2024 Spring Statistical Report

Cedar Rapids/Linn County Solid Waste Agency

Site 2

Permit No. 57-SDP-01-72P

Marion, Iowa

Submittal Date: August 2, 2024

Solid Waste Agency
Cedar Rapids • Linn County
living. together. green

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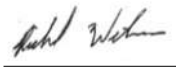
Certification

I hereby certify that this report was prepared by me or under my direct personal supervision and that I am a qualified groundwater scientist based on the requirements noted in IAC 567—113.10(1)"d".



08/02/2024

Richard Wilson — Date

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Certification page (PE or ground water scientist signature) ***113.10(1)"d"***

For the purposes of this rule, 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.

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1 Purpose

The purpose of this document is to provide the statistical evaluation of groundwater analytical data collected from the groundwater monitoring network of the Cedar Rapids/Linn County Solid Waste Agency (CRLCSWA) Site 2 municipal solid waste landfill (MSWLF) unit (herein referred to as Site 2) near Marion, Iowa, during the spring 2024 compliance sampling event. This evaluation is required by Iowa Administrative Code (IAC) 567—113.10 and Iowa Department of Natural Resources (IDNR) Solid Waste Disposal Permit No. 57-SDP-01-72P. Groundwater elevations, groundwater purge parameters, and water quality samples were collected as part of the semiannual compliance sampling event conducted on April 17 and 18, 2024, in general accordance with the most recent Hydrologic Monitoring System Plan (HMSP). Following statistical evaluation of the April 2024 analytical data, a verification and alternative source demonstration (ASD) monitoring event was conducted on May 29 and 30, 2024. Groundwater samples collected from both events were submitted to Eurofins Environment Testing North Central, LLC. (Eurofins) in Cedar Falls, Iowa, for laboratory analysis. The reporting period for this statistical evaluation includes data from the January 2024 to June 2024.

1.1 Monitoring Network

The HMSP monitoring network for Site 2 is summarized in **Table 1** and shown in **Figure 1**. The monitoring program of each monitoring point, status of baseline sampling, and sampling performed during this spring 2024 reporting period are included in **Table 2**. Semiannual detection, assessment, corrective action, and delineation compliance monitoring were conducted at groundwater monitoring locations as indicated in **Table 1** in April 2024. Field sampling forms are provided in **Attachment 1**.

Detection monitoring locations were sampled for the Appendix I constituent list and total suspended solids (TSS). Assessment and corrective action monitoring locations were sampled for the Appendix I constituents, previously detected Appendix II constituents, and TSS. During the April 2024 semiannual compliance monitoring event, monitoring wells MW-26A and MW-304R were sampled for the full Appendix II constituent list. A complete laboratory report containing the analytical results for the April 2024 compliance monitoring event is provided in **Attachment 2**.

In accordance with Special Provision X.4.f of Permit No. 57-SDP-01-72P, resampling for the full set of Appendix II constituents for all wells in assessment monitoring will be completed once every 5 years. The next full Appendix II sampling event is specified for each assessment monitoring well in **Table 2.**

1.2 Proposed Updates to Monitoring Network

The current active landfilling operations consist of the 13-acre cell, Phase 1 through Phase 4, and Phase 5A. Phase 5A expansion was completed and initial receipt of waste occurred in the first quarter of 2022. As part of landfill expansion, monitoring wells MW-501 and MW-502 were installed as downgradient, compliance monitoring wells to Phase 5A and Phase 5B, respectively. Background groundwater data was collected from monitoring wells MW-501 and MW-502 prior to waste placement. Per the most recent HMSP, MW-501 would move into

detection monitoring following the fifth independent background sample, which was collected in April 2022. Monitoring well MW-502 will continue to have background data collected on a semiannual basis until construction of Phase 5B. Upon completion of Phase 5B construction, monitoring well MW-502 will move into the detection monitoring program.

Based on information gathered as part of an alternative source demonstration (ASD), the compliance groundwater monitoring network may need to be modified. Details of the ASD are summarized in the Alternative Source Demonstration: Spring 2024 Report dated August 2, 2024. Pending concurrence from IDNR on the ASD, a revised monitoring network and updated HMSP may need to be implemented for Site 2.

1.3 Sampling Procedures

A Solinst 101 water level indicator was used to measure the static water level in each of the monitoring wells prior to purging and sampling. For the April 2024 semiannual compliance monitoring event, static water levels were collected to create the Site 2 Groundwater Contour Map depicted on the attached **Figure 2.** During the April 2024 monitoring event, groundwater elevations ranged from 808.42 (MW-304R) to 865.45 (MW-201A) feet above mean sea level (AMSL). The groundwater flow direction is variable at the site due to groundwater mounding in the unlined 30-acre cell from leachate generation and a groundwater depression under the 13-acre cell, Phase 1 through Phase 4, and Phase 5A areas due to the groundwater underdrain collection and control system.

In addition to measuring depth to groundwater (static water level) during the sampling event, field parameters were measured to verify and document the presence of a stable and representative sample medium prior to collection. A multi-parameter meter (YSI Pro DSS with flow cell) was used to obtain geochemical measurements including temperature, conductivity, oxidation-reduction potential, dissolved oxygen, turbidity, and pH of the groundwater purged from the monitoring wells prior to sampling. Geochemical measurements collected during purging were recorded on the field sampling forms which are provided in **Attachment 1**.

Groundwater samples were obtained during the April 2024 monitoring event from the following HMSP monitoring locations: GU-1, GU-L, GU-O, GU-P, MW-9AR, MW-15, MW-18, MW-19, MW-20, MW-22, MW-24, MW-26A, MW-201B, MW-300, MW-301, MW-302R, MW-303, MW-304R, MW-305, and MW-501. A sample was also collected from MW-502 to continue to build background data.

Delineation monitoring wells downgradient of the closed 30-acre unlined landfill were sampled to delineate cobalt and benzene around the unlined landfill. The delineation monitoring wells sampled during the recent event included the following monitoring wells: MW-29, MW-30, MW-306, and MW-307A.

Monitoring locations GU-1, GU-O, and GU-P were sampled using the respective, existing dedicated lift station's pump discharge riser. The groundwater sample from GU-L was collected as a grab sample using a disposable polyethylene bailer. Groundwater samples from MW-9AR, MW-15, MW-18, MW-19, MW-20, MW-22, MW-24, MW-26A, MW-29, MW-30, MW-300, MW-301, MW-302R, MW-303, MW-304R, MW-305, MW-306, MW-307A, and MW-501 were

collected using a Geotech peristaltic pump following stabilization of purge parameters. The groundwater samples from MW-201B and MW-502 were collected using a Geotech bladder pump following stabilization of purge parameters. The Geotech bladder pump is used for monitoring locations where the depth to water is greater than approximately 25 feet below ground surface, as the peristaltic pump does not have sufficient power to collect groundwater at these greater depths. The bladder pump was decontaminated with Alconox® (or equivalent) and a distilled or deionized water rinse between each monitoring location. Samples were collected in general accordance with the standard low flow sampling techniques described in the most recently approved HMSP.

2 Data Evaluation and Summary

Statistical analyses were completed using Sanitas™ v10.0.15 (Sanitas Technologies) software. The following sections describe the statistical methodology used for each monitoring program. Additional information on specific statistical equations used in the Sanitas™ program can be provided under separate cover upon request. Note that J-flagged concentrations (concentration between the method detection limit [MDL] and reporting limit [RL]) are not considered statistically significant. Statistical analysis results for the spring 2024 monitoring event are provided in **Attachment 3**.

2.1 Detection Monitoring Activities and Evaluation

Under the detection monitoring program in IAC 113.10(5), Appendix I monitoring results are statistically compared to background levels. The combined background data set (MW-9AR and MW-201B) is used to evaluate statistically significant increases (SSIs) over background for inorganic constituents with historical detections in downgradient monitoring wells. The background data consists of data from April 2015 through the current sampling event. All historical background data collected prior to low-flow sampling techniques initiated in April 2015 have been removed from the background data set. Interwell prediction limits will be used to statistically evaluate SSIs over background for the Appendix I constituents in downgradient monitoring wells, with the exception of monitoring well MW-501. Monitoring well MW-501 was placed into detection monitoring prior to the initial placement of waste in Phase 5A. Since groundwater data was collected prior to waste placement and there were no observed trends in the data, MW-501 was recommended for analysis using intrawell prediction limits.

Groundwater underdrains (GU-1, GU-L, GU-O and GU-P) are monitored for Appendix I constituents and are analyzed using intrawell prediction limits for all Appendix I inorganic constituents. An intrawell prediction limit analysis is conducted for each groundwater underdrain utilizing the entire background data set from October 2015 through April 2022 for underdrains GU-1, GU-L, and GU-O and the entire background data set from February 2022 through October 2022 for underdrain GU-P.

For constituents with greater than or equal to 50% non-detects in the background data set, a non-parametric prediction limit is used. The non-parametric prediction limit is taken as the maximum order statistic (maximum value) of the background data. For constituents with less than 50% non-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 is used. If the background data is normally distributed or can be fit to a normal distribution using a normalizing transformation, then a normal-based parametric prediction limit is applied.

For organic constituents, double quantification rule (DQR) analysis is used. This method states that detection of the same constituent in two consecutive sampling events in the same monitoring point indicates an SSI, and the monitoring point must be placed into the assessment monitoring program. This evaluation will be conducted in a rolling manner using single observations from the semiannual and resample events, as necessary. For newly detected constituents, the resample event will be completed within 90 days of the original exceedance as stated in the IDNR memo for Double Quantification Rule Resampling dated June 22, 2017.

For the April 2024 compliance monitoring event, arsenic, beryllium, cadmium, cobalt, lead, nickel, vanadium, and zinc exceeded either one or both the interwell and intrawell upper prediction limits (UPLs) at monitoring well MW-501. During the April 2024 sampling event, MW-501's purge water was observed to be very turbid and had a reddish-orange color. Iron flocculated material was observed discharging periodically with the purge water. The groundwater sample collected from monitoring well MW-501 was reddish-orange and flocculated solids were observed in the sample containers. The total suspended solids (TSS) analytical result for MW-501 was 1,010 milligrams per liter (mg/L) which is the highest TSS concentration measured at the well with the next highest being reported in the October 2023 groundwater sample at 202 mg/L.

A verification event was conducted in May 2024 at monitoring well MW-501. During the verification event, the purge water was again observed to be very turbid with a reddish-orange color and flocculated material. The TSS for the May 2024 sample at MW-501 was 1,100 mg/L. The May 2024 groundwater sample was analyzed again for total Appendix I metals. In addition, the sample was field filtered and collected into a sample container for laboratory analysis of dissolved Appendix I metals. Arsenic, beryllium, cadmium, cobalt, nickel, and zinc total concentrations exceeded either one or both the interwell and intrawell UPLs while the cadmium, cobalt, nickel, and zinc dissolved concentrations exceeded either one or both the interwell and intrawell UPLs. As discussed in an ASD report dated August 2, 2024, the recent increase in measured metal concentrations at MW-501 appears to be the result of higher amounts of precipitation at the site and interactions of slightly acidic precipitation with subsurface sediments to cause naturally present metal constituents to release into the groundwater. Since these elevated concentrations are not the result of a release from the landfill cells, monitoring well MW-501 will continue to be monitored under the detection monitoring program.

During the April 2024 compliance monitoring event, barium was detected above the intrawell UPL in the sample from groundwater underdrain GU-P. Since the intrawell UPL was exceeded for barium at GU-P, an interwell statistical analysis was conducted utilizing background monitoring wells MW-9AR and MW-201B. Barium concentrations measured at GU-P did not exceed the interwell UPL. Due to the limited number of sampling events conducted at GU-P (eight background and compliance monitoring events), groundwater variability may not have

been fully incorporated into the intrawell background dataset. Since MW-9AR and MW-201B are upgradient monitoring locations relative to GU-P, an interwell statistical analysis is a feasible option for evaluating SSIs in the groundwater underdrain compliance samples.

Interwell and intrawell prediction limits for constituents detected above laboratory reporting limits at detection monitoring locations are summarized on **Table 3**.

2.2 Assessment Monitoring Activities and Evaluation

The downgradient monitoring locations included in the analysis for the assessment monitoring program are MW-15, MW-18, MW-19, MW-20, MW-22, MW-24, MW-26A, MW-300, MW-301, MW-302R, MW-303, MW-304R, and MW-305. Monitoring wells MW-26A and MW-304R were analyzed for the full Appendix II constituent list during the April 2024 compliance monitoring event as required by Special Provision X.4.f of Permit No. 57-SDP-01-72P.

Under the assessment monitoring program in IAC 113.10(6), Appendix I and II monitoring results are statistically compared to background levels and to the groundwater protection standards (GWPS) as defined in IAC 113.10(6)“*g*” and “*h*”.

UPLs were used to formally assess SSIs over background for Appendix I and Appendix II constituents with historical detection in the background dataset, and the DQR method was used for organic constituents, as previously discussed in **Section 2.1**. UPLs used for comparison to the most recent data collected for the assessment monitoring wells are listed in **Table 4**.

Constituents at monitoring wells, which have been determined to be statistically above background are also statistically compared to the GWPS to identify statistically significant levels (SSLs). The GWPS is the Iowa Statewide Standard for a Protected Groundwater Source (SWS). If no SWS exists, or if the background concentrations are higher than the SWS, the GWPS is defined as the background concentration. Per IAC 113.10(6)“*i*”, an alternative GWPS may be established by IDNR for constituents for which there is no SWS or EPA maximum contaminant level (MCL). Confidence intervals are used as the statistical strategy in assessment 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.

Based on the analytical results for the April 2024 compliance monitoring event, Silvex (2,4,5-TP) was detected above laboratory reporting limits in the sample from monitoring well MW-26A, and arsenic was detected at a concentration above the UPL. This was the initial detection of Silvex (2,4,5-TP) at monitoring well MW-26A. During the May 2024 verification event, MW-26A was sampled for arsenic and Silvex (2,4,5-TP). For the May 2024 verification analytical results, Silvex (2,4,5-TP) concentration was below the laboratory reporting limit, and the concentration for arsenic was above the UPL. Arsenic has been verified as an SSI at monitoring well MW-26A. In accordance with the DQR statistical procedure, Silvex (2,4,5-TP) was not identified as an SSI at monitoring well MW-26A since the verification monitoring event concentration was below laboratory reporting limits.

Wells in assessment monitoring were further evaluated by comparison to the GWPS through statistical confidence intervals. One potential new SSL (cobalt) was identified at monitoring well MW-304R in the April 2024 compliance monitoring event analytical results. A verification sampling event was conducted in May 2024 to confirm the SSL for cobalt at monitoring well MW-304R and that the exceedance was not a result of sampling or laboratory error. The May 2024 cobalt concentration measured in the MW-304R groundwater sample was still identified as a SSL based on the GWPS being 0.00228 mg/L for cobalt. However, as part of the May 2024 verification event, additional monitoring wells in the alluvial floodplain of Indian Creek were sampled to evaluate cobalt concentrations in coarser-grained alluvial sediments. As noted in the ASD report dated August 2, 2024, cobalt concentrations in groundwater in the alluvial sediments generally had higher concentrations than background levels established by monitoring wells MW-9AR and MW-201B which are screened in glacial till sediments. A site-specific cobalt concentration was established as a GWPS based on the cobalt analytical results from monitoring well MW-213A. The site-specific cobalt GWPS concentration is 0.00631 mg/L.

No new SSLs above the GWPS, were identified for detected SSIs; therefore, the monitoring locations will not be evaluated for the corrective action monitoring program, except for MW-18, MW-19, MW-20, and MW-301 which are already in corrective action monitoring and discussed in the following section.

A complete summary of the assessment monitoring DQR output and confidence intervals are provided in **Attachment 3**.

2.3 Corrective Action Monitoring Activities and Evaluation

Monitoring locations MW-18, MW-19, MW-20, and MW-301 are in the corrective action monitoring program for cobalt and MW-20 is also in the corrective action monitoring program for benzene concentrations above the GWPS. The other Appendix I and Appendix II constituents at these monitoring wells were evaluated under the assessment monitoring program.

Monitoring well/constituent pairs in the corrective action monitoring program were evaluated by comparison to the GWPS through statistical confidence intervals. In the assessment monitoring mode, the lower confidence limit (LCL) is compared to the GWPS, whereas in the corrective action monitoring mode, the upper confidence limit (UCL) is compared to the GWPS. Based on the recently established site-specific GWPS, cobalt in MW-19 had both the UCL and LCL above the GWPS. Cobalt in MW-301 had the UCL above the GWPS, but the LCL was below the GWPS. Cobalt in MW-18 and MW-20 had both the UCL and LCL below the GWPS. The April 2024 compliance monitoring event was the first monitoring event where both the UCL and LCL at monitoring wells MW-18 and MW-20 were below the GWPS for cobalt. Benzene in MW-20 had the UCL above the GWPS, but the LCL was below the GWPS. To return to assessment monitoring, the UCL must remain below the GWPS for three consecutive years; therefore, MW-20 will remain in the corrective action monitoring program for benzene and MW-18, MW-19, MW-20 and MW-301 will remain in the corrective action monitoring program for cobalt. The most recent detections of cobalt and benzene in these monitoring locations along with the UCLs and GWPS are provided in **Table 5**. A summary of the historical SSIs and SSLs at the site are provided in **Table 6**. A complete statistical summary is included in **Attachment 3**.

2.4 Benzene & Cobalt Delineation Monitoring Activities

Monitoring wells MW-29, MW-30, MW-306, and MW-307A and select HMSP network monitoring wells were included in the analysis for the benzene and cobalt delineation monitoring activities during the most recent sampling event. A summary of the benzene detections is presented in **Table 7**. A benzene iso-concentration map using benzene detections in the vicinity of MW-20 (which is the only monitoring well in corrective action for benzene) was created using data from the April 2024 compliance monitoring event and is provided as attached **Figure 3**. Cobalt detections are provided in **Table 8**. A cobalt iso-concentration map using data from the April 2024 compliance monitoring event is provided as attached **Figure 4.**

3 Quality Assurance/Quality Control

The quality assurance/quality control (QA/QC) protocols for each sampling event include sampling orders, proper field protocols, and laboratory protocols. For the April 2024 compliance sampling event, a field (equipment) blank, three trip blanks, and two duplicate samples were collected and analyzed.

Eurofins in Cedar Falls, Iowa is responsible for providing QA/QC of laboratory protocols; this documentation is included in the attached laboratory reports (**Attachment 2**) for the spring 2024 sampling events. The laboratory QA/QC protocols and documentation were reviewed. The laboratory sample receipt checklist indicated all samples were received within holding times, within acceptable temperatures, and sample containers were not broken or leaking.

The following qualifiers were noted for some parameters in the April 2024 laboratory analytical report:

- J – Result is less than the RL but greater than or equal to the method detection limit (MDL) and the concentration is an approximate value.
- *+ – Laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD) is outside acceptance limits, high biased.
    - 1,1-dichloroethane was flagged in multiple samples. Each concentration was reported as being below laboratory reporting limits.
    - Select semi-volatile organic compounds (SVOCs) were flagged in samples MW-26A and MW-304R. Each concentration was reported as being below laboratory reporting limits.
- *- – LCS and/or LCSD is outside the acceptance limits, low biased.
    - Select SVOCs were flagged in samples MW-26A and MW-304R. Each concentration was reported as being below laboratory reporting limits.
- *1 – LCS/LCSD relative percent difference (RPD) exceeds control limits.
    - Select SVOCs were flagged in samples MW-26A and MW-304R. Each concentration was reported as being below laboratory reporting limits.
- p – The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

- The qualifier was applied to Silvex (2,4,5-TP) in the MW-26A groundwater sample. The constituent was resampled for during the May 2024 verification monitoring event.

Results of the field equipment blank analysis (EQ-1) indicated there were no detections above the laboratory reporting limits for the monitored constituents. Analytical results of the trip blank samples (TB-1, TB-2, and TB-3) indicated there were no detections above the laboratory reporting limits for the monitored constituents. This indicates no cross-contamination from field or sample handling procedures.

Two field duplicate samples were collected during the April 2024 compliance sampling event. Field duplicate sample DUP-1 was obtained from monitoring location MW-20 and field duplicate sample DUP-2 was obtained from monitoring location MW-18. Field duplicate samples were analyzed to determine the relative percent difference (RPD) between the original (parent) sample and the duplicate sample. RPD values are only calculated for constituents detected above the RL for both the parent and duplicate sample; detections with J-flagged concentrations are not included in the analysis. According to *Practical Guide for Ground-Water Sampling*, Barcelona et al, November 1985, prepared in cooperation with the Robert S. Kerr Environmental Research Laboratory and the United Stated Environmental Agency's Environmental Monitoring System Laboratory: "Duplicate sample values which differ by less than ±50% relative difference indicate good error control." As shown in attached **Table 9**, RPD values are calculated for the constituents detected above laboratory reporting limits for the sample/duplicate pairs. For both duplicate pairs, each RPD value was below the recommended 50%.

4 Conclusions

4.1 Detection Monitoring

For the detection monitoring program, prediction limit and background threshold value exceedances (i.e., SSIs) were identified for arsenic, beryllium, cadmium, cobalt, lead, nickel, vanadium, and zinc at MW-501 for the April 2024 compliance monitoring event. Prediction limit exceedances were identified for arsenic, beryllium, cadmium, cobalt, nickel, and zinc at MW-501 for the May 2024 verification monitoring event. An ASD was conducted which indicated the increased metals concentrations at MW-501 are the result of higher amounts of precipitation at the site and interactions of slightly acidic precipitation with subsurface sediments to cause naturally present metal constituents to release into the groundwater. Since these elevated concentrations are not the result of a release from the landfill cells, monitoring well MW-501 will continue to be monitored under the detection monitoring program.

Semiannual detection monitoring for the Appendix I constituents will be continued at detection monitoring locations MW-501, GU-1, GU-L, GU-O, and GU-P.

4.2 Assessment Monitoring

For the assessment monitoring program, prediction limit background threshold value exceedances (i.e., SSIs) were identified during the most recent sampling event in multiple assessment monitoring locations. The exceedances were further evaluated for SSLs using confidence intervals. One potential new SSL for cobalt was identified for monitoring well MW-304R for the April 2024 compliance monitoring event. A verification and ASD sampling event in May 2024 was conducted at monitoring well MW-304R to confirm if a SSL has occurred for cobalt. As part of the May 2024 verification and ASD sampling event, additional monitoring wells in the alluvial floodplain of Indian Creek were sampled to evaluate cobalt concentrations in coarser-grained alluvial sediments. As noted in the ASD report dated August 2, 2024, cobalt concentrations in groundwater in the alluvial sediments generally had higher concentrations than background levels established by monitoring wells MW-9AR and MW-201B which are screened in glacial till sediments. A site-specific cobalt concentration was established as a GWPS based on the cobalt analytical results from monitoring well MW-213A. The site-specific cobalt GWPS concentration is 0.00631 mg/L. Based on the site-specific cobalt GWPS concentration of 0.00631 mg/L, a SSL was not identified for cobalt at MW-304R.

4.3 Corrective Action Monitoring

Monitoring locations MW-18, MW-19, MW-20 and MW-301 are in the corrective action monitoring program for cobalt. Monitoring well MW-20 is in the corrective action monitoring program for benzene. These wells have not yet met criteria (three consecutive years of UCL below the GWPS) to move back into assessment monitoring. Based on data obtained to date, monitoring locations MW-29, MW-30, MW-306, and MW-307A will remain in the semi-annual monitoring network as delineation wells for benzene and cobalt downgradient of the 30-acre closed cell. The historical data obtained for the proposed delineation wells (MW-29, MW-30, MW-306, and MW-307A) provides adequate delineation of both benzene and cobalt downgradient of the 30-acre closed cell.

Figures

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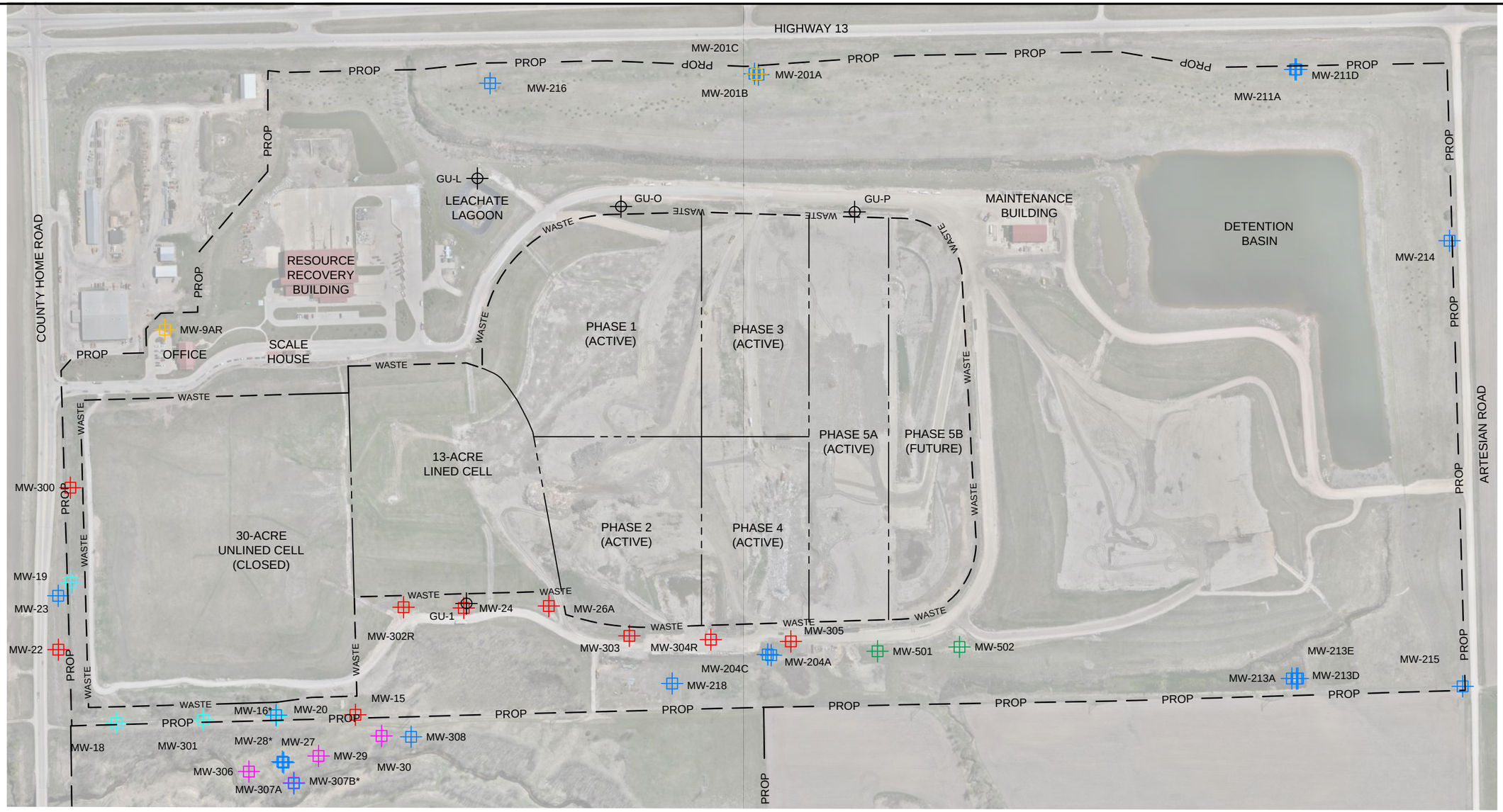

LEGEND

- WASTE — PERMITTED WASTE BOUNDARY
- CELL BOUNDARY
- PROP — PROPERTY LINE
- ASSESSMENT MONITORING WELL
- BACKGROUND MONITORING WELL
- DETECTION MONITORING WELL
- CORRECTIVE ACTION WELL
- WELL - WATER LEVEL ONLY
- DELINEATION WELL
- GROUNDWATER UNDERDRAIN

NOTES

1. AERIAL PHOTOGRAPH INFORMATION OBTAINED BY AEROVIEW AND UPDATED APRIL 15, 2024.

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CEDAR RAPIDS LINN COUNTY SOLID WASTE AGENCY - SITE 2 SITE MAP

2024 SPRING STATISTICAL REPORT

DATE
JULY 2024

FIGURE
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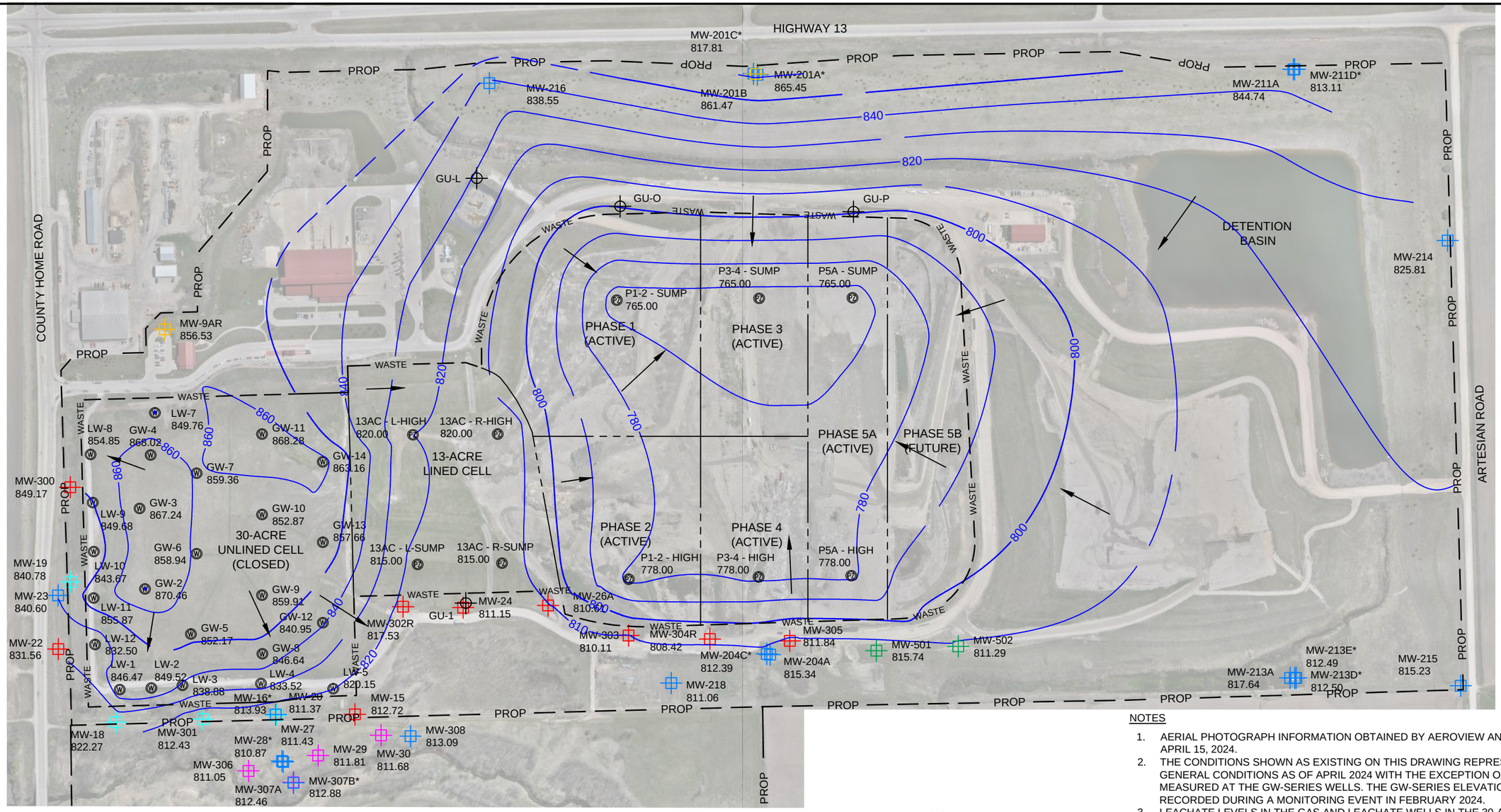

LEGEND

- PERMITTED WASTE BOUNDARY
- CELL BOUNDARY
- PROPERTY LINE
- 830 GROUNDWATER CONTOUR
- INFERRED GROUNDWATER CONTOUR
- FLOW DIRECTION
- ASSESSMENT MONITORING WELL
- BACKGROUND MONITORING WELL
- DETECTION MONITORING WELL
- CORRECTIVE ACTION WELL
- WELL - WATER LEVEL ONLY
- DELINEATION WELL
- GAS WELL
- LEACHATE WELL
- PIEZOMETER
- GROUNDWATER UNDERDRAIN

NOTES

1. AERIAL PHOTOGRAPH INFORMATION OBTAINED BY AEROVIEW AND UPDATED APRIL 15, 2024.
2. THE CONDITIONS SHOWN AS EXISTING ON THIS DRAWING REPRESENT THE GENERAL CONDITIONS AS OF APRIL 2024 WITH THE EXCEPTION OF ELEVATIONS MEASURED AT THE GW-SERIES WELLS. THE GW-SERIES ELEVATIONS WERE RECORDED DURING A MONITORING EVENT IN FEBRUARY 2024.
3. LEACHATE LEVELS IN THE GAS AND LEACHATE WELLS IN THE 30-ACRE UNLINED CELL ARE INCLUDED IN THE GROUNDWATER SURFACE CONTOUR MAP.
4. *MONITORING POINTS WERE NOT UTILIZED IN GENERATION OF THE GROUNDWATER CONTOUR MAP.
5. GROUNDWATER UNDERDRAIN ELEVATIONS ARE DETERMINED BY AS-BUILT ELEVATIONS FOR BOTTOM OF RECOMPACTED CLAY LINER SYSTEM (TOP OF GROUNDWATER UNDERDRAIN COLLECTION SYSTEM).

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CEDAR RAPIDS LINN COUNTY SOLID WASTE AGENCY - SITE 2
GROUNDWATER CONTOUR MAP - APRIL 2024

2024 SPRING STATISTICAL REPORT

DATE
JULY 2024

FIGURE
2

C:\pwworking\central01\d4402229\Figure 2 - Spring 2024 Contours - Including Groundwater Underdrains.dwg, Layout1, 8/1/2024 7:50:00 AM, MICWALSH

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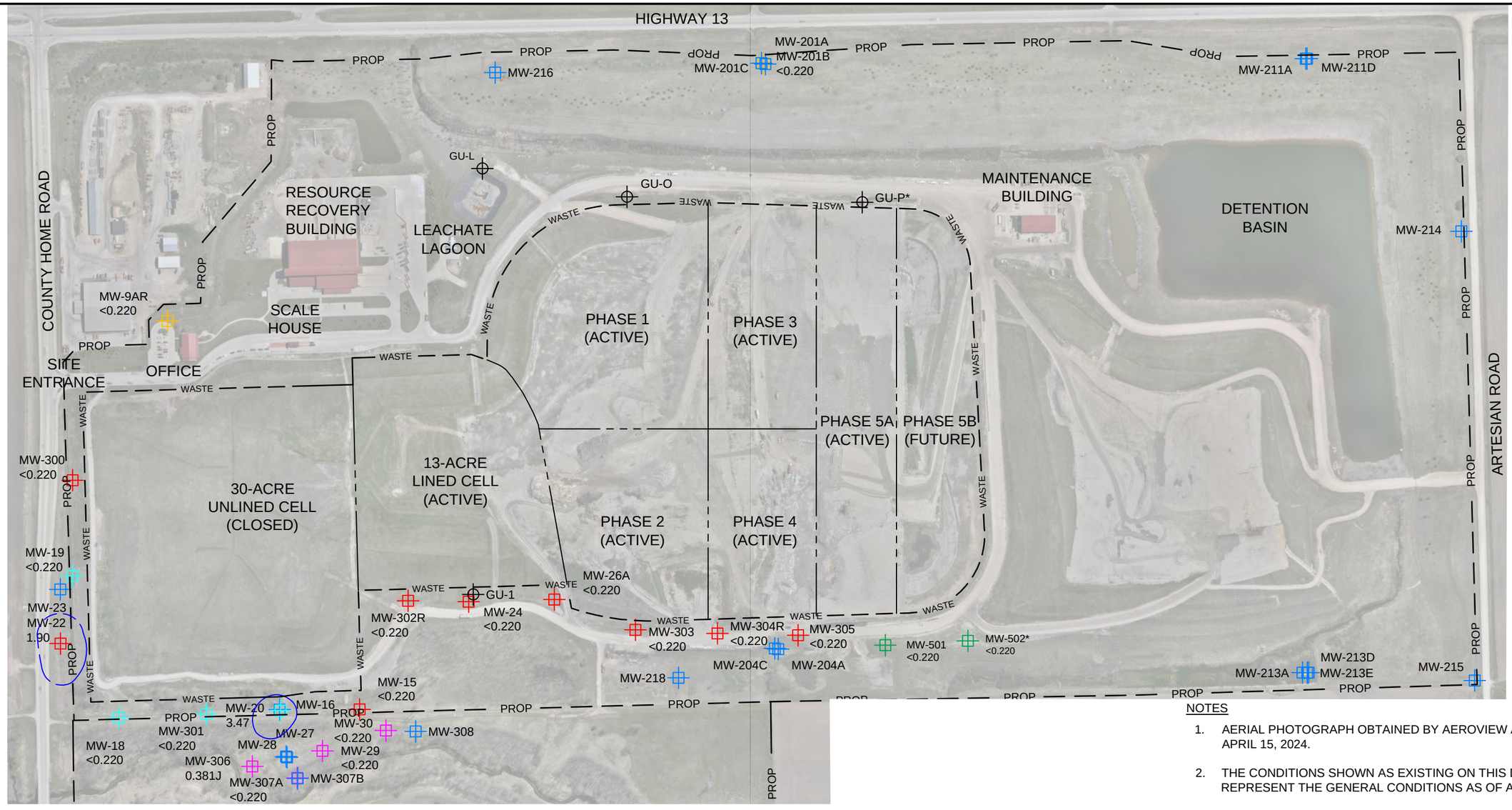

LEGEND

- PERMITTED WASTE BOUNDARY
- CELL BOUNDARY
- PROPERTY LINE
- ISOCONCENTRATION CONTOUR BENZENE BG LEVEL = 0.5 µg/L
- ISOCONCENTRATION CONTOUR BENZENE GWPS = 5.00 µg/L
- ASSESSMENT MONITORING WELL
- BACKGROUND MONITORING WELL
- DETECTION MONITORING WELL
- CORRECTIVE ACTION WELL
- WELL - WATER LEVEL ONLY
- DELINEATION WELL
- GROUNDWATER UNDERDRAIN

400 0 400 800

SCALE IN FEET

NOTES

1. AERIAL PHOTOGRAPH OBTAINED BY AEROVIEW AND UPDATED APRIL 15, 2024.
2. THE CONDITIONS SHOWN AS EXISTING ON THIS DRAWING REPRESENT THE GENERAL CONDITIONS AS OF APRIL 2024.
3. BG = BACKGROUND LEVEL; DETERMINED BY LABORATORY REPORTING LIMIT.
4. GWPS = GROUNDWATER PROTECTION STANDARD.
5. *WELL MW-502 IS NOT CURRENTLY IN THE MONITORING NETWORK AND IS BEING SAMPLED FOR BACKGROUND DATA PRIOR TO CONSTRUCTION OF PHASE 5B; THEREFORE, CONCENTRATIONS ARE NOT UTILIZED IN ISOCONCENTRATION MAPS.
6. NS = NOT SAMPLED

Solid Waste Agency Cedar Rapids / Linn County — living. together. green

CEDAR RAPIDS LINN COUNTY SOLID WASTE AGENCY - SITE 2 BENZENE ISOCONCENTRATION - APRIL 2024

2024 SPRING STATISTICAL REPORT

DATE: JULY 2024

FIGURE: 3

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LEGEND

- PERMITTED WASTE BOUNDARY
- CELL BOUNDARY
- PROPERTY LINE
- ISOCONCENTRATION CONTOUR COBALT BG LEVEL = 0.00288 mg/L
- ISOCONCENTRATION CONTOUR COBALT GWPS = 0.00631 mg/L

400 0 400 800

SCALE IN FEET

- ASSESSMENT MONITORING WELL
- BACKGROUND MONITORING WELL
- DETECTION MONITORING WELL
- CORRECTIVE ACTION WELL
- WELL - WATER LEVEL ONLY
- DELINEATION WELL
- GROUNDWATER UNDERDRAIN

NOTES

1. AERIAL PHOTOGRAPH OBTAINED BY AEROVIEW AND UPDATED APRIL 15, 2024.
2. THE CONDITIONS SHOWN AS EXISTING ON THIS DRAWING REPRESENT THE GENERAL CONDITIONS AS OF APRIL 2024.
3. BG = BACKGROUND LEVEL; DETERMINED BY INTERWELL UPPER PREDICTION LIMITS.
4. GWPS = GROUNDWATER PROTECTION STANDARD.
5. *WELL MW-502 IS NOT CURRENTLY IN THE MONITORING NETWORK AND IS BEING SAMPLED FOR BACKGROUND DATA PRIOR TO THE CONSTRUCTION OF PHASE 5B; THEREFORE, CONCENTRATIONS ARE NOT UTILIZED IN ISOCONCENTRATION MAPS.
6. NS = NOT SAMPLED

CEDAR RAPIDS LINN COUNTY SOLID WASTE AGENCY - SITE 2
COBALT ISOCONCENTRATION - APRIL 2024

2024 SPRING STATISTICAL REPORT

DATE
JULY 2024

FIGURE
4

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Tables

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Table 1
Monitoring Program Summary
2024 Spring Statistical Report
Cedar Rapids Linn County Solid Waste Agency Landfill - Site 2
Permit No. 57-SDP-01-72P

Monitoring Well	Formation	Current Monitoring Program (Spring 2024)	Change for next sampling event	Constituents w/ SSI	Constituents w/ SSL	Total # of Samples in each monitoring program		
						Detection	Assessment	Corrective Action
Monitoring Wells - Background [1]								
MW-201B	Glacial Till (Sandy Lean Clay with Sand seams)	Background	NC	None	None	26	0	0
MW-9AR	Glacial Till (Sandy Lean Clay with Sand seams)	Background	NC	None	None	15	0	0
HMSP Monitoring Wells								
MW-15	Glacial Till (Clayey Sand)	Assessment	NC	Cobalt, Nickel	None	19	20	0
MW-18	Alluvial (Sand - poorly sorted) / Glacial Till (Clayey Sand)	Corrective Action	NC	Cadmium, Nickel	Cobalt	18	8	12
MW-19	Glacial Till (Silty Clay with Sand)	Corrective Action	NC	Chlorobenzene, 1,4-Dichlorobenzene, Nickel	Cobalt	18	8	12
MW-20	Alluvial (Sand with Silt)	Corrective Action	NC	Arsenic, Barium, Chlorobenzene, Nickel	Benzene, Cobalt	2	4	32
MW-22	Glacial Till (Silty Clay with Sand)	Assessment	NC	Barium, Benzene, Nickel, Silvex (2,3,5-TP)	None	18	20	0
MW-24	Alluvial (Silt and Sand)	Assessment	NC	Nickel	None	20	18	0
MW-26A	Alluvial (Silty Sand)	Assessment	NC	Arsenic, Cobalt, Nickel	None	20	10	0
MW-300	Glacial Till (Sandy Lean Clay)	Assessment	NC	None	None	17	16	0
MW-301	Glacial Till (Lean Clay with Sand Seams)	Corrective Action	NC	Arsenic, Nickel	Cobalt	16	3	12
MW-302R[2]	Glacial Till (Silty and Clayey Sand)	Assessment	NC	None	None	17	15	0
MW-303	Alluvial (Sand - Fine to Medium)	Assessment	NC	Cobalt, Cadmium, Nickel	None	23	7	0
MW-304R[3]	Alluvial (Sand - poorly sorted) / Glacial Till (Sandy Lean Clay)	Assessment	NC	Cobalt	None	19	11	0
MW-305	Alluvial (Sand - poorly sorted)	Assessment	NC	None	None	12	14	0
MW-501	Glacial Till & Outwash (Sandy Lean Clay and Clayey Sand)	Detection	NC	Beryllium, Cadmium, Cobalt, Nickel, Zinc[6]	None	9	0	0
Monitoring Wells - Delineation								
MW-29	Alluvial (Sand - poorly sorted)	Delineation	NC	None	None	38	0	0
MW-30	Alluvial (Sand - poorly sorted)	Delineation	NC	None	None	38	0	0
MW-306	Alluvial (Sand - poorly sorted)	Delineation	NC	None	None	25	0	0
MW-307A	Alluvial (Sandy Silt)	Delineation	NC	None	None	20	0	0
Monitoring Points - Underdrain								
GU-1	Underdrain System - Phase 13-Acre	Detection	NC	None	None	31	0	0
GU-P [5]	Underdrain System - Phase 1-4, 5A	Detection	NC	None	None	7	0	0
GU-O[4]	Underdrain System - Phase 1	Detection	NC	None	None	8	0	0
GU-L	Underdrain System - Leachate Pond	Detection	NC	None	None	30	0	0

Comments:

NC = No Change

- The total number of samples under detection, assessment, and corrective action monitoring are estimated based on the total number of samples collected and the number of Appendix II sampling events. The number of sampling events in each monitoring program are estimated and are not considered exact.
- [1] Background wells were updated during the 2021 HMSP update to include MW-9AR and MW-201B (MW-211A, MW-214, and MW-215 were removed from the network).
- [2] MW-302 was replaced with MW-302R on 09/07/2021 in the same location.
- [3] MW-304 was replaced with MW-304R on 08/31/2020 in the same location.
- [4] Underdrain GU-O has been included as a monitoring point for the underdrain system. GU-O was sampled quarterly, beginning with the first quarter of 2022, until 5 samples were obtained, at which point Intrawell Upper Prediction Limits are used to evaluate samples. GU-O monitors a portion of groundwater below Phase 1.
- [5] GU-2, GU-3, GU-4 & GU-5 sampling locations were abandoned during the construction of Phase 5A. The groundwater underdrain systems for Phase 1 (GU-2), Phase 2 (GU-3), Phase 3 (GU-4) and Phase 4 (GU-5) were connected to the underdrain system within Phase 5A. The new groundwater underdrain monitoring location is known as GU-P and will be pumped from a groundwater sump beneath Phase 5A via a sideslope riser. GU-P was sampled quarterly, beginning with the first quarter of 2022, until 5 samples were obtained, at which point Intrawell Upper Prediction Limits are used to evaluate samples.
- [6] An alternative source demonstration (ASD) dated August 2024 indicated elevated metal concentrations were the result of natural variation in precipitation events and interactions of infiltrated precipitation and groundwater with subsurface soils. The elevated concentrations are not the result of a release from the landfill cells. Though the concentrations are identified as SSIs, the monitoring well will remain in the detection monitoring program.

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Table 2
Monitoring Program Implementation Schedule
2024 Spring Statistical Report
Cedar Rapids Linn County Solid Waste Agency Landfill - Site 2
Permit No. 57-SDP-01-72P

	Recent Sampling Dates and Constituents				Upcoming Sampling Dates and Constituents		Full Appendix II Sample Dates	
Monitoring Well	**October 2023**	**December 2023**	**April 2024**	**May 2024**	**October 2024**	**April 2025**	**Previously Collected**	**Next Event**
Monitoring Wells - Background								
MW-201B	Appendix I, TSS, Sulfide	--	Appendix I, TSS, Sulfide	--	Appendix I, TSS, Sulfide	Appendix I, TSS, Sulfide	10/31/2016 (no detections)	N/A
MW-9AR	Appendix I, TSS, Sulfide	--	Appendix I, TSS, Sulfide	--	Appendix I, TSS, Sulfide	Appendix I, TSS, Sulfide	11/01/2018 (no detections)	N/A
HMSP Monitoring Wells								
MW-15	Appendix I, TSS	--	Appendix I, TSS	--	Appendix I, TSS	Appendix I, TSS	6/22/2009, 9/29/2009, 12/2/2009, 3/9/2010, 9/13/2010, 9/20/2011, 12/11/2017, 10/12/2022	Fall 2027
MW-18	Appendix I, TSS	--	Appendix I, TSS	--	Appendix I, TSS	Appendix I, TSS	3/30/2009, 6/22/2009, 9/30/2009, 12/3/2009, 9/13/2010, 9/20/2011, 10/5/2017, 10/12/2022	Fall 2027
MW-19	Appendix I, TSS	--	Appendix I, TSS	--	Appendix I, TSS	Appendix I, TSS	3/30/2009, 6/22/2009, 9/30/2009, 12/3/2009, 9/13/2010, 9/21/2011, 11/2/2016, 10/19/2021	Fall 2026
MW-20	Appendix I, TSS	--	Appendix I, TSS	--	Appendix I, TSS	Appendix I, TSS	3/30/2009, 6/22/2009, 9/30/2009, 12/3/2009, 9/13/2010, 9/20/2011, 11/3/2016, 10/19/2021	Fall 2026
MW-22	Appendix I, TSS, beta-BHC, 2,4,5-TP (Silvex)	--	Appendix I, TSS, beta-BHC, 2,4,5-TP (Silvex)	--	Appendix I, TSS, beta-BHC, 2,4,5-TP (Silvex)	Appendix I, TSS, beta-BHC, 2,4,5-TP (Silvex)	6/22/2009, 9/29/2009, 12/2/2009, 3/8/2010, 9/13/2010, 9/22/2011, 11/4/2016, 10/18/2021	Fall 2026
MW-24	Appendix I, TSS	--	Appendix I, TSS	--	Appendix I, TSS	Appendix I, TSS	6/24/2010, 8/19/2010, 9/13/2010, 12/6/2010, 9/22/2011, 12/11/2017, 10/12/2022	Fall 2027
MW-26A	No Sample - Well Dry	--	Full Appendix II, TSS	2,4,5-TP (Silvex), Arsenic, TSS	Appendix I, TSS	Appendix I, TSS	8/19/2010, 9/13/2010, 3/8/2011, 6/16/2011, 7/17/2018, 11/1/2018, 4/17/2024	Spring 2029
MW-300	Appendix I, TSS	--	Appendix I, TSS	--	Appendix I, TSS	Appendix I, TSS	6/16/2011, 9/21/2011, 12/7/2011, 3/28/2012, 11/2/2016, 10/19/2021	Fall 2026
MW-301	Appendix I, TSS	--	Appendix I, TSS	--	Appendix I, TSS	Appendix I, TSS	6/16/2011, 9/20/2011, 12/7/2011, 3/27/2012, 12/4/2014, 11/4/2016, 10/19/2021	Fall 2026
MW-302R	Appendix I, TSS	--	Appendix I, TSS	--	Appendix I, TSS	Appendix I, TSS	12/11/2017, 10/12/2022	Fall 2027
MW-303	Appendix I, TSS, 2,4-D, gamma-BHC (Lindane), Heptachlor	--	Appendix I, TSS, 2,4-D, gamma-BHC (Lindane), Heptachlor	--	Appendix I, TSS, 2,4-D, gamma-BHC (Lindane), Heptachlor	Appendix I, TSS, 2,4-D, gamma-BHC (Lindane), Heptachlor	12/2/2021	Fall 2026
MW-304R	Appendix I, TSS	--	Full Appendix II, TSS	Cobalt, TSS	Appendix I, TSS	Appendix I, TSS	5/14/2019, 4/17/2024	Spring 2029
MW-305	Appendix I, TSS	--	Appendix I, TSS	--	Appendix I, TSS	Appendix I, TSS	12/11/2017, 10/12/2022	Fall 2027
MW-501	Appendix I, TSS	--	Appendix I, TSS	Appendix I metals, TSS	Appendix I, TSS	Appendix I, TSS	N/A	N/A
Monitoring Wells - Delineation								
MW-29	Benzene & Cobalt, TSS	--	Benzene & Cobalt, TSS	--	Benzene & Cobalt, TSS	Benzene & Cobalt, TSS	N/A	N/A
MW-30	Benzene & Cobalt, TSS	--	Benzene & Cobalt, TSS	--	Benzene & Cobalt, TSS	Benzene & Cobalt, TSS	N/A	N/A
MW-306	Benzene & Cobalt, TSS	--	Benzene & Cobalt, TSS	--	Benzene & Cobalt, TSS	Benzene & Cobalt, TSS	N/A	N/A
MW-307A	Benzene & Cobalt, TSS	--	Benzene & Cobalt, TSS	--	Benzene & Cobalt, TSS	Benzene & Cobalt, TSS	N/A	N/A
Monitoring Points - Underdrain								
GU-1	Appendix I, TSS	Zinc, TSS	Appendix I, TSS	--	Appendix I, TSS	Appendix I, TSS	N/A	N/A
GU-P	Appendix I, TSS	Barium, TSS	Appendix I, TSS	--	Appendix I, TSS	Appendix I, TSS	N/A	N/A
GU-O	Appendix I, TSS	--	Appendix I, TSS	--	Appendix I, TSS	Appendix I, TSS	N/A	N/A
GU-L	Appendix I, TSS	--	Appendix I, TSS	--	Appendix I, TSS	Appendix I, TSS	N/A	N/A

Comments:

- MW-22 was sampled for Full Appendix II during the October 2021 sampling event. Two Appendix II constituents were observed: beta-BHC and 2,4,5-TP Silvex. MW-22 has had historical analysis for both 2,4,-TP [Silvex} and beta-BHC, so MW-22 will be sampled semiannually for these constituents.
- MW-303 was sampled for Full Appendix II in December 2021. Three Appendix II constituents were detected: 2,4-D, gamma-NHC (Lindane), and Heptachlor. MW-303 has had historical analysis for these Appendix II constituents, so MW-303 will be sampled semiannually for these constituents.

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Table 3
Summary of Well/Detected Constituent Pairs with No Previous SSIs
2024 Spring Statistical Report
Cedar Rapids Linn County Solid Waste Agency Landfill - Site 2
Permit No. 57-SDP-01-72P

Well	Constituent	Units	Sampling Event April 2024	Verification Event[3] May 2024	Background Standard Intrawell[1]	Background Standard Interwell[1]
MW-501	Arsenic	mg/l	**0.00868**	**0.00618** (<0.000530)	0.0754	0.00561
	Barium	mg/l	0.0356	0.0232 (0.0145)	0.104	1.09
	Beryllium	mg/l	**0.00119**	**0.00227** (0.000392 J)	0.000274	0.000330
	Cadmium	mg/l	**0.000875**	**0.000576** (**0.000392**)	0.000213	0.000139
	Cobalt	mg/l	**0.127**	**0.0525** (**0.0475**)	0.0109	0.00288
	Lead	mg/l	**0.00412**	0.000365 J (<0.000260)	0.00234	0.00704
	Nickel	mg/l	**0.209**	**0.107** (**0.0996**)	0.0189	0.00561
	Vanadium	mg/l	**0.00551**	0.00210 J (<0.00110)	0.00110	0.00796
	Zinc	mg/l	**0.127**	**0.0702** (**0.0546**)	0.0100	0.0200
	TSS	mg/l	1010	1100 (<1.39)	N/A	N/A
GU-1	Arsenic	mg/l	0.00735	N/A	0.0876	N/A
	Barium	mg/l	0.488	N/A	1.61	N/A
	Cobalt	mg/l	0.00289	N/A	0.0210	N/A
	Nickel	mg/l	0.0463	N/A	0.0728	N/A
	TSS	mg/l	52.8	N/A	N/A	N/A
GU-O	Barium	mg/l	0.325	N/A	0.876	N/A
	TSS	mg/l	28.0	N/A	N/A	N/A
GU-P	Arsenic	mg/l	0.00213	N/A	0.00804	N/A
	Barium[2]	mg/l	**0.309**	N/A	0.298	1.09
	TSS	mg/l	12.0	N/A	N/A	N/A
GU-L	Arsenic	mg/l	0.00238	N/A	0.0131	N/A
	Barium	mg/l	0.0442	N/A	0.120	N/A
	Cobalt	mg/l	0.00931	N/A	0.0189	N/A
	Nickel	mg/l	0.00774	N/A	0.0105	N/A
	TSS	mg/l	11.8	N/A	N/A	N/A

Notes:
N/A = Not Applicable
NS = Not Sampled
J = Laboratory flag indicating result is less than the reporting limit (RL) but greater than or equal to the method detection limit and the concentration is an approximate value.
Bolded and underlined concentrations indicate a value that exceeds a background standard (i.e., UPLs).

[1] Groundwater Underdrain Background Standards (i.e., UPLs) are based on Intrawell Upper Prediction Limits. Monitoring well Background Standards are based on Interwell UPLs, except for MW-501. Since MW-501 was installed and sampled prior to waste placement, this monitoring location is recommeded for analysis using Intrawell UPLs. Both interwell and intrawell analyses are provided above for MW-501.

[2] Based on Intrawell UPL, a statistically significant increase (SSI) was identified for barium at GU-P for the spring 2024 semiannual compliance monitoring event. An Interwell analysis was conducted using MW-9AR and MW-201B as background monitoring points. The Interwell analysis indicated an SSI was not identified for barium at GU-P.

[3] During the May 2024 verification event, field filtering occurred on select samples to evaluate metals concentration in the dissolved fraction of the sample. Dissolved sample results are bracketed in parentheses.

Comments:
● The table above shows detections of constituents above the laboratory reporting limit. Constituents detected between the method detection limit (MDL) and laboratory reporting limit (RL) (J-flagged) are considered estimated concentrations.
● Background standards for Groundwater Underdrains GU-1, GU-O, and GU-L (using Intrawell UPLs) are calculated from data from October 2015 through July 2022. Data prior to October 2015 was removed due to elevated reporting limits.
● Background standards for Groundwater Underdrain GU-P (using Intrawell UPLs) are calculated from data from February 2022 through October 2022.
● Background standards for monitoring wells (using Interwell UPLs) are calculated using only data collected with low-flow sampling procedures (i.e. April 2015 through the current sampling event). Monitoring well MW-501 was also analyzed using Intrawell UPLs with data from March 2021 through February 2022.

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Table 4
Summary of Ongoing and Newly Identified SSIs
2024 Spring Statistical Report
Cedar Rapids Linn County Solid Waste Agency Landfill - Site 2
Permit No. 57-SDP-01-72P

Well	Constituent	Units	Compliance Event April 2024	Verification Event May 2024	Background Standard	Lower Confidence Limit	GWPS	Sample Dates		
								Initial Exceedance (above background)	Resample(s) (Confirmation Event)	5th background sample - With Low Flow Sampling[1]
MW-15	Barium	mg/L	0.0614	N/A	1.09	N/A - No SSI	2	N/A	N/A	March 2017
	Cobalt[2]	mg/L	0.00206**	N/A	0.00288	0.001453	0.00631	03/2017	06/2017	March 2017
	Nickel	mg/L	0.00928*	N/A	0.00561	0.006241	0.1	03/2017	06/2017	March 2017
	TSS	mg/L	4.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW-18	Barium	mg/L	0.0610	N/A	1.09	N/A - No SSI	2	N/A	N/A	March 2017
	Cadmium	mg/L	0.000211*	N/A	0.000139	0.0000638	0.005	04/2022	10/2022	March 2017
	Cobalt[2]	mg/L	0.00346*	N/A	0.00288	0.002836	0.00631	10/2021	05/2017	March 2017
	Nickel	mg/L	0.0261*	N/A	0.00561	0.01195	0.1	03/2017	06/2017	March 2017
MW-19	Barium	mg/L	0.0444	N/A	1.09	N/A - No SSI	2	03/2017	10/2017	March 2017
	Chlorobenzene	µg/L	0.994 J**	N/A	1.00 (RL)	0.7569	100	01/2008	03/2008	October 2008
	Cobalt[2]	mg/L	0.00852*	N/A	0.00288	0.009367	0.00631	03/2017	10/2017	March 2017
	1,4-Dichlorobenzene	µg/L	1.00*	N/A	1.00 (RL)	0.5654	75	01/2008	03/2008	October 2008
	Nickel	mg/L	0.0253*	N/A	0.00561	0.01787	0.1	03/2017	10/2017	March 2017
	TSS	mg/L	3.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW-20	Arsenic	mg/L	0.00296**	N/A	0.00561	0.002772	0.01	03/2017	10/2017	March 2017
	Barium	mg/L	0.719**	N/A	1.09	0.9696	2	03/2017	10/2017	March 2017
	Benzene	µg/l	3.47*	N/A	0.5 (RL)	3.021	5	01/2008	03/2008	October 2008
	Chlorobenzene	µg/l	3.59*	N/A	1.00 (RL)	4.079	100	01/2008	03/2008	October 2008
	Cobalt[2]	mg/L	0.00180	N/A	0.00288	0.00274	0.00631	03/2017	10/2017	March 2017
	Nickel	mg/L	0.0101*	N/A	0.00561	0.0171	0.1	03/2017	10/2017	March 2017
	TSS	mg/L	114	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW-22	Arsenic	mg/L	0.00281	N/A	0.00561	N/A - No SSI	0.01	03/2017	10/2017	March 2017
	Barium	mg/L	1.06**	N/A	1.09	1.01	2	03/2017	10/2017	March 2017
	Benzene	µg/L	1.90*	N/A	0.5 (RL)	1.15	5	01/2008	03/2008	October 2008
	Nickel	mg/L	0.0333*	N/A	0.00561	0.03251	0.1	03/2017	10/2017	March 2017
	Silvex (2,4,5-TP)	µg/l	0.0511 J**	N/A	0.0536 (RL)	0.0511	70	10/2019	03/2020	March 2017
	TSS	mg/L	32.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW-24	Barium	mg/L	0.0426	N/A	1.09	N/A - No SSI	2	N/A	N/A	March 2017
	Nickel	mg/L	0.0140*	N/A	0.00561	0.01875	0.1	03/2017	06/2017	March 2017
MW-26A	Arsenic	mg/L	0.0111***	0.0210*	0.00561	0.0005456	0.01	04/2024	TBD	March 2017
	Barium	mg/L	0.249	N/A	1.09	N/A - No SSI	2	N/A	N/A	March 2017
	Cobalt[2]	mg/L	0.113*	N/A	0.00288	0.00093	0.00631	10/2019	03/2020	March 2017
	Nickel	mg/L	0.0512*	N/A	0.00561	0.00672	0.1	04/2015	04/2016	March 2017
	Silvex (2,4,5-TP)	µg/l	0.0724***	<0.0230	0.0522 (RL)	N/A - No SSI	70	04/2024	TBD	March 2017
	TSS	mg/L	35.50	79.0	N/A	N/A	N/A	N/A	N/A	N/A
MW-300	Barium	mg/L	0.0983	N/A	1.09	N/A - No SSI	2	N/A	N/A	March 2017
	TSS	mg/L	4.75	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW-301	Arsenic	mg/L	0.00467**	N/A	0.00561	0.003951	0.01	03/2017	10/2017	March 2017
	Barium	mg/L	0.0672	N/A	1.09	N/A - No SSI	2	N/A	N/A	March 2017
	Cobalt[2]	mg/L	0.00424*	N/A	0.00288	0.003263	0.00631	03/2017	10/2017	March 2017
	Nickel	mg/L	0.00692*	N/A	0.00561	0.004842	0.1	03/2017	10/2017	March 2017
	TSS	mg/L	34.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 4
Summary of Ongoing and Newly Identified SSIs
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Cedar Rapids Linn County Solid Waste Agency Landfill - Site 2
Permit No. 57-SDP-01-72P

Well	Constituent	Units	Compliance Event April 2024	Verification Event May 2024	Background Standard	Lower Confidence Limit	GWPS	Sample Dates		
								Initial Exceedance (above background)	Resample(s) (Confirmation Event)	5th background sample - With Low Flow Sampling[1]
MW-302R	Barium	mg/L	0.119	N/A	1.09	N/A - No SSI	2	N/A	N/A	March 2017
	TSS	mg/L	3.63	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW-303	Barium	mg/L	0.0157	N/A	1.09	N/A - No SSI	2	04/2021	05/2021	March 2017
	Cadmium	mg/L	0.000173 J**	N/A	0.000139	0.00004804	0.005	04/2021	05/2021	March 2017
	Cobalt[2]	mg/L	0.000204 J**	N/A	0.00288	0.001203	0.00631	04/2021	05/2021	March 2017
	Nickel	mg/L	0.0113*	N/A	0.00561	0.02588	0.1	04/2021	05/2021	March 2017
	TSS	mg/L	4.62	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW-304R	Barium	mg/L	0.0523	N/A	1.09	N/A - No SSI	2	N/A	N/A	March 2017
	Cobalt[2]	mg/L	0.00392*	0.00983*	0.00288	0.003917	0.00631	03/2019	05/2019	March 2017
	TSS	mg/L	23.0	11.3	N/A	N/A	N/A	N/A	N/A	N/A
MW-305	Barium	mg/L	0.0443	N/A	1.09	N/A - No SSI	2	N/A	N/A	March 2017
	Cobalt[2]	mg/L	0.00162	N/A	0.00288	N/A - No SSI	0.00631	04/2015	10/2015	March 2017
	TSS	mg/L	8.63	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:

* Current result is above background, will be analyzed using confidence intervals.

** Current result is below background, if confirmed by next sample SSI will be terminated.

*** Current result is above background. The constituent is not an active SSI. This SSI will be verified during the next sampling event.

[1] The 5th Background sample for Non-organic constituents is the fifth sampling event beginning with low-flow sampling in April 2015.

[2] The background standard for cobalt is a statistically calculated upper prediction limit based on background concentrations measured from monitoring wells MW-9AR and MW-201B. Following review of the May 2024 verification monitoring event results, a cobalt concentration (0.00631 mg/L) measured in a groundwater sample collected from monitoring well MW-213A was established as a site-specific groundwater protection standard (GWPS). Details regarding the site-specific GWPS for cobalt are summarized in the alternative source demonstration dated August 2024.

J Laboratory flag indicating result is less than the reporting limit (RL) but greater than or equal to the method detection limit and the concentration is an approximate value.

N/A Not Applicable

UPL Upper Prediction Limit (Interwell)

Comments:

Monitoring locations in the assessment monitoring program are first compared to background using interwell prediction limits for inorganic constituents. Organic constituents are evaluated using the double quantification rule (DQR) to identify exceedances above background (statistically significant increases [SSIs]). If a prediction limit is exceeded or the DQR indicates a detection, retesting is not completed and the monitoring well/constituent pair is evaluated for exceedance of the groundwater protection standards using confidence intervals. If the lower confidence limit (LCL) is below the GWPS, the monitoring well/constituent pair will be sampled again at the next semiannual event. If the LCL is above the GWPS, the monitoring well will be moved into the corrective action monitoring program. The initial exceedance dates for inorganic constituents are no earlier than Spring 2017. This was the first date statistical analyses were completed following low-flow sampling procedures and modified background data.

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Table 5
Summary of Ongoing and Newly Identified SSLs
2024 Spring Statistical Report
Cedar Rapids Linn County Solid Waste Agency Landfill - Site 2
Permit No. 57-SDP-01-72P

Well	Constituent	Units	Most recent result				Consecutive Compliance Dates		
			(April 2024)	Upper Confidence Limit	GWPS	Initial Exceedance	1st Occurrence	Most Recent	Duration (Years)
MW-20	Benzene	µg/l	3.47	5.879	5	2009	N/A	N/A	N/A
MW-20	Cobalt[1]	mg/l	0.00180	0.00564	0.00631	10/2018	April-24	April-24	0
MW-18	Cobalt[1]	mg/l	0.00346	0.006024	0.00631	3/2017	April-24	April-24	0
MW-19	Cobalt[1]	mg/l	0.00852	0.01773	0.00631	3/2017	N/A	N/A	N/A
MW-301	Cobalt[1]	mg/l	0.00424	0.007217	0.00631	3/2017	N/A	N/A	N/A

Notes

[1] Following review of the May 2024 verification monitoring event results, a cobalt concentration (0.00631 mg/L) measured in a groundwater sample collected from monitoring well MW-213A was established as a site-specific groundwater protection standard (GWPS). Details regarding the site-specific GWPS for cobalt are summarized in the alternative source demonstration dated August 2024.

Comments:

- The upper confidence limit (UCL) for benzene at MW-20 continues to be above the GWPS; therefore, MW-20 will remain in the corrective action monitoring program.
- The UCLs for cobalt at MW-19 and MW-301 continues to be above the GWPS; therefore, the monitoring wells will remain in the corrective action monitoring program.
- The UCLs for cobalt at MW-18 and MW-20 are below the GWPS. The April 2024 compliance monitoring event is the initial event where cobalt concentrations are below the GWPS. Monitoring wells MW-18 and MW-20 will remain in the corrective action monitoring program for the cobalt constituent until the UCLs for cobalt have remained below the GWPS for three (3) consecutive years.

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Table 6
Historic SSI and SSL Summary
2024 Spring Statistical Report
Cedar Rapids Linn County Solid Waste Agency Landfill - Site 2
Permit No. 57-SDP-01-72P

Key:
SSI -
SSL -

Well	Constituent	Spring 2018	Fall 2018	Spring 2019	Fall 2019	Spring 2020	Fall 2020	Spring 2021	Fall 2021	Spring 2022	Fall 2022	Spring 2023	Fall 2023	Spring 2024
MW-15	Arsenic													
	Barium													
	Cadmium													
	Cobalt													**
	Lead													
	Nickel													
MW-18	Cadmium													
	Cobalt													****
	Nickel													
	Silver													
	Thallium													
MW-19	Arsenic													
	Barium													
	Benzene													
	Chlorobenzene													**
	Cobalt													
	Nickel													
	1,4-Dichlorobenzene													
MW-20	Antimony													
	Arsenic													**
	Barium													**
	Benzene													
	Chlorobenzene													
	Chromium													
	Cobalt													****
	Copper													
	Edosulfan I													
	Heptachlor													
	Nickel													
	Zinc													
MW-22	Arsenic													
	Barium													**
	Benzene													
	beta-BHC													
	Cobalt													
	Copper													
	Nickel													
	Silvex (2,4,5-TP)													**
MW-24	Barium													
	Cobalt													
	Cadmium													
	Nickel													

Table 6
Historic SSI and SSL Summary
2024 Spring Statistical Report
Cedar Rapids Linn County Solid Waste Agency Landfill - Site 2
Permit No. 57-SDP-01-72P

Key:
SSI -
SSL -

Well	Constituent	Spring 2018	Fall 2018	Spring 2019	Fall 2019	Spring 2020	Fall 2020	Spring 2021	Fall 2021	Spring 2022	Fall 2022	Spring 2023	Fall 2023	Spring 2024
MW-26A	Arsenic										NE		NE	
	Cobalt										NE		NE	
	Nickel										NE		NE	
	Acetone										NE		NE	
MW-300	Benzene													
	Cadmium													
	Chlorobenzene													
	Cobalt													
	Nickel													
	1,4-Dichlorobenzene													
MW-301	Arsenic													**
	Barium													
	Cadmium													
	Chlorobenzene													
	Cobalt													
	Nickel													
	Silver													
	Thallium													
MW-302R	Arsenic													
	Barium													
	Cobalt													
	Nickel													
MW-303	Arsenic													
	Barium													
	Cadmium													**
	Cobalt												1	1/**
	gamm-BHC (Lindane)													
	2,4-D													
	4,4-DDT													
	Heptachlor													
	Nickel													
MW-304R	Barium													
	Cobalt													
	Nickel													
MW-305	Barium													
	Cobalt													

Comments:
Gray shading = indicates a confirmed SSI above background
Black shading = indicates a confirmed SSL above the GWPS
LCL = Lower Confidence Limit
UCL = Upper Confidence Limit
GWPS = Groundwater Protection Standard
NE = Not Evaluated [Statistical analysis could not be conducted due to groundwater sample not collected and analyzed.]
* Current result caused the LCL to be above the GWPS. The constituent is not an active SSL.
** Current result is below background, if confirmed by next sampling event, SSI will be terminated.
*** Current Result is above background. The constituent is not an active SSI. This SSI will be verified during the next sampling event.
**** Current UCL is below the GWPS. The constituent has historically been identified at a SSL above the GWPS. If the UCL is below the GWPS for three (3) consecutive years, the SSL designation will be removed from the constituent.
[1] Elevated cobalt concentrations detected at monitoring well MW-303 are the result of an alternative source and are not indicative of a release from the landfill. The constituent is not indentified as an SSL at monitoring well MW-303.

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Table 7
Corrective Action Monitoring - Benzene Detections
2024 Spring Statistical Report
Cedar Rapids Linn County Solid Waste Agency Landfill - Site 2
Permit No. 57-SDP-01-72P

	Benzene (µg/l)											**Significant Trend**	**Current Monitoring Prog. (Spring 2024)**
	Spring 2019	*Fall 2019*	*Spring 2020*	*Fall 2020*	*Spring 2021*	*Fall 2021*	*Spring 2022*	*Fall 2022*	*Spring 2023*	*Fall 2023*	*Spring 2024*		
Corrective Action Monitoring Point													
MW-20	5.77	6.47	6.98	5.51	6.12	5.70	5.34	3.09	2.71	3.66	3.47	None	Corrective Action
HMSP/Delineation Monitoring Points													
MW-16[1]	<0.220	<0.220	<0.220	<0.220	<0.220	N.S	N.S.	N.S.	N.S.	N.S.	N.S.		Water Level
MW-28[1]	0.792	0.485J	0.317J	<0.220	0.228J	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.		Water Level
MW-29	0.241J	<0.220	<0.220	<0.220	<0.220	<0.220	<0.220	<0.220	<0.220	<0.220	<0.220	None	Delineation
MW-30	<0.220	<0.220	<0.220	<0.220	<0.220	<0.220	<0.220	<0.220	<0.220	<0.220	<0.220	None	Delineation
MW-306	<0.220	0.347J	0.644	0.280J	0.404J	<0.220	0.473J	<0.220	<0.211	<0.220	0.381J	None	Delineation
MW-307A	<0.220	0.420J	<0.220	0.429J	<0.220	0.316J	<0.220	<0.220	<0.220	<0.220	<0.220	None	Delineation
MW-307B[1]	<0.220	<0.220	<0.220	<0.220	<0.220	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.		Water Level
MW-308[1]	<0.221	<0.220	<0.220	<0.220	<0.220	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.		Water Level

Note:

[1] Delineation Wells MW-16, MW-28, MW-307B and MW-308 are no longer sampled for benzene as part of the delineation program.

J - Laboratory flag indicating result is less than the reporting limit (RL) but greater than or equal to the method detection limit and the concentration is an approximate value.

N.S. - Not Sampled during sampling event.

µg/l - micrograms per liter

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Table 8
Corrective Action Monitoring - Cobalt Detections
2024 Spring Statistical Report
Cedar Rapids Linn County Solid Waste Agency Landfill - Site 2
Permit No. 57-SDP-01-72P

Cobalt (mg/L)													
	Spring 2019	*Fall 2019*	*Spring 2020*	*Fall 2020*	*Spring 2021*	*Fall 2021*	*Spring 2022*	*Fall 2022*	*Spring 2023*	*Fall 2023*	*Spring 2024*	**Significant Trend**	**Current Monitoring Program (Spring 2024)**
Corrective Action Monitoring Points													
MW-18	0.0051	0.00407	0.00271	0.00362	0.00338	0.00591	0.00446	0.00496	0.00255	0.00710	0.00346	None	Corrective Action
MW-19	0.0152	0.0124	0.0145	0.0154	0.0149	0.0129	0.00707	0.0150	0.0156	0.0190	0.00852	None	Corrective Action
MW-20	0.00556	0.00265	0.00273	0.00351	0.00494	0.00567	0.00344	0.00515	0.00339	0.00562	0.00180	None	Corrective Action
MW-301	0.00766	0.00546	0.007	0.00640	0.00480	0.00941	0.00450	0.00498	0.00273	0.00517	0.00424	None	Corrective Action
Cobalt HMSP & Delineation Monitoring Points													
MW-15	0.00258	0.00193	0.00239	0.00357	0.00143	0.00448	0.000701	0.00365	0.00351	0.00330	0.00206	None	Assessment
MW-16[1]	0.000796	0.000649	0.00085	0.000703	0.000739	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.		Water Level
MW-22	0.000302J	0.000339J	0.000312J	0.000357J	0.000335	0.000581	0.000492J	0.000438J	0.000481J	0.000401J	0.000278J	None	Assessment
MW-23	N.S.	N.S.	0.0014	0.000880	0.000178J	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.		Water Level
MW-28[1]	0.00149	0.0016	0.00161	0.00138	0.00141	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.		Water Level
MW-29	0.00182	0.00103	0.00453	0.000972	0.000842	0.001	0.000939	0.000780	0.00181	0.00137	0.00495	None	Delineation
MW-30	0.000373J	0.000293J	0.000288J	0.000235J	0.000302J	0.000826	0.000458J	0.000579	0.000562	0.000645	0.0258	None	Delineation
MW-300	0.00124	0.00249	0.000422J	0.00240	0.000204J	0.00416	<0.000190	0.00525	0.000241J	0.0202	<0.000170	None	Assessment
MW-306	0.00127	0.00234	0.00168	0.00245	0.00197	0.00194	0.00216	0.00189	0.00203	0.00190	0.00223	None	Delineation
MW-307A	0.00187	0.000689	0.00455	0.00125	0.00151	0.000887	0.00181	0.000752	0.00232	0.000793	0.00594	None	Delineation
MW-307B[1]	0.000264J	0.000151J	0.000144J	<0.0000910	<0.0000910	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.		Water Level
MW-308[1]	0.000205J	<0.0000910	0.000112J	<0.0000910	0.000135J	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.		Water Level

Note:

[1] Delineation Wells MW-16, MW-28, MW-307B and MW-308 are no longer sampled for cobalt as part of the delineation program.

J - Laboratory flag indicating result is less than the reporting limit (RL) but greater than or equal to the method detection limit and the concentration is an approximate value.

N.S. - Not Sampled during sampling event.

mg/L - milligrams per liter

Comments:

● Cobalt detections in the HMSP wells (MW-15, MW-22, MW-300) and delineation monitoring wells (MW-16, MW-23, MW-28, MW-29, MW-30, MW-306, MW-307A/B, MW-308) were used to delineate cobalt concentrations near the corrective action monitoring wells (MW-18, MW-19, MW-20, and MW-301).

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Table 9
Duplicate Sample RPD
2024 Spring Statistical Report
Cedar Rapids Linn County Solid Waste Agency Landfill - Site 2
Permit No. 57-SDP-01-72P

Parameter	Units	DUP-1	MW-20	RPD	DUP-2	MW-18	RPD
Arsenic	mg/L	0.00292	0.00296	1.36%	<0.000530	<0.000530	N/A
Barium	mg/L	0.7380	0.719	2.61%	0.0606	0.0610	0.66%
Benzene	µg/L	3.31	3.47	4.72%	<0.220	<0.220	N/A
Cadmium	mg/L	<0.0001	<0.0001	N/A	0.000204	0.000211	3.37%
Chlorobenzene	µg/L	3.50	3.59	2.54%	<0.400	<0.400	N/A
Cobalt	mg/L	0.00178	0.00180	1.12%	0.00346	0.00346	0.00%
Nickel	mg/L	0.00988	0.0101	2.20%	0.0262	0.0261	0.38%
TSS	mg/L	101	114	12.09%	<1.39	<1.39	N/A

Notes:

mg/L - milligrams per liter

N/A - Not Applicable; Constituent was not analyzed or detection was not above the laboratory reporting limit; therefore the RPD was not calculated.

RPD - Relative Percent Difference

TSS - Total Suspended Solids

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Attachment 1

Field Sampling Forms

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Compliance Monitoring Event – April 2024

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Eurofins TestAmerica, Cedar Falls
3019 Venture Way

Cedar Falls, IA 50613
phone 319.277.2401 fax 319.277.2425

Chain of Custody Record

eurofins | Environment Testing America

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Richard Wilson	Site Contact: Richard Wilson	Date:	COC No:
HDR Engineering Inc.	Email: Richard.Wilson2@hdrinc.com	Lab Contact: Shirley Thompson	Carrier:	_____ of _____ COCs
1917 S. 67th St.	Tel/Fax:402-392-6714			TALS Project #:
Omaha, NE 68106	**Analysis Turnaround Time**			Sampler:
Phone	☐ CALENDAR DAYS ☐ WORKING DAYS			**For Lab Use Only:**
FAX	TAT if different from Below _____			Walk-in Client:
Project Name: Cedar Rapids/Linn County Solid Waste Site-2	☐ 2 weeks			Lab Sampling:
Site Location: Marion, Iowa	☐ 1 week			Job / SDG No.:
Project No. 10375879	☐ 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)	Appendix I	TSS	Full Appendix II	Appendix I - VOCs only	2,4-D	gamma-BHC (Lindane)	Benzene	Heptachlor	Cobalt	beta-BHC	2,4,5-TP (Silvex	Sulfide						Sample Specific Notes:
GU-1	4-17-2024	13:18	G	GW	5	N	N	X	X																
GU-L	4-17-2024	12:25	G	GW	5			X	X																
GU-D	4-17-2024	12:45	G	GW	5			X	X																
GU-P	4-17-2024	13:00	G	GW	5			X	X																
MW-201B	4-17-2024	9:04	G	GW	6			X	X										X						
MW-9AR	4-17-2024	8:03	G	GW	6			X	X										X						
MW-15	4-18-2024	13:47	G	GW	5			X	X																
MW-18	4-18-2024	11:30	G	GW	5			X	X																
MW-19	4-18-2024	14:30	G	GW	5			X	X																
MW-20	4-18-2024	13:07	G	GW	5			X	X																
MW-22	4-18-2024	10:23	G	GW	9			X	X								X	X							
MW-24	4-17-2024	14:33	G	GW	5	V	V	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:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____		Therm ID No.: _____
Relinquished by: Richard Wilson	Company: HDR	Date/Time: 4-19-2024 8:00	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: 4/19/24 0820

Eurofins TestAmerica, Cedar Falls
3019 Venture Way

Cedar Falls, IA 50613
phone 319.277.2401 fax 319.277.2425

Chain of Custody Record

eurofins | Environment Testing America

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Richard Wilson	Site Contact: Richard Wilson	Date:	COC No:
HDR Engineering Inc.	Email: Richard.Wilson2@hdrinc.com	Lab Contact: Shirley Thompson	Carrier:	_____ of _____ COCs
1917 S. 67th St.	Tel/Fax:402-392-6714			TALS Project #:
Omaha, NE 68106	Analysis Turnaround Time			Sampler:
Phone	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
FAX	TAT if different from Below _____			Walk-in Client:
Project Name: Cedar Rapids/Linn County Solid Waste Site-2	☐ 2 weeks			Lab Sampling:
Site Location: Marion, Iowa	☐ 1 week			Job / SDG No.:
Project No. 10375879	☐ 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)	Appendix I	TSS	Full Appendix II	Appendix I - VOCs only	2,4-D	gamma-BHC (Lindane)	Benzene	Heptachlor	Cobalt	beta-BHC	2,4,5-TP (Silvex	Sulfide	Sample Specific Notes:
MW-26A	4-17-2024	15:03	G	GW	18	N	N		X	X										
MW-300	4-18-2024	15:10	G	GW	5			X	X											
MW-301	4-18-2024	12:25	G	GW	5			X	X											
MW-302R	4-17-2024	14:01	G	GW	5			X	X											
MW-303	4-17-2024	15:55	G	GW	9			X	X			X	X		X					
MW-304R	4-17-2024	16:58	G	GW	18				X	X										
MW-305	4-17-2024	17:56	G	GW	5			X	X											
MW-29	4-18-2024	8:21	G	GW	5				X					X		X				
MW-30	4-18-2024	7:45	G	GW	5				X					X		X				
MW-306	4-18-2024	9:30	G	GW	5				X					X		X				
MW-307A	4-18-2024	8:58	G	GW	5				X					X		X				
MW-501	4-17-2024	11:50	G	GW	5	↓	↓	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:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____		Therm ID No.: _____
Relinquished by:	Company: HDR	Date/Time: 4-19-2024/8:00	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: 4/19/24 0800

Eurofins TestAmerica, Cedar Falls
3019 Venture Way

Cedar Falls, IA 50613
phone 319.277.2401 fax 319.277.2425

Chain of Custody Record

eurofins | Environment Testing America

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Richard Wilson		COC No:
HDR Engineering Inc.	Email: Richard.Wilson2@hdrinc.com	Site Contact: Richard Wilson	Date:	_____ of _____ COCs
1917 S. 67th St.	Tel/Fax:402-392-6714	Lab Contact: Shirley Thompson	Carrier:	TALS Project #:
Omaha, NE 68106	**Analysis Turnaround Time**			Sampler:
Phone	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
FAX	TAT if different from Below _____			Walk-in Client:
Project Name: Cedar Rapids/Linn County Solid Waste Site-2	☐ 2 weeks			Lab Sampling:
Site Location: Marion, Iowa	☐ 1 week			
Project No. 10375879	☐ 2 days			Job / SDG No.:
	☐ 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)	Appendix I	TSS	Full Appendix II	Appendix I - VOCs only	2,4-D	gamma-BHC (Lindane)	Benzene	Heptachlor	Cobalt	beta-BHC	2,4,5-TP (Silvex	Sulfide	Sample Specific Notes:
MW-502	4-17-2024	10:51	G	~~GW~~ DW	5	N	N	X	X											
EQ-1	4-18-2024	15:25	G	GW	5			X	X											
Dup-1	4-18-2024	11:07	G	GW	5			X	X											
Dup-2	4-18-2024	11:30	G	GW	5			X	X											
TB-1	4-17-2024	13:50	G	~~GW~~ DW	2						X									
TB-2	4-18-2024	8:10	G	~~GW~~ DW	2						X									
TB-3	4-18-2024	15:40	G	DW	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: [signature]	Company: HDR	Date/Time: 4-19-2024 8:00	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: [signature]	Company:	Date/Time: 4/19/24 0800

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Spring 2024

CRLCSWA
Site Water Levels

HDR

Sampler: Richard Wilson

Equipment: Solinst 200' Water Level Alconox with DI Rinse

Well	Date	Time	Water Level (ft. below TOC)	Bottom of Casing (ft. below TOC)	Previous Water Level Below TOC (10/2023)	Previous Water Level Below TOC (4/2023)	Notes
MW-9AR	4-17-2024	7:33	7.17	22.13	10.45	7.42	
MW-15	4-18-2024	13:25	7.44	20.58	10.88	8.02	
MW-16	4-18-2024	12:41	8.31	40.19	9.71	7.52	
MW-18	4-18-2024	11:13	7.77	19.93	10.93	8.65	
MW-19	4-18-2024	14:06	6.35	19.77	10.09	7.12	
MW-20	4-18-2024	12:46	10.88	23.02	13.09	10.63	
MW-22	4-18-2024	10:04	2.48	16.26	4.45	3.19	
MW-23	4-18-2024	9:46	2.00	17.16	3.84	2.35	
MW-24	4-17-2024	14:15	9.12	12.89	12.14	10.42	
MW-26A	4-17-2024	14:44	17.65	20.09	DRY	18.46	
MW-27	4-18-2024	8:32	9.16	17.25	11.09	9.05	
MW-28	4-18-2024	8:30	9.42	21.74	11.25	9.36	
MW-29	4-18-2024	7:57	7.45	17.38	10.08	7.51	
MW-30	4-18-2024	7:20	7.06	17.48	10.12	7.55	
MW-201A	4-17-2024	9:23	6.26	17.35	9.92	7.10	
MW-201B	4-17-2024	8:26	9.59	62.85	26.31	23.55	
MW-201C	4-17-2024	9:21	52.80	7200	52.13	50.35	
MW-204A	4-17-2024	15:07	6.01	13.32	10.34	8.55	
MW-204C	4-17-2024	18:09	9.25	51.86	7.62	6.68	
MW-211A	4-17-2024	9:33	11.76	18.36	13.98	12.51	
MW-211D	4-17-2024	9:35	43.93	116.35	44.59	43.07	
4-18-2024 MW-213A	~~4-17-2024~~	16:02	2.70	11.79	4.93	3.38	
4-18-2024 MW-213D	~~4-17-2024~~	16:06	7.58	64.98	7.69	6.69	
4-18-2024 MW-213E	~~4-17-2024~~	16:10	7.78	82.10	7.81	6.85	
MW-214	4-17-2024	9:42	11.48	18.00	14.02	12.45	
MW-215	4-17-2024	9:59	6.91	18.76	9.08	7.45	
MW-216	4-17-2024	8:25	9.08	25.04	10.96	9.39	
MW-218	4-17-2024	16:26	21.90	29.74	23.54	22.07	
MW-300	4-18-2024	14:53	6.40	16.24	9.85	6.50	
MW-301	4-18-2024	12:00	11.67	20.33	14.09	11.82	
MW-302R	4-17-2024	13:38	5.52	28.12	6.15	5.52	
MW-303	4-17-2024	15:35	16.65	21.06	19.34	17.32	
MW-304R	4-17-2024	16:36	25.67	29.64	26.91	24.40	
MW-305	4-17-2024	17:36	14.92	32.26	18.2	15.02	
MW-306	4-18-2024	9:10	10.35	22.69	13.49	10.39	
MW-307A	4-18-2024	8:38	9.95	20.44	11.13	9.94	
MW-307B	4-18-2024	9:04	9.50	29.41	11.27	9.22	
MW-308	4-18-2024	7:16	8.39	27.48	11.02	8.67	
MW-501	4-17-2024	11:20	15.13	35.78	19.08	15.68	
MW-502	4-17-2024	10:17	31.56	36.10	33.89	32.06	

Low Stress Groundwater Sampling Data Sheet

HDR	Facility Name: **CRLCSWA SITE 2**	Sampler Name(s): Richard Wilson
	MW Identification: GW-1	Date/Time: 4-17-2024 / 13:18
	Sample Number: 8	PID Readings: **N/A**
	Weather Conditions: Cloudy, windy mid-50s	
	Wellhead Inspection: —	

Visual Inspection:

1. Survey Mark Present:	Yes / No	S. Standing/Ponded Water:	Yes / No
2. Collision/Vandalism Damage:	Yes / No	6. Frost Heaving:	Yes / No
3. Casing Degradation:	Yes / No	7. Lock in Place:	Yes / No
4. Well Subsidence:	Yes / No		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])		7. Purge Rate (mL/min)	
2. Intake Depth (±0.01 ft.)		8. Water Level Measuring Equip.	
3. Bottom of casing (±0.01 ft.)		9. Purge Equipment Used	
4. Casing Diameter (inches)		10. Dedicated? (Yes/No)	Yes / No
5. Actual Volume of Water Purged (mL)		11. Immiscible layer observed	Yes / No
6. Purge Water Characteristics:		12. Thickness of immiscible layer	
Odor	Turbidity	13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / N/A
Color			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
13:18	—	10.1	2907	-47.0	5.19	134.61	7.03	—	Grab Sample

1. Well evacuated to dryness? Yes / (No)
2. Sample Filtered? Yes / (No)
3. Sampling Equip. Used: Underdrain Pump
4. Drive Gas (Air/Nitrogen): AIR /NITROGEN/ (N/A)
5. Sample Rate (mL/min):
6. Sample Appearance:
   - Turbidity: Very turbid - Reflow
   - Color: reddish orange
   - Odor: None
7. Time to recharge (min): NA
8. Sample Time: 13:18
9. Parameter/Container/Pres.: See Attached COC
10. Other Information:
11. Decontamination Procedures: Alconox/DI Rinse
12. Instrument type: YSI ProDSS

Calibration	Stnd.	Reading	Adjust.
Date:		LAB	
Time:		LAB	
pH			
Conduct.	See attached Lab Form for Calibration Data		
ORP			
D.O			
Turbidity			

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA SITE 2**	Sampler Name(s): Richard Wilson
MW Identification: [redacted] GW-L	Date/Time: 4-17-2024 / 12:25
Sample Number: 5	PID Readings: **N/A**
Weather Conditions: Cloudy, Windy mid-50s	
Wellhead Inspection: —	

Visual Inspection:

1. Survey Mark Present:	Yes / No	5. Standing/Ponded Water:	Yes / No
2. Collision/Vandalism Damage:	Yes / No	6. Frost Heaving:	Yes / No
3. Casing Degradation:	Yes / No	7. Lock in Place:	Yes / No
4. Well Subsidence:	Yes / No		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])		7. Purge Rate (mL/min)	
2. Intake Depth (±0.01 ft.)		8. Water Level Measuring Equip.	
3. Bottom of casing (±0.01 ft.)		9. Purge Equipment Used	
4. Casing Diameter (inches)		10. Dedicated? (Yes/No)	Yes / No
5. Actual Volume of Water Purged (mL)		11. Immiscible layer observed	Yes / No
6. Purge Water Characteristics:		12. Thickness of immiscible layer	
Odor	Turbidity	13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / N/A
Color			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
12:25	—	10.0	2013	23.4	2.74	39.94	6.59	—	Grab Sample

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	—
2. Sample Filtered?	Yes / (No)	8. Sample Time:	12:25
3. Sampling Equip. Used	Bailer	9: Parameter/Container/Pres.	See Attached COC
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/ (N/A)		
5. Sample Rate (mL/min)	—		
6. Sample Appearance:			
Turbidity	Clear	10. Other Information:	
Color	none		
Odor	None		

11. Decontamination Procedures: **Alconox/DI Rinse**

12. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA SITE 2**	Sampler Name(s): Richard Wilson
MW Identification: GW-0	Date/Time: 4-17-2024 / 12:45
Sample Number: 6	PID Readings: **N/A**
Weather Conditions: Cloudy windy mid-50s	
Wellhead Inspection: —	

Visual Inspection:

1. Survey Mark Present:	Yes / No	5. Standing/Ponded Water:	Yes / No
2. Collision/Vandalism Damage:	Yes / No	6. Frost Heaving:	Yes / No
3. Casing Degradation:	Yes / No	7. Lock in Place:	Yes / No
4. Well Subsidence:	Yes / No		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])		7. Purge Rate (mL/min)	
2. Intake Depth (±0.01 ft.)		8. Water Level Measuring Equip.	
3. Bottom of casing (±0.01 ft.)		9. Purge Equipment Used	
4. Casing Diameter (inches)		10. Dedicated? (Yes/No)	Yes / No
5. Actual Volume of Water Purged (mL)		11. Immiscible layer observed	Yes / No
6. Purge Water Characteristics:		12. Thickness of immiscible layer	
Odor	Turbidity	13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / N/A
Color			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
12:45	—	17.7	1727	-92.7	2.42	3.95	6.81	—	Grab Sample

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	NA
2. Sample Filtered?	Yes / (No)	8. Sample Time:	1245
3. Sampling Equip. Used	Pump Undedicated	9: Parameter/Container/Pres.	**See Attached COC**
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/ (N/A)		
5. Sample Rate (mL/min)	—		
6. Sample Appearance:			
Turbidity	None Clear	10. Other Information:	
Color	Clear None		
Odor	None		

11. Decontamination Procedures: **Alconox/DI Rinse**

12. Instrument type: **YSI ProDSS**

Calibration Date:			**LAB**
Calibration Time:			**LAB**
	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA SITE 2**	Sampler Name(s): Richard Wilson
MW Identification: GU-P	Date/Time: 4-17-2024 / 13:30
Sample Number: 7	PID Readings: **N/A**
Weather Conditions: Cloudy, Windy mid-80s	
Wellhead Inspection:	

Visual Inspection:

1. Survey Mark Present:	Yes / No	S. Standing/Ponded Water:	Yes / No
2. Collision/Vandalism Damage:	Yes / No	6. Frost Heaving:	Yes / No
3. Casing Degradation:	Yes / No	7. Lock in Place:	Yes / No
4. Well Subsidence:	Yes / No		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])		7. Purge Rate (mL/min)	
2. Intake Depth (±0.01 ft.)		8. Water Level Measuring Equip.	
3. Bottom of casing (±0.01 ft.)		9. Purge Equipment Used	
4. Casing Diameter (inches)		10. Dedicated? (Yes/No)	Yes / No
S. Actual Volume of Water Purged (mL)		11. Immiscible layer observed	Yes / No
6. Purge Water Characteristics:		12. Thickness of immiscible layer	
Odor	Turbidity	13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / N/A
Color			

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
13:00	—	14.5	1005	-84.9	2.01	1.74	7.04	—	Grab sample

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	NA	11. Decontamination Procedures:	
2. Sample Filtered?	Yes / (No)	8. Sample Time:	13:00	**Alconox/DI Rinse**	
3. Sampling Equip. Used	Unterdruck pump	9: Parameter/Container/Pres.		12. Instrument type: **YSI ProDSS**	
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/ N/A	**See Attached COC**		Calibration Date:	**LAB**
S. Sample Rate (mL/min)				Calibration Time:	**LAB**
6. Sample Appearance:				Stnd. / Reading / Adjust.	
Turbidity	Clear	10. Other Information:		pH	
Color	None			Conduct.	**See attached Lab Form for Calibration Data**
Odor	None			ORP	
				D.O	
				Turbidity	

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA SITE 2**	Sampler Name(s): Richard Wilson
MW Identification: MW-9AR	Date/Time: 4-17-2024 / 7:33
Sample Number: 1	PID Readings: N/A
Weather Conditions: Cloudy, windy mid 50s	
Wellhead Inspection: Good	

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	7.17	7. Purge Rate (mL/min)	400
2. Intake Depth (±0.01 ft.)	NM	8. Water Level Measuring Equip.	Solinst
3. Bottom of casing (±0.01 ft.)	22.13	9. Purge Equipment Used	Geo Peri
4. Casing Diameter (inches)	2	10. Dedicated? (Yes/No)	Yes / (No)
S. Actual Volume of Water Purged (mL)	8400	11. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		12. Thickness of immiscible layer	—
Odor: none Turbidity: mod. Turbidity		13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color: reddish br.			

