email Christopher Oelkers@aecom com	Lab Contact: Tayler Sanderson	Carrier:	_____ of _____ C
501 Sycamore St. Suite 222	Tel/Fax: (319)232-6531/(319)232-0271			Sampler
Waterloo IA 50703	Analysis Turnaround Time			For Lab Use Only:
(319)232-6531 Phone	☑ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client.
(319)232-0271 FAX	TAT if different from Below _____			Lab Sampling
Project Name Winneshiek SWPPP Sampling	☑ 2 weeks			Job / SDG No
Site Winneshiek County Landfill	☐ 1 week			
P O #	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	Total Metals (Al, Sb, Ar, Ba, Be, Ca, Cr, Cu, Fe, Pb, Hg, Mg, Ni, Se, Ag, Na, Zn)	NO2 + NO3, Ammonia, COD	Cl, SO4, TDS, TSS, Total P	Alkalinity, Total Hardness, Bicarbonate	Lab filter Mg	TOC	Cyanide	Oil & Grease	BOD	pH, Turbidity	Total Ca, K	a-Terpineol, Aniline, Benzoic Acid	Naphthalene, p-Cresol, Phenol	Pyridine				Sample Specific
SW-1	6-3-25	1000	G	GW		N		X	X	X	X	X	X	X	X	X	X	X	X	X	X				
SW-1	6 3-25	10 '60	C	GW		N		X	X	X	X	X	X	X	X	X	X	X	X	X	X				

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments: Table 10-1 attached list of parameters required for SWPPP analyses

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No		Cooler Temp (°C) Obs'd _____ Corr'd _____ Therm ID No _____		
Relinquished by	Company	Date/Time	Received by	Company	Date/Time 6/3/25 1145
Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Relinquished by	Company	Date/Time	Received in Laboratory by CGC	Company Eurofins	Date/Time 6.3.25 1550

Form No. CA-C-WI-002, Rev 4.23, da

6/17/2025

Chain of Custody Record

Eurofins TestAmerica, Cedar Falls
3019 Venture Way

Cedar Falls IA 50613
phone 319 277 2401 fax 319 277 2425

eurofins Environment America

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other: Iowa DNR

Eurofins Environment T

Client Contact	Project Manager: Christopher Oelkers	Site Contact: TJ Schissel	Date:	COC No
AECOM	Email Christopher Oelkers@aecom com	Lab Contact: Tayler Sanderson	Carrier:	____ of ____ C
501 Sycamore St. Suite 222	Tel/Fax: (319)232-6531/(319)232-0271			Sampler:
Waterloo IA 50703	Analysis Turnaround Time			For Lab Use Only:
(319)232-6531 Phone	☑ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client.
(319)232-0271 FAX	TAT if different from Below ____			Lab Sampling
Project Name Winneshiek SWPPP Sampling	☑ 2 weeks			
Site Winneshiek County Landfill	☐ 1 week			Job / SDG No
P O #	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Total Metals (Al, Sb, Ar, Ba, Be, Ca, Cr, Cu, Fe, Pb, Hg, Mg, Ni, Se, Ag, Na, Zn)	NO2 + NO3, Ammonia, COD	Cl, SO4, TDS, TSS, Total P	Alkalinity, Total Hardness, Bicarbonate	Lab filter Mg	TOC	Cyanide	Oil & Grease	BOD	pH, Turbidity	Total Ca, K	a-Terpineol, Aniline, Benzoic Acid	Naphthalene, p-Cresol, Phenol	Pyridine				Sample Specific
SW-2	6-3-25	1040	G	GW		N		X	X	X	X	X	X	X	X	X	X	X	X	X	X				
SW-2	6-3-25	10 10	C	GW		N		X	X	X	X	X	X	X	X	X	X	X	X	X	X				

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments. Table 10-1 attached list of parameters required for SWPPP analyses

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No		Cooler Temp (°C) Obs'd ____ Corr'd ____ Therm ID No ____		
Relinquished by	Company	Date/Time	Received by	Company	Date/Time 6/3/25 1545
Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Relinquished by	Company	Date/Time	Received in Laboratory by CGC	Company Eurofins	Date/Time 6-3-25 1550

Form No. CA-C-WI-002, Rev 4.23, da

Chain of Custody Record

eurofins

Environment Testing America

Eurofins TestAmerica, Cedar Falls
3019 Venture Way

Cedar Falls IA 50613
phone 319.277 2401 fax 319.277 2425

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other Iowa DNR

Eurofins Environment T

Client Contact	Project Manager: Christopher Oelkers	Site Contact: TJ Schissel	Date:	COC No
AECOM	Email Christopher Oelkers@aecom com	Lab Contact: Tayler Sanderson	Carrier:	____ of ____ C
501 Sycamore St Suite 222	Tel/Fax. (319)232-6531/(319)232-0271			Sampler
Waterloo IA 50703	Analysis Turnaround Time			For Lab Use Only:
(319)232-6531 Phone	☑ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client
(319)232-0271 FAX	TAT if different from Below ____			Lab Sampling
Project Name Winneshiek SWPPP Sampling	☑ 2 weeks			Job / SDG No
Site Winneshiek County Landfill	☐ 1 week			
P O #	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	Total Metals (Al, Sb, Ar, Ba, Be, Ca, Cr, Cu, Fe, Pb, Hg, Mg, Ni, Se, Ag, Na, Zn)	NO2 + NO3, Ammonia, COD	Cl, SO4, TDS, TSS, Total P	Alkalinity, Total Hardness, Bicarbonate	Lab filter Mg	TOC	Cyanide	Oil & Grease	BOD	pH, Turbidity	Total Ca, K	a-Terpineol, Aniline, Benzoic Acid	Naphthalene, p-Cresol, Phenol	Pyridine				Sample Specific
SW-4	6-3-25	950	G	GW		N		X	X	X	X	X	X	X	X	X	X	X	X	X	X				
SW-4	6-3-25	950	C	GW		N		X	X	X	X	X	X	X	X	X	X	X	X	X	X				

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other ____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments. Table 10-1 attached list of parameters required for SWPPP analyses

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No		Cooler Temp (°C) Obs'd ____ Corr'd ____		Therm ID No ____
Relinquished by	Company	Date/Time	Received by	Company	Date/Time 6/3/25 1045
Relinquished by:	Company	Date/Time	Received by	Company	Date/Time
Relinquished by	Company	Date/Time	Received in Laboratory by	Company	Date/Time 6-3-25 1550

Form No. CA-C-WI-002, Rev 4.23, da