Pump Start: 7:42

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
7:46	1600	10.9	7104	-49.2	1.06	20.23	6.60	7.50	
7:49	2800	10.9	7133	-58.4	0.58	140.85	6.60	7.57	Emptied flow cell
7:52	4000	10.9	7146	-58.4	0.82	123.64	6.59	7.61	
7:55	5200	10.9	7141	-74.5	0.26	75.03	6.59	7.73	
7:58	6400	10.9	7144	-80.5	0.15	59.13	6.59	7.80	
8:01	7600	10.9	7138	-85.2	0.09	55.74	6.59	7.82	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	8:03
3. Sampling Equip. Used	Peri	9: Parameter/Container/Pres.	See Attached COC
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/ (N/A)		
S. Sample Rate (mL/min)	400		
6. Sample Appearance:			
Turbidity	Slightly turbid	10. Other Information:	
Color	light br		
Odor	none		

11. Decontamination Procedures: **Alconox/DI Rinse**

12. Instrument type: **YSI ProDSS**

Calibration Date:		LAB
Calibration Time:		LAB
	Stnd.	Reading / Adjust.
pH		
Conduct.		See attached Lab Form for Calibration Data
ORP		
D.O		
Turbidity		

Low Stress Groundwater Sampling Data Sheet

Facility Name: CRLCSWA SITE 2		Sampler Name(s):	Richard Wilson
MW Identification:	MW-15	Date/Time:	4-18-2024 / 13:25
Sample Number:	23	PID Readings:	N/A
Weather Conditions:	Cloudy upper 40s		
Wellhead Inspection:	Good		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	S. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	7.44	7. Purge Rate (mL/min)	300
2. Intake Depth (±0.01 ft.)		8. Water Level Measuring Equip.	Solinst
3. Bottom of casing (±0.01 ft.)	20.58	9. Purge Equipment Used	Peri Pump
4. Casing Diameter (inches)	2"	10. Dedicated? (Yes/No)	Yes / (No)
S. Actual Volume of Water Purged (mL)	5100	11. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		12. Thickness of immiscible layer	—
Odor: None Turbidity	Clear	13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color: None			

Pump Start: 13:30

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
13:33	900	9.4	1357	-16.4	3.96	6.43	7.05	8.27	
13:36	1800	9.1	1344	18.1	1.97	6.15	6.98	8.53	
13:39	2700	8.9	1338	30.5	1.666	4.98	6.97	8.64	
13:42	3600	8.8	1333	34.8	1.32	4.76	6.94	8.71	
13:45	4500	8.8	1335	35.6	1.31	4.81	6.93	8.74	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	—	11. Decontamination Procedures:	
2. Sample Filtered?	Yes / (No)	8. Sample Time:	13:47		Alconox/DI Rinse
3. Sampling Equip. Used	Peri Pump	9: Parameter/Container/Pres.		12. Instrument type: YSI ProDSS	
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/ (N/A)		See Attached COC	Calibration Date:	LAB
S. Sample Rate (mL/min)	300			Calibration Time:	LAB
6. Sample Appearance:					Stnd. / Reading / Adjust.
Turbidity	Clear	10. Other Information:		pH	
Color	None			Conduct.	See attached Lab Form for Calibration Data
Odor	None			ORP	
				D.O	
				Turbidity	

Initial Discharge: Turbid, Fe floc, reddish-orange

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA SITE 2**		Sampler Name(s): Richard Wilson
MW Identification: MW-18		Date/Time: 4-18-2024 / 11:13
Sample Number: 20		PID Readings: **N/A**
Weather Conditions: Rainy Upper 40s		
Wellhead Inspection: Good		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	S. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	7.77	7. Purge Rate (mL/min)	200
2. Intake Depth (±0.01 ft.)	—	8. Water Level Measuring Equip.	Solinst
3. Bottom of casing (±0.01 ft.)	19.93	9. Purge Equipment Used	Peri Pump
4. Casing Diameter (inches)	2"	10. Dedicated? (Yes/No)	Yes / (No)
S. Actual Volume of Water Purged (mL)	3000	11. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		12. Thickness of immiscible layer	—
Odor: None Turbidity: Clear		13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color: None			

Pump Start: 11:15

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
MW18	600	9.4	2872	109.9	1.03	3.95	6.95	8.26	
11:21	1200	9.2	2398	108.7	0.60	4.92	6.96	8.30	
11:24	1800	9.0	2390	109.6	0.52	4.07	6.92	8.32	
11:27	2400	9.0	2404	110.3	0.40	4.52	6.89	8.35	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	—	11. Decontamination Procedures:	
2. Sample Filtered?	Yes / (No)	8. Sample Time:	11:30	**Alconox/DI Rinse**	
3. Sampling Equip. Used	Peri Pump	9: Parameter/Container/Pres.		12. Instrument type: **YSI ProDSS**	
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/ (N/A)	**See Attached COC**		Calibration Date:	**LAB**
S. Sample Rate (mL/min)	200			Calibration Time:	**LAB**
6. Sample Appearance:				Stnd. / Reading / Adjust.	
Turbidity	(Clear)	10. Other Information:		pH	
Color	None			Conduct.	**See attached Lab Form for Calibration Data**
Odor	None			ORP	
				D.O	
				Turbidity	

Dup-2: 13:00 4-18-2024

Low Stress Groundwater Sampling Data Sheet

HDR

Facility Name: **CRLCSWA SITE 2**	Sampler Name(s): Richard Wilson
MW Identification: MW-19	Date/Time: 4-18-2024/ 14:06
Sample Number: 24	PID Readings: N/A
Weather Conditions: Cloudy upper 40s lower 60s	
Wellhead Inspection:	

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	6.35	7. Purge Rate (mL/min)	200 – 300
2. Intake Depth (±0.01 ft.)		8. Water Level Measuring Equip.	Solinst
3. Bottom of casing (±0.01 ft.)	19.77	9. Purge Equipment Used	Peri Pump
4. Casing Diameter (inches)	2"	10. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	4500	11. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		12. Thickness of immiscible layer	
Odor: None	Turbidity: Clear, slightly turbid, Fe floc	13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color: None			

Pump Start: 14:11

Time	Volume Purged (mL)	Temp (°C) X	Conductivity (µs/cm) X	ORP (mV) X	D.O. (mg/L) X	Turbidity (NTU) X	pH X	Drawdown	Notes
14:15	1200	9.7	1835	101.6	2.58	70.28	6.66	7.78	
14:18	2100	9.5	1835	101.7	0.63	40.38	6.66	9.01	
14:21	2700	9.3	1839	100.6	0.36	4.32	6.66	9.60	Reduced to 200mL/min
14:24	3300	9.3	1833	98.2	0.24	4.81	6.66	10.07	
14:27	3900	9.2	1828	95.0	0.22	3.98	6.66	10.31	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	
2. Sample Filtered?	Yes / (No)	8. Sample Time:	14:30
3. Sampling Equip. Used	Peri Pump	9: Parameter/Container/Pres.	See Attached COC
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/ (N/A)		
5. Sample Rate (mL/min)	200		
6. Sample Appearance:			
Turbidity	(Clear)	10. Other Information:	
Color	None		
Odor	None		

11. Decontamination Procedures: **Alconox/DI Rinse**

12. Instrument type: **YSI ProDSS**

	Stnd.	Reading	Adjust.
Calibration Date:			LAB
Calibration Time:			LAB
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Intial Discharge: Turbid, Fe floc, reddish-orange

Low Stress Groundwater Sampling Data Sheet

HDR	Facility Name: **CRLCSWA SITE 2**	Sampler Name(s):	Richard Wilson
	MW Identification: MW-20	Date/Time:	4-18-2024 / 12:46
	Sample Number: 22	PID Readings:	N/A
	Weather Conditions: Cloudy upper 40s		
	Wellhead Inspection: Good		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	S. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	10.88	7. Purge Rate (mL/min)	300
2. Intake Depth (±0.01 ft.)	—	8. Water Level Measuring Equip.	Solinst
3. Bottom of casing (±0.01 ft.)	23.02	9. Purge Equipment Used	Peri Pump
4. Casing Diameter (inches)	2"	10. Dedicated? (Yes/No)	Yes / (No)
S. Actual Volume of Water Purged (mL)	5400	11. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		12. Thickness of immiscible layer	—
Odor: slight organic odor	Turbidity: clear	13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color: none			

Pump start: 12:49

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
12:52	900	10.5	2607	-83.5	2.00	2.98	6.87	11.06	
12:55	1800	10.3	2613	-95.4	0.58	4.75	6.87	11.08	
12:58	2700	10.3	2599	-99.4	0.31	4.82	6.87	11.10	
13:01	3600	10.3	2582	-102.0	0.18	3.89	6.85	11.10	
13:04	4500	10.4	2583	-100.9	0.13	4.12	6.85	11.10	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	—
2. Sample Filtered?	Yes / (No)	8. Sample Time:	13:07
3. Sampling Equip. Used	Peri Pump	9: Parameter/Container/Pres.	See Attached COC
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/(N/A)		
S. Sample Rate (mL/min)	300		
6. Sample Appearance:			
Turbidity	Clear	10. Other Information:	
Color	None		
Odor	Slight organic odor		

11. Decontamination Procedures: **Alconox/DI Rinse**

12. Instrument type: **YSI ProDSS**

	Stnd.	Reading	Adjust.
Calibration Date:		LAB	
Calibration Time:		LAB	
pH			
Conduct.		See attached Lab Form for Calibration Data	
ORP			
D.O			
Turbidity			

Dup-1: 11:07

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA SITE 2**	Sampler Name(s): Richard Wilson
MW Identification: MW-22	Date/Time: 4-18-2024 / 10:04
Sample Number: 19	PID Readings: N/A
Weather Conditions: Raining upper 40s	
Wellhead Inspection: Good	

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	Yes / (No)
4. Well Subsidence:	Yes / (No)		

Flushmount well

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	2.48	7. Purge Rate (mL/min)	200
2. Intake Depth (±0.01 ft.)	—	8. Water Level Measuring Equip.	Solinst
3. Bottom of casing (±0.01 ft.)	16.26	9. Purge Equipment Used	Peri Pump
4. Casing Diameter (inches)	2"	10. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	3400	11. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		12. Thickness of immiscible layer	—
Odor: None	Turbidity: clear	13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color: None			

Pump start: 10:06

Time	Volume Purged (mL)	Temp (°C) X	Conductivity (µs/cm) X	ORP (mV) X	D.O. (mg/L) X	Turbidity (NTU) X	pH X	Drawdown	Notes
10:09	600	9.1	3287	-65.6	1.08	150.98	6.82	3.78	
10:12	1200	9.2	3300	-80.9	3.81	11.22	6.90	3.76	
10:15	1800	9.1	3286	-77.0	0.76	4.60	6.88	3.86	
10:18	2400	9.1	3284	-79.6	0.44	3.92	6.88	3.96	
10:21	3000	8.9	3295	-81.5	0.27	4.89	6.88	4.00	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	—
2. Sample Filtered?	Yes / (No)	8. Sample Time:	10:23
3. Sampling Equip. Used	Peri Pump	9: Parameter/Container/Pres.	See Attached COC
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/ (N/A)		
5. Sample Rate (mL/min)	200		
6. Sample Appearance:			
Turbidity	Clear	10. Other Information:	
Color	None		
Odor	None		

11. Decontamination Procedures: **Alconox/DI Rinse**

12. Instrument type: **YSI ProDSS**

Calibration Date:		LAB
Calibration Time:		LAB
	Stnd. / Reading / Adjust.	
pH		
Conduct.		
ORP		
D.O		
Turbidity		

See attached Lab Form for Calibration Data

Induced Discharge: turbid, Fe flocs, reddish-orange

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA SITE 2**	Sampler Name(s): Richard Wilson
MW Identification: MW-24	Date/Time: 4-17-2024 / 14:15
Sample Number: 10	PID Readings: **N/A**
Weather Conditions: Partly cloudy mid-50s	
Wellhead Inspection: Good	

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	9.12	7. Purge Rate (mL/min)	400
2. Intake Depth (±0.01 ft.)	—	8. Water Level Measuring Equip.	Solinst
3. Bottom of casing (±0.01 ft.)	12.89	9. Purge Equipment Used	Peri Pump
4. Casing Diameter (inches)	2"	10. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	5600	11. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		12. Thickness of immiscible layer	—
Odor: None Turbidity: Clear		13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color: None			

Pump Start - 14:19

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
14:22	1200	10.0	2229	113.5	5.92	3.84	7.07	9.27	
14:25	2400	10.0	2247	112.7	5.30	5.48	7.09	9.31	
14:28	3600	9.9	2255	113.6	5.12	4.98	7.09	9.32	
14:31	4800	10.0	2255	115.4	5.08	4.41	7.09	9.32	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	NA
2. Sample Filtered?	Yes / (No)	8. Sample Time:	14:33
3. Sampling Equip. Used	Peri Pump	9: Parameter/Container/Pres.	See Attached COC
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/ N/A		
5. Sample Rate (mL/min)	400		
6. Sample Appearance:			
Turbidity	None Clear	10. Other Information:	
Color	None		
Odor	None		

11. Decontamination Procedures: **Alconox/DI Rinse**

12. Instrument type: **YSI ProDSS**

	Stnd.	Reading	Adjust.
Calibration Date:			LAB
Calibration Time:			LAB
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA SITE 2**	Sampler Name(s): Richard Wilson
MW Identification: MW-26A	Date/Time: 4-17-2024 / 14:44
Sample Number: 11	PID Readings: **N/A**
Weather Conditions: Cloudy, windy mid-80s	
Wellhead Inspection: Good	

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	S. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	17.65	7. Purge Rate (mL/min)	300
2. Intake Depth (±0.01 ft.)		8. Water Level Measuring Equip.	Solinst
3. Bottom of casing (±0.01 ft.)	20.09	9. Purge Equipment Used	Peri Pump
4. Casing Diameter (inches)	2"	10. Dedicated? (Yes/No)	Yes / (No)
S. Actual Volume of Water Purged (mL)	4200	11. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		12. Thickness of immiscible layer	
Odor: None Turbidity: Clear		13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color: None			

Pump Start: 14:50 14:48

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
14:52	900	12.2	27606	-87.9	0.94	10.09	6.69	18.08	
14:55	1800	12.4	2758	-83.2	0.49	14.03	6.70	18.09	
14:58	2700	12.2	2759	-79.5	0.35	15.78	6.71	18.09	
15:01	3600	12.2	2761	-79.7	0.34	13.89	6.72	18.10	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	NA
2. Sample Filtered?	Yes / (No)	8. Sample Time:	15:03
3. Sampling Equip. Used	Peri Pump	9: Parameter/Container/Pres.	See Attached COC
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/ (N/A)		
S. Sample Rate (mL/min)	300		
6. Sample Appearance:			
Turbidity	Clear	10. Other Information:	
Color	None		
Odor	None		

11. Decontamination Procedures: **Alconox/DI Rinse**

12. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

14

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA SITE 2**	Sampler Name(s): Richard Wilson
MW Identification: MW-29	Date/Time: 4-18-2024 / 7:57
Sample Number: 16	PID Readings: N/A
Weather Conditions: Cloudy mid-40s	
Wellhead Inspection: Good	

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	7.45	7. Purge Rate (mL/min)	400
2. Intake Depth (±0.01 ft.)	—	8. Water Level Measuring Equip.	Solinst
3. Bottom of casing (±0.01 ft.)	17.38	9. Purge Equipment Used	Peri Pump
4. Casing Diameter (inches)	2"	10. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	8400	11. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		12. Thickness of immiscible layer	—
Odor: none Turbidity: slightly turbid		13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color: reddish orange			

Pump Start: 8:00

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
8:07	2500	8.5	1325	-16.4	2.94	54.35	6.63	7.60	
8:10	4000	8.4	1330	-18.2	0.76	39.53	6.64	7.60	
8:13	5200	8.4	1330	-24.9	0.42	30.51	6.65	7.60	
8:16	6400	8.4	1330	-31.4	0.25	25.65	6.65	7.60	
8:19	7600	8.3	1331	-34.8	0.20	23.14	6.66	7.60	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	—
2. Sample Filtered?	Yes / (No)	8. Sample Time:	8:21
3. Sampling Equip. Used	Peri Pump	9: Parameter/Container/Pres.	See Attached COC
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/ (N/A)		
5. Sample Rate (mL/min)	400		
6. Sample Appearance:			
Turbidity	Slightly turbid	10. Other Information:	
Color	reddish orange		
Odor	None		

11. Decontamination Procedures: **Alconox/DI Rinse**

12. Instrument type: **YSI ProDSS**

Calibration Date:		LAB
Calibration Time:		LAB
	5tnd.	Reading / Adjust.
pH		
Conduct.		See attached Lab Form for Calibration Data
ORP		
D.O		
Turbidity		

Initial discharge: Very turbid, Fe floc, reddish orange
occassional slugs of Fe floc

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA SITE 2**	Sampler Name(s): Richard Wilson
MW Identification: MW-30	Date/Time: 4-18-2024 / 7:20
Sample Number: 15	PID Readings: N/A
Weather Conditions: Raining mid-40s	
Wellhead Inspection: Good	

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	7.06	7. Purge Rate (mL/min)	400
2. Intake Depth (±0.01 ft.)	—	8. Water Level Measuring Equip.	Solinst
3. Bottom of casing (±0.01 ft.)	17.48	9. Purge Equipment Used	Peri Pump
4. Casing Diameter (inches)	2"	10. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	9800	11. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		12. Thickness of immiscible layer	—
Odor: none Turbidity: slightly turbid		13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN (N/A)
Color: none			

Pump Start: 7:23

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
7:27	1600	8.5	2227	6.7	1.68	73.34	6.33	7.19	
7:30	2800	8.4	2147	-10.4	0.160	13.47	6.35	7.21	
7:33	5400	8.4	1922	-34.5	0.216	28.47	6.52	7.22	
7:37	6600	8.4	1844	-42.6	0.116	25.26	6.56	7.22	
7:40	7800	8.4	1793	-47.4	0.10	21.46	6.58	7.23	
7:43	9000	8.4	1762	-52.6	0.06	8.94	6.60	7.23	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	—
2. Sample Filtered?	Yes / (No)	8. Sample Time:	7:45
3. Sampling Equip. Used	Peri Pump	9: Parameter/Container/Pres.	See Attached COC
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/(N/A)		
S. Sample Rate (mL/min)	400		
6. Sample Appearance:			
Turbidity	Clear	10. Other Information:	
Color	none		
Odor	None		

11. Decontamination Procedures: **Alconox/DI Rinse**

12. Instrument type: **YSI ProDSS**

Calibration Date:		LAB
Calibration Time:		LAB
	Stnd.	Reading / Adjust.
pH		
Conduct.		See attached Lab Form for Calibration Data
ORP		
D.O		
Turbidity		

Initial discharge: turbid w/ Fe floc reddish-orange
Fe floc in flow cell

Low Stress Groundwater Sampling Data Sheet

HDR	Facility Name: CRLCSWA SITE 2	Sampler Name(s): Richard Wilson	
	MW Identification: MW-201B	Date/Time: 4-17-2024 / 8:36	
	Sample Number: 2	PID Readings: N/A	
	Weather Conditions: Cloudy, windy mid-50s		
	Wellhead Inspection: Good		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	9.59	7. Purge Rate (mL/min)	200 - 400
2. Intake Depth (±0.01 ft.)	—	8. Water Level Measuring Equip.	Solinst
3. Bottom of casing (±0.01 ft.)	62.85	9. Purge Equipment Used	Geo Peri
4. Casing Diameter (inches)	2	10. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	6000	11. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		12. Thickness of immiscible layer	—
Odor: none Turbidity: clear		13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color: none			

Pump Start: 8:41

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
8:43	800	10.7	525	85.0	8.66	63.49	7.78	11.37	400 mL/min
8:46	2000	10.7	507	91.2	8.31	64.54	7.74	12.50	Reduced to 300 mL/min
8:49	2600	10.7	505	96.65	8.09	960.8	7.70	13.76	
8:53	3800	10.9	503	96.76	8.05	100.61	7.69	14.72	Reduced to 200 mL/min
8:56	4400	11.2	505	103.1	8.35	30.35	7.67	15.06	Bumped well & removed air in cell
8:59	5000	11.2	506	106.7	8.22	40.74	7.64	15.48	
9:02	5600	11.1	505	111.1	8.20	40.73	7.59	15.73	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	N/A
2. Sample Filtered?	Yes / (No)	8. Sample Time:	9:04
3. Sampling Equip. Used	Peri Pump	9: Parameter/Container/Pres.	See Attached COC
4. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)		
5. Sample Rate (mL/min)	200		
6. Sample Appearance:			
Turbidity	clear	10. Other Information:	
Color	none		
Odor	none		

11. Decontamination Procedures: **Alconox/DI Rinse**

12. Instrument type: **YSI ProDSS**

Calibration Date:		LAB
Calibration Time:		LAB
	Stnd.	Reading / Adjust.
pH		
Conduct.		
ORP		
D.O		
Turbidity		

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

Facility Name: CRLCSWA SITE 2	Sampler Name(s): Richard Wilson
MW Identification: MW-300	Date/Time: 4-18-2024 / 14:53
Sample Number: 25	PID Readings: N/A
Weather Conditions: Cloudy upper 40s	
Wellhead Inspection: Good	

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	S. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Small tree by well needs cut down

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	6.40	7. Purge Rate (mL/min)	250
2. Intake Depth (±0.01 ft.)	—	8. Water Level Measuring Equip.	Solinst
3. Bottom of casing (±0.01 ft.)	16.24	9. Purge Equipment Used	Peri Pump
4. Casing Diameter (inches)	2"	10. Dedicated? (Yes/No)	Yes / (No)
S. Actual Volume of Water Purged (mL)	3750	11. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		12. Thickness of immiscible layer	—
Odor: None / Color: reddish-orange	Turbidity: Slightly turbid	13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)

Pump Start 14:55

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
14:59	1000	8.8	857	120.7	2.23	48.53	6.33	6.76	
15:02	1750	8.7	852	128.6	1.68	24.03	6.31	6.88	
15:05	2500	8.6	866	131.4	1.49	23.09	6.31	7.00	
15:08	3250	8.5	869	133.1	1.43	22.06	6.31	7.12	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	—
2. Sample Filtered?	Yes / (No)	8. Sample Time:	15:10
3. Sampling Equip. Used	~~Peri Pump~~	9. Parameter/Container/Pres.	See Attached COC
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/ (N/A)		
S. Sample Rate (mL/min)	250		
6. Sample Appearance:		10. Other Information:	
Turbidity	Clear		
Color	~~clear~~		
Odor	None		

11. Decontamination Procedures: **Alconox/DI Rinse**

12. Instrument type: **YSI ProDSS**

	Stnd.	Reading	Adjust.
Calibration Date:		LAB	
Calibration Time:		LAB	
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Initial Discharge: Turbid, Fe floc, reddish orange

FD-1: 15:25 4-18-2024

TB-1: 4-17-2024 13:50

TB-2: 4-18-2024 8:10

TB-3: 4-18-2024 15:40

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA SITE 2**		Sampler Name(s):	Richard Wilson
MW Identification:	MW-301	Date/Time:	4-18-2024 / 12:00
Sample Number:	21	PID Readings:	N/A
Weather Conditions:	Cloudy upper 40s		
Wellhead Inspection:	Good		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	S. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	11.67	7. Purge Rate (mL/min)	300
2. Intake Depth (±0.01 ft.)	—	8. Water Level Measuring Equip.	Solinst
3. Bottom of casing (±0.01 ft.)	20.33	9. Purge Equipment Used	Peri Pump
4. Casing Diameter (inches)	2"	10. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	6300	11. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		12. Thickness of immiscible layer	—
Odor: None	Turbidity: clear	13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color: None			

Pump Start: 12:04

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
12:08	1200	9.6	2398	-54.7	1.43	19.30	6.69	12.15	
12:11	2100	9.3	1979	-43.0	0.49	20.28	6.63	12.39	
12:14	3000	9.3	1590	-35.6	1.23	24.58	6.71	12.53	
12:17	3900	9.0	1433	-23.0	3.00	21.82	6.75	12.75	
12:20	4800	9.0	1462	-23.3	3.28	23.26	6.75	12.93	
12:23	5700	9.0	1468	-25.4	3.34	24.46	6.74	13.10	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	—
2. Sample Filtered?	Yes / (No)	8. Sample Time:	12:25
3. Sampling Equip. Used	Peri Pump	9: Parameter/Container/Pres.	See Attached COC
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/ (N/A)		
5. Sample Rate (mL/min)	300		
6. Sample Appearance:			
Turbidity	Clear	10. Other Information:	
Color	None		
Odor	None		

11. Decontamination Procedures: **Alconox/DI Rinse**

12. Instrument type: **YSI ProDSS**

Calibration Date:		LAB
Calibration Time:		LAB
	Stnd.	Reading / Adjust.
pH		
Conduct.		
ORP		
D.O		
Turbidity		

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

Facility Name: CRLCSWA SITE 2		Sampler Name(s):	Richard Wilson
MW Identification:	MW-302R	Date/Time:	4-17-2024 / 13:38
Sample Number:	9	PID Readings:	N/A
Weather Conditions:	Cloudy, windy mid-50s		
Wellhead Inspection:	Good		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	S. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	5.52	7. Purge Rate (mL/min)	300-400
2. Intake Depth (±0.01 ft.)	—	8. Water Level Measuring Equip.	Solinst
3. Bottom of casing (±0.01 ft.)	28.12	9. Purge Equipment Used	Peri Pump
4. Casing Diameter (inches)	2"	10. Dedicated? (Yes/No)	Yes / (No)
S. Actual Volume of Water Purged (mL)	7000	11. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		12. Thickness of immiscible layer	—
Odor: none	Turbidity: clear	13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color: none			

Pump Start: 13:40

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
400 mL/min 13:43	1200	11.8	545	67.0	3.09	27.82	7.66	7.29	
13:47	2800	11.9	532	67.2	1.99	73.86	7.60	8.63	
300 mL/min 13:51	4000	11.9	530	64.2	1.71	75.89	7.58	9.58	
13:55	5200	12.0	529	60.3	1.63	77.32	7.56	10.62	
13:59	6400	12.1	531	60.1	1.60	74.35	7.56	11.65	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	NA
2. Sample Filtered?	Yes / (No)	8. Sample Time:	14:01
3. Sampling Equip. Used	Peri Pump	9: Parameter/Container/Pres.	See Attached COC
4. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)		
S. Sample Rate (mL/min)	300		
6. Sample Appearance:			
Turbidity	Slight Clear	10. Other Information:	
Color	None		
Odor	None		

11. Decontamination Procedures: **Alconox/DI Rinse**

12. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA SITE 2**		Sampler Name(s):	Richard Wilson
MW Identification:	MW-303	Date/Time:	4-17-2024 / 15:35
Sample Number:	12	PID Readings:	N/A
Weather Conditions:	Partly cloudy upper 50s		
Wellhead Inspection:	Good		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	16.65	7. Purge Rate (mL/min)	300
2. Intake Depth (±0.01 ft.)	—	8. Water Level Measuring Equip.	Solinst
3. Bottom of casing (±0.01 ft.)	21.06	9. Purge Equipment Used	Peri Pump
4. Casing Diameter (inches)	2"	10. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	5400	11. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		12. Thickness of immiscible layer	—
Odor: None Turbidity	clear	13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color: None			

Pump Start: 15:37

Time	Volume Purged (mL)	Temp (°C) X	Conductivity (µs/cm) X	ORP (mV) X	D.O. (mg/L) X	Turbidity (NTU) X	pH X	Drawdown X	Notes
15:41	1200	12.3	1571	141.0	1.94	32.11	6.07	17.18	
15:44	2100	11.8	1559	153.9	1.38	30.81	6.04	17.32	
15:47	3000	12.0	1541	163.2	1.12	21.75	6.02	17.33	
15:50	3900	11.7	1540	169.1	1.04	20.82	6.02	17.36	
15:53	4800	11.9	1538	173.9	1.02	20.43	6.01	17.36	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	NA
2. Sample Filtered?	Yes / (No)	8. Sample Time:	15:55
3. Sampling Equip. Used	Peri Pump	9: Parameter/Container/Pres.	See Attached COC
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/ (N/A)		
5. Sample Rate (mL/min)	300		
6. Sample Appearance:			
Turbidity	Clear	10. Other Information:	
Color	None		
Odor	None		

11. Decontamination Procedures: **Alconox/DI Rinse**

12. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA SITE 2**		Sampler Name(s):	Richard Wilson
MW Identification:	MW-304R	Date/Time:	4-17-2024 / 16:36
Sample Number:	13	PID Readings:	N/A
Weather Conditions:	Partly cloudy upper 50s		
Wellhead Inspection:	Good		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	25.67	7. Purge Rate (mL/min)	250
2. Intake Depth (±0.01 ft.)		8. Water Level Measuring Equip.	Solinst
3. Bottom of casing (±0.01 ft.)	29.64	9. Purge Equipment Used	Peri Pump
4. Casing Diameter (inches)	2"	10. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	4500	11. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		12. Thickness of immiscible layer	
Odor: None	Turbidity: slightly turbid	13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color: None			

Pump Start: 16:40

Time	Volume Purged (mL)	Temp (°C) ✓	Conductivity (µs/cm) ✓	ORP (mV) ✓	D.O. (mg/L) ✓	Turbidity (NTU) ✓	pH ✓	Drawdown	Notes
16:44	1000	12.8	1431	-37.3	1.27	74.00	6.48	26.08	
16:47	1750	12.6	1457	-36.0	0.52	35.40	6.47	26.36	
16:50	2500	12.7	1480	-34.9	0.29	34.28	6.47	26.64	
16:53	3250	12.6	1490	-34.9	0.20	29.35	6.48	26.77	
16:56	4000	12.6	1487	-36.7	0.16	29.82	6.48	26.84	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	NA	11. Decontamination Procedures:	
2. Sample Filtered?	Yes / (No)	8. Sample Time:	16:58	**Alconox/DI Rinse**	
3. Sampling Equip. Used	Peri. Pump	9: Parameter/Container/Pres.		12. Instrument type: **YSI ProDSS**	
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/ (N/A)	**See Attached COC**		Calibration Date:	**LAB**
5. Sample Rate (mL/min)	250			Calibration Time:	**LAB**
6. Sample Appearance:				Stnd. / Reading / Adjust.	
Turbidity	Slightly turbid	10. Other Information:		pH	
Color	None			Conduct.	**See attached Lab Form for Calibration Data**
Odor	None			ORP	
				D.O	
				Turbidity	

Initial Discharge: slight Fe floc, reddish orange

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA SITE 2**		Sampler Name(s):	Richard Wilson
MW Identification:	MW-305	Date/Time:	4-17-2024 / 17:36
Sample Number:	14	PID Readings:	N/A
Weather Conditions:	Sunny, windy, low 60s		
Wellhead Inspection:	Good		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	14.92	7. Purge Rate (mL/min)	300
2. Intake Depth (±0.01 ft.)		8. Water Level Measuring Equip.	Solinst
3. Bottom of casing (±0.01 ft.)	32.26	9. Purge Equipment Used	Peri Pump
4. Casing Diameter (inches)	2"	10. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	5100	11. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		12. Thickness of immiscible layer	
Odor: None / Turbidity: slightly turbid		13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color: reddish orange			

Pump Shut: 17:39

Time	Volume Purged (mL)	Temp (°C) X	Conductivity (µs/cm) X	ORP (mV) X	D.O. (mg/L) X	Turbidity (NTU) X	pH X	Drawdown X	Notes
17:42	900	13.1	1226	-22.5	1.88	13.13	6.77	15.27	
17:45	1800	13.0	1172	1.1	0.53	25.34	6.69	15.39	
17:48	2700	12.9	1119	13.7	0.28	42.25	6.66	15.44	
17:51	3600	12.8	1082	19.7	0.19	60.54	6.64	15.44	
17:54	4500	12.8	1080	20.4	0.19	60.53	6.64	15.45	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	NA	11. Decontamination Procedures:	
2. Sample Filtered?	Yes / (No)	8. Sample Time:	17:50	**Alconox/DI Rinse**	
3. Sampling Equip. Used	Peri Pump	9: Parameter/Container/Pres.		12. Instrument type: **YSI ProDSS**	
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/ (N/A)	**See Attached COC**		Calibration Date:	**LAB**
5. Sample Rate (mL/min)	300			Calibration Time:	**LAB**
6. Sample Appearance:				Stnd. / Reading / Adjust.	
Turbidity	slightly turbid	10. Other Information:		pH	
Color	None			Conduct.	**See attached Lab Form for Calibration Data**
Odor	None			ORP	
				D.O	
				Turbidity	

Initial Discharge: slightly turbid, Fe floc, reddish-orange

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA SITE 2**	Sampler Name(s): Richard Wilson
MW Identification: MW-306	Date/Time: 4-18-2024 / 9:10
Sample Number: 18	PID Readings: **N/A**
Weather Conditions: Cloudy upper 40s	
Wellhead Inspection: Good	

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	10.35	7. Purge Rate (mL/min)	400
2. Intake Depth (±0.01 ft.)	—	8. Water Level Measuring Equip.	Solinst
3. Bottom of casing (±0.01 ft.)	22.69	9. Purge Equipment Used	Peri Pump
4. Casing Diameter (inches)	2"	10. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	7200	11. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		12. Thickness of immiscible layer	—
Odor: None Turbidity: slightly turbid		13. Drive Gas (Air/Nitrogen)	~~AIR / NITROGEN / N/A~~
Color: reddish orange			

Pump Start: 9:12

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
9:16	1600	9.0	1719	-7.5	3.71	64.74	6.73	10.86	
9:19	2800	8.8	1688	-23.8	0.61	111.77	6.71	10.97	
9:22	4000	8.7	1698	-29.4	0.28	58.38	6.71	11.05	
9:25	5200	8.6	1699	-32.4	0.16	59.32	6.71	11.12	
9:28	6400	8.6	1698	-34.3	0.12	60.31	6.71	11.17	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	—
2. Sample Filtered?	Yes / (No)	8. Sample Time:	9:30
3. Sampling Equip. Used	Peri Pump	9: Parameter/Container/Pres.	See Attached COC
4. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)		
5. Sample Rate (mL/min)	400		
6. Sample Appearance:			
Turbidity	Slightly turbid	10. Other Information:	
Color	reddish br		
Odor	None		

11. Decontamination Procedures: **Alconox/DI Rinse**

12. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Initial Discharge: Turbid, Fe floc, reddish-orange

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA SITE 2**		Sampler Name(s):	Richard Wilson
MW Identification:	MW-307A	Date/Time:	4-18-2024/ 8:38
Sample Number:	17	PID Readings:	N/A
Weather Conditions:	Cloudy mid-40s		
Wellhead Inspection:	Good		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	9.95	7. Purge Rate (mL/min)	400
2. Intake Depth (±0.01 ft.)	—	8. Water Level Measuring Equip.	Solinst
3. Bottom of casing (±0.01 ft.)	20.44	9. Purge Equipment Used	Peri Pump
4. Casing Diameter (inches)	2"	10. Dedicated? (Yes/No)	Yes / (No)
S. Actual Volume of Water Purged (mL)	6800	11. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		12. Thickness of immiscible layer	—
Odor: None Turbidity:	Slightly turbid	13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color: reddish orange			

Pump Start: 8:41

Time	Volume Purged (mL)	Temp (°C) X	Conductivity (µs/cm) X	ORP (mV) X	D.O. (mg/L) X	Turbidity (NTU) X	pH X	Drawdown	Notes
8:44	1200	8.9	3073	97.8	4.27	42.60	6.51	10.22	
8:47	2400	8.8	3101	114.9	2.50	106.24	6.43	10.41	
8:50	3600	8.8	3096	115.1	1.82	26.38	6.43	10.54	
8:53	4800	8.8	3086	104.8	1.41	28.34	6.44	10.63	
8:56	6000	8.9	3062	103.9	1.31	28.42	6.45	10.71	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	—	11. Decontamination Procedures:	
2. Sample Filtered?	Yes / (No)	8. Sample Time:	8:58	Alconox/DI Rinse	
3. Sampling Equip. Used	Peri Pump	9: Parameter/Container/Pres.		12. Instrument type: YSI ProDSS	
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/ (N/A)	See Attached COC		Calibration Date:	LAB
S. Sample Rate (mL/min)	400			Calibration Time:	LAB
6. Sample Appearance:				Stnd. / Reading / Adjust.	
Turbidity	Slightly Turbid	10. Other Information:		pH	
Color	light reddish brn			Conduct.	See attached Lab Form for Calibration Data
Odor	None			ORP	
				D.O	
				Turbidity	

Initial discharge: Turbid, Fe floc, reddish orange

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA SITE 2**		Sampler Name(s): Richard Wilson
MW Identification: MW-501		Date/Time: 4-17-2024 / 11:20
Sample Number: 4		PID Readings: **N/A**
Weather Conditions: Cloudy, windy mid-50		
Wellhead Inspection: Good		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	S. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	15.13	7. Purge Rate (mL/min)	300
2. Intake Depth (±0.01 ft.)	—	8. Water Level Measuring Equip.	Solinst
3. Bottom of casing (±0.01 ft.)	35.78	9. Purge Equipment Used	Peri
4. Casing Diameter (inches)	2"	10. Dedicated? (Yes/No)	Yes / (No)
S. Actual Volume of Water Purged (mL)	8100	11. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		12. Thickness of immiscible layer	—
Odor None Turbidity	High Fe Floc	13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color reddish-orange			

Pump Start: 11:23

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
11:28	1500	NM	NM	NM	NM	NM	NM	16.33	
11:36	3900	11.2	1817	45.1	1.92	430.40	6.13	16.95	
11:39	4800	11.1	1826	59.1	0.64	3600	6.09	17.05	
11:42	5700	11.0	1846	67.2	0.33	520.47	6.04	17.19	
11:45	6600	11.0	1849	55.6	0.27	827.08	6.09	17.26	
11:48	7500	10.9	1852	60.6	0.21	365.09	6.08	17.32	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	NA
2. Sample Filtered?	Yes / (No)	8. Sample Time:	11:50
3. Sampling Equip. Used	Peri Pump	9: Parameter/Container/Pres.	See Attached COC
4. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)		
5. Sample Rate (mL/min)	300		
6. Sample Appearance:			
Turbidity	High Fe Floc	10. Other Information:	
Color	reddish orange		
Odor	none		

11. Decontamination Procedures: **Alconox/DI Rinse**

12. Instrument type: **YSI ProDSS**

Calibration Date:		**LAB**
Calibration Time:		**LAB**
	Stnd.	Reading / Adjust.
pH		
Conduct.	**See attached Lab Form for Calibration Data**	
ORP		
D.O		
Turbidity		

Initial Discharge: Very turbid, Fe Floc, reddish orange
from 11:23 to 11:27
Periodic slugs of Fe Floc pumping through line from 11:27 to 11:55
not clearing up.

Low Stress Groundwater Sampling Data Sheet

Facility Name: CRLCSWA SITE 2		Sampler Name(s): Richard Wilson	
MW Identification: MW-502		Date/Time: 4-17-2024 / 10:17	
Sample Number: 3		PID Readings: N/A	
Weather Conditions: Cloudy, windy mid-50s			
Wellhead Inspection: Good			

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	31.56	7. Purge Rate (mL/min)	250
2. Intake Depth (±0.01 ft.)	~36	8. Water Level Measuring Equip.	Solinst
3. Bottom of casing (±0.01 ft.)	36.10	9. Purge Equipment Used	Bladder
4. Casing Diameter (inches)	2"	10. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	5500	11. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		12. Thickness of immiscible layer	
Odor: None Turbidity: clear		13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color: Clear			

Pump Start: ~~11:29~~ 10:29

250 mL/min

Time	Volume Purged (mL)	Temp (°C) X	Conductivity (µs/cm) X	ORP (mV) X	D.O. (mg/L) X	Turbidity (NTU) X	pH X	Drawdown X	Notes
10:36	1750	11.8	427.5	63.8	1.77	4.89	6.87	33.55	
10:40	2750	11.8	727	68.2	1.34	5.68	6.88	33.81	
10:43	3500	11.8	746	70.4	0.86	4.68	6.90	34.05	
10:46	4250	11.8	760	73.9	0.65	4.98	6.89	34.25	
10:49	5000	11.8	756	76.1	0.60	4.92	6.91	Top of pump	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):		11. Decontamination Procedures:	
2. Sample Filtered?	Yes / (No)	8. Sample Time:	10:51	Alconox/DI Rinse	
3. Sampling Equip. Used	Bladder	9: Parameter/Container/Pres.		12. Instrument type: YSI ProDSS	
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/(N/A)	See Attached COC		Calibration Date:	LAB
5. Sample Rate (mL/min)	250			Calibration Time:	LAB
6. Sample Appearance:				Stnd. / Reading / Adjust.	
Turbidity	Clear	10. Other Information:		pH	
Color	None			Conduct.	See attached Lab Form for Calibration Data
Odor	None			ORP	
				D.O	
				Turbidity	

Top of Pump: 34.70'

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA Site 2**	Sampler Name(s): Richard Wilson
MW Identification: MW-16	Date/Time: 4-18-2024 / 12:41
Sample Number: —	PID Readings: —
Weather Conditions: —	
Wellhead Inspection: Good	

Visual Inspection:

1. Survey Mark Present: (Yes/No)	(Yes) / No	5. Standing/Ponded Water (Yes/No)	Yes / (No)
2. Collision/Vandalism Damage: (Yes/No)	Yes / (No)	6. Frost Heaving (Yes/No)	Yes / (No)
3. Casing Degradation: (Yes/No)	Yes / (No)	7. Lock in Place (Yes/No)	(Yes) / No
4. Well Subsidence: (Yes/No)	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	8.31	6. Purge Rate (mL/min)	—
2. Bottom of casing (±0.01 ft.)	40.19	7. Water Level Measuring Equip.	Solinst
3. Casing Diameter (inches)	2"	8. Purge Equipment Used	—
4. Actual Volume of Water Purged (mL)	—	9. Dedicated? (Yes/No)	~~Yes / No~~
5. Purge Water Characteristics:		10. Immiscible layer observed	~~Yes / No~~
Odor — Turbidity	—	11. Thickness of immiscible layer	—
Color —		12. Drive Gas (Air/Nitrogen)	AIR / ~~NITROGEN / N/A~~

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown
			WATER LEVEL ONLY					

Well evacuated to dryness?	Yes / No	Time to recharge (min):	—
1. Sample Filtered?	Yes / No	6. Sample Time:	—
2. Sampling Equip. Used		7: Parameter/Container/Pres.	**See Attached COC**
3. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / N/A		
4. Sample Rate (mL/min)			
5. Sample Appearance:			
Turbidity		8. Other Information:	
Color			
Odor			

9. Decontamination Procedures: **Alconox/DI Rinse**

10. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA Site 2**	Sampler Name(s): Richard Wilson
MW Identification: MW-23	Date/Time: 4-18-2024 / 9:46
Sample Number:	PID Readings:
Weather Conditions:	
Wellhead Inspection: Good	

Visual Inspection:

1. Survey Mark Present: (Yes/No)	(Yes) / No	5. Standing/Ponded Water (Yes/No)	Yes / (No)
2. Collision/Vandalism Damage: (Yes/No)	Yes / (No)	6. Frost Heaving (Yes/No)	Yes / (No)
3. Casing Degradation: (Yes/No)	Yes / (No)	7. Lock in Place (Yes/No)	Yes / (No)
4. Well Subsidence: (Yes/No)	Yes / (No)		flushmount well

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	2.00	6. Purge Rate (mL/min)	
2. Bottom of casing (±0.01 ft.)	17.16	7. Water Level Measuring Equip.	Solinst
3. Casing Diameter (inches)	2"	8. Purge Equipment Used	
4. Actual Volume of Water Purged (mL)		9. Dedicated? (Yes/No)	~~Yes / No~~
5. Purge Water Characteristics:		10. Immiscible layer observed	~~Yes~~ / No
Odor	Turbidity	11. Thickness of immiscible layer	
Color		12. Drive Gas (Air/Nitrogen)	~~AIR / NITROGEN / N/A~~

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown
			WATER LEVEL ONLY					

Well evacuated to dryness?	Yes / No	Time to recharge (min):		9. Decontamination Procedures:	**Alconox/DI Rinse**
1. Sample Filtered?	Yes / No	6. Sample Time:		10. Instrument type:	**YSI ProDSS**
2. Sampling Equip. Used		7: Parameter/Container/Pres.	**See Attached COC**	Calibration Date:	**LAB**
3. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / N/A			Calibration Time:	**LAB**
4. Sample Rate (mL/min)				Stnd. / Reading / Adjust.	
5. Sample Appearance:				pH	
Turbidity		8. Other Information:		Conduct.	**See attached Lab Form for Calibration Data**
Color				ORP	
Odor				D.O	
				Turbidity	

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA Site 2**	Sampler Name(s): Richard Wilson
MW Identification: MW-27	Date/Time: 4-18-2024 / 8:32
Sample Number:	PID Readings:
Weather Conditions:	
Wellhead Inspection:	

Visual Inspection:

1. Survey Mark Present: (Yes/No)	(Yes) / No	5. Standing/Ponded Water (Yes/No)	Yes / (No)
2. Collision/Vandalism Damage: (Yes/No)	Yes / (No)	6. Frost Heaving (Yes/No)	Yes / (No)
3. Casing Degradation: (Yes/No)	Yes / (No)	7. Lock in Place (Yes/No)	(Yes) / No
4. Well Subsidence: (Yes/No)	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	9.16	6. Purge Rate (mL/min)	
2. Bottom of casing (±0.01 ft.)	17.25	7. Water Level Measuring Equip.	Solinst
3. Casing Diameter (inches)	2"	8. Purge Equipment Used	
4. Actual Volume of Water Purged (mL)		9. Dedicated? (Yes/No)	~~Yes / No~~
5. Purge Water Characteristics:		10. Immiscible layer observed	~~Yes / No~~
Odor	Turbidity	11. Thickness of immiscible layer	
Color		12. Drive Gas (Air/Nitrogen)	AIR / ~~NITROGEN / N/A~~

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown
			WATER LEVEL ONLY					

Well evacuated to dryness?	Yes / No	Time to recharge (min):	
1. Sample Filtered?	Yes / No	6. Sample Time:	
2. Sampling Equip. Used		7: Parameter/Container/Pres.	**See Attached COC**
3. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / N/A		
4. Sample Rate (mL/min)			
5. Sample Appearance:			
Turbidity		8. Other Information:	
Color			
Odor			

9. Decontamination Procedures: **Alconox/DI Rinse**

10. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA Site 2**	5ampler Name(s): Richard Wilson
MW Identification: MW-28	Date/Time: 4-18-2024/ 8:30
5ample Number:	PID Readings:
Weather Conditions:	
Wellhead Inspection: Good	

Visual Inspection:

1. 5urvey Mark Present: (Yes/No)	(Yes) / No	5. Standing/Ponded Water (Yes/No)	Yes / (No)
2. Collision/Vandalism Damage: (Yes/No)	Yes / (No)	6. Frost Heaving (Yes/No)	Yes / (No)
3. Casing Degradation: (Yes/No)	Yes / (No)	7. Lock in Place (Yes/No)	(Yes) / No
4. Well Subsidence: (Yes/No)	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	9.42	6. Purge Rate (mL/min)	
2. Bottom of casing (±0.01 ft.)	21.74	7. Water Level Measuring Equip.	Solinst
3. Casing Diameter (inches)	2"	8. Purge Equipment Used	
4. Actual Volume of Water Purged (mL)		9. Dedicated? (Yes/No)	~~Yes / No~~
5. Purge Water Characteristics:		10. Immiscible layer observed	~~Yes / No~~
Odor	Turbidity	11. Thickness of immiscible layer	
Color		12. Drive Gas (Air/Nitrogen)	~~AIR / NITROGEN / N/A~~

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown
			WATER LEVEL ONLY					

Well evacuated to dryness?	Yes / No	Time to recharge (min):	
1. 5ample Filtered?	Yes / No	6. Sample Time:	
2. 5ampling Equip. Used		7: Parameter/Container/Pres.	**See Attached COC**
3. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / N/A		
4. Sample Rate (mL/min)			
5. Sample Appearance:			
Turbidity		8. Other Information:	
Color			
Odor			

9. Decontamination Procedures: **Alconox/DI Rinse**

10. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA Site 2**	Sampler Name(s): Richard Wilson
MW Identification: MW-201A	Date/Time: 4-17-2024 / 9:23
Sample Number:	PID Readings:
Weather Conditions:	
Wellhead Inspection: Good	

Visual Inspection:

1. Survey Mark Present: (Yes/No)	(Yes) / No	5. Standing/Ponded Water (Yes/No)	Yes / (No)
2. Collision/Vandalism Damage: (Yes/No)	Yes / (No)	6. Frost Heaving (Yes/No)	Yes / (No)
3. Casing Degradation: (Yes/No)	Yes / (No)	7. Lock in Place (Yes/No)	(Yes) / No
4. Well Subsidence: (Yes/No)	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	6.26	6. Purge Rate (mL/min)	
2. Bottom of casing (±0.01 ft.)	17.35	7. Water Level Measuring Equip.	Solinst
3. Casing Diameter (inches)	2"	8. Purge Equipment Used	
4. Actual Volume of Water Purged (mL)		9. Dedicated? (Yes/No)	~~Yes / No~~
5. Purge Water Characteristics:		10. Immiscible layer observed	~~Yes / No~~
Odor	Turbidity	11. Thickness of immiscible layer	
Color		12. Drive Gas (Air/Nitrogen)	~~AIR / NITROGEN / N/A~~

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown
			WATER LEVEL ONLY					

Well evacuated to dryness?	Yes / No	Time to recharge (min):		9. Decontamination Procedures:	
1. Sample Filtered?	Yes / No	6. Sample Time:		**Alconox/DI Rinse**	
2. Sampling Equip. Used		7: Parameter/Container/Pres.		10. Instrument type: **YSI ProDSS**	
3. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / N/A	**See Attached COC**		Calibration Date:	**LAB**
4. Sample Rate (mL/min)				Calibration Time:	**LAB**
5. Sample Appearance:				Stnd.	Reading / Adjust.
Turbidity		8. Other Information:		pH	
Color				Conduct.	**See attached Lab Form for Calibration Data**
Odor				ORP	
				D.O	
				Turbidity	

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA Site 2**	Sampler Name(s): Richard Wilson
MW Identification: MW-201C	Date/Time: 4-17-2024/ 9:21
Sample Number:	PID Readings:
Weather Conditions:	
Wellhead Inspection: Good	

Visual Inspection:

1. Survey Mark Present: (Yes/No)	(Yes) / No	5. Standing/Ponded Water (Yes/No)	Yes / (No)
2. Collision/Vandalism Damage: (Yes/No)	Yes / (No)	6. Frost Heaving (Yes/No)	Yes / (No)
3. Casing Degradation: (Yes/No)	Yes / (No)	7. Lock in Place (Yes/No)	(Yes) / No
4. Well Subsidence: (Yes/No)	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	52.80	6. Purge Rate (mL/min)	
2. Bottom of casing (±0.01 ft.)	>200	7. Water Level Measuring Equip.	Solinst
3. Casing Diameter (inches)	2"	8. Purge Equipment Used	
4. Actual Volume of Water Purged (mL)		9. Dedicated? (Yes/No)	~~Yes / No~~
5. Purge Water Characteristics:		10. Immiscible layer observed	~~Yes / No~~
Odor	Turbidity	11. Thickness of immiscible layer	
Color		12. Drive Gas (Air/Nitrogen)	~~AIR / NITROGEN~~ / N/A

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown
			WATER LEVEL ONLY					

Well evacuated to dryness?	Yes / No	Time to recharge (min):	
1. Sample Filtered?	Yes / No	6. Sample Time:	
2. Sampling Equip. Used		7: Parameter/Container/Pres.	**See Attached COC**
3. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / N/A		
4. Sample Rate (mL/min)			
5. Sample Appearance:			
Turbidity		8. Other Information:	
Color			
Odor			

9. Decontamination Procedures: **Alconox/DI Rinse**

10. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA Site 2**	Sampler Name(s): Richard Wilson
MW Identification: MW-204A	Date/Time: 4-17-2024 / 18:07
Sample Number:	PID Readings:
Weather Conditions:	
Wellhead Inspection: Good	

Visual Inspection:

1. Survey Mark Present: (Yes/No)	(Yes) / No	5. Standing/Ponded Water (Yes/No)	Yes / (No)
2. Collision/Vandalism Damage: (Yes/No)	Yes / (No)	6. Frost Heaving (Yes/No)	Yes / (No)
3. Casing Degradation: (Yes/No)	Yes / (No)	7. Lock in Place (Yes/No)	(Yes) / No
4. Well Subsidence: (Yes/No)	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	6.01	6. Purge Rate (mL/min)	
2. Bottom of casing (±0.01 ft.)	13.32	7. Water Level Measuring Equip.	Solinst
3. Casing Diameter (inches)	2"	8. Purge Equipment Used	
4. Actual Volume of Water Purged (mL)		9. Dedicated? (Yes/No)	~~Yes / No~~
5. Purge Water Characteristics:		10. Immiscible layer observed	~~Yes / No~~
Odor	Turbidity	11. Thickness of immiscible layer	
Color		12. Drive Gas (Air/Nitrogen)	~~AIR / NITROGEN / N/A~~

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown
			WATER LEVEL ONLY					

Well evacuated to dryness?	Yes / No	Time to recharge (min):	
1. Sample Filtered?	Yes / No	6. Sample Time:	
2. Sampling Equip. Used		7: Parameter/Container/Pres.	See **Attached COC**
3. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / N/A		
4. Sample Rate (mL/min)			
5. Sample Appearance:			
Turbidity		8. Other Information:	
Color			
Odor			

9. Decontamination Procedures: **Alconox/DI Rinse**

10. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA Site 2**	Sampler Name(s): Richard Wilson
MW Identification: MW-204L	Date/Time: 4-17-2024/18:09
Sample Number:	PID Readings:
Weather Conditions:	
Wellhead Inspection: Good	

Visual Inspection:

1. Survey Mark Present: (Yes/No)	(Yes) / No	5. Standing/Ponded Water (Yes/No)	Yes / (No)
2. Collision/Vandalism Damage: (Yes/No)	Yes / (No)	6. Frost Heaving (Yes/No)	Yes / (No)
3. Casing Degradation: (Yes/No)	Yes / (No)	7. Lock in Place (Yes/No)	(Yes) / No
4. Well Subsidence: (Yes/No)	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	9.25	6. Purge Rate (mL/min)	
2. Bottom of casing (±0.01 ft.)	57.86	7. Water Level Measuring Equip.	Solinst
3. Casing Diameter (inches)	2"	8. Purge Equipment Used	
4. Actual Volume of Water Purged (mL)		9. Dedicated? (Yes/No)	~~Yes / No~~
5. Purge Water Characteristics:		10. Immiscible layer observed	~~Yes / No~~
Odor	Turbidity	11. Thickness of immiscible layer	
Color		12. Drive Gas (Air/Nitrogen)	~~AIR / NITROGEN / N/A~~

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown
			WATER LEVEL ONLY					

Well evacuated to dryness?	Yes / No	Time to recharge (min):	
1. Sample Filtered?	Yes / No	6. Sample Time:	
2. Sampling Equip. Used		7: Parameter/Container/Pres.	**See Attached COC**
3. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / N/A		
4. Sample Rate (mL/min)			
5. Sample Appearance:			
Turbidity		8. Other Information:	
Color			
Odor			

9. Decontamination Procedures: **Alconox/DI Rinse**

10. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA Site 2**	Sampler Name(s): Richard Wilson
MW Identification: MW-21A	Date/Time: 4-17-2024 / 9:33
Sample Number:	PID Readings:
Weather Conditions:	
Wellhead Inspection: Good	

Visual Inspection:

1. Survey Mark Present: (Yes/No)	(Yes) / No	5. Standing/Ponded Water (Yes/No)	Yes / (No)
2. Collision/Vandalism Damage: (Yes/No)	Yes / (No)	6. Frost Heaving (Yes/No)	Yes / (No)
3. Casing Degradation: (Yes/No)	Yes / (No)	7. Lock in Place (Yes/No)	(Yes) / No
4. Well Subsidence: (Yes/No)	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	11.76	6. Purge Rate (mL/min)	
2. Bottom of casing (±0.01 ft.)	18.36	7. Water Level Measuring Equip.	Solinst
3. Casing Diameter (inches)	2"	8. Purge Equipment Used	
4. Actual Volume of Water Purged (mL)		9. Dedicated? (Yes/No)	~~Yes / No~~
5. Purge Water Characteristics:		10. Immiscible layer observed	~~Yes / No~~
Odor	Turbidity	11. Thickness of immiscible layer	
Color		12. Drive Gas (Air/Nitrogen)	~~AIR / NITROGEN / N/A~~

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown
			WATER LEVEL ONLY					

Well evacuated to dryness?	Yes / No	Time to recharge (min):		9. Decontamination Procedures:	
1. Sample Filtered?	Yes / No	6. Sample Time:		**Alconox/DI Rinse**	
2. Sampling Equip. Used		7: Parameter/Container/Pres.		10. Instrument type:	**YSI ProDSS**
3. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / N/A	**See Attached COC**		Calibration Date:	**LAB**
4. Sample Rate (mL/min)				Calibration Time:	**LAB**
5. Sample Appearance:				Stnd.	Reading / Adjust.
Turbidity		8. Other Information:		pH	
Color				Conduct.	**See attached Lab Form for Calibration Data**
Odor				ORP	
				D.O	
				Turbidity	

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA Site 2**	Sampler Name(s): Richard Wilson
MW Identification: MW-211D	Date/Time: 4-17-2024 / 9:35
Sample Number:	PID Readings:
Weather Conditions:	
Wellhead Inspection: Good	

Visual Inspection:

1. Survey Mark Present: (Yes/No)	(Yes) / No	5. Standing/Ponded Water (Yes/No)	Yes / (No)
2. Collision/Vandalism Damage: (Yes/No)	Yes / (No)	6. Frost Heaving (Yes/No)	Yes / (No)
3. Casing Degradation: (Yes/No)	Yes / (No)	7. Lock in Place (Yes/No)	(Yes) / No
4. Well Subsidence: (Yes/No)	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	43.93	6. Purge Rate (mL/min)	
2. Bottom of casing (±0.01 ft.)	116.35	7. Water Level Measuring Equip.	Solinst
3. Casing Diameter (inches)	2"	8. Purge Equipment Used	
4. Actual Volume of Water Purged (mL)		9. Dedicated? (Yes/No)	~~Yes / No~~
5. Purge Water Characteristics:		10. Immiscible layer observed	~~Yes / No~~
Odor	Turbidity	11. Thickness of immiscible layer	
Color		12. Drive Gas (Air/Nitrogen)	~~AIR / NITROGEN / N/A~~

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown
			WATER LEVEL ONLY					

Well evacuated to dryness?	Yes / No	Time to recharge (min):		9. Decontamination Procedures:	
1. Sample Filtered?	Yes / No	6. Sample Time:		**Alconox/DI Rinse**	
2. Sampling Equip. Used		7: Parameter/Container/Pres.		10. Instrument type: **YSI ProDSS**	
3. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / N/A	**See Attached COC**		Calibration Date:	**LAB**
4. Sample Rate (mL/min)				Calibration Time:	**LAB**
5. Sample Appearance:				Stnd. / Reading / Adjust.	
Turbidity		8. Other Information:		pH	
Color				Conduct.	**See attached Lab Form for Calibration Data**
Odor				ORP	
				D.O	
				Turbidity	

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA Site 2**	Sampler Name(s): Richard Wilson
MW Identification: MW-23A	Date/Time: 4-18-2024 / 16:02
Sample Number:	PID Readings:
Weather Conditions:	
Wellhead Inspection: Good	

Visual Inspection:

1. Survey Mark Present: (Yes/No)	(Yes) / No	5. Standing/Ponded Water (Yes/No)	(Yes) / No
2. Collision/Vandalism Damage: (Yes/No)	Yes / (No)	6. Frost Heaving (Yes/No)	Yes / (No)
3. Casing Degradation: (Yes/No)	Yes / (No)	7. Lock in Place (Yes/No)	(Yes) / No
4. Well Subsidence: (Yes/No)	Yes / (No)		

Water surrounds location but not covering well pad

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	2.70	6. Purge Rate (mL/min)	
2. Bottom of casing (±0.01 ft.)	11.79	7. Water Level Measuring Equip.	Solinst
3. Casing Diameter (inches)	2"	8. Purge Equipment Used	
4. Actual Volume of Water Purged (mL)		9. Dedicated? (Yes/No)	~~Yes / No~~
5. Purge Water Characteristics:		10. Immiscible layer observed	~~Yes / No~~
Odor	Turbidity	11. Thickness of immiscible layer	
Color		12. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / N/A

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown
			WATER LEVEL ONLY					

Well evacuated to dryness?	Yes / No	Time to recharge (min):	
1. Sample Filtered?	Yes / No	6. Sample Time:	
2. Sampling Equip. Used		7: Parameter/Container/Pres.	**See Attached COC**
3. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / N/A		
4. Sample Rate (mL/min)			
5. Sample Appearance:			
Turbidity		8. Other Information:	
Color			
Odor			

9. Decontamination Procedures: **Alconox/DI Rinse**

10. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA Site 2**	Sampler Name(s): Richard Wilson
MW Identification: MW-213D	Date/Time: 4-18-2024 / 16:06
Sample Number:	PID Readings:
Weather Conditions:	
Wellhead Inspection: Good	

Visual Inspection:

1. Survey Mark Present: (Yes/No)	(Yes) / No	5. Standing/Ponded Water (Yes/No)	(Yes) / No
2. Collision/Vandalism Damage: (Yes/No)	Yes / (No)	6. Frost Heaving (Yes/No)	Yes / (No)
3. Casing Degradation: (Yes/No)	Yes / (No)	7. Lock in Place (Yes/No)	(Yes) / No
4. Well Subsidence: (Yes/No)	Yes / (No)		

Water surrounds locks but not covering well pad

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	7.58	6. Purge Rate (mL/min)	
2. Bottom of casing (±0.01 ft.)	64.96	7. Water Level Measuring Equip.	Solinst
3. Casing Diameter (inches)	2"	8. Purge Equipment Used	
4. Actual Volume of Water Purged (mL)		9. Dedicated? (Yes/No)	~~Yes / No~~
5. Purge Water Characteristics:		10. Immiscible layer observed	~~Yes / No~~
Odor	Turbidity	11. Thickness of immiscible layer	
Color		12. Drive Gas (Air/Nitrogen)	~~AIR / NITROGEN / N/A~~

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown
			WATER LEVEL ONLY					

Well evacuated to dryness?	Yes / No	Time to recharge (min):	
1. Sample Filtered?	Yes / No	6. Sample Time:	
2. Sampling Equip. Used		7: Parameter/Container/Pres.	See **Attached COC**
3. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / N/A		
4. Sample Rate (mL/min)			
5. Sample Appearance:			
Turbidity		8. Other Information:	
Color			
Odor			

9. Decontamination Procedures: **Alconox/DI Rinse**

10. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA Site 2**	Sampler Name(s): Richard Wilson
MW Identification: MW-213E	Date/Time: 4-18-2024/16:10
Sample Number:	PID Readings:
Weather Conditions:	
Wellhead Inspection: Good	

Visual Inspection:

1. Survey Mark Present: (Yes/No)	(Yes) / No	5. Standing/Ponded Water (Yes/No)	(Yes) / No
2. Collision/Vandalism Damage: (Yes/No)	Yes / (No)	6. Frost Heaving (Yes/No)	Yes / (No)
3. Casing Degradation: (Yes/No)	Yes / (No)	7. Lock in Place (Yes/No)	(Yes) / No
4. Well Subsidence: (Yes/No)	Yes / (No)		

Water surrounds area but not covering well pad

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	7.78	6. Purge Rate (mL/min)	
2. Bottom of casing (±0.01 ft.)	82.10	7. Water Level Measuring Equip.	Solinst
3. Casing Diameter (inches)	2"	8. Purge Equipment Used	
4. Actual Volume of Water Purged (mL)		9. Dedicated? (Yes/No)	~~Yes / No~~
5. Purge Water Characteristics:		10. Immiscible layer observed	~~Yes / No~~
Odor	Turbidity	11. Thickness of immiscible layer	
Color		12. Drive Gas (Air/Nitrogen)	~~AIR / NITROGEN / N/A~~

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown
			WATER LEVEL ONLY					

Well evacuated to dryness?	Yes / No	Time to recharge (min):	
1. Sample Filtered?	Yes / No	6. Sample Time:	
2. Sampling Equip. Used		7: Parameter/Container/Pres.	**See Attached COC**
3. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / N/A		
4. Sample Rate (mL/min)			
5. Sample Appearance:			
Turbidity		8. Other Information:	
Color			
Odor			

9. Decontamination Procedures: **Alconox/DI Rinse**

10. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA Site 2**	Sampler Name(s): Richard Wilson
MW Identification: MW-214	Date/Time: 4-17-2024/ 9:42
Sample Number:	PID Readings:
Weather Conditions:	
Wellhead Inspection: Good	

Visual Inspection:

1. Survey Mark Present: (Yes/No)	(Yes) / No	5. Standing/Ponded Water (Yes/No)	Yes / (No)
2. Collision/Vandalism Damage: (Yes/No)	Yes / (No)	6. Frost Heaving (Yes/No)	Yes / (No)
3. Casing Degradation: (Yes/No)	Yes / (No)	7. Lock in Place (Yes/No)	(Yes) / No
4. Well Subsidence: (Yes/No)	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	11.48	6. Purge Rate (mL/min)	
2. Bottom of casing (±0.01 ft.)	18.00	7. Water Level Measuring Equip.	Solinst
3. Casing Diameter (inches)	2"	8. Purge Equipment Used	
4. Actual Volume of Water Purged (mL)		9. Dedicated? (Yes/No)	~~Yes / No~~
5. Purge Water Characteristics:		10. Immiscible layer observed	~~Yes / No~~
Odor	Turbidity	11. Thickness of immiscible layer	
Color		12. Drive Gas (Air/Nitrogen)	~~AIR / NITROGEN / N/A~~

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown
			WATER LEVEL ONLY					

Well evacuated to dryness?	Yes / No	Time to recharge (min):	
1. Sample Filtered?	Yes / No	6. Sample Time:	
2. Sampling Equip. Used		7: Parameter/Container/Pres.	**See Attached COC**
3. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / N/A		
4. Sample Rate (mL/min)			
5. Sample Appearance:			
Turbidity		8. Other Information:	
Color			
Odor			

9. Decontamination Procedures: **Alconox/DI Rinse**

10. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

	Facility Name: **CRLCSWA Site 2**	Sampler Name(s): Richard Wilson
	MW Identification: MW-215	Date/Time: 4-17-2024 / 9:59
	Sample Number: —	PID Readings: —
	Weather Conditions: —	
	Wellhead Inspection: Good	

Visual Inspection:

1. Survey Mark Present: (Yes/No)	(Yes) / No	5. Standing/Ponded Water (Yes/No)	Yes / (No)
2. Collision/Vandalism Damage: (Yes/No)	Yes / (No)	6. Frost Heaving (Yes/No)	Yes / (No)
3. Casing Degradation: (Yes/No)	Yes / (No)	7. Lock in Place (Yes/No)	(Yes) / No
4. Well Subsidence: (Yes/No)	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	9.08	6. Purge Rate (mL/min)	—
2. Bottom of casing (±0.01 ft.)	25.04	7. Water Level Measuring Equip.	Solinst
3. Casing Diameter (inches)	2"	8. Purge Equipment Used	—
4. Actual Volume of Water Purged (mL)	—	9. Dedicated? (Yes/No)	~~Yes / No~~
5. Purge Water Characteristics:		10. Immiscible layer observed	~~Yes / No~~
Odor — Turbidity	—	11. Thickness of immiscible layer	—
Color —		12. Drive Gas (Air/Nitrogen)	~~AIR / NITROGEN / N/A~~

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown
			WATER LEVEL ONLY					

Well evacuated to dryness?	Yes / No	Time to recharge (min):	
1. Sample Filtered?	Yes / No	6. Sample Time:	
2. Sampling Equip. Used		7: Parameter/Container/Pres.	**See Attached COC**
3. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / N/A		
4. Sample Rate (mL/min)			
5. Sample Appearance:			
Turbidity		8. Other Information:	
Color			
Odor			

9. Decontamination Procedures: **Alconox/DI Rinse**

10. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA Site 2**	Sampler Name(s): Richard Wilson
MW Identification: MW-216	Date/Time: 4-17-2024 / 8:25
Sample Number:	PID Readings:
Weather Conditions: NM	
Wellhead Inspection: Good	

Visual Inspection:

1. Survey Mark Present: (Yes/No)	(Yes) / No	5. Standing/Ponded Water (Yes/No)	Yes / (No)
2. Collision/Vandalism Damage: (Yes/No)	Yes / (No)	6. Frost Heaving (Yes/No)	Yes / (No)
3. Casing Degradation: (Yes/No)	Yes / (No)	7. Lock in Place (Yes/No)	(Yes) / No
4. Well Subsidence: (Yes/No)	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	9.08	6. Purge Rate (mL/min)	
2. Bottom of casing (±0.01 ft.)	25.04	7. Water Level Measuring Equip.	Solinst
3. Casing Diameter (inches)	2"	8. Purge Equipment Used	
4. Actual Volume of Water Purged (mL)		9. Dedicated? (Yes/No)	~~Yes / No~~
5. Purge Water Characteristics:		10. Immiscible layer observed	~~Yes / No~~
Odor	Turbidity	11. Thickness of immiscible layer	
Color		12. Drive Gas (Air/Nitrogen)	~~AIR / NITROGEN / N/A~~

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown
			WATER LEVEL ONLY					

Well evacuated to dryness?	Yes / No	Time to recharge (min):	
1. Sample Filtered?	Yes / No	6. Sample Time:	
2. Sampling Equip. Used		7: Parameter/Container/Pres.	See **Attached COC**
3. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / N/A		
4. Sample Rate (mL/min)			
5. Sample Appearance:			
Turbidity		8. Other Information:	
Color			
Odor			

9. Decontamination Procedures: **Alconox/DI Rinse**

10. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA Site 2**	Sampler Name(s): Richard Wilson
MW Identification: MW-218	Date/Time: 4-17-2024 / 16:26
Sample Number:	PID Readings:
Weather Conditions:	
Wellhead Inspection: Good	

Visual Inspection:

1. Survey Mark Present: (Yes/No)	(Yes) / No	5. Standing/Ponded Water (Yes/No)	Yes / (No)
2. Collision/Vandalism Damage: (Yes/No)	Yes / (No)	6. Frost Heaving (Yes/No)	Yes / (No)
3. Casing Degradation: (Yes/No)	Yes / (No)	7. Lock in Place (Yes/No)	(Yes) / No
4. Well Subsidence: (Yes/No)	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	21.90	6. Purge Rate (mL/min)	
2. Bottom of casing (±0.01 ft.)	29.74	7. Water Level Measuring Equip.	Solinst
3. Casing Diameter (inches)	2"	8. Purge Equipment Used	
4. Actual Volume of Water Purged (mL)		9. Dedicated? (Yes/No)	~~Yes / No~~
5. Purge Water Characteristics:		10. Immiscible layer observed	~~Yes / No~~
Odor	Turbidity	11. Thickness of immiscible layer	
Color		12. Drive Gas (Air/Nitrogen)	AIR ~~/ NITROGEN / N/A~~

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown
			WATER LEVEL ONLY					

Well evacuated to dryness?	Yes / No	Time to recharge (min):	
1. Sample Filtered?	Yes / No	6. Sample Time:	
2. Sampling Equip. Used		7: Parameter/Container/Pres.	**See Attached COC**
3. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / N/A		
4. Sample Rate (mL/min)			
5. Sample Appearance:			
Turbidity		8. Other Information:	
Color			
Odor			

9. Decontamination Procedures: **Alconox/DI Rinse**

10. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA Site 2**	Sampler Name(s): Richard Wilson
MW Identification: MW-307B	Date/Time: 4-18-2024 / 9:04
Sample Number: ~	PID Readings: ~
Weather Conditions: ~	
Wellhead Inspection: Good	

Visual Inspection:

1. Survey Mark Present: (Yes/No)	(Yes) / No	S. Standing/Ponded Water (Yes/No)	Yes / (No)
2. Collision/Vandalism Damage: (Yes/No)	Yes / (No)	6. Frost Heaving (Yes/No)	Yes / (No)
3. Casing Degradation: (Yes/No)	Yes / (No)	7. Lock in Place (Yes/No)	(Yes) / No
4. Well Subsidence: (Yes/No)	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	9.50	6. Purge Rate (mL/min)	~
2. Bottom of casing (±0.01 ft.)	29.41	7. Water Level Measuring Equip.	Solinst
3. Casing Diameter (inches)	2"	8. Purge Equipment Used	~
4. Actual Volume of Water Purged (mL)	~	9. Dedicated? (Yes/No)	~~Yes / No~~
5. Purge Water Characteristics:		10. Immiscible layer observed	~~Yes / No~~
Odor ~ Turbidity ~		11. Thickness of immiscible layer	~
Color ~		12. Drive Gas (Air/Nitrogen)	~~AIR / NITROGEN / N/A~~

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown
			WATER LEVEL ONLY					

Well evacuated to dryness?	Yes / No	Time to recharge (min):	
1. Sample Filtered?	Yes / No	6. Sample Time:	
2. Sampling Equip. Used		7: Parameter/Container/Pres.	**See Attached COC**
3. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / N/A		
4. Sample Rate (mL/min)			
S. Sample Appearance:			
Turbidity		8. Other Information:	
Color			
Odor			

9. Decontamination Procedures: **Alconox/DI Rinse**

10. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

	Facility Name: **CRLCSWA Site 2**	Sampler Name(s): Richard Wilson
	MW Identification: MW-308	Date/Time: 4-18-2024 / 7:16
	Sample Number: ~~~	PID Readings: ~~~
	Weather Conditions: ~~~	
	Wellhead Inspection: Good	

Visual Inspection:

1. Survey Mark Present: (Yes/No)	(Yes) / No	5. Standing/Ponded Water (Yes/No)	Yes / (No)
2. Collision/Vandalism Damage: (Yes/No)	Yes / (No)	6. Frost Heaving (Yes/No)	Yes / (No)
3. Casing Degradation: (Yes/No)	Yes / (No)	7. Lock in Place (Yes/No)	(Yes) / No
4. Well Subsidence: (Yes/No)	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	8.39	6. Purge Rate (mL/min)	~~~
2. Bottom of casing (±0.01 ft.)	27.48	7. Water Level Measuring Equip.	Solinst
3. Casing Diameter (inches)	2"	8. Purge Equipment Used	~~~
4. Actual Volume of Water Purged (mL)	~~~	9. Dedicated? (Yes/No)	~~Yes / No~~
5. Purge Water Characteristics:		10. Immiscible layer observed	~~Yes / No~~
Odor ~~~ Turbidity	~~~	11. Thickness of immiscible layer	~~~
Color ~~~		12. Drive Gas (Air/Nitrogen)	AIR ~~/ NITROGEN / N/A~~

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown
			WATER LEVEL ONLY					

Well evacuated to dryness?	Yes / No	Time to recharge (min):		9. Decontamination Procedures:	
1. Sample Filtered?	Yes / No	6. Sample Time:		**Alconox/DI Rinse**	
2. Sampling Equip. Used		7: Parameter/Container/Pres.		10. Instrument type:	**YSI ProDSS**
3. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / N/A	**See Attached COC**		Calibration Date:	**LAB**
4. Sample Rate (mL/min)				Calibration Time:	**LAB**
5. Sample Appearance:				Stnd.	Reading / Adjust.
Turbidity		8. Other Information:		pH	
Color				Conduct.	**See attached Lab Form for Calibration Data**
Odor				ORP	
				D.O	
				Turbidity	

geotech
Calibrated at Geotech's Colorado service center
2650 East 40th Avenue
Denver, CO 80205
(800) 833-7958 Fax: (303) 322-7242

YSI Pro DSS Calibration Certificate

Unit Number: 8241
Serial Number: 23J101870

Calibration Date 4/5/2024
Technician: Brady Cox

Installed Probes
- ☑ Conductivity
- ☑ PH/ORP
- ☑ DO
- ☑ TURB

- ☑ Display is clear, and free of damage
- ☑ Cable and accessories are free of damage
- ☑ Firmware version is up to date.

Display Battery 91 % **Pass**
Cable Flex Test: **Pass**

Cable Length	10M	
Cable Lot #	23J100090	
Cond Probe Lot #	23J101158	
Bath Temp	31.25 °C	
Meter Temp	31.2 °C	
Variance	-0.05	**Pass**

pH/ORP Serial #	23J103239	
DO Probe Serial #	23H106014	
Turb Probe Serial #	23J105164	

Cond

Calibration	Reading		Buffer Lot #	Exp. Date	
1.413 mS	1.413 mS	**Pass**	4GB0619	2/25	**Pass**

pH

Point Test	Calibration	Reading	mV	Slope		Buffer Lot #	Exp. Date	
2 Point	pH 7.00	pH 7.00	-15 mV			4GA0071	1/26	**Pass**
	pH 10.01	pH 10.01	-187.3 mV	172.3	**Pass**	4GB0798	2/26	**Pass**

ORP

Calibraition	Reading		Buffer Lot #	Exp. Date	
220 mV	220 mV	**Pass**	4GB1336	11/24	**Pass**

Turbidity

Zero	Reading	Variance		Cal	Reading	Variance		Buffer Lot #	Exp. Date	
0 ntu	0 ntu	0 ntu	**Pass**	124 ntu	124 ntu	0.0%	**Pass**	03	3/26	**Pass**

DO

Barometer	Calibration	Reading	Variance		Test Fluid
619.3 mmHg	81.5 %	81.5 %	0.0%	**Pass**	Water Saturated Air

Time:	Min.	Sec.	Reading		Nitrogen Lot #
	3	34	1 %	**Pass**	153402559980

Geotech Environmental Equipment, Inc. takes pride in ensuring this instrument is tested to function as specified by the manufacturer and was calibrated in accordance to manufacturer specifications. All calibration standards used are NIST traceable. With the provided lot numbers we can provide NIST documents on request. Call us at (800) 833-7958 and we will be glad to help.

Verification and ASD Monitoring Event – May 2024

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Eurofins Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Phone (319) 277-2401 Phone (319) 277-2425

Chain of Custody Record

TestAmerica Omaha SC
268

eurofins | Environment Testing

Client Information	Sampler: Richard Wilson	Lab PM: Calhoun, Conner M	Carrier Tracking No(s):	COC No: 310-93721-25730.1
Client Contact: Richard Wilson	Phone: 308-882-6141	E-Mail: Conner.Calhoun@et.eurofinsus.com	State of Origin:	Page: 1 of 1 Page 1 of 2
Company: HDR Inc	PWSID:			Job #:
Address: 1917 S 67th Street	Due Date Requested:			
City: Omaha	TAT Requested (days): Standard			
State, Zip: NE, 68106	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order not required			
Email: richard.wilson2@hdrinc.com	WO #:			
Project Name: CRLCSWA_2 Spring 2024	Project #: 31006785			
Site: Iowa	SSOW#:			

Analysis Requested

Preservation Codes:
D - HNO3
N - None
S - H2SO4
A - HCL
Other:

Sample Identification	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)	6020B - Appendix I Metals	I_3766_86 - (TSS)	9056A_ORGFM_28D - Sulfate	6310C - TOC	8151A - 2,4,6-TP	6020B - Arsenic	6020B - Cobalt	6020B - Iron, Mn	6020B- Field Filtered App 1 metals	I_3765_85-Dissolved TSS	6020B - Iron, MN - Dissolved			Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
MW-26A	5-29-2024	~~11:36~~ 17:17	G	Water	N	N		X			X	X								4	
MW-304R		17:59		Water	N			X	X	X			X	X						6	
MW-204A		15:17		Water	N		X	X	X	X				X						6	
MW-204B		15:50		Water	Y		X	X	X	X				X	X		X			7	
MW-213A		12:30		Water	N		X	X	X	X				X						6	
MW-213B		13:06		Water	N		X	X	X	X				X						6	
MW-218		16:39		Water	N		X	X	X	X				X						6	
MW-501		14:05		Water	Y		X	X						X	X	X	X			4	
				Water																	
				Water																	
				Water																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date: 5-29-24	Time: 1000	Method of Shipment: FedEx

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	5-30-2024 / 10:19	HDR	[signature]	5/30/24 / 1020	
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:

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Low Stress Groundwater Sampling Data Sheet

HDR	Facility Name: **CRLCSWA SITE 2**	Sampler Name(s):	Richard Wilson
	MW Identification: MW-26A	Date/Time:	5-29-2024 / 16:56
	Sample Number: 7	PID Readings: **N/A**	
	Weather Conditions: Sunny Upper 70s		
	Wellhead Inspection: Good		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	S. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	16.59	7. Purge Rate (mL/min)	300
2. Intake Depth (±0.01 ft.)	—	8. Water Level Measuring Equip.	Solinst
3. Bottom of casing (±0.01 ft.)	20.09	9. Purge Equipment Used	Peri Pump
4. Casing Diameter (inches)	2"	10. Dedicated? (Yes/No)	Yes / (No)
S. Actual Volume of Water Purged (mL)	5400	11. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		12. Thickness of immiscible layer	—
Odor: None Turbidity: Clear		13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color: None			

Pump Start: 16:59

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
17:03	1200	15.8	2622	-9.9	1.81	7.90	6.41	16.69	
17:06	2100	15.4	2657	-61.9	0.42	16.67	6.48	16.69	
17:09	3000	15.8	2658	-90.7	0.19	15.78	6.51	16.69	
17:12	3900	15.9	2672	-94.6	0.11	16.53	6.51	16.69	
17:15	4800	15.9	2654	-95.3	0.05	15.85	6.51	16.69	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	—
2. Sample Filtered?	Yes / (No)	8. Sample Time:	17:17
3. Sampling Equip. Used	Peri Pump	9: Parameter/Container/Pres.	See Attached COC
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/ (N/A)		
S. Sample Rate (mL/min)	300		
6. Sample Appearance:			
Turbidity	Clear	10. Other Information:	
Color	None		
Odor	None		

11. Decontamination Procedures: **Alconox/DI Rinse**

12. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

HDR	Facility Name: **CRLCSWA SITE 2**	Sampler Name(s):	Richard Wilson
	MW Identification: MW-204A	Date/Time:	5-29-2024 / 14:56
	Sample Number: 4	PID Readings:	N/A
	Weather Conditions: Sunny low-70s		
	Wellhead Inspection: Good		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	3.36	7. Purge Rate (mL/min)	400
2. Intake Depth (±0.01 ft.)	—	8. Water Level Measuring Equip.	Solinst
3. Bottom of casing (±0.01 ft.)	13.35	9. Purge Equipment Used	Peri Pump
4. Casing Diameter (inches)	2"	10. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	5600	11. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		12. Thickness of immiscible layer	—
Odor: none — Turbidity	clear	13. *Drive Gas (Air/Nitrogen)*	AIR / NITROGEN / (N/A)
Color: none			

Pump Shut: 15:03

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
15:06	~~1200~~ 1200	12.9	1097	314.5	3.63	9.34	6.60	3.65	
15:09	2400	12.8	1087	316.7	3.32	4.63	6.63	3.72	
15:12	3600	13.0	1100	321.2	3.33	4.15	6.63	3.72	
15:15	4800	13.0	1101	326.2	3.33	5.05	6.63	3.72	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	—	11. Decontamination Procedures:	
2. Sample Filtered?	Yes / (No)	8. Sample Time:	15:17	**Alconox/DI Rinse**	
3. Sampling Equip. Used	Peri Pump	9. Parameter/Container/Pres.		12. Instrument type: **YSI ProDSS**	
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/ (N/A)	**See Attached COC**		Calibration Date:	**LAB**
5. Sample Rate (mL/min)	400			Calibration Time:	**LAB**
6. Sample Appearance:				Stnd. / Reading / Adjust.	
Turbidity	Clear	10. Other Information:		pH	
Color	None			Conduct.	**See attached Lab Form for Calibration Data**
Odor	None			ORP	
				D.O	
				Turbidity	

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA SITE 2**	Sampler Name(s): Richard Wilson
MW Identification: MW-204B	Date/Time: 5-29-2024 / 7.61 15:25
Sample Number: 5	PID Readings: N/A
Weather Conditions: Sunny low-70s	
Wellhead Inspection: Good	

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	S. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	7.61	7. Purge Rate (mL/min)	300
2. Intake Depth (±0.01 ft.)	—	8. Water Level Measuring Equip.	Solinst
3. Bottom of casing (±0.01 ft.)	26.70	9. Purge Equipment Used	Peri. Pump
4. Casing Diameter (inches)	2"	10. Dedicated? (Yes/No)	Yes / (No)
S. Actual Volume of Water Purged (mL)	6000	11. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		12. Thickness of immiscible layer	—
Odor none Turbidity	Very Turbid	13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color reddish orange	Reddish-orange		

Pump Start. 15:30

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
15:35	~~15:00~~ 1500	12.5	11688	-49.2	0.27	403.28	6.33	8.32	
15:38	2400	12.4	11697	-43.1	1.39	123.80	6.34	8.37	Cleared out flowcell
15:41	3300	12.1	11696	-45.6	0.12	730.03	6.35	8.38	
15:45 ~~15:47~~	~~4200~~ 4500	11.6	11695	-46.2	0.01	155.44	6.35	8.38	
15:48	5400	11.6	11695	-46.2	0.01	234.15	6.35	8.38	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	—
2. Sample Filtered?	(Yes) / No	8. Sample Time:	15:50
3. Sampling Equip. Used	Peri Pump	9: Parameter/Container/Pres.	See Attached COC
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/ (N/A)		
S. Sample Rate (mL/min)	300		
6. Sample Appearance:			
Turbidity	Slightly Turbid	10. Other Information:	
Color	reddish orange		
Odor	none		

11. Decontamination Procedures: **Alconox/DI Rinse**

12. Instrument type: **YSI ProDSS**

Calibration Date:		LAB
Calibration Time:		LAB
	Stnd.	Reading / Adjust.
pH		
Conduct.		
ORP		
D.O		
Turbidity		

See attached Lab Form for Calibration Data

Initial Discharge: Very Turbid, reddish-orange Fe floc] became clearer around 15:47 mark

Collected filtered Nitric preserved sample - for dissolved metals

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA SITE 2**	Sampler Name(s): Richard Wilson
MW Identification: MW-213A	Date/Time: 5-29-2024 / 12:02
Sample Number:	PID Readings: **N/A**
Weather Conditions: Sunny mid-60s	
Wellhead Inspection: Good	

Visual Inspection:

1. Survey Mark Present: (Yes) / No
2. Collision/Vandalism Damage: Yes / (No)
3. Casing Degradation: Yes / (No)
4. Well Subsidence: Yes / (No)
5. Standing/Ponded Water: (Yes) / No
6. Frost Heaving: Yes / (No)
7. Lock in Place: (Yes) / No

not immediately adjacent to well ~10' away

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.]) 3.35
2. Intake Depth (±0.01 ft.) ~
3. Bottom of casing (±0.01 ft.) 11.98
4. Casing Diameter (inches) 2"
5. Actual Volume of Water Purged (mL) 5700
6. Purge Water Characteristics:
   - Odor: none
   - Color: none
   - Turbidity: slightly turbid
7. Purge Rate (mL/min) ~~400~~ 300 - 400
8. Water Level Measuring Equip. Solinst
9. Purge Equipment Used Peri Pump
10. Dedicated? (Yes/No) Yes / (No)
11. Immiscible layer observed Yes / (No)
12. Thickness of immiscible layer
13. Drive Gas (Air/Nitrogen) AIR / NITROGEN / (N/A)

Pump Start: 12:12

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
12:15	1200	12.3	802	125.6	0.77	73.99	6.56	4.78	
12:18	2100	12.6	798	27.5	0.29	35.55	6.51	4.80	300 mL/min
12:21	3000	12.8	796	18.5	0.19	29.36	6.50	4.79	
12:24	3900	12.5	792	15.2	0.12	31.24	6.49	4.79	
12:27	4800	12.8	789	15.4	0.08	32.49	6.49	4.79	

1. Well evacuated to dryness? Yes / (No)
2. Sample Filtered? Yes / (No)
3. Sampling Equip. Used Peri Pump
4. Drive Gas (Air/Nitrogen) AIR /NITROGEN/ (N/A)
5. Sample Rate (mL/min) 300
6. Sample Appearance:
   - Turbidity: Slightly turbid
   - Color: none
   - Odor: none
7. Time to recharge (min): ~
8. Sample Time: 12:30
9. Parameter/Container/Pres.: See Attached COC
10. Other Information:
11. Decontamination Procedures: **Alconox/DI Rinse**
12. Instrument type: **YSI ProDSS**
    Calibration Date: **LAB**
    Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Treated discharge - reddish brown slight Fe floc

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA SITE 2** | Sampler Name(s): Richard Wilson
MW Identification: MW-213B | Date/Time: 5-29-2024 / 12:42
Sample Number: 2 | PID Readings: **N/A**
Weather Conditions: Partly Cloudy mid-60s
Wellhead Inspection: Good

Visual Inspection: — same as MW-213A

1. Survey Mark Present:	(Yes) / No	5. Standing/Ponded Water:	(Yes) / No
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Hornet nest in well lid - cleaned out

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	3.76	7. Purge Rate (mL/min)	400
2. Intake Depth (±0.01 ft.)	—	8. Water Level Measuring Equip.	Solinst
3. Bottom of casing (±0.01 ft.)	30.91	9. Purge Equipment Used	Peri Pump
4. Casing Diameter (inches)	2"	10. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	8000	11. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		12. Thickness of immiscible layer	—
Odor: None — Turbidity: Clear		13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color: None			

Pump start: 12:46

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
12:49	~~1200~~ 1200	11.2	320.0	193.7	1.14	19.15	7.27	4.26	
12:52	2400	11.8	318.7	192.2	0.75	12.85	7.26	4.29	
12:55	3600	12.0	318.7	195.2	0.85	8.82	7.25	4.30	
12:58	4800	12.0	314.8	-4.4	0.37	9.38	7.19	4.30	
13:01	6000	12.0	315.5	-16.4	0.42	13.30	7.19	4.30	
13:04	7200	12.1	313.4	-54.8	0.32	13.29	7.16	4.30	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	—
2. Sample Filtered?	Yes / (No)	8. Sample Time:	13:06
3. Sampling Equip. Used	Peri Pump	9: Parameter/Container/Pres.	See Attached COC
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/ (N/A)		
5. Sample Rate (mL/min)	400		
6. Sample Appearance:			
Turbidity	~~Moderate~~ Clear	10. Other Information:	
Color	None		
Odor	None		

11. Decontamination Procedures: **Alconox/DI Rinse**
12. Instrument type: **YSI ProDSS**

	Stnd.	Reading	Adjust.
Calibration Date:		**LAB**	
Calibration Time:		**LAB**	
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

ORP appears to be anomalous.
No calibration solution for off ORP sensor evaluation

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA SITE 2**		Sampler Name(s):	Richard Wilson
MW Identification:	MW-21S	Date/Time:	5-29-2024/16:15
Sample Number:	6	PID Readings:	N/A
Weather Conditions:	Sunny Mid-70s		
Wellhead Inspection:	Good		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	S. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	21.35	7. Purge Rate (mL/min)	200
2. Intake Depth (±0.01 ft.)	—	8. Water Level Measuring Equip.	Solinst
3. Bottom of casing (±0.01 ft.)	29.70	9. Purge Equipment Used	Peri Pump
4. Casing Diameter (inches)	2"	10. Dedicated? (Yes/No)	Yes / (No)
S. Actual Volume of Water Purged (mL)	4000	11. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		12. Thickness of immiscible layer	—
Odor: none Turbidity: clear after 16:25		13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color: ~~clear~~ none			

Pump Start: 16:19

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
16:24	1000	—	—	—	—	—	—	21.47	
16:28	1800	13.6	564	241.2	2.14	17.69	6.82	21.49	
16:31	2400	13.3	545	244.0	0.43	21.90	6.80	21.44	
16:34	3000	13.4	545	248.3	0.18	22.34	6.78	21.50	
16:37	3600	13.6	545	249.4	0.11	21.83	6.78	21.50	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	—
2. Sample Filtered?	Yes / (No)	8. Sample Time:	16:39
3. Sampling Equip. Used	Peri Pump	9: Parameter/Container/Pres.	See Attached COC
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/ (N/A)		
S. Sample Rate (mL/min)	200		
6. Sample Appearance:			
Turbidity	Clear	10. Other Information:	
Color	none		
Odor	none		

11. Decontamination Procedures: **Alconox/DI Rinse**

12. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Initial discharge: ~~—~~ very turbid, reddish orange Fe floc until ~16:25 Then became clear

Low Stress Groundwater Sampling Data Sheet

HDR	Facility Name: **CRLCSWA SITE 2**	Sampler Name(s):	Richard Wilson
	MW Identification: MW-304R	Date/Time:	5-29-2024/17:40
	Sample Number: 8	PID Readings:	N/A
	Weather Conditions: Sunny Upper 70s		
	Wellhead Inspection: Good		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	S. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	24.65	7. Purge Rate (mL/min)	300
2. Intake Depth (±0.01 ft.)	—	8. Water Level Measuring Equip.	Solinst
3. Bottom of casing (±0.01 ft.)	29.61	9. Purge Equipment Used	Peri Pump
4. Casing Diameter (inches)	2"	10. Dedicated? (Yes/No)	Yes / (No)
5. Actual Volume of Water Purged (mL)	4200	11. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		12. Thickness of immiscible layer	—
Odor: None Turbidity: Clear		13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color: None			

Pump Shut: @ 17:45

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
17:48	900	13.5	1466	-29.1	0.53	33.77	6.39	25.41	
17:51	1800	13.3	1458	-29.1	0.17	34.13	6.37	25.57	
17:54	2700	13.3	1468	-25.0	0.11	32.84	6.36	25.58	
17:57	3600	13.2	1465	-24.7	0.06	31.14	6.36	25.58	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	—
2. Sample Filtered?	Yes / (No)	8. Sample Time:	17:59
3. Sampling Equip. Used	Peri Pump	9: Parameter/Container/Pres.	See Attached COC
4. Drive Gas (Air/Nitrogen)	AIR /NITROGEN/ (N/A)		
S. Sample Rate (mL/min)	300		
6. Sample Appearance:		10. Other Information:	
Turbidity	Clear		
Color	None		
Odor	None		

11. Decontamination Procedures: **Alconox/DI Rinse**

12. Instrument type: **YSI ProDSS**

	Stnd.	Reading	Adjust.
Calibration Date:		LAB	
Calibration Time:		LAB	
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Low Stress Groundwater Sampling Data Sheet

Facility Name: **CRLCSWA SITE 2**		Sampler Name(s):	Richard Wilson
MW Identification:	MW-501	Date/Time:	5-29-2024/13:33
Sample Number:	3	PID Readings:	N/A
Weather Conditions:	Sunny, Upper 60s		
Wellhead Inspection:	~~Good~~ Good		

Visual Inspection:

1. Survey Mark Present:	(Yes) / No	S. Standing/Ponded Water:	Yes / (No)
2. Collision/Vandalism Damage:	Yes / (No)	6. Frost Heaving:	Yes / (No)
3. Casing Degradation:	Yes / (No)	7. Lock in Place:	(Yes) / No
4. Well Subsidence:	Yes / (No)		

Ground Water Measurements/Purge data:

1. Static Water Level (±0.01 feet [ft.])	14.05	7. Purge Rate (mL/min)	200-300
2. Intake Depth (±0.01 ft.)	—	8. Water Level Measuring Equip.	Solinst
3. Bottom of casing (±0.01 ft.)	35.76	9. Purge Equipment Used	Peri Pump
4. Casing Diameter (inches)	2"	10. Dedicated? (Yes/No)	Yes / (No)
S. Actual Volume of Water Purged (mL)	6200	11. Immiscible layer observed	Yes / (No)
6. Purge Water Characteristics:		12. Thickness of immiscible layer	—
Odor: none Turbidity: Very turbid		13. Drive Gas (Air/Nitrogen)	AIR / NITROGEN / (N/A)
Color: reddish-Orange			

Pump Start: 13:38

Time	Volume Purged (mL)	Temp (°C)	Conductivity (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	pH	Drawdown	Notes
13:42	1200	—	—	—	—	—	—	14.99	not hooked to flowcell
13:46	2400	—	—	—	—	—	—	15.41	
13:49	3000	—	—	—	—	—	—	15.23	Reduced to 200 mL/min
13:52	3600	14.6	1528	214.9	1.91	982.31	5.73	15.21	
13:55	4200	14.3	1523	202.3	1.43	1446.22	5.76	15.21	
13:58	4800	13.8	1521	200.7	1.21	2512.74	5.77	15.24	
14:01	5400	14.1	1518	198.5	1.12	1450.81	5.76	15.22	

1. Well evacuated to dryness?	Yes / (No)	7. Time to recharge (min):	—
2. Sample Filtered?	(Yes) / No	8. Sample Time:	14:05
3. Sampling Equip. Used	Peri Pump	9: Parameter/Container/Pres.	See Attached COC
4. Drive Gas (Air/Nitrogen)	AIR/NITROGEN/(N/A)		
S. Sample Rate (mL/min)	200		
6. Sample Appearance:			
Turbidity	Very turbid	10. Other Information:	
Color	reddish-orange		
Odor	none		

11. Decontamination Procedures: **Alconox/DI Rinse**

12. Instrument type: **YSI ProDSS**

Calibration Date: **LAB**

Calibration Time: **LAB**

	Stnd.	Reading	Adjust.
pH			
Conduct.			
ORP			
D.O			
Turbidity			

See attached Lab Form for Calibration Data

Initial Discharge: - Very turbid, Fe floc reddish-Orange
- Occasional slug of Fe flk

pH sensor spot check @ 14:20

pH Std.	Reading
4.0	3.99 at 24.6°C
7.0	7.01 at 25.1°C

geotech
Calibrated at Geotech's Colorado service center
2650 East 40th Avenue
Denver, CO 80205
(800) 833-7958 *Fax:* (303) 322-7242

YSI Pro DSS Calibration Certificate

Unit Number: 7957
Serial Number: 23B102897

Calibration Date 5/16/2024
Technician: Sonny Saldona-Diaz

Installed Probes
- ☑ Conductivity
- ☑ PH/ORP
- ☑ DO
- ☑ TURB

- ☑ Display is clear, and free of damage
- ☑ Cable and accessories are free of damage
- ☑ Firmware version is up to date.

Display Battery 96 % **Pass**
Cable Flex Test: **Pass**

Cable Length	10M	pH/ORP Serial #	18F101499
Cable Lot #	23B105008	DO Probe Serial #	23B101217
Cond Probe Lot #	23B107115	Turb Probe Serial #	23A100616
Bath Temp	31.2 °C		
Meter Temp	31.1 °C		
Variance	-0.10	**Pass**	

Cond

Calibration	Reading		Buffer Lot #	Exp. Date	
1.413 mS	1.413 mS	**Pass**	4GB0033	2/25	**Pass**

pH

Point Test	Calibration	Reading	mV	Slope		Buffer Lot #	Exp. Date	
2 Point	pH 7.00	pH 7.00	-16.8 mV			4GA1179	1/26	**Pass**
	pH 10.01	pH 10.01	-182.6 mV	165.8	**Pass**	4GB0798	2/26	**Pass**

ORP

Calibraition	Reading		Buffer Lot #	Exp. Date	
220 mV	220 mV	**Pass**	4GB1336	11/24	**Pass**

Turbidity

Zero	Reading	Variance		Cal	Reading	Variance		Buffer Lot #	Exp. Date	
0 ntu	0 ntu	0 ntu	**Pass**	126 ntu	126 ntu	0.0%	**Pass**	04	4/26	**Pass**

DO

Barometer	Calibration	Reading	Variance		Test Fluid
626.5 mmHg	82.4 %	82.4 %	0.0%	**Pass**	Water Saturated Air

Time:	Min.	Sec.	Reading		Nitrogen Lot #
	4	8	1 %	**Pass**	

Geotech Environmental Equipment, Inc. takes pride in ensuring this instrument is tested to function as specified by the manufacturer and was calibrated in accordance to manufacturer specifications. All calibration standards used are NIST traceable. With the provided lot numbers we can provide NIST documents on request. Call us at (800) 833-7958 and we will be glad to help.

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Attachment 2

Analytical Laboratory Reports

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Compliance Monitoring Event – April 2024

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eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Richard Wilson
HDR Inc
1917 S 67th Street
Omaha, Nebraska 68106

Generated 5/3/2024 4:45:37 PM Revision 1

JOB DESCRIPTION

CRLCSWA_2
Spring

JOB NUMBER

310-279381-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

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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Revision 1

Authorized for release by
Conner Calhoun, Project Management Assistant I
Conner.Calhoun@et.eurofinsus.com
(319)277-2401

Table of Contents

Job Narrative
310-279381-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample 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 4/19/2024 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 5 coolers at receipt time were 3.3°C, 3.8°C, 3.9°C, 4.8°C and 4.9°C.

GC/MS VOA
Method 8260D: The surrogate recovery for the blank and LCS associated with analytical batch 310-419587 was outside the upper control limits.

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-419688 recovered above the upper control limit for 1,1-Dichloroethene (26.4%D). 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 310-419688/3).

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-419688 recovered above the upper control limit for Dichlorodifluoromethane (60.5%D) Trichlorofluoromethane (25.2%D) and Vinyl chloride (22.0%D). 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 310-419688/4).

Method 8260D: The laboratory control sample (LCS) for analytical batch 310-419688 recovered outside control limits for the following analytes: 1,1-Dichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-419842 recovered above the upper control limit for 1,1-Dichloroethene (20.3%D). 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 310-419842/3).

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 surrogate recovery for the blank associated with preparation batch 310-419297 and analytical batch 310-420102 was outside the upper control limits.

Method 8270E: The continuing calibration verification (CCV) associated with batch 310-420102 recovered above the upper control limit for Indeno[1,2,3-cd]pyrene (30.4%D), Di-n-butyl phthalate (20.1%D), 3-Methylcholanthrene (21.7%D), Di-n-octyl phthalate (24.2%D) and Dibenzo(a,h)anthracene (22.0%D). The samples associated with this CCV were non-detects for the affected analytes; 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 310-419297 and analytical batch 310-420102 recovered outside control limits for the following analytes: 2,4-Dinitrophenol, 3,3'-Dimethylbenzidine, p-Phenylene diamine and Methapyrilene.

Method 8270E: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 310-419297 and analytical batch 310-420102 recovered outside control limits for the following analytes: Famphur. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Job ID: 310-279381-1 (Continued) Eurofins Cedar Falls

Method 8270E: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 310-419297 and analytical batch 310-420102 recovered outside control limits for the following analyte(s): p-Phenylene diamine. p-Phenylene diamine has 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 control limits: MW-26A (310-279381-13). High surrogates due to poor sample matrix and tan tint.

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
Method 9034_Calc: The maximum volume of titrant (10mL) has been reached without a color change. The result is reported as <1.0 mg/L.
Matrix interference is suspected. MW-26A (310-279381-13)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-279381-1	GU-1	Ground Water	04/17/24 13:18	04/19/24 08:00
310-279381-2	GU-L	Ground Water	04/17/24 12:25	04/19/24 08:00
310-279381-3	GU-O	Ground Water	04/17/24 12:45	04/19/24 08:00
310-279381-4	GU-P	Ground Water	04/17/24 13:00	04/19/24 08:00
310-279381-5	MW-201B	Ground Water	04/17/24 09:04	04/19/24 08:00
310-279381-6	MW-9AR	Ground Water	04/17/24 08:03	04/19/24 08:00
310-279381-7	MW-15	Ground Water	04/18/24 13:47	04/19/24 08:00
310-279381-8	MW-18	Ground Water	04/18/24 11:30	04/19/24 08:00
310-279381-9	MW-19	Ground Water	04/18/24 14:30	04/19/24 08:00
310-279381-10	MW-20	Ground Water	04/18/24 13:07	04/19/24 08:00
310-279381-11	MW-22	Ground Water	04/18/24 10:23	04/19/24 08:00
310-279381-12	MW-24	Ground Water	04/17/24 14:33	04/19/24 08:00
310-279381-13	MW-26A	Ground Water	04/17/24 15:03	04/19/24 08:00
310-279381-14	MW-300	Ground Water	04/18/24 15:10	04/19/24 08:00
310-279381-15	MW-301	Ground Water	04/18/24 12:25	04/19/24 08:00
310-279381-16	MW-302R	Ground Water	04/17/24 14:01	04/19/24 08:00
310-279381-17	MW-303	Ground Water	04/17/24 15:55	04/19/24 08:00
310-279381-18	MW-304R	Ground Water	04/17/24 16:58	04/19/24 08:00
310-279381-19	MW-305	Ground Water	04/17/24 17:56	04/19/24 08:00
310-279381-20	MW-29	Ground Water	04/18/24 08:21	04/19/24 08:00
310-279381-21	MW-30	Ground Water	04/18/24 07:45	04/19/24 08:00
310-279381-22	MW-306	Ground Water	04/18/24 09:30	04/19/24 08:00
310-279381-23	MW-307A	Ground Water	04/18/24 08:58	04/19/24 08:00
310-279381-24	MW-501	Ground Water	04/17/24 11:50	04/19/24 08:00
310-279381-25	MW-502	Ground Water	04/17/24 10:51	04/19/24 08:00
310-279381-26	EQ-1	Ground Water	04/18/24 15:25	04/19/24 08:00
310-279381-27	DUP-1	Ground Water	04/18/24 11:07	04/19/24 08:00
310-279381-28	DUP-2	Ground Water	04/18/24 11:30	04/19/24 08:00
310-279381-29	TB-1	Water	04/17/24 13:50	04/19/24 08:00
310-279381-30	TB-2	Water	04/18/24 08:10	04/19/24 08:00
310-279381-31	TB-3	Water	04/18/24 15:40	04/19/24 08:00

Detection Summary

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: GU-1 — Lab Sample ID: 310-279381-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00735		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.488		0.00200	0.000660	mg/L	1		6020B	Total/NA
Chromium	0.00187	J	0.00500	0.00120	mg/L	1		6020B	Total/NA
Cobalt	0.00289		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0463		0.00500	0.00210	mg/L	1		6020B	Total/NA
Total Suspended Solids	52.8		3.75	2.78	mg/L	1		I-3765-85	Total/NA

Client Sample ID: GU-L — Lab Sample ID: 310-279381-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00238		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0442		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00931		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00774		0.00500	0.00210	mg/L	1		6020B	Total/NA
Total Suspended Solids	11.8		2.50	1.85	mg/L	1		I-3765-85	Total/NA

Client Sample ID: GU-O — Lab Sample ID: 310-279381-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00181	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.325		0.00200	0.000660	mg/L	1		6020B	Total/NA
Total Suspended Solids	28.0		7.50	5.55	mg/L	1		I-3765-85	Total/NA

Client Sample ID: GU-P — Lab Sample ID: 310-279381-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00213		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.309		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000484	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Total Suspended Solids	12.0		5.00	3.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-201B — Lab Sample ID: 310-279381-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00123	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0566		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000360	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00197	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.000881		0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.00275	J	0.00500	0.00210	mg/L	1		6020B	Total/NA
Vanadium	0.00143	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	26.6		1.88	1.39	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-9AR — Lab Sample ID: 310-279381-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00866		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.352		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000891		0.000500	0.000170	mg/L	1		6020B	Total/NA
Total Suspended Solids	42.0		7.50	5.55	mg/L	1		I-3765-85	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-15 — Lab Sample ID: 310-279381-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00124	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0614		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00206		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00248	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Nickel	0.00928		0.00500	0.00210	mg/L	1		6020B	Total/NA
Selenium	0.00349	J	0.00500	0.00140	mg/L	1		6020B	Total/NA
Vanadium	0.00123	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	4.13		1.88	1.39	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-18 — Lab Sample ID: 310-279381-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0610		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cadmium	0.000211		0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.00346		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00198	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Nickel	0.0261		0.00500	0.00210	mg/L	1		6020B	Total/NA

Client Sample ID: MW-19 — Lab Sample ID: 310-279381-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	0.994	J	1.00	0.400	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.502	J	1.00	0.210	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	1.00		1.00	0.230	ug/L	1		8260D	Total/NA
Toluene	0.445	J	1.00	0.430	ug/L	1		8260D	Total/NA
Arsenic	0.000845	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0444		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cadmium	0.000119	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.00852		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0253		0.00500	0.00210	mg/L	1		6020B	Total/NA
Total Suspended Solids	3.00		1.88	1.39	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-20 — Lab Sample ID: 310-279381-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.33	J	10.0	3.10	ug/L	1		8260D	Total/NA
Benzene	3.47		0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	3.59		1.00	0.400	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	0.642	J	1.00	0.230	ug/L	1		8260D	Total/NA
Arsenic	0.00296		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.719		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00180		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0101		0.00500	0.00210	mg/L	1		6020B	Total/NA
Vanadium	0.00208	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	114		30.0	22.2	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-22 — Lab Sample ID: 310-279381-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.90		0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	0.577	J	1.00	0.400	ug/L	1		8260D	Total/NA
Silvex (2,4,5-TP)	0.0511	J p	0.0536	0.0236	ug/L	1		8151A	Total/NA
Arsenic	0.00281		0.00200	0.000530	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-22 (Continued) — Lab Sample ID: 310-279381-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	1.06		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000278	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0333		0.00500	0.00210	mg/L	1		6020B	Total/NA
Total Suspended Solids	32.7		5.00	3.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-24 — Lab Sample ID: 310-279381-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.000746	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0426		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000376	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00415	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Nickel	0.0140		0.00500	0.00210	mg/L	1		6020B	Total/NA

Client Sample ID: MW-26A — Lab Sample ID: 310-279381-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silvex (2,4,5-TP)	0.0724		0.0522	0.0230	ug/L	1		8151A	Total/NA
Arsenic	0.0111		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.249		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.113		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0512		0.00500	0.00210	mg/L	1		6020B	Total/NA
Total Suspended Solids	35.5		7.50	5.55	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-300 — Lab Sample ID: 310-279381-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0983		0.00200	0.000660	mg/L	1		6020B	Total/NA
Total Suspended Solids	4.75		1.88	1.39	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-301 — Lab Sample ID: 310-279381-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00467		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0672		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00424		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00692		0.00500	0.00210	mg/L	1		6020B	Total/NA
Total Suspended Solids	34.0		5.00	3.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-302R — Lab Sample ID: 310-279381-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.000745	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.119		0.00200	0.000660	mg/L	1		6020B	Total/NA
Total Suspended Solids	3.63		1.88	1.39	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-303 — Lab Sample ID: 310-279381-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0157		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cadmium	0.000173	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.000204	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0113		0.00500	0.00210	mg/L	1		6020B	Total/NA
Total Suspended Solids	4.62		1.88	1.39	mg/L	1		I-3765-85	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-304R — Lab Sample ID: 310-279381-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.000838	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0523		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00392		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00255	J	0.00500	0.00210	mg/L	1		6020B	Total/NA
Total Suspended Solids	23.0		15.0	11.1	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-305 — Lab Sample ID: 310-279381-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0443		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00162		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00277	J	0.00500	0.00210	mg/L	1		6020B	Total/NA
Total Suspended Solids	8.63		1.88	1.39	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-29 — Lab Sample ID: 310-279381-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.00495		0.000500	0.000170	mg/L	1		6020B	Total/NA
Total Suspended Solids	25.5		7.50	5.55	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-30 — Lab Sample ID: 310-279381-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.0258		0.000500	0.000170	mg/L	1		6020B	Total/NA
Total Suspended Solids	22.3		5.00	3.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-306 — Lab Sample ID: 310-279381-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.381	J	0.500	0.220	ug/L	1		8260D	Total/NA
Cobalt	0.00223		0.000500	0.000170	mg/L	1		6020B	Total/NA
Total Suspended Solids	52.0		5.00	3.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-307A — Lab Sample ID: 310-279381-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.00594		0.000500	0.000170	mg/L	1		6020B	Total/NA
Total Suspended Solids	18.0		5.00	3.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-501 — Lab Sample ID: 310-279381-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00868		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0356		0.00200	0.000660	mg/L	1		6020B	Total/NA
Beryllium	0.00119		0.00100	0.000330	mg/L	1		6020B	Total/NA
Cadmium	0.000875		0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.127		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00447	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.00412		0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.209		0.00500	0.00210	mg/L	1		6020B	Total/NA
Vanadium	0.00551		0.00500	0.00110	mg/L	1		6020B	Total/NA
Zinc	0.127		0.0200	0.00970	mg/L	1		6020B	Total/NA
Total Suspended Solids	1010		15.0	11.1	mg/L	1		I-3765-85	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-502 — Lab Sample ID: 310-279381-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.141		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000742		0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.000581		0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.00255	J	0.00500	0.00210	mg/L	1		6020B	Total/NA
Vanadium	0.00164	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	29.4		1.88	1.39	mg/L	1		I-3765-85	Total/NA

Client Sample ID: EQ-1 — Lab Sample ID: 310-279381-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.534	J	1.00	0.430	ug/L	1		8260D	Total/NA

Client Sample ID: DUP-1 — Lab Sample ID: 310-279381-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.54	J	10.0	3.10	ug/L	1		8260D	Total/NA
Benzene	3.31		0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	3.50		1.00	0.400	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	0.624	J	1.00	0.230	ug/L	1		8260D	Total/NA
Arsenic	0.00292		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.738		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00178		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00988		0.00500	0.00210	mg/L	1		6020B	Total/NA
Vanadium	0.00204	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	101		5.00	3.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: DUP-2 — Lab Sample ID: 310-279381-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0606		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cadmium	0.000204		0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.00346		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00198	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Nickel	0.0262		0.00500	0.00210	mg/L	1		6020B	Total/NA

Client Sample ID: TB-1 — Lab Sample ID: 310-279381-29

No Detections.

Client Sample ID: TB-2 — Lab Sample ID: 310-279381-30

No Detections.

Client Sample ID: TB-3 — Lab Sample ID: 310-279381-31

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: GU-1
Date Collected: 04/17/24 13:18
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-1
Matrix: Ground 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			04/25/24 14:54	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/25/24 14:54	1
Benzene	<0.220		0.500	0.220	ug/L			04/25/24 14:54	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/25/24 14:54	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/25/24 14:54	1
Bromoform	<0.780		5.00	0.780	ug/L			04/25/24 14:54	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/25/24 14:54	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/25/24 14:54	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/25/24 14:54	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/25/24 14:54	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			04/25/24 14:54	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/25/24 14:54	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/25/24 14:54	1
Chloroform	<1.30		3.00	1.30	ug/L			04/25/24 14:54	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/25/24 14:54	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			04/25/24 14:54	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/25/24 14:54	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/25/24 14:54	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/25/24 14:54	1
Dibromomethane	<0.330	F2	1.00	0.330	ug/L			04/25/24 14:54	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/25/24 14:54	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			04/25/24 14:54	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/25/24 14:54	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/25/24 14:54	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			04/25/24 14:54	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/25/24 14:54	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/25/24 14:54	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/25/24 14:54	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/25/24 14:54	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/25/24 14:54	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/25/24 14:54	1
Styrene	<0.370		1.00	0.370	ug/L			04/25/24 14:54	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/25/24 14:54	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			04/25/24 14:54	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			04/25/24 14:54	1
Toluene	<0.430		1.00	0.430	ug/L			04/25/24 14:54	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/25/24 14:54	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/25/24 14:54	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/25/24 14:54	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/25/24 14:54	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/25/24 14:54	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/25/24 14:54	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/25/24 14:54	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/25/24 14:54	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/25/24 14:54	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/25/24 14:54	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/25/24 14:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*04/25/24 14:54*	*1*

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: GU-1

Date Collected: 04/17/24 13:18
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-1

Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*73 - 130*		*04/25/24 14:54*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*04/25/24 14:54*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/22/24 09:00	04/26/24 15:49	1
Arsenic	**0.00735**		0.00200	0.000530	mg/L		04/22/24 09:00	04/26/24 15:49	1
Barium	**0.488**		0.00200	0.000660	mg/L		04/22/24 09:00	04/26/24 15:49	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		04/22/24 09:00	04/26/24 15:49	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		04/22/24 09:00	04/26/24 15:49	1
Chromium	**0.00187**	**J**	0.00500	0.00120	mg/L		04/22/24 09:00	04/26/24 15:49	1
Cobalt	**0.00289**		0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 15:49	1
Copper	<0.00180		0.00500	0.00180	mg/L		04/22/24 09:00	04/26/24 15:49	1
Lead	<0.000260		0.000500	0.000260	mg/L		04/22/24 09:00	04/26/24 15:49	1
Nickel	**0.0463**		0.00500	0.00210	mg/L		04/22/24 09:00	04/26/24 15:49	1
Selenium	<0.00140		0.00500	0.00140	mg/L		04/22/24 09:00	04/26/24 15:49	1
Silver	<0.000500		0.00100	0.000500	mg/L		04/22/24 09:00	04/26/24 15:49	1
Thallium	<0.000570		0.00100	0.000570	mg/L		04/22/24 09:00	04/26/24 15:49	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		04/22/24 09:00	04/26/24 15:49	1
Zinc	<0.00970		0.0200	0.00970	mg/L		04/22/24 09:00	04/26/24 15:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**52.8**		3.75	2.78	mg/L			04/23/24 10:29	1

Client Sample ID: GU-L
Date Collected: 04/17/24 12:25
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-2
Matrix: Ground 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			04/25/24 15:17	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/25/24 15:17	1
Benzene	<0.220		0.500	0.220	ug/L			04/25/24 15:17	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/25/24 15:17	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/25/24 15:17	1
Bromoform	<0.780		5.00	0.780	ug/L			04/25/24 15:17	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/25/24 15:17	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/25/24 15:17	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/25/24 15:17	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/25/24 15:17	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			04/25/24 15:17	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/25/24 15:17	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/25/24 15:17	1
Chloroform	<1.30		3.00	1.30	ug/L			04/25/24 15:17	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/25/24 15:17	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			04/25/24 15:17	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/25/24 15:17	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/25/24 15:17	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/25/24 15:17	1
Dibromomethane	<0.330		1.00	0.330	ug/L			04/25/24 15:17	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/25/24 15:17	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			04/25/24 15:17	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/25/24 15:17	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/25/24 15:17	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			04/25/24 15:17	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/25/24 15:17	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/25/24 15:17	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/25/24 15:17	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/25/24 15:17	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/25/24 15:17	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/25/24 15:17	1
Styrene	<0.370		1.00	0.370	ug/L			04/25/24 15:17	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/25/24 15:17	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			04/25/24 15:17	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			04/25/24 15:17	1
Toluene	<0.430		1.00	0.430	ug/L			04/25/24 15:17	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/25/24 15:17	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/25/24 15:17	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/25/24 15:17	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/25/24 15:17	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/25/24 15:17	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/25/24 15:17	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/25/24 15:17	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/25/24 15:17	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/25/24 15:17	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/25/24 15:17	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/25/24 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*		*04/25/24 15:17*	*1*

Client Sample ID: GU-L
Date Collected: 04/17/24 12:25
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-2
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*101*		*73 - 130*		*04/25/24 15:17*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*04/25/24 15:17*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/22/24 09:00	04/26/24 16:00	1
Arsenic	**0.00238**		0.00200	0.000530	mg/L		04/22/24 09:00	04/26/24 16:00	1
Barium	**0.0442**		0.00200	0.000660	mg/L		04/22/24 09:00	04/26/24 16:00	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		04/22/24 09:00	04/26/24 16:00	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		04/22/24 09:00	04/26/24 16:00	1
Chromium	<0.00120		0.00500	0.00120	mg/L		04/22/24 09:00	04/26/24 16:00	1
Cobalt	**0.00931**		0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 16:00	1
Copper	<0.00180		0.00500	0.00180	mg/L		04/22/24 09:00	04/26/24 16:00	1
Lead	<0.000260		0.000500	0.000260	mg/L		04/22/24 09:00	04/26/24 16:00	1
Nickel	**0.00774**		0.00500	0.00210	mg/L		04/22/24 09:00	04/26/24 16:00	1
Selenium	<0.00140		0.00500	0.00140	mg/L		04/22/24 09:00	04/26/24 16:00	1
Silver	<0.000500		0.00100	0.000500	mg/L		04/22/24 09:00	04/26/24 16:00	1
Thallium	<0.000570		0.00100	0.000570	mg/L		04/22/24 09:00	04/26/24 16:00	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		04/22/24 09:00	04/26/24 16:00	1
Zinc	<0.00970		0.0200	0.00970	mg/L		04/22/24 09:00	04/26/24 16:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**11.8**		2.50	1.85	mg/L			04/23/24 10:29	1

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: GU-O
Date Collected: 04/17/24 12:45
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-3
Matrix: Ground 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			04/25/24 15:39	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/25/24 15:39	1
Benzene	<0.220		0.500	0.220	ug/L			04/25/24 15:39	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/25/24 15:39	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/25/24 15:39	1
Bromoform	<0.780		5.00	0.780	ug/L			04/25/24 15:39	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/25/24 15:39	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/25/24 15:39	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/25/24 15:39	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/25/24 15:39	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			04/25/24 15:39	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/25/24 15:39	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/25/24 15:39	1
Chloroform	<1.30		3.00	1.30	ug/L			04/25/24 15:39	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/25/24 15:39	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			04/25/24 15:39	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/25/24 15:39	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/25/24 15:39	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/25/24 15:39	1
Dibromomethane	<0.330		1.00	0.330	ug/L			04/25/24 15:39	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/25/24 15:39	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			04/25/24 15:39	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/25/24 15:39	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/25/24 15:39	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			04/25/24 15:39	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/25/24 15:39	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/25/24 15:39	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/25/24 15:39	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/25/24 15:39	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/25/24 15:39	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/25/24 15:39	1
Styrene	<0.370		1.00	0.370	ug/L			04/25/24 15:39	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/25/24 15:39	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			04/25/24 15:39	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			04/25/24 15:39	1
Toluene	<0.430		1.00	0.430	ug/L			04/25/24 15:39	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/25/24 15:39	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/25/24 15:39	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/25/24 15:39	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/25/24 15:39	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/25/24 15:39	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/25/24 15:39	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/25/24 15:39	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/25/24 15:39	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/25/24 15:39	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/25/24 15:39	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/25/24 15:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*04/25/24 15:39*	*1*

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: GU-O

Date Collected: 04/17/24 12:45
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-3

Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*101*		*73 - 130*		*04/25/24 15:39*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*04/25/24 15:39*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/22/24 09:00	04/26/24 16:02	1
Arsenic	**0.00181**	**J**	0.00200	0.000530	mg/L		04/22/24 09:00	04/26/24 16:02	1
Barium	**0.325**		0.00200	0.000660	mg/L		04/22/24 09:00	04/26/24 16:02	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		04/22/24 09:00	04/26/24 16:02	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		04/22/24 09:00	04/26/24 16:02	1
Chromium	<0.00120		0.00500	0.00120	mg/L		04/22/24 09:00	04/26/24 16:02	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 16:02	1
Copper	<0.00180		0.00500	0.00180	mg/L		04/22/24 09:00	04/26/24 16:02	1
Lead	<0.000260		0.000500	0.000260	mg/L		04/22/24 09:00	04/26/24 16:02	1
Nickel	<0.00210		0.00500	0.00210	mg/L		04/22/24 09:00	04/26/24 16:02	1
Selenium	<0.00140		0.00500	0.00140	mg/L		04/22/24 09:00	04/26/24 16:02	1
Silver	<0.000500		0.00100	0.000500	mg/L		04/22/24 09:00	04/26/24 16:02	1
Thallium	<0.000570		0.00100	0.000570	mg/L		04/22/24 09:00	04/26/24 16:02	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		04/22/24 09:00	04/26/24 16:02	1
Zinc	<0.00970		0.0200	0.00970	mg/L		04/22/24 09:00	04/26/24 16:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**28.0**		7.50	5.55	mg/L			04/23/24 10:29	1

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: GU-P
Date Collected: 04/17/24 13:00
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-4
Matrix: Ground 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			04/24/24 15:32	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/24/24 15:32	1
Benzene	<0.220		0.500	0.220	ug/L			04/24/24 15:32	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/24/24 15:32	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/24/24 15:32	1
Bromoform	<0.780		5.00	0.780	ug/L			04/24/24 15:32	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/24/24 15:32	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/24/24 15:32	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/24/24 15:32	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/24/24 15:32	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			04/24/24 15:32	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/24/24 15:32	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/24/24 15:32	1
Chloroform	<1.30		3.00	1.30	ug/L			04/24/24 15:32	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/24/24 15:32	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			04/24/24 15:32	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/24/24 15:32	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/24/24 15:32	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/24/24 15:32	1
Dibromomethane	<0.330		1.00	0.330	ug/L			04/24/24 15:32	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/24/24 15:32	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			04/24/24 15:32	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/24/24 15:32	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/24/24 15:32	1
1,1-Dichloroethene	<0.560	*+	2.00	0.560	ug/L			04/24/24 15:32	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/24/24 15:32	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/24/24 15:32	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/24/24 15:32	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/24/24 15:32	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/24/24 15:32	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/24/24 15:32	1
Styrene	<0.370		1.00	0.370	ug/L			04/24/24 15:32	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/24/24 15:32	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			04/24/24 15:32	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			04/24/24 15:32	1
Toluene	<0.430		1.00	0.430	ug/L			04/24/24 15:32	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/24/24 15:32	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/24/24 15:32	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/24/24 15:32	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/24/24 15:32	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/24/24 15:32	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/24/24 15:32	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/24/24 15:32	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/24/24 15:32	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/24/24 15:32	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/24/24 15:32	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/24/24 15:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*04/24/24 15:32*	*1*

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: GU-P

Date Collected: 04/17/24 13:00
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-4

Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*105*		*73 - 130*		*04/24/24 15:32*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*04/24/24 15:32*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/22/24 09:00	04/26/24 16:04	1
Arsenic	**0.00213**		0.00200	0.000530	mg/L		04/22/24 09:00	04/26/24 16:04	1
Barium	**0.309**		0.00200	0.000660	mg/L		04/22/24 09:00	04/26/24 16:04	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		04/22/24 09:00	04/26/24 16:04	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		04/22/24 09:00	04/26/24 16:04	1
Chromium	<0.00120		0.00500	0.00120	mg/L		04/22/24 09:00	04/26/24 16:04	1
Cobalt	**0.000484**	**J**	0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 16:04	1
Copper	<0.00180		0.00500	0.00180	mg/L		04/22/24 09:00	04/26/24 16:04	1
Lead	<0.000260		0.000500	0.000260	mg/L		04/22/24 09:00	04/26/24 16:04	1
Nickel	<0.00210		0.00500	0.00210	mg/L		04/22/24 09:00	04/26/24 16:04	1
Selenium	<0.00140		0.00500	0.00140	mg/L		04/22/24 09:00	04/26/24 16:04	1
Silver	<0.000500		0.00100	0.000500	mg/L		04/22/24 09:00	04/26/24 16:04	1
Thallium	<0.000570		0.00100	0.000570	mg/L		04/22/24 09:00	04/26/24 16:04	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		04/22/24 09:00	04/26/24 16:04	1
Zinc	<0.00970		0.0200	0.00970	mg/L		04/22/24 09:00	04/26/24 16:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**12.0**		5.00	3.70	mg/L			04/23/24 10:29	1

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-201B
Date Collected: 04/17/24 09:04
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-5
Matrix: Ground 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			04/24/24 15:55	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/24/24 15:55	1
Benzene	<0.220		0.500	0.220	ug/L			04/24/24 15:55	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/24/24 15:55	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/24/24 15:55	1
Bromoform	<0.780		5.00	0.780	ug/L			04/24/24 15:55	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/24/24 15:55	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/24/24 15:55	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/24/24 15:55	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/24/24 15:55	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			04/24/24 15:55	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/24/24 15:55	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/24/24 15:55	1
Chloroform	<1.30		3.00	1.30	ug/L			04/24/24 15:55	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/24/24 15:55	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			04/24/24 15:55	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/24/24 15:55	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/24/24 15:55	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/24/24 15:55	1
Dibromomethane	<0.330		1.00	0.330	ug/L			04/24/24 15:55	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/24/24 15:55	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			04/24/24 15:55	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/24/24 15:55	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/24/24 15:55	1
1,1-Dichloroethene	<0.560	*+	2.00	0.560	ug/L			04/24/24 15:55	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/24/24 15:55	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/24/24 15:55	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/24/24 15:55	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/24/24 15:55	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/24/24 15:55	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/24/24 15:55	1
Styrene	<0.370		1.00	0.370	ug/L			04/24/24 15:55	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/24/24 15:55	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			04/24/24 15:55	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			04/24/24 15:55	1
Toluene	<0.430		1.00	0.430	ug/L			04/24/24 15:55	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/24/24 15:55	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/24/24 15:55	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/24/24 15:55	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/24/24 15:55	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/24/24 15:55	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/24/24 15:55	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/24/24 15:55	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/24/24 15:55	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/24/24 15:55	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/24/24 15:55	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/24/24 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*04/24/24 15:55*	*1*

Client Sample ID: MW-201B
Date Collected: 04/17/24 09:04
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-5
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*104*		*73 - 130*		*04/24/24 15:55*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*04/24/24 15:55*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/22/24 09:00	04/26/24 16:06	1
Arsenic	**0.00123**	**J**	0.00200	0.000530	mg/L		04/22/24 09:00	04/26/24 16:06	1
Barium	**0.0566**		0.00200	0.000660	mg/L		04/22/24 09:00	04/26/24 16:06	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		04/22/24 09:00	04/26/24 16:06	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		04/22/24 09:00	04/26/24 16:06	1
Chromium	<0.00120		0.00500	0.00120	mg/L		04/22/24 09:00	04/26/24 16:06	1
Cobalt	**0.000360**	**J**	0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 16:06	1
Copper	**0.00197**	**J**	0.00500	0.00180	mg/L		04/22/24 09:00	04/26/24 16:06	1
Lead	**0.000881**		0.000500	0.000260	mg/L		04/22/24 09:00	04/26/24 16:06	1
Nickel	**0.00275**	**J**	0.00500	0.00210	mg/L		04/22/24 09:00	04/26/24 16:06	1
Selenium	<0.00140		0.00500	0.00140	mg/L		04/22/24 09:00	04/26/24 16:06	1
Silver	<0.000500		0.00100	0.000500	mg/L		04/22/24 09:00	04/26/24 16:06	1
Thallium	<0.000570		0.00100	0.000570	mg/L		04/22/24 09:00	04/26/24 16:06	1
Vanadium	**0.00143**	**J**	0.00500	0.00110	mg/L		04/22/24 09:00	04/26/24 16:06	1
Zinc	<0.00970		0.0200	0.00970	mg/L		04/22/24 09:00	04/26/24 16:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide (SW846 9034)	<0.231		1.00	0.231	mg/L		04/21/24 18:12	04/21/24 22:43	1
Total Suspended Solids (USGS I-3765-85)	**26.6**		1.88	1.39	mg/L			04/23/24 10:29	1

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-9AR
Date Collected: 04/17/24 08:03
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-6
Matrix: Ground 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			04/24/24 16:18	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/24/24 16:18	1
Benzene	<0.220		0.500	0.220	ug/L			04/24/24 16:18	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/24/24 16:18	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/24/24 16:18	1
Bromoform	<0.780		5.00	0.780	ug/L			04/24/24 16:18	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/24/24 16:18	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/24/24 16:18	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/24/24 16:18	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/24/24 16:18	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			04/24/24 16:18	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/24/24 16:18	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/24/24 16:18	1
Chloroform	<1.30		3.00	1.30	ug/L			04/24/24 16:18	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/24/24 16:18	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			04/24/24 16:18	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/24/24 16:18	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/24/24 16:18	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/24/24 16:18	1
Dibromomethane	<0.330		1.00	0.330	ug/L			04/24/24 16:18	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/24/24 16:18	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			04/24/24 16:18	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/24/24 16:18	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/24/24 16:18	1
1,1-Dichloroethene	<0.560	*+	2.00	0.560	ug/L			04/24/24 16:18	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/24/24 16:18	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/24/24 16:18	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/24/24 16:18	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/24/24 16:18	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/24/24 16:18	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/24/24 16:18	1
Styrene	<0.370		1.00	0.370	ug/L			04/24/24 16:18	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/24/24 16:18	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			04/24/24 16:18	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			04/24/24 16:18	1
Toluene	<0.430		1.00	0.430	ug/L			04/24/24 16:18	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/24/24 16:18	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/24/24 16:18	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/24/24 16:18	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/24/24 16:18	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/24/24 16:18	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/24/24 16:18	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/24/24 16:18	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/24/24 16:18	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/24/24 16:18	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/24/24 16:18	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/24/24 16:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*04/24/24 16:18*	*1*

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-9AR

Date Collected: 04/17/24 08:03
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-6

Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*73 - 130*		*04/24/24 16:18*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*04/24/24 16:18*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/22/24 09:00	04/26/24 16:08	1
Arsenic	**0.00866**		0.00200	0.000530	mg/L		04/22/24 09:00	04/26/24 16:08	1
Barium	**0.352**		0.00200	0.000660	mg/L		04/22/24 09:00	04/26/24 16:08	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		04/22/24 09:00	04/26/24 16:08	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		04/22/24 09:00	04/26/24 16:08	1
Chromium	<0.00120		0.00500	0.00120	mg/L		04/22/24 09:00	04/26/24 16:08	1
Cobalt	**0.000891**		0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 16:08	1
Copper	<0.00180		0.00500	0.00180	mg/L		04/22/24 09:00	04/26/24 16:08	1
Lead	<0.000260		0.000500	0.000260	mg/L		04/22/24 09:00	04/26/24 16:08	1
Nickel	<0.00210		0.00500	0.00210	mg/L		04/22/24 09:00	04/26/24 16:08	1
Selenium	<0.00140		0.00500	0.00140	mg/L		04/22/24 09:00	04/26/24 16:08	1
Silver	<0.000500		0.00100	0.000500	mg/L		04/22/24 09:00	04/26/24 16:08	1
Thallium	<0.000570		0.00100	0.000570	mg/L		04/22/24 09:00	04/26/24 16:08	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		04/22/24 09:00	04/26/24 16:08	1
Zinc	<0.00970		0.0200	0.00970	mg/L		04/22/24 09:00	04/26/24 16:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide (SW846 9034)	<0.231		1.00	0.231	mg/L		04/21/24 18:14	04/21/24 22:49	1
Total Suspended Solids (USGS I-3765-85)	**42.0**		7.50	5.55	mg/L			04/23/24 10:29	1

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-15
Date Collected: 04/18/24 13:47
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-7
Matrix: Ground 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			04/25/24 16:02	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/25/24 16:02	1
Benzene	<0.220		0.500	0.220	ug/L			04/25/24 16:02	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/25/24 16:02	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/25/24 16:02	1
Bromoform	<0.780		5.00	0.780	ug/L			04/25/24 16:02	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/25/24 16:02	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/25/24 16:02	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/25/24 16:02	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/25/24 16:02	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			04/25/24 16:02	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/25/24 16:02	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/25/24 16:02	1
Chloroform	<1.30		3.00	1.30	ug/L			04/25/24 16:02	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/25/24 16:02	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			04/25/24 16:02	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/25/24 16:02	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/25/24 16:02	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/25/24 16:02	1
Dibromomethane	<0.330		1.00	0.330	ug/L			04/25/24 16:02	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/25/24 16:02	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			04/25/24 16:02	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/25/24 16:02	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/25/24 16:02	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			04/25/24 16:02	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/25/24 16:02	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/25/24 16:02	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/25/24 16:02	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/25/24 16:02	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/25/24 16:02	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/25/24 16:02	1
Styrene	<0.370		1.00	0.370	ug/L			04/25/24 16:02	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/25/24 16:02	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			04/25/24 16:02	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			04/25/24 16:02	1
Toluene	<0.430		1.00	0.430	ug/L			04/25/24 16:02	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/25/24 16:02	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/25/24 16:02	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/25/24 16:02	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/25/24 16:02	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/25/24 16:02	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/25/24 16:02	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/25/24 16:02	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/25/24 16:02	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/25/24 16:02	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/25/24 16:02	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/25/24 16:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*		*04/25/24 16:02*	*1*

Client Sample ID: MW-15
Lab Sample ID: 310-279381-7
Date Collected: 04/18/24 13:47
Matrix: Ground Water
Date Received: 04/19/24 08:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*73 - 130*		*04/25/24 16:02*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*04/25/24 16:02*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/22/24 09:00	04/26/24 16:19	1
Arsenic	**0.00124**	**J**	0.00200	0.000530	mg/L		04/22/24 09:00	04/26/24 16:19	1
Barium	**0.0614**		0.00200	0.000660	mg/L		04/22/24 09:00	04/26/24 16:19	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		04/22/24 09:00	04/26/24 16:19	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		04/22/24 09:00	04/26/24 16:19	1
Chromium	<0.00120		0.00500	0.00120	mg/L		04/22/24 09:00	04/26/24 16:19	1
Cobalt	**0.00206**		0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 16:19	1
Copper	**0.00248**	**J**	0.00500	0.00180	mg/L		04/22/24 09:00	04/26/24 16:19	1
Lead	<0.000260		0.000500	0.000260	mg/L		04/22/24 09:00	04/26/24 16:19	1
Nickel	**0.00928**		0.00500	0.00210	mg/L		04/22/24 09:00	04/26/24 16:19	1
Selenium	**0.00349**	**J**	0.00500	0.00140	mg/L		04/22/24 09:00	04/26/24 16:19	1
Silver	<0.000500		0.00100	0.000500	mg/L		04/22/24 09:00	04/26/24 16:19	1
Thallium	<0.000570		0.00100	0.000570	mg/L		04/22/24 09:00	04/26/24 16:19	1
Vanadium	**0.00123**	**J**	0.00500	0.00110	mg/L		04/22/24 09:00	04/26/24 16:19	1
Zinc	<0.00970		0.0200	0.00970	mg/L		04/22/24 09:00	04/26/24 16:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**4.13**		1.88	1.39	mg/L			04/23/24 15:48	1

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-18
Date Collected: 04/18/24 11:30
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-8
Matrix: Ground 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			04/25/24 16:25	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/25/24 16:25	1
Benzene	<0.220		0.500	0.220	ug/L			04/25/24 16:25	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/25/24 16:25	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/25/24 16:25	1
Bromoform	<0.780		5.00	0.780	ug/L			04/25/24 16:25	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/25/24 16:25	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/25/24 16:25	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/25/24 16:25	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/25/24 16:25	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			04/25/24 16:25	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/25/24 16:25	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/25/24 16:25	1
Chloroform	<1.30		3.00	1.30	ug/L			04/25/24 16:25	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/25/24 16:25	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			04/25/24 16:25	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/25/24 16:25	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/25/24 16:25	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/25/24 16:25	1
Dibromomethane	<0.330		1.00	0.330	ug/L			04/25/24 16:25	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/25/24 16:25	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			04/25/24 16:25	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/25/24 16:25	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/25/24 16:25	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			04/25/24 16:25	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/25/24 16:25	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/25/24 16:25	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/25/24 16:25	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/25/24 16:25	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/25/24 16:25	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/25/24 16:25	1
Styrene	<0.370		1.00	0.370	ug/L			04/25/24 16:25	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/25/24 16:25	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			04/25/24 16:25	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			04/25/24 16:25	1
Toluene	<0.430		1.00	0.430	ug/L			04/25/24 16:25	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/25/24 16:25	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/25/24 16:25	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/25/24 16:25	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/25/24 16:25	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/25/24 16:25	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/25/24 16:25	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/25/24 16:25	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/25/24 16:25	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/25/24 16:25	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/25/24 16:25	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/25/24 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*04/25/24 16:25*	*1*

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-18
Date Collected: 04/18/24 11:30
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-8
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*103*		*73 - 130*		*04/25/24 16:25*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*04/25/24 16:25*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/22/24 09:00	04/26/24 16:22	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		04/22/24 09:00	04/26/24 16:22	1
Barium	**0.0610**		0.00200	0.000660	mg/L		04/22/24 09:00	04/26/24 16:22	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		04/22/24 09:00	04/26/24 16:22	1
Cadmium	**0.000211**		0.000200	0.000100	mg/L		04/22/24 09:00	04/26/24 16:22	1
Chromium	<0.00120		0.00500	0.00120	mg/L		04/22/24 09:00	04/26/24 16:22	1
Cobalt	**0.00346**		0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 16:22	1
Copper	**0.00198**	**J**	0.00500	0.00180	mg/L		04/22/24 09:00	04/26/24 16:22	1
Lead	<0.000260		0.000500	0.000260	mg/L		04/22/24 09:00	04/26/24 16:22	1
Nickel	**0.0261**		0.00500	0.00210	mg/L		04/22/24 09:00	04/26/24 16:22	1
Selenium	<0.00140		0.00500	0.00140	mg/L		04/22/24 09:00	04/26/24 16:22	1
Silver	<0.000500		0.00100	0.000500	mg/L		04/22/24 09:00	04/26/24 16:22	1
Thallium	<0.000570		0.00100	0.000570	mg/L		04/22/24 09:00	04/26/24 16:22	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		04/22/24 09:00	04/26/24 16:22	1
Zinc	<0.00970		0.0200	0.00970	mg/L		04/22/24 09:00	04/26/24 16:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.39		1.88	1.39	mg/L			04/23/24 16:56	1

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-19
Date Collected: 04/18/24 14:30
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-9
Matrix: Ground 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			04/25/24 16:47	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/25/24 16:47	1
Benzene	<0.220		0.500	0.220	ug/L			04/25/24 16:47	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/25/24 16:47	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/25/24 16:47	1
Bromoform	<0.780		5.00	0.780	ug/L			04/25/24 16:47	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/25/24 16:47	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/25/24 16:47	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/25/24 16:47	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/25/24 16:47	1
Chlorobenzene	**0.994**	**J**	1.00	0.400	ug/L			04/25/24 16:47	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/25/24 16:47	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/25/24 16:47	1
Chloroform	<1.30		3.00	1.30	ug/L			04/25/24 16:47	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/25/24 16:47	1
cis-1,2-Dichloroethene	**0.502**	**J**	1.00	0.210	ug/L			04/25/24 16:47	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/25/24 16:47	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/25/24 16:47	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/25/24 16:47	1
Dibromomethane	<0.330		1.00	0.330	ug/L			04/25/24 16:47	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/25/24 16:47	1
1,4-Dichlorobenzene	**1.00**		1.00	0.230	ug/L			04/25/24 16:47	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/25/24 16:47	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/25/24 16:47	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			04/25/24 16:47	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/25/24 16:47	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/25/24 16:47	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/25/24 16:47	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/25/24 16:47	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/25/24 16:47	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/25/24 16:47	1
Styrene	<0.370		1.00	0.370	ug/L			04/25/24 16:47	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/25/24 16:47	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			04/25/24 16:47	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			04/25/24 16:47	1
Toluene	**0.445**	**J**	1.00	0.430	ug/L			04/25/24 16:47	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/25/24 16:47	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/25/24 16:47	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/25/24 16:47	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/25/24 16:47	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/25/24 16:47	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/25/24 16:47	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/25/24 16:47	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/25/24 16:47	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/25/24 16:47	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/25/24 16:47	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/25/24 16:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*		*04/25/24 16:47*	*1*

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-19

Date Collected: 04/18/24 14:30
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-9

Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*101*		*73 - 130*		*04/25/24 16:47*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*04/25/24 16:47*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/22/24 09:00	04/26/24 16:24	1
Arsenic	**0.000845**	**J**	0.00200	0.000530	mg/L		04/22/24 09:00	04/26/24 16:24	1
Barium	**0.0444**		0.00200	0.000660	mg/L		04/22/24 09:00	04/26/24 16:24	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		04/22/24 09:00	04/26/24 16:24	1
Cadmium	**0.000119**	**J**	0.000200	0.000100	mg/L		04/22/24 09:00	04/26/24 16:24	1
Chromium	<0.00120		0.00500	0.00120	mg/L		04/22/24 09:00	04/26/24 16:24	1
Cobalt	**0.00852**		0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 16:24	1
Copper	<0.00180		0.00500	0.00180	mg/L		04/22/24 09:00	04/26/24 16:24	1
Lead	<0.000260		0.000500	0.000260	mg/L		04/22/24 09:00	04/26/24 16:24	1
Nickel	**0.0253**		0.00500	0.00210	mg/L		04/22/24 09:00	04/26/24 16:24	1
Selenium	<0.00140		0.00500	0.00140	mg/L		04/22/24 09:00	04/26/24 16:24	1
Silver	<0.000500		0.00100	0.000500	mg/L		04/22/24 09:00	04/26/24 16:24	1
Thallium	<0.000570		0.00100	0.000570	mg/L		04/22/24 09:00	04/26/24 16:24	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		04/22/24 09:00	04/26/24 16:24	1
Zinc	<0.00970		0.0200	0.00970	mg/L		04/22/24 09:00	04/26/24 16:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**3.00**		1.88	1.39	mg/L			04/23/24 16:56	1

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-20
Date Collected: 04/18/24 13:07
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-10
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**3.33**	**J**	10.0	3.10	ug/L			04/25/24 17:10	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/25/24 17:10	1
Benzene	**3.47**		0.500	0.220	ug/L			04/25/24 17:10	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/25/24 17:10	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/25/24 17:10	1
Bromoform	<0.780		5.00	0.780	ug/L			04/25/24 17:10	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/25/24 17:10	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/25/24 17:10	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/25/24 17:10	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/25/24 17:10	1
Chlorobenzene	**3.59**		1.00	0.400	ug/L			04/25/24 17:10	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/25/24 17:10	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/25/24 17:10	1
Chloroform	<1.30		3.00	1.30	ug/L			04/25/24 17:10	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/25/24 17:10	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			04/25/24 17:10	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/25/24 17:10	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/25/24 17:10	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/25/24 17:10	1
Dibromomethane	<0.330		1.00	0.330	ug/L			04/25/24 17:10	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/25/24 17:10	1
1,4-Dichlorobenzene	**0.642**	**J**	1.00	0.230	ug/L			04/25/24 17:10	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/25/24 17:10	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/25/24 17:10	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			04/25/24 17:10	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/25/24 17:10	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/25/24 17:10	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/25/24 17:10	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/25/24 17:10	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/25/24 17:10	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/25/24 17:10	1
Styrene	<0.370		1.00	0.370	ug/L			04/25/24 17:10	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/25/24 17:10	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			04/25/24 17:10	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			04/25/24 17:10	1
Toluene	<0.430		1.00	0.430	ug/L			04/25/24 17:10	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/25/24 17:10	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/25/24 17:10	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/25/24 17:10	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/25/24 17:10	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/25/24 17:10	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/25/24 17:10	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/25/24 17:10	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/25/24 17:10	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/25/24 17:10	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/25/24 17:10	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/25/24 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*04/25/24 17:10*	*1*

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-20

Date Collected: 04/18/24 13:07
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-10

Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*103*		*73 - 130*		*04/25/24 17:10*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*04/25/24 17:10*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/22/24 09:00	04/26/24 16:26	1
Arsenic	**0.00296**		0.00200	0.000530	mg/L		04/22/24 09:00	04/26/24 16:26	1
Barium	**0.719**		0.00200	0.000660	mg/L		04/22/24 09:00	04/26/24 16:26	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		04/22/24 09:00	04/26/24 16:26	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		04/22/24 09:00	04/26/24 16:26	1
Chromium	<0.00120		0.00500	0.00120	mg/L		04/22/24 09:00	04/26/24 16:26	1
Cobalt	**0.00180**		0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 16:26	1
Copper	<0.00180		0.00500	0.00180	mg/L		04/22/24 09:00	04/26/24 16:26	1
Lead	<0.000260		0.000500	0.000260	mg/L		04/22/24 09:00	04/26/24 16:26	1
Nickel	**0.0101**		0.00500	0.00210	mg/L		04/22/24 09:00	04/26/24 16:26	1
Selenium	<0.00140		0.00500	0.00140	mg/L		04/22/24 09:00	04/26/24 16:26	1
Silver	<0.000500		0.00100	0.000500	mg/L		04/22/24 09:00	04/26/24 16:26	1
Thallium	<0.000570		0.00100	0.000570	mg/L		04/22/24 09:00	04/26/24 16:26	1
Vanadium	**0.00208**	**J**	0.00500	0.00110	mg/L		04/22/24 09:00	04/26/24 16:26	1
Zinc	<0.00970		0.0200	0.00970	mg/L		04/22/24 09:00	04/26/24 16:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**114**		30.0	22.2	mg/L			04/23/24 17:43	1

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-22
Date Collected: 04/18/24 10:23
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-11
Matrix: Ground 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			04/25/24 17:33	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/25/24 17:33	1
Benzene	**1.90**		0.500	0.220	ug/L			04/25/24 17:33	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/25/24 17:33	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/25/24 17:33	1
Bromoform	<0.780		5.00	0.780	ug/L			04/25/24 17:33	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/25/24 17:33	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/25/24 17:33	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/25/24 17:33	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/25/24 17:33	1
Chlorobenzene	**0.577**	**J**	1.00	0.400	ug/L			04/25/24 17:33	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/25/24 17:33	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/25/24 17:33	1
Chloroform	<1.30		3.00	1.30	ug/L			04/25/24 17:33	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/25/24 17:33	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			04/25/24 17:33	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/25/24 17:33	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/25/24 17:33	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/25/24 17:33	1
Dibromomethane	<0.330		1.00	0.330	ug/L			04/25/24 17:33	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/25/24 17:33	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			04/25/24 17:33	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/25/24 17:33	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/25/24 17:33	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			04/25/24 17:33	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/25/24 17:33	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/25/24 17:33	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/25/24 17:33	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/25/24 17:33	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/25/24 17:33	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/25/24 17:33	1
Styrene	<0.370		1.00	0.370	ug/L			04/25/24 17:33	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/25/24 17:33	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			04/25/24 17:33	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			04/25/24 17:33	1
Toluene	<0.430		1.00	0.430	ug/L			04/25/24 17:33	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/25/24 17:33	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/25/24 17:33	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/25/24 17:33	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/25/24 17:33	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/25/24 17:33	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/25/24 17:33	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/25/24 17:33	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/25/24 17:33	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/25/24 17:33	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/25/24 17:33	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/25/24 17:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*04/25/24 17:33*	*1*

Client Sample ID: MW-22

Date Collected: 04/18/24 10:23
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-11

Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*106*		*73 - 130*		*04/25/24 17:33*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*04/25/24 17:33*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
beta-BHC	<0.0370		0.0640	0.0370	ug/L		04/22/24 11:33	04/29/24 16:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	*67*		*10 - 136*	*04/22/24 11:33*	*04/29/24 16:07*	*1*
Tetrachloro-m-xylene (Surr)	*72*		*10 - 130*	*04/22/24 11:33*	*04/29/24 16:07*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	**0.0511**	**J p**	0.0536	0.0236	ug/L		04/24/24 14:51	04/25/24 08:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid (Surr)	*62*	*p*	*34 - 142*	*04/24/24 14:51*	*04/25/24 08:11*	*1*
2,4-Dichlorophenylacetic acid (Surr)	*132*		*34 - 142*	*04/24/24 14:51*	*04/25/24 08:11*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/22/24 09:00	04/26/24 16:28	1
Arsenic	**0.00281**		0.00200	0.000530	mg/L		04/22/24 09:00	04/26/24 16:28	1
Barium	**1.06**		0.00200	0.000660	mg/L		04/22/24 09:00	04/26/24 16:28	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		04/22/24 09:00	04/26/24 16:28	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		04/22/24 09:00	04/26/24 16:28	1
Chromium	<0.00120		0.00500	0.00120	mg/L		04/22/24 09:00	04/26/24 16:28	1
Cobalt	**0.000278**	**J**	0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 16:28	1
Copper	<0.00180		0.00500	0.00180	mg/L		04/22/24 09:00	04/26/24 16:28	1
Lead	<0.000260		0.000500	0.000260	mg/L		04/22/24 09:00	04/26/24 16:28	1
Nickel	**0.0333**		0.00500	0.00210	mg/L		04/22/24 09:00	04/26/24 16:28	1
Selenium	<0.00140		0.00500	0.00140	mg/L		04/22/24 09:00	04/26/24 16:28	1
Silver	<0.000500		0.00100	0.000500	mg/L		04/22/24 09:00	04/26/24 16:28	1
Thallium	<0.000570		0.00100	0.000570	mg/L		04/22/24 09:00	04/26/24 16:28	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		04/22/24 09:00	04/26/24 16:28	1
Zinc	<0.00970		0.0200	0.00970	mg/L		04/22/24 09:00	04/26/24 16:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**32.7**		5.00	3.70	mg/L			04/23/24 16:56	1

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-24
Date Collected: 04/17/24 14:33
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-12
Matrix: Ground 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			04/24/24 16:40	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/24/24 16:40	1
Benzene	<0.220		0.500	0.220	ug/L			04/24/24 16:40	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/24/24 16:40	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/24/24 16:40	1
Bromoform	<0.780		5.00	0.780	ug/L			04/24/24 16:40	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/24/24 16:40	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/24/24 16:40	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/24/24 16:40	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/24/24 16:40	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			04/24/24 16:40	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/24/24 16:40	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/24/24 16:40	1
Chloroform	<1.30		3.00	1.30	ug/L			04/24/24 16:40	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/24/24 16:40	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			04/24/24 16:40	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/24/24 16:40	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/24/24 16:40	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/24/24 16:40	1
Dibromomethane	<0.330		1.00	0.330	ug/L			04/24/24 16:40	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/24/24 16:40	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			04/24/24 16:40	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/24/24 16:40	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/24/24 16:40	1
1,1-Dichloroethene	<0.560	*+	2.00	0.560	ug/L			04/24/24 16:40	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/24/24 16:40	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/24/24 16:40	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/24/24 16:40	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/24/24 16:40	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/24/24 16:40	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/24/24 16:40	1
Styrene	<0.370		1.00	0.370	ug/L			04/24/24 16:40	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/24/24 16:40	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			04/24/24 16:40	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			04/24/24 16:40	1
Toluene	<0.430		1.00	0.430	ug/L			04/24/24 16:40	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/24/24 16:40	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/24/24 16:40	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/24/24 16:40	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/24/24 16:40	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/24/24 16:40	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/24/24 16:40	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/24/24 16:40	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/24/24 16:40	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/24/24 16:40	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/24/24 16:40	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/24/24 16:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*04/24/24 16:40*	*1*

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-24
Date Collected: 04/17/24 14:33
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-12
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*103*		*73 - 130*		*04/24/24 16:40*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*04/24/24 16:40*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/22/24 09:00	04/26/24 16:33	1
Arsenic	**0.000746**	**J**	0.00200	0.000530	mg/L		04/22/24 09:00	04/26/24 16:33	1
Barium	**0.0426**		0.00200	0.000660	mg/L		04/22/24 09:00	04/26/24 16:33	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		04/22/24 09:00	04/26/24 16:33	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		04/22/24 09:00	04/26/24 16:33	1
Chromium	<0.00120		0.00500	0.00120	mg/L		04/22/24 09:00	04/26/24 16:33	1
Cobalt	**0.000376**	**J**	0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 16:33	1
Copper	**0.00415**	**J**	0.00500	0.00180	mg/L		04/22/24 09:00	04/26/24 16:33	1
Lead	<0.000260		0.000500	0.000260	mg/L		04/22/24 09:00	04/26/24 16:33	1
Nickel	**0.0140**		0.00500	0.00210	mg/L		04/22/24 09:00	04/26/24 16:33	1
Selenium	<0.00140		0.00500	0.00140	mg/L		04/22/24 09:00	04/26/24 16:33	1
Silver	<0.000500		0.00100	0.000500	mg/L		04/22/24 09:00	04/26/24 16:33	1
Thallium	<0.000570		0.00100	0.000570	mg/L		04/22/24 09:00	04/26/24 16:33	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		04/22/24 09:00	04/26/24 16:33	1
Zinc	<0.00970		0.0200	0.00970	mg/L		04/22/24 09:00	04/26/24 16:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.39		1.88	1.39	mg/L			04/23/24 10:29	1

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-26A
Date Collected: 04/17/24 15:03
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-13
Matrix: Ground 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			04/24/24 17:03	1
Acrolein	<3.60		10.0	3.60	ug/L			04/24/24 17:03	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/24/24 17:03	1
Allyl chloride	<0.700		2.00	0.700	ug/L			04/24/24 17:03	1
Benzene	<0.220		0.500	0.220	ug/L			04/24/24 17:03	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/24/24 17:03	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/24/24 17:03	1
Bromoform	<0.780		5.00	0.780	ug/L			04/24/24 17:03	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/24/24 17:03	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/24/24 17:03	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/24/24 17:03	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/24/24 17:03	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			04/24/24 17:03	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/24/24 17:03	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/24/24 17:03	1
Chloroform	<1.30		3.00	1.30	ug/L			04/24/24 17:03	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/24/24 17:03	1
Chloroprene	<0.230		1.00	0.230	ug/L			04/24/24 17:03	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			04/24/24 17:03	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/24/24 17:03	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/24/24 17:03	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/24/24 17:03	1
Dibromomethane	<0.330		1.00	0.330	ug/L			04/24/24 17:03	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/24/24 17:03	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			04/24/24 17:03	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			04/24/24 17:03	1
Dichlorodifluoromethane	<0.250		3.00	0.250	ug/L			04/24/24 17:03	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/24/24 17:03	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/24/24 17:03	1
1,1-Dichloroethene	<0.560	*+	2.00	0.560	ug/L			04/24/24 17:03	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/24/24 17:03	1
1,3-Dichloropropane	<0.400		1.00	0.400	ug/L			04/24/24 17:03	1
2,2-Dichloropropane	<0.690		4.00	0.690	ug/L			04/24/24 17:03	1
1,1-Dichloropropene	<0.430		1.00	0.430	ug/L			04/24/24 17:03	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/24/24 17:03	1
Ethyl methacrylate	<0.680		2.00	0.680	ug/L			04/24/24 17:03	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/24/24 17:03	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/24/24 17:03	1
Methacrylonitrile	<3.30		10.0	3.30	ug/L			04/24/24 17:03	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/24/24 17:03	1
Methyl methacrylate	<0.760		2.00	0.760	ug/L			04/24/24 17:03	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/24/24 17:03	1
m,p-Xylene	<0.380		2.00	0.380	ug/L			04/24/24 17:03	1
Naphthalene	<3.00		5.00	3.00	ug/L			04/24/24 17:03	1
o-Xylene	<0.400		1.00	0.400	ug/L			04/24/24 17:03	1
Propionitrile	<3.40		10.0	3.40	ug/L			04/24/24 17:03	1
Styrene	<0.370		1.00	0.370	ug/L			04/24/24 17:03	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/24/24 17:03	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			04/24/24 17:03	1

Client Sample ID: MW-26A
Date Collected: 04/17/24 15:03
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-13
Matrix: Ground 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			04/24/24 17:03	1
Toluene	<0.430		1.00	0.430	ug/L			04/24/24 17:03	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/24/24 17:03	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/24/24 17:03	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/24/24 17:03	1
1,2,4-Trichlorobenzene	<0.750		5.00	0.750	ug/L			04/24/24 17:03	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/24/24 17:03	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/24/24 17:03	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/24/24 17:03	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/24/24 17:03	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/24/24 17:03	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/24/24 17:03	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/24/24 17:03	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/24/24 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*04/24/24 17:03*	*1*
Dibromofluoromethane (Surr)	*107*		*73 - 130*		*04/24/24 17:03*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*04/24/24 17:03*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	<0.574		10.6	0.574	ug/L		04/19/24 12:30	04/29/24 12:29	1
1,3,5-Trinitrobenzene	<2.45		10.6	2.45	ug/L		04/19/24 12:30	04/29/24 12:29	1
1,3-Dinitrobenzene	<3.40		10.6	3.40	ug/L		04/19/24 12:30	04/29/24 12:29	1
1,4-Naphthoquinone	<3.83		10.6	3.83	ug/L		04/19/24 12:30	04/29/24 12:29	1
1,4-phenylenediamine	<2.02	*- *1	10.6	2.02	ug/L		04/19/24 12:30	04/29/24 12:29	1
1-Naphthylamine	<2.66		10.6	2.66	ug/L		04/19/24 12:30	04/29/24 12:29	1
2,3,4,6-Tetrachlorophenol	<5.64		10.6	5.64	ug/L		04/19/24 12:30	04/29/24 12:29	1
2,4,5-Trichlorophenol	<5.64		10.6	5.64	ug/L		04/19/24 12:30	04/29/24 12:29	1
2,4,6-Trichlorophenol	<5.32		10.6	5.32	ug/L		04/19/24 12:30	04/29/24 12:29	1
2,4-Dichlorophenol	<0.904		10.6	0.904	ug/L		04/19/24 12:30	04/29/24 12:29	1
2,4-Dimethylphenol	<0.617		10.6	0.617	ug/L		04/19/24 12:30	04/29/24 12:29	1
2,4-Dinitrophenol	<13.8	*1	21.3	13.8	ug/L		04/19/24 12:30	04/29/24 12:29	1
2,4-Dinitrotoluene	<6.81		10.6	6.81	ug/L		04/19/24 12:30	04/29/24 12:29	1
2,6-Dichlorophenol	<0.734		10.6	0.734	ug/L		04/19/24 12:30	04/29/24 12:29	1
2,6-Dinitrotoluene	<0.553		10.6	0.553	ug/L		04/19/24 12:30	04/29/24 12:29	1
2-Acetylaminofluorene	<2.87		10.6	2.87	ug/L		04/19/24 12:30	04/29/24 12:29	1
2-Chloronaphthalene	<0.681		10.6	0.681	ug/L		04/19/24 12:30	04/29/24 12:29	1
2-Chlorophenol	<0.574		10.6	0.574	ug/L		04/19/24 12:30	04/29/24 12:29	1
2-Methylnaphthalene	<0.628		10.6	0.628	ug/L		04/19/24 12:30	04/29/24 12:29	1
2-Methylphenol	<0.691		10.6	0.691	ug/L		04/19/24 12:30	04/29/24 12:29	1
2-Naphthylamine	<2.23		10.6	2.23	ug/L		04/19/24 12:30	04/29/24 12:29	1
2-Nitroaniline	<6.28		10.6	6.28	ug/L		04/19/24 12:30	04/29/24 12:29	1
2-Nitrophenol	<7.23		10.6	7.23	ug/L		04/19/24 12:30	04/29/24 12:29	1
3,3'-Dichlorobenzidine	<1.49		10.6	1.49	ug/L		04/19/24 12:30	04/29/24 12:29	1
3,3'-Dimethylbenzidine	<1.60	*1	10.6	1.60	ug/L		04/19/24 12:30	04/29/24 12:29	1
3-Methylcholanthrene	<0.340		10.6	0.340	ug/L		04/19/24 12:30	04/29/24 12:29	1
3-Nitroaniline	<2.87		10.6	2.87	ug/L		04/19/24 12:30	04/29/24 12:29	1
4,6-Dinitro-2-methylphenol	<7.34		10.6	7.34	ug/L		04/19/24 12:30	04/29/24 12:29	1

Client Sample ID: MW-26A
Lab Sample ID: 310-279381-13
Date Collected: 04/17/24 15:03
Matrix: Ground Water
Date Received: 04/19/24 08:00

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Aminobiphenyl	<2.34		10.6	2.34	ug/L		04/19/24 12:30	04/29/24 12:29	1
4-Bromophenyl phenyl ether	<0.745		10.6	0.745	ug/L		04/19/24 12:30	04/29/24 12:29	1
4-Chloro-3-methylphenol	<0.894		10.6	0.894	ug/L		04/19/24 12:30	04/29/24 12:29	1
4-Chloroaniline	<0.660		10.6	0.660	ug/L		04/19/24 12:30	04/29/24 12:29	1
4-Chlorophenyl phenyl ether	<0.734		10.6	0.734	ug/L		04/19/24 12:30	04/29/24 12:29	1
Methylphenol, 3 & 4	<0.745		10.6	0.745	ug/L		04/19/24 12:30	04/29/24 12:29	1
4-Nitroaniline	<1.38		10.6	1.38	ug/L		04/19/24 12:30	04/29/24 12:29	1
4-Nitrophenol	<8.09		10.6	8.09	ug/L		04/19/24 12:30	04/29/24 12:29	1
5-Nitro-o-toluidine	<2.98		10.6	2.98	ug/L		04/19/24 12:30	04/29/24 12:29	1
7,12-Dimethylbenz(a)anthracene	<2.02		10.6	2.02	ug/L		04/19/24 12:30	04/29/24 12:29	1
Acenaphthene	<0.681		10.6	0.681	ug/L		04/19/24 12:30	04/29/24 12:29	1
Acenaphthylene	<0.766		10.6	0.766	ug/L		04/19/24 12:30	04/29/24 12:29	1
Acetophenone	<0.734		10.6	0.734	ug/L		04/19/24 12:30	04/29/24 12:29	1
Anthracene	<0.926		10.6	0.926	ug/L		04/19/24 12:30	04/29/24 12:29	1
Benzo[a]anthracene	<0.904		10.6	0.904	ug/L		04/19/24 12:30	04/29/24 12:29	1
Benzo[a]pyrene	<8.62		10.6	8.62	ug/L		04/19/24 12:30	04/29/24 12:29	1
Benzo[b]fluoranthene	<5.21		10.6	5.21	ug/L		04/19/24 12:30	04/29/24 12:29	1
Benzo[g,h,i]perylene	<6.70		10.6	6.70	ug/L		04/19/24 12:30	04/29/24 12:29	1
Benzo[k]fluoranthene	<2.34		10.6	2.34	ug/L		04/19/24 12:30	04/29/24 12:29	1
Benzyl alcohol	<1.38		10.6	1.38	ug/L		04/19/24 12:30	04/29/24 12:29	1
Bis(2-chloroethoxy)methane	<0.809		10.6	0.809	ug/L		04/19/24 12:30	04/29/24 12:29	1
Bis(2-chloroethyl)ether	<0.872		10.6	0.872	ug/L		04/19/24 12:30	04/29/24 12:29	1
bis (2-chloroisopropyl) ether	<0.574		10.6	0.574	ug/L		04/19/24 12:30	04/29/24 12:29	1
Bis(2-ethylhexyl) phthalate	<5.85		10.6	5.85	ug/L		04/19/24 12:30	04/29/24 12:29	1
Butyl benzyl phthalate	<5.74		10.6	5.74	ug/L		04/19/24 12:30	04/29/24 12:29	1
Chlorobenzilate	<3.83		10.6	3.83	ug/L		04/19/24 12:30	04/29/24 12:29	1
Chrysene	<0.926		10.6	0.926	ug/L		04/19/24 12:30	04/29/24 12:29	1
Diallate	<4.26		10.6	4.26	ug/L		04/19/24 12:30	04/29/24 12:29	1
Dibenzo(a,h)anthracene	<4.15		10.6	4.15	ug/L		04/19/24 12:30	04/29/24 12:29	1
Dibenzofuran	<0.787		10.6	0.787	ug/L		04/19/24 12:30	04/29/24 12:29	1
Diethyl phthalate	<1.81		10.6	1.81	ug/L		04/19/24 12:30	04/29/24 12:29	1
Dimethoate	<3.83		10.6	3.83	ug/L		04/19/24 12:30	04/29/24 12:29	1
Dimethyl phthalate	<1.06		10.6	1.06	ug/L		04/19/24 12:30	04/29/24 12:29	1
Di-n-butyl phthalate	<5.96		10.6	5.96	ug/L		04/19/24 12:30	04/29/24 12:29	1
Di-n-octyl phthalate	<7.45		21.3	7.45	ug/L		04/19/24 12:30	04/29/24 12:29	1
Dinoseb	<2.55		10.6	2.55	ug/L		04/19/24 12:30	04/29/24 12:29	1
Diphenylamine	<6.38		10.6	6.38	ug/L		04/19/24 12:30	04/29/24 12:29	1
Disulfoton	<2.55		10.6	2.55	ug/L		04/19/24 12:30	04/29/24 12:29	1
Ethyl methanesulfonate	<3.83		10.6	3.83	ug/L		04/19/24 12:30	04/29/24 12:29	1
Ethyl Parathion	<2.34		10.6	2.34	ug/L		04/19/24 12:30	04/29/24 12:29	1
Famphur	<4.04	*+	10.6	4.04	ug/L		04/19/24 12:30	04/29/24 12:29	1
Fluoranthene	<1.81		10.6	1.81	ug/L		04/19/24 12:30	04/29/24 12:29	1
Fluorene	<0.840		10.6	0.840	ug/L		04/19/24 12:30	04/29/24 12:29	1
Hexachlorobenzene	<0.745		10.6	0.745	ug/L		04/19/24 12:30	04/29/24 12:29	1
Hexachlorobutadiene	<0.915		10.6	0.915	ug/L		04/19/24 12:30	04/29/24 12:29	1
Hexachlorocyclopentadiene	<5.43		10.6	5.43	ug/L		04/19/24 12:30	04/29/24 12:29	1
Hexachloroethane	<1.03		10.6	1.03	ug/L		04/19/24 12:30	04/29/24 12:29	1
Hexachloropropene	<2.77		10.6	2.77	ug/L		04/19/24 12:30	04/29/24 12:29	1
Indeno[1,2,3-cd]pyrene	<4.47		10.6	4.47	ug/L		04/19/24 12:30	04/29/24 12:29	1

Client Sample ID: MW-26A
Date Collected: 04/17/24 15:03
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-13
Matrix: Ground Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isodrin	<5.00		10.6	5.00	ug/L		04/19/24 12:30	04/29/24 12:29	1
Isophorone	<0.989		10.6	0.989	ug/L		04/19/24 12:30	04/29/24 12:29	1
Isosafrole	<2.45		10.6	2.45	ug/L		04/19/24 12:30	04/29/24 12:29	1
Kepone	<1.06		10.6	1.06	ug/L		04/19/24 12:30	04/29/24 12:29	1
Methapyrilene	<0.809	*1	10.6	0.809	ug/L		04/19/24 12:30	04/29/24 12:29	1
Methyl methanesulfonate	<3.51		10.6	3.51	ug/L		04/19/24 12:30	04/29/24 12:29	1
Methyl parathion	<2.45		10.6	2.45	ug/L		04/19/24 12:30	04/29/24 12:29	1
Nitrobenzene	<0.851		10.6	0.851	ug/L		04/19/24 12:30	04/29/24 12:29	1
N-Nitrosodiethylamine	<3.62		10.6	3.62	ug/L		04/19/24 12:30	04/29/24 12:29	1
N-Nitrosodimethylamine	<0.766		10.6	0.766	ug/L		04/19/24 12:30	04/29/24 12:29	1
N-Nitrosodi-n-butylamine	<4.15		10.6	4.15	ug/L		04/19/24 12:30	04/29/24 12:29	1
N-Nitrosodi-n-propylamine	<0.979		10.6	0.979	ug/L		04/19/24 12:30	04/29/24 12:29	1
N-Nitrosodiphenylamine	<0.798		10.6	0.798	ug/L		04/19/24 12:30	04/29/24 12:29	1
N-Nitrosomethylethylamine	<5.21		10.6	5.21	ug/L		04/19/24 12:30	04/29/24 12:29	1
N-Nitrosopiperidine	<2.87		10.6	2.87	ug/L		04/19/24 12:30	04/29/24 12:29	1
N-Nitrosopyrrolidine	<3.83		10.6	3.83	ug/L		04/19/24 12:30	04/29/24 12:29	1
o,o',o''-Triethylphosphorothioate	<3.40		10.6	3.40	ug/L		04/19/24 12:30	04/29/24 12:29	1
o-Toluidine	<3.09		10.6	3.09	ug/L		04/19/24 12:30	04/29/24 12:29	1
p-Dimethylamino azobenzene	<2.34		10.6	2.34	ug/L		04/19/24 12:30	04/29/24 12:29	1
Pentachlorobenzene	<2.98		10.6	2.98	ug/L		04/19/24 12:30	04/29/24 12:29	1
Pentachloronitrobenzene	<6.17		10.6	6.17	ug/L		04/19/24 12:30	04/29/24 12:29	1
Pentachlorophenol	<10.2		10.6	10.2	ug/L		04/19/24 12:30	04/29/24 12:29	1
Phenacetin	<2.02		10.6	2.02	ug/L		04/19/24 12:30	04/29/24 12:29	1
Phenanthrene	<0.840		10.6	0.840	ug/L		04/19/24 12:30	04/29/24 12:29	1
Phenol	<1.17		10.6	1.17	ug/L		04/19/24 12:30	04/29/24 12:29	1
Phorate	<3.40		10.6	3.40	ug/L		04/19/24 12:30	04/29/24 12:29	1
Pronamide	<2.87		10.6	2.87	ug/L		04/19/24 12:30	04/29/24 12:29	1
Pyrene	<0.840		10.6	0.840	ug/L		04/19/24 12:30	04/29/24 12:29	1
Safrole	<2.98		10.6	2.98	ug/L		04/19/24 12:30	04/29/24 12:29	1
Thionazin	<3.72		10.6	3.72	ug/L		04/19/24 12:30	04/29/24 12:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*64*		*25 - 110*	*04/19/24 12:30*	*04/29/24 12:29*	*1*
Phenol-d5 (Surr)	*63*		*21 - 110*	*04/19/24 12:30*	*04/29/24 12:29*	*1*
Nitrobenzene-d5 (Surr)	*97*		*45 - 129*	*04/19/24 12:30*	*04/29/24 12:29*	*1*
2-Fluorobiphenyl (Surr)	*91*		*39 - 118*	*04/19/24 12:30*	*04/29/24 12:29*	*1*
2,4,6-Tribromophenol (Surr)	*98*		*27 - 136*	*04/19/24 12:30*	*04/29/24 12:29*	*1*
Terphenyl-d14 (Surr)	*115*		*12 - 144*	*04/19/24 12:30*	*04/29/24 12:29*	*1*

Method: SW846 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	<2.60		10.0	2.60	mg/L			04/20/24 11:04	1
Isobutanol	<2.40		10.0	2.40	mg/L			04/20/24 11:04	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.0270		0.0640	0.0270	ug/L		04/22/24 11:33	04/29/24 18:04	1
4,4'-DDE	<0.0270		0.0640	0.0270	ug/L		04/22/24 11:33	04/29/24 18:04	1
4,4'-DDT	<0.0420		0.0640	0.0420	ug/L		04/22/24 11:33	04/29/24 18:04	1
Aldrin	<0.0320		0.0640	0.0320	ug/L		04/22/24 11:33	04/29/24 18:04	1

Client Sample ID: MW-26A
Date Collected: 04/17/24 15:03
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-13
Matrix: Ground Water

Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	<0.0290		0.0640	0.0290	ug/L		04/22/24 11:33	04/29/24 18:04	1
beta-BHC	<0.0370		0.0640	0.0370	ug/L		04/22/24 11:33	04/29/24 18:04	1
Chlordane (technical)	<0.810		2.00	0.810	ug/L		04/22/24 11:33	04/29/24 18:04	1
delta-BHC	<0.0270		0.0640	0.0270	ug/L		04/22/24 11:33	04/29/24 18:04	1
Dieldrin	<0.0260		0.0640	0.0260	ug/L		04/22/24 11:33	04/29/24 18:04	1
Endosulfan I	<0.0330		0.0640	0.0330	ug/L		04/22/24 11:33	04/29/24 18:04	1
Endosulfan II	<0.0290		0.0640	0.0290	ug/L		04/22/24 11:33	04/29/24 18:04	1
Endosulfan sulfate	<0.0300		0.0640	0.0300	ug/L		04/22/24 11:33	04/29/24 18:04	1
Endrin	<0.0260		0.0640	0.0260	ug/L		04/22/24 11:33	04/29/24 18:04	1
Endrin aldehyde	<0.0290		0.0640	0.0290	ug/L		04/22/24 11:33	04/29/24 18:04	1
gamma-BHC (Lindane)	<0.0360		0.0640	0.0360	ug/L		04/22/24 11:33	04/29/24 18:04	1
Heptachlor	<0.0330		0.0640	0.0330	ug/L		04/22/24 11:33	04/29/24 18:04	1
Heptachlor epoxide	<0.0290		0.0640	0.0290	ug/L		04/22/24 11:33	04/29/24 18:04	1
Methoxychlor	<0.0410		0.0640	0.0410	ug/L		04/22/24 11:33	04/29/24 18:04	1
Toxaphene	<0.690		2.00	0.690	ug/L		04/22/24 11:33	04/29/24 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*55*		*10 - 136*	*04/22/24 11:33*	*04/29/24 18:04*	*1*
Tetrachloro-m-xylene	*77*		*10 - 130*	*04/22/24 11:33*	*04/29/24 18:04*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.170		0.800	0.170	ug/L		04/22/24 11:33	04/29/24 18:04	1
PCB-1221	<0.170		0.800	0.170	ug/L		04/22/24 11:33	04/29/24 18:04	1
PCB-1232	<0.170		0.800	0.170	ug/L		04/22/24 11:33	04/29/24 18:04	1
PCB-1242	<0.170		0.800	0.170	ug/L		04/22/24 11:33	04/29/24 18:04	1
PCB-1248	<0.110		0.800	0.110	ug/L		04/22/24 11:33	04/29/24 18:04	1
PCB-1254	<0.110		0.800	0.110	ug/L		04/22/24 11:33	04/29/24 18:04	1
PCB-1260	<0.110		0.800	0.110	ug/L		04/22/24 11:33	04/29/24 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*55*		*10 - 136*	*04/22/24 11:33*	*04/29/24 18:04*	*1*
Tetrachloro-m-xylene	*77*		*10 - 130*	*04/22/24 11:33*	*04/29/24 18:04*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	<0.0679		0.157	0.0679	ug/L		04/24/24 14:51	04/25/24 08:39	1
Silvex (2,4,5-TP)	**0.0724**		0.0522	0.0230	ug/L		04/24/24 14:51	04/25/24 08:39	1
2,4-D	<0.261		0.627	0.261	ug/L		04/24/24 14:51	04/25/24 08:39	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/22/24 09:00	04/26/24 16:35	1
Arsenic	**0.0111**		0.00200	0.000530	mg/L		04/22/24 09:00	04/26/24 16:35	1
Barium	**0.249**		0.00200	0.000660	mg/L		04/22/24 09:00	04/26/24 16:35	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		04/22/24 09:00	04/26/24 16:35	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		04/22/24 09:00	04/26/24 16:35	1
Chromium	<0.00120		0.00500	0.00120	mg/L		04/22/24 09:00	04/26/24 16:35	1
Cobalt	**0.113**		0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 16:35	1
Copper	<0.00180		0.00500	0.00180	mg/L		04/22/24 09:00	04/26/24 16:35	1
Lead	<0.000260		0.000500	0.000260	mg/L		04/22/24 09:00	04/26/24 16:35	1

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-26A
Date Collected: 04/17/24 15:03
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-13
Matrix: Ground Water

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.0512**		0.00500	0.00210	mg/L		04/22/24 09:00	04/26/24 16:35	1
Selenium	<0.00140		0.00500	0.00140	mg/L		04/22/24 09:00	04/26/24 16:35	1
Silver	<0.000500		0.00100	0.000500	mg/L		04/22/24 09:00	04/26/24 16:35	1
Thallium	<0.000570		0.00100	0.000570	mg/L		04/22/24 09:00	04/26/24 16:35	1
Tin	<0.00230		0.00500	0.00230	mg/L		04/22/24 09:00	04/26/24 16:35	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		04/22/24 09:00	04/26/24 16:35	1
Zinc	<0.00970		0.0200	0.00970	mg/L		04/22/24 09:00	04/26/24 16:35	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000110		0.000200	0.000110	mg/L		04/24/24 10:54	05/02/24 12:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.00350		0.0100	0.00350	mg/L		04/23/24 10:14	04/25/24 17:51	1
Sulfide (SW846 9034)	<0.231		1.00	0.231	mg/L		04/21/24 18:16	04/21/24 22:55	1
Total Suspended Solids (USGS I-3765-85)	**35.5**		7.50	5.55	mg/L			04/23/24 10:29	1

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-300
Date Collected: 04/18/24 15:10
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-14
Matrix: Ground 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			04/25/24 17:56	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/25/24 17:56	1
Benzene	<0.220		0.500	0.220	ug/L			04/25/24 17:56	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/25/24 17:56	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/25/24 17:56	1
Bromoform	<0.780		5.00	0.780	ug/L			04/25/24 17:56	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/25/24 17:56	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/25/24 17:56	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/25/24 17:56	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/25/24 17:56	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			04/25/24 17:56	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/25/24 17:56	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/25/24 17:56	1
Chloroform	<1.30		3.00	1.30	ug/L			04/25/24 17:56	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/25/24 17:56	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			04/25/24 17:56	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/25/24 17:56	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/25/24 17:56	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/25/24 17:56	1
Dibromomethane	<0.330		1.00	0.330	ug/L			04/25/24 17:56	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/25/24 17:56	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			04/25/24 17:56	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/25/24 17:56	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/25/24 17:56	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			04/25/24 17:56	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/25/24 17:56	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/25/24 17:56	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/25/24 17:56	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/25/24 17:56	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/25/24 17:56	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/25/24 17:56	1
Styrene	<0.370		1.00	0.370	ug/L			04/25/24 17:56	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/25/24 17:56	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			04/25/24 17:56	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			04/25/24 17:56	1
Toluene	<0.430		1.00	0.430	ug/L			04/25/24 17:56	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/25/24 17:56	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/25/24 17:56	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/25/24 17:56	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/25/24 17:56	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/25/24 17:56	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/25/24 17:56	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/25/24 17:56	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/25/24 17:56	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/25/24 17:56	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/25/24 17:56	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/25/24 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*04/25/24 17:56*	*1*

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-300
Date Collected: 04/18/24 15:10
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-14
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*105*		*73 - 130*		*04/25/24 17:56*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*04/25/24 17:56*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/22/24 09:00	04/26/24 16:37	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		04/22/24 09:00	04/26/24 16:37	1
Barium	**0.0983**		0.00200	0.000660	mg/L		04/22/24 09:00	04/26/24 16:37	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		04/22/24 09:00	04/26/24 16:37	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		04/22/24 09:00	04/26/24 16:37	1
Chromium	<0.00120		0.00500	0.00120	mg/L		04/22/24 09:00	04/26/24 16:37	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 16:37	1
Copper	<0.00180		0.00500	0.00180	mg/L		04/22/24 09:00	04/26/24 16:37	1
Lead	<0.000260		0.000500	0.000260	mg/L		04/22/24 09:00	04/26/24 16:37	1
Nickel	<0.00210		0.00500	0.00210	mg/L		04/22/24 09:00	04/26/24 16:37	1
Selenium	<0.00140		0.00500	0.00140	mg/L		04/22/24 09:00	04/26/24 16:37	1
Silver	<0.000500		0.00100	0.000500	mg/L		04/22/24 09:00	04/26/24 16:37	1
Thallium	<0.000570		0.00100	0.000570	mg/L		04/22/24 09:00	04/26/24 16:37	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		04/22/24 09:00	04/26/24 16:37	1
Zinc	<0.00970		0.0200	0.00970	mg/L		04/22/24 09:00	04/26/24 16:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**4.75**		1.88	1.39	mg/L			04/23/24 18:54	1

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-301
Date Collected: 04/18/24 12:25
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-15
Matrix: Ground 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			04/25/24 18:18	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/25/24 18:18	1
Benzene	<0.220		0.500	0.220	ug/L			04/25/24 18:18	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/25/24 18:18	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/25/24 18:18	1
Bromoform	<0.780		5.00	0.780	ug/L			04/25/24 18:18	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/25/24 18:18	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/25/24 18:18	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/25/24 18:18	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/25/24 18:18	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			04/25/24 18:18	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/25/24 18:18	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/25/24 18:18	1
Chloroform	<1.30		3.00	1.30	ug/L			04/25/24 18:18	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/25/24 18:18	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			04/25/24 18:18	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/25/24 18:18	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/25/24 18:18	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/25/24 18:18	1
Dibromomethane	<0.330		1.00	0.330	ug/L			04/25/24 18:18	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/25/24 18:18	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			04/25/24 18:18	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/25/24 18:18	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/25/24 18:18	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			04/25/24 18:18	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/25/24 18:18	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/25/24 18:18	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/25/24 18:18	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/25/24 18:18	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/25/24 18:18	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/25/24 18:18	1
Styrene	<0.370		1.00	0.370	ug/L			04/25/24 18:18	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/25/24 18:18	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			04/25/24 18:18	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			04/25/24 18:18	1
Toluene	<0.430		1.00	0.430	ug/L			04/25/24 18:18	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/25/24 18:18	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/25/24 18:18	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/25/24 18:18	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/25/24 18:18	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/25/24 18:18	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/25/24 18:18	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/25/24 18:18	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/25/24 18:18	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/25/24 18:18	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/25/24 18:18	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/25/24 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*04/25/24 18:18*	*1*

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-301

Date Collected: 04/18/24 12:25
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-15

Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*105*		*73 - 130*		*04/25/24 18:18*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*04/25/24 18:18*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/22/24 09:00	04/26/24 16:39	1
Arsenic	**0.00467**		0.00200	0.000530	mg/L		04/22/24 09:00	04/26/24 16:39	1
Barium	**0.0672**		0.00200	0.000660	mg/L		04/22/24 09:00	04/26/24 16:39	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		04/22/24 09:00	04/26/24 16:39	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		04/22/24 09:00	04/26/24 16:39	1
Chromium	<0.00120		0.00500	0.00120	mg/L		04/22/24 09:00	04/26/24 16:39	1
Cobalt	**0.00424**		0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 16:39	1
Copper	<0.00180		0.00500	0.00180	mg/L		04/22/24 09:00	04/26/24 16:39	1
Lead	<0.000260		0.000500	0.000260	mg/L		04/22/24 09:00	04/26/24 16:39	1
Nickel	**0.00692**		0.00500	0.00210	mg/L		04/22/24 09:00	04/26/24 16:39	1
Selenium	<0.00140		0.00500	0.00140	mg/L		04/22/24 09:00	04/26/24 16:39	1
Silver	<0.000500		0.00100	0.000500	mg/L		04/22/24 09:00	04/26/24 16:39	1
Thallium	<0.000570		0.00100	0.000570	mg/L		04/22/24 09:00	04/26/24 16:39	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		04/22/24 09:00	04/26/24 16:39	1
Zinc	<0.00970		0.0200	0.00970	mg/L		04/22/24 09:00	04/26/24 16:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**34.0**		5.00	3.70	mg/L			04/24/24 15:19	1

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-302R
Date Collected: 04/17/24 14:01
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-16
Matrix: Ground 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			04/24/24 17:26	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/24/24 17:26	1
Benzene	<0.220		0.500	0.220	ug/L			04/24/24 17:26	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/24/24 17:26	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/24/24 17:26	1
Bromoform	<0.780		5.00	0.780	ug/L			04/24/24 17:26	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/24/24 17:26	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/24/24 17:26	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/24/24 17:26	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/24/24 17:26	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			04/24/24 17:26	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/24/24 17:26	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/24/24 17:26	1
Chloroform	<1.30		3.00	1.30	ug/L			04/24/24 17:26	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/24/24 17:26	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			04/24/24 17:26	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/24/24 17:26	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/24/24 17:26	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/24/24 17:26	1
Dibromomethane	<0.330		1.00	0.330	ug/L			04/24/24 17:26	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/24/24 17:26	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			04/24/24 17:26	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/24/24 17:26	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/24/24 17:26	1
1,1-Dichloroethene	<0.560	*+	2.00	0.560	ug/L			04/24/24 17:26	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/24/24 17:26	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/24/24 17:26	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/24/24 17:26	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/24/24 17:26	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/24/24 17:26	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/24/24 17:26	1
Styrene	<0.370		1.00	0.370	ug/L			04/24/24 17:26	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/24/24 17:26	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			04/24/24 17:26	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			04/24/24 17:26	1
Toluene	<0.430		1.00	0.430	ug/L			04/24/24 17:26	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/24/24 17:26	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/24/24 17:26	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/24/24 17:26	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/24/24 17:26	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/24/24 17:26	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/24/24 17:26	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/24/24 17:26	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/24/24 17:26	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/24/24 17:26	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/24/24 17:26	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/24/24 17:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*04/24/24 17:26*	*1*

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-302R
Date Collected: 04/17/24 14:01
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-16
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*103*		*73 - 130*		*04/24/24 17:26*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*04/24/24 17:26*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/22/24 09:00	04/26/24 16:50	1
Arsenic	**0.000745**	**J**	0.00200	0.000530	mg/L		04/22/24 09:00	04/26/24 16:50	1
Barium	**0.119**		0.00200	0.000660	mg/L		04/22/24 09:00	04/26/24 16:50	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		04/22/24 09:00	04/26/24 16:50	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		04/22/24 09:00	04/26/24 16:50	1
Chromium	<0.00120		0.00500	0.00120	mg/L		04/22/24 09:00	04/26/24 16:50	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 16:50	1
Copper	<0.00180		0.00500	0.00180	mg/L		04/22/24 09:00	04/26/24 16:50	1
Lead	<0.000260		0.000500	0.000260	mg/L		04/22/24 09:00	04/26/24 16:50	1
Nickel	<0.00210		0.00500	0.00210	mg/L		04/22/24 09:00	04/26/24 16:50	1
Selenium	<0.00140		0.00500	0.00140	mg/L		04/22/24 09:00	04/26/24 16:50	1
Silver	<0.000500		0.00100	0.000500	mg/L		04/22/24 09:00	04/26/24 16:50	1
Thallium	<0.000570		0.00100	0.000570	mg/L		04/22/24 09:00	04/26/24 16:50	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		04/22/24 09:00	04/26/24 16:50	1
Zinc	<0.00970		0.0200	0.00970	mg/L		04/22/24 09:00	04/26/24 16:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**3.63**		1.88	1.39	mg/L			04/23/24 13:03	1

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-303
Date Collected: 04/17/24 15:55
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-17
Matrix: Ground 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			04/24/24 17:48	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/24/24 17:48	1
Benzene	<0.220		0.500	0.220	ug/L			04/24/24 17:48	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/24/24 17:48	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/24/24 17:48	1
Bromoform	<0.780		5.00	0.780	ug/L			04/24/24 17:48	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/24/24 17:48	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/24/24 17:48	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/24/24 17:48	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/24/24 17:48	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			04/24/24 17:48	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/24/24 17:48	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/24/24 17:48	1
Chloroform	<1.30		3.00	1.30	ug/L			04/24/24 17:48	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/24/24 17:48	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			04/24/24 17:48	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/24/24 17:48	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/24/24 17:48	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/24/24 17:48	1
Dibromomethane	<0.330		1.00	0.330	ug/L			04/24/24 17:48	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/24/24 17:48	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			04/24/24 17:48	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/24/24 17:48	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/24/24 17:48	1
1,1-Dichloroethene	<0.560	*+	2.00	0.560	ug/L			04/24/24 17:48	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/24/24 17:48	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/24/24 17:48	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/24/24 17:48	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/24/24 17:48	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/24/24 17:48	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/24/24 17:48	1
Styrene	<0.370		1.00	0.370	ug/L			04/24/24 17:48	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/24/24 17:48	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			04/24/24 17:48	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			04/24/24 17:48	1
Toluene	<0.430		1.00	0.430	ug/L			04/24/24 17:48	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/24/24 17:48	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/24/24 17:48	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/24/24 17:48	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/24/24 17:48	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/24/24 17:48	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/24/24 17:48	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/24/24 17:48	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/24/24 17:48	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/24/24 17:48	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/24/24 17:48	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/24/24 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*04/24/24 17:48*	*1*

Client Sample ID: MW-303
Date Collected: 04/17/24 15:55
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-17
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*101*		*73 - 130*		*04/24/24 17:48*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*04/24/24 17:48*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	<0.0360		0.0640	0.0360	ug/L		04/22/24 11:33	04/29/24 15:54	1
Heptachlor	<0.0330		0.0640	0.0330	ug/L		04/22/24 11:33	04/29/24 15:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*49*		*10 - 136*	*04/22/24 11:33*	*04/29/24 15:54*	*1*
Tetrachloro-m-xylene (Surr)	*48*		*10 - 130*	*04/22/24 11:33*	*04/29/24 15:54*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.265		0.635	0.265	ug/L		04/24/24 14:51	04/25/24 09:07	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/22/24 09:00	04/26/24 16:52	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		04/22/24 09:00	04/26/24 16:52	1
Barium	**0.0157**		0.00200	0.000660	mg/L		04/22/24 09:00	04/26/24 16:52	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		04/22/24 09:00	04/26/24 16:52	1
Cadmium	**0.000173**	**J**	0.000200	0.000100	mg/L		04/22/24 09:00	04/26/24 16:52	1
Chromium	<0.00120		0.00500	0.00120	mg/L		04/22/24 09:00	04/26/24 16:52	1
Cobalt	**0.000204**	**J**	0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 16:52	1
Copper	<0.00180		0.00500	0.00180	mg/L		04/22/24 09:00	04/26/24 16:52	1
Lead	<0.000260		0.000500	0.000260	mg/L		04/22/24 09:00	04/26/24 16:52	1
Nickel	**0.0113**		0.00500	0.00210	mg/L		04/22/24 09:00	04/26/24 16:52	1
Selenium	<0.00140		0.00500	0.00140	mg/L		04/22/24 09:00	04/26/24 16:52	1
Silver	<0.000500		0.00100	0.000500	mg/L		04/22/24 09:00	04/26/24 16:52	1
Thallium	<0.000570		0.00100	0.000570	mg/L		04/22/24 09:00	04/26/24 16:52	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		04/22/24 09:00	04/26/24 16:52	1
Zinc	<0.00970		0.0200	0.00970	mg/L		04/22/24 09:00	04/26/24 16:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**4.62**		1.88	1.39	mg/L			04/23/24 13:03	1

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-304R
Date Collected: 04/17/24 16:58
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-18
Matrix: Ground 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			04/24/24 18:11	1
Acrolein	<3.60		10.0	3.60	ug/L			04/24/24 18:11	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/24/24 18:11	1
Allyl chloride	<0.700		2.00	0.700	ug/L			04/24/24 18:11	1
Benzene	<0.220		0.500	0.220	ug/L			04/24/24 18:11	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/24/24 18:11	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/24/24 18:11	1
Bromoform	<0.780		5.00	0.780	ug/L			04/24/24 18:11	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/24/24 18:11	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/24/24 18:11	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/24/24 18:11	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/24/24 18:11	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			04/24/24 18:11	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/24/24 18:11	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/24/24 18:11	1
Chloroform	<1.30		3.00	1.30	ug/L			04/24/24 18:11	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/24/24 18:11	1
Chloroprene	<0.230		1.00	0.230	ug/L			04/24/24 18:11	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			04/24/24 18:11	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/24/24 18:11	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/24/24 18:11	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/24/24 18:11	1
Dibromomethane	<0.330		1.00	0.330	ug/L			04/24/24 18:11	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/24/24 18:11	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			04/24/24 18:11	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			04/24/24 18:11	1
Dichlorodifluoromethane	<0.250		3.00	0.250	ug/L			04/24/24 18:11	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/24/24 18:11	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/24/24 18:11	1
1,1-Dichloroethene	<0.560	*+	2.00	0.560	ug/L			04/24/24 18:11	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/24/24 18:11	1
1,3-Dichloropropane	<0.400		1.00	0.400	ug/L			04/24/24 18:11	1
2,2-Dichloropropane	<0.690		4.00	0.690	ug/L			04/24/24 18:11	1
1,1-Dichloropropene	<0.430		1.00	0.430	ug/L			04/24/24 18:11	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/24/24 18:11	1
Ethyl methacrylate	<0.680		2.00	0.680	ug/L			04/24/24 18:11	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/24/24 18:11	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/24/24 18:11	1
Methacrylonitrile	<3.30		10.0	3.30	ug/L			04/24/24 18:11	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/24/24 18:11	1
Methyl methacrylate	<0.760		2.00	0.760	ug/L			04/24/24 18:11	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/24/24 18:11	1
m,p-Xylene	<0.380		2.00	0.380	ug/L			04/24/24 18:11	1
Naphthalene	<3.00		5.00	3.00	ug/L			04/24/24 18:11	1
o-Xylene	<0.400		1.00	0.400	ug/L			04/24/24 18:11	1
Propionitrile	<3.40		10.0	3.40	ug/L			04/24/24 18:11	1
Styrene	<0.370		1.00	0.370	ug/L			04/24/24 18:11	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/24/24 18:11	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			04/24/24 18:11	1

Client Sample ID: MW-304R
Date Collected: 04/17/24 16:58
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-18
Matrix: Ground 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			04/24/24 18:11	1
Toluene	<0.430		1.00	0.430	ug/L			04/24/24 18:11	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/24/24 18:11	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/24/24 18:11	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/24/24 18:11	1
1,2,4-Trichlorobenzene	<0.750		5.00	0.750	ug/L			04/24/24 18:11	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/24/24 18:11	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/24/24 18:11	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/24/24 18:11	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/24/24 18:11	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/24/24 18:11	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/24/24 18:11	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/24/24 18:11	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/24/24 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*80 - 120*		*04/24/24 18:11*	*1*
Dibromofluoromethane (Surr)	*99*		*73 - 130*		*04/24/24 18:11*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*04/24/24 18:11*	*1*

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	<0.551		10.2	0.551	ug/L		04/19/24 12:30	04/29/24 12:54	1
1,3,5-Trinitrobenzene	<2.35		10.2	2.35	ug/L		04/19/24 12:30	04/29/24 12:54	1
1,3-Dinitrobenzene	<3.27		10.2	3.27	ug/L		04/19/24 12:30	04/29/24 12:54	1
1,4-Naphthoquinone	<3.67		10.2	3.67	ug/L		04/19/24 12:30	04/29/24 12:54	1
1,4-phenylenediamine	<1.94	*- *1	10.2	1.94	ug/L		04/19/24 12:30	04/29/24 12:54	1
1-Naphthylamine	<2.55		10.2	2.55	ug/L		04/19/24 12:30	04/29/24 12:54	1
2,3,4,6-Tetrachlorophenol	<5.41		10.2	5.41	ug/L		04/19/24 12:30	04/29/24 12:54	1
2,4,5-Trichlorophenol	<5.41		10.2	5.41	ug/L		04/19/24 12:30	04/29/24 12:54	1
2,4,6-Trichlorophenol	<5.10		10.2	5.10	ug/L		04/19/24 12:30	04/29/24 12:54	1
2,4-Dichlorophenol	<0.867		10.2	0.867	ug/L		04/19/24 12:30	04/29/24 12:54	1
2,4-Dimethylphenol	<0.592		10.2	0.592	ug/L		04/19/24 12:30	04/29/24 12:54	1
2,4-Dinitrophenol	<13.3	*1	20.4	13.3	ug/L		04/19/24 12:30	04/29/24 12:54	1
2,4-Dinitrotoluene	<6.53		10.2	6.53	ug/L		04/19/24 12:30	04/29/24 12:54	1
2,6-Dichlorophenol	<0.704		10.2	0.704	ug/L		04/19/24 12:30	04/29/24 12:54	1
2,6-Dinitrotoluene	<0.531		10.2	0.531	ug/L		04/19/24 12:30	04/29/24 12:54	1
2-Acetylaminofluorene	<2.76		10.2	2.76	ug/L		04/19/24 12:30	04/29/24 12:54	1
2-Chloronaphthalene	<0.653		10.2	0.653	ug/L		04/19/24 12:30	04/29/24 12:54	1
2-Chlorophenol	<0.551		10.2	0.551	ug/L		04/19/24 12:30	04/29/24 12:54	1
2-Methylnaphthalene	<0.602		10.2	0.602	ug/L		04/19/24 12:30	04/29/24 12:54	1
2-Methylphenol	<0.663		10.2	0.663	ug/L		04/19/24 12:30	04/29/24 12:54	1
2-Naphthylamine	<2.14		10.2	2.14	ug/L		04/19/24 12:30	04/29/24 12:54	1
2-Nitroaniline	<6.02		10.2	6.02	ug/L		04/19/24 12:30	04/29/24 12:54	1
2-Nitrophenol	<6.94		10.2	6.94	ug/L		04/19/24 12:30	04/29/24 12:54	1
3,3'-Dichlorobenzidine	<1.43		10.2	1.43	ug/L		04/19/24 12:30	04/29/24 12:54	1
3,3'-Dimethylbenzidine	<1.53	*1	10.2	1.53	ug/L		04/19/24 12:30	04/29/24 12:54	1
3-Methylcholanthrene	<0.327		10.2	0.327	ug/L		04/19/24 12:30	04/29/24 12:54	1
3-Nitroaniline	<2.76		10.2	2.76	ug/L		04/19/24 12:30	04/29/24 12:54	1
4,6-Dinitro-2-methylphenol	<7.04		10.2	7.04	ug/L		04/19/24 12:30	04/29/24 12:54	1

Client Sample ID: MW-304R
Date Collected: 04/17/24 16:58
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-18
Matrix: Ground Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Aminobiphenyl	<2.24		10.2	2.24	ug/L		04/19/24 12:30	04/29/24 12:54	1
4-Bromophenyl phenyl ether	<0.714		10.2	0.714	ug/L		04/19/24 12:30	04/29/24 12:54	1
4-Chloro-3-methylphenol	<0.857		10.2	0.857	ug/L		04/19/24 12:30	04/29/24 12:54	1
4-Chloroaniline	<0.633		10.2	0.633	ug/L		04/19/24 12:30	04/29/24 12:54	1
4-Chlorophenyl phenyl ether	<0.704		10.2	0.704	ug/L		04/19/24 12:30	04/29/24 12:54	1
Methylphenol, 3 & 4	<0.714		10.2	0.714	ug/L		04/19/24 12:30	04/29/24 12:54	1
4-Nitroaniline	<1.33		10.2	1.33	ug/L		04/19/24 12:30	04/29/24 12:54	1
4-Nitrophenol	<7.76		10.2	7.76	ug/L		04/19/24 12:30	04/29/24 12:54	1
5-Nitro-o-toluidine	<2.86		10.2	2.86	ug/L		04/19/24 12:30	04/29/24 12:54	1
7,12-Dimethylbenz(a)anthracene	<1.94		10.2	1.94	ug/L		04/19/24 12:30	04/29/24 12:54	1
Acenaphthene	<0.653		10.2	0.653	ug/L		04/19/24 12:30	04/29/24 12:54	1
Acenaphthylene	<0.735		10.2	0.735	ug/L		04/19/24 12:30	04/29/24 12:54	1
Acetophenone	<0.704		10.2	0.704	ug/L		04/19/24 12:30	04/29/24 12:54	1
Anthracene	<0.888		10.2	0.888	ug/L		04/19/24 12:30	04/29/24 12:54	1
Benzo[a]anthracene	<0.867		10.2	0.867	ug/L		04/19/24 12:30	04/29/24 12:54	1
Benzo[a]pyrene	<8.27		10.2	8.27	ug/L		04/19/24 12:30	04/29/24 12:54	1
Benzo[b]fluoranthene	<5.00		10.2	5.00	ug/L		04/19/24 12:30	04/29/24 12:54	1
Benzo[g,h,i]perylene	<6.43		10.2	6.43	ug/L		04/19/24 12:30	04/29/24 12:54	1
Benzo[k]fluoranthene	<2.24		10.2	2.24	ug/L		04/19/24 12:30	04/29/24 12:54	1
Benzyl alcohol	<1.33		10.2	1.33	ug/L		04/19/24 12:30	04/29/24 12:54	1
Bis(2-chloroethoxy)methane	<0.776		10.2	0.776	ug/L		04/19/24 12:30	04/29/24 12:54	1
Bis(2-chloroethyl)ether	<0.837		10.2	0.837	ug/L		04/19/24 12:30	04/29/24 12:54	1
bis (2-chloroisopropyl) ether	<0.551		10.2	0.551	ug/L		04/19/24 12:30	04/29/24 12:54	1
Bis(2-ethylhexyl) phthalate	<5.61		10.2	5.61	ug/L		04/19/24 12:30	04/29/24 12:54	1
Butyl benzyl phthalate	<5.51		10.2	5.51	ug/L		04/19/24 12:30	04/29/24 12:54	1
Chlorobenzilate	<3.67		10.2	3.67	ug/L		04/19/24 12:30	04/29/24 12:54	1
Chrysene	<0.888		10.2	0.888	ug/L		04/19/24 12:30	04/29/24 12:54	1
Diallate	<4.08		10.2	4.08	ug/L		04/19/24 12:30	04/29/24 12:54	1
Dibenzo(a,h)anthracene	<3.98		10.2	3.98	ug/L		04/19/24 12:30	04/29/24 12:54	1
Dibenzofuran	<0.755		10.2	0.755	ug/L		04/19/24 12:30	04/29/24 12:54	1
Diethyl phthalate	<1.73		10.2	1.73	ug/L		04/19/24 12:30	04/29/24 12:54	1
Dimethoate	<3.67		10.2	3.67	ug/L		04/19/24 12:30	04/29/24 12:54	1
Dimethyl phthalate	<1.02		10.2	1.02	ug/L		04/19/24 12:30	04/29/24 12:54	1
Di-n-butyl phthalate	<5.71		10.2	5.71	ug/L		04/19/24 12:30	04/29/24 12:54	1
Di-n-octyl phthalate	<7.14		20.4	7.14	ug/L		04/19/24 12:30	04/29/24 12:54	1
Dinoseb	<2.45		10.2	2.45	ug/L		04/19/24 12:30	04/29/24 12:54	1
Diphenylamine	<6.12		10.2	6.12	ug/L		04/19/24 12:30	04/29/24 12:54	1
Disulfoton	<2.45		10.2	2.45	ug/L		04/19/24 12:30	04/29/24 12:54	1
Ethyl methanesulfonate	<3.67		10.2	3.67	ug/L		04/19/24 12:30	04/29/24 12:54	1
Ethyl Parathion	<2.24		10.2	2.24	ug/L		04/19/24 12:30	04/29/24 12:54	1
Famphur	<3.88	*+	10.2	3.88	ug/L		04/19/24 12:30	04/29/24 12:54	1
Fluoranthene	<1.73		10.2	1.73	ug/L		04/19/24 12:30	04/29/24 12:54	1
Fluorene	<0.806		10.2	0.806	ug/L		04/19/24 12:30	04/29/24 12:54	1
Hexachlorobenzene	<0.714		10.2	0.714	ug/L		04/19/24 12:30	04/29/24 12:54	1
Hexachlorobutadiene	<0.878		10.2	0.878	ug/L		04/19/24 12:30	04/29/24 12:54	1
Hexachlorocyclopentadiene	<5.20		10.2	5.20	ug/L		04/19/24 12:30	04/29/24 12:54	1
Hexachloroethane	<0.990		10.2	0.990	ug/L		04/19/24 12:30	04/29/24 12:54	1
Hexachloropropene	<2.65		10.2	2.65	ug/L		04/19/24 12:30	04/29/24 12:54	1
Indeno[1,2,3-cd]pyrene	<4.29		10.2	4.29	ug/L		04/19/24 12:30	04/29/24 12:54	1

Client Sample ID: MW-304R
Date Collected: 04/17/24 16:58
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-18
Matrix: Ground Water

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isodrin	<4.80		10.2	4.80	ug/L		04/19/24 12:30	04/29/24 12:54	1
Isophorone	<0.949		10.2	0.949	ug/L		04/19/24 12:30	04/29/24 12:54	1
Isosafrole	<2.35		10.2	2.35	ug/L		04/19/24 12:30	04/29/24 12:54	1
Kepone	<1.02		10.2	1.02	ug/L		04/19/24 12:30	04/29/24 12:54	1
Methapyrilene	<0.776	*1	10.2	0.776	ug/L		04/19/24 12:30	04/29/24 12:54	1
Methyl methanesulfonate	<3.37		10.2	3.37	ug/L		04/19/24 12:30	04/29/24 12:54	1
Methyl parathion	<2.35		10.2	2.35	ug/L		04/19/24 12:30	04/29/24 12:54	1
Nitrobenzene	<0.816		10.2	0.816	ug/L		04/19/24 12:30	04/29/24 12:54	1
N-Nitrosodiethylamine	<3.47		10.2	3.47	ug/L		04/19/24 12:30	04/29/24 12:54	1
N-Nitrosodimethylamine	<0.735		10.2	0.735	ug/L		04/19/24 12:30	04/29/24 12:54	1
N-Nitrosodi-n-butylamine	<3.98		10.2	3.98	ug/L		04/19/24 12:30	04/29/24 12:54	1
N-Nitrosodi-n-propylamine	<0.939		10.2	0.939	ug/L		04/19/24 12:30	04/29/24 12:54	1
N-Nitrosodiphenylamine	<0.765		10.2	0.765	ug/L		04/19/24 12:30	04/29/24 12:54	1
N-Nitrosomethylethylamine	<5.00		10.2	5.00	ug/L		04/19/24 12:30	04/29/24 12:54	1
N-Nitrosopiperidine	<2.76		10.2	2.76	ug/L		04/19/24 12:30	04/29/24 12:54	1
N-Nitrosopyrrolidine	<3.67		10.2	3.67	ug/L		04/19/24 12:30	04/29/24 12:54	1
o,o',o''-Triethylphosphorothioate	<3.27		10.2	3.27	ug/L		04/19/24 12:30	04/29/24 12:54	1
o-Toluidine	<2.96		10.2	2.96	ug/L		04/19/24 12:30	04/29/24 12:54	1
p-Dimethylamino azobenzene	<2.24		10.2	2.24	ug/L		04/19/24 12:30	04/29/24 12:54	1
Pentachlorobenzene	<2.86		10.2	2.86	ug/L		04/19/24 12:30	04/29/24 12:54	1
Pentachloronitrobenzene	<5.92		10.2	5.92	ug/L		04/19/24 12:30	04/29/24 12:54	1
Pentachlorophenol	<9.80		10.2	9.80	ug/L		04/19/24 12:30	04/29/24 12:54	1
Phenacetin	<1.94		10.2	1.94	ug/L		04/19/24 12:30	04/29/24 12:54	1
Phenanthrene	<0.806		10.2	0.806	ug/L		04/19/24 12:30	04/29/24 12:54	1
Phenol	<1.12		10.2	1.12	ug/L		04/19/24 12:30	04/29/24 12:54	1
Phorate	<3.27		10.2	3.27	ug/L		04/19/24 12:30	04/29/24 12:54	1
Pronamide	<2.76		10.2	2.76	ug/L		04/19/24 12:30	04/29/24 12:54	1
Pyrene	<0.806		10.2	0.806	ug/L		04/19/24 12:30	04/29/24 12:54	1
Safrole	<2.86		10.2	2.86	ug/L		04/19/24 12:30	04/29/24 12:54	1
Thionazin	<3.57		10.2	3.57	ug/L		04/19/24 12:30	04/29/24 12:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*61*		*25 - 110*	*04/19/24 12:30*	*04/29/24 12:54*	*1*
Phenol-d5 (Surr)	*61*		*21 - 110*	*04/19/24 12:30*	*04/29/24 12:54*	*1*
Nitrobenzene-d5 (Surr)	*95*		*45 - 129*	*04/19/24 12:30*	*04/29/24 12:54*	*1*
2-Fluorobiphenyl (Surr)	*84*		*39 - 118*	*04/19/24 12:30*	*04/29/24 12:54*	*1*
2,4,6-Tribromophenol (Surr)	*92*		*27 - 136*	*04/19/24 12:30*	*04/29/24 12:54*	*1*
Terphenyl-d14 (Surr)	*110*		*12 - 144*	*04/19/24 12:30*	*04/29/24 12:54*	*1*

Method: SW846 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	<2.60		10.0	2.60	mg/L			04/20/24 11:22	1
Isobutanol	<2.40		10.0	2.40	mg/L			04/20/24 11:22	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.0270		0.0640	0.0270	ug/L		04/22/24 11:33	04/29/24 17:51	1
4,4'-DDE	<0.0270		0.0640	0.0270	ug/L		04/22/24 11:33	04/29/24 17:51	1
4,4'-DDT	<0.0420		0.0640	0.0420	ug/L		04/22/24 11:33	04/29/24 17:51	1
Aldrin	<0.0320		0.0640	0.0320	ug/L		04/22/24 11:33	04/29/24 17:51	1

Client Sample ID: MW-304R
Date Collected: 04/17/24 16:58
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-18
Matrix: Ground Water

Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	<0.0290		0.0640	0.0290	ug/L		04/22/24 11:33	04/29/24 17:51	1
beta-BHC	<0.0370		0.0640	0.0370	ug/L		04/22/24 11:33	04/29/24 17:51	1
Chlordane (technical)	<0.810		2.00	0.810	ug/L		04/22/24 11:33	04/29/24 17:51	1
delta-BHC	<0.0270		0.0640	0.0270	ug/L		04/22/24 11:33	04/29/24 17:51	1
Dieldrin	<0.0260		0.0640	0.0260	ug/L		04/22/24 11:33	04/29/24 17:51	1
Endosulfan I	<0.0330		0.0640	0.0330	ug/L		04/22/24 11:33	04/29/24 17:51	1
Endosulfan II	<0.0290		0.0640	0.0290	ug/L		04/22/24 11:33	04/29/24 17:51	1
Endosulfan sulfate	<0.0300		0.0640	0.0300	ug/L		04/22/24 11:33	04/29/24 17:51	1
Endrin	<0.0260		0.0640	0.0260	ug/L		04/22/24 11:33	04/29/24 17:51	1
Endrin aldehyde	<0.0290		0.0640	0.0290	ug/L		04/22/24 11:33	04/29/24 17:51	1
gamma-BHC (Lindane)	<0.0360		0.0640	0.0360	ug/L		04/22/24 11:33	04/29/24 17:51	1
Heptachlor	<0.0330		0.0640	0.0330	ug/L		04/22/24 11:33	04/29/24 17:51	1
Heptachlor epoxide	<0.0290		0.0640	0.0290	ug/L		04/22/24 11:33	04/29/24 17:51	1
Methoxychlor	<0.0410		0.0640	0.0410	ug/L		04/22/24 11:33	04/29/24 17:51	1
Toxaphene	<0.690		2.00	0.690	ug/L		04/22/24 11:33	04/29/24 17:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*49*		*10 - 136*	*04/22/24 11:33*	*04/29/24 17:51*	*1*
Tetrachloro-m-xylene	*75*		*10 - 130*	*04/22/24 11:33*	*04/29/24 17:51*	*1*

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.170		0.800	0.170	ug/L		04/22/24 11:33	04/29/24 17:51	1
PCB-1221	<0.170		0.800	0.170	ug/L		04/22/24 11:33	04/29/24 17:51	1
PCB-1232	<0.170		0.800	0.170	ug/L		04/22/24 11:33	04/29/24 17:51	1
PCB-1242	<0.170		0.800	0.170	ug/L		04/22/24 11:33	04/29/24 17:51	1
PCB-1248	<0.110		0.800	0.110	ug/L		04/22/24 11:33	04/29/24 17:51	1
PCB-1254	<0.110		0.800	0.110	ug/L		04/22/24 11:33	04/29/24 17:51	1
PCB-1260	<0.110		0.800	0.110	ug/L		04/22/24 11:33	04/29/24 17:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*49*		*10 - 136*	*04/22/24 11:33*	*04/29/24 17:51*	*1*
Tetrachloro-m-xylene	*75*		*10 - 130*	*04/22/24 11:33*	*04/29/24 17:51*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	<0.0695		0.160	0.0695	ug/L		04/24/24 14:51	04/25/24 10:32	1
Silvex (2,4,5-TP)	<0.0235		0.0535	0.0235	ug/L		04/24/24 14:51	04/25/24 10:32	1
2,4-D	<0.267		0.642	0.267	ug/L		04/24/24 14:51	04/25/24 10:32	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/22/24 09:00	04/26/24 16:54	1
Arsenic	**0.000838**	**J**	0.00200	0.000530	mg/L		04/22/24 09:00	04/26/24 16:54	1
Barium	**0.0523**		0.00200	0.000660	mg/L		04/22/24 09:00	04/26/24 16:54	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		04/22/24 09:00	04/26/24 16:54	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		04/22/24 09:00	04/26/24 16:54	1
Chromium	<0.00120		0.00500	0.00120	mg/L		04/22/24 09:00	04/26/24 16:54	1
Cobalt	**0.00392**		0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 16:54	1
Copper	<0.00180		0.00500	0.00180	mg/L		04/22/24 09:00	04/26/24 16:54	1
Lead	<0.000260		0.000500	0.000260	mg/L		04/22/24 09:00	04/26/24 16:54	1

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-304R
Date Collected: 04/17/24 16:58
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-18
Matrix: Ground Water

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.00255**	**J**	0.00500	0.00210	mg/L		04/22/24 09:00	04/26/24 16:54	1
Selenium	<0.00140		0.00500	0.00140	mg/L		04/22/24 09:00	04/26/24 16:54	1
Silver	<0.000500		0.00100	0.000500	mg/L		04/22/24 09:00	04/26/24 16:54	1
Thallium	<0.000570		0.00100	0.000570	mg/L		04/22/24 09:00	04/26/24 16:54	1
Tin	<0.00230		0.00500	0.00230	mg/L		04/22/24 09:00	04/26/24 16:54	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		04/22/24 09:00	04/26/24 16:54	1
Zinc	<0.00970		0.0200	0.00970	mg/L		04/22/24 09:00	04/26/24 16:54	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000110		0.000200	0.000110	mg/L		04/24/24 11:01	04/30/24 10:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.00350		0.0100	0.00350	mg/L		04/23/24 10:14	04/25/24 17:49	1
Sulfide (SW846 9034)	<0.231		1.00	0.231	mg/L		04/21/24 18:18	04/21/24 23:01	1
Total Suspended Solids (USGS I-3765-85)	**23.0**		15.0	11.1	mg/L			04/23/24 15:48	1

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-305
Date Collected: 04/17/24 17:56
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-19
Matrix: Ground 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			04/24/24 18:33	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/24/24 18:33	1
Benzene	<0.220		0.500	0.220	ug/L			04/24/24 18:33	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/24/24 18:33	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/24/24 18:33	1
Bromoform	<0.780		5.00	0.780	ug/L			04/24/24 18:33	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/24/24 18:33	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/24/24 18:33	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/24/24 18:33	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/24/24 18:33	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			04/24/24 18:33	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/24/24 18:33	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/24/24 18:33	1
Chloroform	<1.30		3.00	1.30	ug/L			04/24/24 18:33	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/24/24 18:33	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			04/24/24 18:33	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/24/24 18:33	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/24/24 18:33	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/24/24 18:33	1
Dibromomethane	<0.330		1.00	0.330	ug/L			04/24/24 18:33	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/24/24 18:33	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			04/24/24 18:33	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/24/24 18:33	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/24/24 18:33	1
1,1-Dichloroethene	<0.560	*+	2.00	0.560	ug/L			04/24/24 18:33	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/24/24 18:33	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/24/24 18:33	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/24/24 18:33	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/24/24 18:33	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/24/24 18:33	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/24/24 18:33	1
Styrene	<0.370		1.00	0.370	ug/L			04/24/24 18:33	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/24/24 18:33	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			04/24/24 18:33	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			04/24/24 18:33	1
Toluene	<0.430		1.00	0.430	ug/L			04/24/24 18:33	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/24/24 18:33	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/24/24 18:33	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/24/24 18:33	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/24/24 18:33	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/24/24 18:33	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/24/24 18:33	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/24/24 18:33	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/24/24 18:33	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/24/24 18:33	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/24/24 18:33	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/24/24 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*04/24/24 18:33*	*1*

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-305

Date Collected: 04/17/24 17:56
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-19

Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*105*		*73 - 130*		*04/24/24 18:33*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*04/24/24 18:33*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/22/24 09:00	04/26/24 16:57	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		04/22/24 09:00	04/26/24 16:57	1
Barium	**0.0443**		0.00200	0.000660	mg/L		04/22/24 09:00	04/26/24 16:57	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		04/22/24 09:00	04/26/24 16:57	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		04/22/24 09:00	04/26/24 16:57	1
Chromium	<0.00120		0.00500	0.00120	mg/L		04/22/24 09:00	04/26/24 16:57	1
Cobalt	**0.00162**		0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 16:57	1
Copper	<0.00180		0.00500	0.00180	mg/L		04/22/24 09:00	04/26/24 16:57	1
Lead	<0.000260		0.000500	0.000260	mg/L		04/22/24 09:00	04/26/24 16:57	1
Nickel	**0.00277**	**J**	0.00500	0.00210	mg/L		04/22/24 09:00	04/26/24 16:57	1
Selenium	<0.00140		0.00500	0.00140	mg/L		04/22/24 09:00	04/26/24 16:57	1
Silver	<0.000500		0.00100	0.000500	mg/L		04/22/24 09:00	04/26/24 16:57	1
Thallium	<0.000570		0.00100	0.000570	mg/L		04/22/24 09:00	04/26/24 16:57	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		04/22/24 09:00	04/26/24 16:57	1
Zinc	<0.00970		0.0200	0.00970	mg/L		04/22/24 09:00	04/26/24 16:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**8.63**		1.88	1.39	mg/L			04/23/24 13:03	1

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-29

Date Collected: 04/18/24 08:21
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-20

Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.220		0.500	0.220	ug/L			04/23/24 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*93*		*73 - 130*		*04/23/24 16:28*	*1*
Toluene-d8 (Surr)	*109*		*80 - 120*		*04/23/24 16:28*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*04/23/24 16:28*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**0.00495**		0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 17:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**25.5**		7.50	5.55	mg/L			04/24/24 15:19	1

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-30

Date Collected: 04/18/24 07:45
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-21

Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.220		0.500	0.220	ug/L			04/23/24 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*98*		*73 - 130*		*04/23/24 16:51*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*04/23/24 16:51*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*04/23/24 16:51*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**0.0258**		0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 17:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**22.3**		5.00	3.70	mg/L			04/24/24 15:19	1

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-306

Date Collected: 04/18/24 09:30
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-22

Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.381	J	0.500	0.220	ug/L			04/23/24 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*92*		*73 - 130*		*04/23/24 17:38*	*1*
Toluene-d8 (Surr)	*108*		*80 - 120*		*04/23/24 17:38*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*04/23/24 17:38*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	0.00223		0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 17:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	52.0		5.00	3.70	mg/L			04/24/24 15:19	1

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-307A

Date Collected: 04/18/24 08:58
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-23

Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.220		0.500	0.220	ug/L			04/23/24 17:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*73 - 130*		*04/23/24 17:14*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*04/23/24 17:14*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*04/23/24 17:14*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	**0.00594**		0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 17:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**18.0**		5.00	3.70	mg/L			04/24/24 15:19	1

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-501
Date Collected: 04/17/24 11:50
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-24
Matrix: Ground 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			04/24/24 18:56	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/24/24 18:56	1
Benzene	<0.220		0.500	0.220	ug/L			04/24/24 18:56	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/24/24 18:56	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/24/24 18:56	1
Bromoform	<0.780		5.00	0.780	ug/L			04/24/24 18:56	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/24/24 18:56	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/24/24 18:56	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/24/24 18:56	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/24/24 18:56	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			04/24/24 18:56	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/24/24 18:56	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/24/24 18:56	1
Chloroform	<1.30		3.00	1.30	ug/L			04/24/24 18:56	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/24/24 18:56	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			04/24/24 18:56	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/24/24 18:56	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/24/24 18:56	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/24/24 18:56	1
Dibromomethane	<0.330		1.00	0.330	ug/L			04/24/24 18:56	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/24/24 18:56	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			04/24/24 18:56	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/24/24 18:56	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/24/24 18:56	1
1,1-Dichloroethene	<0.560	*+	2.00	0.560	ug/L			04/24/24 18:56	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/24/24 18:56	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/24/24 18:56	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/24/24 18:56	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/24/24 18:56	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/24/24 18:56	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/24/24 18:56	1
Styrene	<0.370		1.00	0.370	ug/L			04/24/24 18:56	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/24/24 18:56	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			04/24/24 18:56	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			04/24/24 18:56	1
Toluene	<0.430		1.00	0.430	ug/L			04/24/24 18:56	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/24/24 18:56	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/24/24 18:56	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/24/24 18:56	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/24/24 18:56	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/24/24 18:56	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/24/24 18:56	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/24/24 18:56	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/24/24 18:56	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/24/24 18:56	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/24/24 18:56	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/24/24 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*80 - 120*		*04/24/24 18:56*	*1*

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-501

Date Collected: 04/17/24 11:50
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-24

Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*101*		*73 - 130*		*04/24/24 18:56*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*04/24/24 18:56*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/22/24 09:00	04/26/24 17:31	1
Arsenic	**0.00868**		0.00200	0.000530	mg/L		04/22/24 09:00	04/26/24 17:31	1
Barium	**0.0356**		0.00200	0.000660	mg/L		04/22/24 09:00	04/26/24 17:31	1
Beryllium	**0.00119**		0.00100	0.000330	mg/L		04/22/24 09:00	04/26/24 17:31	1
Cadmium	**0.000875**		0.000200	0.000100	mg/L		04/22/24 09:00	04/26/24 17:31	1
Chromium	<0.00120		0.00500	0.00120	mg/L		04/22/24 09:00	04/26/24 17:31	1
Cobalt	**0.127**		0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 17:31	1
Copper	**0.00447**	**J**	0.00500	0.00180	mg/L		04/22/24 09:00	04/26/24 17:31	1
Lead	**0.00412**		0.000500	0.000260	mg/L		04/22/24 09:00	04/26/24 17:31	1
Nickel	**0.209**		0.00500	0.00210	mg/L		04/22/24 09:00	04/26/24 17:31	1
Selenium	<0.00140		0.00500	0.00140	mg/L		04/22/24 09:00	04/26/24 17:31	1
Silver	<0.000500		0.00100	0.000500	mg/L		04/22/24 09:00	04/26/24 17:31	1
Thallium	<0.000570		0.00100	0.000570	mg/L		04/22/24 09:00	04/26/24 17:31	1
Vanadium	**0.00551**		0.00500	0.00110	mg/L		04/22/24 09:00	04/26/24 17:31	1
Zinc	**0.127**		0.0200	0.00970	mg/L		04/22/24 09:00	04/26/24 17:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**1010**		15.0	11.1	mg/L			04/23/24 13:03	1

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-502
Date Collected: 04/17/24 10:51
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-25
Matrix: Ground 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			04/24/24 19:18	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/24/24 19:18	1
Benzene	<0.220		0.500	0.220	ug/L			04/24/24 19:18	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/24/24 19:18	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/24/24 19:18	1
Bromoform	<0.780		5.00	0.780	ug/L			04/24/24 19:18	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/24/24 19:18	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/24/24 19:18	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/24/24 19:18	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/24/24 19:18	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			04/24/24 19:18	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/24/24 19:18	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/24/24 19:18	1
Chloroform	<1.30		3.00	1.30	ug/L			04/24/24 19:18	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/24/24 19:18	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			04/24/24 19:18	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/24/24 19:18	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/24/24 19:18	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/24/24 19:18	1
Dibromomethane	<0.330		1.00	0.330	ug/L			04/24/24 19:18	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/24/24 19:18	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			04/24/24 19:18	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/24/24 19:18	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/24/24 19:18	1
1,1-Dichloroethene	<0.560	*+	2.00	0.560	ug/L			04/24/24 19:18	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/24/24 19:18	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/24/24 19:18	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/24/24 19:18	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/24/24 19:18	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/24/24 19:18	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/24/24 19:18	1
Styrene	<0.370		1.00	0.370	ug/L			04/24/24 19:18	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/24/24 19:18	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			04/24/24 19:18	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			04/24/24 19:18	1
Toluene	<0.430		1.00	0.430	ug/L			04/24/24 19:18	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/24/24 19:18	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/24/24 19:18	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/24/24 19:18	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/24/24 19:18	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/24/24 19:18	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/24/24 19:18	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/24/24 19:18	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/24/24 19:18	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/24/24 19:18	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/24/24 19:18	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/24/24 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*04/24/24 19:18*	*1*

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-502

Date Collected: 04/17/24 10:51
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-25

Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*98*		*73 - 130*		*04/24/24 19:18*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*04/24/24 19:18*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/22/24 09:00	04/26/24 17:33	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		04/22/24 09:00	04/26/24 17:33	1
Barium	**0.141**		0.00200	0.000660	mg/L		04/22/24 09:00	04/26/24 17:33	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		04/22/24 09:00	04/26/24 17:33	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		04/22/24 09:00	04/26/24 17:33	1
Chromium	<0.00120		0.00500	0.00120	mg/L		04/22/24 09:00	04/26/24 17:33	1
Cobalt	**0.000742**		0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 17:33	1
Copper	<0.00180		0.00500	0.00180	mg/L		04/22/24 09:00	04/26/24 17:33	1
Lead	**0.000581**		0.000500	0.000260	mg/L		04/22/24 09:00	04/26/24 17:33	1
Nickel	**0.00255**	**J**	0.00500	0.00210	mg/L		04/22/24 09:00	04/26/24 17:33	1
Selenium	<0.00140		0.00500	0.00140	mg/L		04/22/24 09:00	04/26/24 17:33	1
Silver	<0.000500		0.00100	0.000500	mg/L		04/22/24 09:00	04/26/24 17:33	1
Thallium	<0.000570		0.00100	0.000570	mg/L		04/22/24 09:00	04/26/24 17:33	1
Vanadium	**0.00164**	**J**	0.00500	0.00110	mg/L		04/22/24 09:00	04/26/24 17:33	1
Zinc	<0.00970		0.0200	0.00970	mg/L		04/22/24 09:00	04/26/24 17:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**29.4**		1.88	1.39	mg/L			04/23/24 13:03	1

Client Sample ID: EQ-1
Date Collected: 04/18/24 15:25
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-26
Matrix: Ground 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			04/25/24 18:41	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/25/24 18:41	1
Benzene	<0.220		0.500	0.220	ug/L			04/25/24 18:41	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/25/24 18:41	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/25/24 18:41	1
Bromoform	<0.780		5.00	0.780	ug/L			04/25/24 18:41	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/25/24 18:41	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/25/24 18:41	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/25/24 18:41	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/25/24 18:41	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			04/25/24 18:41	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/25/24 18:41	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/25/24 18:41	1
Chloroform	<1.30		3.00	1.30	ug/L			04/25/24 18:41	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/25/24 18:41	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			04/25/24 18:41	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/25/24 18:41	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/25/24 18:41	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/25/24 18:41	1
Dibromomethane	<0.330		1.00	0.330	ug/L			04/25/24 18:41	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/25/24 18:41	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			04/25/24 18:41	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/25/24 18:41	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/25/24 18:41	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			04/25/24 18:41	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/25/24 18:41	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/25/24 18:41	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/25/24 18:41	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/25/24 18:41	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/25/24 18:41	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/25/24 18:41	1
Styrene	<0.370		1.00	0.370	ug/L			04/25/24 18:41	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/25/24 18:41	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			04/25/24 18:41	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			04/25/24 18:41	1
Toluene	**0.534**	**J**	1.00	0.430	ug/L			04/25/24 18:41	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/25/24 18:41	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/25/24 18:41	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/25/24 18:41	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/25/24 18:41	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/25/24 18:41	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/25/24 18:41	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/25/24 18:41	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/25/24 18:41	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/25/24 18:41	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/25/24 18:41	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/25/24 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*80 - 120*		*04/25/24 18:41*	*1*

Client Sample ID: EQ-1

Date Collected: 04/18/24 15:25
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-26

Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*73 - 130*		*04/25/24 18:41*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*04/25/24 18:41*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/22/24 09:00	04/26/24 17:35	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		04/22/24 09:00	04/26/24 17:35	1
Barium	<0.000660		0.00200	0.000660	mg/L		04/22/24 09:00	04/26/24 17:35	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		04/22/24 09:00	04/26/24 17:35	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		04/22/24 09:00	04/26/24 17:35	1
Chromium	<0.00120		0.00500	0.00120	mg/L		04/22/24 09:00	04/26/24 17:35	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 17:35	1
Copper	<0.00180		0.00500	0.00180	mg/L		04/22/24 09:00	04/26/24 17:35	1
Lead	<0.000260		0.000500	0.000260	mg/L		04/22/24 09:00	04/26/24 17:35	1
Nickel	<0.00210		0.00500	0.00210	mg/L		04/22/24 09:00	04/26/24 17:35	1
Selenium	<0.00140		0.00500	0.00140	mg/L		04/22/24 09:00	04/26/24 17:35	1
Silver	<0.000500		0.00100	0.000500	mg/L		04/22/24 09:00	04/26/24 17:35	1
Thallium	<0.000570		0.00100	0.000570	mg/L		04/22/24 09:00	04/26/24 17:35	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		04/22/24 09:00	04/26/24 17:35	1
Zinc	<0.00970		0.0200	0.00970	mg/L		04/22/24 09:00	04/26/24 17:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<3.70		5.00	3.70	mg/L			04/23/24 18:54	1

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: DUP-1
Date Collected: 04/18/24 11:07
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-27
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**3.54**	**J**	10.0	3.10	ug/L			04/25/24 19:03	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/25/24 19:03	1
Benzene	**3.31**		0.500	0.220	ug/L			04/25/24 19:03	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/25/24 19:03	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/25/24 19:03	1
Bromoform	<0.780		5.00	0.780	ug/L			04/25/24 19:03	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/25/24 19:03	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/25/24 19:03	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/25/24 19:03	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/25/24 19:03	1
Chlorobenzene	**3.50**		1.00	0.400	ug/L			04/25/24 19:03	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/25/24 19:03	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/25/24 19:03	1
Chloroform	<1.30		3.00	1.30	ug/L			04/25/24 19:03	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/25/24 19:03	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			04/25/24 19:03	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/25/24 19:03	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/25/24 19:03	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/25/24 19:03	1
Dibromomethane	<0.330		1.00	0.330	ug/L			04/25/24 19:03	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/25/24 19:03	1
1,4-Dichlorobenzene	**0.624**	**J**	1.00	0.230	ug/L			04/25/24 19:03	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/25/24 19:03	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/25/24 19:03	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			04/25/24 19:03	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/25/24 19:03	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/25/24 19:03	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/25/24 19:03	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/25/24 19:03	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/25/24 19:03	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/25/24 19:03	1
Styrene	<0.370		1.00	0.370	ug/L			04/25/24 19:03	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/25/24 19:03	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			04/25/24 19:03	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			04/25/24 19:03	1
Toluene	<0.430		1.00	0.430	ug/L			04/25/24 19:03	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/25/24 19:03	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/25/24 19:03	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/25/24 19:03	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/25/24 19:03	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/25/24 19:03	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/25/24 19:03	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/25/24 19:03	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/25/24 19:03	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/25/24 19:03	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/25/24 19:03	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/25/24 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*04/25/24 19:03*	*1*

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: DUP-1

Date Collected: 04/18/24 11:07
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-27

Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*103*		*73 - 130*		*04/25/24 19:03*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*04/25/24 19:03*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/22/24 09:00	04/26/24 17:38	1
Arsenic	**0.00292**		0.00200	0.000530	mg/L		04/22/24 09:00	04/26/24 17:38	1
Barium	**0.738**		0.00200	0.000660	mg/L		04/22/24 09:00	04/26/24 17:38	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		04/22/24 09:00	04/26/24 17:38	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		04/22/24 09:00	04/26/24 17:38	1
Chromium	<0.00120		0.00500	0.00120	mg/L		04/22/24 09:00	04/26/24 17:38	1
Cobalt	**0.00178**		0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 17:38	1
Copper	<0.00180		0.00500	0.00180	mg/L		04/22/24 09:00	04/26/24 17:38	1
Lead	<0.000260		0.000500	0.000260	mg/L		04/22/24 09:00	04/26/24 17:38	1
Nickel	**0.00988**		0.00500	0.00210	mg/L		04/22/24 09:00	04/26/24 17:38	1
Selenium	<0.00140		0.00500	0.00140	mg/L		04/22/24 09:00	04/26/24 17:38	1
Silver	<0.000500		0.00100	0.000500	mg/L		04/22/24 09:00	04/26/24 17:38	1
Thallium	<0.000570		0.00100	0.000570	mg/L		04/22/24 09:00	04/26/24 17:38	1
Vanadium	**0.00204**	**J**	0.00500	0.00110	mg/L		04/22/24 09:00	04/26/24 17:38	1
Zinc	<0.00970		0.0200	0.00970	mg/L		04/22/24 09:00	04/26/24 17:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**101**		5.00	3.70	mg/L			04/24/24 15:19	1

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: DUP-2
Date Collected: 04/18/24 11:30
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-28
Matrix: Ground 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			04/25/24 19:26	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/25/24 19:26	1
Benzene	<0.220		0.500	0.220	ug/L			04/25/24 19:26	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/25/24 19:26	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/25/24 19:26	1
Bromoform	<0.780		5.00	0.780	ug/L			04/25/24 19:26	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/25/24 19:26	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/25/24 19:26	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/25/24 19:26	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/25/24 19:26	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			04/25/24 19:26	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/25/24 19:26	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/25/24 19:26	1
Chloroform	<1.30		3.00	1.30	ug/L			04/25/24 19:26	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/25/24 19:26	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			04/25/24 19:26	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/25/24 19:26	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/25/24 19:26	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/25/24 19:26	1
Dibromomethane	<0.330		1.00	0.330	ug/L			04/25/24 19:26	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/25/24 19:26	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			04/25/24 19:26	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/25/24 19:26	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/25/24 19:26	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			04/25/24 19:26	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/25/24 19:26	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/25/24 19:26	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/25/24 19:26	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/25/24 19:26	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/25/24 19:26	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/25/24 19:26	1
Styrene	<0.370		1.00	0.370	ug/L			04/25/24 19:26	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/25/24 19:26	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			04/25/24 19:26	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			04/25/24 19:26	1
Toluene	<0.430		1.00	0.430	ug/L			04/25/24 19:26	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/25/24 19:26	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/25/24 19:26	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/25/24 19:26	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/25/24 19:26	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/25/24 19:26	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/25/24 19:26	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/25/24 19:26	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/25/24 19:26	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/25/24 19:26	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/25/24 19:26	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/25/24 19:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*04/25/24 19:26*	*1*

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: DUP-2

Date Collected: 04/18/24 11:30
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-28

Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*104*		*73 - 130*		*04/25/24 19:26*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*04/25/24 19:26*	*1*

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/22/24 09:00	04/26/24 17:40	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		04/22/24 09:00	04/26/24 17:40	1
Barium	**0.0606**		0.00200	0.000660	mg/L		04/22/24 09:00	04/26/24 17:40	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		04/22/24 09:00	04/26/24 17:40	1
Cadmium	**0.000204**		0.000200	0.000100	mg/L		04/22/24 09:00	04/26/24 17:40	1
Chromium	<0.00120		0.00500	0.00120	mg/L		04/22/24 09:00	04/26/24 17:40	1
Cobalt	**0.00346**		0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 17:40	1
Copper	**0.00198**	**J**	0.00500	0.00180	mg/L		04/22/24 09:00	04/26/24 17:40	1
Lead	<0.000260		0.000500	0.000260	mg/L		04/22/24 09:00	04/26/24 17:40	1
Nickel	**0.0262**		0.00500	0.00210	mg/L		04/22/24 09:00	04/26/24 17:40	1
Selenium	<0.00140		0.00500	0.00140	mg/L		04/22/24 09:00	04/26/24 17:40	1
Silver	<0.000500		0.00100	0.000500	mg/L		04/22/24 09:00	04/26/24 17:40	1
Thallium	<0.000570		0.00100	0.000570	mg/L		04/22/24 09:00	04/26/24 17:40	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		04/22/24 09:00	04/26/24 17:40	1
Zinc	<0.00970		0.0200	0.00970	mg/L		04/22/24 09:00	04/26/24 17:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.39		1.88	1.39	mg/L			04/24/24 15:19	1

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: TB-1
Date Collected: 04/17/24 13:50
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-29
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			04/24/24 12:53	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/24/24 12:53	1
Benzene	<0.220		0.500	0.220	ug/L			04/24/24 12:53	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/24/24 12:53	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/24/24 12:53	1
Bromoform	<0.780		5.00	0.780	ug/L			04/24/24 12:53	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/24/24 12:53	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/24/24 12:53	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/24/24 12:53	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/24/24 12:53	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			04/24/24 12:53	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/24/24 12:53	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/24/24 12:53	1
Chloroform	<1.30		3.00	1.30	ug/L			04/24/24 12:53	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/24/24 12:53	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			04/24/24 12:53	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/24/24 12:53	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/24/24 12:53	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/24/24 12:53	1
Dibromomethane	<0.330		1.00	0.330	ug/L			04/24/24 12:53	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/24/24 12:53	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			04/24/24 12:53	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/24/24 12:53	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/24/24 12:53	1
1,1-Dichloroethene	<0.560	*+	2.00	0.560	ug/L			04/24/24 12:53	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/24/24 12:53	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/24/24 12:53	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/24/24 12:53	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/24/24 12:53	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/24/24 12:53	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/24/24 12:53	1
Styrene	<0.370		1.00	0.370	ug/L			04/24/24 12:53	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/24/24 12:53	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			04/24/24 12:53	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			04/24/24 12:53	1
Toluene	<0.430		1.00	0.430	ug/L			04/24/24 12:53	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/24/24 12:53	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/24/24 12:53	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/24/24 12:53	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/24/24 12:53	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/24/24 12:53	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/24/24 12:53	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/24/24 12:53	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/24/24 12:53	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/24/24 12:53	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/24/24 12:53	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/24/24 12:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*04/24/24 12:53*	*1*

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: TB-1
Date Collected: 04/17/24 13:50
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-29
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*101*		*73 - 130*		*04/24/24 12:53*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*04/24/24 12:53*	*1*

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: TB-2

Date Collected: 04/18/24 08:10
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-30

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			04/25/24 14:08	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/25/24 14:08	1
Benzene	<0.220		0.500	0.220	ug/L			04/25/24 14:08	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/25/24 14:08	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/25/24 14:08	1
Bromoform	<0.780		5.00	0.780	ug/L			04/25/24 14:08	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/25/24 14:08	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/25/24 14:08	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/25/24 14:08	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/25/24 14:08	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			04/25/24 14:08	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/25/24 14:08	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/25/24 14:08	1
Chloroform	<1.30		3.00	1.30	ug/L			04/25/24 14:08	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/25/24 14:08	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			04/25/24 14:08	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/25/24 14:08	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/25/24 14:08	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/25/24 14:08	1
Dibromomethane	<0.330		1.00	0.330	ug/L			04/25/24 14:08	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/25/24 14:08	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			04/25/24 14:08	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/25/24 14:08	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/25/24 14:08	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			04/25/24 14:08	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/25/24 14:08	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/25/24 14:08	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/25/24 14:08	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/25/24 14:08	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/25/24 14:08	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/25/24 14:08	1
Styrene	<0.370		1.00	0.370	ug/L			04/25/24 14:08	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/25/24 14:08	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			04/25/24 14:08	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			04/25/24 14:08	1
Toluene	<0.430		1.00	0.430	ug/L			04/25/24 14:08	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/25/24 14:08	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/25/24 14:08	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/25/24 14:08	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/25/24 14:08	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/25/24 14:08	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/25/24 14:08	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/25/24 14:08	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/25/24 14:08	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/25/24 14:08	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/25/24 14:08	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/25/24 14:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*		*04/25/24 14:08*	*1*

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: TB-2
Date Collected: 04/18/24 08:10
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-30
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*103*		*73 - 130*		*04/25/24 14:08*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*04/25/24 14:08*	*1*

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: TB-3
Date Collected: 04/18/24 15:40
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-31
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			04/25/24 14:32	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/25/24 14:32	1
Benzene	<0.220		0.500	0.220	ug/L			04/25/24 14:32	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/25/24 14:32	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/25/24 14:32	1
Bromoform	<0.780		5.00	0.780	ug/L			04/25/24 14:32	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/25/24 14:32	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/25/24 14:32	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/25/24 14:32	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/25/24 14:32	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			04/25/24 14:32	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/25/24 14:32	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/25/24 14:32	1
Chloroform	<1.30		3.00	1.30	ug/L			04/25/24 14:32	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/25/24 14:32	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			04/25/24 14:32	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/25/24 14:32	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/25/24 14:32	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/25/24 14:32	1
Dibromomethane	<0.330		1.00	0.330	ug/L			04/25/24 14:32	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/25/24 14:32	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			04/25/24 14:32	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/25/24 14:32	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/25/24 14:32	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			04/25/24 14:32	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/25/24 14:32	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/25/24 14:32	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/25/24 14:32	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/25/24 14:32	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/25/24 14:32	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/25/24 14:32	1
Styrene	<0.370		1.00	0.370	ug/L			04/25/24 14:32	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/25/24 14:32	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			04/25/24 14:32	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			04/25/24 14:32	1
Toluene	<0.430		1.00	0.430	ug/L			04/25/24 14:32	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/25/24 14:32	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/25/24 14:32	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/25/24 14:32	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/25/24 14:32	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/25/24 14:32	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/25/24 14:32	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/25/24 14:32	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/25/24 14:32	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/25/24 14:32	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/25/24 14:32	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/25/24 14:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*04/25/24 14:32*	*1*

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: TB-3
Date Collected: 04/18/24 15:40
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-31
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*105*		*73 - 130*		*04/25/24 14:32*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*04/25/24 14:32*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
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.
*+	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.
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi 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.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Metals

Qualifier	Qualifier Description
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.
F1	MS and/or MSD recovery 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.

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

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Ground Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(73-130)	(80-120)
310-279381-1	GU-1	105	106	99
310-279381-1 MS	GU-1	98	100	99
310-279381-1 MSD	GU-1	95	100	101
310-279381-2	GU-L	108	101	97
310-279381-3	GU-O	104	101	98
310-279381-4	GU-P	106	105	97
310-279381-4 MS	GU-P	105	100	104
310-279381-4 MSD	GU-P	103	100	103
310-279381-5	MW-201B	103	104	98
310-279381-6	MW-9AR	105	97	100
310-279381-7	MW-15	107	106	99
310-279381-8	MW-18	104	103	99
310-279381-9	MW-19	107	101	99
310-279381-10	MW-20	104	103	99
310-279381-11	MW-22	106	106	95
310-279381-12	MW-24	106	103	99
310-279381-13	MW-26A	105	107	101
310-279381-14	MW-300	103	105	100
310-279381-15	MW-301	106	105	97
310-279381-16	MW-302R	105	103	99
310-279381-17	MW-303	105	101	97
310-279381-18	MW-304R	110	99	99
310-279381-19	MW-305	105	105	96
310-279381-20	MW-29	97	93	109
310-279381-21	MW-30	101	98	103
310-279381-22	MW-306	99	92	108
310-279381-23	MW-307A	99	97	103
310-279381-24	MW-501	113	101	100
310-279381-25	MW-502	102	98	100
310-279381-26	EQ-1	110	106	99
310-279381-27	DUP-1	106	103	98
310-279381-28	DUP-2	104	104	98

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(73-130)	(80-120)
310-279310-C-1 MS	Matrix Spike	93	96	110
310-279310-C-1 MSD	Matrix Spike Duplicate	94	98	109
310-279381-29	TB-1	105	101	98
310-279381-30	TB-2	107	103	101
310-279381-31	TB-3	103	105	100
LCS 310-419587/6	Lab Control Sample	100	100	129 S1+

Surrogate Summary

Client: HDR Inc
Job ID: 310-279381-1
Project/Site: CRLCSWA_2

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(73-130)	(80-120)
LCS 310-419688/6	Lab Control Sample	98	100	100
LCS 310-419688/7	Lab Control Sample	111	103	101
LCS 310-419842/6	Lab Control Sample	102	95	103
LCS 310-419842/7	Lab Control Sample	108	103	98
MB 310-419587/5	Method Blank	99	98	123 S1+
MB 310-419688/5	Method Blank	110	102	97
MB 310-419842/5	Method Blank	110	100	99

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Matrix: Ground Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		2FP	PHL	NBZ	FBP	TBP	TPHL
Lab Sample ID	Client Sample ID	(25-110)	(21-110)	(45-129)	(39-118)	(27-136)	(12-144)
310-279381-13	MW-26A	64	63	97	91	98	115
310-279381-18	MW-304R	61	61	95	84	92	110

Surrogate Legend

2FP = 2-Fluorophenol (Surr)
PHL = Phenol-d5 (Surr)
NBZ = Nitrobenzene-d5 (Surr)
FBP = 2-Fluorobiphenyl (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		2FP	PHL	NBZ	FBP	TBP	TPHL
Lab Sample ID	Client Sample ID	(25-110)	(21-110)	(45-129)	(39-118)	(27-136)	(12-144)
LCS 310-419297/2-A	Lab Control Sample	70	66	95	89	105	113
LCSD 310-419297/3-A	Lab Control Sample Dup	66	62	89	78	98	102
MB 310-419297/1-A	Method Blank	85	82	128	120 S1+	129	145 S1+

Surrogate Legend

2FP = 2-Fluorophenol (Surr)
PHL = Phenol-d5 (Surr)
NBZ = Nitrobenzene-d5 (Surr)
FBP = 2-Fluorobiphenyl (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
TPHL = Terphenyl-d14 (Surr)

Surrogate Summary

Client: HDR Inc
Job ID: 310-279381-1
Project/Site: CRLCSWA_2

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Ground Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		DCB1	TCX1								
Lab Sample ID	Client Sample ID	(10-136)	(10-130)								
310-279381-11	MW-22	67	72								
310-279381-13	MW-26A	55	77								
310-279381-17	MW-303	49	48								
310-279381-18	MW-304R	49	75								

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		DCB1	TCX1	TCX1							
Lab Sample ID	Client Sample ID	(10-136)	(10-130)	(10-130)							
LCS 310-419457/2-A	Lab Control Sample	75	71	71							
LCSD 310-419457/3-A	Lab Control Sample Dup	80	70	70							
MB 310-419457/1-A	Method Blank	81	66	66							

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Ground Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		DCB1	TCX1								
Lab Sample ID	Client Sample ID	(10-136)	(10-130)								
310-279381-13	MW-26A	55	77								
310-279381-18	MW-304R	49	75								

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	(10-136)	(10-130)								
LCS 310-419457/4-A	Lab Control Sample	76	66								
LCSD 310-419457/5-A	Lab Control Sample Dup	70	59								
MB 310-419457/1-A	Method Blank	81	66								

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene

Surrogate Summary

Client: HDR Inc
Job ID: 310-279381-1
Project/Site: CRLCSWA_2

Method: 8151A - Herbicides (GC)

Matrix: Ground Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	DCPAA1 (34-142)	DCPAA2 (34-142)								
310-279381-11	MW-22	62 p	132								

Surrogate Legend

DCPAA = 2,4-Dichlorophenylacetic acid (Surr)

Method: 8151A - Herbicides (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	DCPAA1 (34-142)	DCPAA2 (34-142)								
280-190404-A-4-A MS	Matrix Spike	64	73								
280-190404-A-4-B MSD	Matrix Spike Duplicate	61	67								
LCS 410-498161/2-A	Lab Control Sample	79	87								
MB 410-498161/1-A	Method Blank	69	72								

Surrogate Legend

DCPAA = 2,4-Dichlorophenylacetic acid (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 310-419587/5
Matrix: Water
Analysis Batch: 419587

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			04/23/24 13:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*04/23/24 13:43*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 130*		*04/23/24 13:43*	*1*
Toluene-d8 (Surr)	*123*	*S1+*	*80 - 120*		*04/23/24 13:43*	*1*

Lab Sample ID: LCS 310-419587/6
Matrix: Water
Analysis Batch: 419587

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			20.0	18.14		ug/L		91	72 - 124		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*73 - 130*
Toluene-d8 (Surr)	*129*	*S1+*	*80 - 120*

Lab Sample ID: 310-279310-C-1 MS
Matrix: Water
Analysis Batch: 419587

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.220		25.0	21.65		ug/L		87	46 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*73 - 130*
Toluene-d8 (Surr)	*110*		*80 - 120*

Lab Sample ID: 310-279310-C-1 MSD
Matrix: Water
Analysis Batch: 419587

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.220		25.0	21.28		ug/L		85	46 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*73 - 130*
Toluene-d8 (Surr)	*109*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-419688/5
Matrix: Water
Analysis Batch: 419688

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			04/24/24 11:21	1
Acrolein	<3.60		10.0	3.60	ug/L			04/24/24 11:21	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/24/24 11:21	1
Allyl chloride	<0.700		2.00	0.700	ug/L			04/24/24 11:21	1
Benzene	<0.220		0.500	0.220	ug/L			04/24/24 11:21	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/24/24 11:21	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/24/24 11:21	1
Bromoform	<0.780		5.00	0.780	ug/L			04/24/24 11:21	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/24/24 11:21	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/24/24 11:21	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/24/24 11:21	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/24/24 11:21	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			04/24/24 11:21	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/24/24 11:21	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/24/24 11:21	1
Chloroform	<1.30		3.00	1.30	ug/L			04/24/24 11:21	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/24/24 11:21	1
Chloroprene	<0.230		1.00	0.230	ug/L			04/24/24 11:21	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			04/24/24 11:21	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/24/24 11:21	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/24/24 11:21	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/24/24 11:21	1
Dibromomethane	<0.330		1.00	0.330	ug/L			04/24/24 11:21	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/24/24 11:21	1
1,3-Dichlorobenzene	<0.300		1.00	0.300	ug/L			04/24/24 11:21	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			04/24/24 11:21	1
Dichlorodifluoromethane	<0.250		3.00	0.250	ug/L			04/24/24 11:21	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/24/24 11:21	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/24/24 11:21	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			04/24/24 11:21	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/24/24 11:21	1
1,3-Dichloropropane	<0.400		1.00	0.400	ug/L			04/24/24 11:21	1
2,2-Dichloropropane	<0.690		4.00	0.690	ug/L			04/24/24 11:21	1
1,1-Dichloropropene	<0.430		1.00	0.430	ug/L			04/24/24 11:21	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/24/24 11:21	1
Ethyl methacrylate	<0.680		2.00	0.680	ug/L			04/24/24 11:21	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/24/24 11:21	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/24/24 11:21	1
Methacrylonitrile	<3.30		10.0	3.30	ug/L			04/24/24 11:21	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/24/24 11:21	1
Methyl methacrylate	<0.760		2.00	0.760	ug/L			04/24/24 11:21	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/24/24 11:21	1
m,p-Xylene	<0.380		2.00	0.380	ug/L			04/24/24 11:21	1
Naphthalene	<3.00		5.00	3.00	ug/L			04/24/24 11:21	1
o-Xylene	<0.400		1.00	0.400	ug/L			04/24/24 11:21	1
Propionitrile	<3.40		10.0	3.40	ug/L			04/24/24 11:21	1
Styrene	<0.370		1.00	0.370	ug/L			04/24/24 11:21	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/24/24 11:21	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-419688/5
Matrix: Water
Analysis Batch: 419688

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			04/24/24 11:21	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			04/24/24 11:21	1
Toluene	<0.430		1.00	0.430	ug/L			04/24/24 11:21	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/24/24 11:21	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/24/24 11:21	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/24/24 11:21	1
1,2,4-Trichlorobenzene	<0.750		5.00	0.750	ug/L			04/24/24 11:21	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/24/24 11:21	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/24/24 11:21	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/24/24 11:21	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/24/24 11:21	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/24/24 11:21	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/24/24 11:21	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/24/24 11:21	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/24/24 11:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*80 - 120*		*04/24/24 11:21*	*1*
Dibromofluoromethane (Surr)	*102*		*73 - 130*		*04/24/24 11:21*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*04/24/24 11:21*	*1*

Lab Sample ID: LCS 310-419688/6
Matrix: Water
Analysis Batch: 419688

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	40.42		ug/L		101	50 - 150
Acrolein	94.8	94.49		ug/L		100	49 - 150
Acrylonitrile	200	213.3		ug/L		107	50 - 150
Allyl chloride	20.0	22.59		ug/L		113	49 - 150
Benzene	20.0	22.66		ug/L		113	72 - 124
Bromochloromethane	20.0	21.37		ug/L		107	73 - 130
Bromodichloromethane	20.0	20.98		ug/L		105	74 - 122
Bromoform	20.0	17.42		ug/L		87	61 - 122
2-Butanone (MEK)	40.0	40.22		ug/L		101	50 - 150
Carbon disulfide	20.0	25.64		ug/L		128	59 - 135
Carbon tetrachloride	20.0	21.42		ug/L		107	67 - 132
Chlorobenzene	20.0	22.63		ug/L		113	76 - 120
Chlorodibromomethane	20.0	18.36		ug/L		92	71 - 121
Chloroform	20.0	22.42		ug/L		112	72 - 125
Chloroprene	20.0	23.89		ug/L		119	69 - 133
cis-1,2-Dichloroethene	20.0	22.37		ug/L		112	74 - 123
cis-1,3-Dichloropropene	20.0	21.13		ug/L		106	71 - 125
1,2-Dibromo-3-Chloropropane	20.0	18.69		ug/L		93	50 - 150
1,2-Dibromoethane (EDB)	20.0	20.53		ug/L		103	75 - 125
Dibromomethane	20.0	20.95		ug/L		105	74 - 125
1,2-Dichlorobenzene	20.0	22.64		ug/L		113	74 - 120
1,3-Dichlorobenzene	20.0	22.09		ug/L		110	72 - 120

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-419688/6
Matrix: Water
Analysis Batch: 419688

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dichlorobenzene	20.0	21.84		ug/L		109	72 - 120
1,1-Dichloroethane	20.0	22.43		ug/L		112	70 - 127
1,2-Dichloroethane	20.0	20.64		ug/L		103	71 - 125
1,1-Dichloroethene	20.0	26.69	*+	ug/L		133	63 - 132
1,2-Dichloropropane	20.0	21.90		ug/L		110	73 - 124
1,3-Dichloropropane	20.0	19.99		ug/L		100	72 - 125
2,2-Dichloropropane	20.0	24.61		ug/L		123	50 - 150
1,1-Dichloropropene	20.0	22.48		ug/L		112	69 - 132
Ethylbenzene	20.0	21.26		ug/L		106	74 - 122
Ethyl methacrylate	20.0	21.64		ug/L		108	70 - 129
2-Hexanone	40.0	40.85		ug/L		102	60 - 140
Iodomethane	20.0	17.61		ug/L		88	10 - 150
Methacrylonitrile	200	197.2		ug/L		99	69 - 129
Methylene Chloride	20.0	22.89		ug/L		114	50 - 150
Methyl methacrylate	40.0	40.50		ug/L		101	68 - 131
4-Methyl-2-pentanone (MIBK)	40.0	39.56		ug/L		99	60 - 139
Naphthalene	20.0	21.71		ug/L		109	50 - 150
Propionitrile	200	208.6		ug/L		104	63 - 135
Styrene	20.0	21.87		ug/L		109	74 - 121
1,1,1,2-Tetrachloroethane	20.0	20.00		ug/L		100	71 - 120
1,1,2,2-Tetrachloroethane	20.0	18.74		ug/L		94	68 - 124
Tetrachloroethene	20.0	23.68		ug/L		118	71 - 130
Toluene	20.0	21.22		ug/L		106	74 - 123
trans-1,4-Dichloro-2-butene	20.0	19.49		ug/L		97	50 - 150
trans-1,2-Dichloroethene	20.0	23.85		ug/L		119	70 - 126
trans-1,3-Dichloropropene	20.0	21.19		ug/L		106	69 - 123
1,2,4-Trichlorobenzene	20.0	23.18		ug/L		116	68 - 124
1,1,1-Trichloroethane	20.0	21.92		ug/L		110	73 - 129
1,1,2-Trichloroethane	20.0	21.09		ug/L		105	73 - 123
Trichloroethene	20.0	20.02		ug/L		100	72 - 126
1,2,3-Trichloropropane	20.0	21.21		ug/L		106	65 - 127
Vinyl acetate	40.0	42.73		ug/L		107	50 - 150
Xylenes, Total	40.0	45.43		ug/L		114	73 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*73 - 130*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: LCS 310-419688/7
Matrix: Water
Analysis Batch: 419688

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	15.80		ug/L		79	23 - 150
Chloroethane	20.0	18.82		ug/L		94	54 - 136
Chloromethane	20.0	20.09		ug/L		100	38 - 150
Dichlorodifluoromethane	20.0	25.46		ug/L		127	39 - 150

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-419688/7
Matrix: Water
Analysis Batch: 419688

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	16.94		ug/L		85	54 - 149		
Vinyl chloride			20.0	22.03		ug/L		110	56 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*73 - 130*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: 310-279381-4 MS
Matrix: Ground Water
Analysis Batch: 419688

Client Sample ID: GU-P
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Acetone	<3.10		40.0	32.49		ug/L		81	31 - 150		
Acrolein	<3.60		94.8	66.67		ug/L		70	25 - 150		
Acrylonitrile	<2.20		200	168.4		ug/L		84	40 - 150		
Allyl chloride	<0.700		20.0	23.13		ug/L		116	28 - 150		
Benzene	<0.220		20.0	16.62		ug/L		83	46 - 130		
Bromochloromethane	<0.540		20.0	17.36		ug/L		87	57 - 130		
Bromodichloromethane	<0.390		20.0	16.70		ug/L		83	57 - 130		
Bromoform	<0.780		20.0	14.17		ug/L		71	44 - 130		
2-Butanone (MEK)	<2.10		40.0	30.78		ug/L		77	38 - 150		
Carbon disulfide	<0.450		20.0	19.33		ug/L		97	38 - 135		
Carbon tetrachloride	<0.650		20.0	15.12		ug/L		76	45 - 132		
Chlorobenzene	<0.400		20.0	16.71		ug/L		84	59 - 130		
Chlorodibromomethane	<0.750		20.0	13.79		ug/L		69	54 - 130		
Chloroform	<1.30		20.0	16.66		ug/L		83	51 - 130		
Chloroprene	<0.230		20.0	16.69		ug/L		83	43 - 133		
cis-1,2-Dichloroethene	<0.210		20.0	17.66		ug/L		88	45 - 130		
cis-1,3-Dichloropropene	<0.250		20.0	16.11		ug/L		81	53 - 130		
1,2-Dibromo-3-Chloropropane	<1.20		20.0	16.55		ug/L		83	38 - 150		
1,2-Dibromoethane (EDB)	<0.340		20.0	16.35		ug/L		82	60 - 130		
Dibromomethane	<0.330		20.0	15.57		ug/L		78	59 - 130		
1,2-Dichlorobenzene	<0.370		20.0	17.01		ug/L		85	59 - 130		
1,3-Dichlorobenzene	<0.300		20.0	16.70		ug/L		83	57 - 130		
1,4-Dichlorobenzene	<0.230		20.0	15.73		ug/L		79	57 - 130		
1,1-Dichloroethane	<0.220		20.0	17.75		ug/L		89	49 - 130		
1,2-Dichloroethane	<0.390		20.0	15.29		ug/L		76	51 - 130		
1,1-Dichloroethene	<0.560	*+	20.0	19.93		ug/L		100	37 - 132		
1,2-Dichloropropane	<0.270		20.0	17.56		ug/L		88	57 - 130		
1,3-Dichloropropane	<0.400		20.0	16.03		ug/L		80	56 - 130		
2,2-Dichloropropane	<0.690	F2	20.0	18.22		ug/L		91	25 - 150		
1,1-Dichloropropene	<0.430		20.0	15.82		ug/L		79	50 - 132		
Ethylbenzene	<0.310		20.0	16.43		ug/L		82	45 - 130		
Ethyl methacrylate	<0.680		20.0	16.93		ug/L		85	54 - 130		
2-Hexanone	<2.00		40.0	31.96		ug/L		80	46 - 140		
Iodomethane	<7.00		20.0	12.87		ug/L		64	10 - 150		
Methacrylonitrile	<3.30		200	163.5		ug/L		82	55 - 130		

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 310-279381-4 MS
Matrix: Ground Water
Analysis Batch: 419688

Client Sample ID: GU-P
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	<1.70		20.0	18.35		ug/L		92	37 - 150
Methyl methacrylate	<0.760		40.0	31.28		ug/L		78	44 - 139
4-Methyl-2-pentanone (MIBK)	<2.10		40.0	32.77		ug/L		82	47 - 139
Naphthalene	<3.00		20.0	16.15		ug/L		81	40 - 150
Propionitrile	<3.40		200	168.8		ug/L		84	49 - 135
Styrene	<0.370		20.0	17.31		ug/L		87	47 - 130
1,1,1,2-Tetrachloroethane	<0.380		20.0	15.89		ug/L		79	55 - 130
1,1,2,2-Tetrachloroethane	<0.470		20.0	15.27		ug/L		76	54 - 130
Tetrachloroethene	<0.480		20.0	16.83		ug/L		84	47 - 130
Toluene	<0.430		20.0	16.78		ug/L		84	51 - 130
trans-1,4-Dichloro-2-butene	<1.10		20.0	14.69		ug/L		73	26 - 150
trans-1,2-Dichloroethene	<0.270		20.0	17.39		ug/L		87	48 - 130
trans-1,3-Dichloropropene	<0.560		20.0	16.62		ug/L		83	50 - 130
1,2,4-Trichlorobenzene	<0.750		20.0	17.56		ug/L		88	55 - 130
1,1,1-Trichloroethane	<0.190		20.0	16.76		ug/L		84	52 - 130
1,1,2-Trichloroethane	<0.450		20.0	16.42		ug/L		82	58 - 130
Trichloroethene	<0.430		20.0	16.09		ug/L		80	51 - 130
1,2,3-Trichloropropane	<0.590		20.0	18.83		ug/L		94	49 - 130
Vinyl acetate	<2.50		40.0	31.26		ug/L		78	29 - 150
Xylenes, Total	<0.400		40.0	34.85		ug/L		87	43 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*73 - 130*
Toluene-d8 (Surr)	*104*		*80 - 120*

Lab Sample ID: 310-279381-4 MSD
Matrix: Ground Water
Analysis Batch: 419688

Client Sample ID: GU-P
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		40.0	29.05		ug/L		73	31 - 150	11	29
Acrolein	<3.60		94.8	75.18		ug/L		79	25 - 150	12	31
Acrylonitrile	<2.20		200	170.0		ug/L		85	40 - 150	1	20
Allyl chloride	<0.700		20.0	19.26		ug/L		96	28 - 150	18	35
Benzene	<0.220		20.0	15.79		ug/L		79	46 - 130	5	20
Bromochloromethane	<0.540		20.0	19.90		ug/L		100	57 - 130	14	20
Bromodichloromethane	<0.390		20.0	15.26		ug/L		76	57 - 130	9	20
Bromoform	<0.780		20.0	13.70		ug/L		69	44 - 130	3	20
2-Butanone (MEK)	<2.10		40.0	30.09		ug/L		75	38 - 150	2	20
Carbon disulfide	<0.450		20.0	17.71		ug/L		89	38 - 135	9	30
Carbon tetrachloride	<0.650		20.0	14.60		ug/L		73	45 - 132	3	20
Chlorobenzene	<0.400		20.0	16.06		ug/L		80	59 - 130	4	20
Chlorodibromomethane	<0.750		20.0	13.90		ug/L		69	54 - 130	1	20
Chloroform	<1.30		20.0	15.54		ug/L		78	51 - 130	7	20
Chloroprene	<0.230		20.0	16.01		ug/L		80	43 - 133	4	20
cis-1,2-Dichloroethene	<0.210		20.0	16.78		ug/L		84	45 - 130	5	20
cis-1,3-Dichloropropene	<0.250		20.0	15.77		ug/L		79	53 - 130	2	20

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 310-279381-4 MSD
Matrix: Ground Water
Analysis Batch: 419688

Client Sample ID: GU-P
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-Dibromo-3-Chloropropane	<1.20		20.0	17.19		ug/L		86	38 - 150	4	20
1,2-Dibromoethane (EDB)	<0.340		20.0	14.42		ug/L		72	60 - 130	13	20
Dibromomethane	<0.330		20.0	14.42		ug/L		72	59 - 130	8	20
1,2-Dichlorobenzene	<0.370		20.0	16.56		ug/L		83	59 - 130	3	20
1,3-Dichlorobenzene	<0.300		20.0	16.51		ug/L		83	57 - 130	1	20
1,4-Dichlorobenzene	<0.230		20.0	16.01		ug/L		80	57 - 130	2	20
1,1-Dichloroethane	<0.220		20.0	17.41		ug/L		87	49 - 130	2	20
1,2-Dichloroethane	<0.390		20.0	14.53		ug/L		73	51 - 130	5	20
1,1-Dichloroethene	<0.560	*+	20.0	17.96		ug/L		90	37 - 132	10	26
1,2-Dichloropropane	<0.270		20.0	17.07		ug/L		85	57 - 130	3	20
1,3-Dichloropropane	<0.400		20.0	14.97		ug/L		75	56 - 130	7	20
2,2-Dichloropropane	<0.690	F2	20.0	13.15	F2	ug/L		66	25 - 150	32	25
1,1-Dichloropropene	<0.430		20.0	15.91		ug/L		80	50 - 132	1	20
Ethylbenzene	<0.310		20.0	15.42		ug/L		77	45 - 130	6	20
Ethyl methacrylate	<0.680		20.0	15.86		ug/L		79	54 - 130	7	20
2-Hexanone	<2.00		40.0	30.17		ug/L		75	46 - 140	6	20
Iodomethane	<7.00		20.0	15.70		ug/L		79	10 - 150	20	35
Methacrylonitrile	<3.30		200	160.8		ug/L		80	55 - 130	2	20
Methylene Chloride	<1.70		20.0	17.81		ug/L		89	37 - 150	3	24
Methyl methacrylate	<0.760		40.0	32.07		ug/L		80	44 - 139	3	20
4-Methyl-2-pentanone (MIBK)	<2.10		40.0	32.44		ug/L		81	47 - 139	1	20
Naphthalene	<3.00		20.0	16.72		ug/L		84	40 - 150	3	30
Propionitrile	<3.40		200	169.5		ug/L		85	49 - 135	0	20
Styrene	<0.370		20.0	16.22		ug/L		81	47 - 130	7	20
1,1,1,2-Tetrachloroethane	<0.380		20.0	14.43		ug/L		72	55 - 130	10	20
1,1,2,2-Tetrachloroethane	<0.470		20.0	15.00		ug/L		75	54 - 130	2	20
Tetrachloroethene	<0.480		20.0	16.00		ug/L		80	47 - 130	5	20
Toluene	<0.430		20.0	15.50		ug/L		78	51 - 130	8	20
trans-1,4-Dichloro-2-butene	<1.10		20.0	12.87		ug/L		64	26 - 150	13	23
trans-1,2-Dichloroethene	<0.270		20.0	17.60		ug/L		88	48 - 130	1	22
trans-1,3-Dichloropropene	<0.560		20.0	14.79		ug/L		74	50 - 130	12	20
1,2,4-Trichlorobenzene	<0.750		20.0	17.41		ug/L		87	55 - 130	1	20
1,1,1-Trichloroethane	<0.190		20.0	16.13		ug/L		81	52 - 130	4	20
1,1,2-Trichloroethane	<0.450		20.0	16.39		ug/L		82	58 - 130	0	20
Trichloroethene	<0.430		20.0	15.54		ug/L		78	51 - 130	3	20
1,2,3-Trichloropropane	<0.590		20.0	14.53		ug/L		73	49 - 130	26	26
Vinyl acetate	<2.50		40.0	31.21		ug/L		78	29 - 150	0	23
Xylenes, Total	<0.400		40.0	32.17		ug/L		80	43 - 130	8	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*73 - 130*
Toluene-d8 (Surr)	*103*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-419842/5
Matrix: Water
Analysis Batch: 419842

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			04/25/24 12:15	1
Acrylonitrile	<2.20		5.00	2.20	ug/L			04/25/24 12:15	1
Benzene	<0.220		0.500	0.220	ug/L			04/25/24 12:15	1
Bromochloromethane	<0.540		5.00	0.540	ug/L			04/25/24 12:15	1
Bromodichloromethane	<0.390		1.00	0.390	ug/L			04/25/24 12:15	1
Bromoform	<0.780		5.00	0.780	ug/L			04/25/24 12:15	1
Bromomethane	<1.10		4.00	1.10	ug/L			04/25/24 12:15	1
2-Butanone (MEK)	<2.10		10.0	2.10	ug/L			04/25/24 12:15	1
Carbon disulfide	<0.450		1.00	0.450	ug/L			04/25/24 12:15	1
Carbon tetrachloride	<0.650		2.00	0.650	ug/L			04/25/24 12:15	1
Chlorobenzene	<0.400		1.00	0.400	ug/L			04/25/24 12:15	1
Chlorodibromomethane	<0.750		5.00	0.750	ug/L			04/25/24 12:15	1
Chloroethane	<0.790		4.00	0.790	ug/L			04/25/24 12:15	1
Chloroform	<1.30		3.00	1.30	ug/L			04/25/24 12:15	1
Chloromethane	<0.610		3.00	0.610	ug/L			04/25/24 12:15	1
cis-1,2-Dichloroethene	<0.210		1.00	0.210	ug/L			04/25/24 12:15	1
cis-1,3-Dichloropropene	<0.250		5.00	0.250	ug/L			04/25/24 12:15	1
1,2-Dibromo-3-Chloropropane	<1.20		5.00	1.20	ug/L			04/25/24 12:15	1
1,2-Dibromoethane (EDB)	<0.340		1.00	0.340	ug/L			04/25/24 12:15	1
Dibromomethane	<0.330		1.00	0.330	ug/L			04/25/24 12:15	1
1,2-Dichlorobenzene	<0.370		1.00	0.370	ug/L			04/25/24 12:15	1
1,4-Dichlorobenzene	<0.230		1.00	0.230	ug/L			04/25/24 12:15	1
1,1-Dichloroethane	<0.220		1.00	0.220	ug/L			04/25/24 12:15	1
1,2-Dichloroethane	<0.390		1.00	0.390	ug/L			04/25/24 12:15	1
1,1-Dichloroethene	<0.560		2.00	0.560	ug/L			04/25/24 12:15	1
1,2-Dichloropropane	<0.270		1.00	0.270	ug/L			04/25/24 12:15	1
Ethylbenzene	<0.310		1.00	0.310	ug/L			04/25/24 12:15	1
2-Hexanone	<2.00		10.0	2.00	ug/L			04/25/24 12:15	1
Iodomethane	<7.00		10.0	7.00	ug/L			04/25/24 12:15	1
Methylene Chloride	<1.70		5.00	1.70	ug/L			04/25/24 12:15	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			04/25/24 12:15	1
Styrene	<0.370		1.00	0.370	ug/L			04/25/24 12:15	1
1,1,1,2-Tetrachloroethane	<0.380		1.00	0.380	ug/L			04/25/24 12:15	1
1,1,2,2-Tetrachloroethane	<0.470		1.00	0.470	ug/L			04/25/24 12:15	1
Tetrachloroethene	<0.480		1.00	0.480	ug/L			04/25/24 12:15	1
Toluene	<0.430		1.00	0.430	ug/L			04/25/24 12:15	1
trans-1,4-Dichloro-2-butene	<1.10		10.0	1.10	ug/L			04/25/24 12:15	1
trans-1,2-Dichloroethene	<0.270		1.00	0.270	ug/L			04/25/24 12:15	1
trans-1,3-Dichloropropene	<0.560		5.00	0.560	ug/L			04/25/24 12:15	1
1,1,1-Trichloroethane	<0.190		1.00	0.190	ug/L			04/25/24 12:15	1
1,1,2-Trichloroethane	<0.450		1.00	0.450	ug/L			04/25/24 12:15	1
Trichloroethene	<0.430		1.00	0.430	ug/L			04/25/24 12:15	1
Trichlorofluoromethane	<0.380		4.00	0.380	ug/L			04/25/24 12:15	1
1,2,3-Trichloropropane	<0.590		5.00	0.590	ug/L			04/25/24 12:15	1
Vinyl acetate	<2.50		10.0	2.50	ug/L			04/25/24 12:15	1
Vinyl chloride	<0.180		1.00	0.180	ug/L			04/25/24 12:15	1
Xylenes, Total	<0.400		3.00	0.400	ug/L			04/25/24 12:15	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-419842/5
Matrix: Water
Analysis Batch: 419842

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*110*		*80 - 120*		*04/25/24 12:15*	*1*
Dibromofluoromethane (Surr)	*100*		*73 - 130*		*04/25/24 12:15*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*04/25/24 12:15*	*1*

Lab Sample ID: LCS 310-419842/6
Matrix: Water
Analysis Batch: 419842

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	40.18		ug/L		100	50 - 150
Acrylonitrile	200	208.5		ug/L		104	50 - 150
Benzene	20.0	20.09		ug/L		100	72 - 124
Bromochloromethane	20.0	18.13		ug/L		91	73 - 130
Bromodichloromethane	20.0	19.68		ug/L		98	74 - 122
Bromoform	20.0	17.61		ug/L		88	61 - 122
2-Butanone (MEK)	40.0	38.46		ug/L		96	50 - 150
Carbon disulfide	20.0	22.87		ug/L		114	59 - 135
Carbon tetrachloride	20.0	20.23		ug/L		101	67 - 132
Chlorobenzene	20.0	20.92		ug/L		105	76 - 120
Chlorodibromomethane	20.0	18.20		ug/L		91	71 - 121
Chloroform	20.0	20.25		ug/L		101	72 - 125
cis-1,2-Dichloroethene	20.0	20.71		ug/L		104	74 - 123
cis-1,3-Dichloropropene	20.0	20.21		ug/L		101	71 - 125
1,2-Dibromo-3-Chloropropane	20.0	24.56		ug/L		123	50 - 150
1,2-Dibromoethane (EDB)	20.0	19.36		ug/L		97	75 - 125
Dibromomethane	20.0	20.74		ug/L		104	74 - 125
1,2-Dichlorobenzene	20.0	21.31		ug/L		107	74 - 120
1,4-Dichlorobenzene	20.0	20.97		ug/L		105	72 - 120
1,1-Dichloroethane	20.0	20.18		ug/L		101	70 - 127
1,2-Dichloroethane	20.0	19.97		ug/L		100	71 - 125
1,1-Dichloroethene	20.0	23.32		ug/L		117	63 - 132
1,2-Dichloropropane	20.0	20.08		ug/L		100	73 - 124
Ethylbenzene	20.0	19.49		ug/L		97	74 - 122
2-Hexanone	40.0	38.46		ug/L		96	60 - 140
Iodomethane	20.0	13.09		ug/L		65	10 - 150
Methylene Chloride	20.0	21.62		ug/L		108	50 - 150
4-Methyl-2-pentanone (MIBK)	40.0	39.26		ug/L		98	60 - 139
Styrene	20.0	20.53		ug/L		103	74 - 121
1,1,1,2-Tetrachloroethane	20.0	19.04		ug/L		95	71 - 120
1,1,2,2-Tetrachloroethane	20.0	18.95		ug/L		95	68 - 124
Tetrachloroethene	20.0	21.49		ug/L		107	71 - 130
Toluene	20.0	20.18		ug/L		101	74 - 123
trans-1,4-Dichloro-2-butene	20.0	18.95		ug/L		95	50 - 150
trans-1,2-Dichloroethene	20.0	21.83		ug/L		109	70 - 126
trans-1,3-Dichloropropene	20.0	20.94		ug/L		105	69 - 123
1,1,1-Trichloroethane	20.0	20.96		ug/L		105	73 - 129
1,1,2-Trichloroethane	20.0	20.63		ug/L		103	73 - 123
Trichloroethene	20.0	19.19		ug/L		96	72 - 126

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-419842/6
Matrix: Water
Analysis Batch: 419842

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	21.14		ug/L		106	65 - 127
Vinyl acetate	40.0	40.81		ug/L		102	50 - 150
Xylenes, Total	40.0	41.39		ug/L		103	73 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*95*		*73 - 130*
Toluene-d8 (Surr)	*103*		*80 - 120*

Lab Sample ID: LCS 310-419842/7
Matrix: Water
Analysis Batch: 419842

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	15.38		ug/L		77	23 - 150
Chloroethane	20.0	18.43		ug/L		92	54 - 136
Chloromethane	20.0	18.87		ug/L		94	38 - 150
Trichlorofluoromethane	20.0	19.02		ug/L		95	54 - 149
Vinyl chloride	20.0	20.68		ug/L		103	56 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*73 - 130*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: 310-279381-1 MS
Matrix: Ground Water
Analysis Batch: 419842

Client Sample ID: GU-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	<3.10		40.0	46.77		ug/L		117	31 - 150
Acrylonitrile	<2.20		200	201.2		ug/L		101	40 - 150
Benzene	<0.220		20.0	19.33		ug/L		97	46 - 130
Bromochloromethane	<0.540		20.0	21.73		ug/L		109	57 - 130
Bromodichloromethane	<0.390		20.0	18.79		ug/L		94	57 - 130
Bromoform	<0.780		20.0	16.38		ug/L		82	44 - 130
2-Butanone (MEK)	<2.10		40.0	39.93		ug/L		100	38 - 150
Carbon disulfide	<0.450		20.0	22.96		ug/L		115	38 - 135
Carbon tetrachloride	<0.650		20.0	18.66		ug/L		93	45 - 132
Chlorobenzene	<0.400		20.0	19.26		ug/L		96	59 - 130
Chlorodibromomethane	<0.750		20.0	15.93		ug/L		80	54 - 130
Chloroform	<1.30		20.0	18.93		ug/L		95	51 - 130
cis-1,2-Dichloroethene	<0.210		20.0	20.07		ug/L		100	45 - 130
cis-1,3-Dichloropropene	<0.250		20.0	18.32		ug/L		92	53 - 130
1,2-Dibromo-3-Chloropropane	<1.20		20.0	19.39		ug/L		97	38 - 150
1,2-Dibromoethane (EDB)	<0.340		20.0	18.53		ug/L		93	60 - 130
Dibromomethane	<0.330	F2	20.0	19.76		ug/L		99	59 - 130
1,2-Dichlorobenzene	<0.370		20.0	19.43		ug/L		97	59 - 130

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 310-279381-1 MS
Matrix: Ground Water
Analysis Batch: 419842

Client Sample ID: GU-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dichlorobenzene	<0.230		20.0	19.22		ug/L		96	57 - 130
1,1-Dichloroethane	<0.220		20.0	20.56		ug/L		103	49 - 130
1,2-Dichloroethane	<0.390		20.0	19.39		ug/L		97	51 - 130
1,1-Dichloroethene	<0.560		20.0	23.07		ug/L		115	37 - 132
1,2-Dichloropropane	<0.270		20.0	20.03		ug/L		100	57 - 130
Ethylbenzene	<0.310		20.0	18.35		ug/L		92	45 - 130
2-Hexanone	<2.00		40.0	37.84		ug/L		95	46 - 140
Iodomethane	<7.00		20.0	13.97		ug/L		70	10 - 150
Methylene Chloride	<1.70		20.0	21.25		ug/L		106	37 - 150
4-Methyl-2-pentanone (MIBK)	<2.10		40.0	38.53		ug/L		96	47 - 139
Styrene	<0.370		20.0	19.12		ug/L		96	47 - 130
1,1,1,2-Tetrachloroethane	<0.380		20.0	17.49		ug/L		87	55 - 130
1,1,2,2-Tetrachloroethane	<0.470		20.0	18.55		ug/L		93	54 - 130
Tetrachloroethene	<0.480		20.0	19.37		ug/L		97	47 - 130
Toluene	<0.430		20.0	18.86		ug/L		94	51 - 130
trans-1,4-Dichloro-2-butene	<1.10		20.0	18.31		ug/L		92	26 - 150
trans-1,2-Dichloroethene	<0.270		20.0	20.89		ug/L		104	48 - 130
trans-1,3-Dichloropropene	<0.560		20.0	19.07		ug/L		95	50 - 130
1,1,1-Trichloroethane	<0.190		20.0	19.53		ug/L		98	52 - 130
1,1,2-Trichloroethane	<0.450		20.0	18.35		ug/L		92	58 - 130
Trichloroethene	<0.430		20.0	18.21		ug/L		91	51 - 130
1,2,3-Trichloropropane	<0.590		20.0	18.93		ug/L		95	49 - 130
Vinyl acetate	<2.50		40.0	36.53		ug/L		91	29 - 150
Xylenes, Total	<0.400		40.0	39.19		ug/L		98	43 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*73 - 130*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: 310-279381-1 MSD
Matrix: Ground Water
Analysis Batch: 419842

Client Sample ID: GU-1
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		40.0	40.82		ug/L		102	31 - 150	14	29
Acrylonitrile	<2.20		200	186.5		ug/L		93	40 - 150	8	20
Benzene	<0.220		20.0	18.84		ug/L		94	46 - 130	3	20
Bromochloromethane	<0.540		20.0	19.75		ug/L		99	57 - 130	10	20
Bromodichloromethane	<0.390		20.0	18.39		ug/L		92	57 - 130	2	20
Bromoform	<0.780		20.0	14.95		ug/L		75	44 - 130	9	20
2-Butanone (MEK)	<2.10		40.0	33.68		ug/L		84	38 - 150	17	20
Carbon disulfide	<0.450		20.0	20.87		ug/L		104	38 - 135	10	30
Carbon tetrachloride	<0.650		20.0	16.85		ug/L		84	45 - 132	10	20
Chlorobenzene	<0.400		20.0	18.81		ug/L		94	59 - 130	2	20
Chlorodibromomethane	<0.750		20.0	15.34		ug/L		77	54 - 130	4	20
Chloroform	<1.30		20.0	17.85		ug/L		89	51 - 130	6	20
cis-1,2-Dichloroethene	<0.210		20.0	19.67		ug/L		98	45 - 130	2	20

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 310-279381-1 MSD
Matrix: Ground Water
Analysis Batch: 419842

Client Sample ID: GU-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	<0.250		20.0	16.71		ug/L		84	53 - 130	9	20
1,2-Dibromo-3-Chloropropane	<1.20		20.0	16.02		ug/L		80	38 - 150	19	20
1,2-Dibromoethane (EDB)	<0.340		20.0	17.39		ug/L		87	60 - 130	6	20
Dibromomethane	<0.330	F2	20.0	16.09	F2	ug/L		80	59 - 130	21	20
1,2-Dichlorobenzene	<0.370		20.0	18.74		ug/L		94	59 - 130	4	20
1,4-Dichlorobenzene	<0.230		20.0	18.76		ug/L		94	57 - 130	2	20
1,1-Dichloroethane	<0.220		20.0	19.56		ug/L		98	49 - 130	5	20
1,2-Dichloroethane	<0.390		20.0	16.47		ug/L		82	51 - 130	16	20
1,1-Dichloroethene	<0.560		20.0	21.93		ug/L		110	37 - 132	5	26
1,2-Dichloropropane	<0.270		20.0	19.36		ug/L		97	57 - 130	3	20
Ethylbenzene	<0.310		20.0	18.54		ug/L		93	45 - 130	1	20
2-Hexanone	<2.00		40.0	35.17		ug/L		88	46 - 140	7	20
Iodomethane	<7.00		20.0	17.24		ug/L		86	10 - 150	21	35
Methylene Chloride	<1.70		20.0	20.71		ug/L		104	37 - 150	3	24
4-Methyl-2-pentanone (MIBK)	<2.10		40.0	36.76		ug/L		92	47 - 139	5	20
Styrene	<0.370		20.0	18.97		ug/L		95	47 - 130	1	20
1,1,1,2-Tetrachloroethane	<0.380		20.0	16.15		ug/L		81	55 - 130	8	20
1,1,2,2-Tetrachloroethane	<0.470		20.0	17.81		ug/L		89	54 - 130	4	20
Tetrachloroethene	<0.480		20.0	18.63		ug/L		93	47 - 130	4	20
Toluene	<0.430		20.0	18.52		ug/L		93	51 - 130	2	20
trans-1,4-Dichloro-2-butene	<1.10		20.0	15.21		ug/L		76	26 - 150	18	23
trans-1,2-Dichloroethene	<0.270		20.0	20.72		ug/L		104	48 - 130	1	22
trans-1,3-Dichloropropene	<0.560		20.0	18.67		ug/L		93	50 - 130	2	20
1,1,1-Trichloroethane	<0.190		20.0	19.35		ug/L		97	52 - 130	1	20
1,1,2-Trichloroethane	<0.450		20.0	18.68		ug/L		93	58 - 130	2	20
Trichloroethene	<0.430		20.0	17.46		ug/L		87	51 - 130	4	20
1,2,3-Trichloropropane	<0.590		20.0	19.68		ug/L		98	49 - 130	4	26
Vinyl acetate	<2.50		40.0	33.93		ug/L		85	29 - 150	7	23
Xylenes, Total	<0.400		40.0	38.40		ug/L		96	43 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*73 - 130*
Toluene-d8 (Surr)	*101*		*80 - 120*

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 310-419297/1-A
Matrix: Water
Analysis Batch: 420102

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 419297

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	<0.540		10.0	0.540	ug/L		04/19/24 12:30	04/29/24 11:13	1
1,3,5-Trinitrobenzene	<2.30		10.0	2.30	ug/L		04/19/24 12:30	04/29/24 11:13	1
1,3-Dinitrobenzene	<3.20		10.0	3.20	ug/L		04/19/24 12:30	04/29/24 11:13	1
1,4-Naphthoquinone	<3.60		10.0	3.60	ug/L		04/19/24 12:30	04/29/24 11:13	1
1,4-phenylenediamine	<1.90		10.0	1.90	ug/L		04/19/24 12:30	04/29/24 11:13	1
1-Naphthylamine	<2.50		10.0	2.50	ug/L		04/19/24 12:30	04/29/24 11:13	1
2,3,4,6-Tetrachlorophenol	<5.30		10.0	5.30	ug/L		04/19/24 12:30	04/29/24 11:13	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 310-419297/1-A
Matrix: Water
Analysis Batch: 420102

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 419297

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<5.30		10.0	5.30	ug/L		04/19/24 12:30	04/29/24 11:13	1
2,4,6-Trichlorophenol	<5.00		10.0	5.00	ug/L		04/19/24 12:30	04/29/24 11:13	1
2,4-Dichlorophenol	<0.850		10.0	0.850	ug/L		04/19/24 12:30	04/29/24 11:13	1
2,4-Dimethylphenol	<0.580		10.0	0.580	ug/L		04/19/24 12:30	04/29/24 11:13	1
2,4-Dinitrophenol	<13.0		20.0	13.0	ug/L		04/19/24 12:30	04/29/24 11:13	1
2,4-Dinitrotoluene	<6.40		10.0	6.40	ug/L		04/19/24 12:30	04/29/24 11:13	1
2,6-Dichlorophenol	<0.690		10.0	0.690	ug/L		04/19/24 12:30	04/29/24 11:13	1
2,6-Dinitrotoluene	<0.520		10.0	0.520	ug/L		04/19/24 12:30	04/29/24 11:13	1
2-Acetylaminofluorene	<2.70		10.0	2.70	ug/L		04/19/24 12:30	04/29/24 11:13	1
2-Chloronaphthalene	<0.640		10.0	0.640	ug/L		04/19/24 12:30	04/29/24 11:13	1
2-Chlorophenol	<0.540		10.0	0.540	ug/L		04/19/24 12:30	04/29/24 11:13	1
2-Methylnaphthalene	<0.590		10.0	0.590	ug/L		04/19/24 12:30	04/29/24 11:13	1
2-Methylphenol	<0.650		10.0	0.650	ug/L		04/19/24 12:30	04/29/24 11:13	1
2-Naphthylamine	<2.10		10.0	2.10	ug/L		04/19/24 12:30	04/29/24 11:13	1
2-Nitroaniline	<5.90		10.0	5.90	ug/L		04/19/24 12:30	04/29/24 11:13	1
2-Nitrophenol	<6.80		10.0	6.80	ug/L		04/19/24 12:30	04/29/24 11:13	1
3,3'-Dichlorobenzidine	<1.40		10.0	1.40	ug/L		04/19/24 12:30	04/29/24 11:13	1
3,3'-Dimethylbenzidine	<1.50		10.0	1.50	ug/L		04/19/24 12:30	04/29/24 11:13	1
3-Methylcholanthrene	<0.320		10.0	0.320	ug/L		04/19/24 12:30	04/29/24 11:13	1
3-Nitroaniline	<2.70		10.0	2.70	ug/L		04/19/24 12:30	04/29/24 11:13	1
4,6-Dinitro-2-methylphenol	<6.90		10.0	6.90	ug/L		04/19/24 12:30	04/29/24 11:13	1
4-Aminobiphenyl	<2.20		10.0	2.20	ug/L		04/19/24 12:30	04/29/24 11:13	1
4-Bromophenyl phenyl ether	<0.700		10.0	0.700	ug/L		04/19/24 12:30	04/29/24 11:13	1
4-Chloro-3-methylphenol	<0.840		10.0	0.840	ug/L		04/19/24 12:30	04/29/24 11:13	1
4-Chloroaniline	<0.620		10.0	0.620	ug/L		04/19/24 12:30	04/29/24 11:13	1
4-Chlorophenyl phenyl ether	<0.690		10.0	0.690	ug/L		04/19/24 12:30	04/29/24 11:13	1
Methylphenol, 3 & 4	<0.700		10.0	0.700	ug/L		04/19/24 12:30	04/29/24 11:13	1
4-Nitroaniline	<1.30		10.0	1.30	ug/L		04/19/24 12:30	04/29/24 11:13	1
4-Nitrophenol	<7.60		10.0	7.60	ug/L		04/19/24 12:30	04/29/24 11:13	1
5-Nitro-o-toluidine	<2.80		10.0	2.80	ug/L		04/19/24 12:30	04/29/24 11:13	1
7,12-Dimethylbenz(a)anthracene	<1.90		10.0	1.90	ug/L		04/19/24 12:30	04/29/24 11:13	1
Acenaphthene	<0.640		10.0	0.640	ug/L		04/19/24 12:30	04/29/24 11:13	1
Acenaphthylene	<0.720		10.0	0.720	ug/L		04/19/24 12:30	04/29/24 11:13	1
Acetophenone	<0.690		10.0	0.690	ug/L		04/19/24 12:30	04/29/24 11:13	1
Anthracene	<0.870		10.0	0.870	ug/L		04/19/24 12:30	04/29/24 11:13	1
Benzo[a]anthracene	<0.850		10.0	0.850	ug/L		04/19/24 12:30	04/29/24 11:13	1
Benzo[a]pyrene	<8.10		10.0	8.10	ug/L		04/19/24 12:30	04/29/24 11:13	1
Benzo[b]fluoranthene	<4.90		10.0	4.90	ug/L		04/19/24 12:30	04/29/24 11:13	1
Benzo[g,h,i]perylene	<6.30		10.0	6.30	ug/L		04/19/24 12:30	04/29/24 11:13	1
Benzo[k]fluoranthene	<2.20		10.0	2.20	ug/L		04/19/24 12:30	04/29/24 11:13	1
Benzyl alcohol	<1.30		10.0	1.30	ug/L		04/19/24 12:30	04/29/24 11:13	1
Bis(2-chloroethoxy)methane	<0.760		10.0	0.760	ug/L		04/19/24 12:30	04/29/24 11:13	1
Bis(2-chloroethyl)ether	<0.820		10.0	0.820	ug/L		04/19/24 12:30	04/29/24 11:13	1
bis (2-chloroisopropyl) ether	<0.540		10.0	0.540	ug/L		04/19/24 12:30	04/29/24 11:13	1
Bis(2-ethylhexyl) phthalate	<5.50		10.0	5.50	ug/L		04/19/24 12:30	04/29/24 11:13	1
Butyl benzyl phthalate	<5.40		10.0	5.40	ug/L		04/19/24 12:30	04/29/24 11:13	1
Chlorobenzilate	<3.60		10.0	3.60	ug/L		04/19/24 12:30	04/29/24 11:13	1
Chrysene	<0.870		10.0	0.870	ug/L		04/19/24 12:30	04/29/24 11:13	1
Diallate	<4.00		10.0	4.00	ug/L		04/19/24 12:30	04/29/24 11:13	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 310-419297/1-A
Matrix: Water
Analysis Batch: 420102

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 419297

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzo(a,h)anthracene	<3.90		10.0	3.90	ug/L		04/19/24 12:30	04/29/24 11:13	1
Dibenzofuran	<0.740		10.0	0.740	ug/L		04/19/24 12:30	04/29/24 11:13	1
Diethyl phthalate	<1.70		10.0	1.70	ug/L		04/19/24 12:30	04/29/24 11:13	1
Dimethoate	<3.60		10.0	3.60	ug/L		04/19/24 12:30	04/29/24 11:13	1
Dimethyl phthalate	<1.00		10.0	1.00	ug/L		04/19/24 12:30	04/29/24 11:13	1
Di-n-butyl phthalate	<5.60		10.0	5.60	ug/L		04/19/24 12:30	04/29/24 11:13	1
Di-n-octyl phthalate	<7.00		20.0	7.00	ug/L		04/19/24 12:30	04/29/24 11:13	1
Dinoseb	<2.40		10.0	2.40	ug/L		04/19/24 12:30	04/29/24 11:13	1
Diphenylamine	<6.00		10.0	6.00	ug/L		04/19/24 12:30	04/29/24 11:13	1
Disulfoton	<2.40		10.0	2.40	ug/L		04/19/24 12:30	04/29/24 11:13	1
Ethyl methanesulfonate	<3.60		10.0	3.60	ug/L		04/19/24 12:30	04/29/24 11:13	1
Ethyl Parathion	<2.20		10.0	2.20	ug/L		04/19/24 12:30	04/29/24 11:13	1
Famphur	<3.80		10.0	3.80	ug/L		04/19/24 12:30	04/29/24 11:13	1
Fluoranthene	<1.70		10.0	1.70	ug/L		04/19/24 12:30	04/29/24 11:13	1
Fluorene	<0.790		10.0	0.790	ug/L		04/19/24 12:30	04/29/24 11:13	1
Hexachlorobenzene	<0.700		10.0	0.700	ug/L		04/19/24 12:30	04/29/24 11:13	1
Hexachlorobutadiene	<0.860		10.0	0.860	ug/L		04/19/24 12:30	04/29/24 11:13	1
Hexachlorocyclopentadiene	<5.10		10.0	5.10	ug/L		04/19/24 12:30	04/29/24 11:13	1
Hexachloroethane	<0.970		10.0	0.970	ug/L		04/19/24 12:30	04/29/24 11:13	1
Hexachloropropene	<2.60		10.0	2.60	ug/L		04/19/24 12:30	04/29/24 11:13	1
Indeno[1,2,3-cd]pyrene	<4.20		10.0	4.20	ug/L		04/19/24 12:30	04/29/24 11:13	1
Isodrin	<4.70		10.0	4.70	ug/L		04/19/24 12:30	04/29/24 11:13	1
Isophorone	<0.930		10.0	0.930	ug/L		04/19/24 12:30	04/29/24 11:13	1
Isosafrole	<2.30		10.0	2.30	ug/L		04/19/24 12:30	04/29/24 11:13	1
Kepone	<1.00		10.0	1.00	ug/L		04/19/24 12:30	04/29/24 11:13	1
Methapyrilene	<0.760		10.0	0.760	ug/L		04/19/24 12:30	04/29/24 11:13	1
Methyl methanesulfonate	<3.30		10.0	3.30	ug/L		04/19/24 12:30	04/29/24 11:13	1
Methyl parathion	<2.30		10.0	2.30	ug/L		04/19/24 12:30	04/29/24 11:13	1
Nitrobenzene	<0.800		10.0	0.800	ug/L		04/19/24 12:30	04/29/24 11:13	1
N-Nitrosodiethylamine	<3.40		10.0	3.40	ug/L		04/19/24 12:30	04/29/24 11:13	1
N-Nitrosodimethylamine	<0.720		10.0	0.720	ug/L		04/19/24 12:30	04/29/24 11:13	1
N-Nitrosodi-n-butylamine	<3.90		10.0	3.90	ug/L		04/19/24 12:30	04/29/24 11:13	1
N-Nitrosodi-n-propylamine	<0.920		10.0	0.920	ug/L		04/19/24 12:30	04/29/24 11:13	1
N-Nitrosodiphenylamine	<0.750		10.0	0.750	ug/L		04/19/24 12:30	04/29/24 11:13	1
N-Nitrosomethylethylamine	<4.90		10.0	4.90	ug/L		04/19/24 12:30	04/29/24 11:13	1
N-Nitrosopiperidine	<2.70		10.0	2.70	ug/L		04/19/24 12:30	04/29/24 11:13	1
N-Nitrosopyrrolidine	<3.60		10.0	3.60	ug/L		04/19/24 12:30	04/29/24 11:13	1
o,o',o''-Triethylphosphorothioate	<3.20		10.0	3.20	ug/L		04/19/24 12:30	04/29/24 11:13	1
o-Toluidine	<2.90		10.0	2.90	ug/L		04/19/24 12:30	04/29/24 11:13	1
p-Dimethylamino azobenzene	<2.20		10.0	2.20	ug/L		04/19/24 12:30	04/29/24 11:13	1
Pentachlorobenzene	<2.80		10.0	2.80	ug/L		04/19/24 12:30	04/29/24 11:13	1
Pentachloronitrobenzene	<5.80		10.0	5.80	ug/L		04/19/24 12:30	04/29/24 11:13	1
Pentachlorophenol	<9.60		10.0	9.60	ug/L		04/19/24 12:30	04/29/24 11:13	1
Phenacetin	<1.90		10.0	1.90	ug/L		04/19/24 12:30	04/29/24 11:13	1
Phenanthrene	<0.790		10.0	0.790	ug/L		04/19/24 12:30	04/29/24 11:13	1
Phenol	<1.10		10.0	1.10	ug/L		04/19/24 12:30	04/29/24 11:13	1
Phorate	<3.20		10.0	3.20	ug/L		04/19/24 12:30	04/29/24 11:13	1
Pronamide	<2.70		10.0	2.70	ug/L		04/19/24 12:30	04/29/24 11:13	1
Pyrene	<0.790		10.0	0.790	ug/L		04/19/24 12:30	04/29/24 11:13	1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 310-419297/1-A
Matrix: Water
Analysis Batch: 420102

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 419297

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Safrole	<2.80		10.0	2.80	ug/L		04/19/24 12:30	04/29/24 11:13	1
Thionazin	<3.50		10.0	3.50	ug/L		04/19/24 12:30	04/29/24 11:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*85*		*25 - 110*	*04/19/24 12:30*	*04/29/24 11:13*	*1*
Phenol-d5 (Surr)	*82*		*21 - 110*	*04/19/24 12:30*	*04/29/24 11:13*	*1*
Nitrobenzene-d5 (Surr)	*128*		*45 - 129*	*04/19/24 12:30*	*04/29/24 11:13*	*1*
2-Fluorobiphenyl (Surr)	*120*	*S1+*	*39 - 118*	*04/19/24 12:30*	*04/29/24 11:13*	*1*
2,4,6-Tribromophenol (Surr)	*129*		*27 - 136*	*04/19/24 12:30*	*04/29/24 11:13*	*1*
Terphenyl-d14 (Surr)	*145*	*S1+*	*12 - 144*	*04/19/24 12:30*	*04/29/24 11:13*	*1*

Lab Sample ID: LCS 310-419297/2-A
Matrix: Water
Analysis Batch: 420102

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 419297

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4,5-Tetrachlorobenzene	100	75.32		ug/L		75	36 - 110
1,3,5-Trinitrobenzene	64.0	56.82		ug/L		89	39 - 144
1,3-Dinitrobenzene	100	69.61		ug/L		70	45 - 138
1,4-Naphthoquinone	64.0	70.94		ug/L		111	37 - 149
1,4-phenylenediamine	64.0	<1.90	*-	ug/L		-1	20 - 120
1-Naphthylamine	64.0	46.84		ug/L		73	19 - 110
2,3,4,6-Tetrachlorophenol	100	106.6		ug/L		107	33 - 134
2,4,5-Trichlorophenol	100	95.87		ug/L		96	35 - 133
2,4,6-Trichlorophenol	100	104.5		ug/L		105	28 - 139
2,4-Dichlorophenol	100	99.65		ug/L		100	41 - 124
2,4-Dimethylphenol	100	99.77		ug/L		100	31 - 142
2,4-Dinitrophenol	200	198.4		ug/L		99	10 - 138
2,4-Dinitrotoluene	100	99.35		ug/L		99	47 - 137
2,6-Dichlorophenol	100	94.10		ug/L		94	30 - 130
2,6-Dinitrotoluene	100	96.87		ug/L		97	51 - 130
2-Acetylaminofluorene	64.0	69.95		ug/L		109	35 - 150
2-Chloronaphthalene	100	79.02		ug/L		79	37 - 110
2-Chlorophenol	100	97.04		ug/L		97	44 - 117
2-Methylnaphthalene	100	79.45		ug/L		79	33 - 110
2-Methylphenol	100	89.27		ug/L		89	47 - 118
2-Naphthylamine	64.0	54.75		ug/L		86	18 - 127
2-Nitroaniline	100	99.65		ug/L		100	50 - 135
2-Nitrophenol	100	91.06		ug/L		91	41 - 129
3,3'-Dimethylbenzidine	64.0	9.125	J	ug/L		14	10 - 150
3-Methylcholanthrene	64.0	70.85		ug/L		111	43 - 150
3-Nitroaniline	100	109.3		ug/L		109	42 - 139
4,6-Dinitro-2-methylphenol	200	228.4		ug/L		114	22 - 143
4-Aminobiphenyl	64.0	58.28		ug/L		91	24 - 138
4-Bromophenyl phenyl ether	100	87.47		ug/L		87	45 - 119
4-Chloro-3-methylphenol	100	98.98		ug/L		99	49 - 130
4-Chloroaniline	100	102.0		ug/L		102	21 - 139
4-Chlorophenyl phenyl ether	100	85.79		ug/L		86	44 - 116

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 310-419297/2-A
Matrix: Water
Analysis Batch: 420102

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 419297

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylphenol, 3 & 4	100	87.98		ug/L		88	46 - 117
4-Nitroaniline	100	100.3		ug/L		100	31 - 145
4-Nitrophenol	200	114.7		ug/L		57	18 - 110
5-Nitro-o-toluidine	64.0	68.57		ug/L		107	47 - 145
7,12-Dimethylbenz(a)anthracene	64.0	62.76		ug/L		98	51 - 129
Acenaphthene	100	88.67		ug/L		89	43 - 110
Acenaphthylene	100	83.25		ug/L		83	40 - 110
Acetophenone	100	91.48		ug/L		91	48 - 119
Anthracene	100	94.24		ug/L		94	51 - 120
Benzo[a]anthracene	100	98.04		ug/L		98	51 - 123
Benzo[a]pyrene	100	99.49		ug/L		99	48 - 125
Benzo[b]fluoranthene	100	93.80		ug/L		94	49 - 129
Benzo[g,h,i]perylene	100	108.3		ug/L		108	43 - 139
Benzo[k]fluoranthene	100	96.74		ug/L		97	47 - 130
Benzyl alcohol	100	91.89		ug/L		92	39 - 128
Bis(2-chloroethoxy)methane	100	88.75		ug/L		89	48 - 121
Bis(2-chloroethyl)ether	100	89.37		ug/L		89	43 - 123
bis (2-chloroisopropyl) ether	100	73.87		ug/L		74	34 - 123
Bis(2-ethylhexyl) phthalate	100	108.1		ug/L		108	43 - 143
Butyl benzyl phthalate	100	98.39		ug/L		98	46 - 135
Chlorobenzilate	64.0	63.66		ug/L		99	52 - 138
Chrysene	100	100.1		ug/L		100	51 - 125
Diallate	64.0	57.65		ug/L		90	42 - 141
Dibenzo(a,h)anthracene	100	106.2		ug/L		106	38 - 149
Dibenzofuran	100	87.99		ug/L		88	45 - 112
Diethyl phthalate	100	111.1		ug/L		111	43 - 135
Dimethoate	64.0	81.08		ug/L		127	51 - 150
Dimethyl phthalate	100	106.4		ug/L		106	43 - 129
Di-n-butyl phthalate	100	105.3		ug/L		105	50 - 133
Di-n-octyl phthalate	100	110.7		ug/L		111	34 - 150
Dinoseb	64.0	73.66		ug/L		115	25 - 146
Disulfoton	64.0	50.87		ug/L		79	54 - 131
Ethyl methanesulfonate	64.0	56.70		ug/L		89	48 - 120
Ethyl Parathion	64.0	70.79		ug/L		111	52 - 149
Famphur	64.0	144.7	E *+	ug/L		226	44 - 150
Fluoranthene	100	98.05		ug/L		98	47 - 128
Fluorene	100	94.96		ug/L		95	45 - 119
Hexachlorobenzene	100	94.24		ug/L		94	48 - 119
Hexachlorobutadiene	100	76.70		ug/L		77	32 - 110
Hexachlorocyclopentadiene	100	32.53		ug/L		33	10 - 110
Hexachloroethane	100	60.92		ug/L		61	31 - 110
Hexachloropropene	64.0	27.43		ug/L		43	10 - 110
Indeno[1,2,3-cd]pyrene	100	112.1		ug/L		112	37 - 150
Isodrin	64.0	54.53		ug/L		85	52 - 125
Isophorone	100	83.18		ug/L		83	50 - 125
Methapyrilene	64.0	17.42		ug/L		27	10 - 110
Methyl methanesulfonate	64.0	46.57		ug/L		73	36 - 110
Methyl parathion	64.0	81.42		ug/L		127	50 - 150
Nitrobenzene	100	81.18		ug/L		81	47 - 116

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 310-419297/2-A
Matrix: Water
Analysis Batch: 420102

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 419297

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
N-Nitrosodiethylamine			64.0	58.92		ug/L		92	47 - 138		
N-Nitrosodimethylamine			100	66.91		ug/L		67	37 - 110		
N-Nitrosodi-n-butylamine			64.0	60.77		ug/L		95	52 - 142		
N-Nitrosodi-n-propylamine			100	92.49		ug/L		92	45 - 130		
N-Nitrosodiphenylamine			100	100.3		ug/L		100	49 - 121		
N-Nitrosomethylethylamine			64.0	57.61		ug/L		90	54 - 123		
N-Nitrosopiperidine			64.0	57.81		ug/L		90	60 - 127		
N-Nitrosopyrrolidine			64.0	62.14		ug/L		97	56 - 143		
o,o',o''-Triethylphosphorothioate			64.0	57.91		ug/L		90	45 - 113		
o-Toluidine			64.0	56.78		ug/L		89	24 - 142		
p-Dimethylamino azobenzene			64.0	64.89		ug/L		101	42 - 138		
Pentachlorobenzene			64.0	46.30		ug/L		72	33 - 110		
Pentachloronitrobenzene			64.0	65.62		ug/L		103	65 - 127		
Pentachlorophenol			200	182.3		ug/L		91	26 - 133		
Phenacetin			64.0	67.08		ug/L		105	56 - 146		
Phenanthrene			100	92.93		ug/L		93	51 - 117		
Phenol			100	58.73		ug/L		59	29 - 110		
Phorate			64.0	53.42		ug/L		83	57 - 135		
Pronamide			64.0	66.27		ug/L		104	61 - 144		
Pyrene			100	96.70		ug/L		97	48 - 127		
Safrole			64.0	51.37		ug/L		80	34 - 110		
Thionazin			64.0	65.65		ug/L		103	52 - 147		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol (Surr)	*70*		*25 - 110*
Phenol-d5 (Surr)	*66*		*21 - 110*
Nitrobenzene-d5 (Surr)	*95*		*45 - 129*
2-Fluorobiphenyl (Surr)	*89*		*39 - 118*
2,4,6-Tribromophenol (Surr)	*105*		*27 - 136*
Terphenyl-d14 (Surr)	*113*		*12 - 144*

Lab Sample ID: LCSD 310-419297/3-A
Matrix: Water
Analysis Batch: 420102

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 419297

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4,5-Tetrachlorobenzene			100	64.40		ug/L		64	36 - 110	16	35
1,3,5-Trinitrobenzene			64.0	53.98		ug/L		84	39 - 144	5	35
1,3-Dinitrobenzene			100	59.84		ug/L		60	45 - 138	15	35
1,4-Naphthoquinone			64.0	58.15		ug/L		91	37 - 149	20	29
1,4-phenylenediamine			64.0	<1.90	*- *1	ug/L		-0.5	20 - 120	82	35
1-Naphthylamine			64.0	50.69		ug/L		79	19 - 110	8	35
2,3,4,6-Tetrachlorophenol			100	88.87		ug/L		89	33 - 134	18	35
2,4,5-Trichlorophenol			100	80.94		ug/L		81	35 - 133	17	35
2,4,6-Trichlorophenol			100	85.63		ug/L		86	28 - 139	20	35
2,4-Dichlorophenol			100	79.77		ug/L		80	41 - 124	22	35
2,4-Dimethylphenol			100	80.84		ug/L		81	31 - 142	21	35
2,4-Dinitrophenol			200	134.2	*1	ug/L		67	10 - 138	39	35

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 310-419297/3-A
Matrix: Water
Analysis Batch: 420102

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 419297

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-Dinitrotoluene	100	84.25		ug/L		84	47 - 137	16	35
2,6-Dichlorophenol	100	79.23		ug/L		79	30 - 130	17	35
2,6-Dinitrotoluene	100	83.09		ug/L		83	51 - 130	15	35
2-Acetylaminofluorene	64.0	60.13		ug/L		94	35 - 150	15	28
2-Chloronaphthalene	100	63.93		ug/L		64	37 - 110	21	35
2-Chlorophenol	100	81.33		ug/L		81	44 - 117	18	35
2-Methylnaphthalene	100	64.63		ug/L		65	33 - 110	21	35
2-Methylphenol	100	78.14		ug/L		78	47 - 118	13	35
2-Naphthylamine	64.0	51.15		ug/L		80	18 - 127	7	35
2-Nitroaniline	100	86.02		ug/L		86	50 - 135	15	35
2-Nitrophenol	100	75.97		ug/L		76	41 - 129	18	35
3,3'-Dimethylbenzidine	64.0	28.28	*1	ug/L		44	10 - 150	102	35
3-Methylcholanthrene	64.0	63.36		ug/L		99	43 - 150	11	32
3-Nitroaniline	100	92.58		ug/L		93	42 - 139	17	35
4,6-Dinitro-2-methylphenol	200	189.1		ug/L		95	22 - 143	19	35
4-Aminobiphenyl	64.0	55.83		ug/L		87	24 - 138	4	35
4-Bromophenyl phenyl ether	100	76.53		ug/L		77	45 - 119	13	35
4-Chloro-3-methylphenol	100	80.16		ug/L		80	49 - 130	21	35
4-Chloroaniline	100	74.05		ug/L		74	21 - 139	32	35
4-Chlorophenyl phenyl ether	100	68.86		ug/L		69	44 - 116	22	35
Methylphenol, 3 & 4	100	78.14		ug/L		78	46 - 117	12	35
4-Nitroaniline	100	81.99		ug/L		82	31 - 145	20	35
4-Nitrophenol	200	102.3		ug/L		51	18 - 110	11	35
5-Nitro-o-toluidine	64.0	59.43		ug/L		93	47 - 145	14	31
7,12-Dimethylbenz(a)anthracene	64.0	56.71		ug/L		89	51 - 129	10	28
Acenaphthene	100	71.05		ug/L		71	43 - 110	22	35
Acenaphthylene	100	67.05		ug/L		67	40 - 110	22	35
Acetophenone	100	76.00		ug/L		76	48 - 119	18	35
Anthracene	100	81.94		ug/L		82	51 - 120	14	35
Benzo[a]anthracene	100	83.39		ug/L		83	51 - 123	16	35
Benzo[a]pyrene	100	84.90		ug/L		85	48 - 125	16	35
Benzo[b]fluoranthene	100	84.26		ug/L		84	49 - 129	11	35
Benzo[g,h,i]perylene	100	91.56		ug/L		92	43 - 139	17	35
Benzo[k]fluoranthene	100	85.65		ug/L		86	47 - 130	12	35
Benzyl alcohol	100	82.89		ug/L		83	39 - 128	10	35
Bis(2-chloroethoxy)methane	100	72.82		ug/L		73	48 - 121	20	35
Bis(2-chloroethyl)ether	100	74.38		ug/L		74	43 - 123	18	35
bis (2-chloroisopropyl) ether	100	60.66		ug/L		61	34 - 123	20	35
Bis(2-ethylhexyl) phthalate	100	94.02		ug/L		94	43 - 143	14	35
Butyl benzyl phthalate	100	83.93		ug/L		84	46 - 135	16	35
Chlorobenzilate	64.0	55.89		ug/L		87	52 - 138	13	28
Chrysene	100	83.79		ug/L		84	51 - 125	18	35
Diallate	64.0	48.00		ug/L		75	42 - 141	18	35
Dibenzo(a,h)anthracene	100	92.51		ug/L		93	38 - 149	14	35
Dibenzofuran	100	71.49		ug/L		71	45 - 112	21	35
Diethyl phthalate	100	93.28		ug/L		93	43 - 135	17	35
Dimethoate	64.0	70.04		ug/L		109	51 - 150	15	26
Dimethyl phthalate	100	92.71		ug/L		93	43 - 129	14	35
Di-n-butyl phthalate	100	92.87		ug/L		93	50 - 133	13	35

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 310-419297/3-A
Client Sample ID: Lab Control Sample Dup
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 420102
Prep Batch: 419297

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Di-n-octyl phthalate			100	95.67		ug/L		96	34 - 150	15	35
Dinoseb			64.0	62.79		ug/L		98	25 - 146	16	35
Disulfoton			64.0	46.20		ug/L		72	54 - 131	10	24
Ethyl methanesulfonate			64.0	51.64		ug/L		81	48 - 120	9	27
Ethyl Parathion			64.0	61.45		ug/L		96	52 - 149	14	26
Famphur			64.0	115.3	E *+	ug/L		180	44 - 150	23	35
Fluoranthene			100	88.43		ug/L		88	47 - 128	10	35
Fluorene			100	75.97		ug/L		76	45 - 119	22	35
Hexachlorobenzene			100	81.85		ug/L		82	48 - 119	14	35
Hexachlorobutadiene			100	65.28		ug/L		65	32 - 110	16	35
Hexachlorocyclopentadiene			100	28.18		ug/L		28	10 - 110	14	35
Hexachloroethane			100	51.58		ug/L		52	31 - 110	17	35
Hexachloropropene			64.0	25.58		ug/L		40	10 - 110	7	35
Indeno[1,2,3-cd]pyrene			100	99.23		ug/L		99	37 - 150	12	35
Isodrin			64.0	53.21		ug/L		83	52 - 125	2	26
Isophorone			100	69.97		ug/L		70	50 - 125	17	35
Methapyrilene			64.0	33.17	*1	ug/L		52	10 - 110	62	35
Methyl methanesulfonate			64.0	41.06		ug/L		64	36 - 110	13	26
Methyl parathion			64.0	70.39		ug/L		110	50 - 150	15	25
Nitrobenzene			100	66.90		ug/L		67	47 - 116	19	35
N-Nitrosodiethylamine			64.0	52.51		ug/L		82	47 - 138	12	26
N-Nitrosodimethylamine			100	58.51		ug/L		59	37 - 110	13	35
N-Nitrosodi-n-butylamine			64.0	54.36		ug/L		85	52 - 142	11	27
N-Nitrosodi-n-propylamine			100	79.09		ug/L		79	45 - 130	16	35
N-Nitrosodiphenylamine			100	83.85		ug/L		84	49 - 121	18	35
N-Nitrosomethylethylamine			64.0	50.17		ug/L		78	54 - 123	14	26
N-Nitrosopiperidine			64.0	51.20		ug/L		80	60 - 127	12	26
N-Nitrosopyrrolidine			64.0	55.26		ug/L		86	56 - 143	12	25
o,o',o''-Triethylphosphorothioate			64.0	46.03		ug/L		72	45 - 113	23	33
o-Toluidine			64.0	51.33		ug/L		80	24 - 142	10	35
p-Dimethylamino azobenzene			64.0	56.40		ug/L		88	42 - 138	14	29
Pentachlorobenzene			64.0	39.66		ug/L		62	33 - 110	15	35
Pentachloronitrobenzene			64.0	62.51		ug/L		98	65 - 127	5	29
Pentachlorophenol			200	137.5		ug/L		69	26 - 133	28	35
Phenacetin			64.0	60.15		ug/L		94	56 - 146	11	25
Phenanthrene			100	81.21		ug/L		81	51 - 117	13	35
Phenol			100	51.61		ug/L		52	29 - 110	13	35
Phorate			64.0	43.90		ug/L		69	57 - 135	20	26
Pronamide			64.0	57.10		ug/L		89	61 - 144	15	27
Pyrene			100	80.55		ug/L		81	48 - 127	18	35
Safrole			64.0	40.49		ug/L		63	34 - 110	24	35
Thionazin			64.0	54.44		ug/L		85	52 - 147	19	28

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorophenol (Surr)	*66*		*25 - 110*
Phenol-d5 (Surr)	*62*		*21 - 110*
Nitrobenzene-d5 (Surr)	*89*		*45 - 129*
2-Fluorobiphenyl (Surr)	*78*		*39 - 118*

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 310-419297/3-A
Matrix: Water
Analysis Batch: 420102

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 419297

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	*98*		*27 - 136*
Terphenyl-d14 (Surr)	*102*		*12 - 144*

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Lab Sample ID: MB 310-419362/4
Matrix: Water
Analysis Batch: 419362

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	<2.60		10.0	2.60	mg/L			04/20/24 09:53	1
Isobutanol	<2.40		10.0	2.40	mg/L			04/20/24 09:53	1

Lab Sample ID: LCS 310-419362/5
Matrix: Water
Analysis Batch: 419362

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Acetonitrile			113	130.6		mg/L		115	67 - 132		
Isobutanol			104	106.0		mg/L		102	80 - 121		

Lab Sample ID: 310-279381-13 MS
Matrix: Ground Water
Analysis Batch: 419362

Client Sample ID: MW-26A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Acetonitrile	<2.60		113	129.6		mg/L		114	60 - 138		
Isobutanol	<2.40		104	103.3		mg/L		99	72 - 131		

Lab Sample ID: 310-279381-13 MSD
Matrix: Ground Water
Analysis Batch: 419362

Client Sample ID: MW-26A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetonitrile	<2.60		113	124.6		mg/L		110	60 - 138	4	30
Isobutanol	<2.40		104	101.3		mg/L		97	72 - 131	2	30

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 310-419457/1-A
Matrix: Water
Analysis Batch: 420085

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 419457

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.0270		0.0640	0.0270	ug/L		04/22/24 11:33	04/29/24 11:37	1
4,4'-DDE	<0.0270		0.0640	0.0270	ug/L		04/22/24 11:33	04/29/24 11:37	1
4,4'-DDT	<0.0420		0.0640	0.0420	ug/L		04/22/24 11:33	04/29/24 11:37	1
Aldrin	<0.0320		0.0640	0.0320	ug/L		04/22/24 11:33	04/29/24 11:37	1
alpha-BHC	<0.0290		0.0640	0.0290	ug/L		04/22/24 11:33	04/29/24 11:37	1
beta-BHC	<0.0370		0.0640	0.0370	ug/L		04/22/24 11:33	04/29/24 11:37	1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 310-419457/1-A
Matrix: Water
Analysis Batch: 420085

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 419457

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	<0.810		2.00	0.810	ug/L		04/22/24 11:33	04/29/24 11:37	1
delta-BHC	<0.0270		0.0640	0.0270	ug/L		04/22/24 11:33	04/29/24 11:37	1
Dieldrin	<0.0260		0.0640	0.0260	ug/L		04/22/24 11:33	04/29/24 11:37	1
Endosulfan I	<0.0330		0.0640	0.0330	ug/L		04/22/24 11:33	04/29/24 11:37	1
Endosulfan II	<0.0290		0.0640	0.0290	ug/L		04/22/24 11:33	04/29/24 11:37	1
Endosulfan sulfate	<0.0300		0.0640	0.0300	ug/L		04/22/24 11:33	04/29/24 11:37	1
Endrin	<0.0260		0.0640	0.0260	ug/L		04/22/24 11:33	04/29/24 11:37	1
Endrin aldehyde	<0.0290		0.0640	0.0290	ug/L		04/22/24 11:33	04/29/24 11:37	1
gamma-BHC (Lindane)	<0.0360		0.0640	0.0360	ug/L		04/22/24 11:33	04/29/24 11:37	1
Heptachlor	<0.0330		0.0640	0.0330	ug/L		04/22/24 11:33	04/29/24 11:37	1
Heptachlor epoxide	<0.0290		0.0640	0.0290	ug/L		04/22/24 11:33	04/29/24 11:37	1
Methoxychlor	<0.0410		0.0640	0.0410	ug/L		04/22/24 11:33	04/29/24 11:37	1
Toxaphene	<0.690		2.00	0.690	ug/L		04/22/24 11:33	04/29/24 11:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*81*		*10 - 136*	*04/22/24 11:33*	*04/29/24 11:37*	*1*
Tetrachloro-m-xylene	*66*		*10 - 130*	*04/22/24 11:33*	*04/29/24 11:37*	*1*
Tetrachloro-m-xylene (Surr)	*66*		*10 - 130*	*04/22/24 11:33*	*04/29/24 11:37*	*1*

Lab Sample ID: LCS 310-419457/2-A
Matrix: Water
Analysis Batch: 420085

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 419457

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	1.00	0.7624		ug/L		76	36 - 149
4,4'-DDE	1.00	0.7064		ug/L		71	34 - 130
4,4'-DDT	1.00	0.7844		ug/L		78	23 - 150
Aldrin	1.00	0.5033		ug/L		50	13 - 120
alpha-BHC	1.00	0.7464		ug/L		75	36 - 127
beta-BHC	1.00	0.7425		ug/L		74	37 - 136
delta-BHC	1.00	0.7129		ug/L		71	33 - 134
Dieldrin	1.00	0.8081		ug/L		81	39 - 130
Endosulfan I	1.00	0.4442		ug/L		44	10 - 120
Endosulfan II	1.00	0.5222		ug/L		52	14 - 120
Endosulfan sulfate	1.00	0.9430		ug/L		94	36 - 147
Endrin	1.00	0.7593		ug/L		76	39 - 140
Endrin aldehyde	1.00	0.7444		ug/L		74	32 - 137
gamma-BHC (Lindane)	1.00	0.7054		ug/L		71	36 - 132
Heptachlor	1.00	0.6250		ug/L		63	27 - 120
Heptachlor epoxide	1.00	0.7414		ug/L		74	38 - 133
Methoxychlor	1.00	0.7705		ug/L		77	10 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*75*		*10 - 136*
Tetrachloro-m-xylene	*71*		*10 - 130*
Tetrachloro-m-xylene (Surr)	*71*		*10 - 130*

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCSD 310-419457/3-A
Matrix: Water
Analysis Batch: 420085

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 419457

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4,4'-DDD			1.00	0.7751		ug/L		78	36 - 149	2	35
4,4'-DDE			1.00	0.7063		ug/L		71	34 - 130	0	35
4,4'-DDT			1.00	0.7993		ug/L		80	23 - 150	2	35
Aldrin			1.00	0.4893		ug/L		49	13 - 120	3	35
alpha-BHC			1.00	0.7567		ug/L		76	36 - 127	1	35
beta-BHC			1.00	0.7413		ug/L		74	37 - 136	0	35
delta-BHC			1.00	0.7168		ug/L		72	33 - 134	1	35
Dieldrin			1.00	0.8144		ug/L		81	39 - 130	1	35
Endosulfan I			1.00	0.4477		ug/L		45	10 - 120	1	35
Endosulfan II			1.00	0.5274		ug/L		53	14 - 120	1	35
Endosulfan sulfate			1.00	0.9378		ug/L		94	36 - 147	1	35
Endrin			1.00	0.7603		ug/L		76	39 - 140	0	35
Endrin aldehyde			1.00	0.7365		ug/L		74	32 - 137	1	35
gamma-BHC (Lindane)			1.00	0.7146		ug/L		71	36 - 132	1	35
Heptachlor			1.00	0.6103		ug/L		61	27 - 120	2	35
Heptachlor epoxide			1.00	0.7483		ug/L		75	38 - 133	1	35
Methoxychlor			1.00	0.7686		ug/L		77	10 - 150	0	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*80*		*10 - 136*
Tetrachloro-m-xylene	*70*		*10 - 130*
Tetrachloro-m-xylene (Surr)	*70*		*10 - 130*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 310-419457/1-A
Matrix: Water
Analysis Batch: 420084

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 419457

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.170		0.800	0.170	ug/L		04/22/24 11:33	04/29/24 11:37	1
PCB-1221	<0.170		0.800	0.170	ug/L		04/22/24 11:33	04/29/24 11:37	1
PCB-1232	<0.170		0.800	0.170	ug/L		04/22/24 11:33	04/29/24 11:37	1
PCB-1242	<0.170		0.800	0.170	ug/L		04/22/24 11:33	04/29/24 11:37	1
PCB-1248	<0.110		0.800	0.110	ug/L		04/22/24 11:33	04/29/24 11:37	1
PCB-1254	<0.110		0.800	0.110	ug/L		04/22/24 11:33	04/29/24 11:37	1
PCB-1260	<0.110		0.800	0.110	ug/L		04/22/24 11:33	04/29/24 11:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*81*		*10 - 136*	*04/22/24 11:33*	*04/29/24 11:37*	*1*
Tetrachloro-m-xylene	*66*		*10 - 130*	*04/22/24 11:33*	*04/29/24 11:37*	*1*

Lab Sample ID: LCS 310-419457/4-A
Matrix: Water
Analysis Batch: 420084

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 419457

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016			10.0	7.075		ug/L		71	30 - 133		

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 310-419457/4-A
Matrix: Water
Analysis Batch: 420084

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 419457

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1260			10.0	7.151		ug/L		72	31 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*76*		*10 - 136*
Tetrachloro-m-xylene	*66*		*10 - 130*

Lab Sample ID: LCSD 310-419457/5-A
Matrix: Water
Analysis Batch: 420084

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 419457

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016			10.0	6.717		ug/L		67	30 - 133	5	35
PCB-1260			10.0	7.278		ug/L		73	31 - 133	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*70*		*10 - 136*
Tetrachloro-m-xylene	*59*		*10 - 130*

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 410-498161/1-A
Matrix: Water
Analysis Batch: 498344

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 498161

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	<0.0650		0.150	0.0650	ug/L		04/24/24 14:51	04/25/24 04:53	1
Silvex (2,4,5-TP)	<0.0220		0.0500	0.0220	ug/L		04/24/24 14:51	04/25/24 04:53	1
2,4-D	<0.250		0.600	0.250	ug/L		04/24/24 14:51	04/25/24 04:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid (Surr)	*69*		*34 - 142*	*04/24/24 14:51*	*04/25/24 04:53*	*1*
2,4-Dichlorophenylacetic acid (Surr)	*72*		*34 - 142*	*04/24/24 14:51*	*04/25/24 04:53*	*1*

Lab Sample ID: LCS 410-498161/2-A
Matrix: Water
Analysis Batch: 498344

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 498161

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4,5-T			0.250	0.2688		ug/L		108	57 - 171		
Silvex (2,4,5-TP)			0.250	0.2922		ug/L		117	62 - 170		
2,4-D			2.51	2.189		ug/L		87	53 - 159		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid (Surr)	*79*		*34 - 142*
2,4-Dichlorophenylacetic acid (Surr)	*87*		*34 - 142*

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: 280-190404-A-4-A MS
Matrix: Water
Analysis Batch: 498344

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 498161

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-T	<0.0611		0.235	0.2057		ug/L		88	57 - 171
Silvex (2,4,5-TP)	<0.0207		0.235	0.2209		ug/L		94	62 - 170
2,4-D	<0.235		2.35	1.631		ug/L		69	53 - 159

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid (Surr)	*64*		*34 - 142*
2,4-Dichlorophenylacetic acid (Surr)	*73*		*34 - 142*

Lab Sample ID: 280-190404-A-4-B MSD
Matrix: Water
Analysis Batch: 498344

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 498161

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4,5-T	<0.0611		0.234	0.1882		ug/L		81	57 - 171	9	30
Silvex (2,4,5-TP)	<0.0207		0.234	0.1879		ug/L		80	62 - 170	16	30
2,4-D	<0.235		2.34	1.472		ug/L		63	53 - 159	10	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid (Surr)	*61*		*34 - 142*
2,4-Dichlorophenylacetic acid (Surr)	*67*		*34 - 142*

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-419336/1-A
Matrix: Water
Analysis Batch: 420080

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 419336

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/22/24 09:00	04/26/24 15:36	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		04/22/24 09:00	04/26/24 15:36	1
Barium	<0.000660		0.00200	0.000660	mg/L		04/22/24 09:00	04/26/24 15:36	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		04/22/24 09:00	04/26/24 15:36	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		04/22/24 09:00	04/26/24 15:36	1
Chromium	<0.00120		0.00500	0.00120	mg/L		04/22/24 09:00	04/26/24 15:36	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 15:36	1
Copper	<0.00180		0.00500	0.00180	mg/L		04/22/24 09:00	04/26/24 15:36	1
Lead	<0.000260		0.000500	0.000260	mg/L		04/22/24 09:00	04/26/24 15:36	1
Nickel	<0.00210		0.00500	0.00210	mg/L		04/22/24 09:00	04/26/24 15:36	1
Selenium	<0.00140		0.00500	0.00140	mg/L		04/22/24 09:00	04/26/24 15:36	1
Silver	<0.000500		0.00100	0.000500	mg/L		04/22/24 09:00	04/26/24 15:36	1
Thallium	<0.000570		0.00100	0.000570	mg/L		04/22/24 09:00	04/26/24 15:36	1
Tin	<0.00230		0.00500	0.00230	mg/L		04/22/24 09:00	04/26/24 15:36	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		04/22/24 09:00	04/26/24 15:36	1
Zinc	<0.00970		0.0200	0.00970	mg/L		04/22/24 09:00	04/26/24 15:36	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 310-419336/2-A
Matrix: Water
Analysis Batch: 420080

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 419336

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.200	0.2153		mg/L		108	80 - 120
Arsenic	0.200	0.2085		mg/L		104	80 - 120
Barium	0.100	0.1095		mg/L		109	80 - 120
Beryllium	0.100	0.1004		mg/L		100	80 - 120
Cadmium	0.100	0.09883		mg/L		99	80 - 120
Chromium	0.100	0.09727		mg/L		97	80 - 120
Cobalt	0.100	0.1085		mg/L		108	80 - 120
Copper	0.200	0.2143		mg/L		107	80 - 120
Lead	0.200	0.2125		mg/L		106	80 - 120
Nickel	0.200	0.2118		mg/L		106	80 - 120
Selenium	0.400	0.4010		mg/L		100	80 - 120
Silver	0.100	0.1095		mg/L		109	80 - 120
Thallium	0.100	0.1121		mg/L		112	80 - 120
Tin	0.200	0.2169		mg/L		108	80 - 120
Vanadium	0.100	0.09285		mg/L		93	80 - 120
Zinc	0.200	0.1908		mg/L		95	80 - 120

Lab Sample ID: 310-279381-1 MS
Matrix: Ground Water
Analysis Batch: 420080

Client Sample ID: GU-1
Prep Type: Total/NA
Prep Batch: 419336

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<0.00100		0.200	0.2168		mg/L		108	75 - 125
Arsenic	0.00735		0.200	0.2197		mg/L		106	75 - 125
Barium	0.488		0.100	0.6213	4	mg/L		133	75 - 125
Beryllium	<0.000330		0.100	0.1076		mg/L		108	75 - 125
Cadmium	<0.000100		0.100	0.1010		mg/L		101	75 - 125
Chromium	0.00187	J	0.100	0.09721		mg/L		95	75 - 125
Cobalt	0.00289		0.100	0.1065		mg/L		104	75 - 125
Copper	<0.00180		0.200	0.1991		mg/L		100	75 - 125
Lead	<0.000260		0.200	0.2039		mg/L		102	75 - 125
Nickel	0.0463		0.200	0.2462		mg/L		100	75 - 125
Selenium	<0.00140		0.400	0.4105		mg/L		103	75 - 125
Silver	<0.000500		0.100	0.1069		mg/L		107	75 - 125
Thallium	<0.000570		0.100	0.1106		mg/L		111	75 - 125
Tin	<0.00230		0.200	0.2096		mg/L		105	75 - 125
Vanadium	<0.00110		0.100	0.09535		mg/L		95	75 - 125
Zinc	<0.00970		0.200	0.2008		mg/L		100	75 - 125

Lab Sample ID: 310-279381-1 MSD
Matrix: Ground Water
Analysis Batch: 420080

Client Sample ID: GU-1
Prep Type: Total/NA
Prep Batch: 419336

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<0.00100		0.200	0.2095		mg/L		105	75 - 125	3	20
Arsenic	0.00735		0.200	0.2165		mg/L		105	75 - 125	1	20
Barium	0.488		0.100	0.6070	4	mg/L		119	75 - 125	2	20
Beryllium	<0.000330		0.100	0.1027		mg/L		103	75 - 125	5	20
Cadmium	<0.000100		0.100	0.09662		mg/L		97	75 - 125	4	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 310-279381-1 MSD
Matrix: Ground Water
Analysis Batch: 420080

Client Sample ID: GU-1
Prep Type: Total/NA
Prep Batch: 419336

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium	0.00187	J	0.100	0.09571		mg/L		94	75 - 125	2	20
Cobalt	0.00289		0.100	0.1036		mg/L		101	75 - 125	3	20
Copper	<0.00180		0.200	0.1968		mg/L		98	75 - 125	1	20
Lead	<0.000260		0.200	0.1972		mg/L		99	75 - 125	3	20
Nickel	0.0463		0.200	0.2417		mg/L		98	75 - 125	2	20
Selenium	<0.00140		0.400	0.4036		mg/L		101	75 - 125	2	20
Silver	<0.000500		0.100	0.1073		mg/L		107	75 - 125	0	20
Thallium	<0.000570		0.100	0.1109		mg/L		111	75 - 125	0	20
Tin	<0.00230		0.200	0.2050		mg/L		102	75 - 125	2	20
Vanadium	<0.00110		0.100	0.09328		mg/L		93	75 - 125	2	20
Zinc	<0.00970		0.200	0.1981		mg/L		99	75 - 125	1	20

Lab Sample ID: 310-279381-11 DU
Matrix: Ground Water
Analysis Batch: 420080

Client Sample ID: MW-22
Prep Type: Total/NA
Prep Batch: 419336

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<0.00100		<0.00100		mg/L		NC	20
Arsenic	0.00281		0.002893		mg/L		3	20
Barium	1.06		1.093		mg/L		3	20
Beryllium	<0.000330		<0.000330		mg/L		NC	20
Cadmium	<0.000100		<0.000100		mg/L		NC	20
Chromium	<0.00120		<0.00120		mg/L		NC	20
Cobalt	0.000278	J	0.0002840	J	mg/L		2	20
Copper	<0.00180		<0.00180		mg/L		NC	20
Lead	<0.000260		<0.000260		mg/L		NC	20
Nickel	0.0333		0.03429		mg/L		3	20
Selenium	<0.00140		<0.00140		mg/L		NC	20
Silver	<0.000500		<0.000500		mg/L		NC	20
Thallium	<0.000570		<0.000570		mg/L		NC	20
Tin	<0.00230		<0.00230		mg/L		NC	20
Vanadium	<0.00110		<0.00110		mg/L		NC	20
Zinc	<0.00970		<0.00970		mg/L		NC	20

Lab Sample ID: MB 310-419339/1-A
Matrix: Water
Analysis Batch: 420080

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 419339

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		04/22/24 09:00	04/26/24 17:01	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		04/22/24 09:00	04/26/24 17:01	1
Barium	<0.000660		0.00200	0.000660	mg/L		04/22/24 09:00	04/26/24 17:01	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		04/22/24 09:00	04/26/24 17:01	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		04/22/24 09:00	04/26/24 17:01	1
Chromium	<0.00120		0.00500	0.00120	mg/L		04/22/24 09:00	04/26/24 17:01	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		04/22/24 09:00	04/26/24 17:01	1
Copper	<0.00180		0.00500	0.00180	mg/L		04/22/24 09:00	04/26/24 17:01	1
Lead	<0.000260		0.000500	0.000260	mg/L		04/22/24 09:00	04/26/24 17:01	1
Nickel	<0.00210		0.00500	0.00210	mg/L		04/22/24 09:00	04/26/24 17:01	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 310-419339/1-A
Matrix: Water
Analysis Batch: 420080

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 419339

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	<0.00140		0.00500	0.00140	mg/L		04/22/24 09:00	04/26/24 17:01	1
Silver	<0.000500		0.00100	0.000500	mg/L		04/22/24 09:00	04/26/24 17:01	1
Thallium	<0.000570		0.00100	0.000570	mg/L		04/22/24 09:00	04/26/24 17:01	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		04/22/24 09:00	04/26/24 17:01	1
Zinc	<0.00970		0.0200	0.00970	mg/L		04/22/24 09:00	04/26/24 17:01	1

Lab Sample ID: LCS 310-419339/2-A
Matrix: Water
Analysis Batch: 420080

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 419339

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.200	0.2131		mg/L		107	80 - 120
Arsenic	0.200	0.2054		mg/L		103	80 - 120
Barium	0.100	0.1085		mg/L		108	80 - 120
Beryllium	0.100	0.09948		mg/L		99	80 - 120
Cadmium	0.100	0.09696		mg/L		97	80 - 120
Chromium	0.100	0.09562		mg/L		96	80 - 120
Cobalt	0.100	0.1080		mg/L		108	80 - 120
Copper	0.200	0.2110		mg/L		105	80 - 120
Lead	0.200	0.2124		mg/L		106	80 - 120
Nickel	0.200	0.2071		mg/L		104	80 - 120
Selenium	0.400	0.3976		mg/L		99	80 - 120
Silver	0.100	0.1056		mg/L		106	80 - 120
Thallium	0.100	0.1101		mg/L		110	80 - 120
Vanadium	0.100	0.09230		mg/L		92	80 - 120
Zinc	0.200	0.1861		mg/L		93	80 - 120

Lab Sample ID: 310-279381-20 MS
Matrix: Ground Water
Analysis Batch: 420080

Client Sample ID: MW-29
Prep Type: Total/NA
Prep Batch: 419339

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<0.00100		0.200	0.2143		mg/L		107	75 - 125
Arsenic	0.00210		0.200	0.2115		mg/L		105	75 - 125
Barium	0.356	F1	0.100	0.5174	F1	mg/L		161	75 - 125
Beryllium	<0.000330		0.100	0.1079		mg/L		108	75 - 125
Cadmium	<0.000100		0.100	0.1015		mg/L		102	75 - 125
Chromium	<0.00120		0.100	0.09481		mg/L		95	75 - 125
Cobalt	0.00495		0.100	0.1086		mg/L		104	75 - 125
Copper	<0.00180		0.200	0.2031		mg/L		102	75 - 125
Lead	<0.000260		0.200	0.2064		mg/L		103	75 - 125
Nickel	0.00907		0.200	0.2090		mg/L		100	75 - 125
Selenium	<0.00140		0.400	0.4078		mg/L		102	75 - 125
Silver	<0.000500		0.100	0.1069		mg/L		107	75 - 125
Thallium	<0.000570		0.100	0.1075		mg/L		108	75 - 125
Vanadium	<0.00110		0.100	0.09330		mg/L		93	75 - 125
Zinc	<0.00970		0.200	0.1879		mg/L		94	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 310-279381-20 MSD
Matrix: Ground Water
Analysis Batch: 420080

Client Sample ID: MW-29
Prep Type: Total/NA
Prep Batch: 419339

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<0.00100		0.200	0.2166		mg/L		108	75 - 125	1	20
Arsenic	0.00210		0.200	0.2123		mg/L		105	75 - 125	0	20
Barium	0.356	F1	0.100	0.5150	F1	mg/L		159	75 - 125	0	20
Beryllium	<0.000330		0.100	0.1080		mg/L		108	75 - 125	0	20
Cadmium	<0.000100		0.100	0.1015		mg/L		101	75 - 125	0	20
Chromium	<0.00120		0.100	0.09529		mg/L		95	75 - 125	1	20
Cobalt	0.00495		0.100	0.1118		mg/L		107	75 - 125	3	20
Copper	<0.00180		0.200	0.2028		mg/L		101	75 - 125	0	20
Lead	<0.000260		0.200	0.2054		mg/L		103	75 - 125	1	20
Nickel	0.00907		0.200	0.2104		mg/L		101	75 - 125	1	20
Selenium	<0.00140		0.400	0.4100		mg/L		103	75 - 125	1	20
Silver	<0.000500		0.100	0.1070		mg/L		107	75 - 125	0	20
Thallium	<0.000570		0.100	0.1098		mg/L		110	75 - 125	2	20
Vanadium	<0.00110		0.100	0.09410		mg/L		94	75 - 125	1	20
Zinc	<0.00970		0.200	0.1910		mg/L		95	75 - 125	2	20

Lab Sample ID: 310-279404-A-3-B DU
Matrix: Water
Analysis Batch: 420080

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 419339

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<0.00100		<0.00100		mg/L		NC	20
Arsenic	0.00190	J	0.001879	J	mg/L		0.9	20
Beryllium	<0.000330		<0.000330		mg/L		NC	20
Cadmium	<0.000100		<0.000100		mg/L		NC	20
Chromium	<0.00120		<0.00120		mg/L		NC	20
Cobalt	0.000196	J	0.0001940	J	mg/L		1	20
Copper	0.0255		0.02562		mg/L		0.6	20
Lead	0.000264	J	<0.000260		mg/L		NC	20
Nickel	<0.00210		<0.00210		mg/L		NC	20
Silver	<0.000500		<0.000500		mg/L		NC	20
Thallium	<0.000570		<0.000570		mg/L		NC	20
Vanadium	<0.00110		<0.00110		mg/L		NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-419711/1-A
Matrix: Water
Analysis Batch: 420548

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 419711

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000110		0.000200	0.000110	mg/L		04/24/24 10:54	05/02/24 11:08	1

Lab Sample ID: LCS 310-419711/2-A
Matrix: Water
Analysis Batch: 420548

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 419711

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00167	0.001598		mg/L		96	80 - 120

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: MB 310-419713/1-A
Matrix: Water
Analysis Batch: 420265

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 419713

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000110		0.000200	0.000110	mg/L		04/24/24 11:01	04/30/24 09:37	1

Lab Sample ID: LCS 310-419713/2-A
Matrix: Water
Analysis Batch: 420265

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 419713

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00167	0.001527		mg/L		92	80 - 120		

Lab Sample ID: 310-279435-A-2-C DU
Matrix: Water
Analysis Batch: 420265

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 419713

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Mercury	<0.000110			<0.000110		mg/L				NC	20

Lab Sample ID: 310-279209-A-2-C MS
Matrix: Water
Analysis Batch: 420548

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 419711

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	<0.000110	F1	0.00167	0.001138	F1	mg/L		68	80 - 120		

Lab Sample ID: 310-279209-A-2-D MSD
Matrix: Water
Analysis Batch: 420548

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 419711

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.000110	F1	0.00167	0.001245	F1	mg/L		75	80 - 120	9	20

Lab Sample ID: 310-279209-A-16-C DU
Matrix: Water
Analysis Batch: 420548

Client Sample ID: Duplicate
Prep Type: Dissolved
Prep Batch: 419711

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Mercury	<0.000110			<0.000110		mg/L				NC	20

Lab Sample ID: 310-279507-A-1-C MS
Matrix: Water
Analysis Batch: 420265

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 419713

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	<0.000110		0.00167	0.001622		mg/L		97	80 - 120		

Lab Sample ID: 310-279507-A-1-D MSD
Matrix: Water
Analysis Batch: 420265

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 419713

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.000110		0.00167	0.001612		mg/L		97	80 - 120	1	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 310-419560/1-A
Matrix: Water
Analysis Batch: 419908

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 419560

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.00350		0.0100	0.00350	mg/L		04/23/24 10:14	04/25/24 17:45	1

Lab Sample ID: LCS 310-419560/2-A
Matrix: Water
Analysis Batch: 419908

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 419560

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.200	0.1934		mg/L		97	90 - 110

Lab Sample ID: 310-279246-B-1-B MS
Matrix: Water
Analysis Batch: 419908

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 419560

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	<0.00350		0.200	0.1417		mg/L		71	59 - 126

Lab Sample ID: 310-279246-B-1-C MSD
Matrix: Water
Analysis Batch: 419908

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 419560

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	<0.00350		0.200	0.1872		mg/L		94	59 - 126	28	35

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 500-764192/1-A
Matrix: Water
Analysis Batch: 764193

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 764192

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<0.231		1.00	0.231	mg/L		04/21/24 18:00	04/21/24 22:08	1

Lab Sample ID: LCS 500-764192/2-A
Matrix: Water
Analysis Batch: 764193

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 764192

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	3.72	3.729		mg/L		100	80 - 120

Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: MB 310-419563/1
Matrix: Water
Analysis Batch: 419563

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	<3.70		5.00	3.70	mg/L			04/23/24 10:29	1

Method: I-3765-85 - Residue, Non-filterable (TSS) (Continued)

Lab Sample ID: LCS 310-419563/2
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 419563

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			100	106.0		mg/L		106	75 - 116		

Lab Sample ID: 310-279147-C-1 DU
Client Sample ID: Duplicate
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 419563

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	31.0			41.00		mg/L				28	35

Lab Sample ID: 310-279244-B-2 DU
Client Sample ID: Duplicate
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 419563

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	102			78.00		mg/L				27	35

Lab Sample ID: MB 310-419590/1
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 419590

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<3.70		5.00	3.70	mg/L			04/23/24 13:03	1

Lab Sample ID: LCS 310-419590/2
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 419590

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			100	104.0		mg/L		104	75 - 116		

Lab Sample ID: 310-279567-B-1 DU
Client Sample ID: Duplicate
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 419590

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	2330			2360		mg/L				1	35

Lab Sample ID: MB 310-419622/1
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 419622

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<3.70		5.00	3.70	mg/L			04/23/24 15:48	1

Lab Sample ID: LCS 310-419622/2
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 419622

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			100	104.0		mg/L		104	75 - 116		

Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: 310-279381-18 DU
Matrix: Ground Water
Analysis Batch: 419622

Client Sample ID: MW-304R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	23.0		22.00		mg/L		4	35

Lab Sample ID: MB 310-419628/1
Matrix: Water
Analysis Batch: 419628

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	<3.70		5.00	3.70	mg/L			04/23/24 16:56	1

Lab Sample ID: LCS 310-419628/2
Matrix: Water
Analysis Batch: 419628

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	75 - 116

Lab Sample ID: 310-279341-B-1 DU
Matrix: Water
Analysis Batch: 419628

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	1430		1548		mg/L		8	35

Lab Sample ID: MB 310-419631/1
Matrix: Water
Analysis Batch: 419631

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	<3.70		5.00	3.70	mg/L			04/23/24 17:43	1

Lab Sample ID: LCS 310-419631/2
Matrix: Water
Analysis Batch: 419631

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	103.0		mg/L		103	75 - 116

Lab Sample ID: 310-279381-10 DU
Matrix: Ground Water
Analysis Batch: 419631

Client Sample ID: MW-20
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	114		102.0		mg/L		11	35

Lab Sample ID: MB 310-419633/1
Matrix: Water
Analysis Batch: 419633

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	<3.70		5.00	3.70	mg/L			04/23/24 18:54	1

Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: LCS 310-419633/2
Matrix: Water
Analysis Batch: 419633

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	100.0		mg/L		100	75 - 116		

Lab Sample ID: 310-279475-B-2 DU
Matrix: Water
Analysis Batch: 419633

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	25.5			28.00		mg/L				9	35

Lab Sample ID: MB 310-419763/1
Matrix: Water
Analysis Batch: 419763

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	<3.70		5.00	3.70	mg/L			04/24/24 15:19	1

Lab Sample ID: LCS 310-419763/2
Matrix: Water
Analysis Batch: 419763

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	75 - 116		

Lab Sample ID: 310-279381-27 DU
Matrix: Ground Water
Analysis Batch: 419763

Client Sample ID: DUP-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	101			98.67		mg/L				3	35

GC/MS VOA

Analysis Batch: 419587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-20	MW-29	Total/NA	Ground Water	8260D	
310-279381-21	MW-30	Total/NA	Ground Water	8260D	
310-279381-22	MW-306	Total/NA	Ground Water	8260D	
310-279381-23	MW-307A	Total/NA	Ground Water	8260D	
MB 310-419587/5	Method Blank	Total/NA	Water	8260D	
LCS 310-419587/6	Lab Control Sample	Total/NA	Water	8260D	
310-279310-C-1 MS	Matrix Spike	Total/NA	Water	8260D	
310-279310-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 419688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-4	GU-P	Total/NA	Ground Water	8260D	
310-279381-5	MW-201B	Total/NA	Ground Water	8260D	
310-279381-6	MW-9AR	Total/NA	Ground Water	8260D	
310-279381-12	MW-24	Total/NA	Ground Water	8260D	
310-279381-13	MW-26A	Total/NA	Ground Water	8260D	
310-279381-16	MW-302R	Total/NA	Ground Water	8260D	
310-279381-17	MW-303	Total/NA	Ground Water	8260D	
310-279381-18	MW-304R	Total/NA	Ground Water	8260D	
310-279381-19	MW-305	Total/NA	Ground Water	8260D	
310-279381-24	MW-501	Total/NA	Ground Water	8260D	
310-279381-25	MW-502	Total/NA	Ground Water	8260D	
310-279381-29	TB-1	Total/NA	Water	8260D	
MB 310-419688/5	Method Blank	Total/NA	Water	8260D	
LCS 310-419688/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-419688/7	Lab Control Sample	Total/NA	Water	8260D	
310-279381-4 MS	GU-P	Total/NA	Ground Water	8260D	
310-279381-4 MSD	GU-P	Total/NA	Ground Water	8260D	

Analysis Batch: 419842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-1	GU-1	Total/NA	Ground Water	8260D	
310-279381-2	GU-L	Total/NA	Ground Water	8260D	
310-279381-3	GU-O	Total/NA	Ground Water	8260D	
310-279381-7	MW-15	Total/NA	Ground Water	8260D	
310-279381-8	MW-18	Total/NA	Ground Water	8260D	
310-279381-9	MW-19	Total/NA	Ground Water	8260D	
310-279381-10	MW-20	Total/NA	Ground Water	8260D	
310-279381-11	MW-22	Total/NA	Ground Water	8260D	
310-279381-14	MW-300	Total/NA	Ground Water	8260D	
310-279381-15	MW-301	Total/NA	Ground Water	8260D	
310-279381-26	EQ-1	Total/NA	Ground Water	8260D	
310-279381-27	DUP-1	Total/NA	Ground Water	8260D	
310-279381-28	DUP-2	Total/NA	Ground Water	8260D	
310-279381-30	TB-2	Total/NA	Water	8260D	
310-279381-31	TB-3	Total/NA	Water	8260D	
MB 310-419842/5	Method Blank	Total/NA	Water	8260D	
LCS 310-419842/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-419842/7	Lab Control Sample	Total/NA	Water	8260D	
310-279381-1 MS	GU-1	Total/NA	Ground Water	8260D	
310-279381-1 MSD	GU-1	Total/NA	Ground Water	8260D	

GC/MS Semi VOA

Prep Batch: 419297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-13	MW-26A	Total/NA	Ground Water	3510C	
310-279381-18	MW-304R	Total/NA	Ground Water	3510C	
MB 310-419297/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-419297/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-419297/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 420102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-13	MW-26A	Total/NA	Ground Water	8270E	419297
310-279381-18	MW-304R	Total/NA	Ground Water	8270E	419297
MB 310-419297/1-A	Method Blank	Total/NA	Water	8270E	419297
LCS 310-419297/2-A	Lab Control Sample	Total/NA	Water	8270E	419297
LCSD 310-419297/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	419297

GC Semi VOA

Analysis Batch: 419362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-13	MW-26A	Total/NA	Ground Water	8015C	
310-279381-18	MW-304R	Total/NA	Ground Water	8015C	
MB 310-419362/4	Method Blank	Total/NA	Water	8015C	
LCS 310-419362/5	Lab Control Sample	Total/NA	Water	8015C	
310-279381-13 MS	MW-26A	Total/NA	Ground Water	8015C	
310-279381-13 MSD	MW-26A	Total/NA	Ground Water	8015C	

Prep Batch: 419457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-11	MW-22	Total/NA	Ground Water	3510C	
310-279381-13	MW-26A	Total/NA	Ground Water	3510C	
310-279381-17	MW-303	Total/NA	Ground Water	3510C	
310-279381-18	MW-304R	Total/NA	Ground Water	3510C	
MB 310-419457/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-419457/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 310-419457/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-419457/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 310-419457/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 420084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-419457/1-A	Method Blank	Total/NA	Water	8082A	419457
LCS 310-419457/4-A	Lab Control Sample	Total/NA	Water	8082A	419457
LCSD 310-419457/5-A	Lab Control Sample Dup	Total/NA	Water	8082A	419457

Analysis Batch: 420085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-419457/1-A	Method Blank	Total/NA	Water	8081B	419457
LCS 310-419457/2-A	Lab Control Sample	Total/NA	Water	8081B	419457
LCSD 310-419457/3-A	Lab Control Sample Dup	Total/NA	Water	8081B	419457

GC Semi VOA

Analysis Batch: 420142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-11	MW-22	Total/NA	Ground Water	8081B	419457
310-279381-13	MW-26A	Total/NA	Ground Water	8081B	419457
310-279381-17	MW-303	Total/NA	Ground Water	8081B	419457
310-279381-18	MW-304R	Total/NA	Ground Water	8081B	419457

Analysis Batch: 420144

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-13	MW-26A	Total/NA	Ground Water	8082A	419457
310-279381-18	MW-304R	Total/NA	Ground Water	8082A	419457

Prep Batch: 498161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-11	MW-22	Total/NA	Ground Water	8151A	
310-279381-13	MW-26A	Total/NA	Ground Water	8151A	
310-279381-17	MW-303	Total/NA	Ground Water	8151A	
310-279381-18	MW-304R	Total/NA	Ground Water	8151A	
MB 410-498161/1-A	Method Blank	Total/NA	Water	8151A	
LCS 410-498161/2-A	Lab Control Sample	Total/NA	Water	8151A	
280-190404-A-4-A MS	Matrix Spike	Total/NA	Water	8151A	
280-190404-A-4-B MSD	Matrix Spike Duplicate	Total/NA	Water	8151A	

Analysis Batch: 498344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-11	MW-22	Total/NA	Ground Water	8151A	498161
310-279381-13	MW-26A	Total/NA	Ground Water	8151A	498161
310-279381-17	MW-303	Total/NA	Ground Water	8151A	498161
310-279381-18	MW-304R	Total/NA	Ground Water	8151A	498161
MB 410-498161/1-A	Method Blank	Total/NA	Water	8151A	498161
LCS 410-498161/2-A	Lab Control Sample	Total/NA	Water	8151A	498161
280-190404-A-4-A MS	Matrix Spike	Total/NA	Water	8151A	498161
280-190404-A-4-B MSD	Matrix Spike Duplicate	Total/NA	Water	8151A	498161

Metals

Prep Batch: 419336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-1	GU-1	Total/NA	Ground Water	3005A	
310-279381-2	GU-L	Total/NA	Ground Water	3005A	
310-279381-3	GU-O	Total/NA	Ground Water	3005A	
310-279381-4	GU-P	Total/NA	Ground Water	3005A	
310-279381-5	MW-201B	Total/NA	Ground Water	3005A	
310-279381-6	MW-9AR	Total/NA	Ground Water	3005A	
310-279381-7	MW-15	Total/NA	Ground Water	3005A	
310-279381-8	MW-18	Total/NA	Ground Water	3005A	
310-279381-9	MW-19	Total/NA	Ground Water	3005A	
310-279381-10	MW-20	Total/NA	Ground Water	3005A	
310-279381-11	MW-22	Total/NA	Ground Water	3005A	
310-279381-12	MW-24	Total/NA	Ground Water	3005A	
310-279381-13	MW-26A	Total/NA	Ground Water	3005A	
310-279381-14	MW-300	Total/NA	Ground Water	3005A	
310-279381-15	MW-301	Total/NA	Ground Water	3005A	

Metals (Continued)

Prep Batch: 419336 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-16	MW-302R	Total/NA	Ground Water	3005A	
310-279381-17	MW-303	Total/NA	Ground Water	3005A	
310-279381-18	MW-304R	Total/NA	Ground Water	3005A	
310-279381-19	MW-305	Total/NA	Ground Water	3005A	
MB 310-419336/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-419336/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-279381-1 MS	GU-1	Total/NA	Ground Water	3005A	
310-279381-1 MSD	GU-1	Total/NA	Ground Water	3005A	
310-279381-11 DU	MW-22	Total/NA	Ground Water	3005A	

Prep Batch: 419339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-20	MW-29	Total/NA	Ground Water	3005A	
310-279381-21	MW-30	Total/NA	Ground Water	3005A	
310-279381-22	MW-306	Total/NA	Ground Water	3005A	
310-279381-23	MW-307A	Total/NA	Ground Water	3005A	
310-279381-24	MW-501	Total/NA	Ground Water	3005A	
310-279381-25	MW-502	Total/NA	Ground Water	3005A	
310-279381-26	EQ-1	Total/NA	Ground Water	3005A	
310-279381-27	DUP-1	Total/NA	Ground Water	3005A	
310-279381-28	DUP-2	Total/NA	Ground Water	3005A	
MB 310-419339/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-419339/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-279381-20 MS	MW-29	Total/NA	Ground Water	3005A	
310-279381-20 MSD	MW-29	Total/NA	Ground Water	3005A	
310-279404-A-3-B DU	Duplicate	Total/NA	Water	3005A	

Prep Batch: 419711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-13	MW-26A	Total/NA	Ground Water	7470A	
MB 310-419711/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-419711/2-A	Lab Control Sample	Total/NA	Water	7470A	
310-279209-A-2-C MS	Matrix Spike	Dissolved	Water	7470A	
310-279209-A-2-D MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	
310-279209-A-16-C DU	Duplicate	Dissolved	Water	7470A	

Prep Batch: 419713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-18	MW-304R	Total/NA	Ground Water	7470A	
MB 310-419713/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-419713/2-A	Lab Control Sample	Total/NA	Water	7470A	
310-279507-A-1-C MS	Matrix Spike	Dissolved	Water	7470A	
310-279507-A-1-D MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	
310-279435-A-2-C DU	Duplicate	Total/NA	Water	7470A	

Analysis Batch: 420080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-1	GU-1	Total/NA	Ground Water	6020B	419336
310-279381-2	GU-L	Total/NA	Ground Water	6020B	419336
310-279381-3	GU-O	Total/NA	Ground Water	6020B	419336
310-279381-4	GU-P	Total/NA	Ground Water	6020B	419336

Metals (Continued)

Analysis Batch: 420080 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-5	MW-201B	Total/NA	Ground Water	6020B	419336
310-279381-6	MW-9AR	Total/NA	Ground Water	6020B	419336
310-279381-7	MW-15	Total/NA	Ground Water	6020B	419336
310-279381-8	MW-18	Total/NA	Ground Water	6020B	419336
310-279381-9	MW-19	Total/NA	Ground Water	6020B	419336
310-279381-10	MW-20	Total/NA	Ground Water	6020B	419336
310-279381-11	MW-22	Total/NA	Ground Water	6020B	419336
310-279381-12	MW-24	Total/NA	Ground Water	6020B	419336
310-279381-13	MW-26A	Total/NA	Ground Water	6020B	419336
310-279381-14	MW-300	Total/NA	Ground Water	6020B	419336
310-279381-15	MW-301	Total/NA	Ground Water	6020B	419336
310-279381-16	MW-302R	Total/NA	Ground Water	6020B	419336
310-279381-17	MW-303	Total/NA	Ground Water	6020B	419336
310-279381-18	MW-304R	Total/NA	Ground Water	6020B	419336
310-279381-19	MW-305	Total/NA	Ground Water	6020B	419336
310-279381-20	MW-29	Total/NA	Ground Water	6020B	419339
310-279381-21	MW-30	Total/NA	Ground Water	6020B	419339
310-279381-22	MW-306	Total/NA	Ground Water	6020B	419339
310-279381-23	MW-307A	Total/NA	Ground Water	6020B	419339
310-279381-24	MW-501	Total/NA	Ground Water	6020B	419339
310-279381-25	MW-502	Total/NA	Ground Water	6020B	419339
310-279381-26	EQ-1	Total/NA	Ground Water	6020B	419339
310-279381-27	DUP-1	Total/NA	Ground Water	6020B	419339
310-279381-28	DUP-2	Total/NA	Ground Water	6020B	419339
MB 310-419336/1-A	Method Blank	Total/NA	Water	6020B	419336
MB 310-419339/1-A	Method Blank	Total/NA	Water	6020B	419339
LCS 310-419336/2-A	Lab Control Sample	Total/NA	Water	6020B	419336
LCS 310-419339/2-A	Lab Control Sample	Total/NA	Water	6020B	419339
310-279381-1 MS	GU-1	Total/NA	Ground Water	6020B	419336
310-279381-1 MSD	GU-1	Total/NA	Ground Water	6020B	419336
310-279381-20 MS	MW-29	Total/NA	Ground Water	6020B	419339
310-279381-20 MSD	MW-29	Total/NA	Ground Water	6020B	419339
310-279381-11 DU	MW-22	Total/NA	Ground Water	6020B	419336
310-279404-A-3-B DU	Duplicate	Total/NA	Water	6020B	419339

Analysis Batch: 420265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-18	MW-304R	Total/NA	Ground Water	7470A	419713
MB 310-419713/1-A	Method Blank	Total/NA	Water	7470A	419713
LCS 310-419713/2-A	Lab Control Sample	Total/NA	Water	7470A	419713
310-279507-A-1-C MS	Matrix Spike	Dissolved	Water	7470A	419713
310-279507-A-1-D MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	419713
310-279435-A-2-C DU	Duplicate	Total/NA	Water	7470A	419713

Analysis Batch: 420548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-13	MW-26A	Total/NA	Ground Water	7470A	419711
MB 310-419711/1-A	Method Blank	Total/NA	Water	7470A	419711
LCS 310-419711/2-A	Lab Control Sample	Total/NA	Water	7470A	419711
310-279209-A-2-C MS	Matrix Spike	Dissolved	Water	7470A	419711
310-279209-A-2-D MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	419711

Metals (Continued)

Analysis Batch: 420548 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279209-A-16-C DU	Duplicate	Dissolved	Water	7470A	419711

General Chemistry

Prep Batch: 419560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-13	MW-26A	Total/NA	Ground Water	9012B	
310-279381-18	MW-304R	Total/NA	Ground Water	9012B	
MB 310-419560/1-A	Method Blank	Total/NA	Water	9012B	
LCS 310-419560/2-A	Lab Control Sample	Total/NA	Water	9012B	
310-279246-B-1-B MS	Matrix Spike	Total/NA	Water	9012B	
310-279246-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	

Analysis Batch: 419563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-1	GU-1	Total/NA	Ground Water	I-3765-85	
310-279381-2	GU-L	Total/NA	Ground Water	I-3765-85	
310-279381-3	GU-O	Total/NA	Ground Water	I-3765-85	
310-279381-4	GU-P	Total/NA	Ground Water	I-3765-85	
310-279381-5	MW-201B	Total/NA	Ground Water	I-3765-85	
310-279381-6	MW-9AR	Total/NA	Ground Water	I-3765-85	
310-279381-12	MW-24	Total/NA	Ground Water	I-3765-85	
310-279381-13	MW-26A	Total/NA	Ground Water	I-3765-85	
MB 310-419563/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-419563/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-279147-C-1 DU	Duplicate	Total/NA	Water	I-3765-85	
310-279244-B-2 DU	Duplicate	Total/NA	Water	I-3765-85	

Analysis Batch: 419590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-16	MW-302R	Total/NA	Ground Water	I-3765-85	
310-279381-17	MW-303	Total/NA	Ground Water	I-3765-85	
310-279381-19	MW-305	Total/NA	Ground Water	I-3765-85	
310-279381-24	MW-501	Total/NA	Ground Water	I-3765-85	
310-279381-25	MW-502	Total/NA	Ground Water	I-3765-85	
MB 310-419590/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-419590/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-279567-B-1 DU	Duplicate	Total/NA	Water	I-3765-85	

Analysis Batch: 419622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-7	MW-15	Total/NA	Ground Water	I-3765-85	
310-279381-18	MW-304R	Total/NA	Ground Water	I-3765-85	
MB 310-419622/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-419622/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-279381-18 DU	MW-304R	Total/NA	Ground Water	I-3765-85	

Analysis Batch: 419628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-8	MW-18	Total/NA	Ground Water	I-3765-85	
310-279381-9	MW-19	Total/NA	Ground Water	I-3765-85	

General Chemistry (Continued)

Analysis Batch: 419628 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-11	MW-22	Total/NA	Ground Water	I-3765-85	
MB 310-419628/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-419628/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-279341-B-1 DU	Duplicate	Total/NA	Water	I-3765-85	

Analysis Batch: 419631

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-10	MW-20	Total/NA	Ground Water	I-3765-85	
MB 310-419631/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-419631/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-279381-10 DU	MW-20	Total/NA	Ground Water	I-3765-85	

Analysis Batch: 419633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-14	MW-300	Total/NA	Ground Water	I-3765-85	
310-279381-26	EQ-1	Total/NA	Ground Water	I-3765-85	
MB 310-419633/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-419633/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-279475-B-2 DU	Duplicate	Total/NA	Water	I-3765-85	

Analysis Batch: 419763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-15	MW-301	Total/NA	Ground Water	I-3765-85	
310-279381-20	MW-29	Total/NA	Ground Water	I-3765-85	
310-279381-21	MW-30	Total/NA	Ground Water	I-3765-85	
310-279381-22	MW-306	Total/NA	Ground Water	I-3765-85	
310-279381-23	MW-307A	Total/NA	Ground Water	I-3765-85	
310-279381-27	DUP-1	Total/NA	Ground Water	I-3765-85	
310-279381-28	DUP-2	Total/NA	Ground Water	I-3765-85	
MB 310-419763/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-419763/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-279381-27 DU	DUP-1	Total/NA	Ground Water	I-3765-85	

Analysis Batch: 419908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-13	MW-26A	Total/NA	Ground Water	9012B	419560
310-279381-18	MW-304R	Total/NA	Ground Water	9012B	419560
MB 310-419560/1-A	Method Blank	Total/NA	Water	9012B	419560
LCS 310-419560/2-A	Lab Control Sample	Total/NA	Water	9012B	419560
310-279246-B-1-B MS	Matrix Spike	Total/NA	Water	9012B	419560
310-279246-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	419560

Prep Batch: 764192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-5	MW-201B	Total/NA	Ground Water	9030B	
310-279381-6	MW-9AR	Total/NA	Ground Water	9030B	
310-279381-13	MW-26A	Total/NA	Ground Water	9030B	
310-279381-18	MW-304R	Total/NA	Ground Water	9030B	
MB 500-764192/1-A	Method Blank	Total/NA	Water	9030B	
LCS 500-764192/2-A	Lab Control Sample	Total/NA	Water	9030B	

QC Association Summary

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

General Chemistry

Analysis Batch: 764193

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279381-5	MW-201B	Total/NA	Ground Water	9034	764192
310-279381-6	MW-9AR	Total/NA	Ground Water	9034	764192
310-279381-13	MW-26A	Total/NA	Ground Water	9034	764192
310-279381-18	MW-304R	Total/NA	Ground Water	9034	764192
MB 500-764192/1-A	Method Blank	Total/NA	Water	9034	764192
LCS 500-764192/2-A	Lab Control Sample	Total/NA	Water	9034	764192

Lab Chronicle

Client: HDR Inc
Job ID: 310-279381-1
Project/Site: CRLCSWA_2

Client Sample ID: GU-1
Lab Sample ID: 310-279381-1
Date Collected: 04/17/24 13:18
Matrix: Ground Water
Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419842	FE5V	EET CF	04/25/24 14:54
Total/NA	Prep	3005A			419336	QTZ5	EET CF	04/22/24 09:00
Total/NA	Analysis	6020B		1	420080	NFT2	EET CF	04/26/24 15:49
Total/NA	Analysis	I-3765-85		1	419563	DGU1	EET CF	04/23/24 10:29

Client Sample ID: GU-L
Lab Sample ID: 310-279381-2
Date Collected: 04/17/24 12:25
Matrix: Ground Water
Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419842	FE5V	EET CF	04/25/24 15:17
Total/NA	Prep	3005A			419336	QTZ5	EET CF	04/22/24 09:00
Total/NA	Analysis	6020B		1	420080	NFT2	EET CF	04/26/24 16:00
Total/NA	Analysis	I-3765-85		1	419563	DGU1	EET CF	04/23/24 10:29

Client Sample ID: GU-O
Lab Sample ID: 310-279381-3
Date Collected: 04/17/24 12:45
Matrix: Ground Water
Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419842	FE5V	EET CF	04/25/24 15:39
Total/NA	Prep	3005A			419336	QTZ5	EET CF	04/22/24 09:00
Total/NA	Analysis	6020B		1	420080	NFT2	EET CF	04/26/24 16:02
Total/NA	Analysis	I-3765-85		1	419563	DGU1	EET CF	04/23/24 10:29

Client Sample ID: GU-P
Lab Sample ID: 310-279381-4
Date Collected: 04/17/24 13:00
Matrix: Ground Water
Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419688	FE5V	EET CF	04/24/24 15:32
Total/NA	Prep	3005A			419336	QTZ5	EET CF	04/22/24 09:00
Total/NA	Analysis	6020B		1	420080	NFT2	EET CF	04/26/24 16:04
Total/NA	Analysis	I-3765-85		1	419563	DGU1	EET CF	04/23/24 10:29

Client Sample ID: MW-201B
Lab Sample ID: 310-279381-5
Date Collected: 04/17/24 09:04
Matrix: Ground Water
Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419688	FE5V	EET CF	04/24/24 15:55
Total/NA	Prep	3005A			419336	QTZ5	EET CF	04/22/24 09:00
Total/NA	Analysis	6020B		1	420080	NFT2	EET CF	04/26/24 16:06
Total/NA	Prep	9030B			764192	CLB	EET CHI	04/21/24 18:12 - 04/21/24 18:14 [1]
Total/NA	Analysis	9034		1	764193	CLB	EET CHI	04/21/24 22:43 - 04/21/24 22:49 [1]

Lab Chronicle

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-201B

Lab Sample ID: 310-279381-5

Date Collected: 04/17/24 09:04

Matrix: Ground Water

Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	I-3765-85		1	419563	DGU1	EET CF	04/23/24 10:29

Client Sample ID: MW-9AR

Lab Sample ID: 310-279381-6

Date Collected: 04/17/24 08:03

Matrix: Ground Water

Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419688	FE5V	EET CF	04/24/24 16:18
Total/NA	Prep	3005A			419336	QTZ5	EET CF	04/22/24 09:00
Total/NA	Analysis	6020B		1	420080	NFT2	EET CF	04/26/24 16:08
Total/NA	Prep	9030B			764192	CLB	EET CHI	04/21/24 18:14 - 04/21/24 18:16 [1]
Total/NA	Analysis	9034		1	764193	CLB	EET CHI	04/21/24 22:49 - 04/21/24 22:55 [1]
Total/NA	Analysis	I-3765-85		1	419563	DGU1	EET CF	04/23/24 10:29

Client Sample ID: MW-15

Lab Sample ID: 310-279381-7

Date Collected: 04/18/24 13:47

Matrix: Ground Water

Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419842	FE5V	EET CF	04/25/24 16:02
Total/NA	Prep	3005A			419336	QTZ5	EET CF	04/22/24 09:00
Total/NA	Analysis	6020B		1	420080	NFT2	EET CF	04/26/24 16:19
Total/NA	Analysis	I-3765-85		1	419622	A4XP	EET CF	04/23/24 15:48

Client Sample ID: MW-18

Lab Sample ID: 310-279381-8

Date Collected: 04/18/24 11:30

Matrix: Ground Water

Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419842	FE5V	EET CF	04/25/24 16:25
Total/NA	Prep	3005A			419336	QTZ5	EET CF	04/22/24 09:00
Total/NA	Analysis	6020B		1	420080	NFT2	EET CF	04/26/24 16:22
Total/NA	Analysis	I-3765-85		1	419628	A4XP	EET CF	04/23/24 16:56

Client Sample ID: MW-19

Lab Sample ID: 310-279381-9

Date Collected: 04/18/24 14:30

Matrix: Ground Water

Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419842	FE5V	EET CF	04/25/24 16:47
Total/NA	Prep	3005A			419336	QTZ5	EET CF	04/22/24 09:00
Total/NA	Analysis	6020B		1	420080	NFT2	EET CF	04/26/24 16:24
Total/NA	Analysis	I-3765-85		1	419628	A4XP	EET CF	04/23/24 16:56

Client Sample ID: MW-20
Lab Sample ID: 310-279381-10

Date Collected: 04/18/24 13:07
Matrix: Ground Water
Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419842	FE5V	EET CF	04/25/24 17:10
Total/NA	Prep	3005A			419336	QTZ5	EET CF	04/22/24 09:00
Total/NA	Analysis	6020B		1	420080	NFT2	EET CF	04/26/24 16:26
Total/NA	Analysis	I-3765-85		1	419631	A4XP	EET CF	04/23/24 17:43

Client Sample ID: MW-22
Lab Sample ID: 310-279381-11

Date Collected: 04/18/24 10:23
Matrix: Ground Water
Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419842	FE5V	EET CF	04/25/24 17:33
Total/NA	Prep	3510C			419457	JT8P	EET CF	04/22/24 11:33
Total/NA	Analysis	8081B		1	420142	BW2O	EET CF	04/29/24 16:07
Total/NA	Prep	8151A			498161	QJZ6	ELLE	04/24/24 14:51
Total/NA	Analysis	8151A		1	498344	UAMZ	ELLE	04/25/24 08:11
Total/NA	Prep	3005A			419336	QTZ5	EET CF	04/22/24 09:00
Total/NA	Analysis	6020B		1	420080	NFT2	EET CF	04/26/24 16:28
Total/NA	Analysis	I-3765-85		1	419628	A4XP	EET CF	04/23/24 16:56

Client Sample ID: MW-24
Lab Sample ID: 310-279381-12

Date Collected: 04/17/24 14:33
Matrix: Ground Water
Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419688	FE5V	EET CF	04/24/24 16:40
Total/NA	Prep	3005A			419336	QTZ5	EET CF	04/22/24 09:00
Total/NA	Analysis	6020B		1	420080	NFT2	EET CF	04/26/24 16:33
Total/NA	Analysis	I-3765-85		1	419563	DGU1	EET CF	04/23/24 10:29

Client Sample ID: MW-26A
Lab Sample ID: 310-279381-13

Date Collected: 04/17/24 15:03
Matrix: Ground Water
Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419688	FE5V	EET CF	04/24/24 17:03
Total/NA	Prep	3510C			419297	JT8P	EET CF	04/19/24 12:30
Total/NA	Analysis	8270E		1	420102	L0FS	EET CF	04/29/24 12:29
Total/NA	Analysis	8015C		1	419362	V7YZ	EET CF	04/20/24 11:04
Total/NA	Prep	3510C			419457	JT8P	EET CF	04/22/24 11:33
Total/NA	Analysis	8081B		1	420142	BW2O	EET CF	04/29/24 18:04
Total/NA	Prep	3510C			419457	JT8P	EET CF	04/22/24 11:33
Total/NA	Analysis	8082A		1	420144	BW2O	EET CF	04/29/24 18:04
Total/NA	Prep	8151A			498161	QJZ6	ELLE	04/24/24 14:51
Total/NA	Analysis	8151A		1	498344	UAMZ	ELLE	04/25/24 08:39

Lab Chronicle

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-26A

Lab Sample ID: 310-279381-13

Date Collected: 04/17/24 15:03

Matrix: Ground Water

Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			419336	QTZ5	EET CF	04/22/24 09:00
Total/NA	Analysis	6020B		1	420080	NFT2	EET CF	04/26/24 16:35
Total/NA	Prep	7470A			419711	A6US	EET CF	04/24/24 10:54
Total/NA	Analysis	7470A		1	420548	A6US	EET CF	05/02/24 12:05
Total/NA	Prep	9012B			419560	WZC8	EET CF	04/23/24 10:14
Total/NA	Analysis	9012B		1	419908	ZJX4	EET CF	04/25/24 17:51
Total/NA	Prep	9030B			764192	CLB	EET CHI	04/21/24 18:16 - 04/21/24 18:18 [1]
Total/NA	Analysis	9034		1	764193	CLB	EET CHI	04/21/24 22:55 - 04/21/24 23:01 [1]
Total/NA	Analysis	I-3765-85		1	419563	DGU1	EET CF	04/23/24 10:29

Client Sample ID: MW-300

Lab Sample ID: 310-279381-14

Date Collected: 04/18/24 15:10

Matrix: Ground Water

Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419842	FE5V	EET CF	04/25/24 17:56
Total/NA	Prep	3005A			419336	QTZ5	EET CF	04/22/24 09:00
Total/NA	Analysis	6020B		1	420080	NFT2	EET CF	04/26/24 16:37
Total/NA	Analysis	I-3765-85		1	419633	A4XP	EET CF	04/23/24 18:54

Client Sample ID: MW-301

Lab Sample ID: 310-279381-15

Date Collected: 04/18/24 12:25

Matrix: Ground Water

Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419842	FE5V	EET CF	04/25/24 18:18
Total/NA	Prep	3005A			419336	QTZ5	EET CF	04/22/24 09:00
Total/NA	Analysis	6020B		1	420080	NFT2	EET CF	04/26/24 16:39
Total/NA	Analysis	I-3765-85		1	419763	ENB7	EET CF	04/24/24 15:19

Client Sample ID: MW-302R

Lab Sample ID: 310-279381-16

Date Collected: 04/17/24 14:01

Matrix: Ground Water

Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419688	FE5V	EET CF	04/24/24 17:26
Total/NA	Prep	3005A			419336	QTZ5	EET CF	04/22/24 09:00
Total/NA	Analysis	6020B		1	420080	NFT2	EET CF	04/26/24 16:50
Total/NA	Analysis	I-3765-85		1	419590	DGU1	EET CF	04/23/24 13:03

Lab Chronicle

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-303

Date Collected: 04/17/24 15:55
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-17
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419688	FE5V	EET CF	04/24/24 17:48
Total/NA	Prep	3510C			419457	JT8P	EET CF	04/22/24 11:33
Total/NA	Analysis	8081B		1	420142	BW2O	EET CF	04/29/24 15:54
Total/NA	Prep	8151A			498161	QJZ6	ELLE	04/24/24 14:51
Total/NA	Analysis	8151A		1	498344	UAMZ	ELLE	04/25/24 09:07
Total/NA	Prep	3005A			419336	QTZ5	EET CF	04/22/24 09:00
Total/NA	Analysis	6020B		1	420080	NFT2	EET CF	04/26/24 16:52
Total/NA	Analysis	I-3765-85		1	419590	DGU1	EET CF	04/23/24 13:03

Client Sample ID: MW-304R

Date Collected: 04/17/24 16:58
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-18
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419688	FE5V	EET CF	04/24/24 18:11
Total/NA	Prep	3510C			419297	JT8P	EET CF	04/19/24 12:30
Total/NA	Analysis	8270E		1	420102	L0FS	EET CF	04/29/24 12:54
Total/NA	Analysis	8015C		1	419362	V7YZ	EET CF	04/20/24 11:22
Total/NA	Prep	3510C			419457	JT8P	EET CF	04/22/24 11:33
Total/NA	Analysis	8081B		1	420142	BW2O	EET CF	04/29/24 17:51
Total/NA	Prep	3510C			419457	JT8P	EET CF	04/22/24 11:33
Total/NA	Analysis	8082A		1	420144	BW2O	EET CF	04/29/24 17:51
Total/NA	Prep	8151A			498161	QJZ6	ELLE	04/24/24 14:51
Total/NA	Analysis	8151A		1	498344	UAMZ	ELLE	04/25/24 10:32
Total/NA	Prep	3005A			419336	QTZ5	EET CF	04/22/24 09:00
Total/NA	Analysis	6020B		1	420080	NFT2	EET CF	04/26/24 16:54
Total/NA	Prep	7470A			419713	A6US	EET CF	04/24/24 11:01
Total/NA	Analysis	7470A		1	420265	A6US	EET CF	04/30/24 10:05
Total/NA	Prep	9012B			419560	WZC8	EET CF	04/23/24 10:14
Total/NA	Analysis	9012B		1	419908	ZJX4	EET CF	04/25/24 17:49
Total/NA	Prep	9030B			764192	CLB	EET CHI	04/21/24 18:18 - 04/21/24 18:20 [1]
Total/NA	Analysis	9034		1	764193	CLB	EET CHI	04/21/24 23:01 - 04/21/24 23:07 [1]
Total/NA	Analysis	I-3765-85		1	419622	A4XP	EET CF	04/23/24 15:48

Client Sample ID: MW-305

Date Collected: 04/17/24 17:56
Date Received: 04/19/24 08:00

Lab Sample ID: 310-279381-19
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419688	FE5V	EET CF	04/24/24 18:33
Total/NA	Prep	3005A			419336	QTZ5	EET CF	04/22/24 09:00
Total/NA	Analysis	6020B		1	420080	NFT2	EET CF	04/26/24 16:57
Total/NA	Analysis	I-3765-85		1	419590	DGU1	EET CF	04/23/24 13:03

Client Sample ID: MW-29
Lab Sample ID: 310-279381-20

Date Collected: 04/18/24 08:21
Matrix: Ground Water
Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419587	WSE8	EET CF	04/23/24 16:28
Total/NA	Prep	3005A			419339	QTZ5	EET CF	04/22/24 09:00
Total/NA	Analysis	6020B		1	420080	NFT2	EET CF	04/26/24 17:05
Total/NA	Analysis	I-3765-85		1	419763	ENB7	EET CF	04/24/24 15:19

Client Sample ID: MW-30
Lab Sample ID: 310-279381-21

Date Collected: 04/18/24 07:45
Matrix: Ground Water
Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419587	WSE8	EET CF	04/23/24 16:51
Total/NA	Prep	3005A			419339	QTZ5	EET CF	04/22/24 09:00
Total/NA	Analysis	6020B		1	420080	NFT2	EET CF	04/26/24 17:24
Total/NA	Analysis	I-3765-85		1	419763	ENB7	EET CF	04/24/24 15:19

Client Sample ID: MW-306
Lab Sample ID: 310-279381-22

Date Collected: 04/18/24 09:30
Matrix: Ground Water
Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419587	WSE8	EET CF	04/23/24 17:38
Total/NA	Prep	3005A			419339	QTZ5	EET CF	04/22/24 09:00
Total/NA	Analysis	6020B		1	420080	NFT2	EET CF	04/26/24 17:27
Total/NA	Analysis	I-3765-85		1	419763	ENB7	EET CF	04/24/24 15:19

Client Sample ID: MW-307A
Lab Sample ID: 310-279381-23

Date Collected: 04/18/24 08:58
Matrix: Ground Water
Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419587	WSE8	EET CF	04/23/24 17:14
Total/NA	Prep	3005A			419339	QTZ5	EET CF	04/22/24 09:00
Total/NA	Analysis	6020B		1	420080	NFT2	EET CF	04/26/24 17:29
Total/NA	Analysis	I-3765-85		1	419763	ENB7	EET CF	04/24/24 15:19

Client Sample ID: MW-501
Lab Sample ID: 310-279381-24

Date Collected: 04/17/24 11:50
Matrix: Ground Water
Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419688	FE5V	EET CF	04/24/24 18:56
Total/NA	Prep	3005A			419339	QTZ5	EET CF	04/22/24 09:00
Total/NA	Analysis	6020B		1	420080	NFT2	EET CF	04/26/24 17:31
Total/NA	Analysis	I-3765-85		1	419590	DGU1	EET CF	04/23/24 13:03

Lab Chronicle

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: MW-502

Lab Sample ID: 310-279381-25

Date Collected: 04/17/24 10:51

Matrix: Ground Water

Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419688	FE5V	EET CF	04/24/24 19:18
Total/NA	Prep	3005A			419339	QTZ5	EET CF	04/22/24 09:00
Total/NA	Analysis	6020B		1	420080	NFT2	EET CF	04/26/24 17:33
Total/NA	Analysis	I-3765-85		1	419590	DGU1	EET CF	04/23/24 13:03

Client Sample ID: EQ-1

Lab Sample ID: 310-279381-26

Date Collected: 04/18/24 15:25

Matrix: Ground Water

Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419842	FE5V	EET CF	04/25/24 18:41
Total/NA	Prep	3005A			419339	QTZ5	EET CF	04/22/24 09:00
Total/NA	Analysis	6020B		1	420080	NFT2	EET CF	04/26/24 17:35
Total/NA	Analysis	I-3765-85		1	419633	A4XP	EET CF	04/23/24 18:54

Client Sample ID: DUP-1

Lab Sample ID: 310-279381-27

Date Collected: 04/18/24 11:07

Matrix: Ground Water

Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419842	FE5V	EET CF	04/25/24 19:03
Total/NA	Prep	3005A			419339	QTZ5	EET CF	04/22/24 09:00
Total/NA	Analysis	6020B		1	420080	NFT2	EET CF	04/26/24 17:38
Total/NA	Analysis	I-3765-85		1	419763	ENB7	EET CF	04/24/24 15:19

Client Sample ID: DUP-2

Lab Sample ID: 310-279381-28

Date Collected: 04/18/24 11:30

Matrix: Ground Water

Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419842	FE5V	EET CF	04/25/24 19:26
Total/NA	Prep	3005A			419339	QTZ5	EET CF	04/22/24 09:00
Total/NA	Analysis	6020B		1	420080	NFT2	EET CF	04/26/24 17:40
Total/NA	Analysis	I-3765-85		1	419763	ENB7	EET CF	04/24/24 15:19

Client Sample ID: TB-1

Lab Sample ID: 310-279381-29

Date Collected: 04/17/24 13:50

Matrix: Water

Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419688	FE5V	EET CF	04/24/24 12:53

Lab Chronicle

Client: HDR Inc
Project/Site: CRLCSWA_2

Job ID: 310-279381-1

Client Sample ID: TB-2

Lab Sample ID: 310-279381-30

Date Collected: 04/18/24 08:10

Matrix: Water

Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419842	FE5V	EET CF	04/25/24 14:08

Client Sample ID: TB-3

Lab Sample ID: 310-279381-31

Date Collected: 04/18/24 15:40

Matrix: Water

Date Received: 04/19/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419842	FE5V	EET CF	04/25/24 14:32

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: HDR Inc
Job ID: 310-279381-1
Project/Site: CRLCSWA_2

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

Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Iowa	State	082	05-01-24

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Iowa	State	361	03-01-24 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: HDR Inc
Job ID: 310-279381-1
Project/Site: CRLCSWA_2

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 CHI
I-3765-85	Residue, Non-filterable (TSS)	USGS	EET CF
3005A	Preparation, Total Metals	SW846	EET CF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	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 CHI

Protocol References:

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 CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

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310-279381 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: LIDR			
City/State: CITY Omaha		STATE NE	Project:
Receipt Information			
Date/Time Received:	DATE 4/19/24	TIME 0800	Received By: MRH

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: TB2
Multiple Coolers?	☒ Yes	☐ No	*If yes:* Cooler # 1 of 5
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? ↓

DUP-2, MW 18, MW20, EQ1, DUP 1, MW301, MW396

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: T	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): 3.9	Corrected Temp (°C): 3.9

• **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

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Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: HDR

City/State: CITY Omaha STATE NE Project:

Receipt Information

Date/Time Received: DATE 4/19/24 TIME 0800 Received By: MRH

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: TB 1

Multiple Coolers? ☒ Yes ☐ No *If yes:* Cooler # 2 of 5

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? ↓

MW502, MW201B, GW-P, GW-L, GW-1, MW302R, MW501

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: T 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): 4.8 Corrected Temp (°C): 4.8

• **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: HDR

City/State: CITY Omaha STATE NE Project:

Receipt Information

Date/Time Received: DATE 4/19/24 TIME 0800 Received By: MRH

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 5
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: T 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): 4.9 Corrected Temp (°C): 4.9

• **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

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Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: LIDR

City/State: CITY Omaha | STATE NE | Project:

Receipt Information

Date/Time Received: DATE 4/19/24 | TIME 0800 | Received By: MRH

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: TB3

Multiple Coolers? ☒ Yes ☐ No *If yes:* Cooler # 4 of 5

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? ↓

MW15, MW19, MW24, MW300, MW303

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: T | 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): 3.3 | Corrected Temp (°C): 3.3

• **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

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Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: IDR

City/State: CITY Omaha STATE NE Project:

Receipt Information

Date/Time Received: DATE 4/19/24 TIME 0800 Received By: MRH

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 5
Cooler Custody Seals Present? No	☐ Yes	☒ No	*If yes:* Cooler custody seals intact? ☐ Yes ☐ No
Sample Custody Seals Present? No	☐ 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: T 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): 3.8 Corrected Temp (°C): 3.8

• **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

Eurofins TestAmerica, Cedar Falls
3019 Venture Way

Cedar Falls, IA 50613
phone 319.277.2401 fax 319 277.2425

Chain of Custody Record

eurofins | Environment Testing America

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	**Project Manager: Richard Wilson**		COC No
HDR Engineering Inc.	Email Richard Wilson2@hdrinc.com	Site Contact: Richard Wilson	Date:	_____ of _____ COCs
1917 S 67th St.	Tel/Fax:402-392-6714	Lab Contact: Shirley Thompson	Carrier:	TALS Project #:
Omaha, NE 68106	**Analysis Turnaround Time**			Sampler:
Phone	☐CALENDAR DAYS ☐WORKING DAYS			**For Lab Use Only:**
FAX	TAT if different from Below _____			Walk-in Client:
Project Name Cedar Rapids/Linn County Solid Waste Site-2	☐ 2 weeks			Lab Sampling
Site Location Marion, Iowa	☐ 1 week			
Project No 10375879	☐ 2 days			Job / SDG No
	☐ 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)	Appendix I	TSS	Full Appendix II	Appendix I - VOCs only	2,4-D	gamma-BHC (Lindane)	Benzene	Heptachlor	Cobalt	beta-BHC	2,4,5-TP (Silvex	Sulfide						Sample Specific Notes
GU-1	4-17-2024	13:18	G	GW	5	N	N	X	X																
GU-L	4-17-2024	12:25	G	GW	5			X	X																
GU-D	4-17-2024	12:45	G	GW	5			X	X																
GU-P	4-17-2024	13:00	G	GW	5			X	X																
MW-201B	4-17-2024	9:04	G	GW	6			X	X										X						
MW-9AR	4-17-2024	8:03	G	GW	6			X	X										X						
MW-15	4-18-2024	13:47	G	GW	5			X	X																
MW-18	4-18-2024	11:30	G	GW	5			X	X																
MW-19	4-18-2024	14:30	G	GW	5			X	X																
MW-20	4-18-2024	13:07	G	GW	5			X	X																
MW-22	4-18-2024	10:23	G	GW	9			X	X								X	X							
MW-24	4-17-2024	14:35	G	GW	5	↓	↓	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:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No		Cooler Temp (°C): Obs'd _____ Corr'd _____		Therm ID No _____
Relinquished by: Richard Wilson	Company: HDR	Date/Time: 4-19-2024 / 8:00	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: 4/19/24 0800

Form No. CA-C-WI-002, Rev. 4.35, dated 10/6/2020

Eurofins TestAmerica, Cedar Falls
3019 Venture Way

Cedar Falls, IA 50613
phone 319 277 2401 fax 319.277 2425

Chain of Custody Record

eurofins | Environment Testing America

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Richard Wilson	Site Contact: Richard Wilson	Date:	COC No
HDR Engineering Inc.	Email Richard.Wilson2@hdrinc.com	Lab Contact: Shirley Thompson	Carrier:	_____ of _____ COCs
1917 S 67th St.	Tel/Fax:402-392-6714			TALS Project #
Omaha, NE 68106	Analysis Turnaround Time			Sampler
Phone	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
FAX	TAT if different from Below _____			Walk-in Client:
Project Name. Cedar Rapids/Linn County Solid Waste Site-2	☐ 2 weeks			Lab Sampling
Site Location Marion, Iowa	☐ 1 week			
Project No 10375879	☐ 2 days			Job / SDG No
	☐ 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)	Appendix I	TSS	Full Appendix II	Appendix I - VOCs only	2,4-D	gamma-BHC (Lindane)	Benzene	Heptachlor	Cobalt	beta-BHC	2,4,5-TP (Silvex	Sulfide	Sample Specific Notes
MW-26A	4-17-2024	15:03	G	GW	18	N	N		X	X										
MW-300	4-18-2024	15:10	G	GW	5			X	X											
MW-301	4-18-2024	12:25	G	GW	5			X	X											
MW-302R	4-17-2024	14:01	G	GW	5			X	X											
MW-303	4-17-2024	15:55	G	GW	9			X	X			X	X		X					
MW-304R	4-17-2024	16:58	G	GW	18				X	X										
MW-305	4-17-2024	17:56	G	GW	5			X	X											
MW-29	4-18-2024	8:21	G	GW	5				X					X		X				
MW-30	4-18-2024	7:45	G	GW	5				X					X		X				
MW-306	4-18-2024	9:30	G	GW	5				X					X		X				
MW-307A	4-18-2024	8:58	G	GW	5				X					X		X				
MW-501	4-17-2024	11:50	G	GW	5	↓	↓	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
[signature]	HDR	4-19-2024/8:00			
Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Relinquished by	Company	Date/Time	Received in Laboratory by	Company	Date/Time
			[signature]		4/19/24 0800

Form No. CA-C-WI-002, Rev. 4.35, dated 10/6/2020

5/3/2024 (Rev. 1)

Eurofins TestAmerica, Cedar Falls
3019 Venture Way

Cedar Falls, IA 50613
phone 319 277.2401 fax 319.277.2425

Chain of Custody Record

eurofins | Environment Testing America

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☐Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	**Project Manager: Richard Wilson**	COC No
	Email Richard.Wilson2@hdrinc.com	Site Contact: Richard Wilson — Date: — ____ of ____ COCs
HDR Engineering Inc.	Tel/Fax:402-392-6714	Lab Contact: Shirley Thompson — Carrier: — TALS Project #
1917 S 67th St.	**Analysis Turnaround Time**	Sampler
Omaha, NE 68106	☐CALENDAR DAYS ☐WORKING DAYS	**For Lab Use Only:**
Phone	TAT if different from Below ____	Walk-in Client:
FAX	☐ 2 weeks	Lab Sampling
Project Name. Cedar Rapids/Linn County Solid Waste Site-2	☐ 1 week	
Site Location Marion, Iowa	☐ 2 days	Job / SDG No
Project No 10375879	☐ 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)	Appendix I	TSS	Full Appendix II	Appendix I - VOCs only	2,4-D	gamma-BHC (Lindane)	Benzene	Heptachlor	Cobalt	beta-BHC	2,4,5-TP (Silvex	Sulfide	Sample Specific Notes.
MW-502	4-17-2024	10:51	G	GW	5	N	N	X	X											
EQ-1	4-18-2024	15:25	G	GW	5			X	X											
Dup-1	4-18-2024	11:07	G	GW	5			X	X											
Dup-2	4-18-2024	11:30	G	GW	5			X	X											
TB-1	4-17-2024	13:50	G	~~GW~~ DW	2						X									
TB-2	4-18-2024	8:10	G	~~GW~~ DW	2						X									
TB-3	4-18-2024	15:40	G	DW	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: Richard Wilson	Company: HDR	Date/Time: 4-19-2024 8:00	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: 4/19/24 0800

Form No. CA-C-WI-002, Rev. 4.35, dated 10/6/2020

5/3/2024 (Rev. 1)

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:	Lab PM: Calhoun, Conner M	Carrier Tracking No(s):	COC No: 310-71493.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Conner.Calhoun@et.eurofinsus.com	State of Origin: Iowa	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): State - Iowa; State Program - Iowa		Job #: 310-279381-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 5/8/2024			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: CRLCSWA_2	Project #: 31006785			
Site: 310- HDR- CRLCSWA	SSOW#:			

Analysis Requested

Preservation Codes:

Other:

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 (MOD) Standard Herbicides	8151A/8151A_AP 8151 Herbicides	8151A/8151A_AP (MOD) 2,4-D	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-22 (310-279381-11)	4/18/24	10:23 Central		Water			X			2	
MW-26A (310-279381-13)	4/17/24	15:03 Central		Water				X		2	
MW-303 (310-279381-17)	4/17/24	15:55 Central		Water					X	2	
MW-304R (310-279381-18)	4/17/24	16:58 Central		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. Dalk	4/19/24 1245				
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				4/20/24 9:45	CHET

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		R: 7.3 C: 7.2

Ver: 06/08/2021

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:	Lab PM: Calhoun, Conner M	Carrier Tracking No(s):	COC No: 310-71489 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Conner Calhoun@et.eurofinsus com	State of Origin: Iowa	Page: Page 1 of 1
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): State - Iowa, State Program - Iowa		Job #: 310-279381-1
Address: 2417 Bond Street, ,	Due Date Requested: 5/8/2024			
City: University Park	TAT Requested (days):			
State, Zip: IL, 60484				
Phone: 708-534-5200(Tel) 708-534-5211(Fax)	PO #:			
Email	WO #:			
Project Name: CRLCSWA_2	Project #: 31006785			
Site: 310- HDR- CRLCSWA	SSOW#:			

Analysis Requested

Preservation Codes:
-

310-279381 COC

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	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-201B (310-279381-5)	4/17/24	09:04 Central		Water			X	1	
MW-9AR (310-279381-6)	4/17/24	08 03 Central		Water			X	1	
MW-26A (310-279381-13)	4/17/24	15 03 Central		Water			X	1	
MW-304R (310-279381-18)	4/17/24	16 58 Central		Water			X	1	

Other:

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	[signature]	4/19/24 1200		Stephanie Hernandez	4/20/24 0930	EFLD
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. 4.9+4.5

Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 310-279381-1

Login Number: 279381

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Homolar, Dana J

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: HDR Inc

Job Number: 310-279381-1

Login Number: 279381
List Number: 3
Creator: Hernandez, Stephanie

List Source: Eurofins Chicago
List Creation: 04/20/24 03:11 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are 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 is acceptable.	True	
Cooler Temperature is recorded.	True	4.5
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 310-279381-1

Login Number: 279381
List Number: 2
Creator: Santiago, Nathaniel

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 04/20/24 10:54 AM

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).	False	Cooler temperature outside required temperature criteria.
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?	True	
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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Verification and ASD Monitoring Event – May 2024

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eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Richard Wilson
HDR Inc
1917 S 67th Street
Omaha, Nebraska 68106

Generated 7/12/2024 11:14:09 AM Revision 1

JOB DESCRIPTION

CRLCSWA_2 Spring 2024

JOB NUMBER

310-282336-1

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
7/12/2024 11:14:09 AM
Revision 1

Authorized for release by
Conner Calhoun, Project Management Assistant I
Conner.Calhoun@et.eurofinsus.com
(319)277-2401

Table of Contents

Job Narrative
310-282336-1

REVISION

The report being provided is a revision of the original report sent on 7/1/2024. The report (revision 1) is being revised due to Client needed 2,4,5-TP reported on MW-26A.

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample 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 5/30/2024 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 1.2°C.

Herbicides
Method 8151A: The continuing calibration verification (CCV) associated with batch 410-513167 recovered outside acceptance criteria, low biased, for 2,4-Dichlorophenylacetic acid (Surr) on one column. Results are reported from the passing column. MW-26A (310-282336-1)

Method 8151A: Surrogate recovery for the following sample was outside the upper control limit: MW-26A (310-282336-1). 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.

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: HDR Inc
Project/Site: CRLCSWA_2 Spring 2024

Job ID: 310-282336-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-282336-1	MW-26A	Water	05/29/24 17:17	05/30/24 10:20
310-282336-2	MW-304R	Water	05/29/24 17:59	05/30/24 10:20
310-282336-3	MW-204A	Water	05/29/24 15:17	05/30/24 10:20
310-282336-4	MW-204B	Water	05/29/24 15:50	05/30/24 10:20
310-282336-5	MW-213A	Water	05/29/24 12:30	05/30/24 10:20
310-282336-6	MW-213B	Water	05/29/24 13:06	05/30/24 10:20
310-282336-7	MW-218	Water	05/29/24 16:39	05/30/24 10:20
310-282336-8	MW-501	Water	05/29/24 14:05	05/30/24 10:20

Detection Summary

Client: HDR Inc
Project/Site: CRLCSWA_2 Spring 2024

Job ID: 310-282336-1

Client Sample ID: MW-26A — Lab Sample ID: 310-282336-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0210		0.00200	0.000530	mg/L	1		6020B	Total/NA
Total Suspended Solids	79.0		15.0	11.1	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-304R — Lab Sample ID: 310-282336-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	369		5.00	2.10	mg/L	5		9056A	Total/NA
Cobalt	0.00983		0.000500	0.000170	mg/L	1		6020B	Total/NA
Iron	14.0		0.100	0.0360	mg/L	1		6020B	Total/NA
Manganese	2.23		0.0100	0.00360	mg/L	1		6020B	Total/NA
Total Suspended Solids	11.3		5.00	3.70	mg/L	1		I-3765-85	Total/NA
Total Organic Carbon	2.81		1.00	0.500	mg/L	1		SM 5310C	Total/NA

Client Sample ID: MW-204A — Lab Sample ID: 310-282336-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	396		5.00	2.10	mg/L	5		9056A	Total/NA
Barium	0.0464		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cadmium	0.000173	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.000966		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00451	J	0.00500	0.00210	mg/L	1		6020B	Total/NA
Selenium	0.0102		0.00500	0.00140	mg/L	1		6020B	Total/NA
Vanadium	0.00423	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Organic Carbon	3.46		1.00	0.500	mg/L	1		SM 5310C	Total/NA

Client Sample ID: MW-204B — Lab Sample ID: 310-282336-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	723		20.0	8.40	mg/L	20		9056A	Total/NA
Arsenic	0.00163	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0230		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.0120		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00202	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.00186		0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.00568		0.00500	0.00210	mg/L	1		6020B	Total/NA
Vanadium	0.00126	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Zinc	0.0101	J	0.0200	0.00970	mg/L	1		6020B	Total/NA
Iron	51.9		0.100	0.0360	mg/L	1		6020B	Total/NA
Manganese	2.17		0.0100	0.00360	mg/L	1		6020B	Total/NA
Arsenic	0.000633	J	0.00200	0.000530	mg/L	1		6020B	Dissolved
Barium	0.0158		0.00200	0.000660	mg/L	1		6020B	Dissolved
Cobalt	0.0108		0.000500	0.000170	mg/L	1		6020B	Dissolved
Nickel	0.00483	J	0.00500	0.00210	mg/L	1		6020B	Dissolved
Zinc	0.0104	J	0.0200	0.00970	mg/L	1		6020B	Dissolved
Iron	38.8		0.100	0.0360	mg/L	1		6020B	Dissolved
Manganese	1.91		0.0100	0.00360	mg/L	1		6020B	Dissolved
Total Suspended Solids	272		30.0	22.2	mg/L	1		I-3765-85	Total/NA
Total Organic Carbon	4.79		1.00	0.500	mg/L	1		SM 5310C	Total/NA

Client Sample ID: MW-213A — Lab Sample ID: 310-282336-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	192		5.00	2.10	mg/L	5		9056A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-213A (Continued) — Lab Sample ID: 310-282336-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.000927	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0567		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00631		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00310	J	0.00500	0.00210	mg/L	1		6020B	Total/NA
Iron	1.81		0.100	0.0360	mg/L	1		6020B	Total/NA
Manganese	1.73		0.0100	0.00360	mg/L	1		6020B	Total/NA
Total Suspended Solids	3.25		1.88	1.39	mg/L	1		I-3765-85	Total/NA
Total Organic Carbon	2.43		1.00	0.500	mg/L	1		SM 5310C	Total/NA

Client Sample ID: MW-213B — Lab Sample ID: 310-282336-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	24.9		5.00	2.10	mg/L	5		9056A	Total/NA
Arsenic	0.000790	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0952		0.00200	0.000660	mg/L	1		6020B	Total/NA
Lead	0.000425	J	0.000500	0.000260	mg/L	1		6020B	Total/NA
Iron	1.46		0.100	0.0360	mg/L	1		6020B	Total/NA
Manganese	0.169		0.0100	0.00360	mg/L	1		6020B	Total/NA
Total Suspended Solids	4.88		1.88	1.39	mg/L	1		I-3765-85	Total/NA
Total Organic Carbon	0.760	J	1.00	0.500	mg/L	1		SM 5310C	Total/NA

Client Sample ID: MW-218 — Lab Sample ID: 310-282336-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	24.7		5.00	2.10	mg/L	5		9056A	Total/NA
Arsenic	0.00105	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.187		0.00200	0.000660	mg/L	1		6020B	Total/NA
Selenium	0.00478	J	0.00500	0.00140	mg/L	1		6020B	Total/NA
Iron	0.550		0.100	0.0360	mg/L	1		6020B	Total/NA
Manganese	0.0413		0.0100	0.00360	mg/L	1		6020B	Total/NA
Total Suspended Solids	5.37		1.88	1.39	mg/L	1		I-3765-85	Total/NA
Total Organic Carbon	1.14		1.00	0.500	mg/L	1		SM 5310C	Total/NA

Client Sample ID: MW-501 — Lab Sample ID: 310-282336-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00618		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0232		0.00200	0.000660	mg/L	1		6020B	Total/NA
Beryllium	0.00227		0.00100	0.000330	mg/L	1		6020B	Total/NA
Cadmium	0.000576		0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.0525		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00289	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.000365	J	0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.107		0.00500	0.00210	mg/L	1		6020B	Total/NA
Vanadium	0.00210	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Zinc	0.0702		0.0200	0.00970	mg/L	1		6020B	Total/NA
Iron	52.1		0.100	0.0360	mg/L	1		6020B	Total/NA
Manganese	0.350		0.0100	0.00360	mg/L	1		6020B	Total/NA
Barium	0.0145		0.00200	0.000660	mg/L	1		6020B	Dissolved
Beryllium	0.000392	J	0.00100	0.000330	mg/L	1		6020B	Dissolved
Cadmium	0.000392		0.000200	0.000100	mg/L	1		6020B	Dissolved
Cobalt	0.0475		0.000500	0.000170	mg/L	1		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-501 (Continued)

Lab Sample ID: 310-282336-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	0.0996		0.00500	0.00210	mg/L	1		6020B	Dissolved
Zinc	0.0546		0.0200	0.00970	mg/L	1		6020B	Dissolved
Iron	0.755		0.100	0.0360	mg/L	1		6020B	Dissolved
Manganese	0.316		0.0100	0.00360	mg/L	1		6020B	Dissolved
Total Suspended Solids	1100		60.0	44.4	mg/L	1		I-3765-85	Total/NA

This Detection Summary does not include radiochemical test results.

Client: HDR Inc
Job ID: 310-282336-1
Project/Site: CRLCSWA_2 Spring 2024

Client Sample ID: MW-26A
Lab Sample ID: 310-282336-1
Date Collected: 05/29/24 17:17
Matrix: Water
Date Received: 05/30/24 10:20

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	<0.0230		0.0524	0.0230	ug/L		06/03/24 15:46	06/04/24 12:39	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0210**		0.00200	0.000530	mg/L		05/31/24 08:45	06/03/24 16:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**79.0**		15.0	11.1	mg/L			05/31/24 10:56	1

Client Sample Results

Client: HDR Inc
Project/Site: CRLCSWA_2 Spring 2024

Job ID: 310-282336-1

Client Sample ID: MW-304R

Date Collected: 05/29/24 17:59
Date Received: 05/30/24 10:20

Lab Sample ID: 310-282336-2

Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	369		5.00	2.10	mg/L			06/06/24 18:00	5

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	0.00983		0.000500	0.000170	mg/L		05/31/24 08:45	06/03/24 16:20	1
Iron	14.0		0.100	0.0360	mg/L		05/31/24 08:45	06/03/24 16:20	1
Manganese	2.23		0.0100	0.00360	mg/L		05/31/24 08:45	06/03/24 16:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	11.3		5.00	3.70	mg/L			05/31/24 10:02	1
Total Organic Carbon (SM 5310C)	2.81		1.00	0.500	mg/L			06/01/24 06:45	1

Client: HDR Inc
Project/Site: CRLCSWA_2 Spring 2024

Job ID: 310-282336-1

Client Sample ID: MW-204A

Date Collected: 05/29/24 15:17
Date Received: 05/30/24 10:20

Lab Sample ID: 310-282336-3

Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**396**		5.00	2.10	mg/L			06/06/24 18:38	5

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		05/31/24 08:45	06/03/24 16:24	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		05/31/24 08:45	06/03/24 16:24	1
Barium	**0.0464**		0.00200	0.000660	mg/L		05/31/24 08:45	06/03/24 16:24	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		05/31/24 08:45	06/03/24 16:24	1
Cadmium	**0.000173**	**J**	0.000200	0.000100	mg/L		05/31/24 08:45	06/03/24 16:24	1
Chromium	<0.00120		0.00500	0.00120	mg/L		05/31/24 08:45	06/03/24 16:24	1
Cobalt	**0.000966**		0.000500	0.000170	mg/L		05/31/24 08:45	06/03/24 16:24	1
Copper	<0.00180		0.00500	0.00180	mg/L		05/31/24 08:45	06/03/24 16:24	1
Lead	<0.000260		0.000500	0.000260	mg/L		05/31/24 08:45	06/03/24 16:24	1
Nickel	**0.00451**	**J**	0.00500	0.00210	mg/L		05/31/24 08:45	06/03/24 16:24	1
Selenium	**0.0102**		0.00500	0.00140	mg/L		05/31/24 08:45	06/03/24 16:24	1
Silver	<0.000500		0.00100	0.000500	mg/L		05/31/24 08:45	06/12/24 19:06	1
Thallium	<0.000570		0.00100	0.000570	mg/L		05/31/24 08:45	06/03/24 16:24	1
Vanadium	**0.00423**	**J**	0.00500	0.00110	mg/L		05/31/24 08:45	06/03/24 16:24	1
Zinc	<0.00970		0.0200	0.00970	mg/L		05/31/24 08:45	06/03/24 16:24	1
Iron	<0.0360		0.100	0.0360	mg/L		05/31/24 08:45	06/03/24 16:24	1
Manganese	<0.00360		0.0100	0.00360	mg/L		05/31/24 08:45	06/03/24 16:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.39		1.88	1.39	mg/L			05/31/24 10:02	1
Total Organic Carbon (SM 5310C)	**3.46**		1.00	0.500	mg/L			06/01/24 07:21	1

Client: HDR Inc
Project/Site: CRLCSWA_2 Spring 2024

Job ID: 310-282336-1

Client Sample ID: MW-204B

Date Collected: 05/29/24 15:50
Date Received: 05/30/24 10:20

Lab Sample ID: 310-282336-4

Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**723**		20.0	8.40	mg/L			06/07/24 09:06	20

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		05/31/24 08:45	06/03/24 16:27	1
Arsenic	**0.00163**	**J**	0.00200	0.000530	mg/L		05/31/24 08:45	06/03/24 16:27	1
Barium	**0.0230**		0.00200	0.000660	mg/L		05/31/24 08:45	06/03/24 16:27	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		05/31/24 08:45	06/03/24 16:27	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		05/31/24 08:45	06/03/24 16:27	1
Chromium	<0.00120		0.00500	0.00120	mg/L		05/31/24 08:45	06/03/24 16:27	1
Cobalt	**0.0120**		0.000500	0.000170	mg/L		05/31/24 08:45	06/03/24 16:27	1
Copper	**0.00202**	**J**	0.00500	0.00180	mg/L		05/31/24 08:45	06/03/24 16:27	1
Lead	**0.00186**		0.000500	0.000260	mg/L		05/31/24 08:45	06/03/24 16:27	1
Nickel	**0.00568**		0.00500	0.00210	mg/L		05/31/24 08:45	06/03/24 16:27	1
Selenium	<0.00140		0.00500	0.00140	mg/L		05/31/24 08:45	06/03/24 16:27	1
Silver	<0.000500		0.00100	0.000500	mg/L		05/31/24 08:45	06/12/24 19:09	1
Thallium	<0.000570		0.00100	0.000570	mg/L		05/31/24 08:45	06/03/24 16:27	1
Vanadium	**0.00126**	**J**	0.00500	0.00110	mg/L		05/31/24 08:45	06/03/24 16:27	1
Zinc	**0.0101**	**J**	0.0200	0.00970	mg/L		05/31/24 08:45	06/03/24 16:27	1
Iron	**51.9**		0.100	0.0360	mg/L		05/31/24 08:45	06/03/24 16:27	1
Manganese	**2.17**		0.0100	0.00360	mg/L		05/31/24 08:45	06/03/24 16:27	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		06/03/24 09:00	06/12/24 01:35	1
Arsenic	**0.000633**	**J**	0.00200	0.000530	mg/L		06/03/24 09:00	06/12/24 01:35	1
Barium	**0.0158**		0.00200	0.000660	mg/L		06/03/24 09:00	06/12/24 01:35	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		06/03/24 09:00	06/12/24 01:35	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		06/03/24 09:00	06/12/24 01:35	1
Chromium	<0.00120		0.00500	0.00120	mg/L		06/03/24 09:00	06/12/24 01:35	1
Cobalt	**0.0108**		0.000500	0.000170	mg/L		06/03/24 09:00	06/12/24 01:35	1
Copper	<0.00180		0.00500	0.00180	mg/L		06/03/24 09:00	06/12/24 01:35	1
Lead	<0.000260		0.000500	0.000260	mg/L		06/03/24 09:00	06/12/24 01:35	1
Nickel	**0.00483**	**J**	0.00500	0.00210	mg/L		06/03/24 09:00	06/12/24 01:35	1
Selenium	<0.00140		0.00500	0.00140	mg/L		06/03/24 09:00	06/12/24 01:35	1
Silver	<0.000500		0.00100	0.000500	mg/L		06/03/24 09:00	06/13/24 18:13	1
Thallium	<0.000570		0.00100	0.000570	mg/L		06/03/24 09:00	06/12/24 01:35	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		06/03/24 09:00	06/12/24 01:35	1
Zinc	**0.0104**	**J**	0.0200	0.00970	mg/L		06/03/24 09:00	06/12/24 01:35	1
Iron	**38.8**		0.100	0.0360	mg/L		06/03/24 09:00	06/12/24 01:35	1
Manganese	**1.91**		0.0100	0.00360	mg/L		06/24/24 09:30	06/27/24 21:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**272**		30.0	22.2	mg/L			05/31/24 10:02	1
Total Organic Carbon (SM 5310C)	**4.79**		1.00	0.500	mg/L			06/01/24 09:10	1

Client: HDR Inc
Project/Site: CRLCSWA_2 Spring 2024

Job ID: 310-282336-1

Client Sample ID: MW-213A

Date Collected: 05/29/24 12:30
Date Received: 05/30/24 10:20

Lab Sample ID: 310-282336-5

Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**192**		5.00	2.10	mg/L			06/06/24 19:03	5

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		05/31/24 08:45	06/03/24 16:45	1
Arsenic	**0.000927**	**J**	0.00200	0.000530	mg/L		05/31/24 08:45	06/03/24 16:45	1
Barium	**0.0567**		0.00200	0.000660	mg/L		05/31/24 08:45	06/03/24 16:45	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		05/31/24 08:45	06/03/24 16:45	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		05/31/24 08:45	06/03/24 16:45	1
Chromium	<0.00120		0.00500	0.00120	mg/L		05/31/24 08:45	06/03/24 16:45	1
Cobalt	**0.00631**		0.000500	0.000170	mg/L		05/31/24 08:45	06/03/24 16:45	1
Copper	<0.00180		0.00500	0.00180	mg/L		05/31/24 08:45	06/03/24 16:45	1
Lead	<0.000260		0.000500	0.000260	mg/L		05/31/24 08:45	06/03/24 16:45	1
Nickel	**0.00310**	**J**	0.00500	0.00210	mg/L		05/31/24 08:45	06/03/24 16:45	1
Selenium	<0.00140		0.00500	0.00140	mg/L		05/31/24 08:45	06/03/24 16:45	1
Silver	<0.000500		0.00100	0.000500	mg/L		05/31/24 08:45	06/12/24 19:11	1
Thallium	<0.000570		0.00100	0.000570	mg/L		05/31/24 08:45	06/03/24 16:45	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		05/31/24 08:45	06/03/24 16:45	1
Zinc	<0.00970		0.0200	0.00970	mg/L		05/31/24 08:45	06/03/24 16:45	1
Iron	**1.81**		0.100	0.0360	mg/L		05/31/24 08:45	06/03/24 16:45	1
Manganese	**1.73**		0.0100	0.00360	mg/L		05/31/24 08:45	06/03/24 16:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**3.25**		1.88	1.39	mg/L			05/31/24 10:02	1
Total Organic Carbon (SM 5310C)	**2.43**		1.00	0.500	mg/L			06/01/24 09:46	1

Client: HDR Inc
Project/Site: CRLCSWA_2 Spring 2024

Job ID: 310-282336-1

Client Sample ID: MW-213B

Date Collected: 05/29/24 13:06
Date Received: 05/30/24 10:20

Lab Sample ID: 310-282336-6

Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**24.9**		5.00	2.10	mg/L			06/06/24 19:16	5

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		05/31/24 08:45	06/03/24 16:49	1
Arsenic	**0.000790**	**J**	0.00200	0.000530	mg/L		05/31/24 08:45	06/03/24 16:49	1
Barium	**0.0952**		0.00200	0.000660	mg/L		05/31/24 08:45	06/03/24 16:49	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		05/31/24 08:45	06/03/24 16:49	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		05/31/24 08:45	06/03/24 16:49	1
Chromium	<0.00120		0.00500	0.00120	mg/L		05/31/24 08:45	06/03/24 16:49	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		05/31/24 08:45	06/03/24 16:49	1
Copper	<0.00180		0.00500	0.00180	mg/L		05/31/24 08:45	06/03/24 16:49	1
Lead	**0.000425**	**J**	0.000500	0.000260	mg/L		05/31/24 08:45	06/03/24 16:49	1
Nickel	<0.00210		0.00500	0.00210	mg/L		05/31/24 08:45	06/03/24 16:49	1
Selenium	<0.00140		0.00500	0.00140	mg/L		05/31/24 08:45	06/03/24 16:49	1
Silver	<0.000500		0.00100	0.000500	mg/L		05/31/24 08:45	06/12/24 19:13	1
Thallium	<0.000570		0.00100	0.000570	mg/L		05/31/24 08:45	06/03/24 16:49	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		05/31/24 08:45	06/03/24 16:49	1
Zinc	<0.00970		0.0200	0.00970	mg/L		05/31/24 08:45	06/03/24 16:49	1
Iron	**1.46**		0.100	0.0360	mg/L		05/31/24 08:45	06/03/24 16:49	1
Manganese	**0.169**		0.0100	0.00360	mg/L		05/31/24 08:45	06/03/24 16:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**4.88**		1.88	1.39	mg/L			05/31/24 10:02	1
Total Organic Carbon (SM 5310C)	**0.760**	**J**	1.00	0.500	mg/L			06/01/24 10:23	1

Client: HDR Inc
Project/Site: CRLCSWA_2 Spring 2024

Job ID: 310-282336-1

Client Sample ID: MW-218

Date Collected: 05/29/24 16:39
Date Received: 05/30/24 10:20

Lab Sample ID: 310-282336-7

Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**24.7**		5.00	2.10	mg/L			06/06/24 19:54	5

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		05/31/24 08:45	06/03/24 16:53	1
Arsenic	**0.00105**	**J**	0.00200	0.000530	mg/L		05/31/24 08:45	06/03/24 16:53	1
Barium	**0.187**		0.00200	0.000660	mg/L		05/31/24 08:45	06/03/24 16:53	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		05/31/24 08:45	06/03/24 16:53	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		05/31/24 08:45	06/03/24 16:53	1
Chromium	<0.00120		0.00500	0.00120	mg/L		05/31/24 08:45	06/03/24 16:53	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		05/31/24 08:45	06/03/24 16:53	1
Copper	<0.00180		0.00500	0.00180	mg/L		05/31/24 08:45	06/03/24 16:53	1
Lead	<0.000260		0.000500	0.000260	mg/L		05/31/24 08:45	06/03/24 16:53	1
Nickel	<0.00210		0.00500	0.00210	mg/L		05/31/24 08:45	06/03/24 16:53	1
Selenium	**0.00478**	**J**	0.00500	0.00140	mg/L		05/31/24 08:45	06/03/24 16:53	1
Silver	<0.000500		0.00100	0.000500	mg/L		05/31/24 08:45	06/12/24 19:15	1
Thallium	<0.000570		0.00100	0.000570	mg/L		05/31/24 08:45	06/03/24 16:53	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		05/31/24 08:45	06/03/24 16:53	1
Zinc	<0.00970		0.0200	0.00970	mg/L		05/31/24 08:45	06/03/24 16:53	1
Iron	**0.550**		0.100	0.0360	mg/L		05/31/24 08:45	06/03/24 16:53	1
Manganese	**0.0413**		0.0100	0.00360	mg/L		05/31/24 08:45	06/03/24 16:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**5.37**		1.88	1.39	mg/L			05/31/24 10:02	1
Total Organic Carbon (SM 5310C)	**1.14**		1.00	0.500	mg/L			06/01/24 10:59	1

Client: HDR Inc
Project/Site: CRLCSWA_2 Spring 2024

Job ID: 310-282336-1

Client Sample ID: MW-501

Date Collected: 05/29/24 14:05
Date Received: 05/30/24 10:20

Lab Sample ID: 310-282336-8

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		05/31/24 08:45	06/03/24 16:56	1
Arsenic	**0.00618**		0.00200	0.000530	mg/L		05/31/24 08:45	06/03/24 16:56	1
Barium	**0.0232**		0.00200	0.000660	mg/L		05/31/24 08:45	06/03/24 16:56	1
Beryllium	**0.00227**		0.00100	0.000330	mg/L		05/31/24 08:45	06/03/24 16:56	1
Cadmium	**0.000576**		0.000200	0.000100	mg/L		05/31/24 08:45	06/03/24 16:56	1
Chromium	<0.00120		0.00500	0.00120	mg/L		05/31/24 08:45	06/03/24 16:56	1
Cobalt	**0.0525**		0.000500	0.000170	mg/L		05/31/24 08:45	06/03/24 16:56	1
Copper	**0.00289**	**J**	0.00500	0.00180	mg/L		05/31/24 08:45	06/03/24 16:56	1
Lead	**0.000365**	**J**	0.000500	0.000260	mg/L		05/31/24 08:45	06/03/24 16:56	1
Nickel	**0.107**		0.00500	0.00210	mg/L		05/31/24 08:45	06/03/24 16:56	1
Selenium	<0.00140		0.00500	0.00140	mg/L		05/31/24 08:45	06/03/24 16:56	1
Silver	<0.000500		0.00100	0.000500	mg/L		05/31/24 08:45	06/12/24 19:17	1
Thallium	<0.000570		0.00100	0.000570	mg/L		05/31/24 08:45	06/03/24 16:56	1
Vanadium	**0.00210**	**J**	0.00500	0.00110	mg/L		05/31/24 08:45	06/03/24 16:56	1
Zinc	**0.0702**		0.0200	0.00970	mg/L		05/31/24 08:45	06/03/24 16:56	1
Iron	**52.1**		0.100	0.0360	mg/L		05/31/24 08:45	06/03/24 16:56	1
Manganese	**0.350**		0.0100	0.00360	mg/L		05/31/24 08:45	06/03/24 16:56	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		06/03/24 09:00	06/12/24 01:38	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		06/03/24 09:00	06/12/24 01:38	1
Barium	**0.0145**		0.00200	0.000660	mg/L		06/03/24 09:00	06/12/24 01:38	1
Beryllium	**0.000392**	**J**	0.00100	0.000330	mg/L		06/03/24 09:00	06/12/24 01:38	1
Cadmium	**0.000392**		0.000200	0.000100	mg/L		06/03/24 09:00	06/12/24 01:38	1
Chromium	<0.00120		0.00500	0.00120	mg/L		06/03/24 09:00	06/12/24 01:38	1
Cobalt	**0.0475**		0.000500	0.000170	mg/L		06/03/24 09:00	06/12/24 01:38	1
Copper	<0.00180		0.00500	0.00180	mg/L		06/03/24 09:00	06/12/24 01:38	1
Lead	<0.000260		0.000500	0.000260	mg/L		06/03/24 09:00	06/12/24 01:38	1
Nickel	**0.0996**		0.00500	0.00210	mg/L		06/03/24 09:00	06/12/24 01:38	1
Selenium	<0.00140		0.00500	0.00140	mg/L		06/03/24 09:00	06/12/24 01:38	1
Silver	<0.000500		0.00100	0.000500	mg/L		06/03/24 09:00	06/13/24 18:15	1
Thallium	<0.000570		0.00100	0.000570	mg/L		06/03/24 09:00	06/12/24 01:38	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		06/03/24 09:00	06/12/24 01:38	1
Zinc	**0.0546**		0.0200	0.00970	mg/L		06/03/24 09:00	06/12/24 01:38	1
Iron	**0.755**		0.100	0.0360	mg/L		06/03/24 09:00	06/12/24 01:38	1
Manganese	**0.316**		0.0100	0.00360	mg/L		06/24/24 09:30	06/27/24 21:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**1100**		60.0	44.4	mg/L			05/31/24 10:02	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.39		1.88	1.39	mg/L			05/31/24 10:28	1

Definitions/Glossary

Client: HDR Inc
Job ID: 310-282336-1
Project/Site: CRLCSWA_2 Spring 2024

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
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.

Metals

Qualifier	Qualifier Description
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.
F1	MS and/or MSD recovery 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.

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

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 410-513048/1-A
Matrix: Water
Analysis Batch: 513167

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 513048

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	<0.0220		0.0500	0.0220	ug/L		06/03/24 15:46	06/04/24 08:53	1

Lab Sample ID: LCS 410-513048/2-A
Matrix: Water
Analysis Batch: 513167

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 513048

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silvex (2,4,5-TP)	0.250	0.1800		ug/L		72	62 - 170

Lab Sample ID: LCSD 410-513048/3-A
Matrix: Water
Analysis Batch: 513167

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 513048

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silvex (2,4,5-TP)	0.250	0.1794		ug/L		72	62 - 170	0	30

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 310-423954/3
Matrix: Water
Analysis Batch: 423954

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<0.420		1.00	0.420	mg/L			06/06/24 17:23	1

Lab Sample ID: LCS 310-423954/4
Matrix: Water
Analysis Batch: 423954

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	10.13		mg/L		101	90 - 110

Lab Sample ID: 310-282336-2 MS
Matrix: Water
Analysis Batch: 423954

Client Sample ID: MW-304R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	369		25.0	380.8	4	mg/L		49	80 - 120

Lab Sample ID: 310-282336-2 MSD
Matrix: Water
Analysis Batch: 423954

Client Sample ID: MW-304R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	369		25.0	382.3	4	mg/L		55	80 - 120	0	15

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-423146/1-A
Matrix: Water
Analysis Batch: 423437

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 423146

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		05/31/24 08:45	06/03/24 15:56	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		05/31/24 08:45	06/03/24 15:56	1
Barium	<0.000660		0.00200	0.000660	mg/L		05/31/24 08:45	06/03/24 15:56	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		05/31/24 08:45	06/03/24 15:56	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		05/31/24 08:45	06/03/24 15:56	1
Chromium	<0.00120		0.00500	0.00120	mg/L		05/31/24 08:45	06/03/24 15:56	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		05/31/24 08:45	06/03/24 15:56	1
Copper	<0.00180		0.00500	0.00180	mg/L		05/31/24 08:45	06/03/24 15:56	1
Lead	<0.000260		0.000500	0.000260	mg/L		05/31/24 08:45	06/03/24 15:56	1
Nickel	<0.00210		0.00500	0.00210	mg/L		05/31/24 08:45	06/03/24 15:56	1
Selenium	<0.00140		0.00500	0.00140	mg/L		05/31/24 08:45	06/03/24 15:56	1
Thallium	<0.000570		0.00100	0.000570	mg/L		05/31/24 08:45	06/03/24 15:56	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		05/31/24 08:45	06/03/24 15:56	1
Zinc	<0.00970		0.0200	0.00970	mg/L		05/31/24 08:45	06/03/24 15:56	1
Iron	<0.0360		0.100	0.0360	mg/L		05/31/24 08:45	06/03/24 15:56	1
Manganese	<0.00360		0.0100	0.00360	mg/L		05/31/24 08:45	06/03/24 15:56	1

Lab Sample ID: MB 310-423146/1-A
Matrix: Water
Analysis Batch: 424410

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 423146

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.000500		0.00100	0.000500	mg/L		05/31/24 08:45	06/12/24 19:02	1

Lab Sample ID: LCS 310-423146/2-A
Matrix: Water
Analysis Batch: 423437

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 423146

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.200	0.2162		mg/L		108	80 - 120
Arsenic	0.200	0.2206		mg/L		110	80 - 120
Barium	0.100	0.1106		mg/L		111	80 - 120
Beryllium	0.100	0.1064		mg/L		106	80 - 120
Cadmium	0.100	0.1009		mg/L		101	80 - 120
Chromium	0.100	0.1043		mg/L		104	80 - 120
Cobalt	0.100	0.1020		mg/L		102	80 - 120
Copper	0.200	0.2076		mg/L		104	80 - 120
Lead	0.200	0.2179		mg/L		109	80 - 120
Nickel	0.200	0.2194		mg/L		110	80 - 120
Selenium	0.400	0.3871		mg/L		97	80 - 120
Thallium	0.100	0.09167		mg/L		92	80 - 120
Vanadium	0.100	0.1019		mg/L		102	80 - 120
Zinc	0.200	0.1992		mg/L		100	80 - 120
Iron	0.200	0.2120		mg/L		106	80 - 120
Manganese	0.100	0.1025		mg/L		103	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 310-423146/2-A
Matrix: Water
Analysis Batch: 424410

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 423146

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Silver			0.100	0.1150		mg/L		115	80 - 120		

Lab Sample ID: 310-282336-1 MS
Matrix: Water
Analysis Batch: 423437

Client Sample ID: MW-26A
Prep Type: Total/NA
Prep Batch: 423146

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony	<0.00100		0.200	0.1997		mg/L		100	75 - 125		
Arsenic	0.0210		0.200	0.2407		mg/L		110	75 - 125		
Barium	0.537		0.100	0.6400	4	mg/L		103	75 - 125		
Beryllium	<0.000330		0.100	0.1010		mg/L		101	75 - 125		
Cadmium	<0.000100		0.100	0.09649		mg/L		96	75 - 125		
Chromium	<0.00120		0.100	0.1003		mg/L		100	75 - 125		
Cobalt	0.0709		0.100	0.1705		mg/L		100	75 - 125		
Copper	0.00183	J	0.200	0.1900		mg/L		94	75 - 125		
Lead	0.000918		0.200	0.1975		mg/L		98	75 - 125		
Nickel	0.0445		0.200	0.2367		mg/L		96	75 - 125		
Selenium	<0.00140		0.400	0.3923		mg/L		98	75 - 125		
Thallium	<0.000570	F1	0.100	0.07156	F1	mg/L		72	75 - 125		
Vanadium	<0.00110		0.100	0.1021		mg/L		102	75 - 125		
Zinc	<0.00970		0.200	0.1837		mg/L		92	75 - 125		
Iron	40.6		0.200	40.87	4	mg/L		152	75 - 125		

Lab Sample ID: 310-282336-1 MSD
Matrix: Water
Analysis Batch: 423437

Client Sample ID: MW-26A
Prep Type: Total/NA
Prep Batch: 423146

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<0.00100		0.200	0.1965		mg/L		98	75 - 125	2	20
Arsenic	0.0210		0.200	0.2467		mg/L		113	75 - 125	2	20
Barium	0.537		0.100	0.6677	4	mg/L		131	75 - 125	4	20
Beryllium	<0.000330		0.100	0.1013		mg/L		101	75 - 125	0	20
Cadmium	<0.000100		0.100	0.1000		mg/L		100	75 - 125	4	20
Chromium	<0.00120		0.100	0.1031		mg/L		103	75 - 125	3	20
Cobalt	0.0709		0.100	0.1693		mg/L		98	75 - 125	1	20
Copper	0.00183	J	0.200	0.1916		mg/L		95	75 - 125	1	20
Lead	0.000918		0.200	0.1993		mg/L		99	75 - 125	1	20
Nickel	0.0445		0.200	0.2413		mg/L		98	75 - 125	2	20
Selenium	<0.00140		0.400	0.3981		mg/L		100	75 - 125	1	20
Thallium	<0.000570	F1	0.100	0.07441	F1	mg/L		74	75 - 125	4	20
Vanadium	<0.00110		0.100	0.1032		mg/L		103	75 - 125	1	20
Zinc	<0.00970		0.200	0.1836		mg/L		92	75 - 125	0	20
Iron	40.6		0.200	41.43	4	mg/L		436	75 - 125	1	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 310-282218-A-1-B DU
Matrix: Water
Analysis Batch: 423437

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 423146

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Antimony	<0.00100			<0.00100		mg/L				NC	20
Arsenic	0.000970	J		0.001012	J	mg/L				4	20
Barium	0.0343			0.03456		mg/L				0.8	20
Beryllium	0.00961			0.009006		mg/L				6	20
Cadmium	<0.000100			<0.000100		mg/L				NC	20
Chromium	0.00570			0.005751		mg/L				0.8	20
Cobalt	0.000580			0.0005760		mg/L				0.7	20
Copper	<0.00180			<0.00180		mg/L				NC	20
Lead	<0.000260			<0.000260		mg/L				NC	20
Nickel	0.00382	J		0.003806	J	mg/L				0.3	20
Selenium	<0.00140			<0.00140		mg/L				NC	20
Thallium	<0.000570			<0.000570		mg/L				NC	20
Vanadium	<0.00110			<0.00110		mg/L				NC	20
Zinc	0.0228			0.02315		mg/L				2	20
Iron	12.6			12.75		mg/L				1	20
Manganese	4.73			4.811		mg/L				2	20

Lab Sample ID: MB 310-423240/1-A
Matrix: Water
Analysis Batch: 424262

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 423240

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00100		0.00200	0.00100	mg/L		06/03/24 09:00	06/11/24 17:00	1
Arsenic	<0.000530		0.00200	0.000530	mg/L		06/03/24 09:00	06/11/24 17:00	1
Barium	<0.000660		0.00200	0.000660	mg/L		06/03/24 09:00	06/11/24 17:00	1
Beryllium	<0.000330		0.00100	0.000330	mg/L		06/03/24 09:00	06/11/24 17:00	1
Cadmium	<0.000100		0.000200	0.000100	mg/L		06/03/24 09:00	06/11/24 17:00	1
Chromium	<0.00120		0.00500	0.00120	mg/L		06/03/24 09:00	06/11/24 17:00	1
Cobalt	<0.000170		0.000500	0.000170	mg/L		06/03/24 09:00	06/11/24 17:00	1
Copper	<0.00180		0.00500	0.00180	mg/L		06/03/24 09:00	06/11/24 17:00	1
Lead	<0.000260		0.000500	0.000260	mg/L		06/03/24 09:00	06/11/24 17:00	1
Nickel	<0.00210		0.00500	0.00210	mg/L		06/03/24 09:00	06/11/24 17:00	1
Selenium	<0.00140		0.00500	0.00140	mg/L		06/03/24 09:00	06/11/24 17:00	1
Thallium	<0.000570		0.00100	0.000570	mg/L		06/03/24 09:00	06/11/24 17:00	1
Vanadium	<0.00110		0.00500	0.00110	mg/L		06/03/24 09:00	06/11/24 17:00	1
Zinc	<0.00970		0.0200	0.00970	mg/L		06/03/24 09:00	06/11/24 17:00	1
Iron	<0.0360		0.100	0.0360	mg/L		06/03/24 09:00	06/11/24 17:00	1
Manganese	<0.00360		0.0100	0.00360	mg/L		06/03/24 09:00	06/11/24 17:00	1

Lab Sample ID: MB 310-423240/1-A
Matrix: Water
Analysis Batch: 424525

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 423240

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.000500		0.00100	0.000500	mg/L		06/03/24 09:00	06/13/24 14:05	1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 310-423240/2-A
Matrix: Water
Analysis Batch: 424262

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 423240

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.200	0.1996		mg/L		100	80 - 120
Arsenic	0.200	0.1913		mg/L		96	80 - 120
Barium	0.100	0.09785		mg/L		98	80 - 120
Beryllium	0.100	0.09251		mg/L		93	80 - 120
Cadmium	0.100	0.09093		mg/L		91	80 - 120
Chromium	0.100	0.09248		mg/L		92	80 - 120
Cobalt	0.100	0.09739		mg/L		97	80 - 120
Copper	0.200	0.1893		mg/L		95	80 - 120
Lead	0.200	0.1936		mg/L		97	80 - 120
Nickel	0.200	0.1953		mg/L		98	80 - 120
Selenium	0.400	0.3674		mg/L		92	80 - 120
Thallium	0.100	0.08781		mg/L		88	80 - 120
Vanadium	0.100	0.09300		mg/L		93	80 - 120
Zinc	0.200	0.1835		mg/L		92	80 - 120
Iron	0.200	0.1956		mg/L		98	80 - 120

Lab Sample ID: LCS 310-423240/2-A
Matrix: Water
Analysis Batch: 424525

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 423240

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.100	0.1087		mg/L		109	80 - 120

Lab Sample ID: 310-282416-A-1-B MS
Matrix: Water
Analysis Batch: 424262

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 423240

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<0.00100		0.200	0.2120		mg/L		106	75 - 125
Arsenic	0.00913		0.200	0.2209		mg/L		106	75 - 125
Barium	0.351		0.100	0.4736		mg/L		123	75 - 125
Beryllium	<0.000330		0.100	0.1022		mg/L		102	75 - 125
Cadmium	0.000111	J	0.100	0.1007		mg/L		101	75 - 125
Chromium	<0.00120		0.100	0.09769		mg/L		98	75 - 125
Cobalt	0.00273		0.100	0.1022		mg/L		100	75 - 125
Copper	<0.00180		0.200	0.1919		mg/L		96	75 - 125
Lead	<0.000260		0.200	0.2020		mg/L		101	75 - 125
Nickel	0.00248	J	0.200	0.2028		mg/L		100	75 - 125
Selenium	<0.00140		0.400	0.3882		mg/L		97	75 - 125
Thallium	<0.000570		0.100	0.07963		mg/L		80	75 - 125
Vanadium	<0.00110		0.100	0.09983		mg/L		100	75 - 125
Zinc	<0.00970		0.200	0.1978		mg/L		99	75 - 125
Iron	3.61		0.200	3.900	4	mg/L		144	75 - 125
Manganese	1.37	*+	0.100	1.488	4	mg/L		120	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 310-282416-A-1-B MS
Matrix: Water
Analysis Batch: 424569

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 423240

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	<0.000500		0.100	0.1060		mg/L		106	75 - 125

Lab Sample ID: 310-282416-A-1-C MSD
Matrix: Water
Analysis Batch: 424262

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 423240

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<0.00100		0.200	0.2070		mg/L		103	75 - 125	2	20
Arsenic	0.00913		0.200	0.2167		mg/L		104	75 - 125	2	20
Barium	0.351		0.100	0.4364		mg/L		86	75 - 125	8	20
Beryllium	<0.000330		0.100	0.09612		mg/L		96	75 - 125	6	20
Cadmium	0.000111	J	0.100	0.09555		mg/L		95	75 - 125	5	20
Chromium	<0.00120		0.100	0.09406		mg/L		94	75 - 125	4	20
Cobalt	0.00273		0.100	0.09882		mg/L		96	75 - 125	3	20
Copper	<0.00180		0.200	0.1885		mg/L		94	75 - 125	2	20
Lead	<0.000260		0.200	0.1930		mg/L		96	75 - 125	5	20
Nickel	0.00248	J	0.200	0.1955		mg/L		97	75 - 125	4	20
Selenium	<0.00140		0.400	0.3845		mg/L		96	75 - 125	1	20
Thallium	<0.000570		0.100	0.07549		mg/L		75	75 - 125	5	20
Vanadium	<0.00110		0.100	0.09615		mg/L		96	75 - 125	4	20
Zinc	<0.00970		0.200	0.1918		mg/L		96	75 - 125	3	20
Iron	3.61		0.200	3.678	4	mg/L		33	75 - 125	6	20
Manganese	1.37	*+	0.100	1.398	4	mg/L		30	75 - 125	6	20

Lab Sample ID: 310-282416-A-1-C MSD
Matrix: Water
Analysis Batch: 424569

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 423240

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	<0.000500		0.100	0.1087		mg/L		109	75 - 125	3	20

Lab Sample ID: 310-282420-A-1-B DU
Matrix: Water
Analysis Batch: 424262

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 423240

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<0.00100		<0.00100		mg/L		NC	20
Arsenic	<0.000530		<0.000530		mg/L		NC	20
Beryllium	<0.000330		<0.000330		mg/L		NC	20
Cadmium	0.000343		0.0003460		mg/L		0.9	20
Chromium	<0.00120		<0.00120		mg/L		NC	20
Cobalt	0.000968		0.0009550		mg/L		1	20
Copper	<0.00180		<0.00180		mg/L		NC	20
Lead	<0.000260		<0.000260		mg/L		NC	20
Nickel	0.00366	J	0.003613	J	mg/L		1	20
Selenium	<0.00140		<0.00140		mg/L		NC	20
Thallium	<0.000570		<0.000570		mg/L		NC	20
Vanadium	0.00117	J	0.001177	J	mg/L		0.9	20
Zinc	<0.00970		<0.00970		mg/L		NC	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 310-282420-A-1-B DU
Matrix: Water
Analysis Batch: 424262

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 423240

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Iron	0.0417	J	<0.0360		mg/L		NC	20

Lab Sample ID: 310-282420-A-1-B DU
Matrix: Water
Analysis Batch: 424409

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 423240

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Barium	0.0118		0.01107		mg/L		6	20

Lab Sample ID: 310-282420-A-1-B DU
Matrix: Water
Analysis Batch: 424569

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 423240

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	<0.000500		<0.000500		mg/L		NC	20

Lab Sample ID: MB 310-425347/1-A
Matrix: Water
Analysis Batch: 425927

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 425347

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	<0.00360		0.0100	0.00360	mg/L		06/24/24 09:30	06/27/24 21:18	1

Lab Sample ID: 310-283558-A-1-B MS
Matrix: Water
Analysis Batch: 424981

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 424660

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.000567	J *+	0.200	0.2044		mg/L		102	75 - 125
Barium	0.0410	*+	0.100	0.1544		mg/L		113	75 - 125
Cadmium	<0.000100	*+	0.100	0.1031		mg/L		103	75 - 125
Cobalt	0.000668	*+	0.100	0.09786		mg/L		97	75 - 125
Copper	0.00191	J *+	0.200	0.2244		mg/L		111	75 - 125
Lead	<0.000260	*+	0.200	0.2023		mg/L		101	75 - 125
Nickel	<0.00210	*+	0.200	0.2080		mg/L		104	75 - 125
Selenium	<0.00140		0.400	0.3952		mg/L		99	75 - 125
Silver	<0.000500		0.100	0.08541		mg/L		85	75 - 125

Lab Sample ID: 310-283558-A-1-C MSD
Matrix: Water
Analysis Batch: 424981

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 424660

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	0.000567	J *+	0.200	0.2204		mg/L		110	75 - 125	7	20
Barium	0.0410	*+	0.100	0.1626		mg/L		122	75 - 125	5	20
Cadmium	<0.000100	*+	0.100	0.1118		mg/L		112	75 - 125	8	20
Cobalt	0.000668	*+	0.100	0.1061		mg/L		105	75 - 125	8	20
Copper	0.00191	J *+	0.200	0.2407		mg/L		119	75 - 125	7	20
Lead	<0.000260	*+	0.200	0.2161		mg/L		108	75 - 125	7	20
Nickel	<0.00210	*+	0.200	0.2258		mg/L		113	75 - 125	8	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 310-283558-A-1-C MSD
Matrix: Water
Analysis Batch: 424981

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 424660

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Selenium	<0.00140		0.400	0.4261		mg/L		107	75 - 125	8	20
Silver	<0.000500		0.100	0.09225		mg/L		92	75 - 125	8	20

Lab Sample ID: 310-282336-8 DU
Matrix: Water
Analysis Batch: 424981

Client Sample ID: MW-501
Prep Type: Dissolved
Prep Batch: 424660

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Selenium	<0.00140		<0.00140		mg/L		NC	20
Silver	<0.000500		<0.000500		mg/L		NC	20

Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: MB 310-423203/1
Matrix: Water
Analysis Batch: 423203

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	<3.70		5.00	3.70	mg/L			05/31/24 10:02	1

Lab Sample ID: LCS 310-423203/2
Matrix: Water
Analysis Batch: 423203

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	93.00		mg/L		93	81 - 116

Lab Sample ID: 310-282344-C-1 DU
Matrix: Water
Analysis Batch: 423203

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	284		272.0		mg/L		4	35

Lab Sample ID: MB 310-423217/1
Matrix: Water
Analysis Batch: 423217

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	<3.70		5.00	3.70	mg/L			05/31/24 10:28	1

Lab Sample ID: LCS 310-423217/2
Matrix: Water
Analysis Batch: 423217

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	94.00		mg/L		94	81 - 116

Method: I-3765-85 - Residue, Non-filterable (TSS) (Continued)

Lab Sample ID: 310-282386-A-1 DU
Matrix: Water
Analysis Batch: 423217

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	15.0			16.00		mg/L				13	35

Lab Sample ID: MB 310-423228/1
Matrix: Water
Analysis Batch: 423228

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	<3.70		5.00	3.70	mg/L			05/31/24 10:56	1

Lab Sample ID: LCS 310-423228/2
Matrix: Water
Analysis Batch: 423228

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	94.00		mg/L		94	81 - 116		

Lab Sample ID: 310-282433-A-1 DU
Matrix: Water
Analysis Batch: 423228

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	2100			2760		mg/L				27	35

Method: SM 5310C - TOC

Lab Sample ID: MB 310-423315/11
Matrix: Water
Analysis Batch: 423315

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<0.500		1.00	0.500	mg/L			05/31/24 18:40	1

Lab Sample ID: LCS 310-423315/12
Matrix: Water
Analysis Batch: 423315

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Organic Carbon			9.99	10.46		mg/L		105	85 - 115		

Lab Sample ID: 310-282319-O-3 MS
Matrix: Water
Analysis Batch: 423315

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Organic Carbon	11.5		4.99	16.04		mg/L		91	85 - 115		

Method: SM 5310C - TOC (Continued)

Lab Sample ID: 310-282204-L-8 DU
Matrix: Water
Analysis Batch: 423315

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Organic Carbon	3.81			3.640		mg/L				5	15

GC Semi VOA

Prep Batch: 513048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282336-1	MW-26A	Total/NA	Water	8151A	
MB 410-513048/1-A	Method Blank	Total/NA	Water	8151A	
LCS 410-513048/2-A	Lab Control Sample	Total/NA	Water	8151A	
LCSD 410-513048/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	

Analysis Batch: 513167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282336-1	MW-26A	Total/NA	Water	8151A	513048
MB 410-513048/1-A	Method Blank	Total/NA	Water	8151A	513048
LCS 410-513048/2-A	Lab Control Sample	Total/NA	Water	8151A	513048
LCSD 410-513048/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	513048

HPLC/IC

Analysis Batch: 423954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282336-2	MW-304R	Total/NA	Water	9056A	
310-282336-3	MW-204A	Total/NA	Water	9056A	
310-282336-4	MW-204B	Total/NA	Water	9056A	
310-282336-5	MW-213A	Total/NA	Water	9056A	
310-282336-6	MW-213B	Total/NA	Water	9056A	
310-282336-7	MW-218	Total/NA	Water	9056A	
MB 310-423954/3	Method Blank	Total/NA	Water	9056A	
LCS 310-423954/4	Lab Control Sample	Total/NA	Water	9056A	
310-282336-2 MS	MW-304R	Total/NA	Water	9056A	
310-282336-2 MSD	MW-304R	Total/NA	Water	9056A	

Metals

Prep Batch: 423146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282336-1	MW-26A	Total/NA	Water	3005A	
310-282336-2	MW-304R	Total/NA	Water	3005A	
310-282336-3	MW-204A	Total/NA	Water	3005A	
310-282336-4	MW-204B	Total/NA	Water	3005A	
310-282336-5	MW-213A	Total/NA	Water	3005A	
310-282336-6	MW-213B	Total/NA	Water	3005A	
310-282336-7	MW-218	Total/NA	Water	3005A	
310-282336-8	MW-501	Total/NA	Water	3005A	
MB 310-423146/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-423146/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-282336-1 MS	MW-26A	Total/NA	Water	3005A	
310-282336-1 MSD	MW-26A	Total/NA	Water	3005A	
310-282218-A-1-B DU	Duplicate	Total/NA	Water	3005A	

Prep Batch: 423240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282336-4	MW-204B	Dissolved	Water	3005A	
310-282336-8	MW-501	Dissolved	Water	3005A	
MB 310-423240/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-423240/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-282416-A-1-B MS	Matrix Spike	Total/NA	Water	3005A	

Metals (Continued)

Prep Batch: 423240 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282416-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	3005A	
310-282420-A-1-B DU	Duplicate	Total/NA	Water	3005A	

Analysis Batch: 423437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282336-1	MW-26A	Total/NA	Water	6020B	423146
310-282336-2	MW-304R	Total/NA	Water	6020B	423146
310-282336-3	MW-204A	Total/NA	Water	6020B	423146
310-282336-4	MW-204B	Total/NA	Water	6020B	423146
310-282336-5	MW-213A	Total/NA	Water	6020B	423146
310-282336-6	MW-213B	Total/NA	Water	6020B	423146
310-282336-7	MW-218	Total/NA	Water	6020B	423146
310-282336-8	MW-501	Total/NA	Water	6020B	423146
MB 310-423146/1-A	Method Blank	Total/NA	Water	6020B	423146
LCS 310-423146/2-A	Lab Control Sample	Total/NA	Water	6020B	423146
310-282336-1 MS	MW-26A	Total/NA	Water	6020B	423146
310-282336-1 MSD	MW-26A	Total/NA	Water	6020B	423146
310-282218-A-1-B DU	Duplicate	Total/NA	Water	6020B	423146

Analysis Batch: 424262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282336-4	MW-204B	Dissolved	Water	6020B	423240
310-282336-8	MW-501	Dissolved	Water	6020B	423240
MB 310-423240/1-A	Method Blank	Total/NA	Water	6020B	423240
LCS 310-423240/2-A	Lab Control Sample	Total/NA	Water	6020B	423240
310-282416-A-1-B MS	Matrix Spike	Total/NA	Water	6020B	423240
310-282416-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020B	423240
310-282420-A-1-B DU	Duplicate	Total/NA	Water	6020B	423240

Analysis Batch: 424409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282420-A-1-B DU	Duplicate	Total/NA	Water	6020B	423240

Analysis Batch: 424410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282336-3	MW-204A	Total/NA	Water	6020B	423146
310-282336-4	MW-204B	Total/NA	Water	6020B	423146
310-282336-5	MW-213A	Total/NA	Water	6020B	423146
310-282336-6	MW-213B	Total/NA	Water	6020B	423146
310-282336-7	MW-218	Total/NA	Water	6020B	423146
310-282336-8	MW-501	Total/NA	Water	6020B	423146
MB 310-423146/1-A	Method Blank	Total/NA	Water	6020B	423146
LCS 310-423146/2-A	Lab Control Sample	Total/NA	Water	6020B	423146

Analysis Batch: 424525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-423240/1-A	Method Blank	Total/NA	Water	6020B	423240
LCS 310-423240/2-A	Lab Control Sample	Total/NA	Water	6020B	423240

Metals

Analysis Batch: 424569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282336-4	MW-204B	Dissolved	Water	6020B	423240
310-282336-8	MW-501	Dissolved	Water	6020B	423240
310-282416-A-1-B MS	Matrix Spike	Total/NA	Water	6020B	423240
310-282416-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020B	423240
310-282420-A-1-B DU	Duplicate	Total/NA	Water	6020B	423240

Prep Batch: 424660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-283558-A-1-B MS	Matrix Spike	Dissolved	Water	3005A	
310-283558-A-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	
310-282336-8 DU	MW-501	Dissolved	Water	3005A	

Analysis Batch: 424981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-283558-A-1-B MS	Matrix Spike	Dissolved	Water	6020B	424660
310-283558-A-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	6020B	424660
310-282336-8 DU	MW-501	Dissolved	Water	6020B	424660

Prep Batch: 425347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282336-4	MW-204B	Dissolved	Water	3005A	
310-282336-8	MW-501	Dissolved	Water	3005A	
MB 310-425347/1-A	Method Blank	Total/NA	Water	3005A	

Analysis Batch: 425927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282336-4	MW-204B	Dissolved	Water	6020B	425347
310-282336-8	MW-501	Dissolved	Water	6020B	425347
MB 310-425347/1-A	Method Blank	Total/NA	Water	6020B	425347

General Chemistry

Analysis Batch: 423203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282336-2	MW-304R	Total/NA	Water	I-3765-85	
310-282336-3	MW-204A	Total/NA	Water	I-3765-85	
310-282336-4	MW-204B	Total/NA	Water	I-3765-85	
310-282336-5	MW-213A	Total/NA	Water	I-3765-85	
310-282336-6	MW-213B	Total/NA	Water	I-3765-85	
310-282336-7	MW-218	Total/NA	Water	I-3765-85	
310-282336-8	MW-501	Total/NA	Water	I-3765-85	
MB 310-423203/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-423203/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-282344-C-1 DU	Duplicate	Total/NA	Water	I-3765-85	

Analysis Batch: 423217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282336-8	MW-501	Dissolved	Water	I-3765-85	
MB 310-423217/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-423217/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-282386-A-1 DU	Duplicate	Total/NA	Water	I-3765-85	

QC Association Summary

Client: HDR Inc
Project/Site: CRLCSWA_2 Spring 2024

Job ID: 310-282336-1

General Chemistry

Analysis Batch: 423228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282336-1	MW-26A	Total/NA	Water	I-3765-85	
MB 310-423228/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-423228/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-282433-A-1 DU	Duplicate	Total/NA	Water	I-3765-85	

Analysis Batch: 423315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282336-2	MW-304R	Total/NA	Water	SM 5310C	
310-282336-3	MW-204A	Total/NA	Water	SM 5310C	
310-282336-4	MW-204B	Total/NA	Water	SM 5310C	
310-282336-5	MW-213A	Total/NA	Water	SM 5310C	
310-282336-6	MW-213B	Total/NA	Water	SM 5310C	
310-282336-7	MW-218	Total/NA	Water	SM 5310C	
MB 310-423315/11	Method Blank	Total/NA	Water	SM 5310C	
LCS 310-423315/12	Lab Control Sample	Total/NA	Water	SM 5310C	
310-282319-O-3 MS	Matrix Spike	Total/NA	Water	SM 5310C	
310-282204-L-8 DU	Duplicate	Total/NA	Water	SM 5310C	

Lab Chronicle

Client: HDR Inc
Project/Site: CRLCSWA_2 Spring 2024

Job ID: 310-282336-1

Client Sample ID: MW-26A
Date Collected: 05/29/24 17:17
Date Received: 05/30/24 10:20

Lab Sample ID: 310-282336-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	8151A			513048	QJZ6	ELLE	06/03/24 15:46
Total/NA	Analysis	8151A		1	513167	UAMZ	ELLE	06/04/24 12:39
Total/NA	Prep	3005A			423146	KM3E	EET CF	05/31/24 08:45
Total/NA	Analysis	6020B		1	423437	NFT2	EET CF	06/03/24 16:03
Total/NA	Analysis	I-3765-85		1	423228	HE7K	EET CF	05/31/24 10:56

Client Sample ID: MW-304R
Date Collected: 05/29/24 17:59
Date Received: 05/30/24 10:20

Lab Sample ID: 310-282336-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	423954	QTZ5	EET CF	06/06/24 18:00
Total/NA	Prep	3005A			423146	KM3E	EET CF	05/31/24 08:45
Total/NA	Analysis	6020B		1	423437	NFT2	EET CF	06/03/24 16:20
Total/NA	Analysis	I-3765-85		1	423203	HE7K	EET CF	05/31/24 10:02
Total/NA	Analysis	SM 5310C		1	423315	HE7K	EET CF	06/01/24 06:45

Client Sample ID: MW-204A
Date Collected: 05/29/24 15:17
Date Received: 05/30/24 10:20

Lab Sample ID: 310-282336-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	423954	QTZ5	EET CF	06/06/24 18:38
Total/NA	Prep	3005A			423146	KM3E	EET CF	05/31/24 08:45
Total/NA	Analysis	6020B		1	423437	NFT2	EET CF	06/03/24 16:24
Total/NA	Prep	3005A			423146	KM3E	EET CF	05/31/24 08:45
Total/NA	Analysis	6020B		1	424410	NFT2	EET CF	06/12/24 19:06
Total/NA	Analysis	I-3765-85		1	423203	HE7K	EET CF	05/31/24 10:02
Total/NA	Analysis	SM 5310C		1	423315	HE7K	EET CF	06/01/24 07:21

Client Sample ID: MW-204B
Date Collected: 05/29/24 15:50
Date Received: 05/30/24 10:20

Lab Sample ID: 310-282336-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		20	423954	QTZ5	EET CF	06/07/24 09:06
Dissolved	Prep	3005A			423240	KM3E	EET CF	06/03/24 09:00
Dissolved	Analysis	6020B		1	424262	NFT2	EET CF	06/12/24 01:35
Dissolved	Prep	3005A			425347	QTZ5	EET CF	06/24/24 09:30
Dissolved	Analysis	6020B		1	425927	DHM5	EET CF	06/27/24 21:25
Dissolved	Prep	3005A			423240	KM3E	EET CF	06/03/24 09:00
Dissolved	Analysis	6020B		1	424569	NFT2	EET CF	06/13/24 18:13
Total/NA	Prep	3005A			423146	KM3E	EET CF	05/31/24 08:45
Total/NA	Analysis	6020B		1	423437	NFT2	EET CF	06/03/24 16:27

Lab Chronicle

Client: HDR Inc
Project/Site: CRLCSWA_2 Spring 2024

Job ID: 310-282336-1

Client Sample ID: MW-204B

Date Collected: 05/29/24 15:50
Date Received: 05/30/24 10:20

Lab Sample ID: 310-282336-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			423146	KM3E	EET CF	05/31/24 08:45
Total/NA	Analysis	6020B		1	424410	NFT2	EET CF	06/12/24 19:09
Total/NA	Analysis	I-3765-85		1	423203	HE7K	EET CF	05/31/24 10:02
Total/NA	Analysis	SM 5310C		1	423315	HE7K	EET CF	06/01/24 09:10

Client Sample ID: MW-213A

Date Collected: 05/29/24 12:30
Date Received: 05/30/24 10:20

Lab Sample ID: 310-282336-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	423954	QTZ5	EET CF	06/06/24 19:03
Total/NA	Prep	3005A			423146	KM3E	EET CF	05/31/24 08:45
Total/NA	Analysis	6020B		1	423437	NFT2	EET CF	06/03/24 16:45
Total/NA	Prep	3005A			423146	KM3E	EET CF	05/31/24 08:45
Total/NA	Analysis	6020B		1	424410	NFT2	EET CF	06/12/24 19:11
Total/NA	Analysis	I-3765-85		1	423203	HE7K	EET CF	05/31/24 10:02
Total/NA	Analysis	SM 5310C		1	423315	HE7K	EET CF	06/01/24 09:46

Client Sample ID: MW-213B

Date Collected: 05/29/24 13:06
Date Received: 05/30/24 10:20

Lab Sample ID: 310-282336-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	423954	QTZ5	EET CF	06/06/24 19:16
Total/NA	Prep	3005A			423146	KM3E	EET CF	05/31/24 08:45
Total/NA	Analysis	6020B		1	423437	NFT2	EET CF	06/03/24 16:49
Total/NA	Prep	3005A			423146	KM3E	EET CF	05/31/24 08:45
Total/NA	Analysis	6020B		1	424410	NFT2	EET CF	06/12/24 19:13
Total/NA	Analysis	I-3765-85		1	423203	HE7K	EET CF	05/31/24 10:02
Total/NA	Analysis	SM 5310C		1	423315	HE7K	EET CF	06/01/24 10:23

Client Sample ID: MW-218

Date Collected: 05/29/24 16:39
Date Received: 05/30/24 10:20

Lab Sample ID: 310-282336-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	423954	QTZ5	EET CF	06/06/24 19:54
Total/NA	Prep	3005A			423146	KM3E	EET CF	05/31/24 08:45
Total/NA	Analysis	6020B		1	423437	NFT2	EET CF	06/03/24 16:53
Total/NA	Prep	3005A			423146	KM3E	EET CF	05/31/24 08:45
Total/NA	Analysis	6020B		1	424410	NFT2	EET CF	06/12/24 19:15
Total/NA	Analysis	I-3765-85		1	423203	HE7K	EET CF	05/31/24 10:02
Total/NA	Analysis	SM 5310C		1	423315	HE7K	EET CF	06/01/24 10:59

Lab Chronicle

Client: HDR Inc
Project/Site: CRLCSWA_2 Spring 2024

Job ID: 310-282336-1

Client Sample ID: MW-501

Date Collected: 05/29/24 14:05
Date Received: 05/30/24 10:20

Lab Sample ID: 310-282336-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			423240	KM3E	EET CF	06/03/24 09:00
Dissolved	Analysis	6020B		1	424262	NFT2	EET CF	06/12/24 01:38
Dissolved	Prep	3005A			425347	QTZ5	EET CF	06/24/24 09:30
Dissolved	Analysis	6020B		1	425927	DHM5	EET CF	06/27/24 21:28
Dissolved	Prep	3005A			423240	KM3E	EET CF	06/03/24 09:00
Dissolved	Analysis	6020B		1	424569	NFT2	EET CF	06/13/24 18:15
Total/NA	Prep	3005A			423146	KM3E	EET CF	05/31/24 08:45
Total/NA	Analysis	6020B		1	423437	NFT2	EET CF	06/03/24 16:56
Total/NA	Prep	3005A			423146	KM3E	EET CF	05/31/24 08:45
Total/NA	Analysis	6020B		1	424410	NFT2	EET CF	06/12/24 19:17
Dissolved	Analysis	I-3765-85		1	423217	HE7K	EET CF	05/31/24 10:28
Total/NA	Analysis	I-3765-85		1	423203	HE7K	EET CF	05/31/24 10:02

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: HDR Inc
Project/Site: CRLCSWA_2 Spring 2024

Job ID: 310-282336-1

Laboratory: Eurofins Cedar Falls

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

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	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24
Alabama	State	43200	01-31-25
Alaska	State	PA00009	06-30-24
Alaska (UST)	State	17-027	02-28-25
Arizona	State	AZ0780	03-12-25
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	11-30-24
Colorado	State	PA00009	06-16-24
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-25
Delaware (DW)	State	N/A	01-31-25
Florida	NELAP	E87997	06-09-24
Georgia (DW)	State	C048	01-31-25
Hawaii	State	N/A	01-31-25
Illinois	NELAP	200027	06-09-24
Kansas	NELAP	E-10151	10-31-24
Kentucky (DW)	State	KY90088	12-31-24
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-24
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-25
Massachusetts	State	M-PA009	06-30-25
Michigan	State	9930	01-31-25
Minnesota	NELAP	042-999-487	12-31-24
Mississippi	State	023	01-31-25
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-25
Nebraska	State	NE-OS-32-17	01-31-25
New Hampshire	NELAP	2730	01-10-25
New Jersey	NELAP	PA011	06-30-24
New York	NELAP	10670	04-01-25
North Carolina (DW)	State	42705	06-30-24
North Carolina (WW/SW)	State	521	12-31-24
North Dakota	State	R-205	01-31-24 *
Oklahoma	NELAP	9804	08-31-24
Oregon	NELAP	PA200001	09-11-24
Pennsylvania	NELAP	36-00037	06-09-24
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-24
Rhode Island	State	LAO00338	12-30-24
South Carolina	State	89002	01-31-25
Tennessee	State	02838	01-31-25
Texas	NELAP	T104704194-23-46	06-12-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: HDR Inc
Job ID: 310-282336-1
Project/Site: CRLCSWA_2 Spring 2024

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
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-24
Virginia	NELAP	460182	06-14-24
Washington	State	C457	04-11-24 *
West Virginia (DW)	State	9906 C	01-31-25
West Virginia DEP	State	055	06-20-24
Wyoming	State	8TMS-L	01-31-25
Wyoming (UST)	A2LA	0001.01	11-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: HDR Inc
Job ID: 310-282336-1
Project/Site: CRLCSWA_2 Spring 2024

Method	Method Description	Protocol	Laboratory
8151A	Herbicides (GC)	SW846	ELLE
9056A	Anions, Ion Chromatography	SW846	EET CF
6020B	Metals (ICP/MS)	SW846	EET CF
I-3765-85	Residue, Non-filterable (TSS)	USGS	EET CF
SM 5310C	TOC	SM	EET CF
3005A	Preparation, Total Metals	SW846	EET CF
8151A	Extraction (Herbicides)	SW846	ELLE

Protocol References:

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

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

eurofins | Environment Testing America

310-282336 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: HDR

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 5-30-24 TIME 1020 | Received By: CC

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? ↓

Temperature Record

Coolant: ☒ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ Other:_____ ☐ NONE

Thermometer ID: R | 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): 1.2 | Corrected Temp (°C): 1.2

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: HDR

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 5-30-24 | TIME 1020 | Received By: CC

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? No	☒ Yes	☒ No	*If yes:* Cooler custody seals intact? ☐ Yes ☐
Sample Custody Seals Present? No	☐ Yes	☒ No	*If yes:* Sample custody seals intact? ☐ Yes ☐
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): 0.6 | 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 Cedar Falls
3019 Venture Way
Cedar Falls IA 50613
Phone (319) 277-2401 Phone (319) 277-2425

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Richard Wilson	Lab PM: Calhoun Conner M	Carrier Tracking No(s):	COC No: 310-93721-25730 1
Client Contact: Richard Wilson	Phone: 308-882-6141	E-Mail: Conner Calhoun@et.eurofinsus.com	State of Origin:	Page: 1 of 1 ~~1 of 2~~ Page
Company: HDR Inc	PWSID:			Job #:
Address: 1917 S 67th Street	Due Date Requested:			
City: Omaha	TAT Requested (days): Standard			
State Zip: NE, 68106	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order not required			
Email: richard.wilson2@hdrinc.com	WO #:			
Project Name: CRLCSWA_2 Spring 2024	Project #: 31006785			
Site: Iowa	SSOW#:			

Analysis Requested

Preservation Codes: D - HNO3; N - None; S - H2SO4; A - HCL; Other:

Sample Identification	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)	6020B - Appendix I Metals	I_3765_85 - (TSS)	9056A_ORGFM_28D - Sulfate	5310C - TOC	8151A - 2,4,5-TP	6020B - Arsenic	6020B - Cobalt	6020B - Iron, Mn	6020B- Field Filtered App 1 metals	I_3765_85-Dissolved TSS	6020 B - Iron, MN - Dissolved			Total Number of containers	Special Instructions/Note:
		Preservation Code:																			
MW-26A	5-29-2024	~~11:56~~ 17:17	G	Water	N	N		X			X	X								4	
MW-304R		17:59		Water	N			X	X	X			X	X						6	
MW-204A		15:17		Water	N		X	X	X	X				X						6	
MW-204B		15:50		Water	Y		X	X	X	X				X	X		X			7	
MW-213A		12:30		Water	N		X	X	X	X				X						6	
MW-213B		13:06		Water	N		X	X	X	X				X						6	
MW-218		16:39		Water	N		X	X	X	X				X						6	
MW-501		14:05		Water	Y		X	X						X	X	X	X			4	
				Water																	
				Water																	
				Water																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I, II, III, IV Other (specify)

Special Instructions/QC Requirements.

Empty Kit Relinquished by: Date: 5-21-24 Time: 1000 Method of Shipment: FedEx

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Richard Wilson	5-30-2024/10:19	HDR		5/30/24/1020	
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.

Ver: 04/02/2024

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:	Lab PM: Calhoun, Conner M	Carrier Tracking No(s):	COC No: 310-72962.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Conner.Calhoun@et.eurofinsus.com	State of Origin: Iowa	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): State - Iowa; State Program - Iowa		Job #: 310-282336-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 6/12/2024			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: CRLCSWA_2 Spring 2024	Project #: 31006785			
Site: 310- HDR- CRLCSWA	SSOW#:			

Analysis Requested

Preservation Codes:

Other:

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 2,4,5-TP	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-26A (310-282336-1)	5/29/24	17:17 Central		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		5/30/24 1600				
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	5/31/24 10:15	ELCT

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: rad: 3.5 cor: 3.2

Ver: 04/02/2024

Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 310-282336-1

Login Number: 282336
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.	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: HDR Inc

Job Number: 310-282336-1

Login Number: 282336
List Number: 2
Creator: Foreman, Leah M

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 05/31/24 03:10 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	

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Attachment 3

Statistical Analysis Summary

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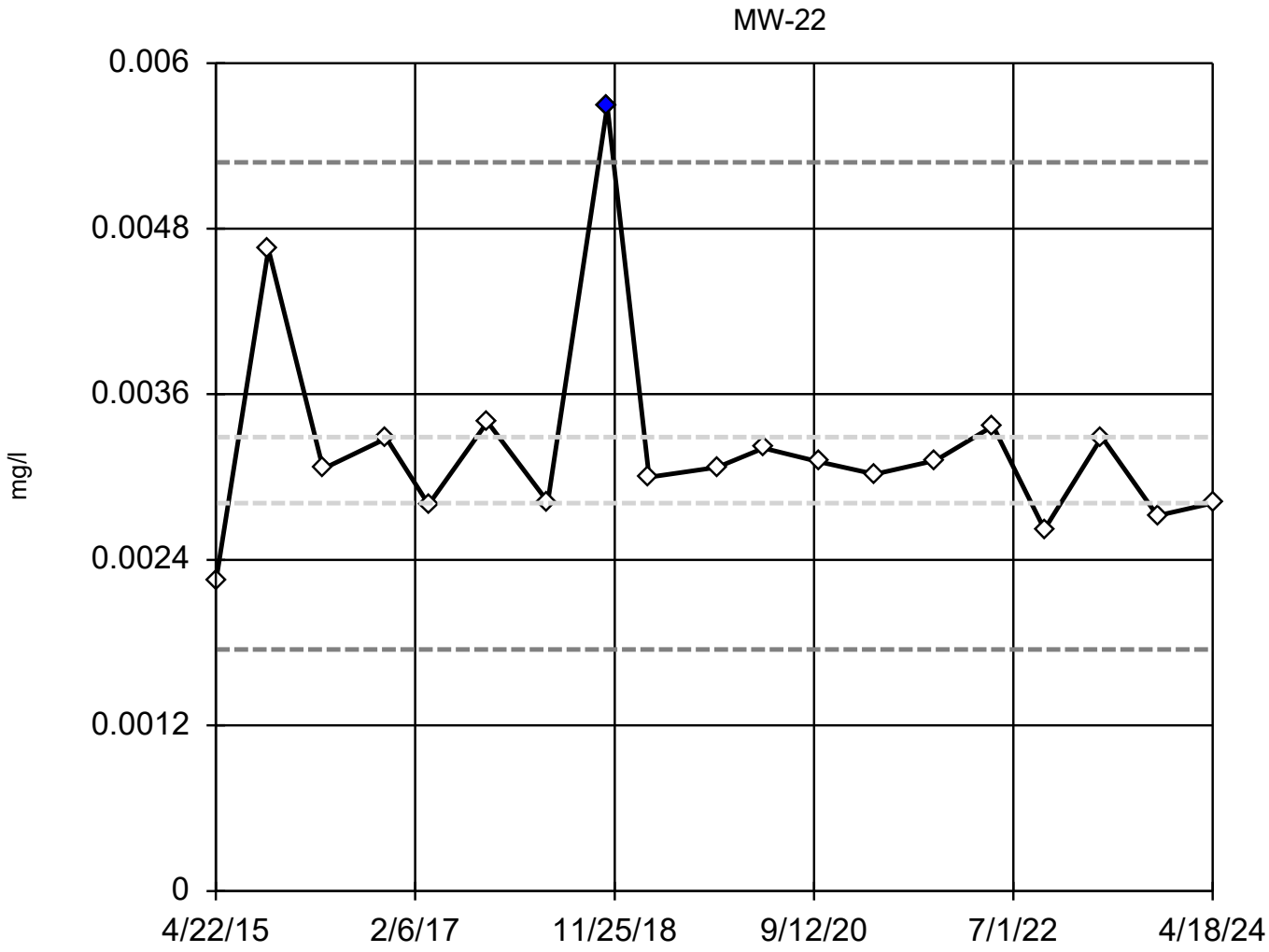
Monitoring Well Inorganic Outliers Analysis – Spring 2024

Tukey's Outlier Screening



n = 19

Outlier is drawn as solid. Tukey's method selected by user.

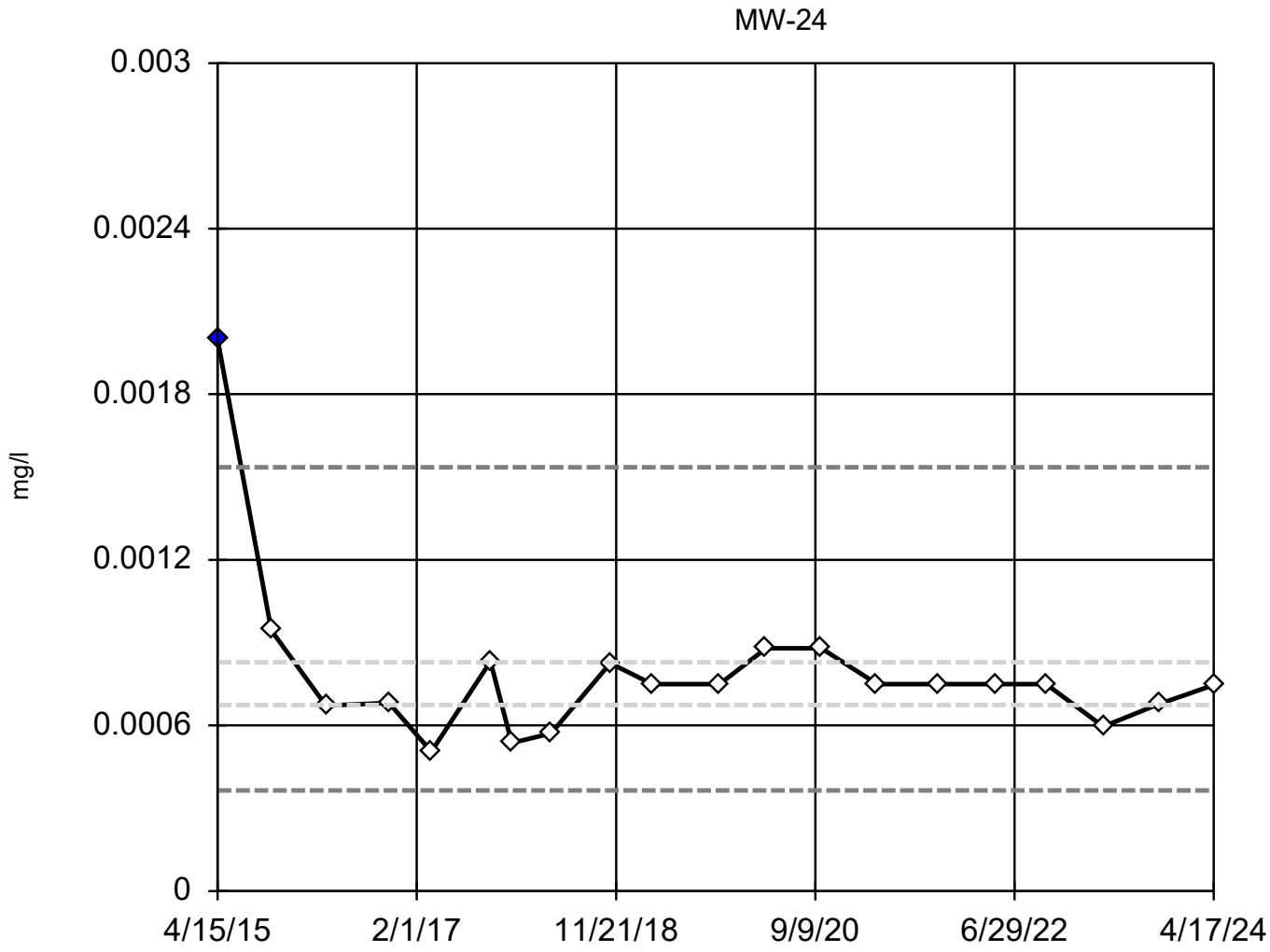
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.00528, low cutoff = 0.001751, based on IQR multiplier of 3.

Constituent: Arsenic Analysis Run 7/12/2024 1:45 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 20

Outlier is drawn as solid. Tukey's method selected by user.

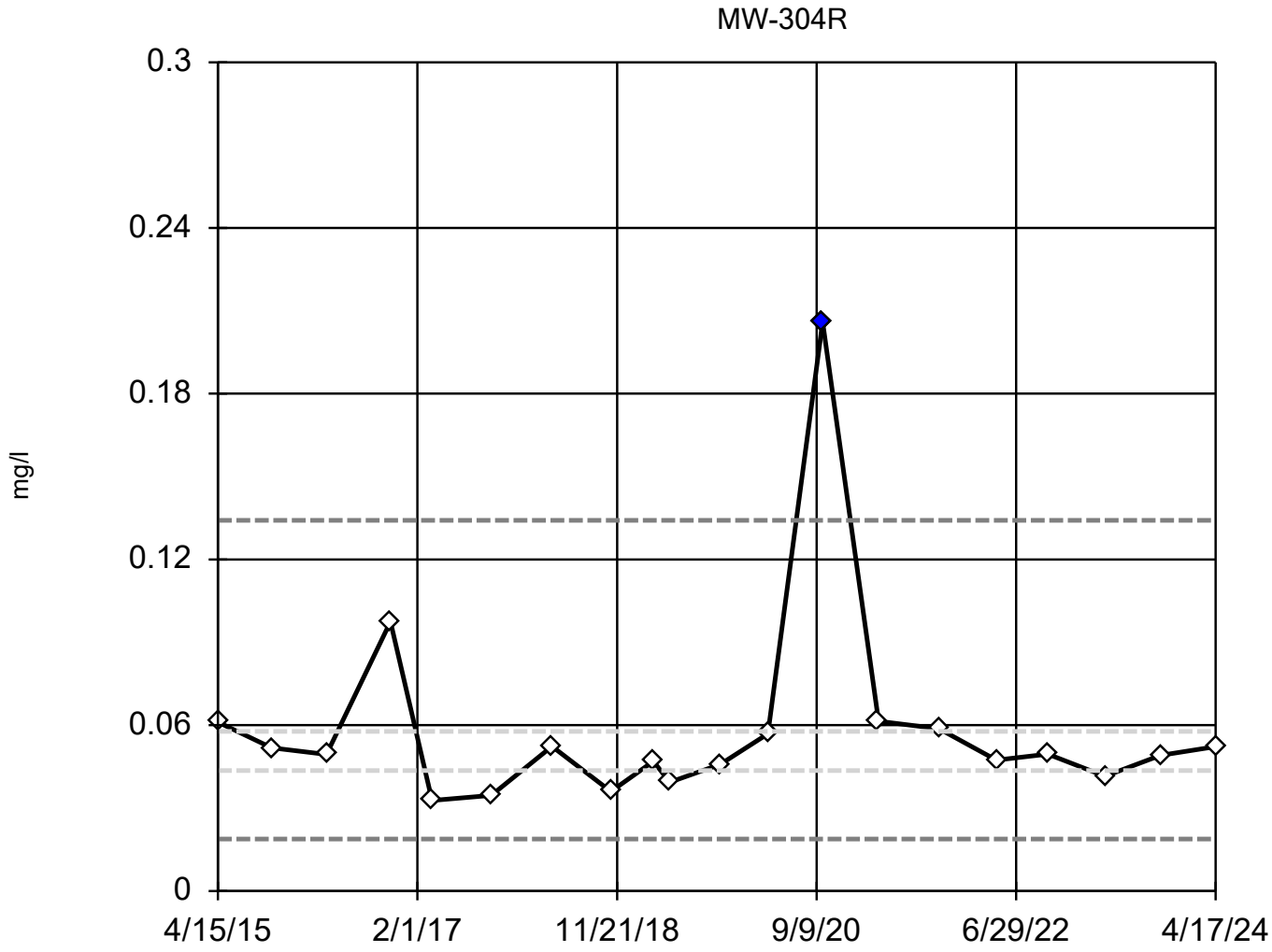
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.001535, low cutoff = 0.000364, based on IQR multiplier of 3.

Constituent: Arsenic Analysis Run 7/12/2024 1:45 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 20

Outlier is drawn as solid. Tukey's method selected by user.

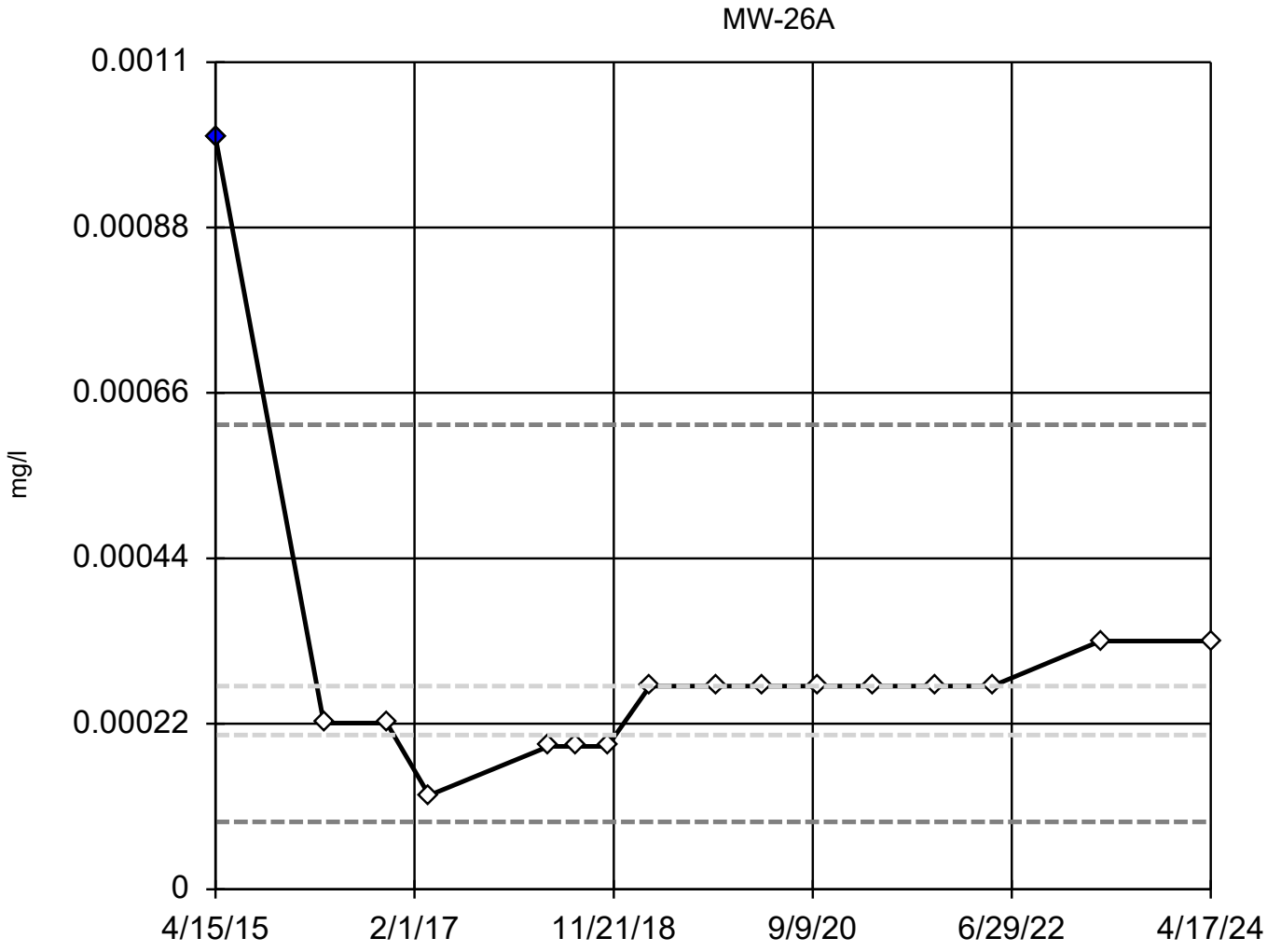
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.1342, low cutoff = 0.0188, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 7/12/2024 1:46 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 16

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

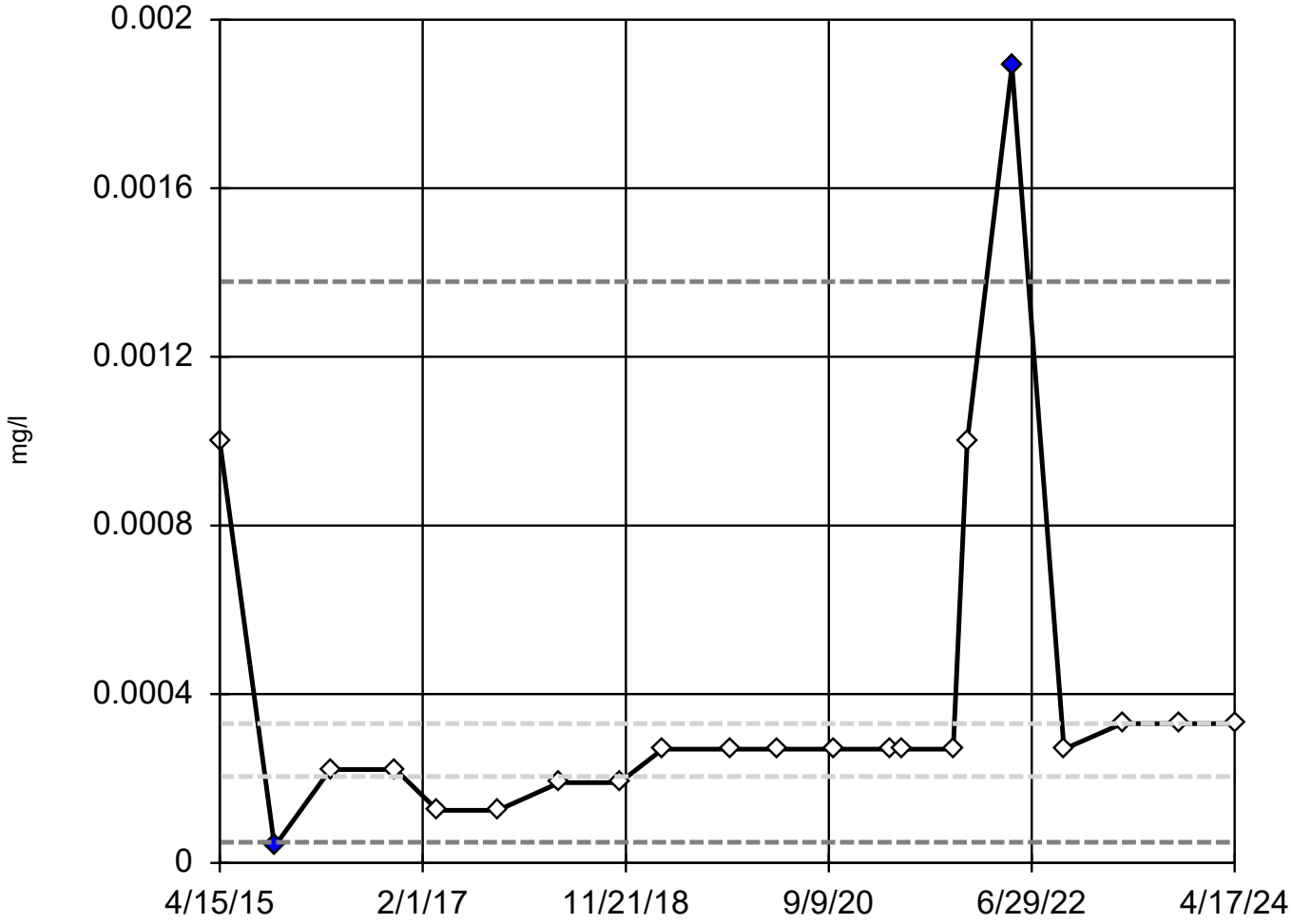
High cutoff = 0.0006176, low cutoff = 0.00008958, based on IQR multiplier of 3.

Constituent: Beryllium Analysis Run 7/12/2024 1:46 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-303



n = 21

Outliers are drawn as solid.
Tukey's method selected by user.

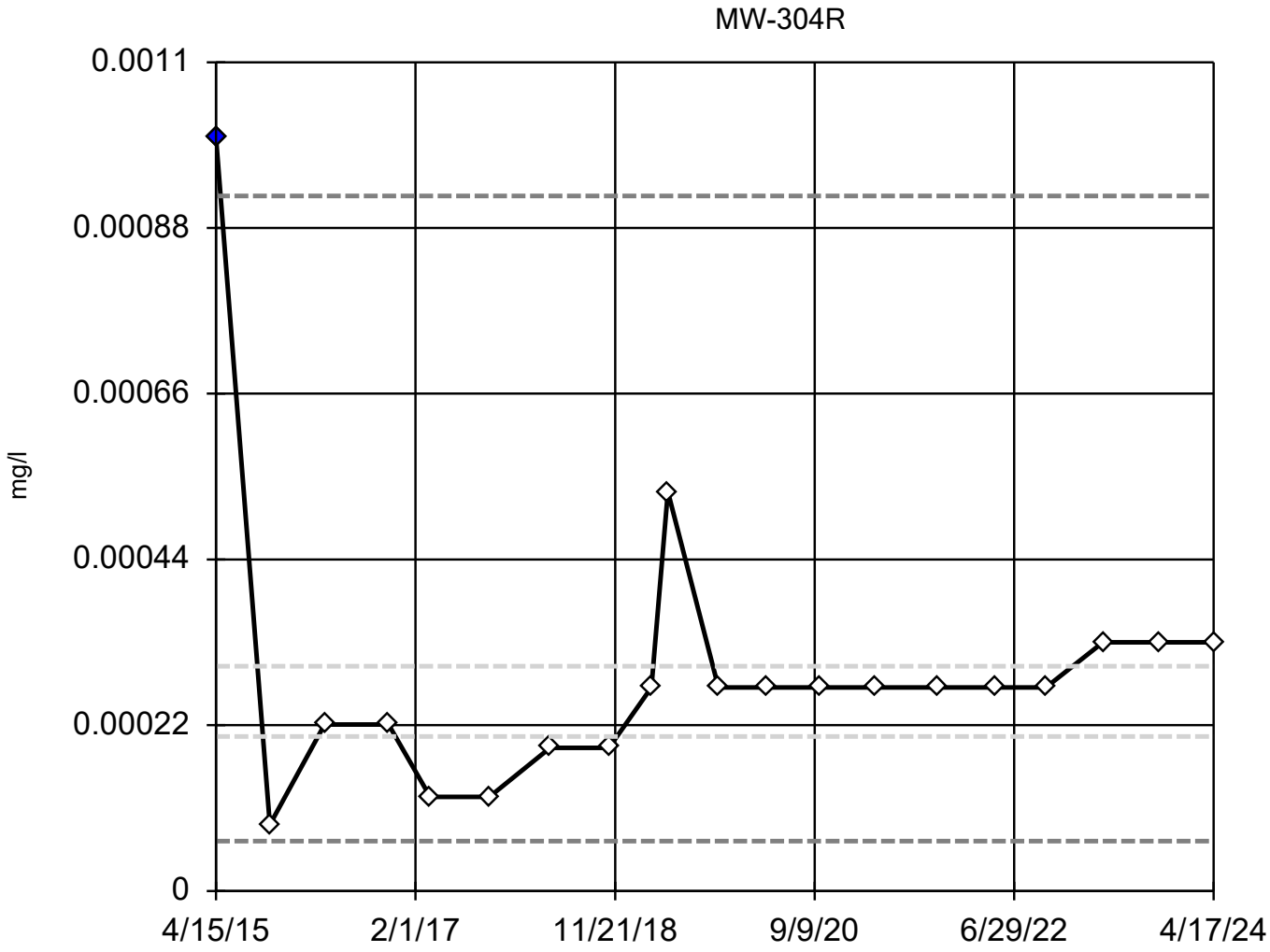
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.001378, low cutoff = 0.00004906, based on IQR multiplier of 3.

Constituent: Beryllium Analysis Run 7/12/2024 1:46 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 20

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

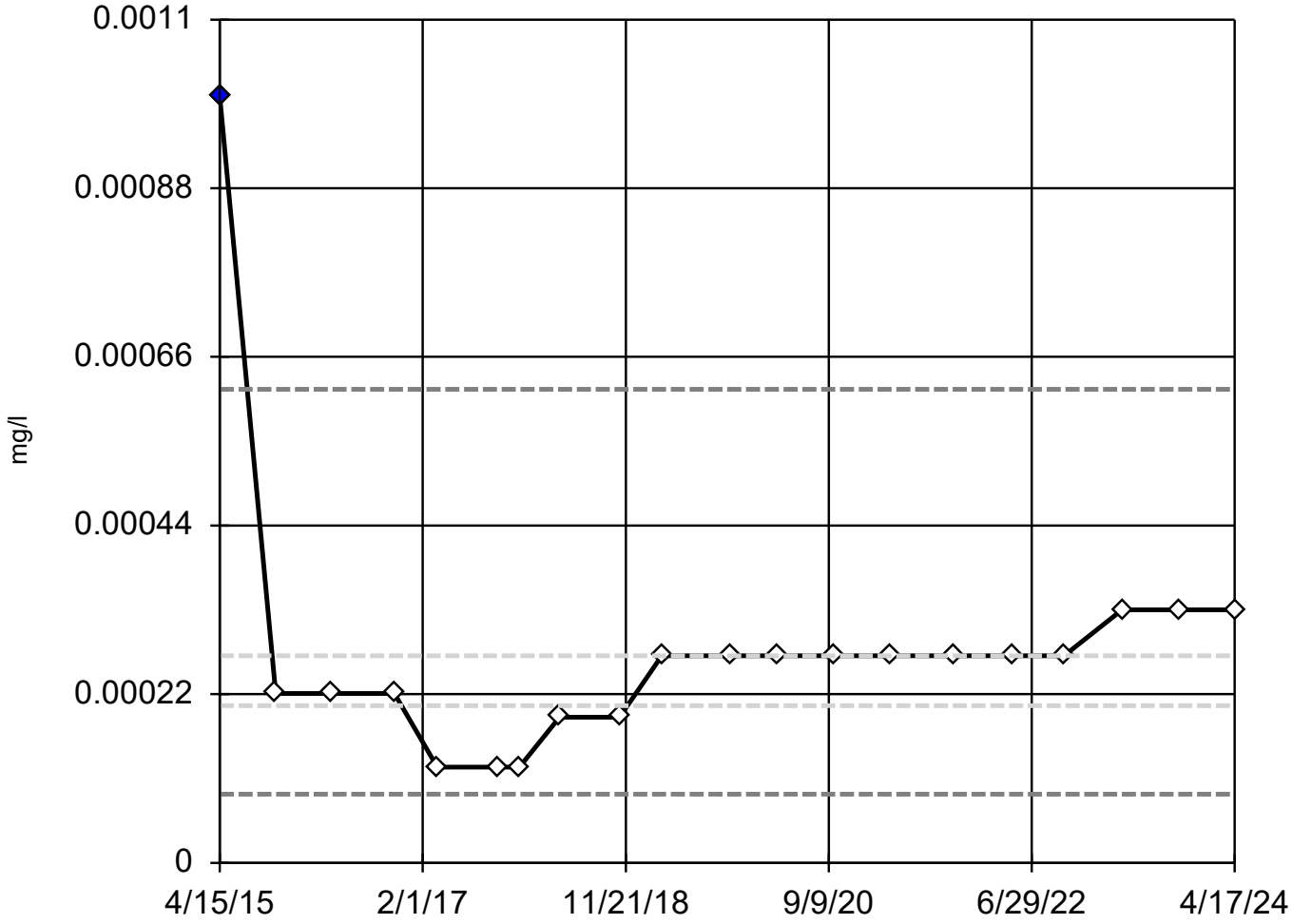
High cutoff = 0.0009226, low cutoff = 0.00006629, based on IQR multiplier of 3.

Constituent: Beryllium Analysis Run 7/12/2024 1:46 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-305



n = 20

Outlier is drawn as solid. Tukey's method selected by user.

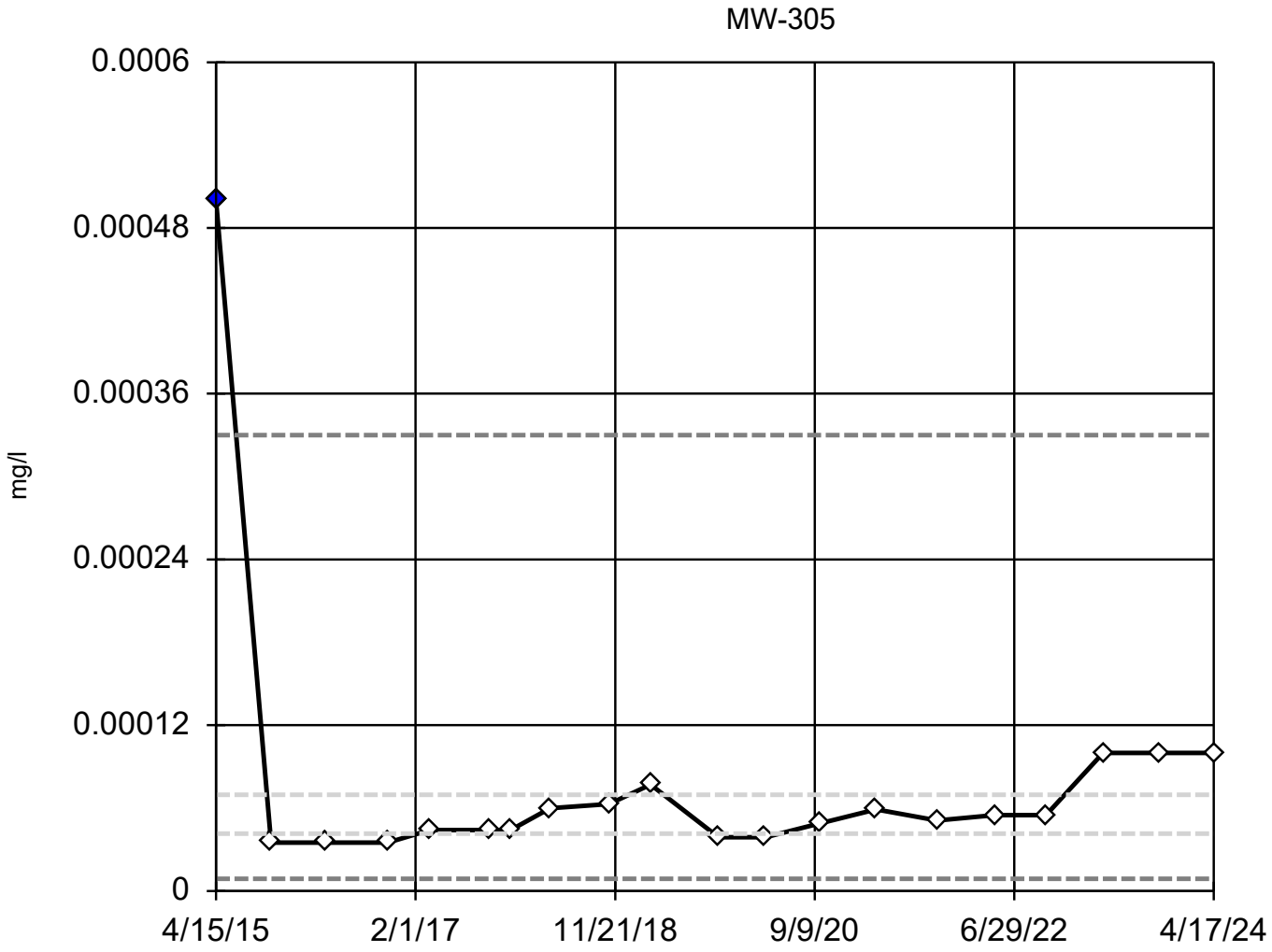
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.0006176, low cutoff = 0.00008958, based on IQR multiplier of 3.

Constituent: Beryllium Analysis Run 7/12/2024 1:46 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 20

Outlier is drawn as solid. Tukey's method selected by user.

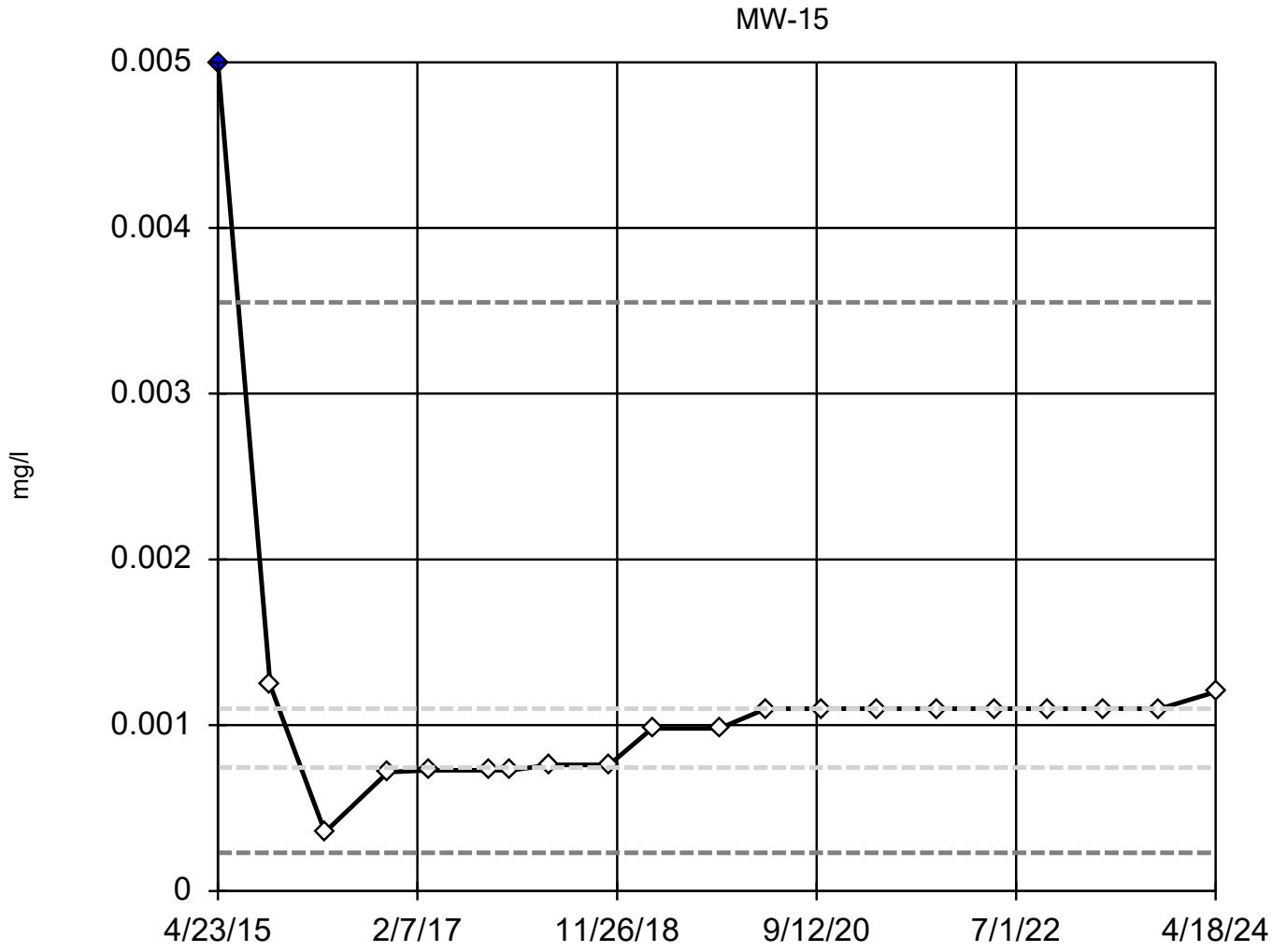
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.0003299, low cutoff = 0.000008755, based on IQR multiplier of 3.

Constituent: Cadmium Analysis Run 7/12/2024 1:46 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 20

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

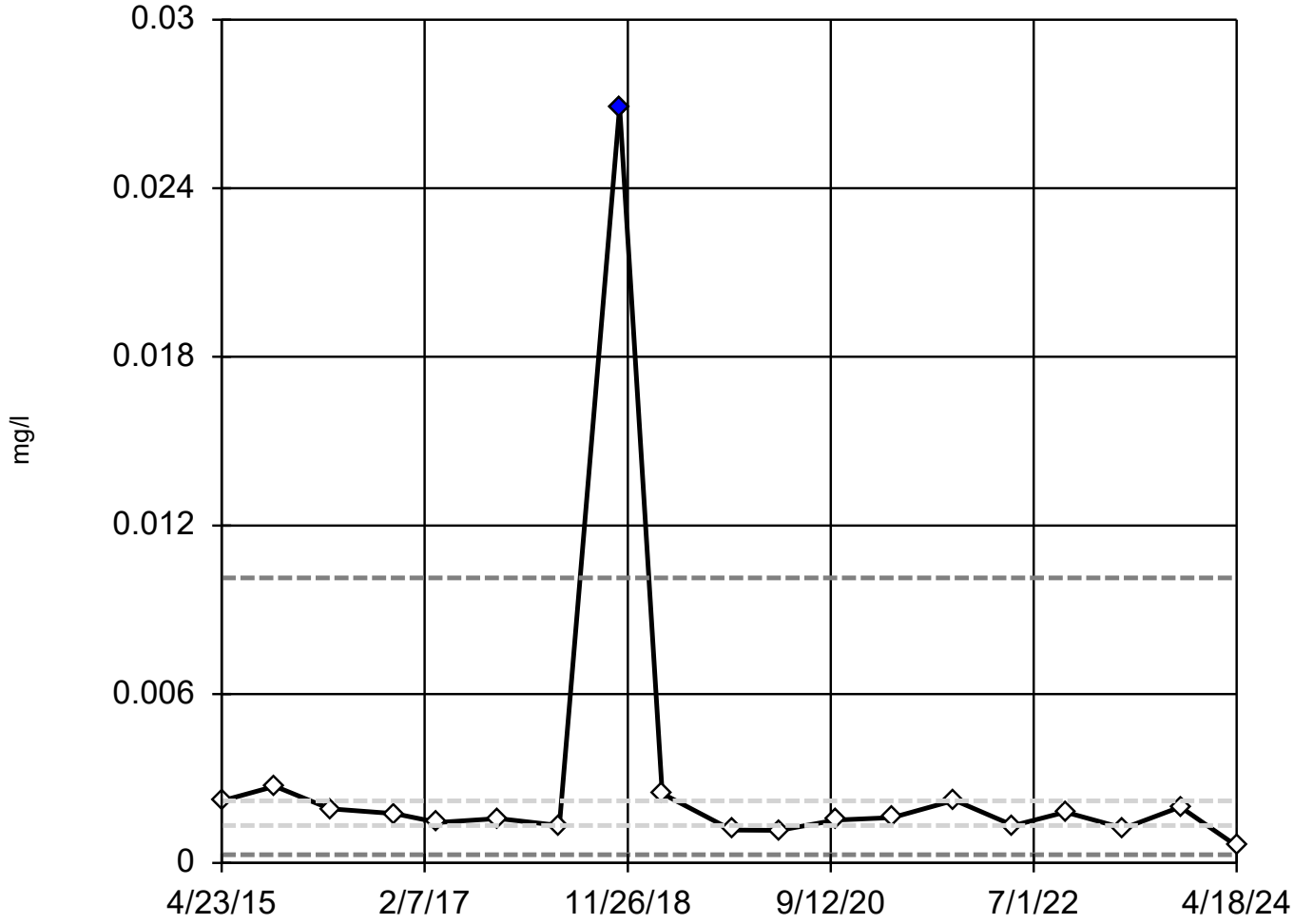
High cutoff = 0.00355, low cutoff = 0.0002306, based on IQR multiplier of 3.

Constituent: Chromium Analysis Run 7/12/2024 1:46 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-20



n = 19

Outlier is drawn as solid. Tukey's method selected by user.

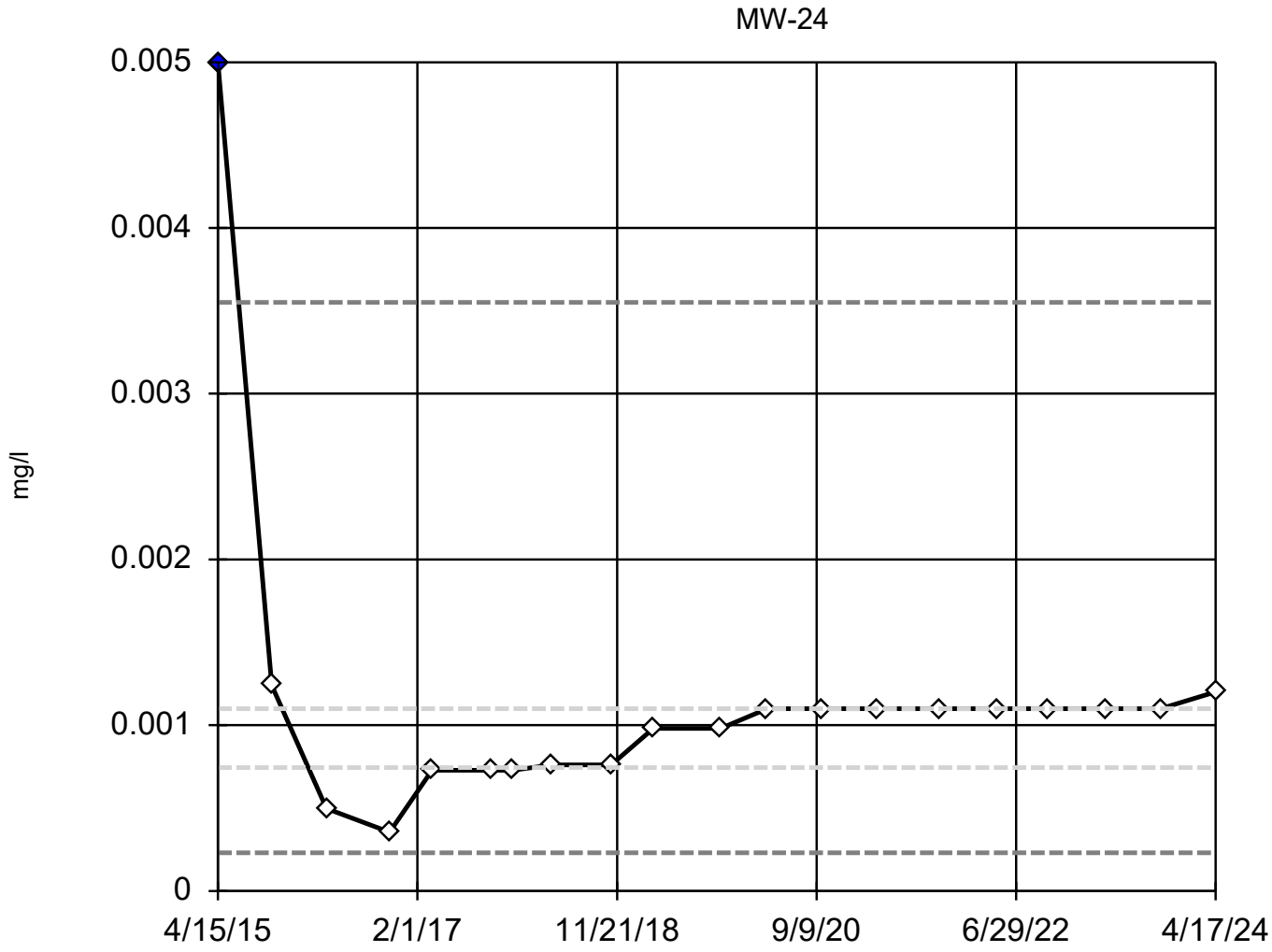
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.01014, low cutoff = 0.0002899, based on IQR multiplier of 3.

Constituent: Chromium Analysis Run 7/12/2024 1:46 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 20

Outlier is drawn as solid. Tukey's method selected by user.

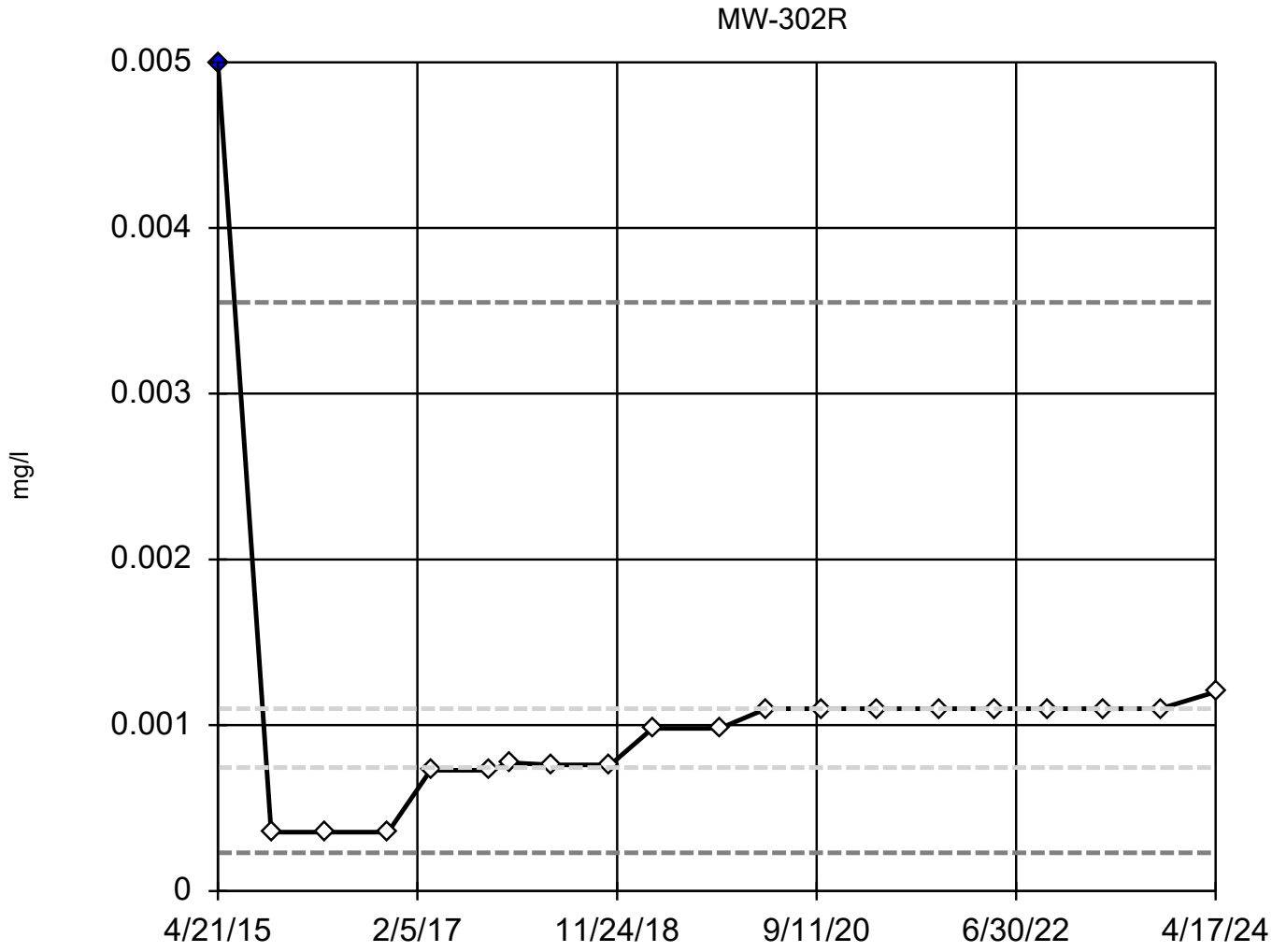
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.00355, low cutoff = 0.0002306, based on IQR multiplier of 3.

Constituent: Chromium Analysis Run 7/12/2024 1:46 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 20

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

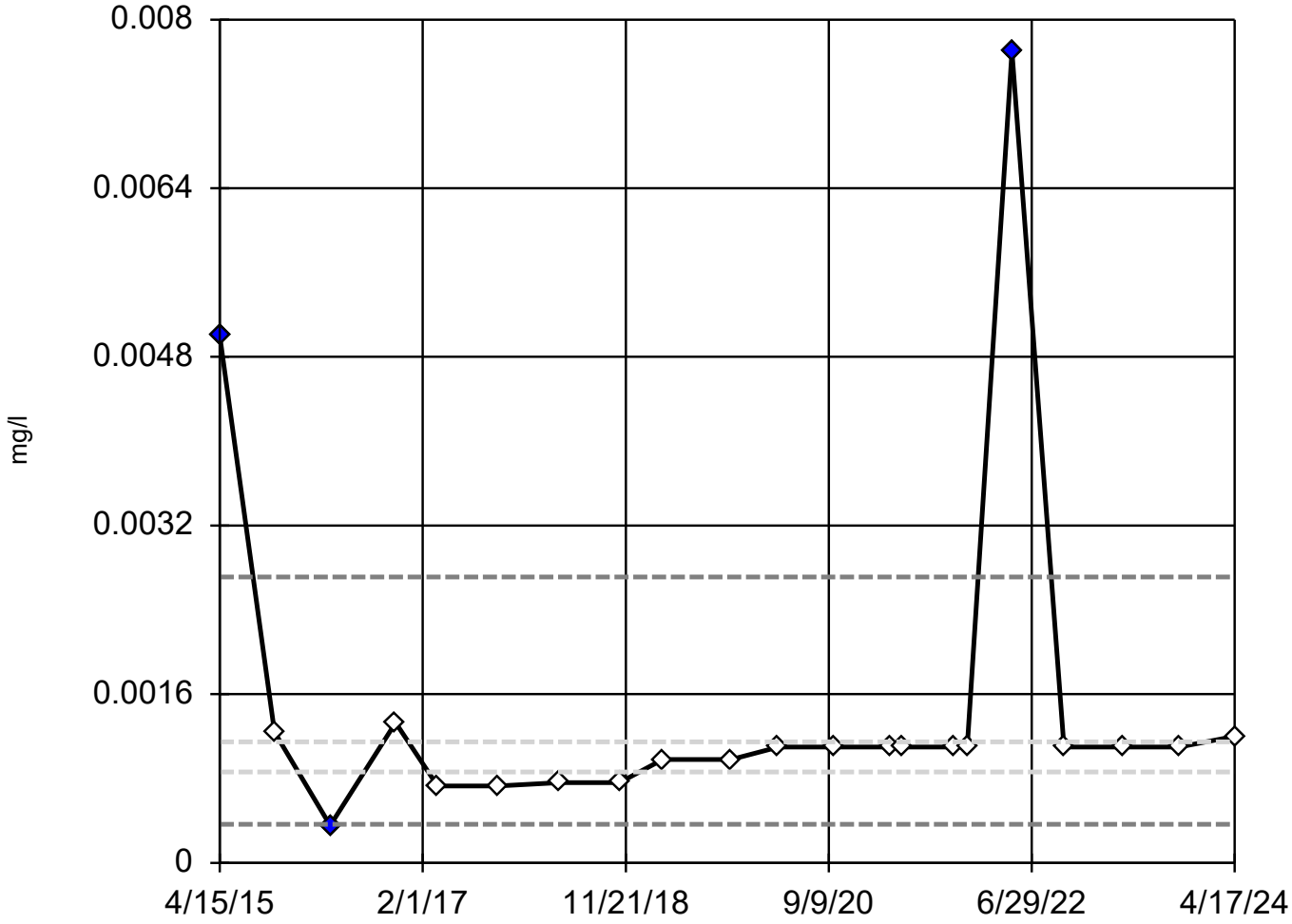
High cutoff = 0.00355, low cutoff = 0.0002306, based on IQR multiplier of 3.

Constituent: Chromium Analysis Run 7/12/2024 1:46 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-303



n = 21

Outliers are drawn as solid.
Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

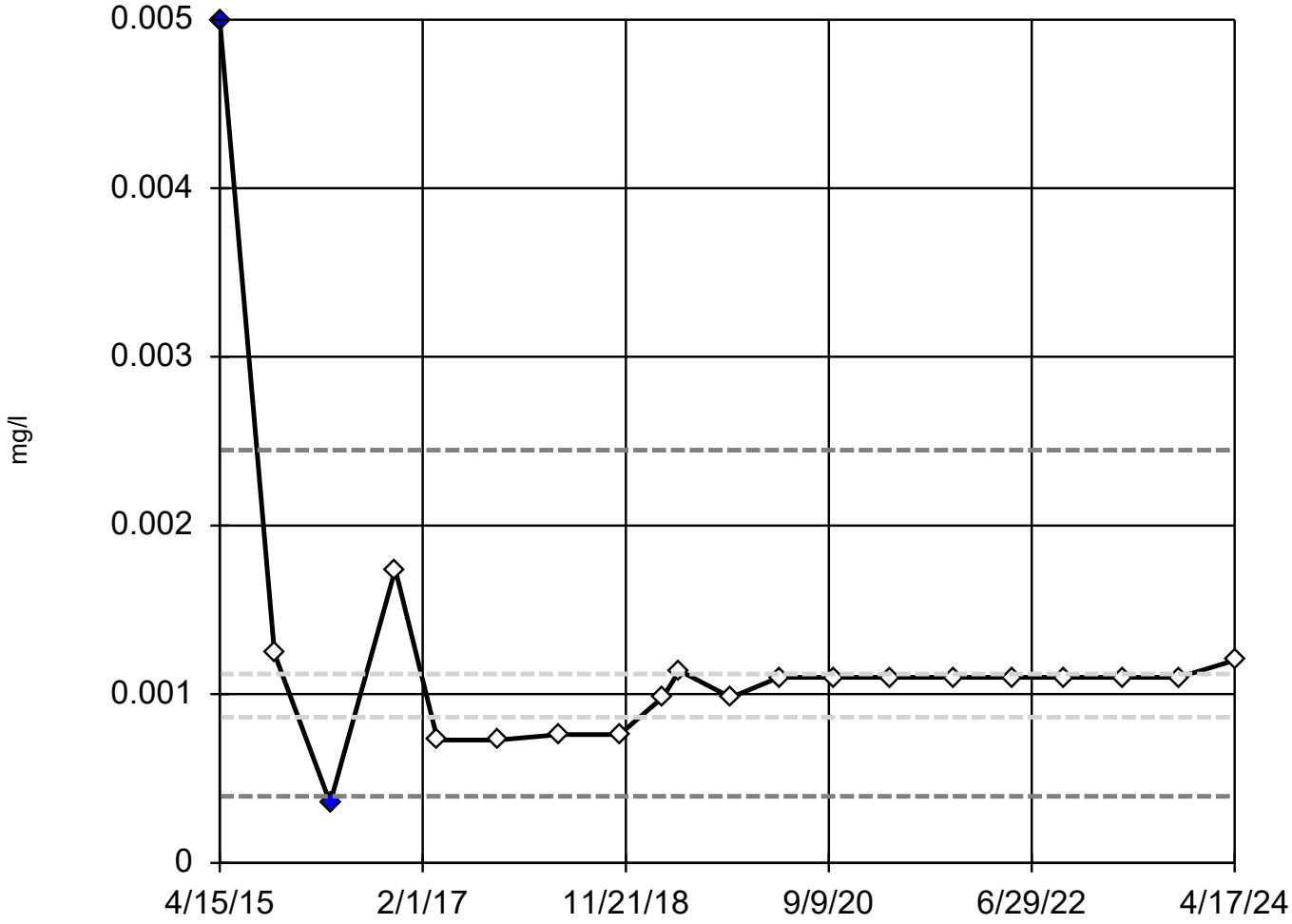
High cutoff = 0.002711, low cutoff = 0.0003658, based on IQR multiplier of 3.

Constituent: Chromium Analysis Run 7/12/2024 1:46 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-304R



n = 20

Outliers are drawn as solid.
Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

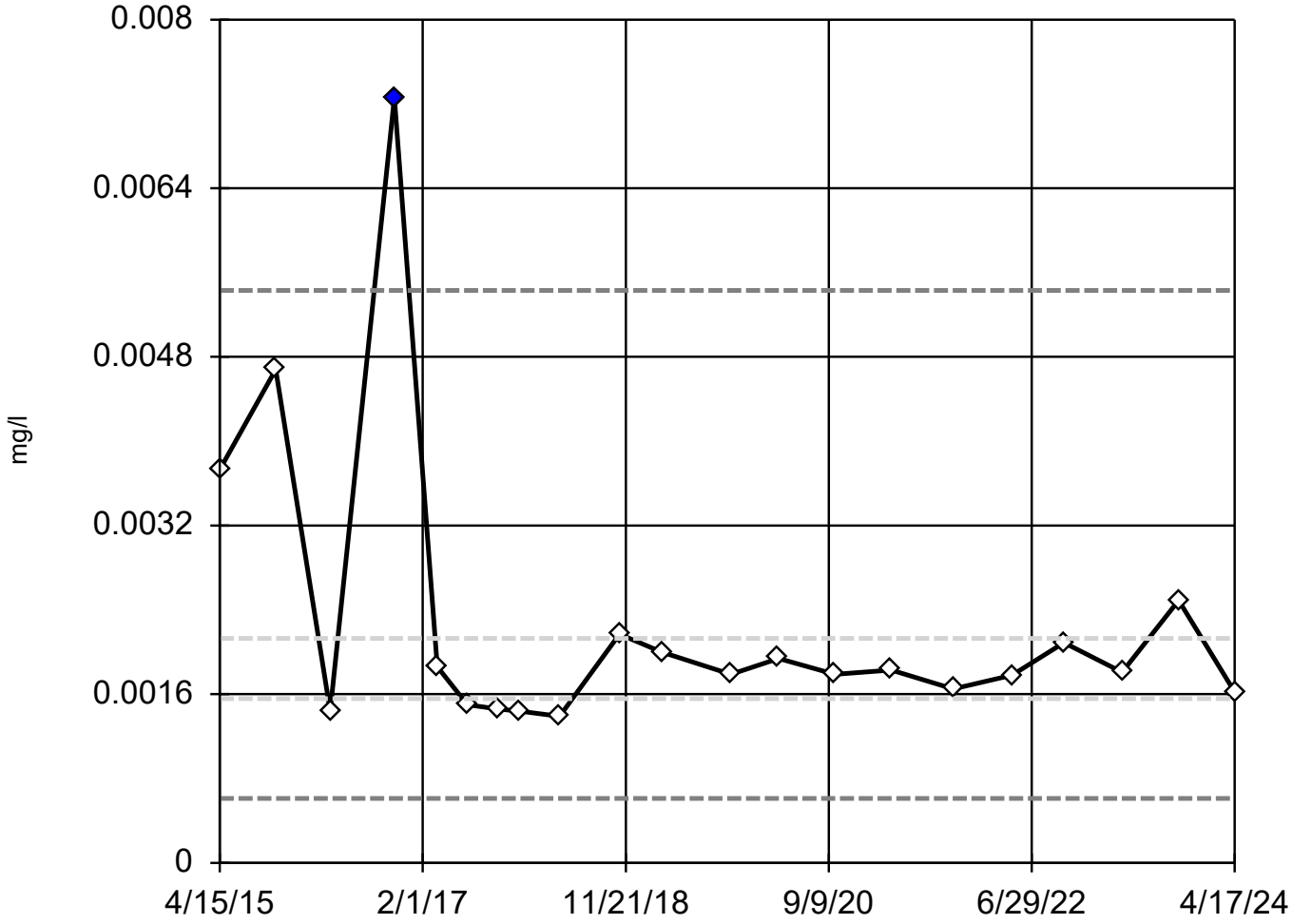
High cutoff = 0.002446, low cutoff = 0.000395, based on IQR multiplier of 3.

Constituent: Chromium Analysis Run 7/12/2024 1:46 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-305



n = 21

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

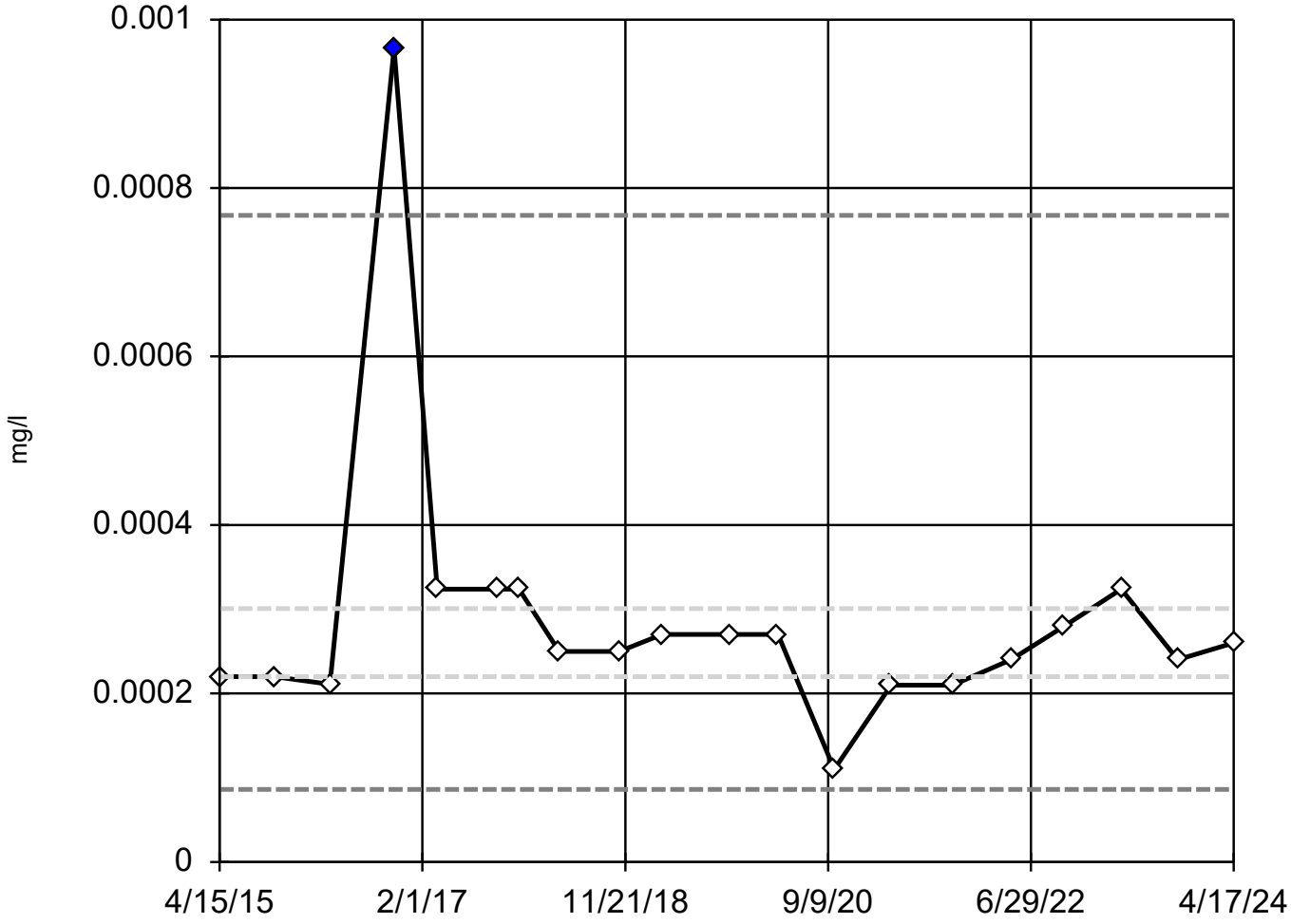
High cutoff = 0.00543, low cutoff = 0.0006114, based on IQR multiplier of 3.

Constituent: Cobalt Analysis Run 7/12/2024 1:46 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-24



n = 20

Outlier is drawn as solid. Tukey's method selected by user.

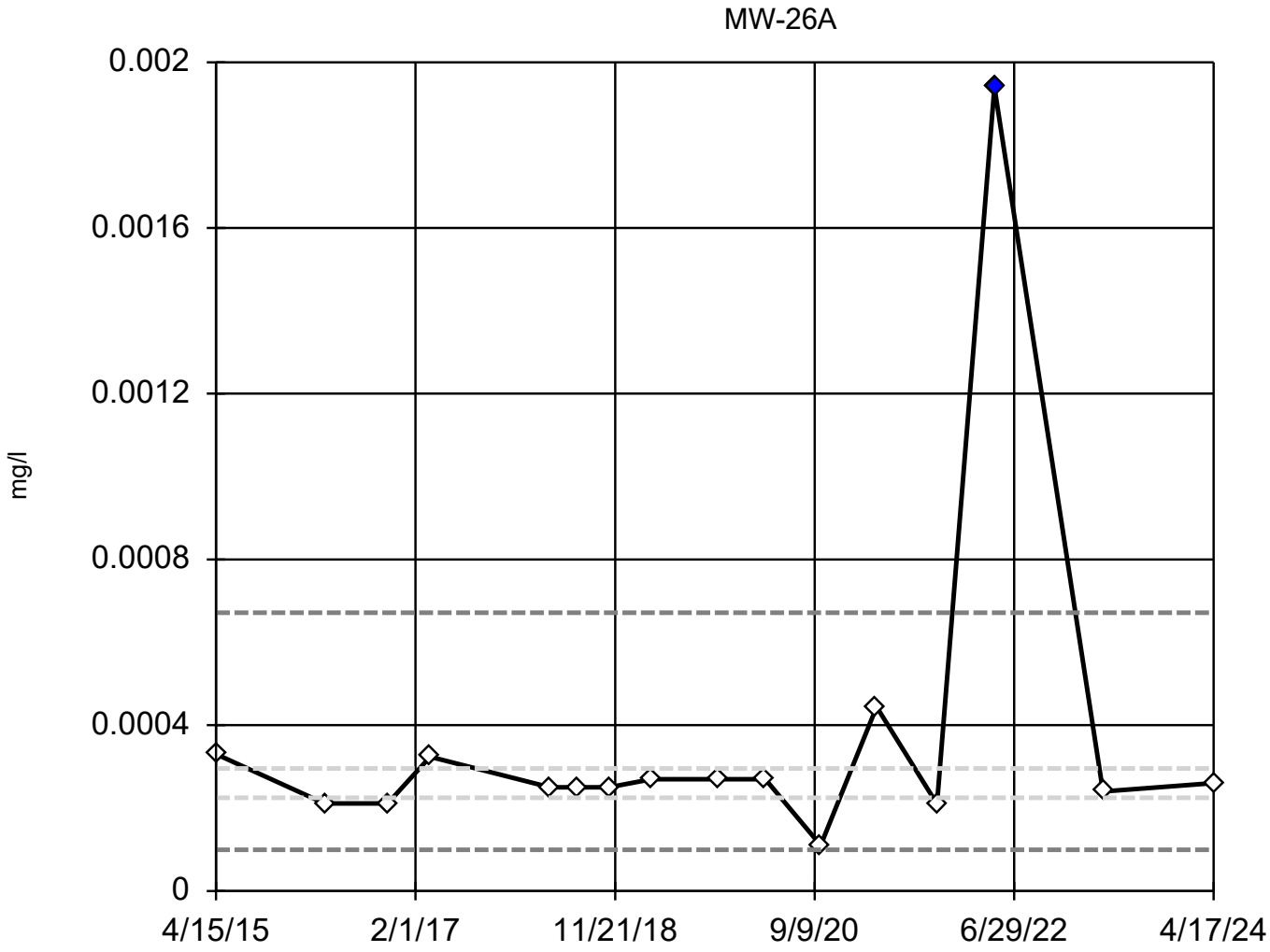
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.0007674, low cutoff = 0.00008619, based on IQR multiplier of 3.

Constituent: Lead Analysis Run 7/12/2024 1:47 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 16

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

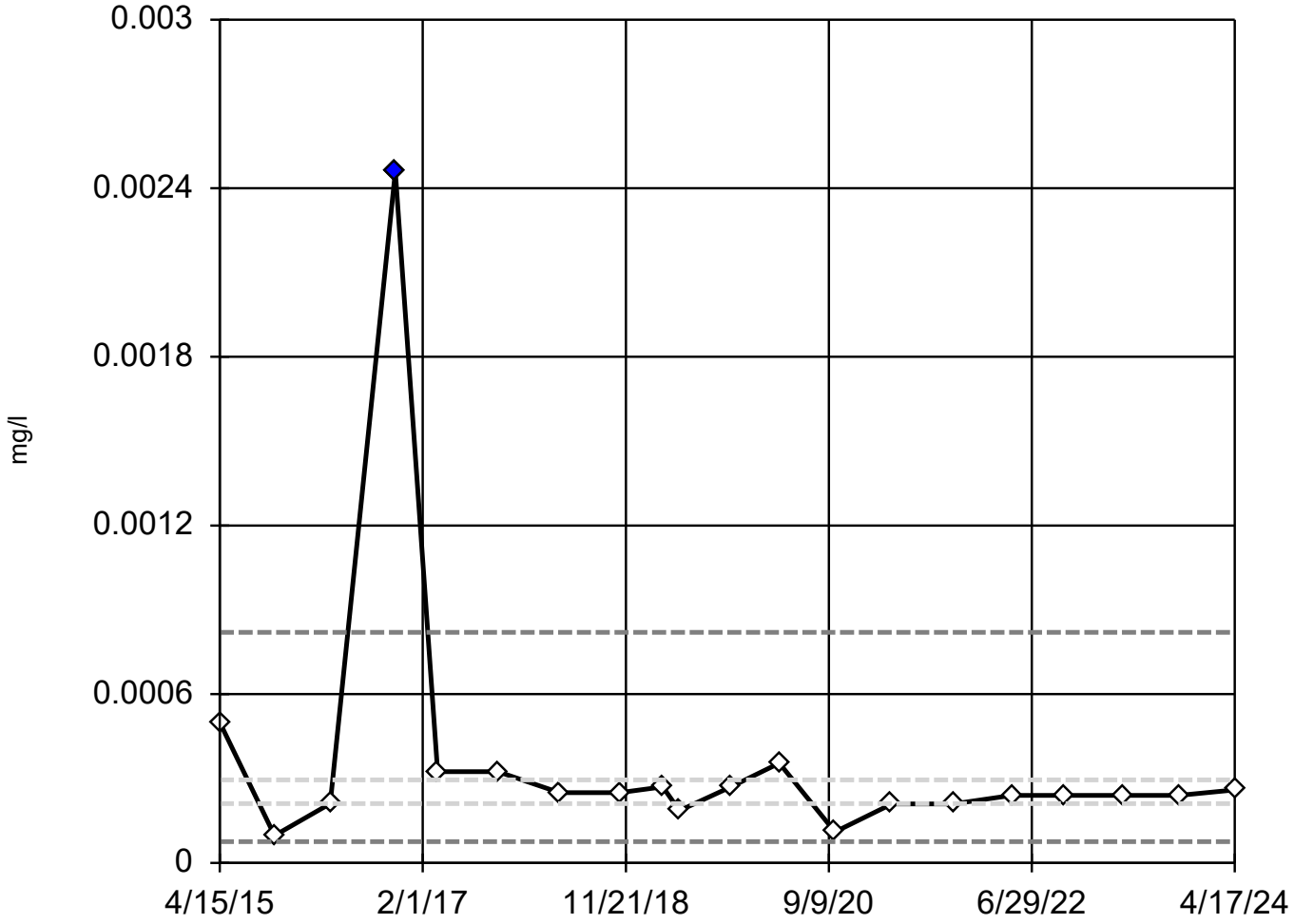
High cutoff = 0.0006715, low cutoff = 0.00009911, based on IQR multiplier of 3.

Constituent: Lead Analysis Run 7/12/2024 1:47 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-304R



n = 20

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

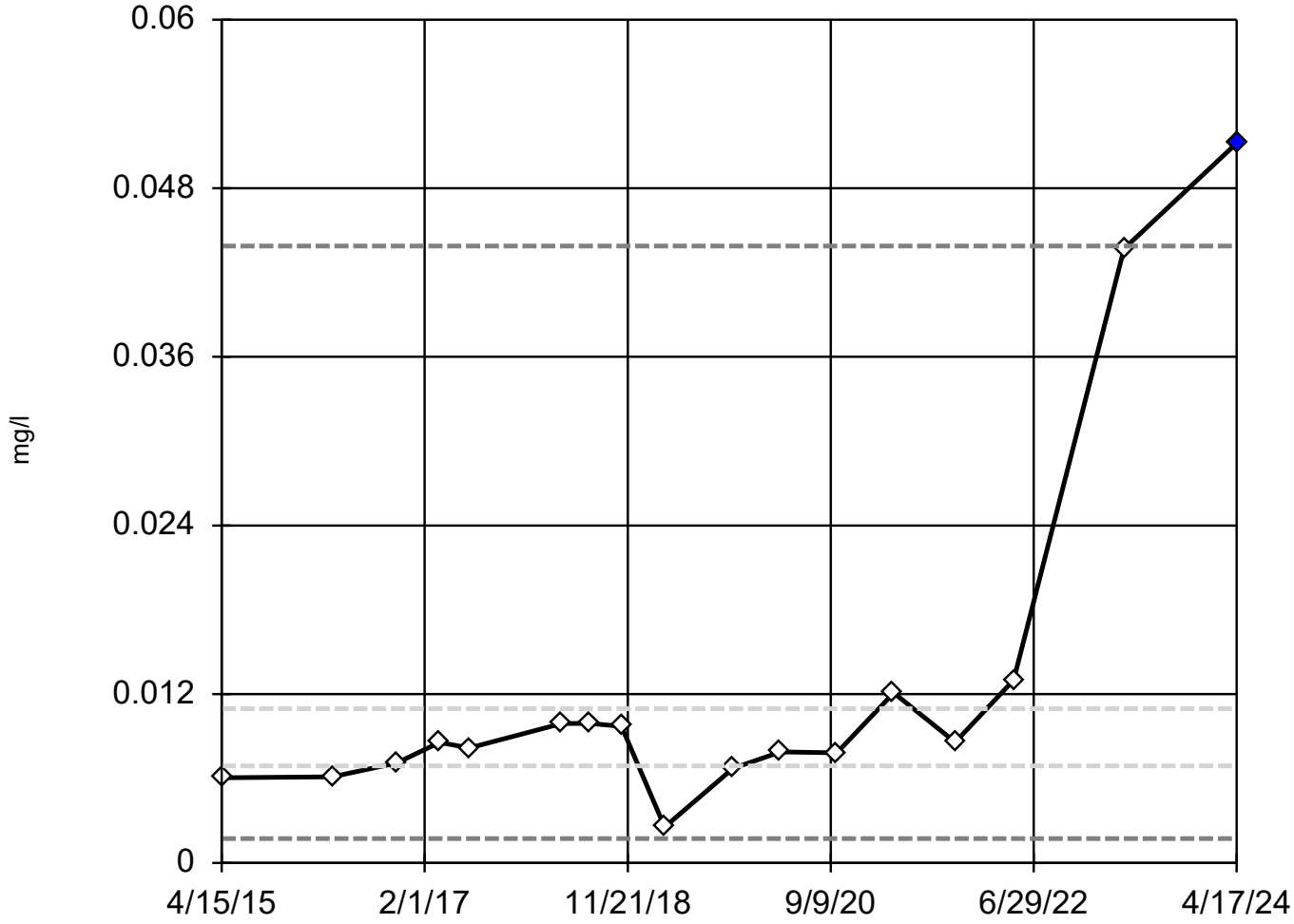
High cutoff = 0.0008205, low cutoff = 0.00007588, based on IQR multiplier of 3.

Constituent: Lead Analysis Run 7/12/2024 1:47 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-26A



n = 17

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

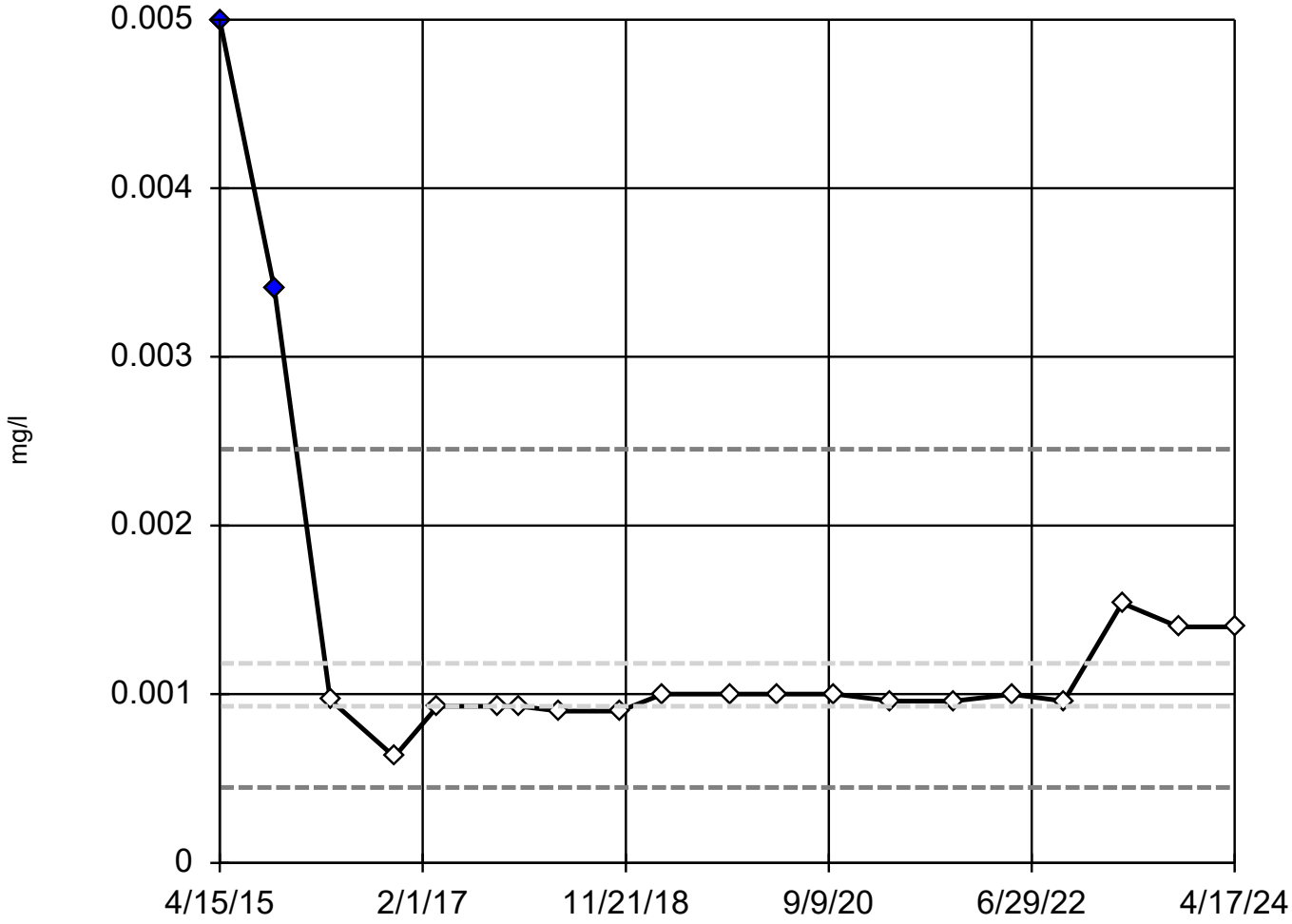
High cutoff = 0.04389, low cutoff = 0.001726, based on IQR multiplier of 3.

Constituent: Nickel Analysis Run 7/12/2024 1:47 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-24



n = 20

Outliers are drawn as solid.
Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

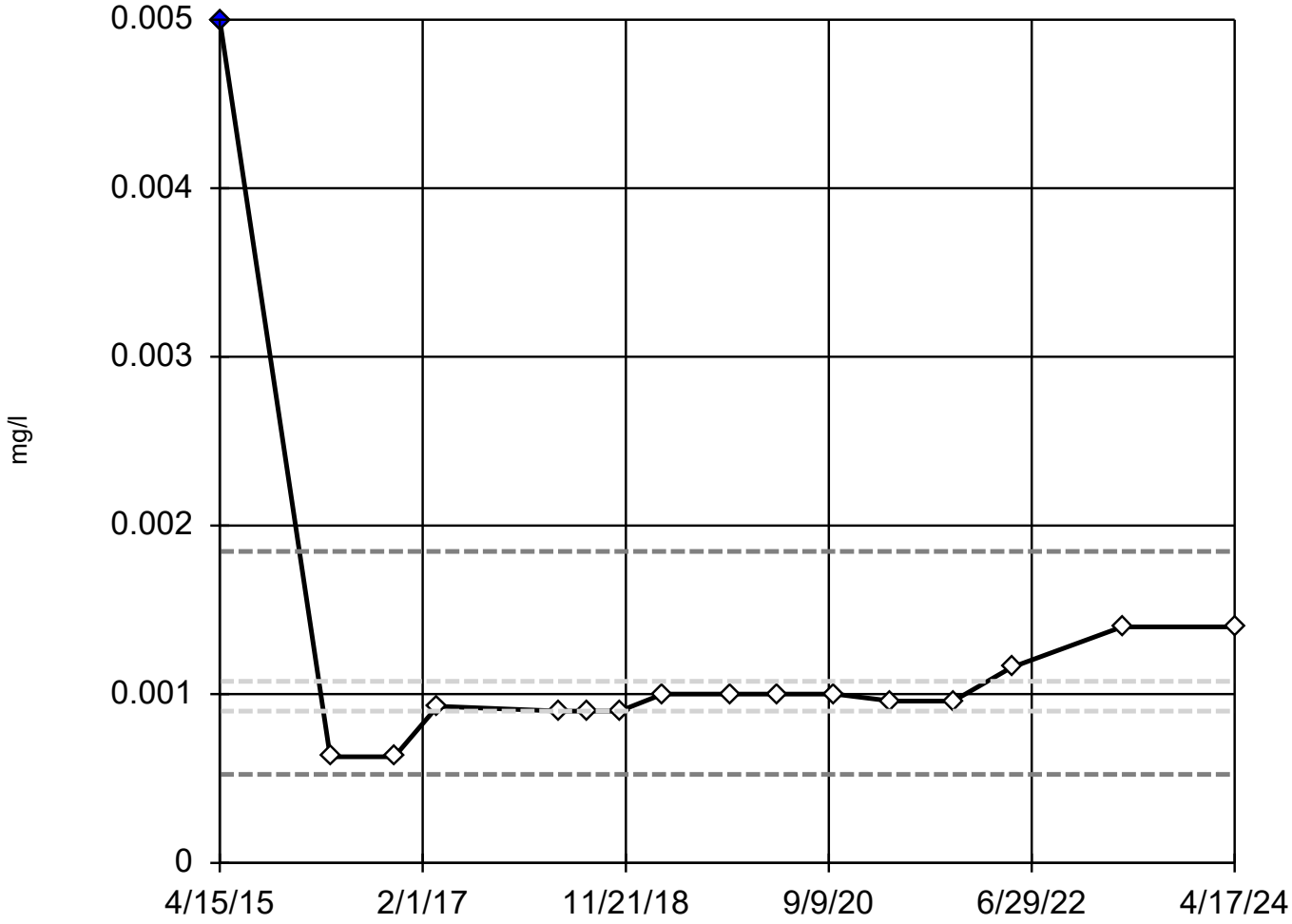
High cutoff = 0.002453, low cutoff = 0.0004477, based on IQR multiplier of 3.

Constituent: Selenium Analysis Run 7/12/2024 1:47 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-26A



n = 16

Outlier is drawn as solid. Tukey's method selected by user.

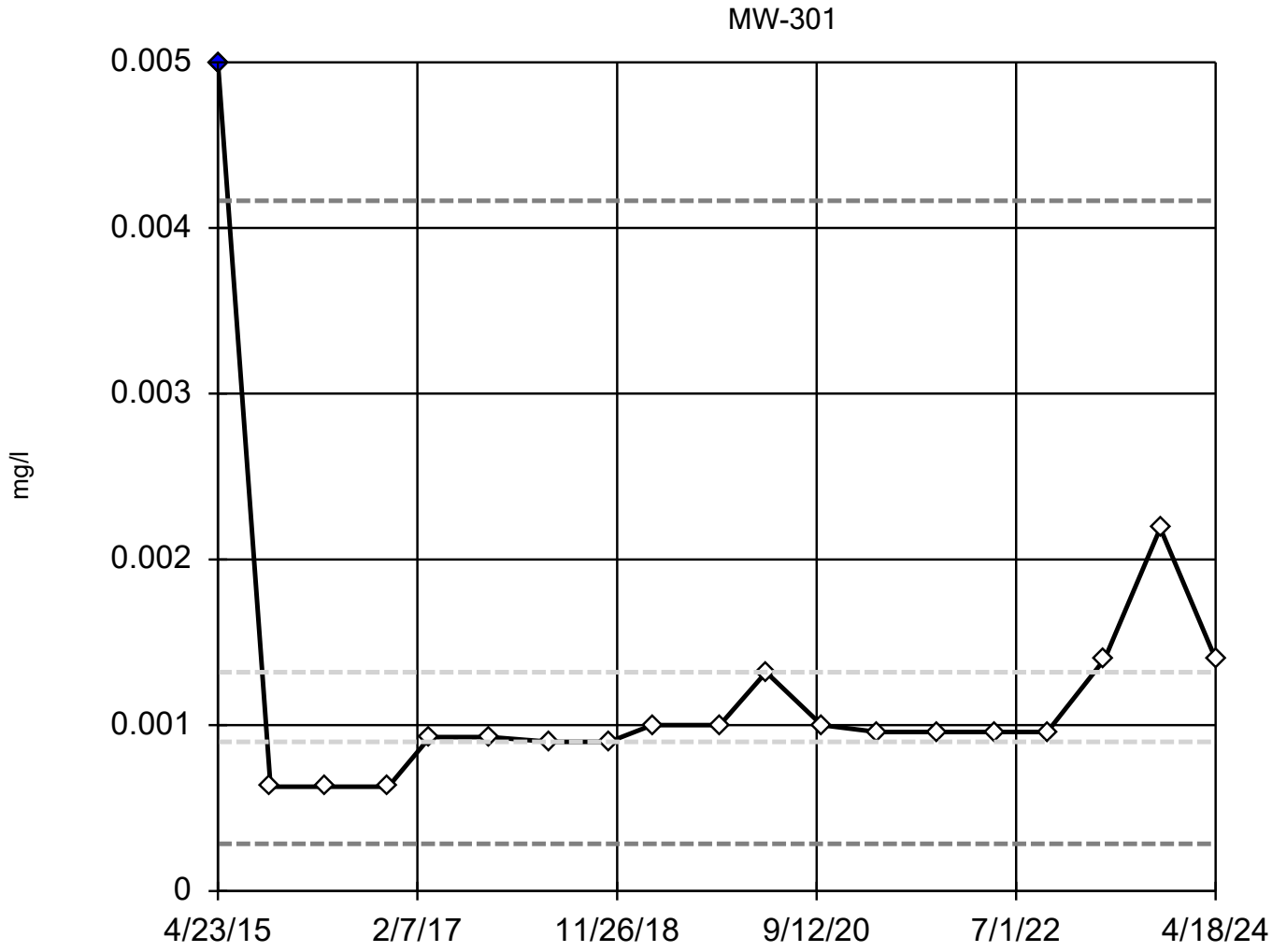
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.001846, low cutoff = 0.0005251, based on IQR multiplier of 3.

Constituent: Selenium Analysis Run 7/12/2024 1:47 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 19

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

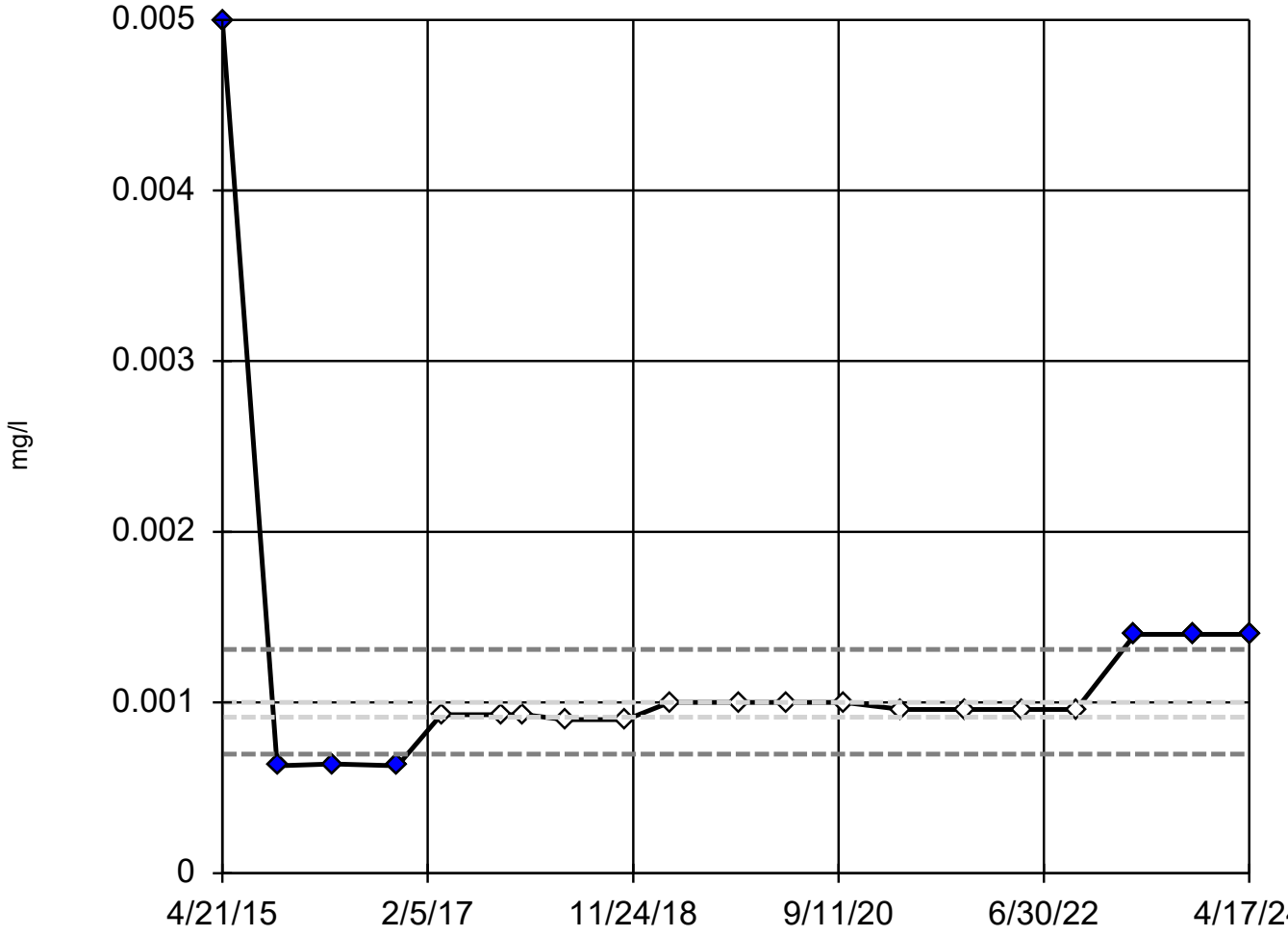
High cutoff = 0.004165, low cutoff = 0.0002853, based on IQR multiplier of 3.

Constituent: Selenium Analysis Run 7/12/2024 1:47 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-302R



n = 20

Outliers are drawn as solid.
Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

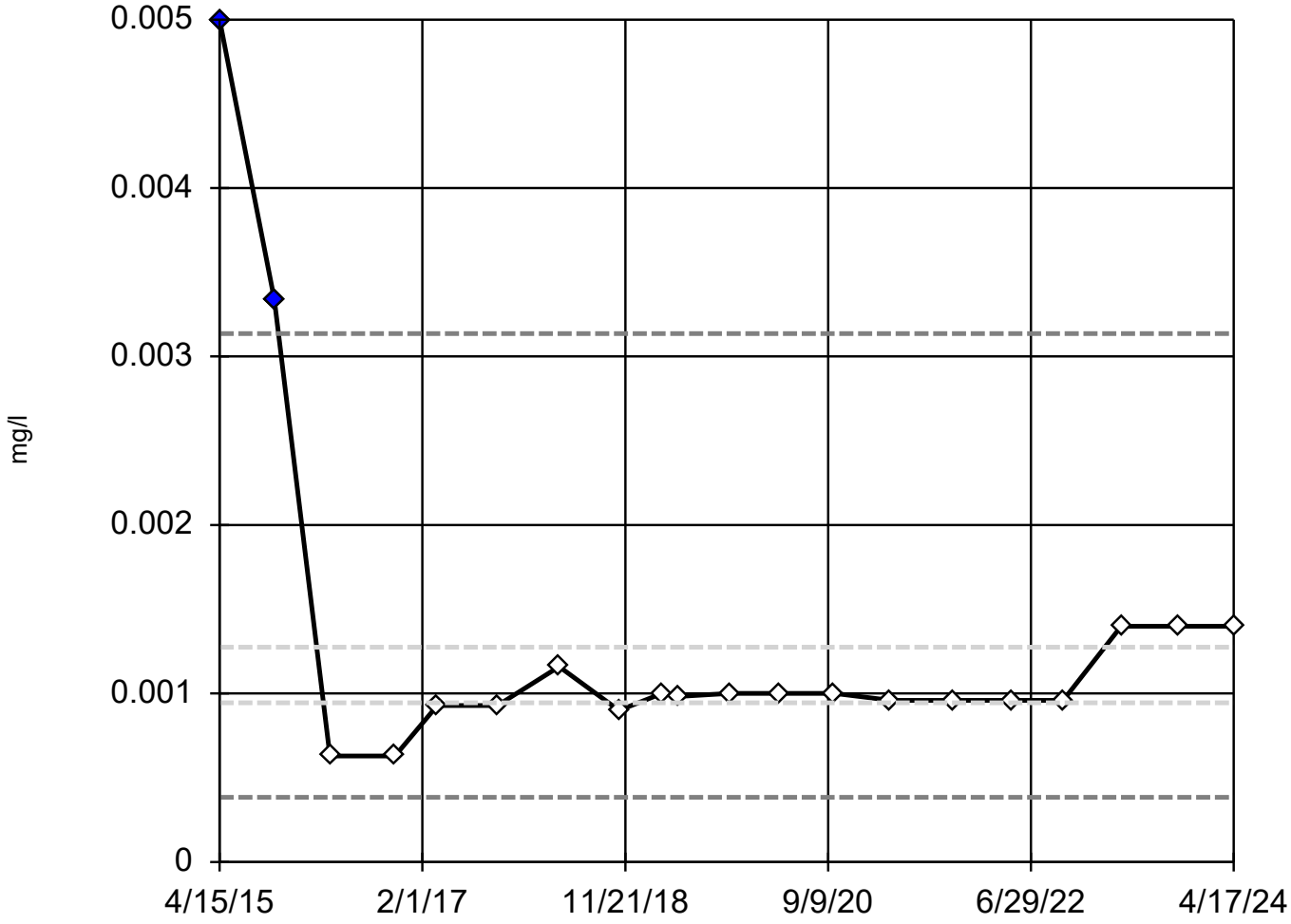
High cutoff = 0.00131, low cutoff = 0.0006976, based on IQR multiplier of 3.

Constituent: Selenium Analysis Run 7/12/2024 1:48 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-304R



n = 20

Outliers are drawn as solid.
Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

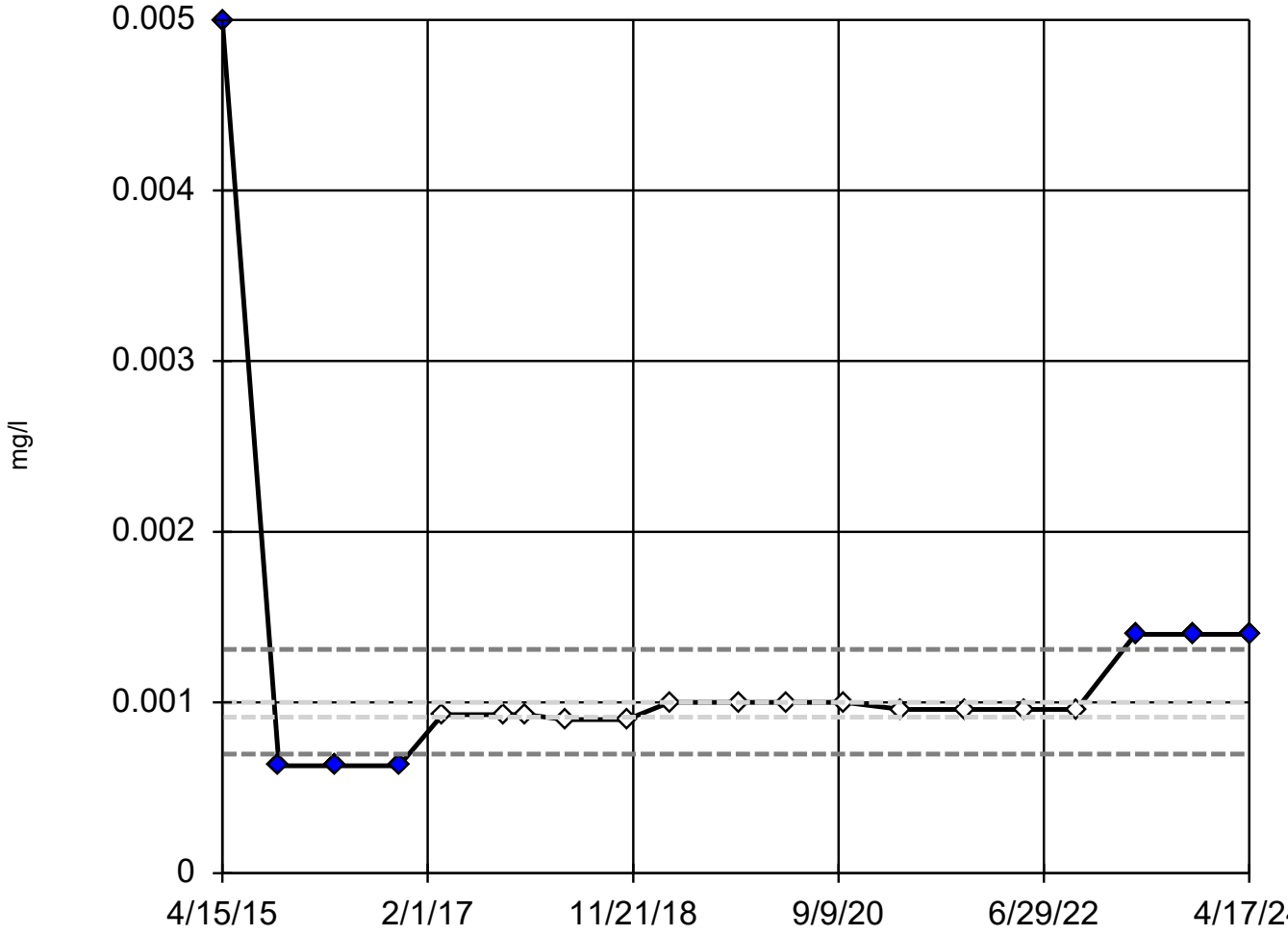
High cutoff = 0.003136, low cutoff = 0.0003835, based on IQR multiplier of 3.

Constituent: Selenium Analysis Run 7/12/2024 1:48 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-305



n = 20

Outliers are drawn as solid.
Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

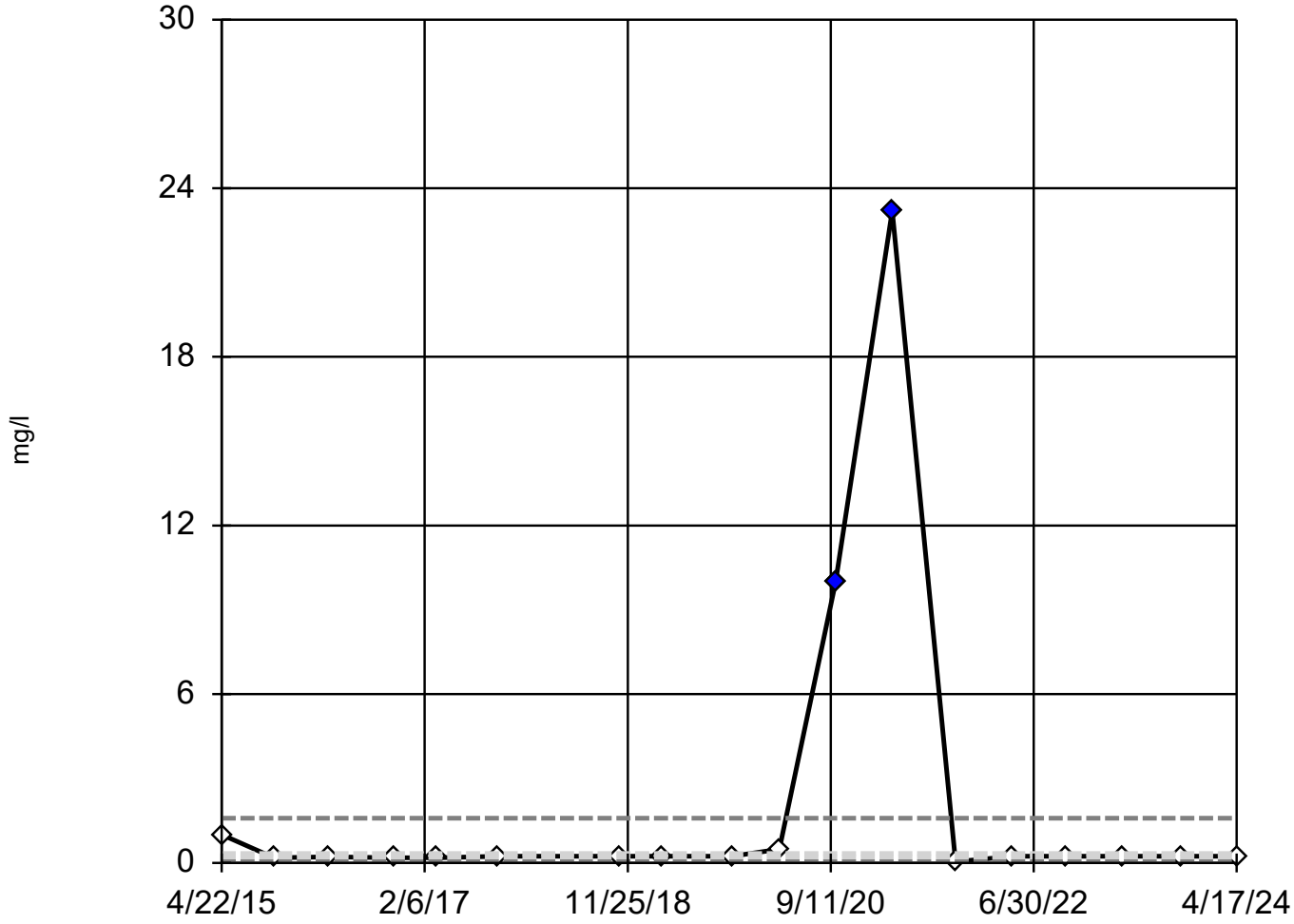
High cutoff = 0.00131, low cutoff = 0.0006976, based on IQR multiplier of 3.

Constituent: Selenium Analysis Run 7/12/2024 1:48 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-201B (bg)



n = 18

Outliers are drawn as solid.
Tukey's method selected by user.

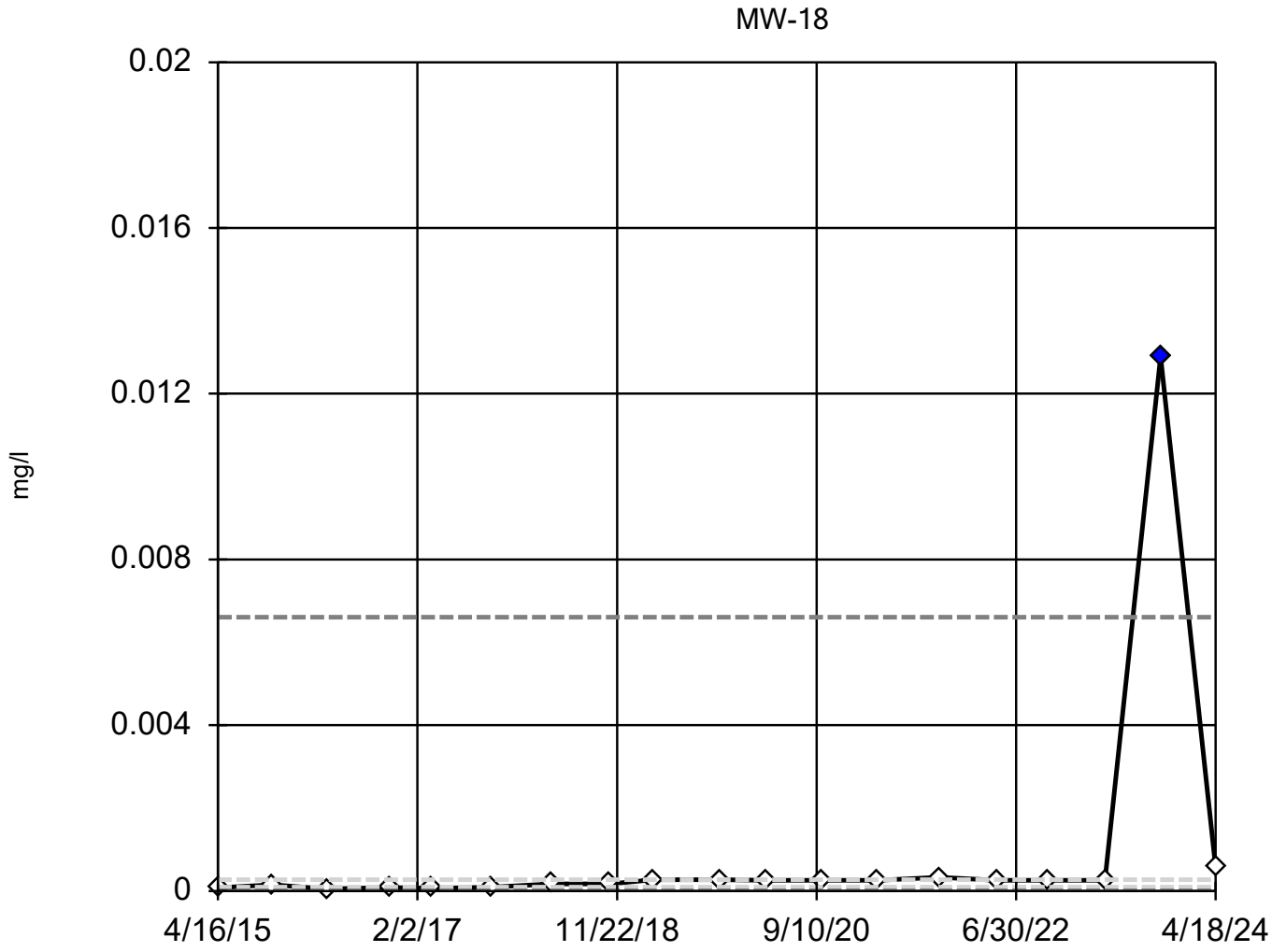
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 1.584, low cutoff = 0.04183, based on IQR multiplier of 3.

Constituent: Sulfide Analysis Run 7/12/2024 1:48 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 19

Outlier is drawn as solid. Tukey's method selected by user.

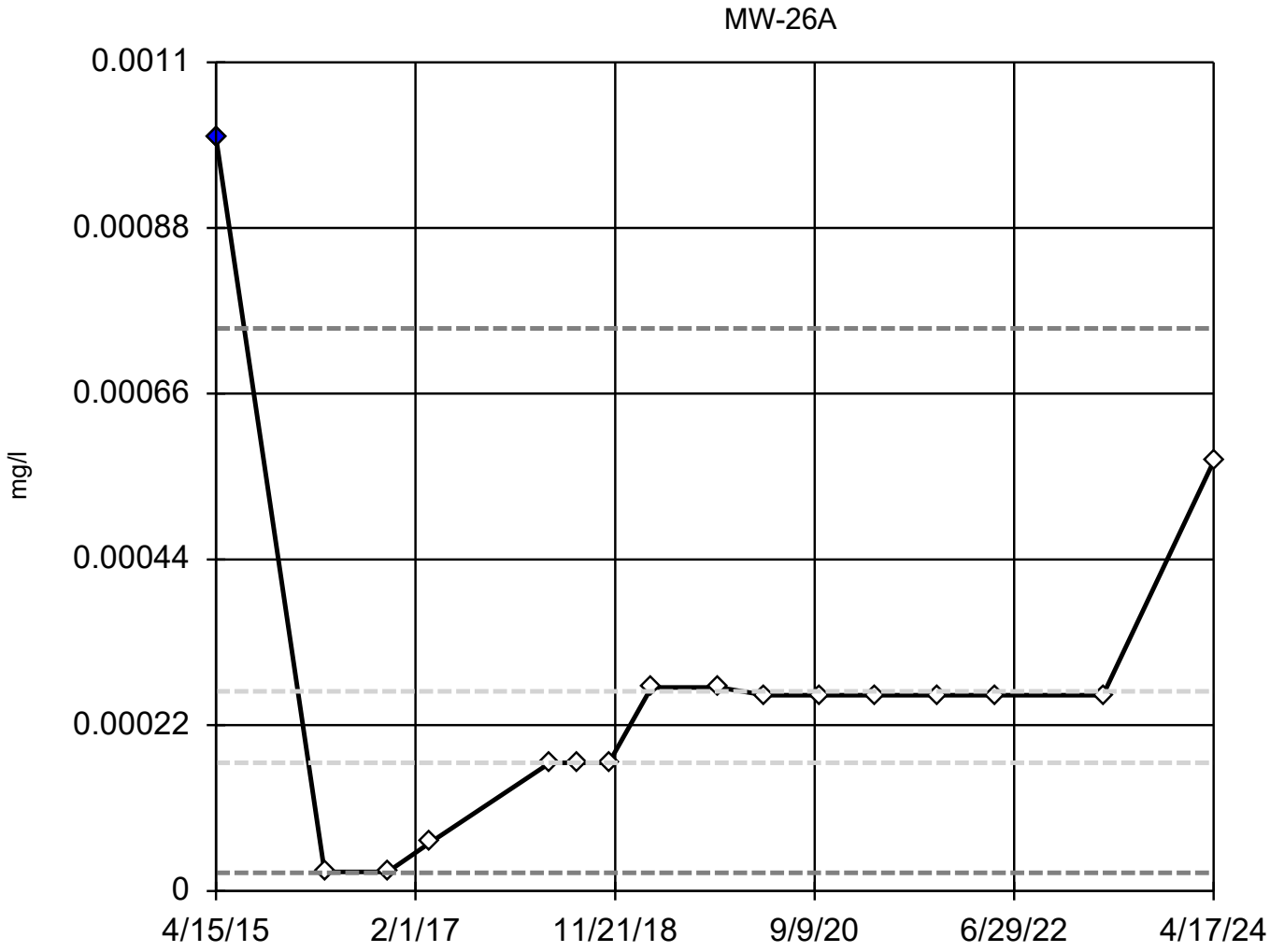
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.006607, low cutoff = 0.0000038, based on IQR multiplier of 3.

Constituent: Thallium Analysis Run 7/12/2024 1:48 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 16

Outlier is drawn as solid. Tukey's method selected by user.

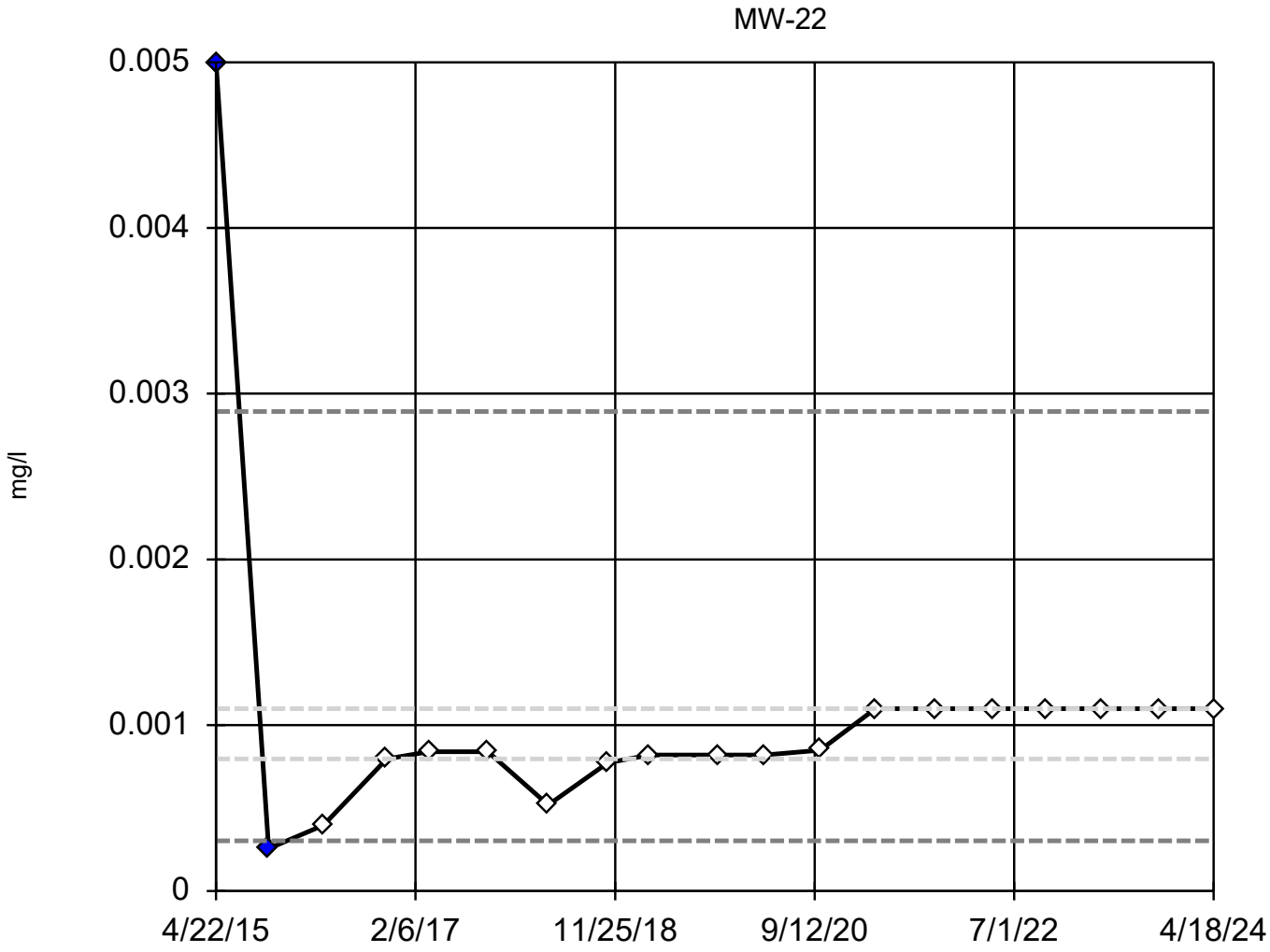
Data were cube root transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.0007468, low cutoff = 0.00002414, based on IQR multiplier of 3.

Constituent: Thallium Analysis Run 7/12/2024 1:48 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 19

Outliers are drawn as solid.
Tukey's method selected by user.

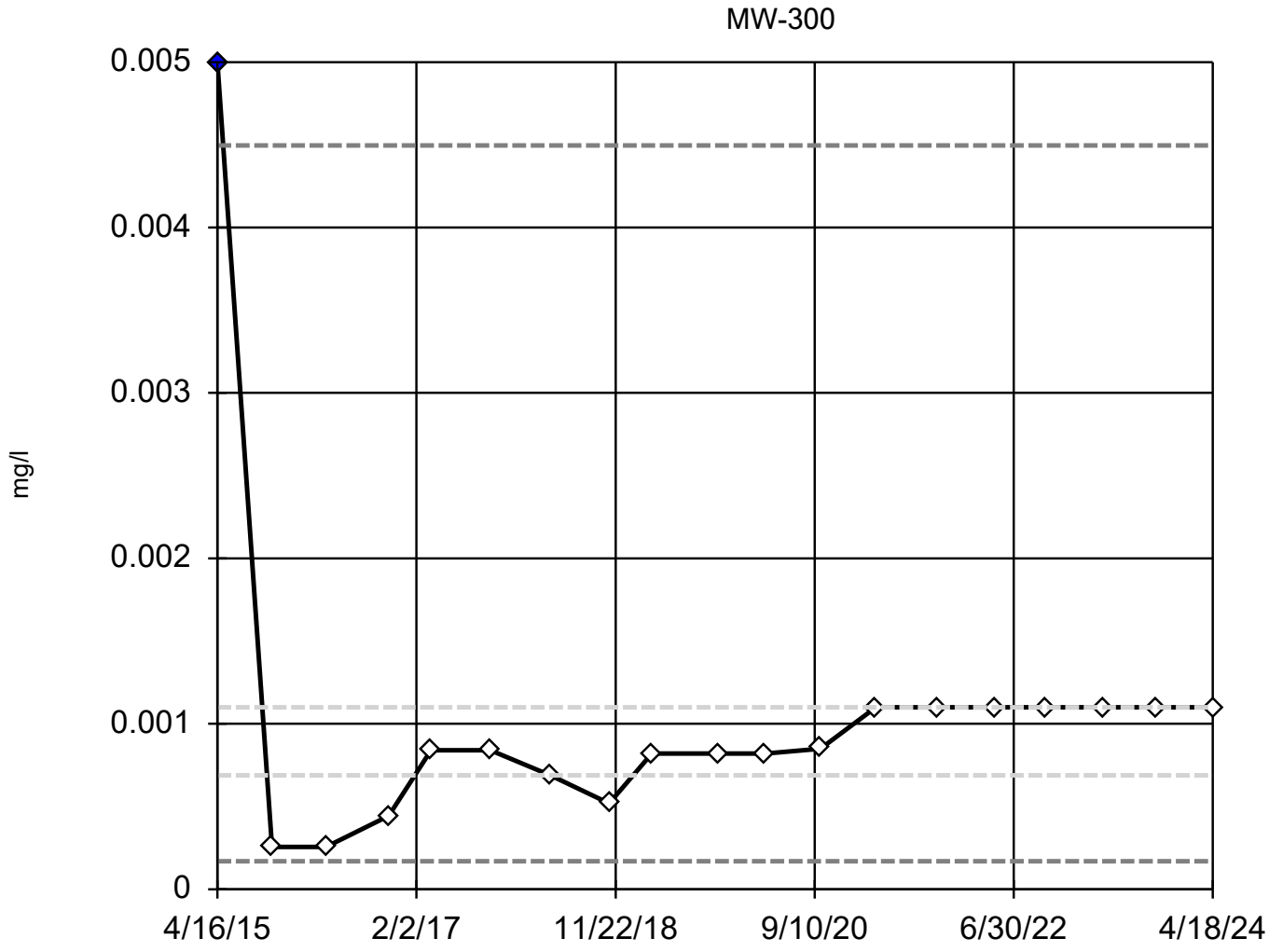
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.002892, low cutoff = 0.0003031, based on IQR multiplier of 3.

Constituent: Vanadium Analysis Run 7/12/2024 1:48 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 19

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

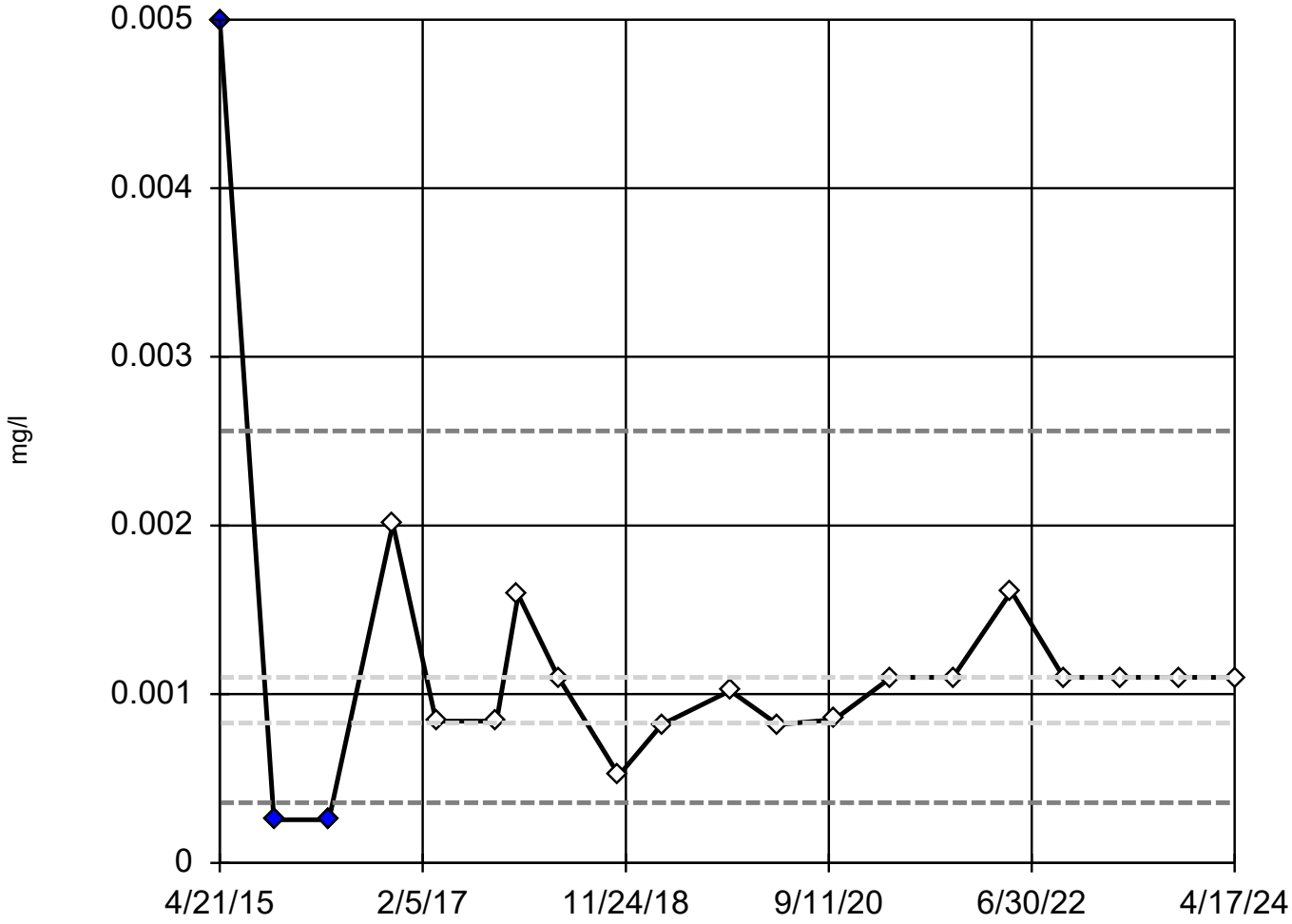
High cutoff = 0.004496, low cutoff = 0.0001683, based on IQR multiplier of 3.

Constituent: Vanadium Analysis Run 7/12/2024 1:49 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-302R



n = 20

Outliers are drawn as solid.
Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

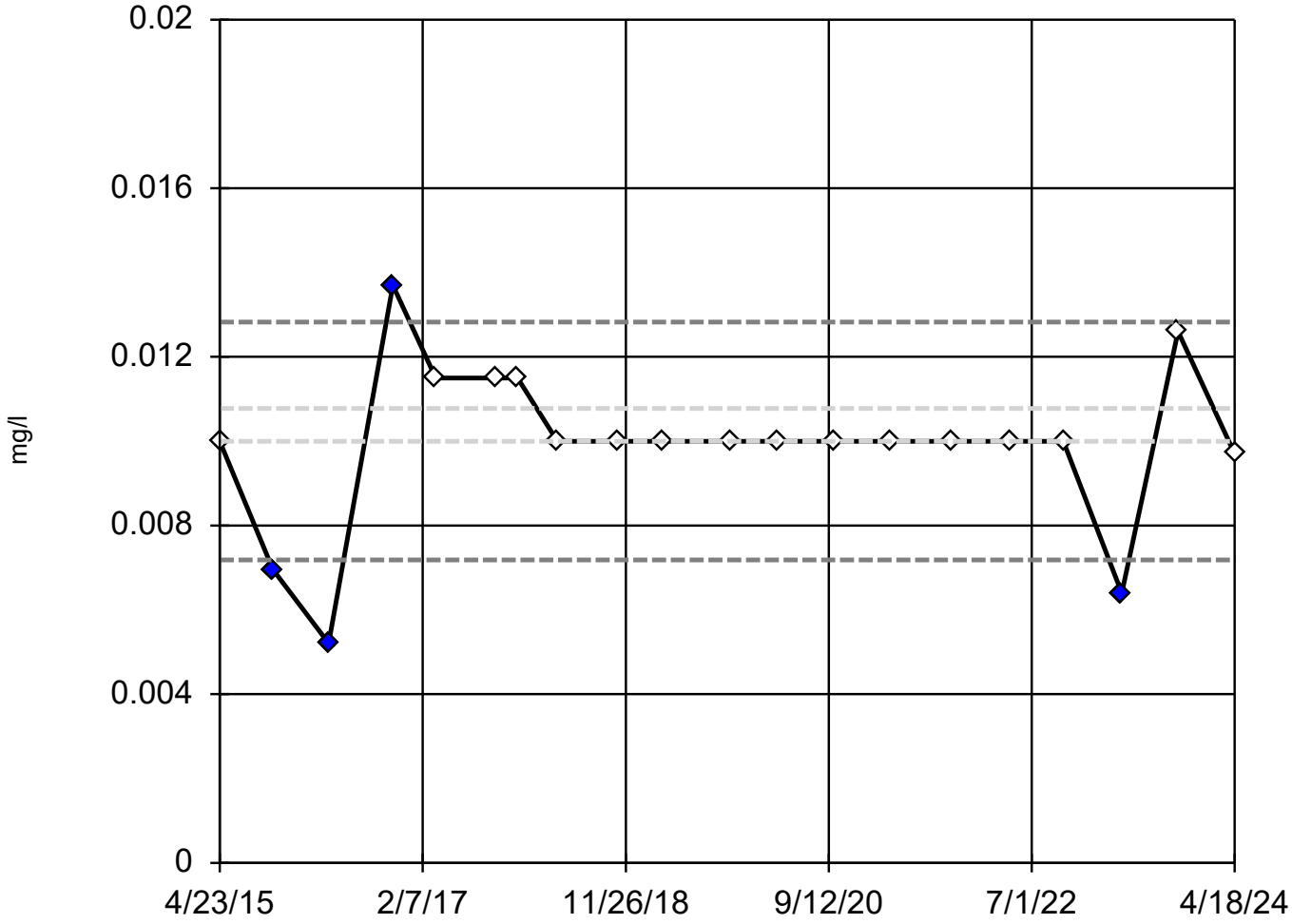
High cutoff = 0.002561, low cutoff = 0.0003565, based on IQR multiplier of 3.

Constituent: Vanadium Analysis Run 7/12/2024 1:49 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-15



n = 20

Outliers are drawn as solid.
Tukey's method selected by user.

Data were square transformed to achieve best W statistic (graph shown in original units).

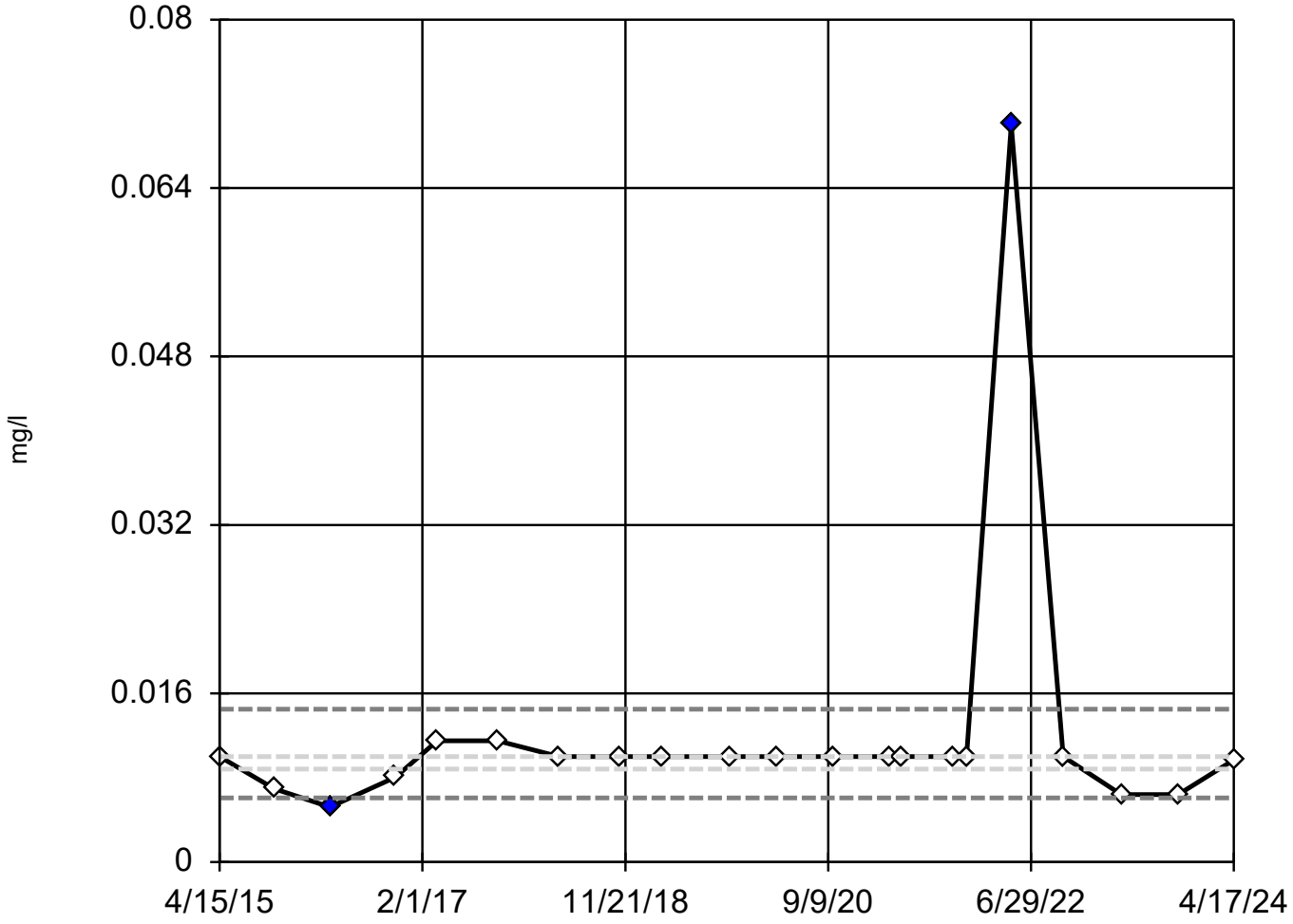
High cutoff = 0.01283, low cutoff = 0.007185, based on IQR multiplier of 3.

Constituent: Zinc Analysis Run 7/12/2024 1:49 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-303



n = 21

Outliers are drawn as solid.
Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.01452, low cutoff = 0.006082, based on IQR multiplier of 3.

Constituent: Zinc Analysis Run 7/12/2024 1:49 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Outlier Analysis

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 1:49 PM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Antimony (mg/l)	MW-15	No	n/a	n/a	NP	NaN	20	0.000...	0.000331	x^(1/3)	ShapiroWilk
Antimony (mg/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0004463	unknown	ShapiroWilk
Antimony (mg/l)	MW-19	No	n/a	n/a	NP	NaN	19	0.000...	0.0003299	x^(1/3)	ShapiroWilk
Antimony (mg/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.003637	0.01314	unknown	ShapiroWilk
Antimony (mg/l)	MW-201B (bg)	No	n/a	n/a	NP	NaN	19	0.001036	0.0005159	ln(x)	ShapiroWilk
Antimony (mg/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0003313	unknown	ShapiroWilk
Antimony (mg/l)	MW-24	No	n/a	n/a	NP	NaN	20	0.000676	0.0003913	sqrt(x)	ShapiroWilk
Antimony (mg/l)	MW-26A	n/a	n/a	n/a	NP	NaN	16	0.000...	0.0003195	unknown	ShapiroWilk
Antimony (mg/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0003597	unknown	ShapiroWilk
Antimony (mg/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0004403	unknown	ShapiroWilk
Antimony (mg/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.000...	0.0003364	unknown	ShapiroWilk
Antimony (mg/l)	MW-303	No	n/a	n/a	NP	NaN	21	0.000...	0.0009767	ln(x)	ShapiroWilk
Antimony (mg/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.000...	0.0004046	unknown	ShapiroWilk
Antimony (mg/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.000...	0.0003364	unknown	ShapiroWilk
Antimony (mg/l)	MW-501	No	n/a	n/a	NP	NaN	10	0.001059	0.0003359	ln(x)	ShapiroWilk
Antimony (mg/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.000...	0.0003603	unknown	ShapiroWilk
Arsenic (mg/l)	MW-15	No	n/a	n/a	NP	NaN	21	0.003261	0.003899	ln(x)	ShapiroWilk
Arsenic (mg/l)	MW-18	No	n/a	n/a	NP	NaN	19	0.001303	0.0008478	ln(x)	ShapiroWilk
Arsenic (mg/l)	MW-19	No	n/a	n/a	NP	NaN	19	0.005171	0.003695	x^(1/3)	ShapiroWilk
Arsenic (mg/l)	MW-20	No	n/a	n/a	NP	NaN	19	0.007183	0.004541	sqrt(x)	ShapiroWilk
Arsenic (mg/l)	MW-201B (bg)	No	n/a	n/a	NP	NaN	19	0.001432	0.0009793	ln(x)	ShapiroWilk
Arsenic (mg/l)	**MW-22**	**Yes**	**0.00569**	**11/1/2018**	**NP**	**NaN**	**19**	**0.003225**	**0.0007617**	**ln(x)**	**ShapiroWilk**
Arsenic (mg/l)	**MW-24**	**Yes**	**0.002**	**4/15/2015**	**NP**	**NaN**	**20**	**0.000...**	**0.0003068**	**ln(x)**	**ShapiroWilk**
Arsenic (mg/l)	MW-26A	No	n/a	n/a	NP	NaN	17	0.003019	0.00534	ln(x)	ShapiroWilk
Arsenic (mg/l)	MW-300	No	n/a	n/a	NP	NaN	19	0.001724	0.001198	ln(x)	ShapiroWilk
Arsenic (mg/l)	MW-301	No	n/a	n/a	NP	NaN	19	0.007553	0.00244	normal	ShapiroWilk
Arsenic (mg/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.000...	0.0004308	unknown	ShapiroWilk
Arsenic (mg/l)	MW-303	No	n/a	n/a	NP	NaN	21	0.001916	0.002071	ln(x)	ShapiroWilk
Arsenic (mg/l)	MW-304R	No	n/a	n/a	NP	NaN	20	0.000...	0.0003952	ln(x)	ShapiroWilk
Arsenic (mg/l)	MW-305	No	n/a	n/a	NP	NaN	20	0.000...	0.0004389	ln(x)	ShapiroWilk
Arsenic (mg/l)	MW-501	No	n/a	n/a	NP	NaN	10	0.004483	0.003762	x^(1/3)	ShapiroWilk
Arsenic (mg/l)	MW-9AR (bg)	No	n/a	n/a	NP	NaN	15	0.002151	0.00207	ln(x)	ShapiroWilk
Barium (mg/l)	MW-15	No	n/a	n/a	NP	NaN	20	0.1198	0.03571	normal	ShapiroWilk
Barium (mg/l)	MW-18	No	n/a	n/a	NP	NaN	19	0.05761	0.0149	ln(x)	ShapiroWilk
Barium (mg/l)	MW-19	No	n/a	n/a	NP	NaN	19	0.2318	0.2149	ln(x)	ShapiroWilk
Barium (mg/l)	MW-20	No	n/a	n/a	NP	NaN	19	1.11	0.383	x^2	ShapiroWilk
Barium (mg/l)	MW-201B (bg)	No	n/a	n/a	NP	NaN	19	0.1136	0.06571	ln(x)	ShapiroWilk
Barium (mg/l)	MW-22	No	n/a	n/a	NP	NaN	19	1.059	0.06751	x^(1/3)	ShapiroWilk
Barium (mg/l)	MW-24	No	n/a	n/a	NP	NaN	20	0.06371	0.01707	ln(x)	ShapiroWilk
Barium (mg/l)	MW-26A	No	n/a	n/a	NP	NaN	16	0.1447	0.09414	ln(x)	ShapiroWilk
Barium (mg/l)	MW-300	No	n/a	n/a	NP	NaN	19	0.13	0.09958	ln(x)	ShapiroWilk
Barium (mg/l)	MW-301	No	n/a	n/a	NP	NaN	19	0.06769	0.01495	normal	ShapiroWilk
Barium (mg/l)	MW-302R	No	n/a	n/a	NP	NaN	20	0.0496	0.0568	ln(x)	ShapiroWilk
Barium (mg/l)	MW-303	No	n/a	n/a	NP	NaN	21	0.07059	0.07725	ln(x)	ShapiroWilk
Barium (mg/l)	**MW-304R**	**Yes**	**0.206**	**9/29/2020**	**NP**	**NaN**	**20**	**0.05854**	**0.03733**	**ln(x)**	**ShapiroWilk**
Barium (mg/l)	MW-305	No	n/a	n/a	NP	NaN	20	0.1026	0.03743	normal	ShapiroWilk
Barium (mg/l)	MW-501	No	n/a	n/a	NP	NaN	10	0.04176	0.0123	x^2	ShapiroWilk
Barium (mg/l)	MW-9AR (bg)	No	n/a	n/a	NP	NaN	15	0.487	0.06861	x^5	ShapiroWilk
Beryllium (mg/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.000...	0.0001889	unknown	ShapiroWilk
Beryllium (mg/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.000...	0.000189	unknown	ShapiroWilk

Outlier Analysis

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 1:49 PM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Beryllium (mg/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0001903	unknown	ShapiroWilk
Beryllium (mg/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0001843	unknown	ShapiroWilk
Beryllium (mg/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0000...	unknown	ShapiroWilk
Beryllium (mg/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0000...	unknown	ShapiroWilk
Beryllium (mg/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.000...	0.0001885	unknown	ShapiroWilk
Beryllium (mg/l)	**MW-26A**	**Yes**	**0.001**	**4/15/2015**	**NP**	**NaN**	**16**	**0.000...**	**0.0001961**	**ln(x)**	**ShapiroWilk**
Beryllium (mg/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0002633	unknown	ShapiroWilk
Beryllium (mg/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0001827	unknown	ShapiroWilk
Beryllium (mg/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.000...	0.0000...	unknown	ShapiroWilk
Beryllium (mg/l)	**MW-303**	**Yes**	**0.00003...**	**10/9/2015,4/26/2022**	**NP**	**NaN**	**21**	**0.000...**	**0.0004196**	**ln(x)**	**ShapiroWilk**
Beryllium (mg/l)	**MW-304R**	**Yes**	**0.001**	**4/15/2015**	**NP**	**NaN**	**20**	**0.000292**	**0.0001912**	**ln(x)**	**ShapiroWilk**
Beryllium (mg/l)	**MW-305**	**Yes**	**0.001**	**4/15/2015**	**NP**	**NaN**	**20**	**0.000...**	**0.0001814**	**ln(x)**	**ShapiroWilk**
Beryllium (mg/l)	MW-501	No	n/a	n/a	NP	NaN	10	0.000...	0.0006606	ln(x)	ShapiroWilk
Beryllium (mg/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.000...	0.0000...	unknown	ShapiroWilk
Cadmium (mg/l)	MW-15	No	n/a	n/a	NP	NaN	20	0.000...	0.0001028	ln(x)	ShapiroWilk
Cadmium (mg/l)	MW-18	No	n/a	n/a	NP	NaN	19	0.000...	0.0001038	ln(x)	ShapiroWilk
Cadmium (mg/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0001042	unknown	ShapiroWilk
Cadmium (mg/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0001035	unknown	ShapiroWilk
Cadmium (mg/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0001035	unknown	ShapiroWilk
Cadmium (mg/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0001039	unknown	ShapiroWilk
Cadmium (mg/l)	MW-24	No	n/a	n/a	NP	NaN	20	0.000...	0.0001847	ln(x)	ShapiroWilk
Cadmium (mg/l)	MW-26A	No	n/a	n/a	NP	NaN	16	0.000101	0.0001115	ln(x)	ShapiroWilk
Cadmium (mg/l)	MW-300	No	n/a	n/a	NP	NaN	19	0.000...	0.0001512	ln(x)	ShapiroWilk
Cadmium (mg/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0001112	unknown	ShapiroWilk
Cadmium (mg/l)	MW-302R	No	n/a	n/a	NP	NaN	20	0.000...	0.0000...	ln(x)	ShapiroWilk
Cadmium (mg/l)	MW-303	No	n/a	n/a	NP	NaN	21	0.000...	0.001365	ln(x)	ShapiroWilk
Cadmium (mg/l)	MW-304R	No	n/a	n/a	NP	NaN	20	0.000...	0.0001007	ln(x)	ShapiroWilk
Cadmium (mg/l)	**MW-305**	**Yes**	**0.0005**	**4/15/2015**	**NP**	**NaN**	**20**	**0.000...**	**0.0001013**	**ln(x)**	**ShapiroWilk**
Cadmium (mg/l)	MW-501	No	n/a	n/a	NP	NaN	10	0.000...	0.0002794	ln(x)	ShapiroWilk
Cadmium (mg/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.000...	0.0000...	unknown	ShapiroWilk
Chromium (mg/l)	**MW-15**	**Yes**	**0.005**	**4/23/2015**	**NP**	**NaN**	**20**	**0.001149**	**0.0009338**	**ln(x)**	**ShapiroWilk**
Chromium (mg/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.001152	0.0009671	unknown	ShapiroWilk
Chromium (mg/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.001285	0.001059	unknown	ShapiroWilk
Chromium (mg/l)	**MW-20**	**Yes**	**0.0269**	**10/31/2018**	**NP**	**NaN**	**19**	**0.002998**	**0.005811**	**ln(x)**	**ShapiroWilk**
Chromium (mg/l)	MW-201B (bg)	No	n/a	n/a	NP	NaN	19	0.002274	0.003047	ln(x)	ShapiroWilk
Chromium (mg/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.001131	0.0009663	unknown	ShapiroWilk
Chromium (mg/l)	**MW-24**	**Yes**	**0.005**	**4/15/2015**	**NP**	**NaN**	**20**	**0.001138**	**0.0009404**	**ln(x)**	**ShapiroWilk**
Chromium (mg/l)	MW-26A	n/a	n/a	n/a	NP	NaN	16	0.001181	0.001054	unknown	ShapiroWilk
Chromium (mg/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.001106	0.0009838	unknown	ShapiroWilk
Chromium (mg/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.001111	0.0009798	unknown	ShapiroWilk
Chromium (mg/l)	**MW-302R**	**Yes**	**0.005**	**4/21/2015**	**NP**	**NaN**	**20**	**0.001089**	**0.0009604**	**ln(x)**	**ShapiroWilk**
Chromium (mg/l)	**MW-303**	**Yes**	**0.005,0...**	**4/15/2015,4/7/201...**	**NP**	**NaN**	**21**	**0.001508**	**0.00168**	**ln(x)**	**ShapiroWilk**
Chromium (mg/l)	**MW-304R**	**Yes**	**0.005,0...**	**4/15/2015,4/7/2016**	**NP**	**NaN**	**20**	**0.001221**	**0.0009305**	**ln(x)**	**ShapiroWilk**
Chromium (mg/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.001087	0.0009612	unknown	ShapiroWilk
Chromium (mg/l)	MW-501	No	n/a	n/a	NP	NaN	10	0.00112	0.0000...	ln(x)	ShapiroWilk
Chromium (mg/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.001025	0.0001473	unknown	ShapiroWilk
Cobalt (mg/l)	MW-15	No	n/a	n/a	NP	NaN	21	0.002102	0.001074	ln(x)	ShapiroWilk
Cobalt (mg/l)	MW-18	No	n/a	n/a	NP	NaN	20	0.007496	0.005624	ln(x)	ShapiroWilk
Cobalt (mg/l)	MW-19	No	n/a	n/a	NP	NaN	19	0.01364	0.003526	x^2	ShapiroWilk
Cobalt (mg/l)	MW-20	No	n/a	n/a	NP	NaN	19	0.004092	0.001279	sqrt(x)	ShapiroWilk

Outlier Analysis

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 1:49 PM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Cobalt (mg/l)	MW-201B (bg)	No	n/a	n/a	NP	NaN	19	0.000...	0.0007353	ln(x)	ShapiroWilk
Cobalt (mg/l)	MW-22	No	n/a	n/a	NP	NaN	19	0.000...	0.0001406	ln(x)	ShapiroWilk
Cobalt (mg/l)	MW-24	No	n/a	n/a	NP	NaN	21	0.002834	0.004105	ln(x)	ShapiroWilk
Cobalt (mg/l)	MW-26A	No	n/a	n/a	NP	NaN	17	0.01751	0.03471	ln(x)	ShapiroWilk
Cobalt (mg/l)	MW-300	No	n/a	n/a	NP	NaN	19	0.005716	0.006665	x^(1/3)	ShapiroWilk
Cobalt (mg/l)	MW-301	No	n/a	n/a	NP	NaN	19	0.006708	0.002762	x^(1/3)	ShapiroWilk
Cobalt (mg/l)	MW-302R	No	n/a	n/a	NP	NaN	20	0.001331	0.001307	ln(x)	ShapiroWilk
Cobalt (mg/l)	MW-303	No	n/a	n/a	NP	NaN	22	0.008198	0.01381	ln(x)	ShapiroWilk
Cobalt (mg/l)	MW-304R	No	n/a	n/a	NP	NaN	22	0.004031	0.003905	sqrt(x)	ShapiroWilk
Cobalt (mg/l)	**MW-305**	**Yes**	**0.00726**	**11/1/2016**	**NP**	**NaN**	**21**	**0.002272**	**0.001389**	**ln(x)**	**ShapiroWilk**
Cobalt (mg/l)	MW-501	No	n/a	n/a	NP	NaN	10	0.02238	0.03965	ln(x)	ShapiroWilk
Cobalt (mg/l)	MW-9AR (bg)	No	n/a	n/a	NP	NaN	15	0.000...	0.0007165	ln(x)	ShapiroWilk
Copper (mg/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.001937	0.0006105	unknown	ShapiroWilk
Copper (mg/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.00171	0.0005462	unknown	ShapiroWilk
Copper (mg/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.001816	0.0004456	unknown	ShapiroWilk
Copper (mg/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.005358	0.01576	unknown	ShapiroWilk
Copper (mg/l)	MW-201B (bg)	No	n/a	n/a	NP	NaN	19	0.002559	0.001655	ln(x)	ShapiroWilk
Copper (mg/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.002885	0.003129	unknown	ShapiroWilk
Copper (mg/l)	MW-24	No	n/a	n/a	NP	NaN	20	0.002391	0.0008361	ln(x)	ShapiroWilk
Copper (mg/l)	MW-26A	No	n/a	n/a	NP	NaN	16	0.00192	0.0007544	ln(x)	ShapiroWilk
Copper (mg/l)	MW-300	No	n/a	n/a	NP	NaN	19	0.001822	0.0005633	normal	ShapiroWilk
Copper (mg/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.001931	0.0006087	unknown	ShapiroWilk
Copper (mg/l)	MW-302R	No	n/a	n/a	NP	NaN	20	0.001994	0.0006248	ln(x)	ShapiroWilk
Copper (mg/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.002227	0.002433	unknown	ShapiroWilk
Copper (mg/l)	MW-304R	No	n/a	n/a	NP	NaN	20	0.001734	0.0005796	normal	ShapiroWilk
Copper (mg/l)	MW-305	No	n/a	n/a	NP	NaN	20	0.001796	0.0004608	ln(x)	ShapiroWilk
Copper (mg/l)	MW-501	No	n/a	n/a	NP	NaN	10	0.002145	0.0009603	ln(x)	ShapiroWilk
Copper (mg/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.001764	0.000683	unknown	ShapiroWilk
Lead (mg/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.000...	0.0002333	unknown	ShapiroWilk
Lead (mg/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0001223	unknown	ShapiroWilk
Lead (mg/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0000...	unknown	ShapiroWilk
Lead (mg/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0000...	unknown	ShapiroWilk
Lead (mg/l)	MW-201B (bg)	No	n/a	n/a	NP	NaN	19	0.001512	0.002102	ln(x)	ShapiroWilk
Lead (mg/l)	MW-22	No	n/a	n/a	NP	NaN	19	0.000...	0.0001403	ln(x)	ShapiroWilk
Lead (mg/l)	**MW-24**	**Yes**	**0.000966**	**11/1/2016**	**NP**	**NaN**	**20**	**0.000...**	**0.0001675**	**ln(x)**	**ShapiroWilk**
Lead (mg/l)	**MW-26A**	**Yes**	**0.00194**	**4/25/2022**	**NP**	**NaN**	**16**	**0.000365**	**0.0004258**	**ln(x)**	**ShapiroWilk**
Lead (mg/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0001231	unknown	ShapiroWilk
Lead (mg/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0001596	unknown	ShapiroWilk
Lead (mg/l)	MW-302R	No	n/a	n/a	NP	NaN	20	0.000...	0.0001342	ln(x)	ShapiroWilk
Lead (mg/l)	MW-303	No	n/a	n/a	NP	NaN	21	0.000...	0.0003869	ln(x)	ShapiroWilk
Lead (mg/l)	**MW-304R**	**Yes**	**0.00246**	**11/4/2016**	**NP**	**NaN**	**20**	**0.000...**	**0.000501**	**ln(x)**	**ShapiroWilk**
Lead (mg/l)	MW-305	No	n/a	n/a	NP	NaN	20	0.000...	0.0000...	x^2	ShapiroWilk
Lead (mg/l)	MW-501	No	n/a	n/a	NP	NaN	10	0.000943	0.001293	ln(x)	ShapiroWilk
Lead (mg/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.000...	0.0000...	unknown	ShapiroWilk
Mercury (mg/l)	MW-201B (bg)	No	n/a	n/a	NP	NaN	4	0.000...	0.0000...	ln(x)	ShapiroWilk
Mercury (mg/l)	MW-301	n/a	n/a	n/a	NP	NaN	11	0.000...	0.0000...	unknown	ShapiroWilk
Nickel (mg/l)	MW-15	No	n/a	n/a	NP	NaN	21	0.007219	0.002126	x^2	ShapiroWilk
Nickel (mg/l)	MW-18	No	n/a	n/a	NP	NaN	20	0.01875	0.006806	x^(1/3)	ShapiroWilk
Nickel (mg/l)	MW-19	No	n/a	n/a	NP	NaN	19	0.02856	0.008766	ln(x)	ShapiroWilk
Nickel (mg/l)	MW-20	No	n/a	n/a	NP	NaN	19	0.02224	0.008892	x^(1/3)	ShapiroWilk

Outlier Analysis

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 1:49 PM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Nickel (mg/l)	MW-201B (bg)	No	n/a	n/a	NP	NaN	19	0.002433	0.001369	ln(x)	ShapiroWilk
Nickel (mg/l)	MW-22	No	n/a	n/a	NP	NaN	19	0.03459	0.004252	ln(x)	ShapiroWilk
Nickel (mg/l)	MW-24	No	n/a	n/a	NP	NaN	21	0.03881	0.01082	x^3	ShapiroWilk
Nickel (mg/l)	**MW-26A**	**Yes**	**0.0512**	**4/17/2024**	**NP**	**NaN**	**17**	**0.01289**	**0.01329**	**ln(x)**	**ShapiroWilk**
Nickel (mg/l)	MW-300	No	n/a	n/a	NP	NaN	19	0.01135	0.008598	sqrt(x)	ShapiroWilk
Nickel (mg/l)	MW-301	No	n/a	n/a	NP	NaN	19	0.009207	0.00402	x^(1/3)	ShapiroWilk
Nickel (mg/l)	MW-302R	No	n/a	n/a	NP	NaN	21	0.008242	0.005154	normal	ShapiroWilk
Nickel (mg/l)	MW-303	No	n/a	n/a	NP	NaN	22	0.0262	0.02842	ln(x)	ShapiroWilk
Nickel (mg/l)	MW-304R	No	n/a	n/a	NP	NaN	21	0.00467	0.003314	x^(1/3)	ShapiroWilk
Nickel (mg/l)	MW-305	No	n/a	n/a	NP	NaN	20	0.002394	0.0008333	ln(x)	ShapiroWilk
Nickel (mg/l)	MW-501	No	n/a	n/a	NP	NaN	10	0.03922	0.06721	ln(x)	ShapiroWilk
Nickel (mg/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.001867	0.0004869	unknown	ShapiroWilk
Selenium (mg/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.001474	0.001149	unknown	ShapiroWilk
Selenium (mg/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.001454	0.001068	unknown	ShapiroWilk
Selenium (mg/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.001391	0.001046	unknown	ShapiroWilk
Selenium (mg/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.001391	0.001038	unknown	ShapiroWilk
Selenium (mg/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.001331	0.001059	unknown	ShapiroWilk
Selenium (mg/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.001251	0.0009561	unknown	ShapiroWilk
Selenium (mg/l)	**MW-24**	**Yes**	**0.005,0...**	**4/15/2015,10/9/2015**	**NP**	**NaN**	**20**	**0.00134**	**0.001032**	**ln(x)**	**ShapiroWilk**
Selenium (mg/l)	**MW-26A**	**Yes**	**0.005**	**4/15/2015**	**NP**	**NaN**	**16**	**0.001235**	**0.001025**	**ln(x)**	**ShapiroWilk**
Selenium (mg/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.001305	0.0009565	unknown	ShapiroWilk
Selenium (mg/l)	**MW-301**	**Yes**	**0.005**	**4/23/2015**	**NP**	**NaN**	**19**	**0.001247**	**0.0009754**	**ln(x)**	**ShapiroWilk**
Selenium (mg/l)	**MW-302R**	**Yes**	**0.005,0...**	**4/21/2015,10/13/2...**	**NP**	**NaN**	**20**	**0.001176**	**0.0009264**	**ln(x)**	**ShapiroWilk**
Selenium (mg/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.00164	0.001539	unknown	ShapiroWilk
Selenium (mg/l)	**MW-304R**	**Yes**	**0.005,0...**	**4/15/2015,10/9/2015**	**NP**	**NaN**	**20**	**0.001327**	**0.00103**	**ln(x)**	**ShapiroWilk**
Selenium (mg/l)	**MW-305**	**Yes**	**0.005,0...**	**4/15/2015,10/13/2...**	**NP**	**NaN**	**20**	**0.001176**	**0.0009267**	**ln(x)**	**ShapiroWilk**
Selenium (mg/l)	MW-501	n/a	n/a	n/a	NP	NaN	10	0.001136	0.0002272	unknown	ShapiroWilk
Selenium (mg/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.001098	0.0002168	unknown	ShapiroWilk
Silver (mg/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.000...	0.0002114	unknown	ShapiroWilk
Silver (mg/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0002863	unknown	ShapiroWilk
Silver (mg/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0002107	unknown	ShapiroWilk
Silver (mg/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0002107	unknown	ShapiroWilk
Silver (mg/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0002107	unknown	ShapiroWilk
Silver (mg/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0002024	unknown	ShapiroWilk
Silver (mg/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.000...	0.0002104	unknown	ShapiroWilk
Silver (mg/l)	MW-26A	No	n/a	n/a	NP	NaN	16	0.000...	0.0002014	ln(x)	ShapiroWilk
Silver (mg/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0002423	unknown	ShapiroWilk
Silver (mg/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0002702	unknown	ShapiroWilk
Silver (mg/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.000364	0.000204	unknown	ShapiroWilk
Silver (mg/l)	MW-303	No	n/a	n/a	NP	NaN	21	0.000...	0.0006969	ln(x)	ShapiroWilk
Silver (mg/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.000...	0.0002128	unknown	ShapiroWilk
Silver (mg/l)	MW-305	No	n/a	n/a	NP	NaN	20	0.000...	0.000202	x^(1/3)	ShapiroWilk
Silver (mg/l)	MW-501	n/a	n/a	n/a	NP	NaN	10	0.000473	0.0000...	unknown	ShapiroWilk
Silver (mg/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.000...	0.0001068	unknown	ShapiroWilk
Sulfide (mg/l)	MW-20	No	n/a	n/a	NP	NaN	14	3.725	4.47	x^(1/3)	ShapiroWilk
Sulfide (mg/l)	**MW-201B (bg)**	**Yes**	**10,23.2**	**9/28/2020,3/30/2021**	**NP**	**NaN**	**18**	**2.087**	**5.748**	**ln(x)**	**ShapiroWilk**
Sulfide (mg/l)	MW-300	No	n/a	n/a	NP	NaN	11	2.296	3.933	ln(x)	ShapiroWilk
Sulfide (mg/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	13	1.734	3.669	unknown	ShapiroWilk
Thallium (mg/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.000...	0.0004229	unknown	ShapiroWilk
Thallium (mg/l)	**MW-18**	**Yes**	**0.0129**	**10/19/2023**	**NP**	**NaN**	**19**	**0.000...**	**0.002913**	**ln(x)**	**ShapiroWilk**

Outlier Analysis

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 1:49 PM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Thallium (mg/l)	MW-19	No	n/a	n/a	NP	NaN	19	0.000...	0.0002228	x^(1/3)	ShapiroWilk
Thallium (mg/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0002231	unknown	ShapiroWilk
Thallium (mg/l)	MW-201B (bg)	No	n/a	n/a	NP	NaN	19	0.000...	0.000262	ln(x)	ShapiroWilk
Thallium (mg/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.000...	0.0002235	unknown	ShapiroWilk
Thallium (mg/l)	MW-24	No	n/a	n/a	NP	NaN	20	0.000...	0.00022	x^(1/3)	ShapiroWilk
Thallium (mg/l)	**MW-26A**	**Yes**	**0.001**	**4/15/2015**	**NP**	**NaN**	**16**	**0.000...**	**0.0002331**	**x^(1/3)**	**ShapiroWilk**
Thallium (mg/l)	MW-300	No	n/a	n/a	NP	NaN	19	0.000321	0.0003048	ln(x)	ShapiroWilk
Thallium (mg/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.000...	0.002911	unknown	ShapiroWilk
Thallium (mg/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.00024	0.0002215	unknown	ShapiroWilk
Thallium (mg/l)	MW-303	No	n/a	n/a	NP	NaN	21	0.000...	0.0004027	ln(x)	ShapiroWilk
Thallium (mg/l)	MW-304R	No	n/a	n/a	NP	NaN	20	0.000295	0.0002611	x^(1/3)	ShapiroWilk
Thallium (mg/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.000...	0.000302	unknown	ShapiroWilk
Thallium (mg/l)	MW-501	No	n/a	n/a	NP	NaN	10	0.000322	0.0001307	x^(1/3)	ShapiroWilk
Thallium (mg/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.000...	0.0001218	unknown	ShapiroWilk
Tin (mg/l)	MW-201B (bg)	No	n/a	n/a	NP	NaN	4	0.02606	0.04929	ln(x)	ShapiroWilk
Tin (mg/l)	MW-301	n/a	n/a	n/a	NP	NaN	11	0.08591	0.2492	unknown	ShapiroWilk
Vanadium (mg/l)	MW-15	No	n/a	n/a	NP	NaN	20	0.001734	0.001064	x^(1/3)	ShapiroWilk
Vanadium (mg/l)	MW-18	No	n/a	n/a	NP	NaN	19	0.001059	0.0009886	ln(x)	ShapiroWilk
Vanadium (mg/l)	MW-19	No	n/a	n/a	NP	NaN	19	0.001048	0.0009944	ln(x)	ShapiroWilk
Vanadium (mg/l)	MW-20	No	n/a	n/a	NP	NaN	19	0.003585	0.000919	sqrt(x)	ShapiroWilk
Vanadium (mg/l)	MW-201B (bg)	No	n/a	n/a	NP	NaN	19	0.001708	0.001859	ln(x)	ShapiroWilk
Vanadium (mg/l)	**MW-22**	**Yes**	**0.005,0...**	**4/22/2015,10/12/2015**	**NP**	**NaN**	**19**	**0.001075**	**0.0009825**	**ln(x)**	**ShapiroWilk**
Vanadium (mg/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.001286	0.0011	unknown	ShapiroWilk
Vanadium (mg/l)	MW-26A	n/a	n/a	n/a	NP	NaN	15	0.001046	0.0005214	unknown	ShapiroWilk
Vanadium (mg/l)	**MW-300**	**Yes**	**0.005**	**4/16/2015**	**NP**	**NaN**	**19**	**0.001045**	**0.0009986**	**ln(x)**	**ShapiroWilk**
Vanadium (mg/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.001098	0.001	unknown	ShapiroWilk
Vanadium (mg/l)	**MW-302R**	**Yes**	**0.005,0...**	**4/21/2015,10/13/2...**	**NP**	**NaN**	**20**	**0.001206**	**0.0009851**	**ln(x)**	**ShapiroWilk**
Vanadium (mg/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.001478	0.001719	unknown	ShapiroWilk
Vanadium (mg/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.001209	0.001013	unknown	ShapiroWilk
Vanadium (mg/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.001112	0.0008123	unknown	ShapiroWilk
Vanadium (mg/l)	MW-501	No	n/a	n/a	NP	NaN	10	0.001887	0.001461	ln(x)	ShapiroWilk
Vanadium (mg/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.000...	0.0003962	unknown	ShapiroWilk
Zinc (mg/l)	**MW-15**	**Yes**	**0.00695...**	**10/12/2015,4/9/20...**	**NP**	**NaN**	**20**	**0.009953**	**0.001953**	**x^2**	**ShapiroWilk**
Zinc (mg/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.01512	0.0193	unknown	ShapiroWilk
Zinc (mg/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.01093	0.006369	unknown	ShapiroWilk
Zinc (mg/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.01393	0.01654	unknown	ShapiroWilk
Zinc (mg/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.01132	0.00495	unknown	ShapiroWilk
Zinc (mg/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.03078	0.09114	unknown	ShapiroWilk
Zinc (mg/l)	MW-24	No	n/a	n/a	NP	NaN	20	0.009384	0.001744	x^3	ShapiroWilk
Zinc (mg/l)	MW-26A	n/a	n/a	n/a	NP	NaN	15	0.009201	0.00192	unknown	ShapiroWilk
Zinc (mg/l)	MW-300	No	n/a	n/a	NP	NaN	19	0.008906	0.002077	x^4	ShapiroWilk
Zinc (mg/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.02336	0.06169	unknown	ShapiroWilk
Zinc (mg/l)	MW-302R	No	n/a	n/a	NP	NaN	20	0.01007	0.002861	sqrt(x)	ShapiroWilk
Zinc (mg/l)	**MW-303**	**Yes**	**0.00521...**	**4/7/2016,4/26/2022**	**NP**	**NaN**	**21**	**0.01218**	**0.01336**	**ln(x)**	**ShapiroWilk**
Zinc (mg/l)	MW-304R	No	n/a	n/a	NP	NaN	20	0.0092	0.001836	x^4	ShapiroWilk
Zinc (mg/l)	MW-305	No	n/a	n/a	NP	NaN	20	0.008984	0.002172	x^4	ShapiroWilk
Zinc (mg/l)	MW-501	No	n/a	n/a	NP	NaN	10	0.02755	0.03977	ln(x)	ShapiroWilk
Zinc (mg/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.01017	0.002995	unknown	ShapiroWilk

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Monitoring Well Inorganic Flagged Outliers – Spring 2024

Flagged_Outliers

Linn County Data: CRLCSWA_Groundwater Database Printed 5/10/2024, 9:25 AM

	MW-20 Antimony (mg/l)	MW-22 Arsenic (mg/l)	MW-24 Arsenic (mg/l)	MW-303 Arsenic (mg/l)	MW-20 Barium (mg/l)	MW-304R Barium (mg/l)	MW-18 Beryllium (mg/l)	MW-19 Beryllium (mg/l)	MW-20 Beryllium (mg/l)	MW-26A Beryllium (mg/l)
4/15/2015			<0.002 (o)							<0.001 (o)
4/16/2015							<0.001 (o)			
4/21/2015										
4/22/2015		0.00224 (o)						<0.001 (o)		
4/23/2015									<0.001 (o)	
10/8/2015										
10/9/2015										
10/12/2015		0.00465 (o)							0.000163 (JBo)	
10/13/2015										
4/5/2016										
4/7/2016										
4/8/2016										
4/9/2016										
10/31/2016										
11/1/2016										
11/2/2016										
11/3/2016										
11/4/2016										
11/5/2016										
10/3/2017										
10/4/2017										
10/5/2017										
4/18/2018										
4/19/2018										
4/20/2018										
7/17/2018										
10/31/2018	0.0579 (o)				0.0446 (o)					
11/1/2018		0.00569 (o)								
5/14/2019										
10/28/2019										
10/29/2019										
3/31/2020										
4/1/2020										
9/28/2020										
9/29/2020						0.206 (o)				
9/30/2020										
3/30/2021										
4/1/2021										
5/6/2021				0.00492 (o)						
10/19/2021										
10/20/2021										
12/2/2021										
2/22/2022										
4/25/2022										
4/26/2022										
4/18/2023										
4/19/2023										
10/18/2023										
10/19/2023										
4/17/2024										

Flagged_Outliers

Linn County Data: CRLCSWA_Groundwater Database Printed 5/10/2024, 9:25 AM

	MW-300 Beryllium (mg/l)	MW-301 Beryllium (mg/l)	MW-303 Beryllium (mg/l)	MW-304R Beryllium (mg/l)	MW-305 Beryllium (mg/l)	MW-501 Beryllium (mg/l)	MW-9AR Beryllium (mg/l)	MW-15 Cadmium (mg/l)	MW-20 Cadmium (mg/l)	MW-201B Cadmium (mg/l)
4/15/2015			<0.001 (o)	<0.001 (o)	<0.001 (o)					
4/16/2015	<0.001 (o)									
4/21/2015										
4/22/2015										<0.0005 (o)
4/23/2015		<0.001 (o)							<0.0005 (o)	
10/8/2015										
10/9/2015										
10/12/2015										
10/13/2015										
4/5/2016										
4/7/2016										
4/8/2016										
4/9/2016										
10/31/2016										
11/1/2016										
11/2/2016										
11/3/2016										
11/4/2016										
11/5/2016										
10/3/2017										
10/4/2017										
10/5/2017										
4/18/2018										
4/19/2018										
4/20/2018										
7/17/2018										
10/31/2018										
11/1/2018										
5/14/2019							<0.00053 (o)			
10/28/2019										
10/29/2019										
3/31/2020								0.000209 (o)		
4/1/2020										
9/28/2020										
9/29/2020	0.00108 (o)									
9/30/2020										
3/30/2021										
4/1/2021										
5/6/2021										
10/19/2021										
10/20/2021										
12/2/2021			<0.001 (o)							
2/22/2022										
4/25/2022										
4/26/2022			<0.00189 (o)							
4/18/2023						<0.00033 (o)				
4/19/2023										
10/18/2023										
10/19/2023										
4/17/2024										

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Linn County Data: CRLCSWA_Groundwater Database Printed 5/10/2024, 9:25 AM

	MW-22 Cadmium (mg/l)	MW-301 Cadmium (mg/l)	MW-304R Cadmium (mg/l)	MW-305 Cadmium (mg/l)	MW-9AR Cadmium (mg/l)	MW-15 Chromium (mg/l)	MW-18 Chromium (mg/l)	MW-19 Chromium (mg/l)	MW-20 Chromium (mg/l)	MW-24 Chromium (mg/l)
4/15/2015				<0.0005 (o)						<0.005 (o)
4/16/2015							<0.005 (o)			
4/21/2015										
4/22/2015	<0.0005 (o)							<0.005 (o)		
4/23/2015		<0.0005 (o)				<0.005 (o)				
10/8/2015										
10/9/2015										
10/12/2015										
10/13/2015										
4/5/2016										
4/7/2016										
4/8/2016										
4/9/2016										
10/31/2016										
11/1/2016										
11/2/2016								<0.000355 (o)		
11/3/2016										
11/4/2016										
11/5/2016										
10/3/2017										
10/4/2017										
10/5/2017										
4/18/2018								0.00316 (Jo)		
4/19/2018										
4/20/2018										
7/17/2018										
10/31/2018									0.0269 (o)	
11/1/2018										
5/14/2019					<0.000167 (o)					
10/28/2019										
10/29/2019										
3/31/2020										
4/1/2020										
9/28/2020										
9/29/2020										
9/30/2020										
3/30/2021										
4/1/2021			0.000127 (o)							
5/6/2021										
10/19/2021										
10/20/2021										
12/2/2021										
2/22/2022										
4/25/2022										
4/26/2022										
4/18/2023										
4/19/2023										
10/18/2023										
10/19/2023		0.00026 (o)								
4/17/2024										

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Linn County Data: CRLCSWA_Groundwater Database Printed 5/10/2024, 9:25 AM

	MW-26A Chromium (mg/l)	MW-301 Chromium (mg/l)	MW-302R Chromium (mg/l)	MW-303 Chromium (mg/l)	MW-304R Chromium (mg/l)	MW-22 Cobalt (mg/l)	MW-305 Cobalt (mg/l)	MW-15 Copper (mg/l)	MW-20 Copper (mg/l)	MW-22 Copper (mg/l)
4/15/2015	<0.005 (o)			<0.005 (o)	<0.005 (o)		0.00373 (o)			
4/16/2015										
4/21/2015			<0.005 (o)							
4/22/2015										
4/23/2015		<0.005 (o)						<0.002 (o)		
10/8/2015										
10/9/2015										
10/12/2015										
10/13/2015							0.00468 (o)			
4/5/2016										
4/7/2016										
4/8/2016										
4/9/2016										0.0128 (o)
10/31/2016										
11/1/2016							0.00726 (o)			
11/2/2016										
11/3/2016										
11/4/2016					0.00174 (Jo)					
11/5/2016										
10/3/2017										
10/4/2017										
10/5/2017										
4/18/2018										
4/19/2018						0.000779 (o)				
4/20/2018										
7/17/2018										
10/31/2018									0.0704 (o)	
11/1/2018										0.0103 (o)
5/14/2019										
10/28/2019										
10/29/2019										
3/31/2020										
4/1/2020										
9/28/2020										
9/29/2020										
9/30/2020										
3/30/2021										
4/1/2021										
5/6/2021										
10/19/2021										
10/20/2021										
12/2/2021										
2/22/2022										
4/25/2022										
4/26/2022				<0.0077 (o)						
4/18/2023										
4/19/2023										
10/18/2023										
10/19/2023										
4/17/2024										

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Linn County Data: CRLCSWA_Groundwater Database Printed 5/10/2024, 9:25 AM

	MW-301 Copper (mg/l)	MW-501 Copper (mg/l)	MW-9AR Copper (mg/l)	MW-20 Lead (mg/l)	MW-24 Lead (mg/l)	MW-26A Lead (mg/l)	MW-300 Lead (mg/l)	MW-301 Lead (mg/l)	MW-304R Lead (mg/l)	MW-22 Nickel (mg/l)
4/15/2015										
4/16/2015										
4/21/2015										
4/22/2015										
4/23/2015										
10/8/2015										
10/9/2015										
10/12/2015										
10/13/2015										
4/5/2016										
4/7/2016										
4/8/2016										
4/9/2016										0.0486 (o)
10/31/2016										
11/1/2016					0.000966 (o)					
11/2/2016										
11/3/2016										
11/4/2016	0.00297 (Jo)							0.000493 (JBo)	0.00246 (o)	
11/5/2016										
10/3/2017										
10/4/2017	0.00329 (Jo)							0.000414 (Jo)		
10/5/2017										
4/18/2018										
4/19/2018										
4/20/2018										
7/17/2018										
10/31/2018				0.000457 (Jo)						
11/1/2018										
5/14/2019			<0.000497 (o)							
10/28/2019										
10/29/2019										
3/31/2020										
4/1/2020			0.00386 (Jo)							
9/28/2020										
9/29/2020										
9/30/2020										
3/30/2021										
4/1/2021										
5/6/2021										
10/19/2021							0.000704 (o)			
10/20/2021										
12/2/2021										
2/22/2022										
4/25/2022						0.00194 (o)				
4/26/2022										
4/18/2023										
4/19/2023										
10/18/2023		0.00263 (Jo)								
10/19/2023								0.000829 (o)		
4/17/2024										

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Linn County Data: CRLCSWA_Groundwater Database Printed 5/10/2024, 9:25 AM

	MW-9AR Nickel (mg/l)	MW-15 Selenium (mg/l)	MW-18 Selenium (mg/l)	MW-19 Selenium (mg/l)	MW-20 Selenium (mg/l)	MW-201B Selenium (mg/l)	MW-22 Selenium (mg/l)	MW-24 Selenium (mg/l)	MW-26A Selenium (mg/l)	MW-300 Selenium (mg/l)
4/15/2015								<0.005 (o)	<0.005 (o)	
4/16/2015			<0.005 (o)							<0.005 (o)
4/21/2015										
4/22/2015				<0.005 (o)		<0.005 (o)	<0.005 (o)			
4/23/2015		<0.005 (o)			<0.005 (o)					
10/8/2015						<0.00334 (o)				
10/9/2015								<0.0034 (o)		
10/12/2015		<0.00334 (o)		<0.00334 (o)	<0.00334 (o)					
10/13/2015			<0.00334 (o)							
4/5/2016						<0.00063 (o)				
4/7/2016										
4/8/2016										
4/9/2016										
10/31/2016						<0.00063 (o)				
11/1/2016										
11/2/2016										
11/3/2016										
11/4/2016										
11/5/2016										
10/3/2017							<0.00186 (o)			
10/4/2017										
10/5/2017										
4/18/2018										
4/19/2018										
4/20/2018										
7/17/2018	0.00295 (Jo)									
10/31/2018										
11/1/2018										
5/14/2019										
10/28/2019										
10/29/2019										
3/31/2020		0.00213 (Jo)								
4/1/2020										
9/28/2020										
9/29/2020										
9/30/2020										
3/30/2021										
4/1/2021										
5/6/2021										
10/19/2021										
10/20/2021										
12/2/2021										
2/22/2022										
4/25/2022										
4/26/2022										
4/18/2023										
4/19/2023										
10/18/2023										
10/19/2023	0.00257 (Jo)		0.00229 (Jo)							
4/17/2024										

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Linn County Data: CRLCSWA_Groundwater Database Printed 5/10/2024, 9:25 AM

	MW-301 Selenium (mg/l)	MW-302R Selenium (mg/l)	MW-303 Selenium (mg/l)	MW-304R Selenium (mg/l)	MW-305 Selenium (mg/l)	MW-18 Silver (mg/l)	MW-301 Silver (mg/l)	MW-201B Sulfide (mg/l)	MW-18 Thallium (mg/l)	MW-201B Thallium (mg/l)
4/15/2015			<0.005 (o)	<0.005 (o)	<0.005 (o)					
4/16/2015										
4/21/2015		<0.005 (o)								
4/22/2015										
4/23/2015	<0.005 (o)									
10/8/2015										
10/9/2015			<0.00334 (o)	<0.00334 (o)						
10/12/2015										
10/13/2015		<0.00063 (o)								
4/5/2016										
4/7/2016										
4/8/2016										
4/9/2016										
10/31/2016										
11/1/2016		<0.00063 (o)								
11/2/2016										
11/3/2016										
11/4/2016										
11/5/2016										
10/3/2017										
10/4/2017										
10/5/2017										
4/18/2018										
4/19/2018										
4/20/2018										
7/17/2018										
10/31/2018										
11/1/2018										
5/14/2019										
10/28/2019										
10/29/2019										
3/31/2020										
4/1/2020										
9/28/2020								<10 (o)		
9/29/2020										
9/30/2020										
3/30/2021								23.2 (o)		0.000968 (Jo)
4/1/2021										
5/6/2021										
10/19/2021										
10/20/2021										
12/2/2021										
2/22/2022										
4/25/2022										
4/26/2022			<0.00672 (o)							
4/18/2023										
4/19/2023										
10/18/2023										
10/19/2023	0.00219 (Jo)					0.00126 (o)	0.00116 (o)		0.0129 (o)	
4/17/2024										

Flagged_Outliers

Linn County Data: CRLCSWA_Groundwater Database Printed 5/10/2024, 9:25 AM

	MW-26A Thallium (mg/l)	MW-301 Thallium (mg/l)	MW-9AR Thallium (mg/l)	MW-201B Tin (mg/l)	MW-301 Tin (mg/l)	MW-22 Vanadium (mg/l)	MW-24 Vanadium (mg/l)	MW-26A Vanadium (mg/l)	MW-300 Vanadium (mg/l)	MW-301 Vanadium (mg/l)
4/15/2015	<0.001 (o)						<0.005 (o)			
4/16/2015									<0.005 (o)	
4/21/2015										
4/22/2015				<0.1 (o)		<0.005 (o)				
4/23/2015										<0.005 (o)
10/8/2015										
10/9/2015										
10/12/2015										
10/13/2015					<0.832 (o)					
4/5/2016										
4/7/2016										
4/8/2016										
4/9/2016										
10/31/2016										
11/1/2016							0.00382 (o)	0.00283 (Bo)		
11/2/2016										
11/3/2016										
11/4/2016										
11/5/2016										
10/3/2017										
10/4/2017										
10/5/2017										
4/18/2018										
4/19/2018										
4/20/2018										
7/17/2018										
10/31/2018										
11/1/2018										
5/14/2019			<0.00057 (o)							
10/28/2019										
10/29/2019										
3/31/2020										
4/1/2020										
9/28/2020										
9/29/2020										
9/30/2020										
3/30/2021										
4/1/2021										
5/6/2021										
10/19/2021										
10/20/2021										
12/2/2021										
2/22/2022										
4/25/2022										
4/26/2022										
4/18/2023										
4/19/2023										
10/18/2023										
10/19/2023		0.0129 (o)								
4/17/2024	<0.00057 (o)									

Flagged_Outliers

Linn County Data: CRLCSWA_Groundwater Database Printed 5/10/2024, 9:25 AM

	MW-302R Vanadium (mg/l)	MW-303 Vanadium (mg/l)	MW-304R Vanadium (mg/l)	MW-501 Vanadium (mg/l)	MW-15 Zinc (mg/l)	MW-18 Zinc (mg/l)	MW-19 Zinc (mg/l)	MW-20 Zinc (mg/l)	MW-201B Zinc (mg/l)	MW-22 Zinc (mg/l)
4/15/2015		<0.005 (o)	<0.005 (o)							
4/16/2015										
4/21/2015	<0.005 (o)									
4/22/2015										
4/23/2015										
10/8/2015										
10/9/2015										
10/12/2015					<0.00695 (o)					
10/13/2015										
4/5/2016									<0.00521 (o)	
4/7/2016			0.000279 (Jo)							
4/8/2016										
4/9/2016					<0.00521 (o)					
10/31/2016									<0.00521 (o)	
11/1/2016										
11/2/2016							0.0364 (o)			
11/3/2016					0.0137 (o)					
11/4/2016			0.00231 (Jo)							0.407 (o)
11/5/2016		0.00237 (Jo)								
10/3/2017										
10/4/2017										
10/5/2017						0.0939 (o)				
4/18/2018										
4/19/2018										
4/20/2018										
7/17/2018										
10/31/2018								0.0781 (o)		
11/1/2018										
5/14/2019			<0.00215 (o)							
10/28/2019									0.019 (Jo)	
10/29/2019										
3/31/2020										
4/1/2020										
9/28/2020										
9/29/2020										
9/30/2020								0.0325 (o)		
3/30/2021										
4/1/2021										
5/6/2021										
10/19/2021										
10/20/2021									0.0273 (o)	
12/2/2021										
2/22/2022				0.00331 (Jo)						
4/25/2022										
4/26/2022		<0.0077 (o)								
4/18/2023										
4/19/2023					<0.0064 (o)		<0.0064 (o)			<0.0064 (o)
10/18/2023										
10/19/2023										
4/17/2024										

Flagged_Outliers

Linn County Data: CRLCSWA_Groundwater Database Printed 5/10/2024, 9:25 AM

	MW-24 Zinc (mg/l)	MW-300 Zinc (mg/l)	MW-301 Zinc (mg/l)	MW-302R Zinc (mg/l)	MW-303 Zinc (mg/l)	MW-304R Zinc (mg/l)	MW-305 Zinc (mg/l)
4/15/2015							0.00705 (Jo)
4/16/2015		0.00736 (Jo)					
4/21/2015				0.0174 (o)			
4/22/2015							
4/23/2015							
10/8/2015							
10/9/2015	<0.00695 (o)					0.0101 (o)	
10/12/2015							
10/13/2015		<0.00521 (o)		<0.00521 (o)			<0.00521 (o)
4/5/2016							
4/7/2016	<0.00521 (o)					<0.00521 (o)	<0.00521 (o)
4/8/2016				<0.00521 (o)			
4/9/2016		<0.00521 (o)					
10/31/2016							
11/1/2016	0.00796 (Jo)						<0.00521 (o)
11/2/2016							
11/3/2016							
11/4/2016			0.278 (o)				
11/5/2016							
10/3/2017							
10/4/2017							
10/5/2017							
4/18/2018							
4/19/2018							
4/20/2018				0.013 (Jo)			
7/17/2018							
10/31/2018							
11/1/2018							
5/14/2019						<0.00692 (o)	
10/28/2019							
10/29/2019				0.0138 (Jo)			
3/31/2020							
4/1/2020							
9/28/2020							
9/29/2020							
9/30/2020							
3/30/2021							
4/1/2021							
5/6/2021							
10/19/2021							
10/20/2021							
12/2/2021							
2/22/2022							
4/25/2022							
4/26/2022					<0.07 (o)		
4/18/2023							
4/19/2023							
10/18/2023							
10/19/2023							
4/17/2024							

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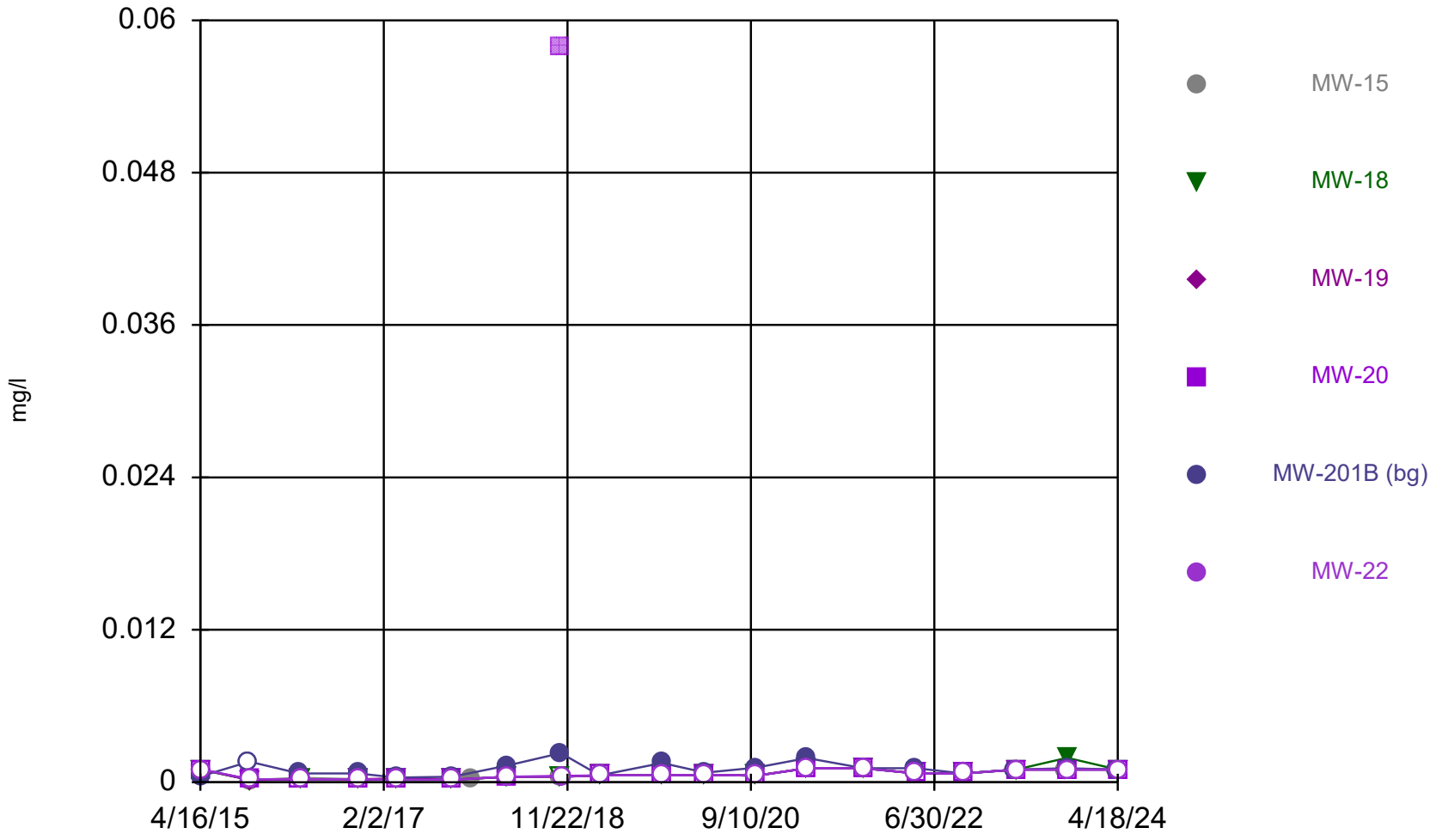
Monitoring Well Inorganic Time-Series – Spring 2024

Hollow symbols indicate censored values.

Time Series

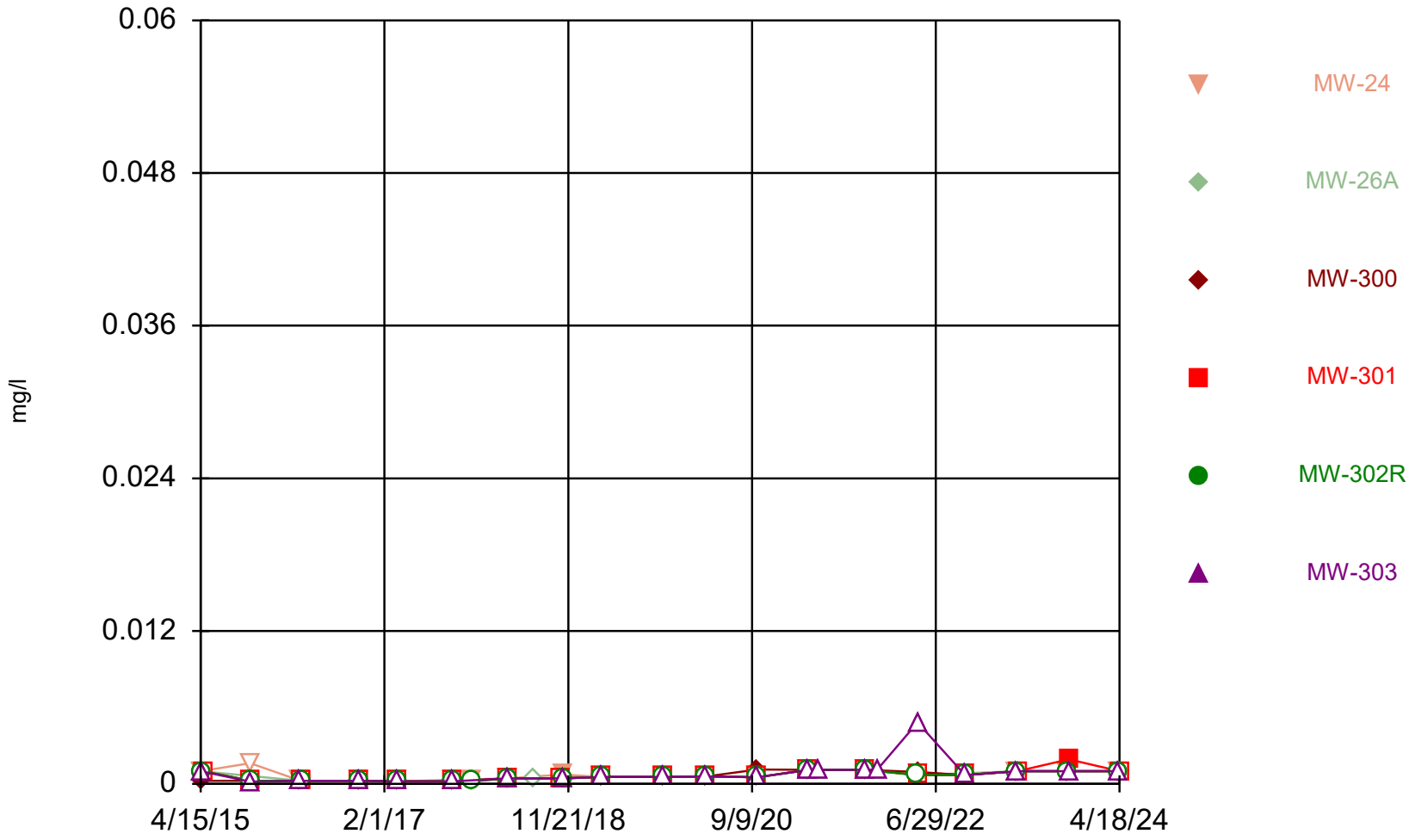


Constituent: Antimony Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

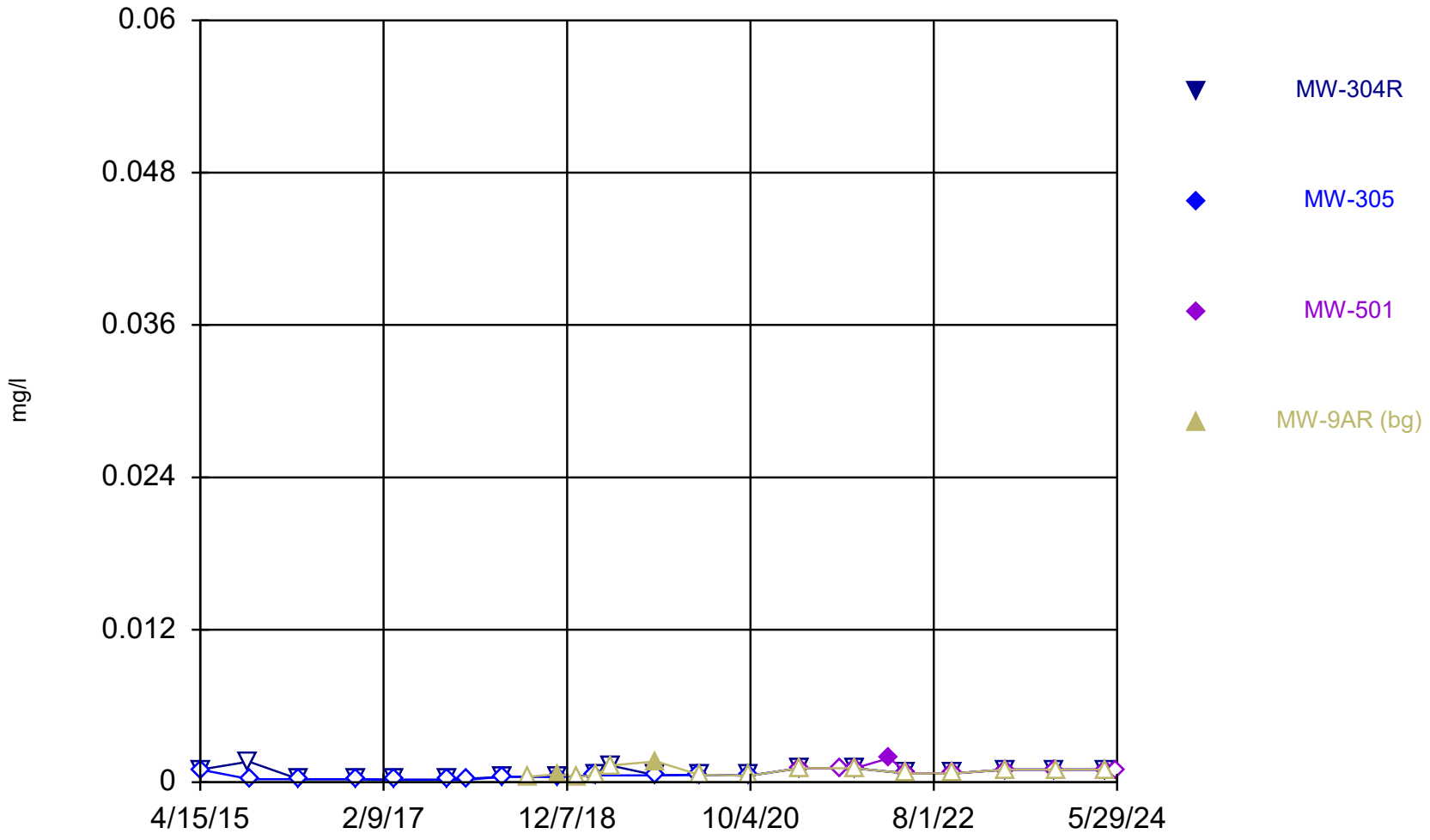


Constituent: Antimony Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



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Linn County Data: CRLCSWA_Groundwater Database

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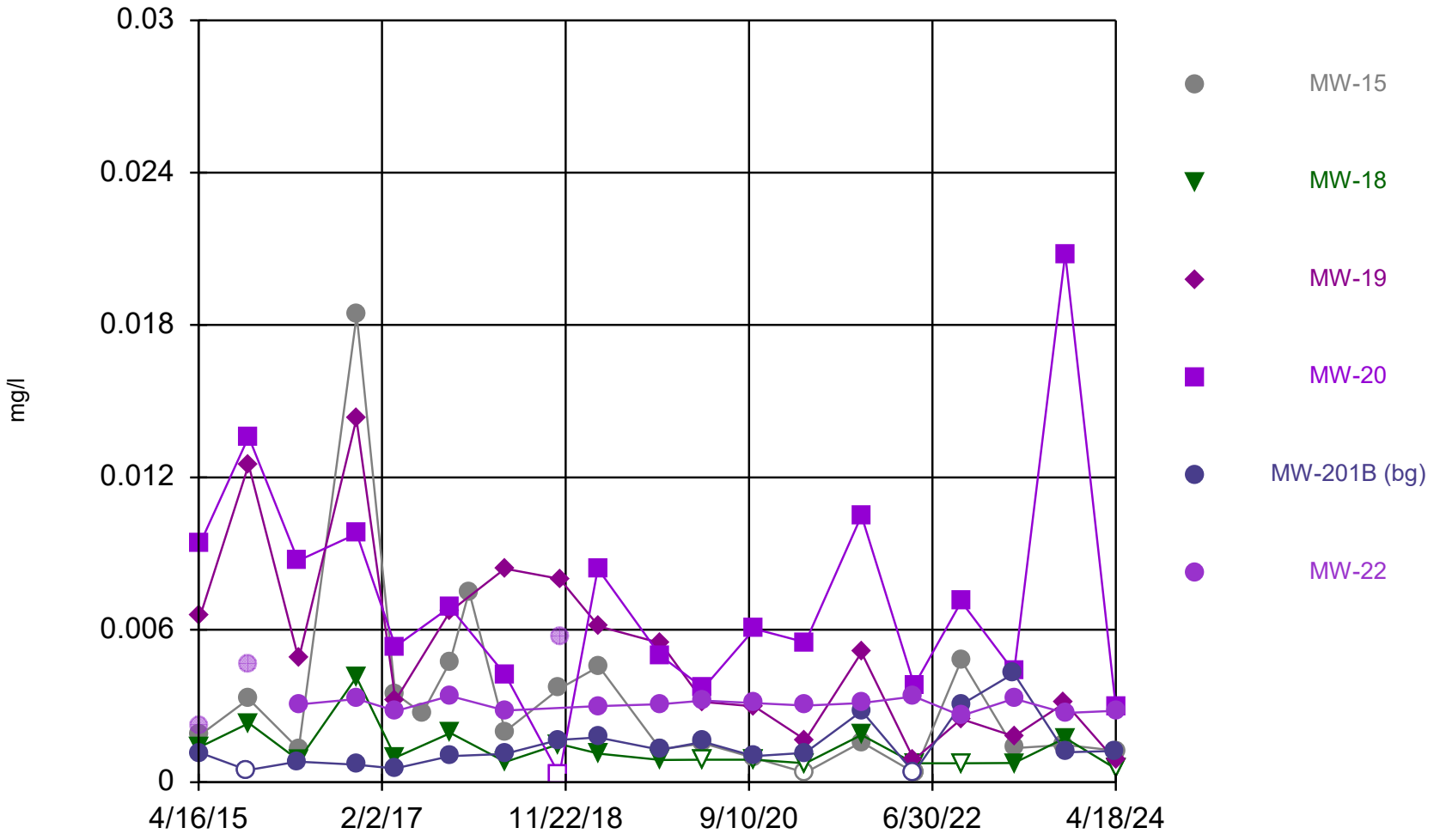
Time Series



Constituent: Arsenic Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

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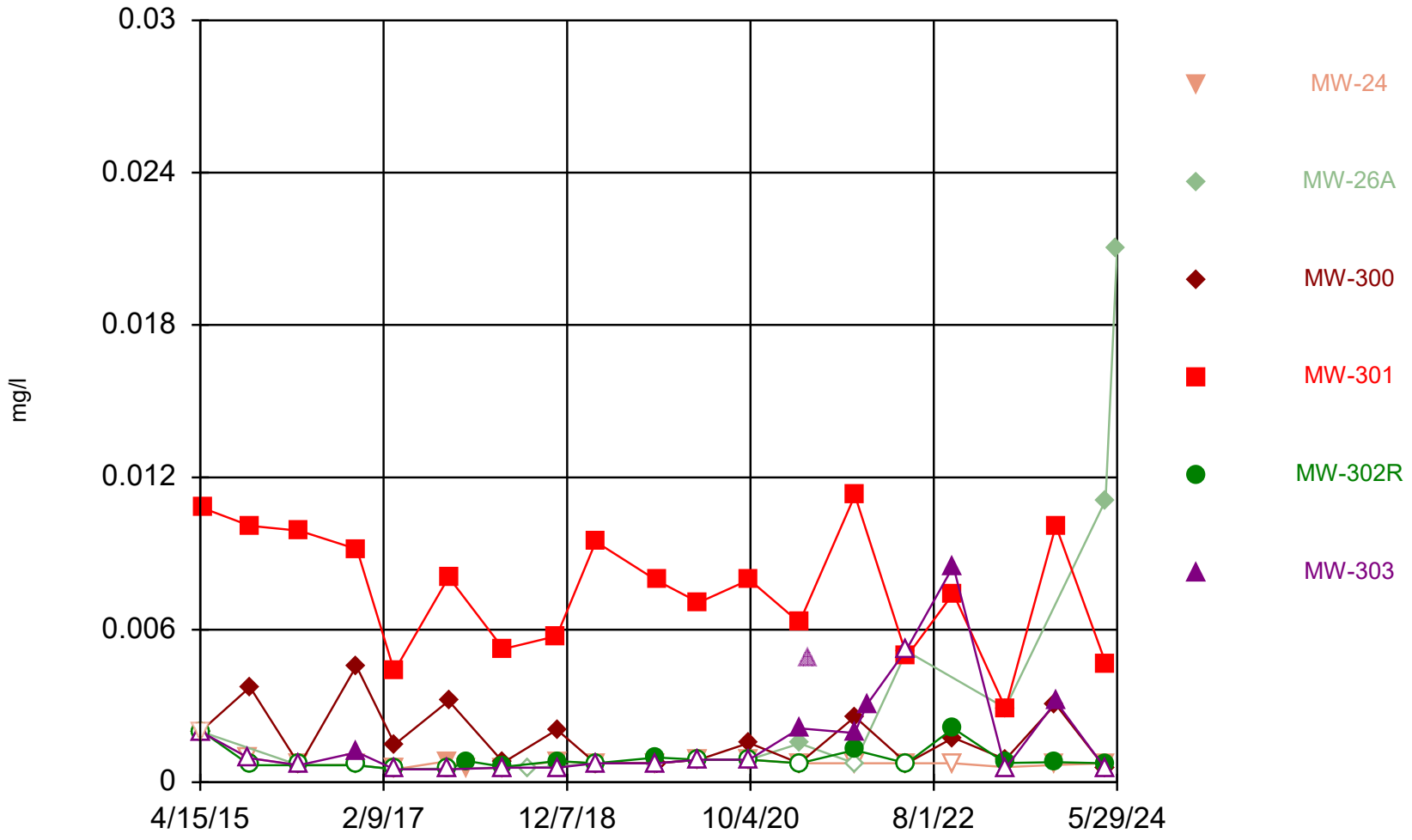
Time Series



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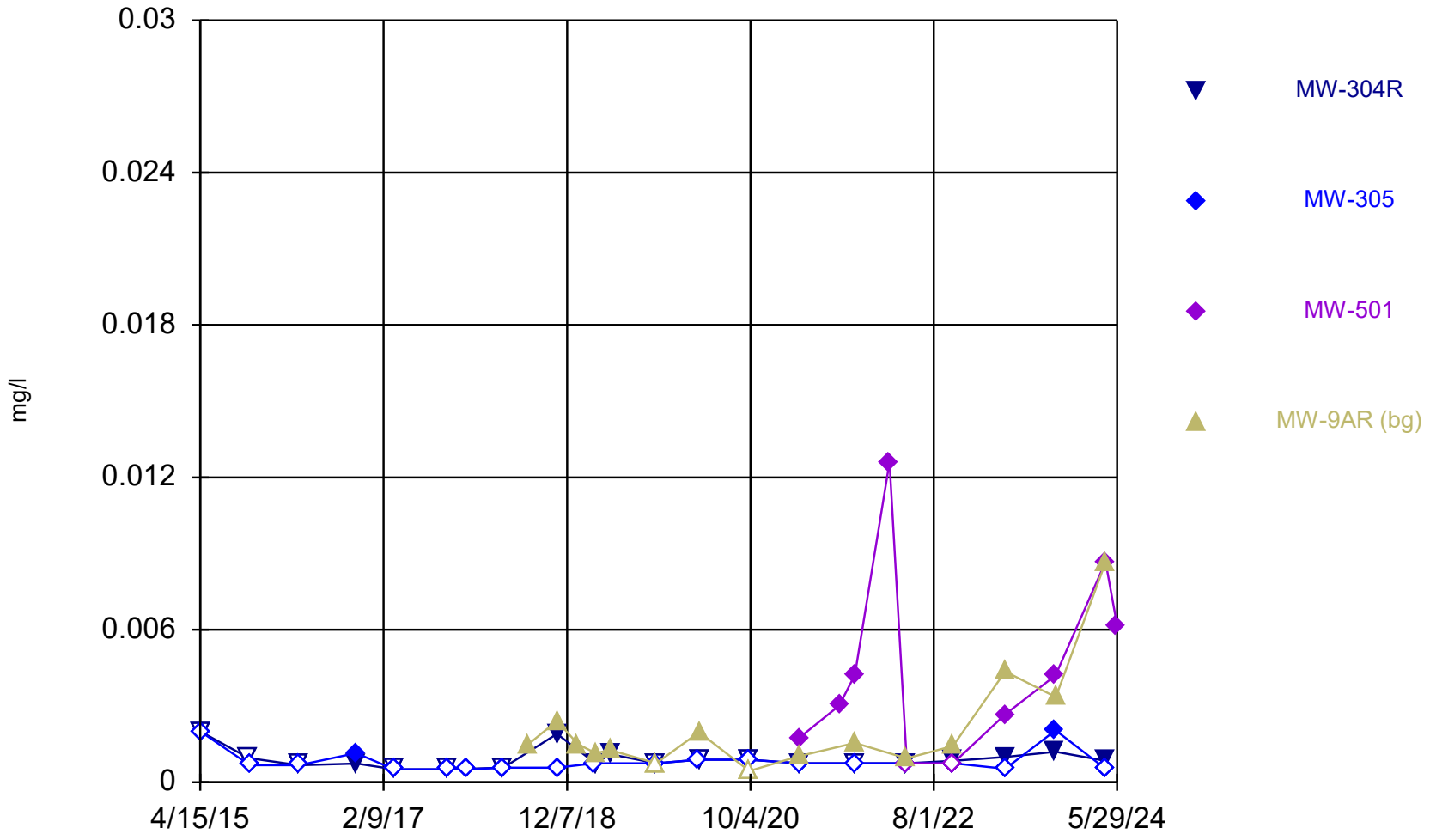
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



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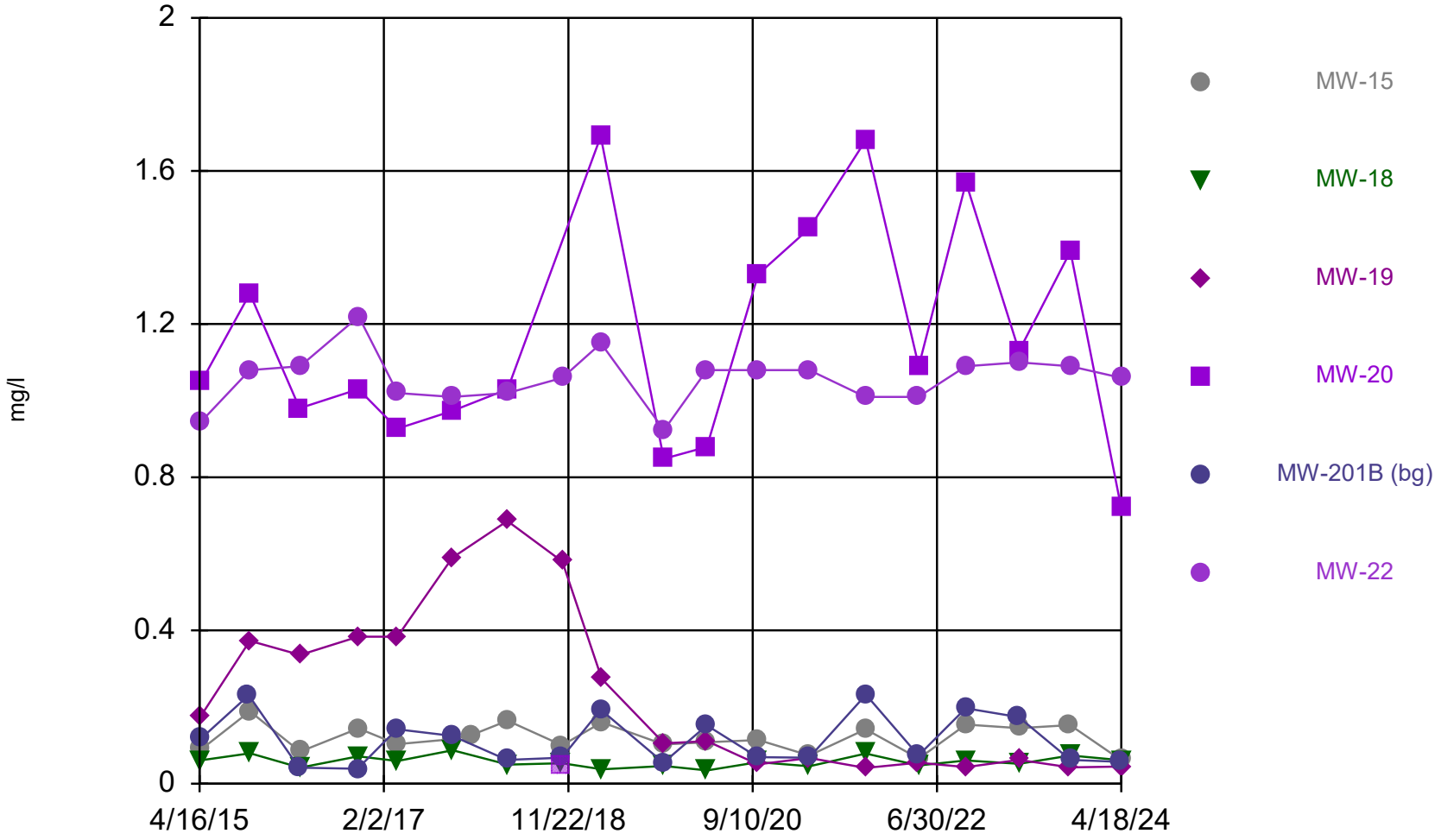
Linn County Data: CRLCSWA_Groundwater Database

Time Series



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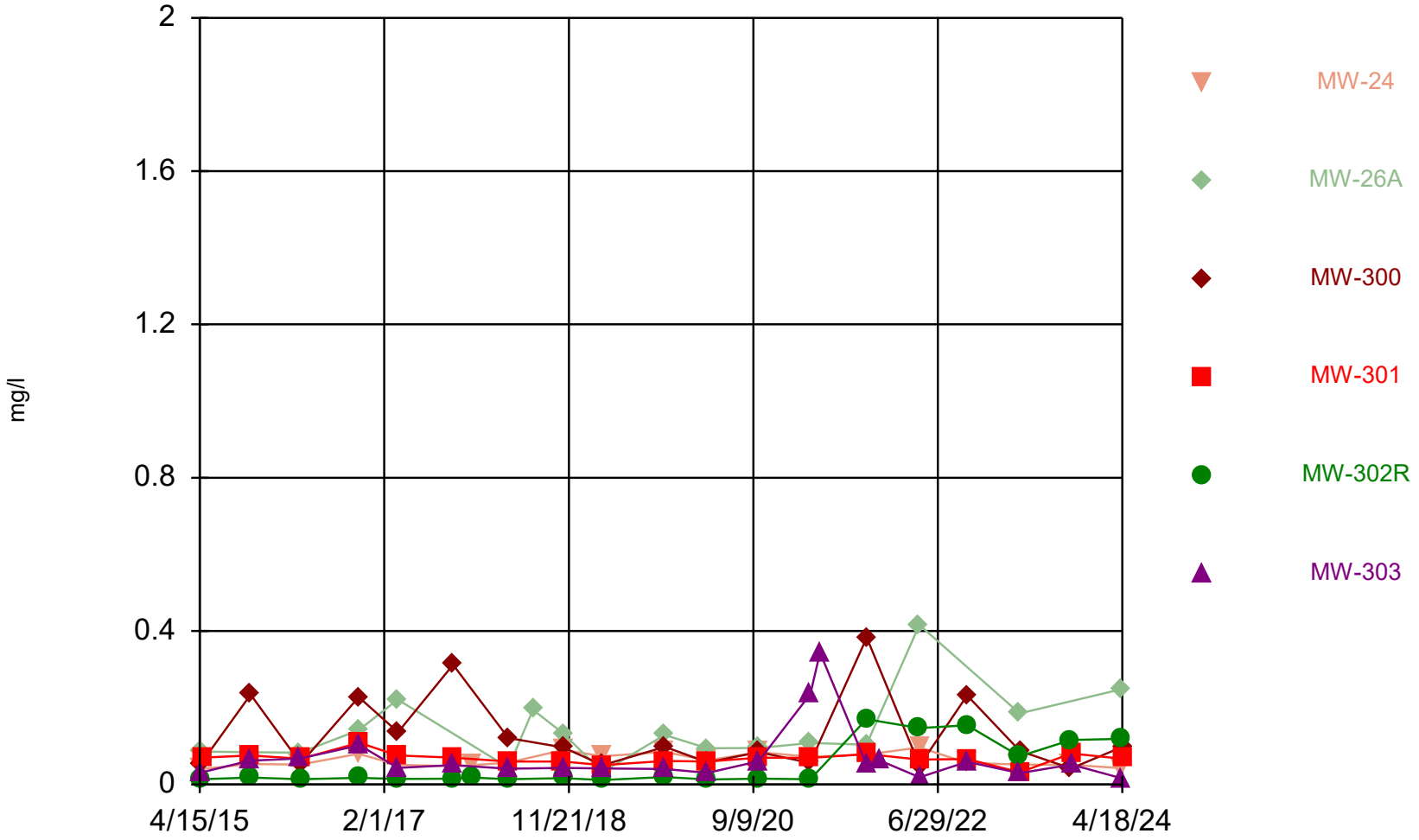
Linn County Data: CRLCSWA_Groundwater Database

Time Series



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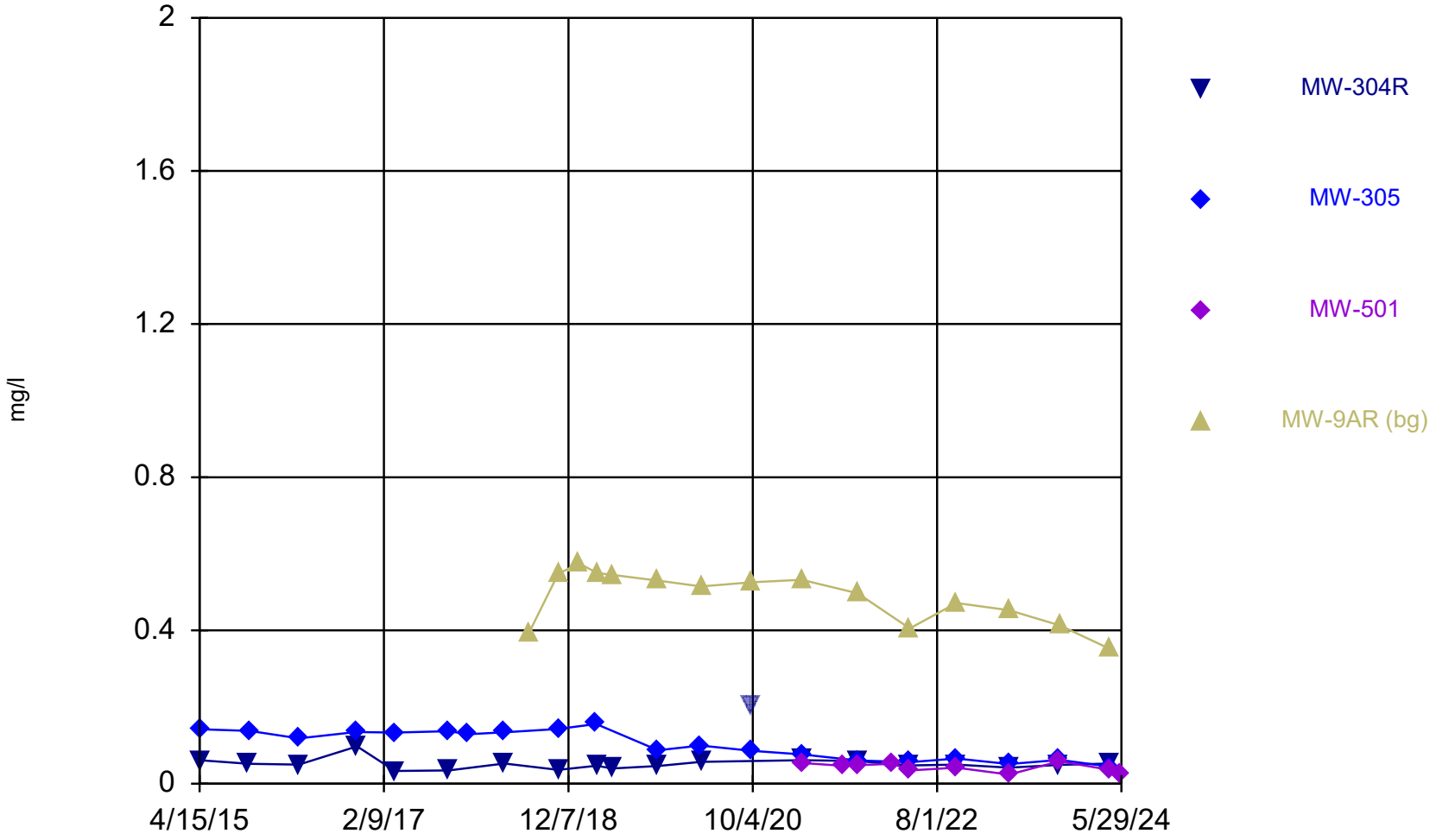
Linn County Data: CRLCSWA_Groundwater Database

Time Series



Constituent: Barium Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

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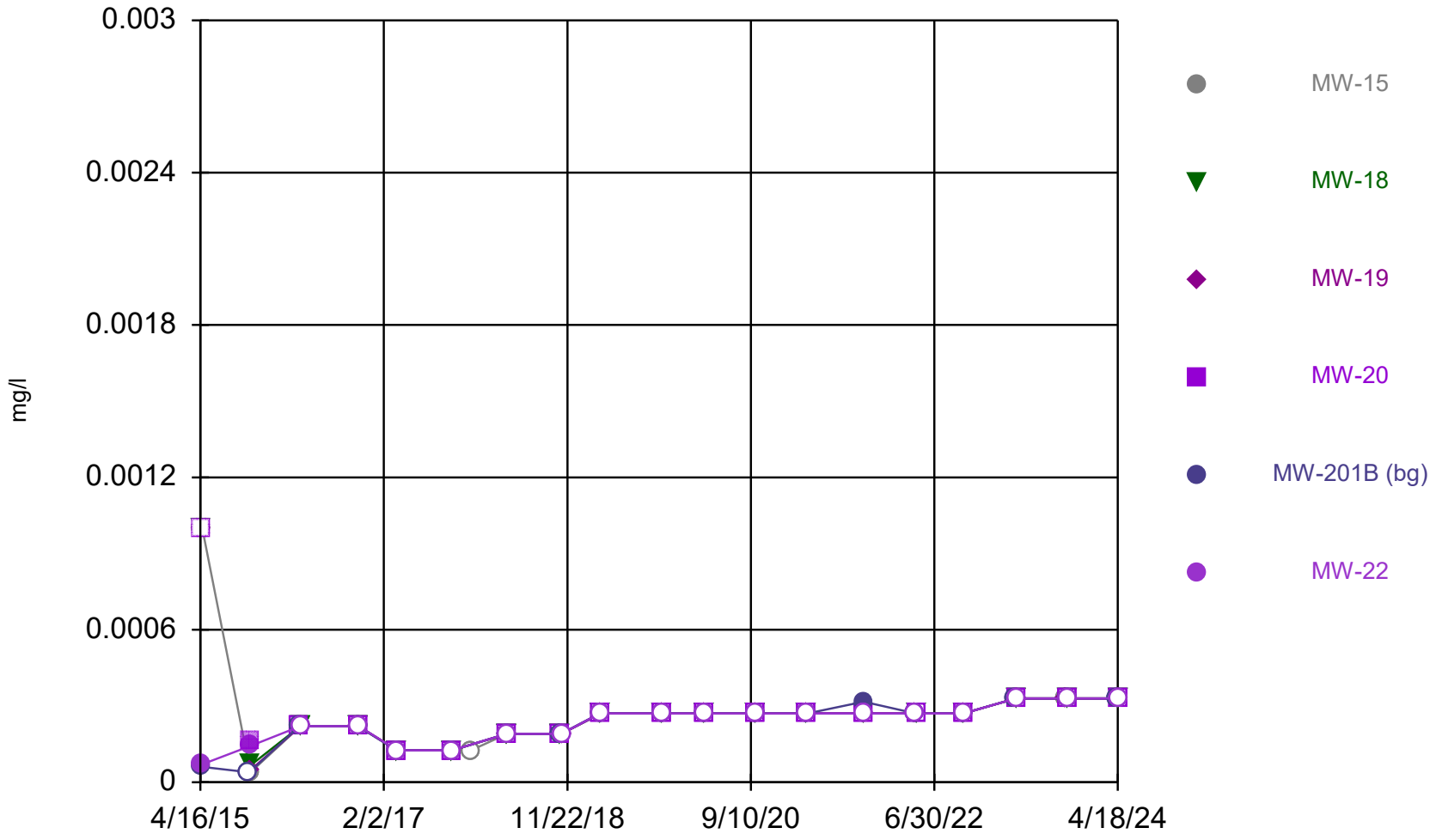
Time Series



Constituent: Beryllium Analysis Run 7/12/2024 1:55 PM View: App I_Metals
Linn County Data: CRLCSWA_Groundwater Database

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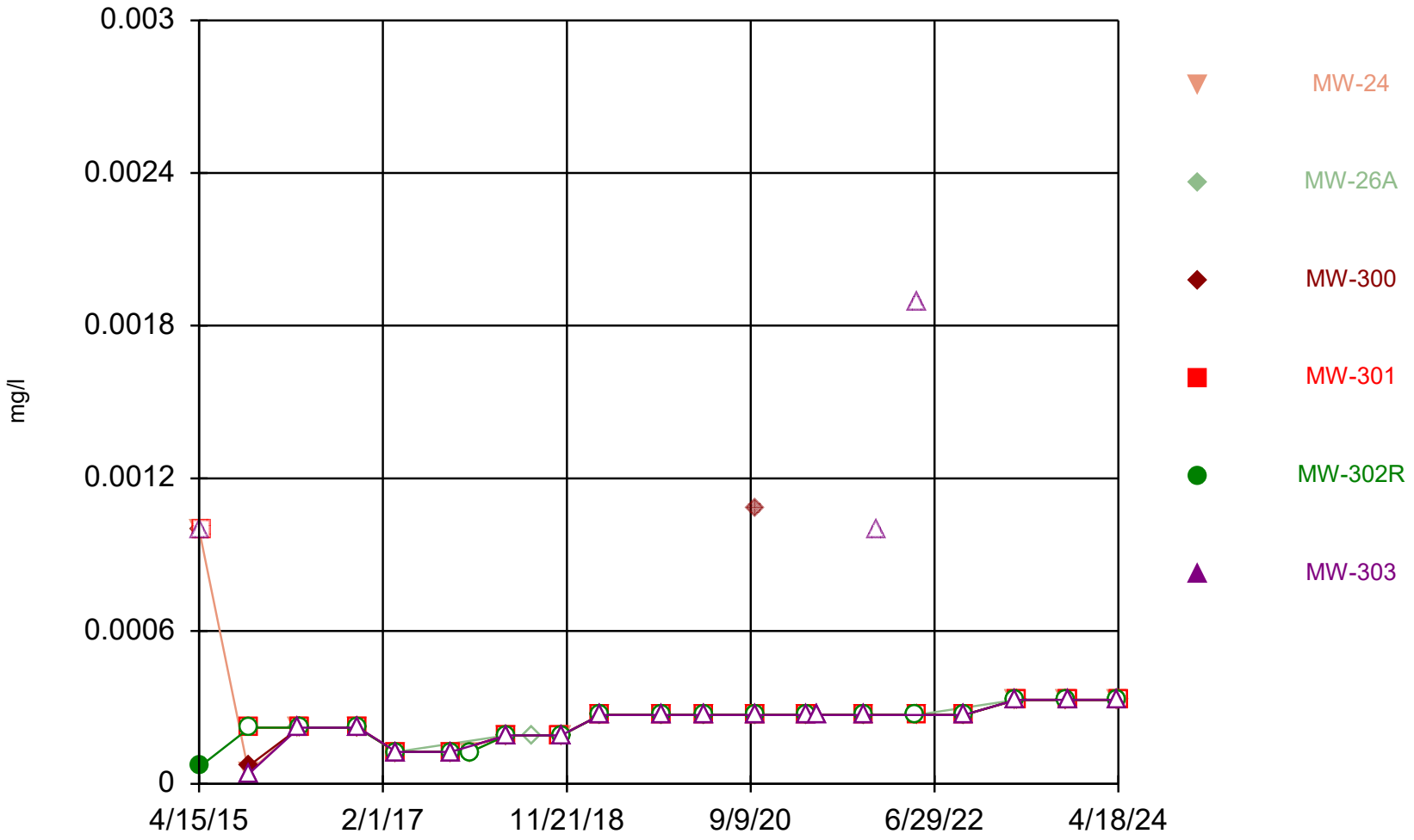
Time Series



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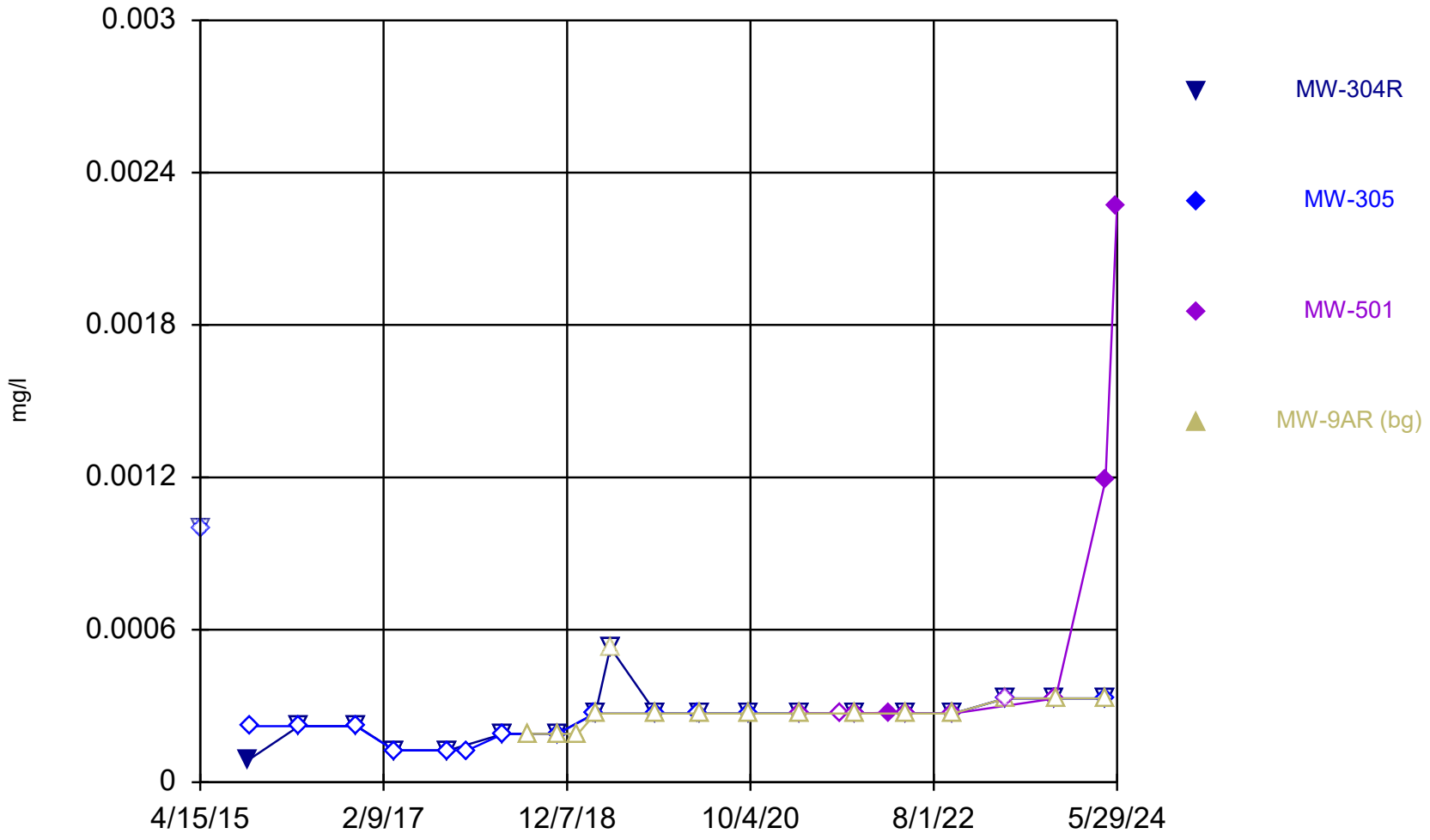
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



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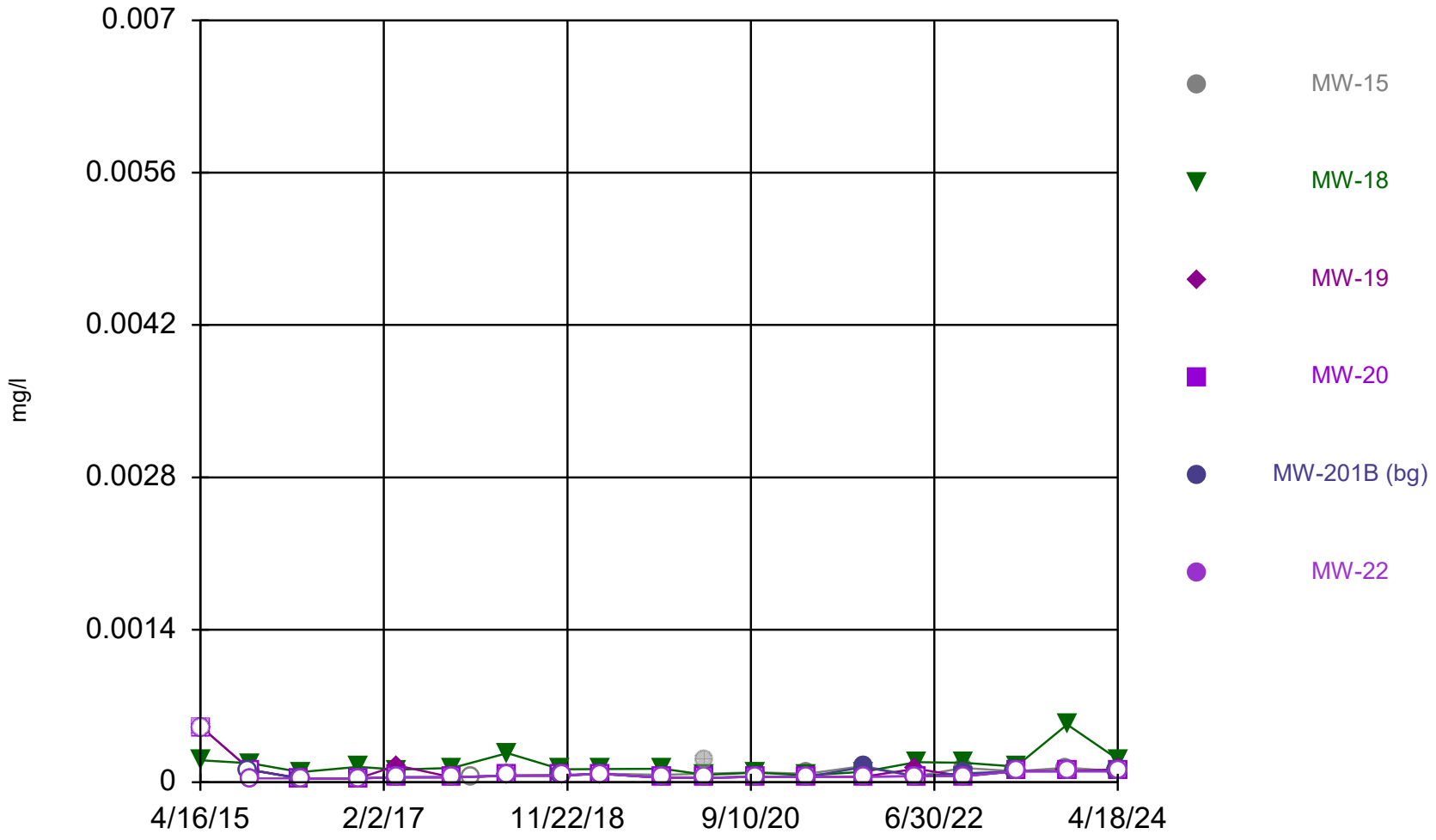
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

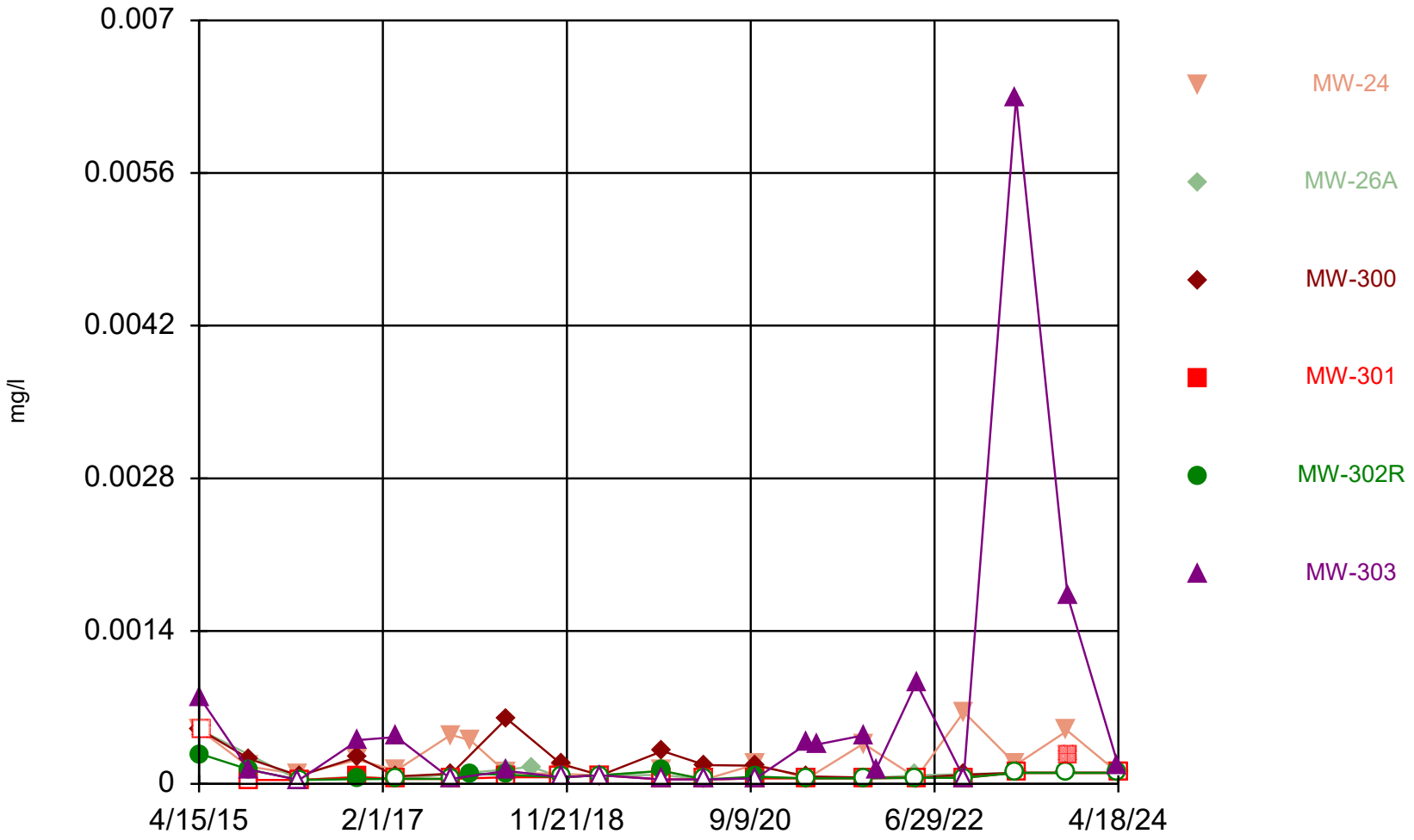


Constituent: Cadmium Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



Constituent: Cadmium Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

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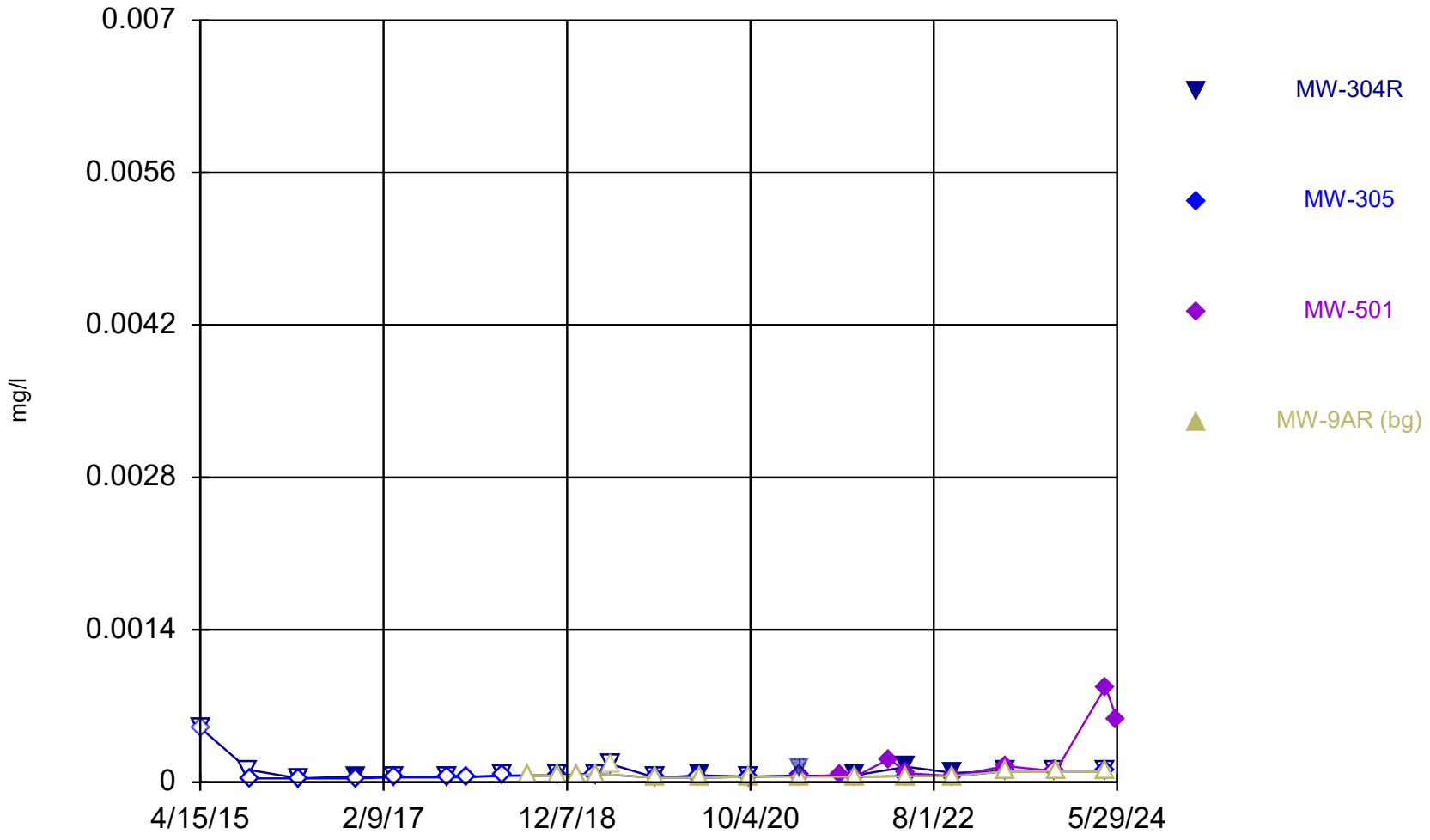

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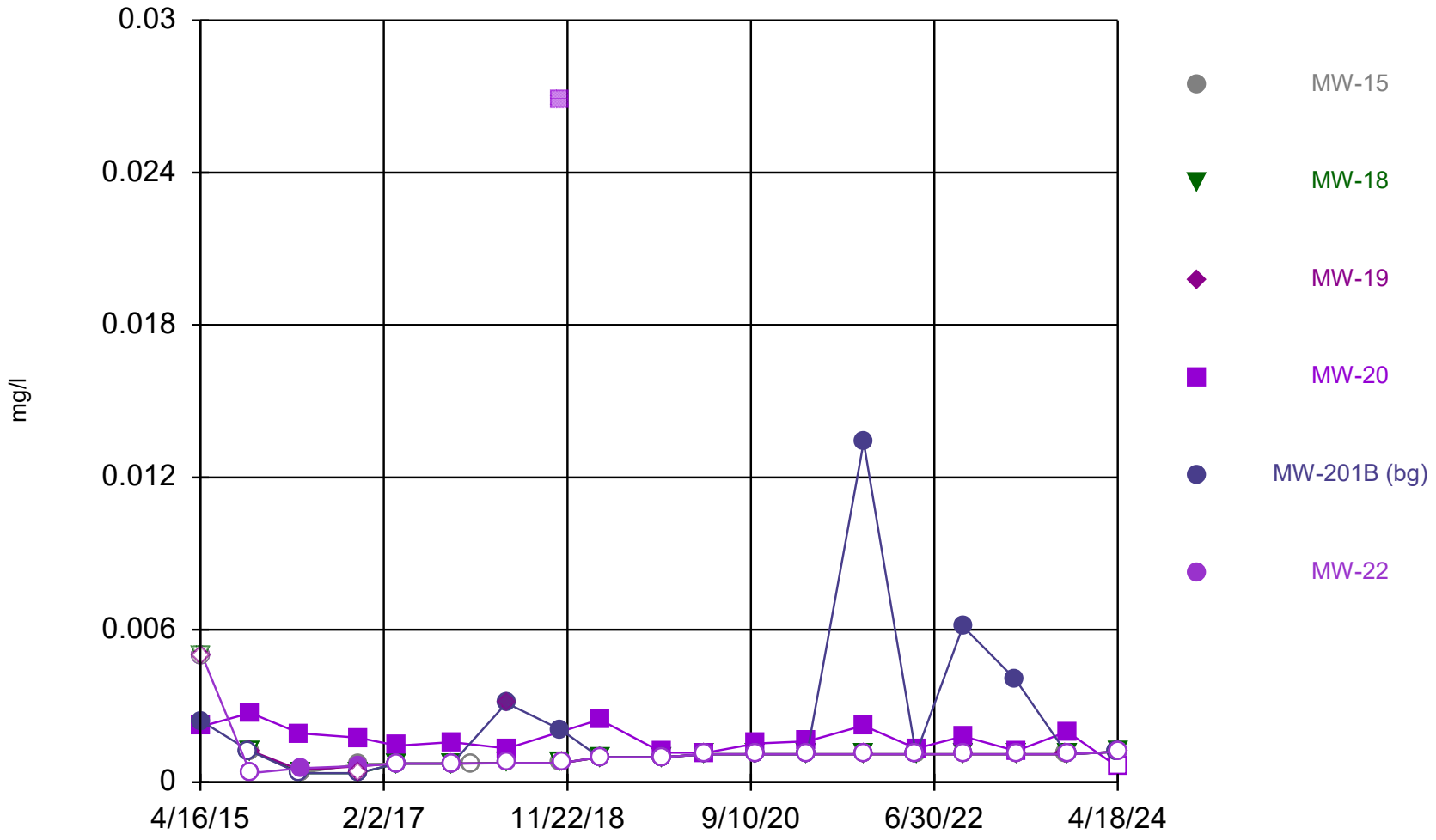

Constituent: Chromium Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

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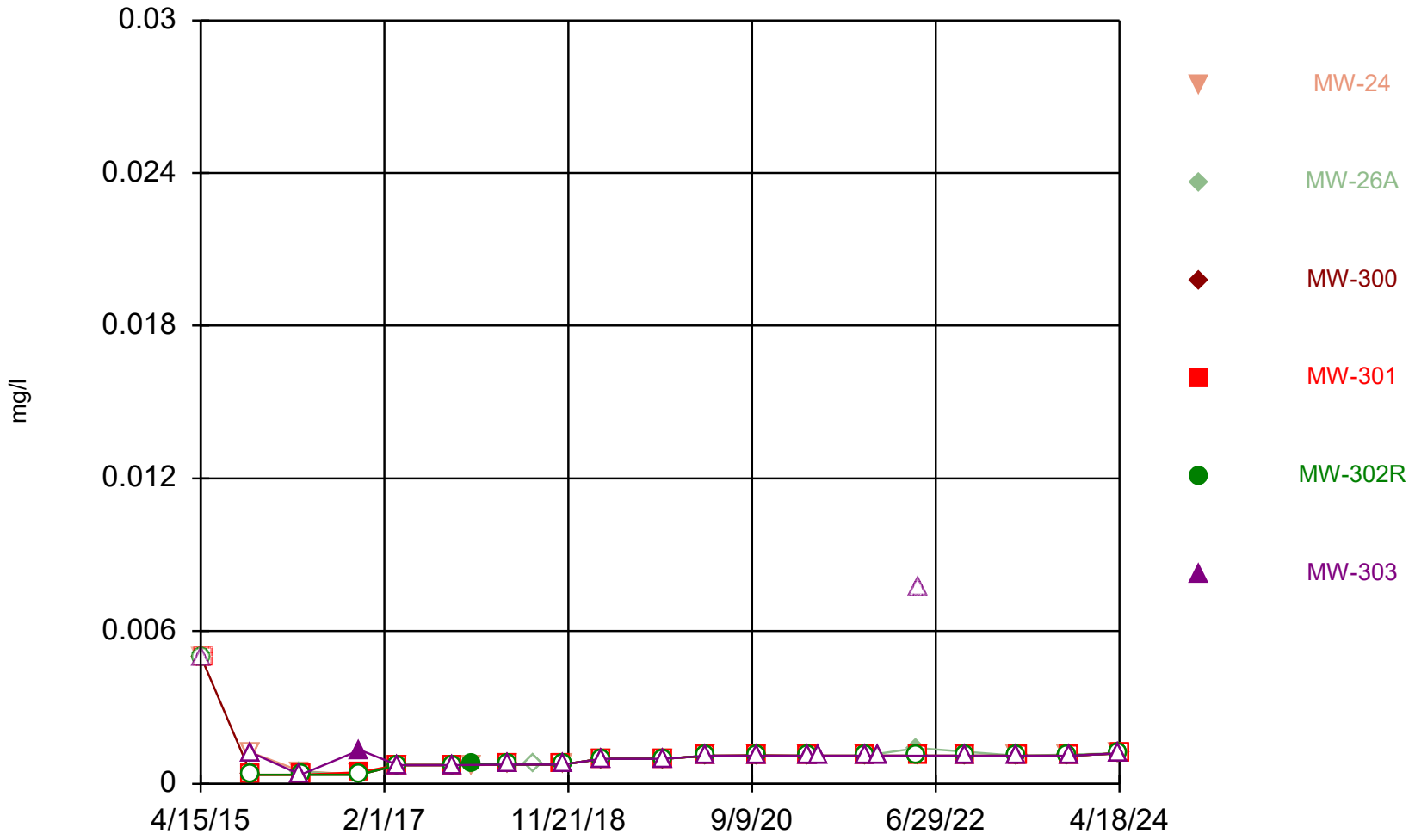
Time Series



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Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

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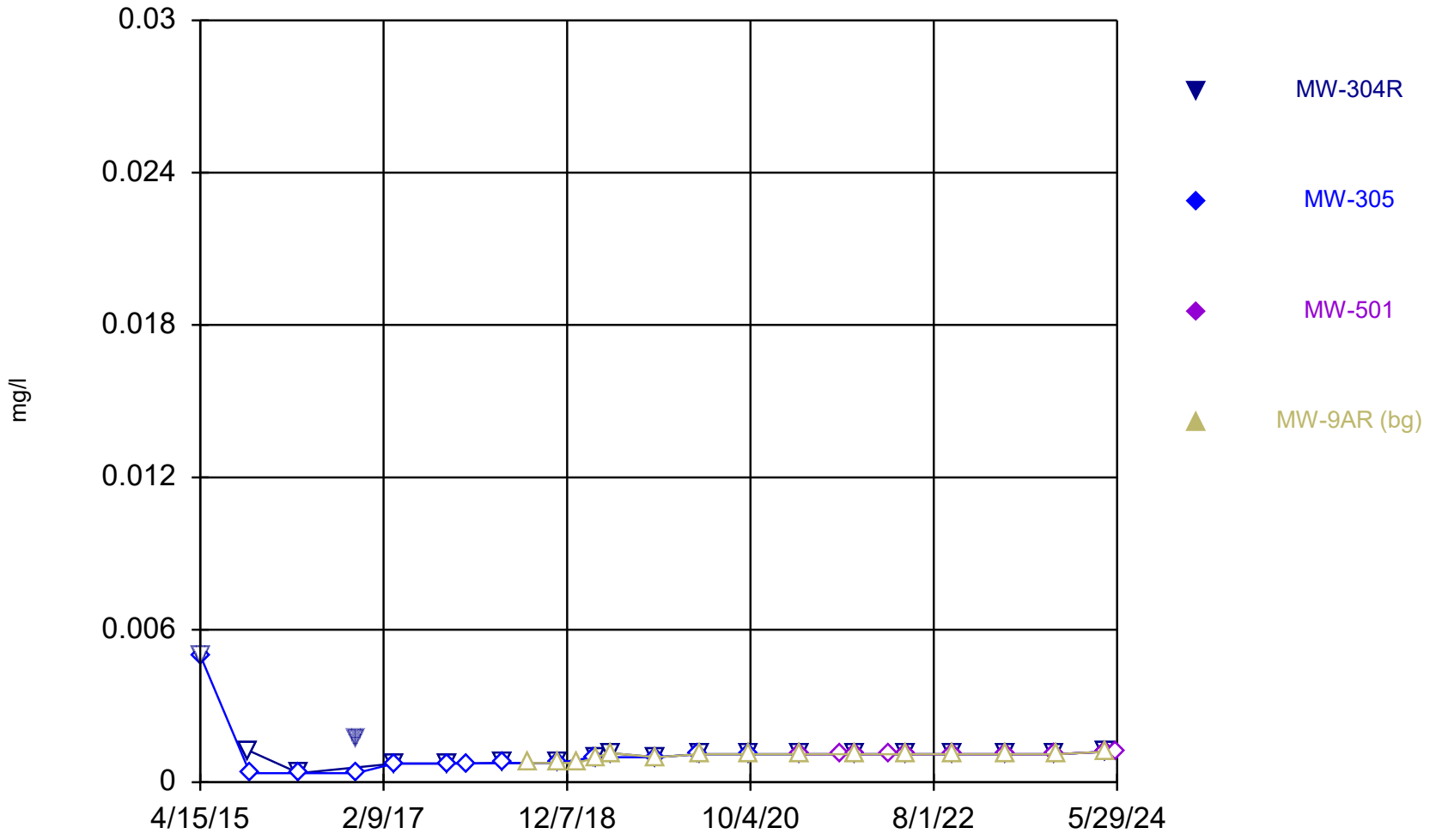

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Linn County Data: CRLCSWA_Groundwater Database

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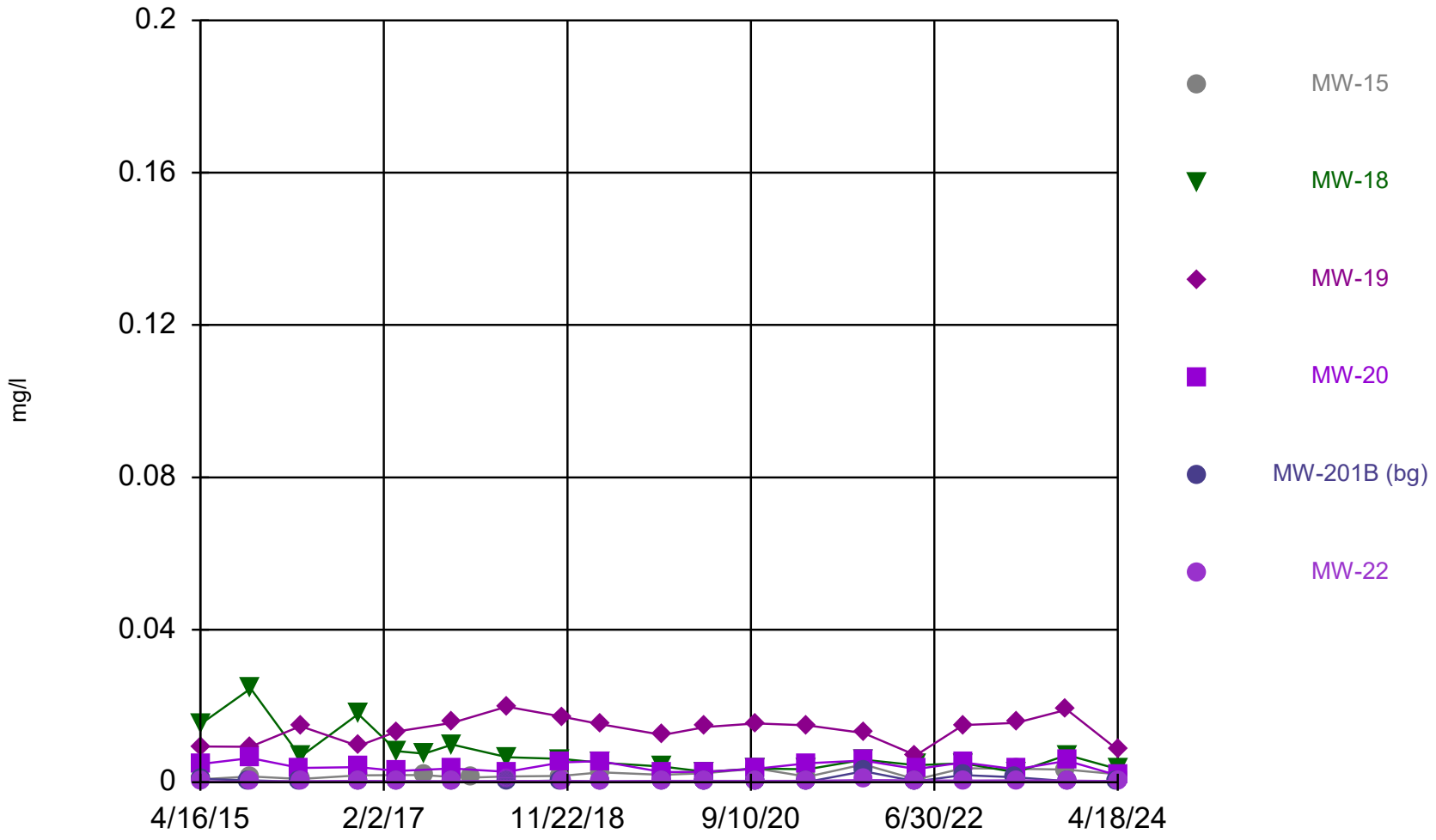

Constituent: Cobalt Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

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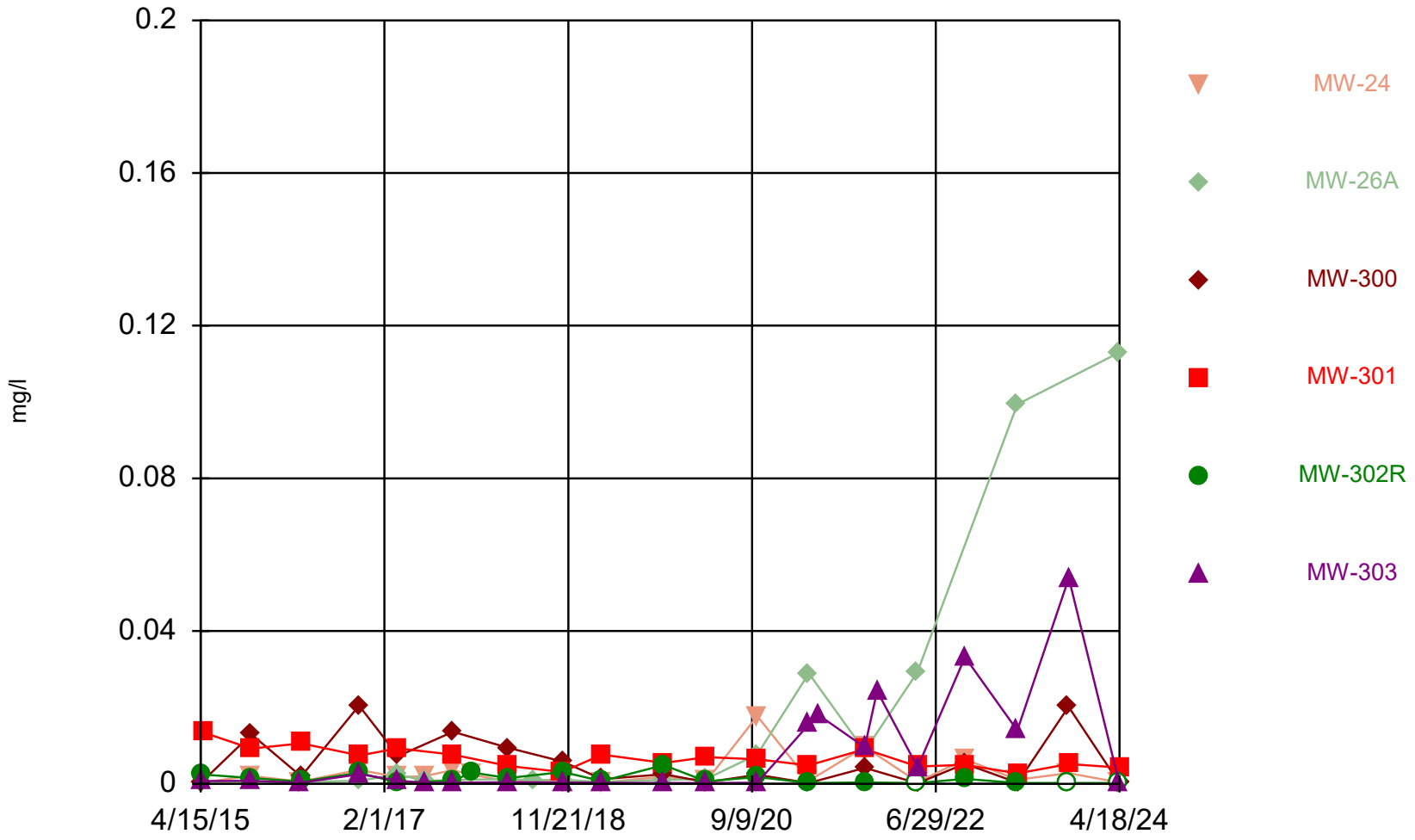
Time Series



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Linn County Data: CRLCSWA_Groundwater Database

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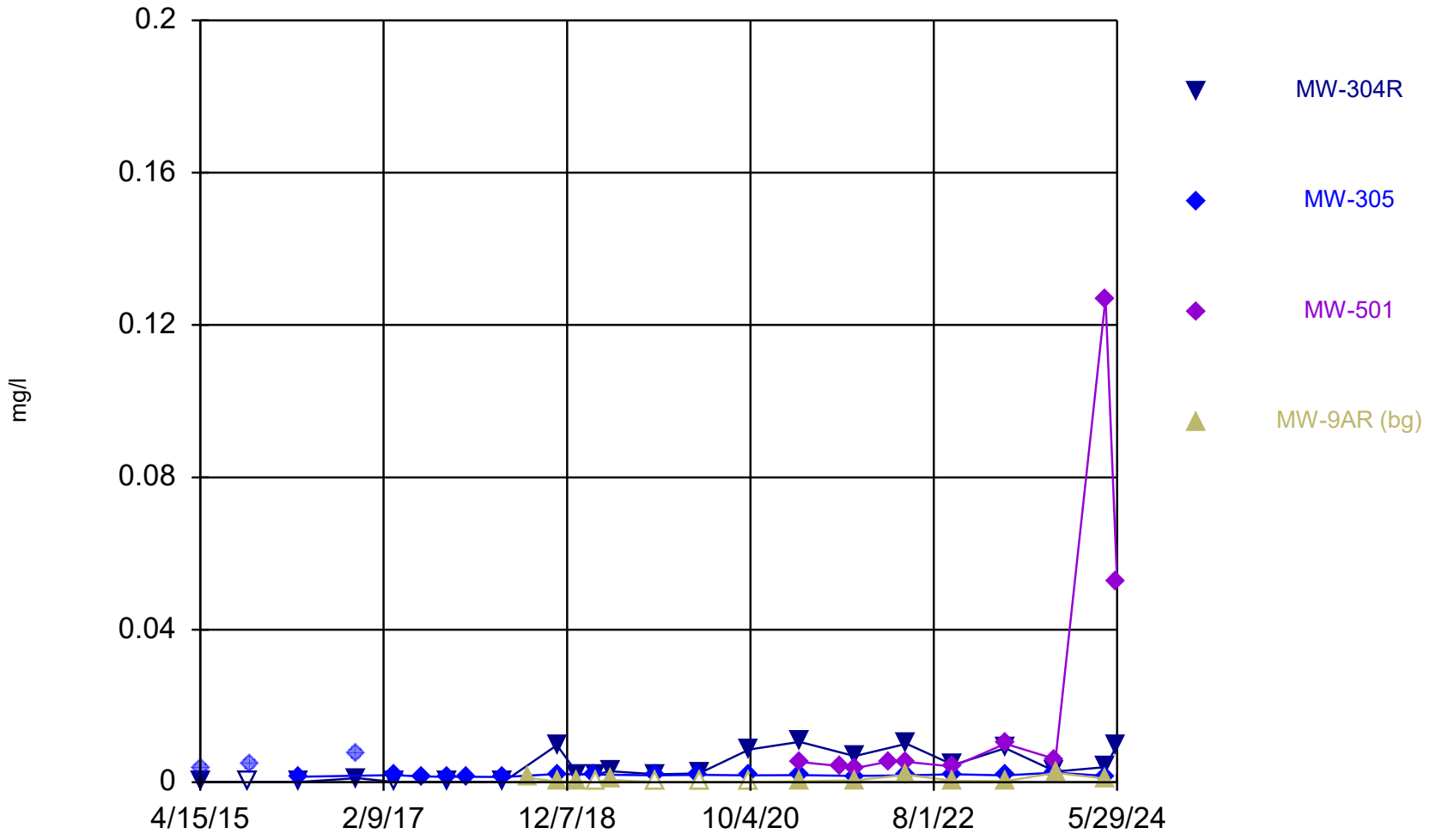
Time Series



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Linn County Data: CRLCSWA_Groundwater Database

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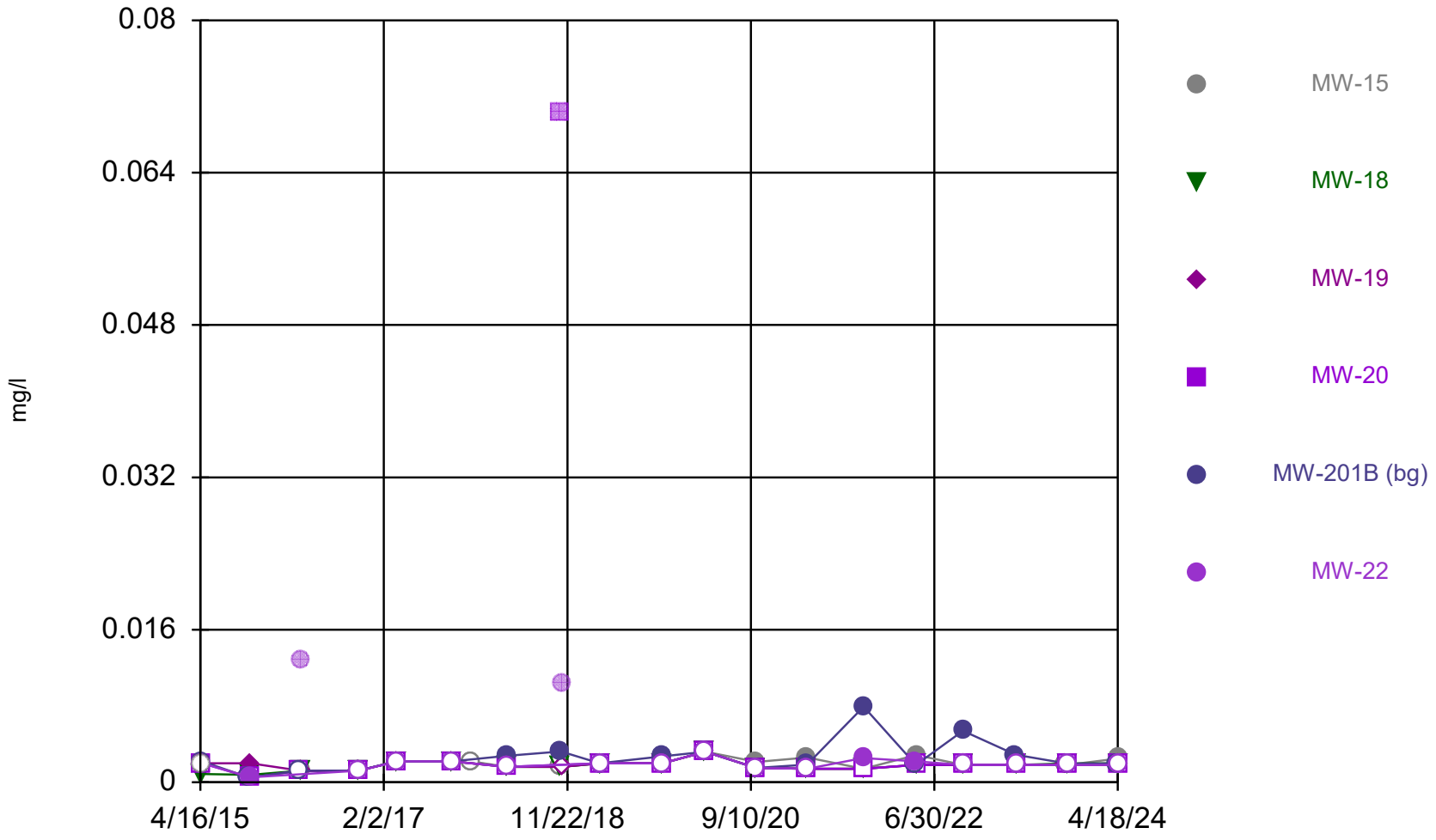
Time Series

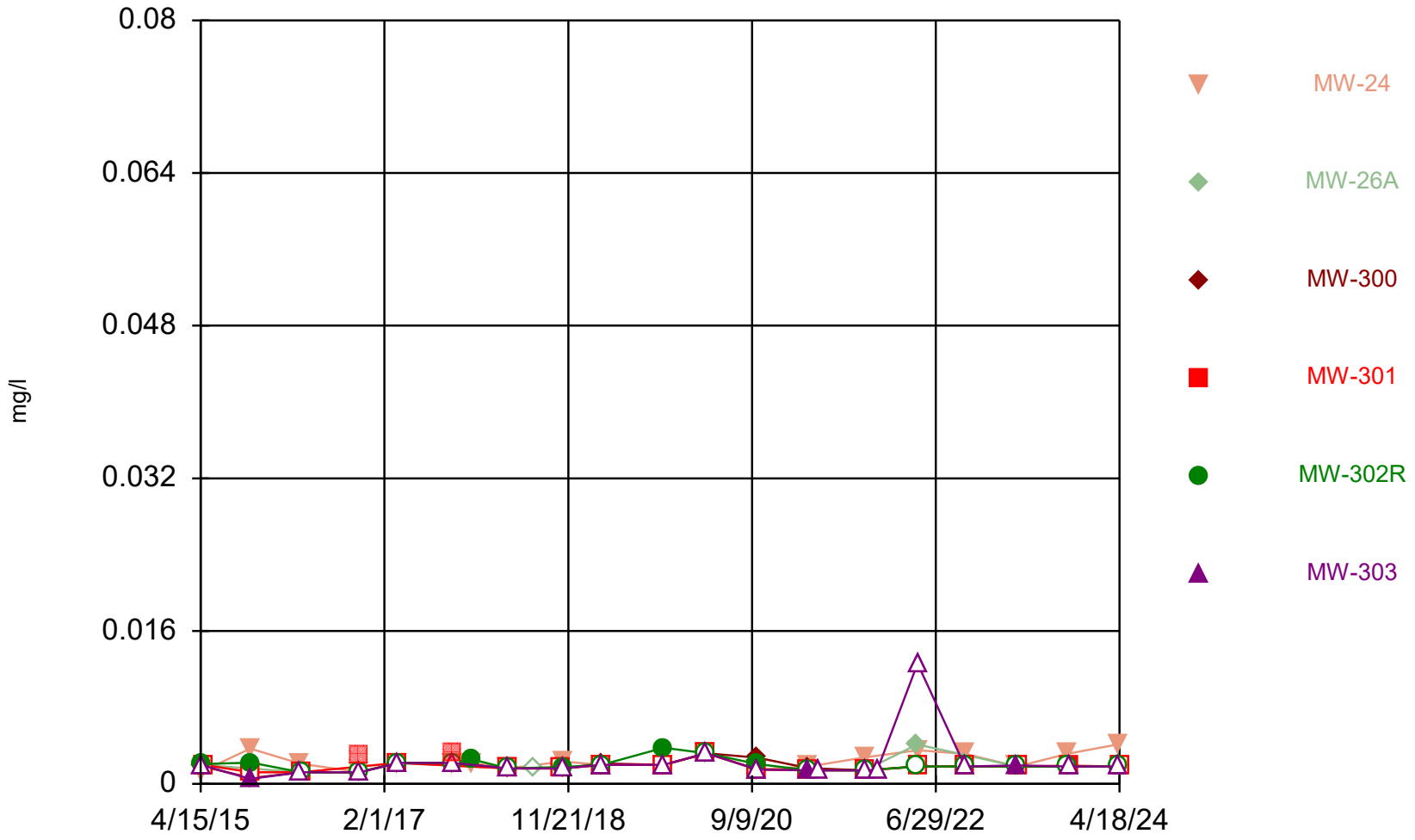


Constituent: Copper Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

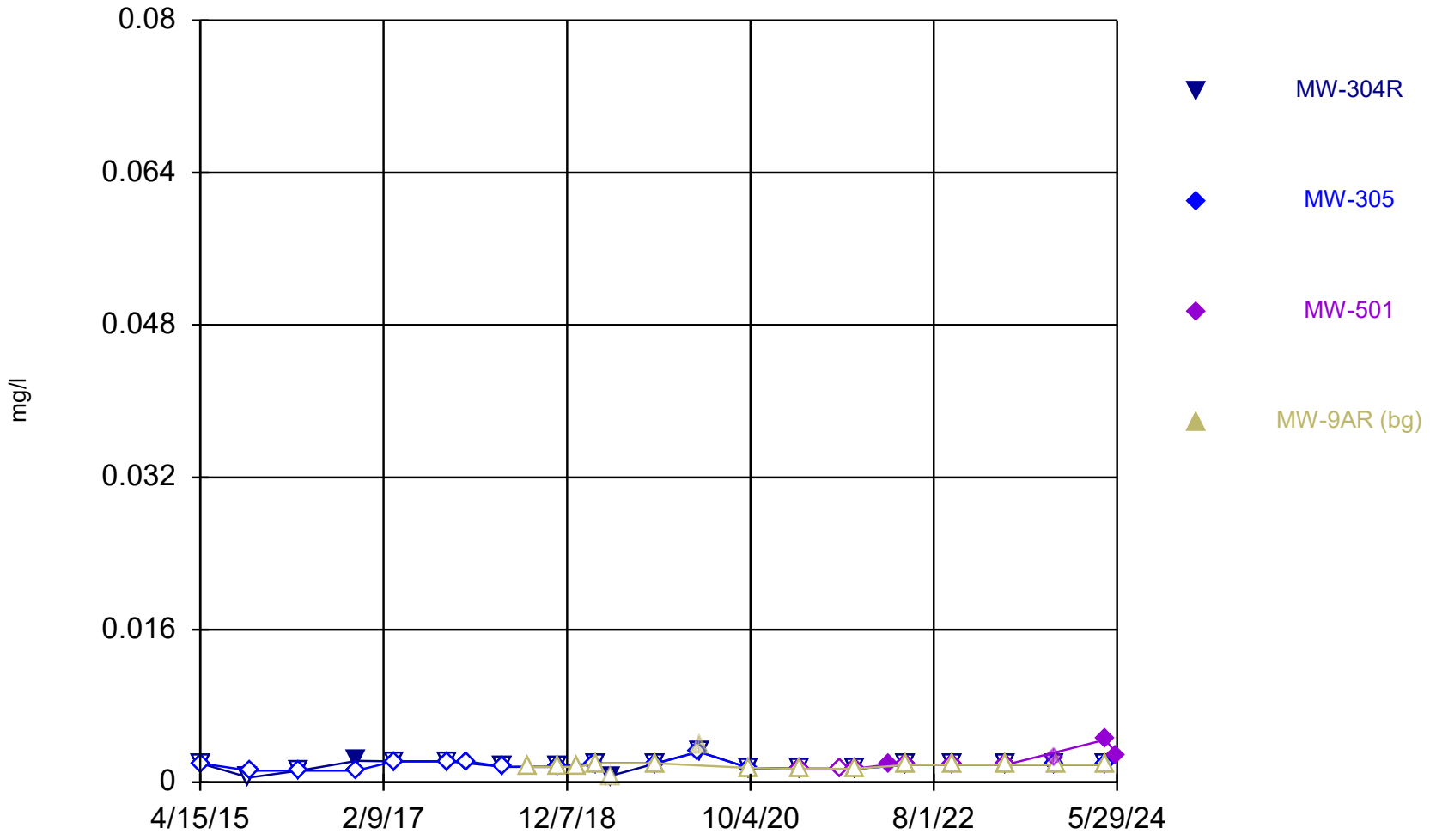


Constituent: Copper Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



Constituent: Copper Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

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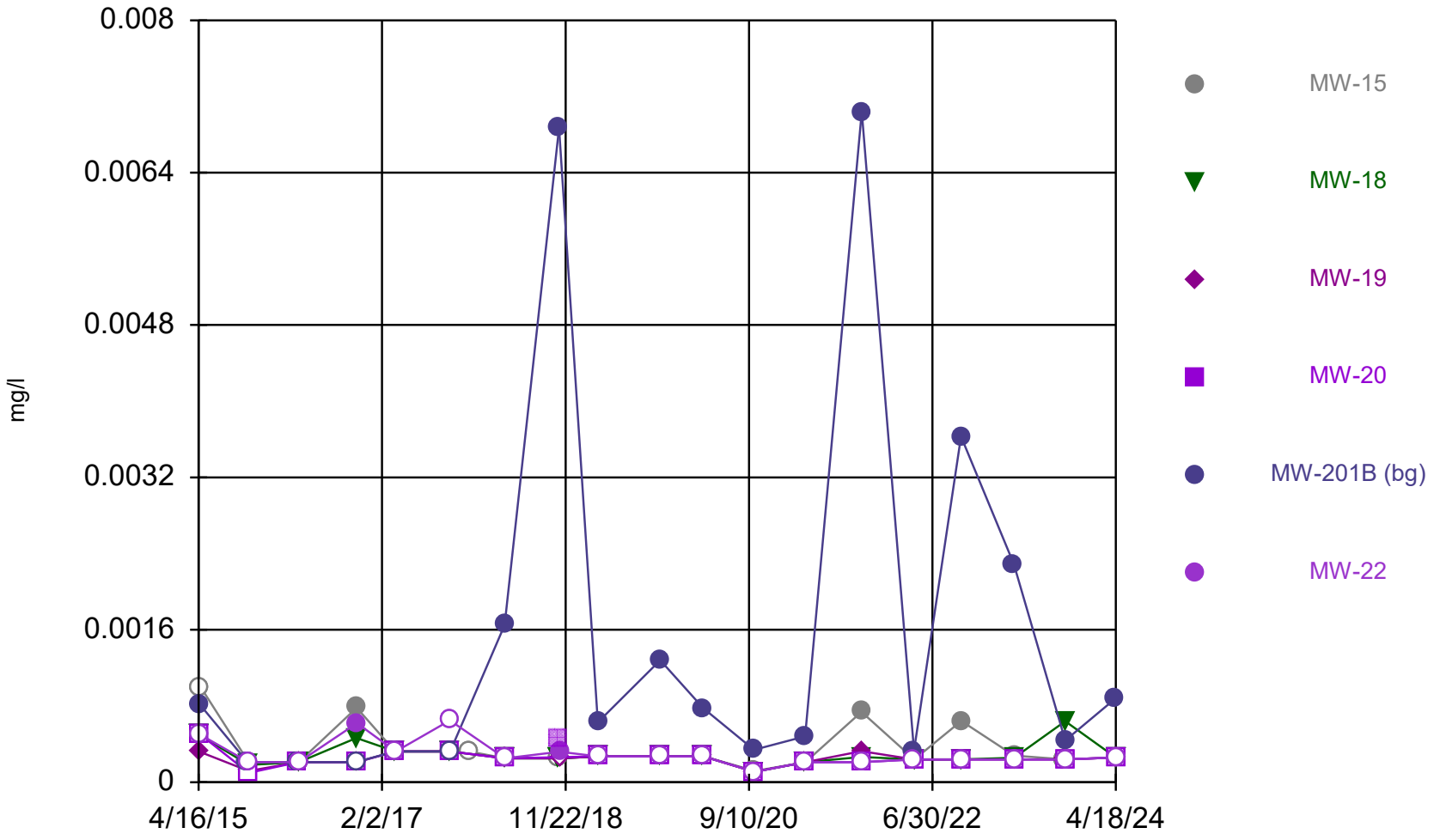
Hollow symbols indicate censored values.

Time Series

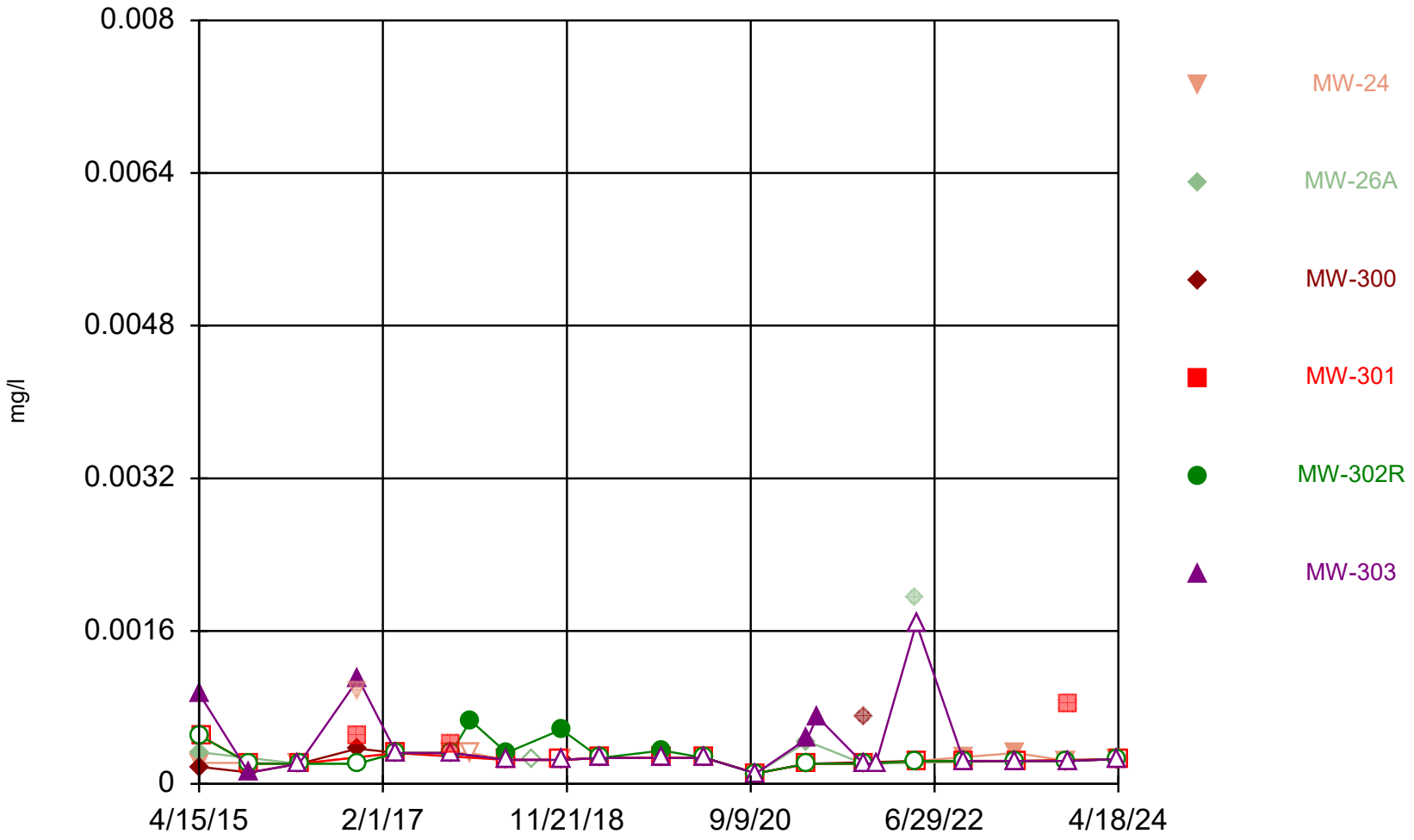


Constituent: Lead Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



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Linn County Data: CRLCSWA_Groundwater Database

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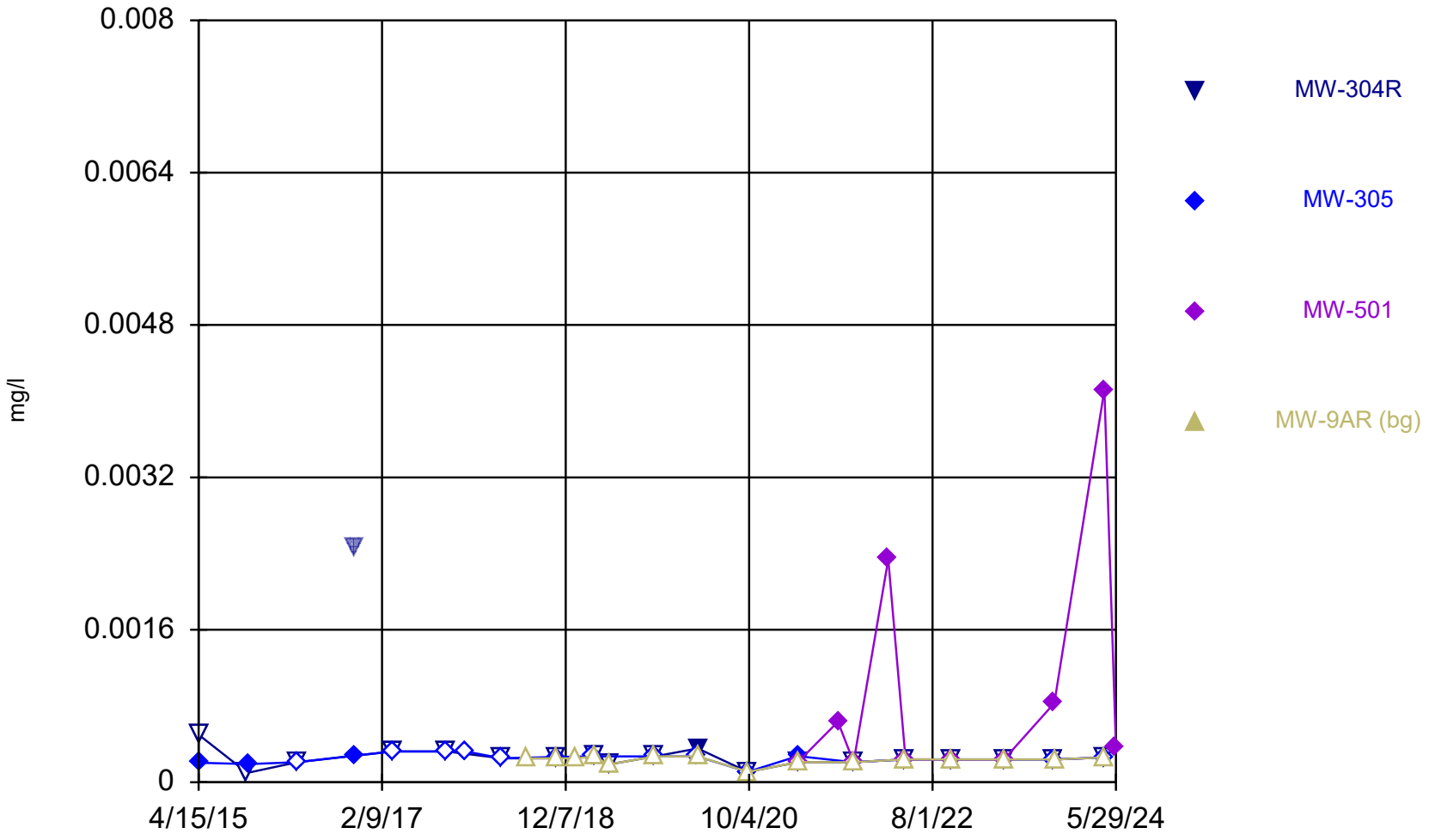
Time Series



Constituent: Lead Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

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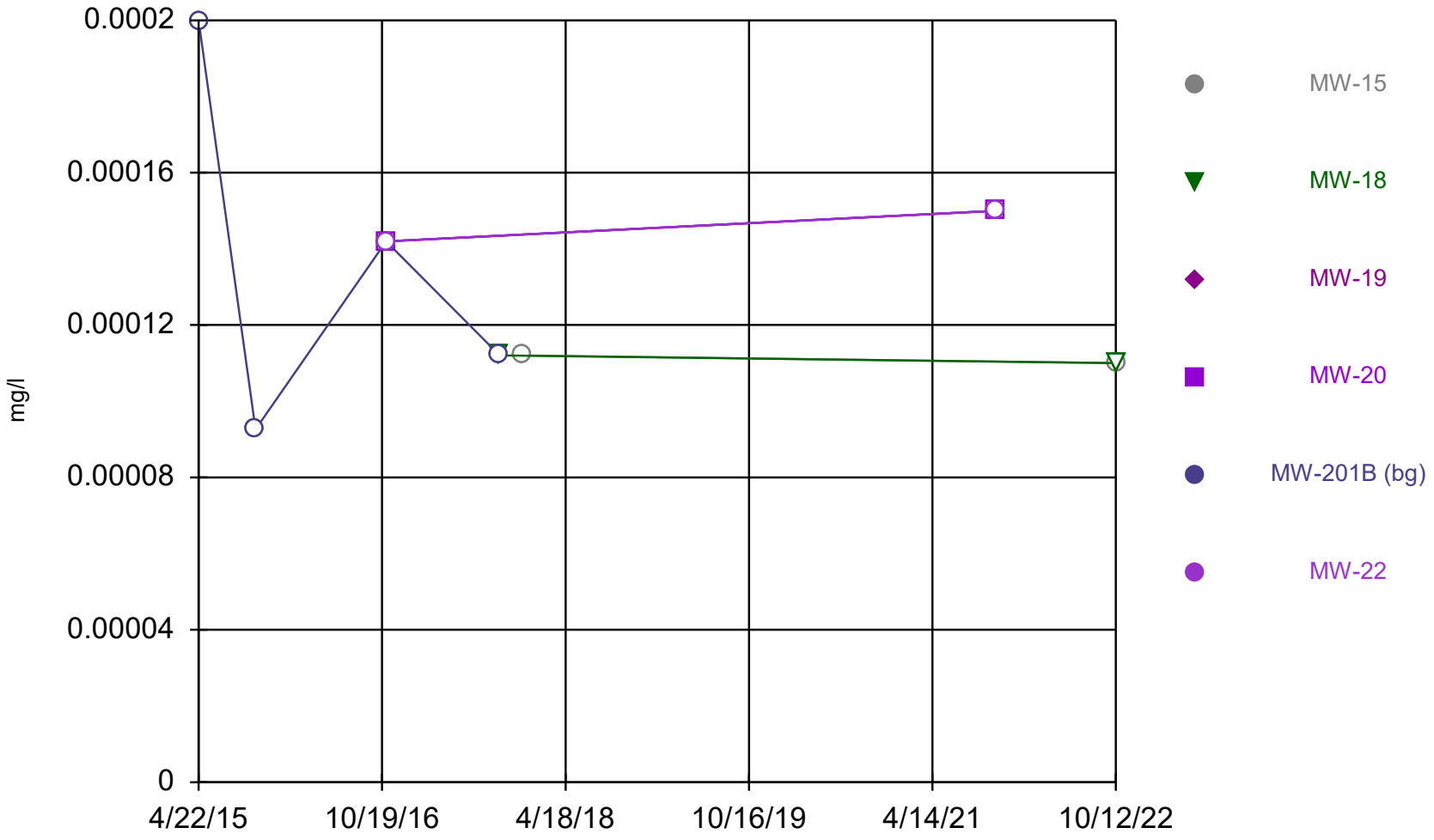
Hollow symbols indicate censored values.

Time Series

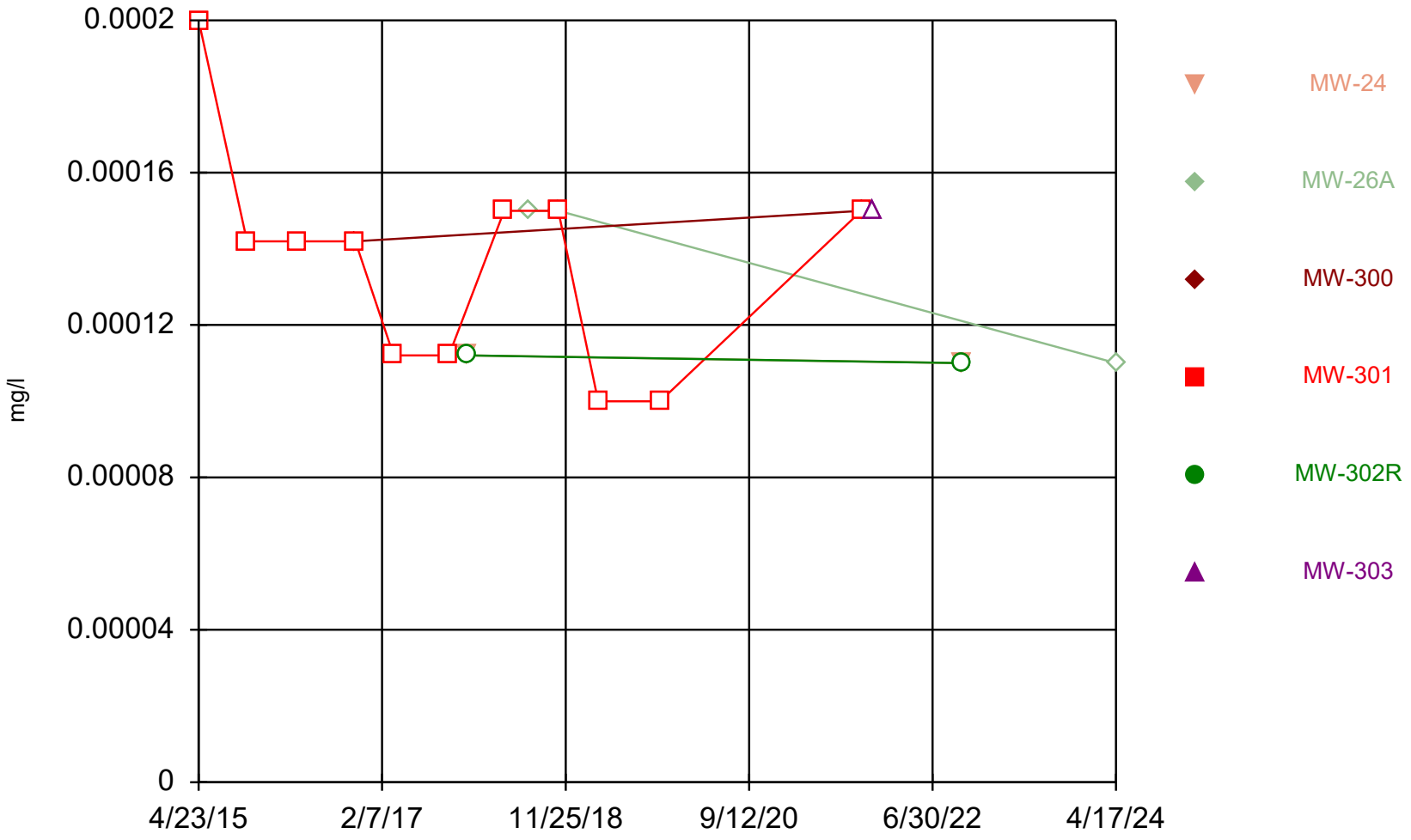


Constituent: Mercury Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

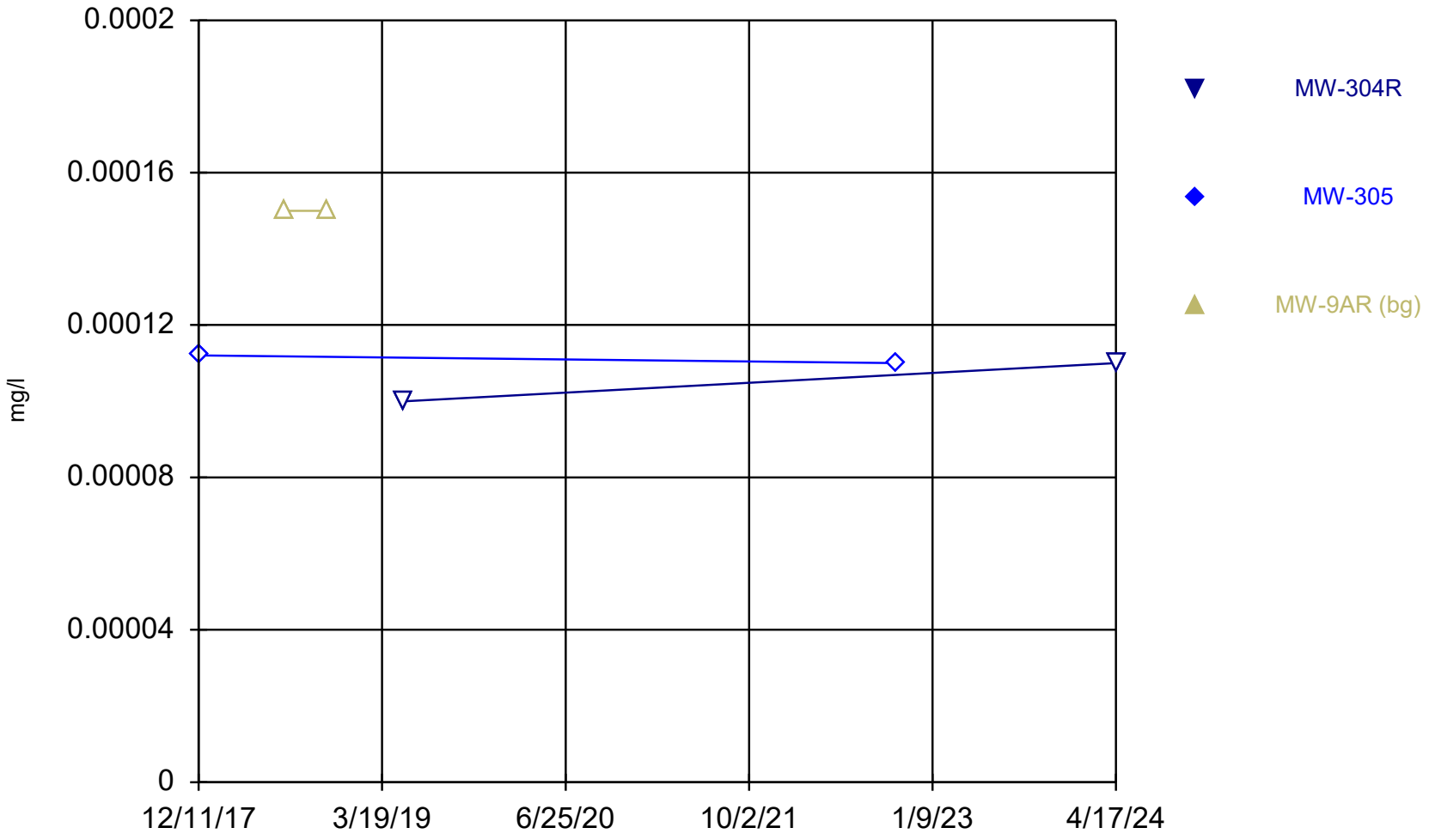


Constituent: Mercury Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



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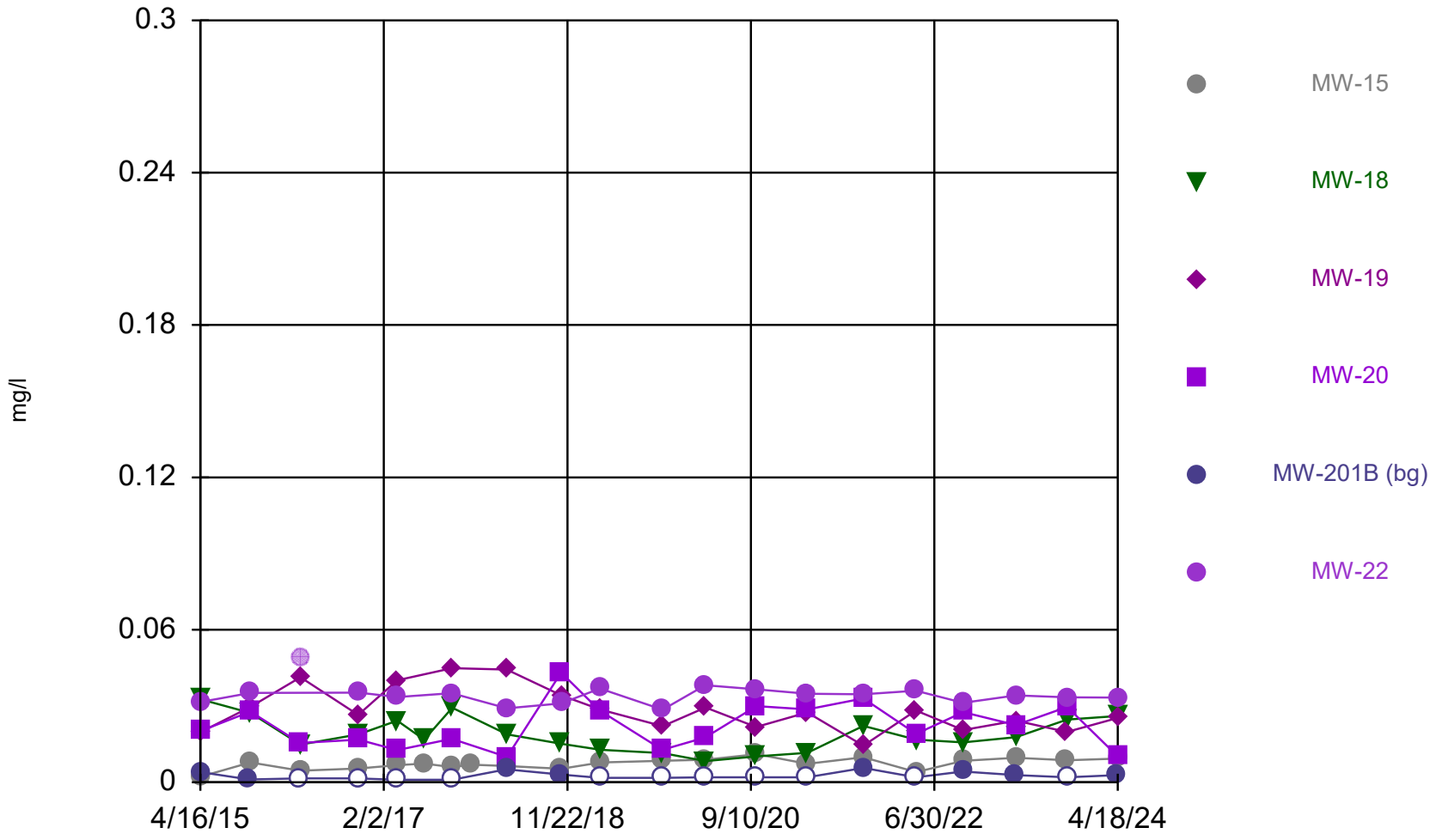
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

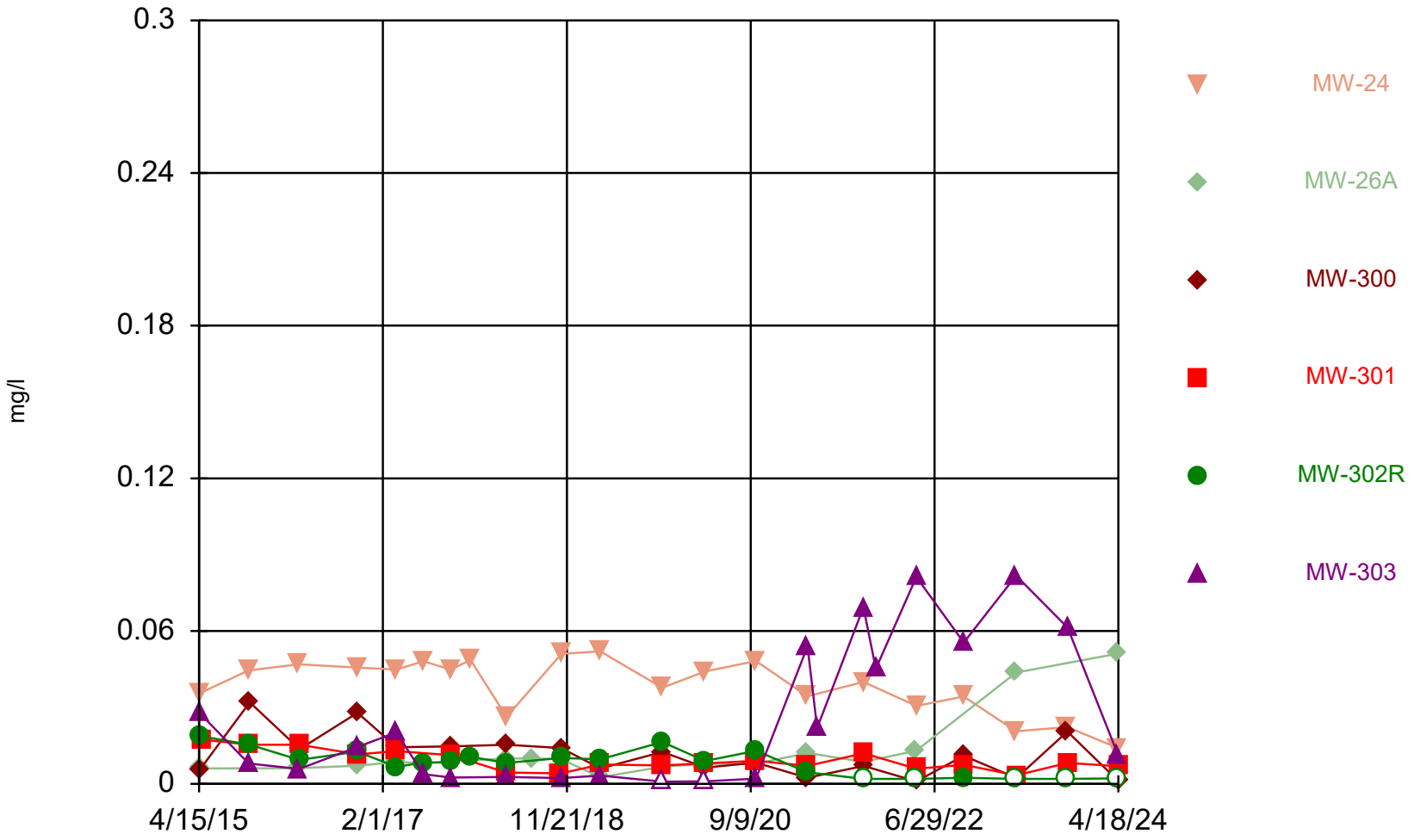


Constituent: Nickel Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

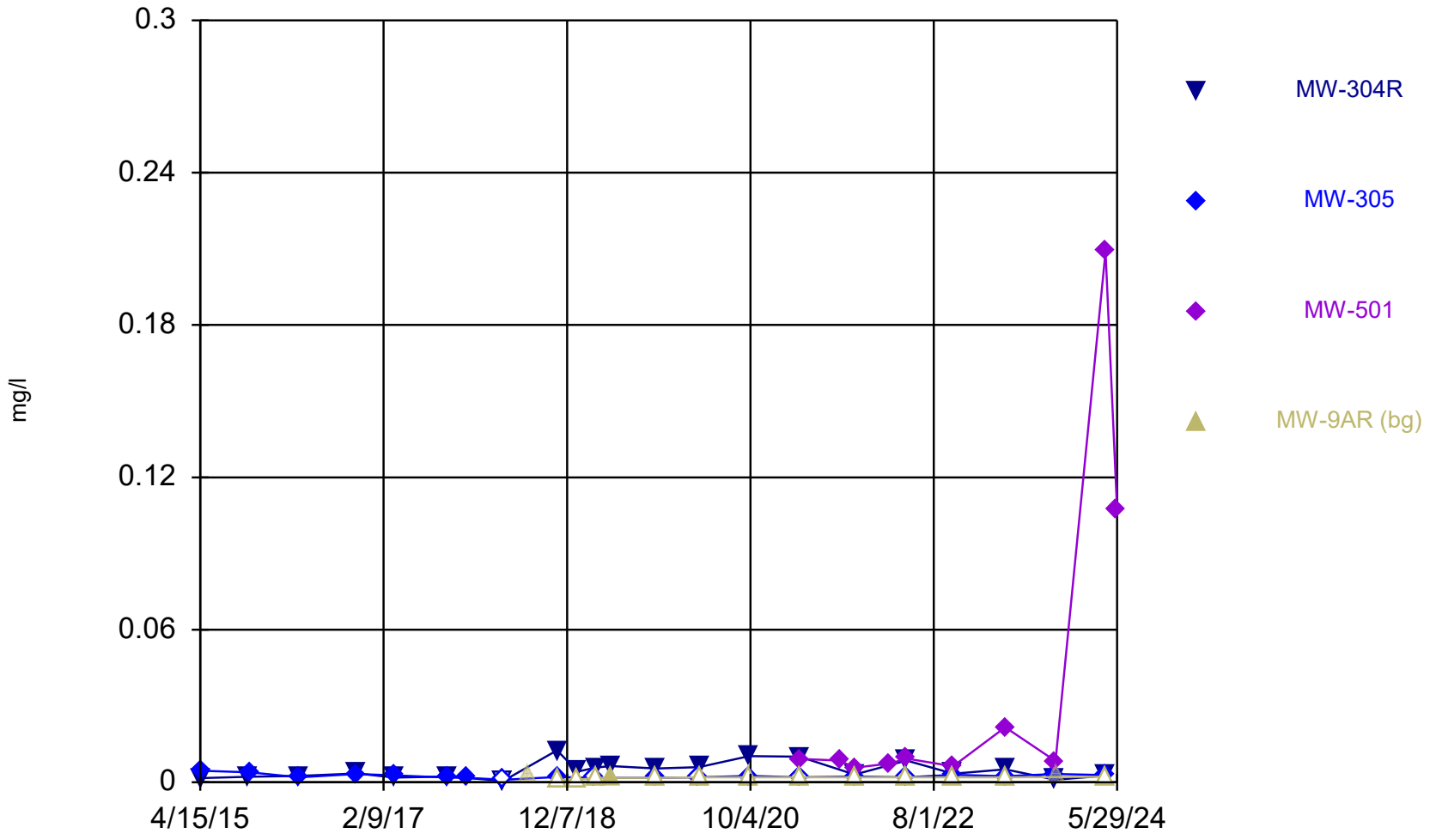


Constituent: Nickel Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



Constituent: Nickel Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

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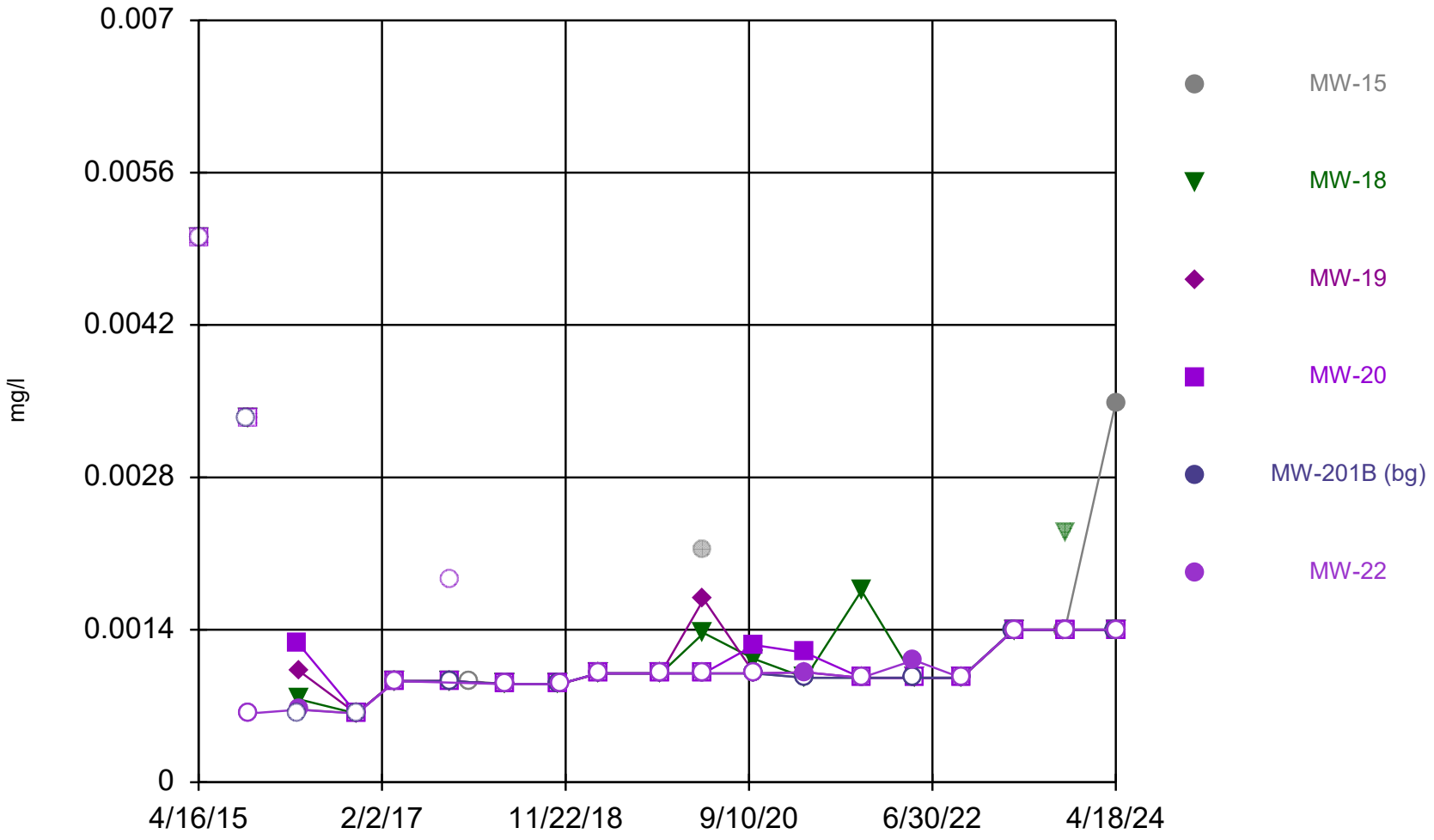
Time Series



Constituent: Selenium Analysis Run 7/12/2024 1:55 PM View: App I_Metals
Linn County Data: CRLCSWA_Groundwater Database

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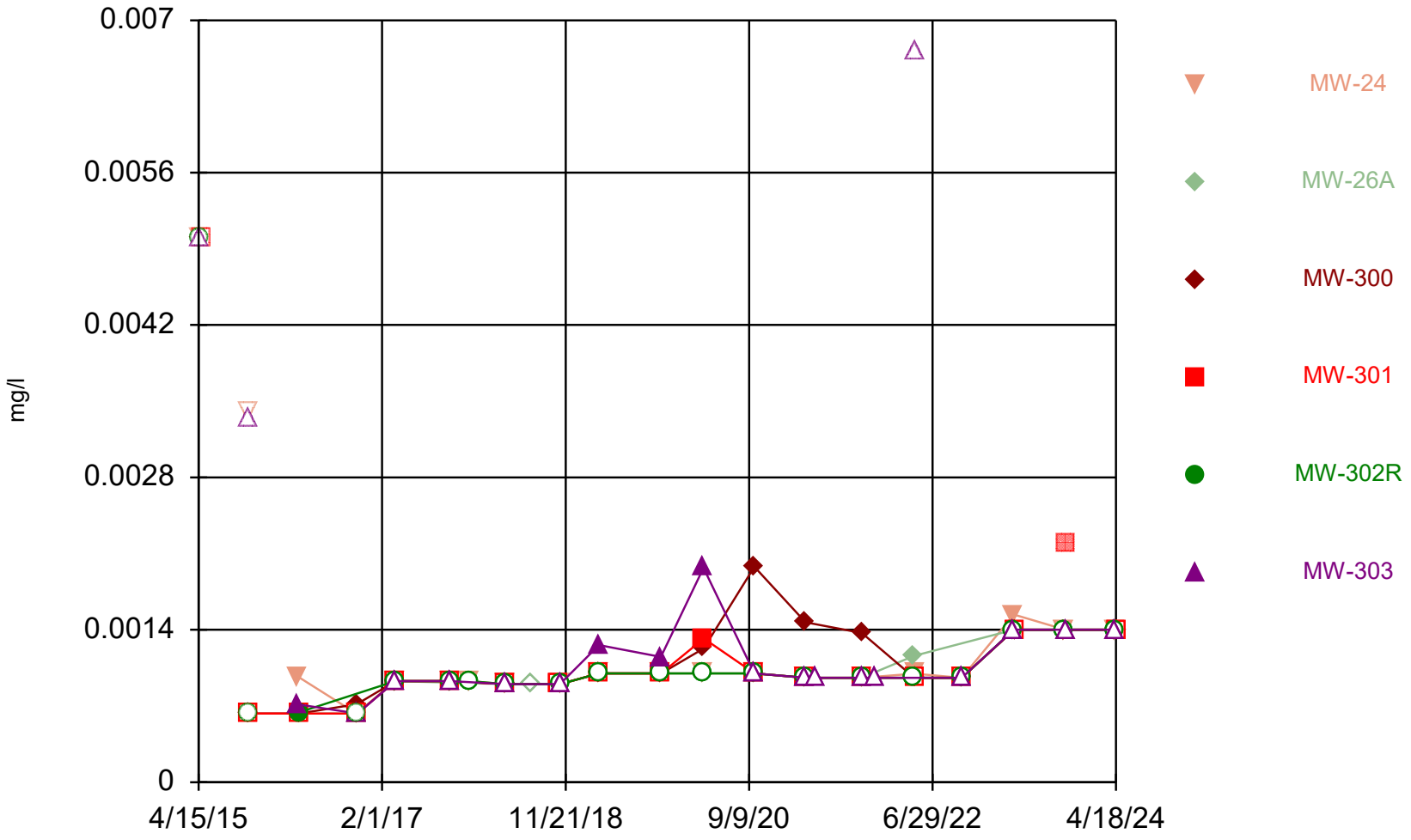
Hollow symbols indicate censored values.

Time Series

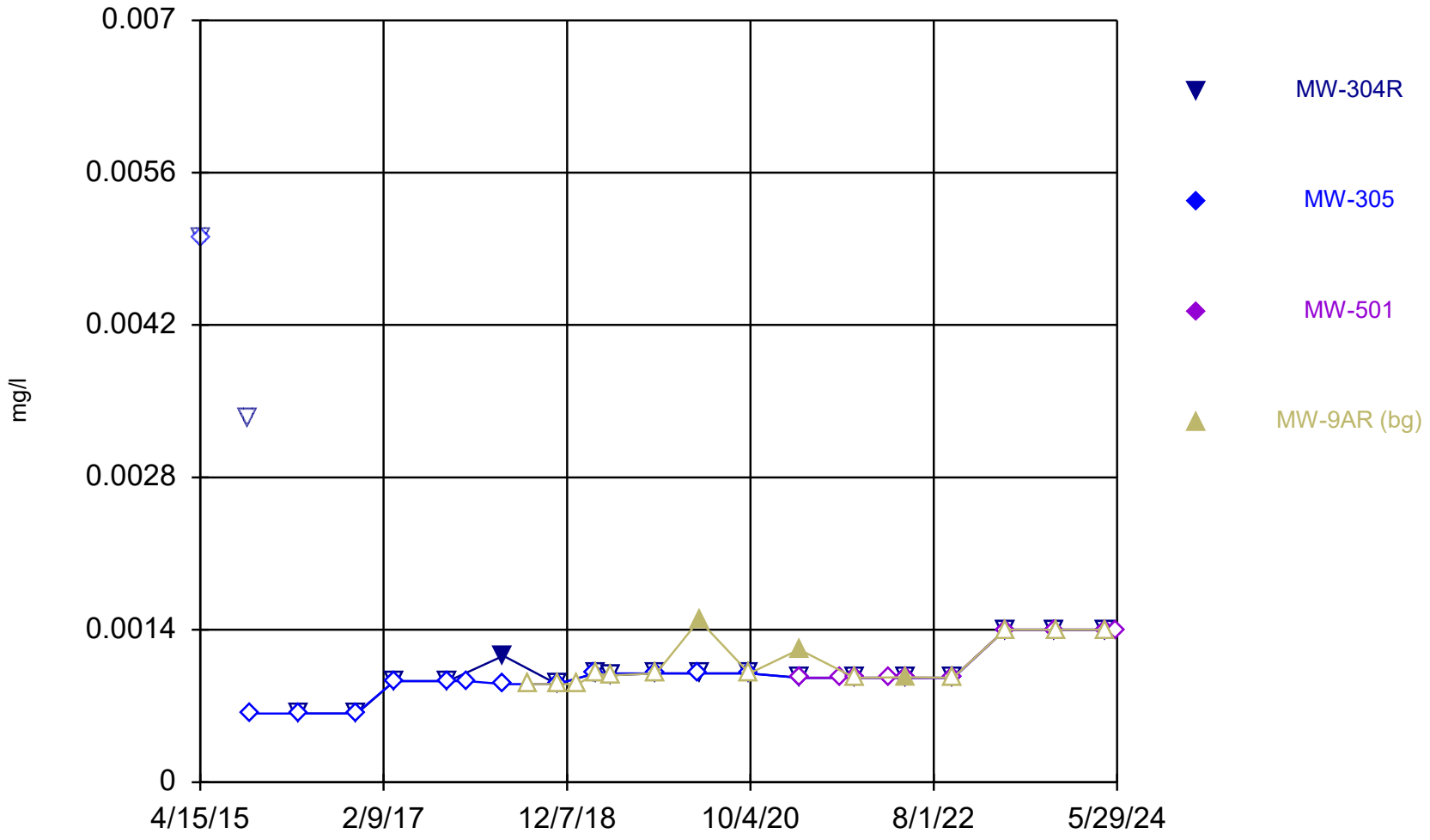


Constituent: Selenium Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

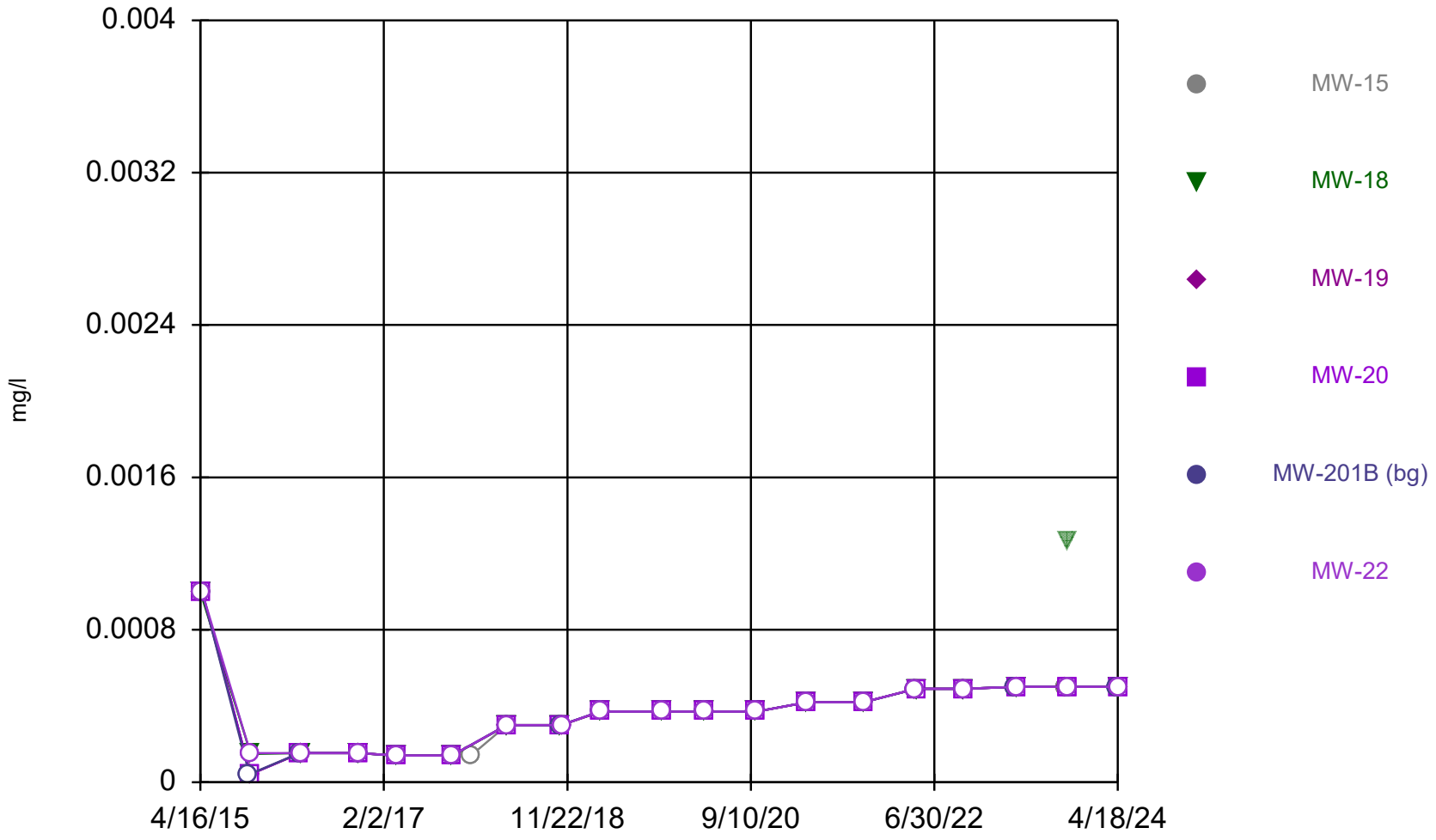


Constituent: Selenium Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

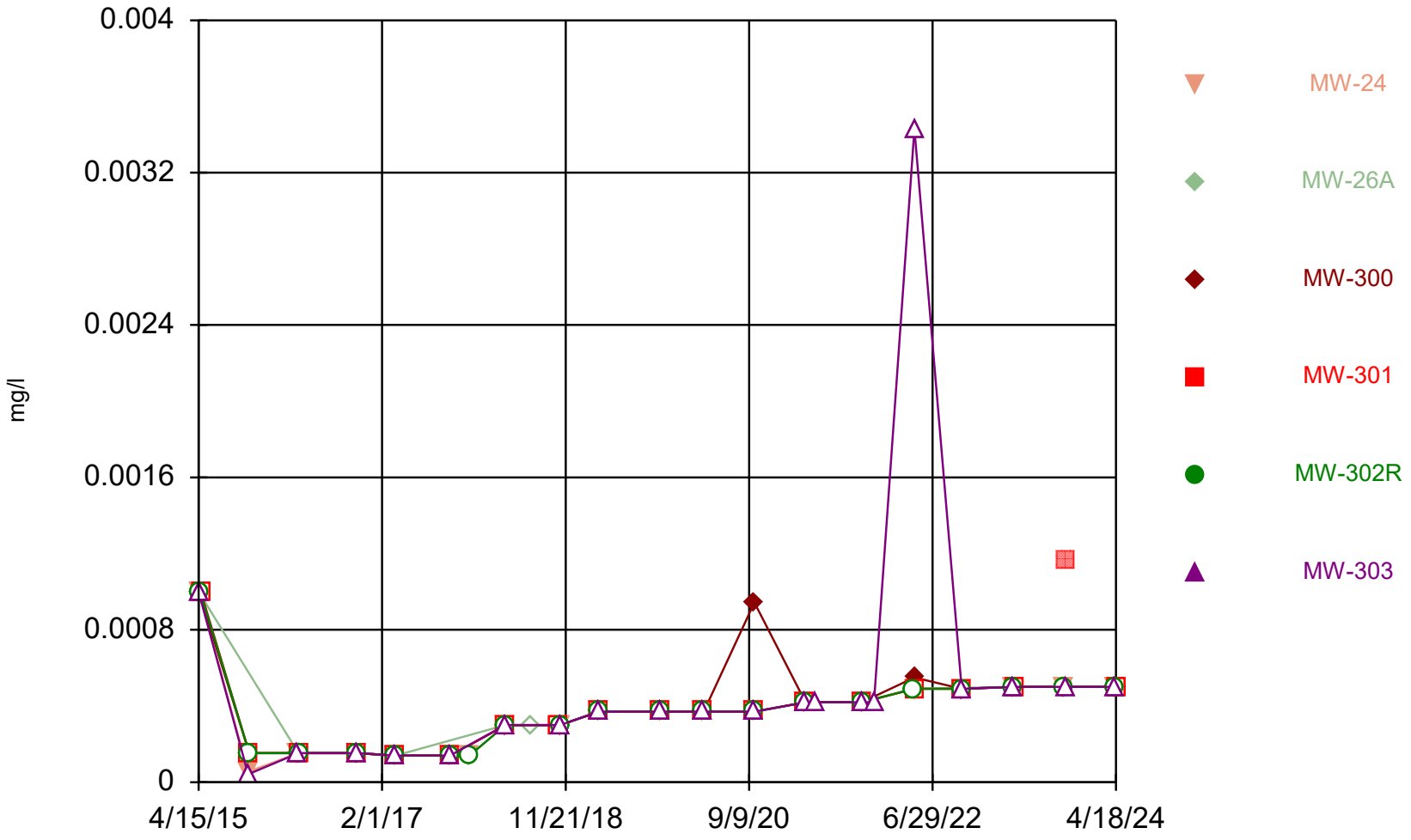


Constituent: Silver Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Sanitas™ v.10.0.15 Software licensed to HDR. UG
Hollow symbols indicate censored values.

Time Series

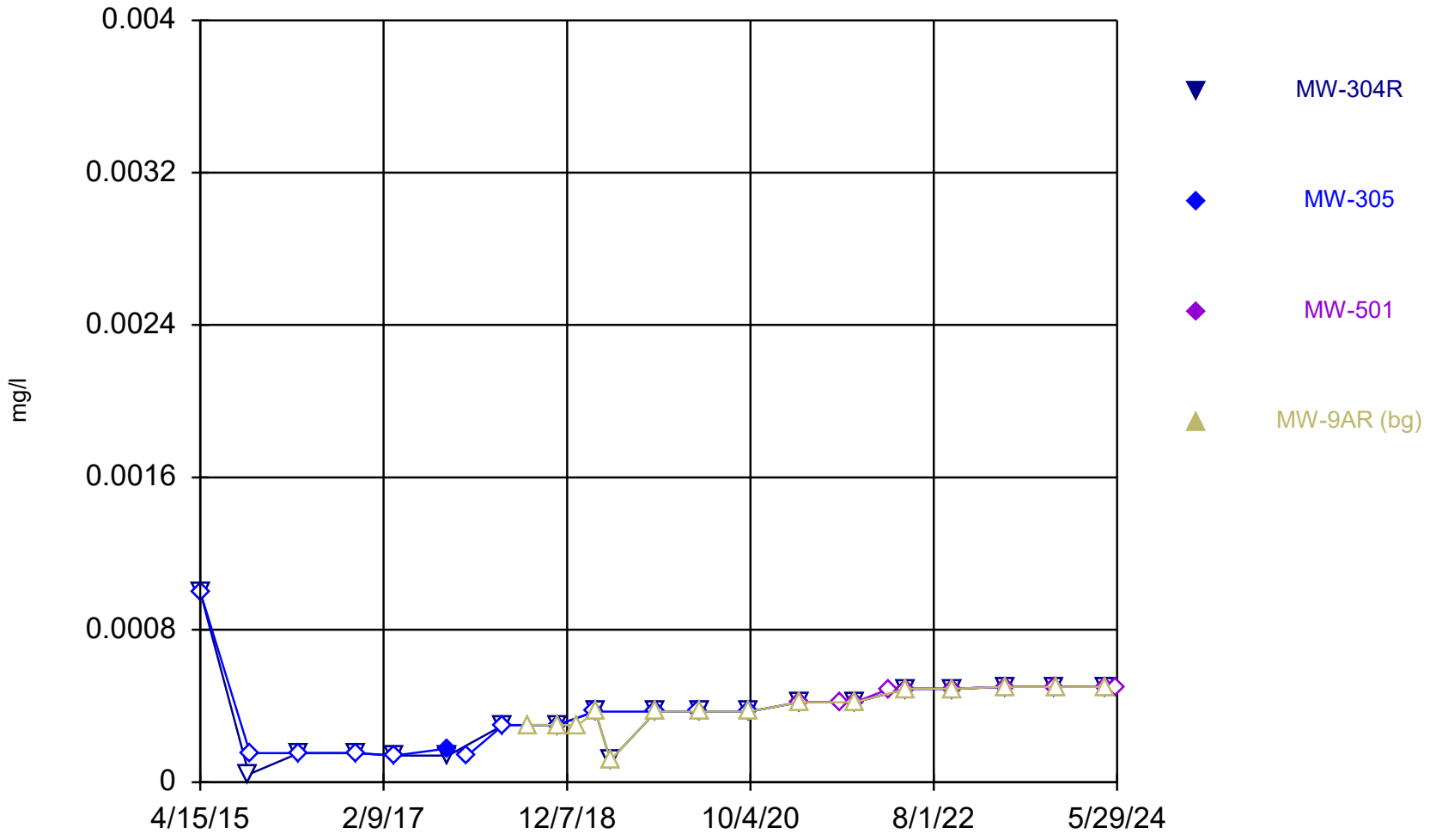


Constituent: Silver Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



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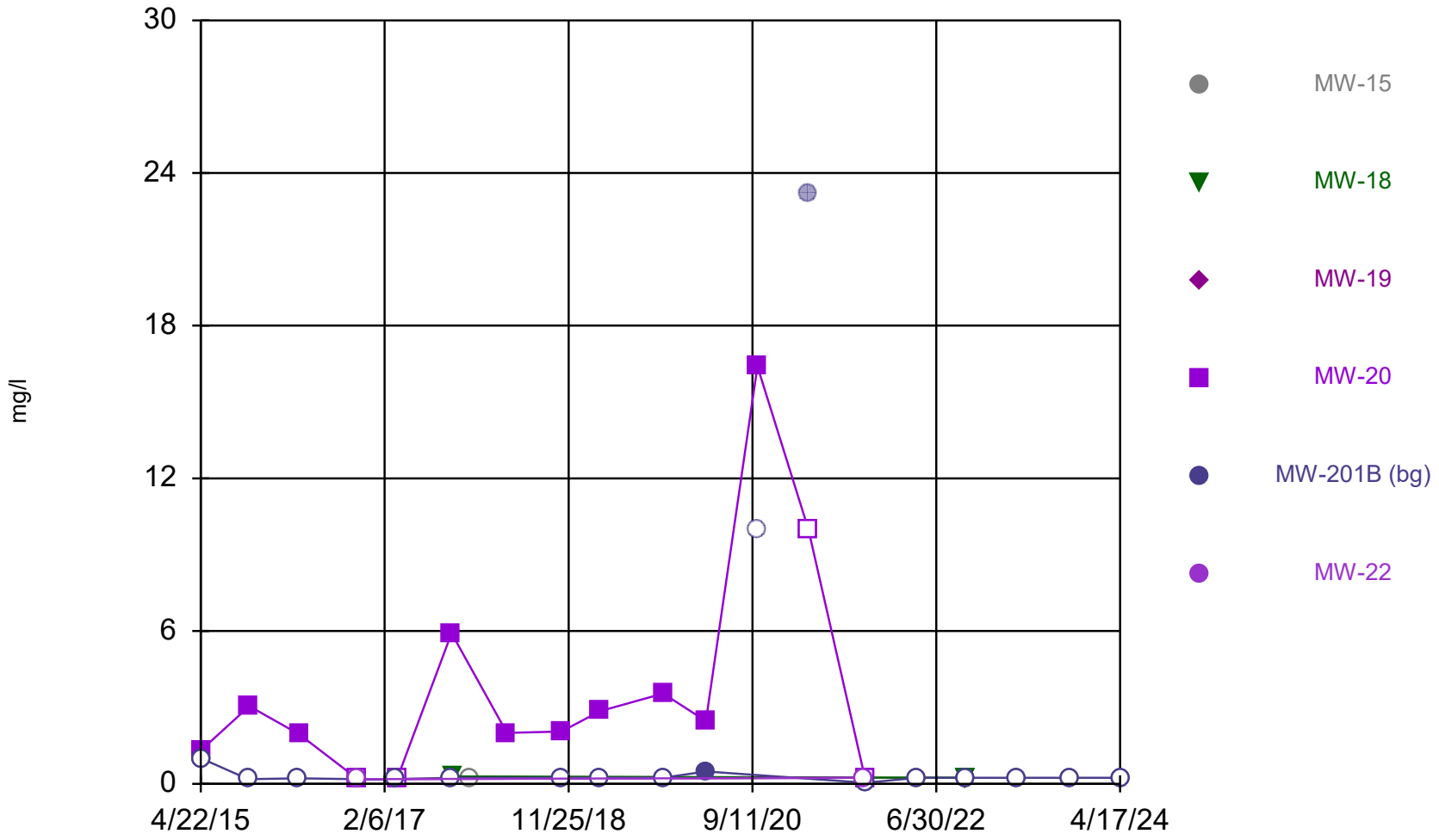
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

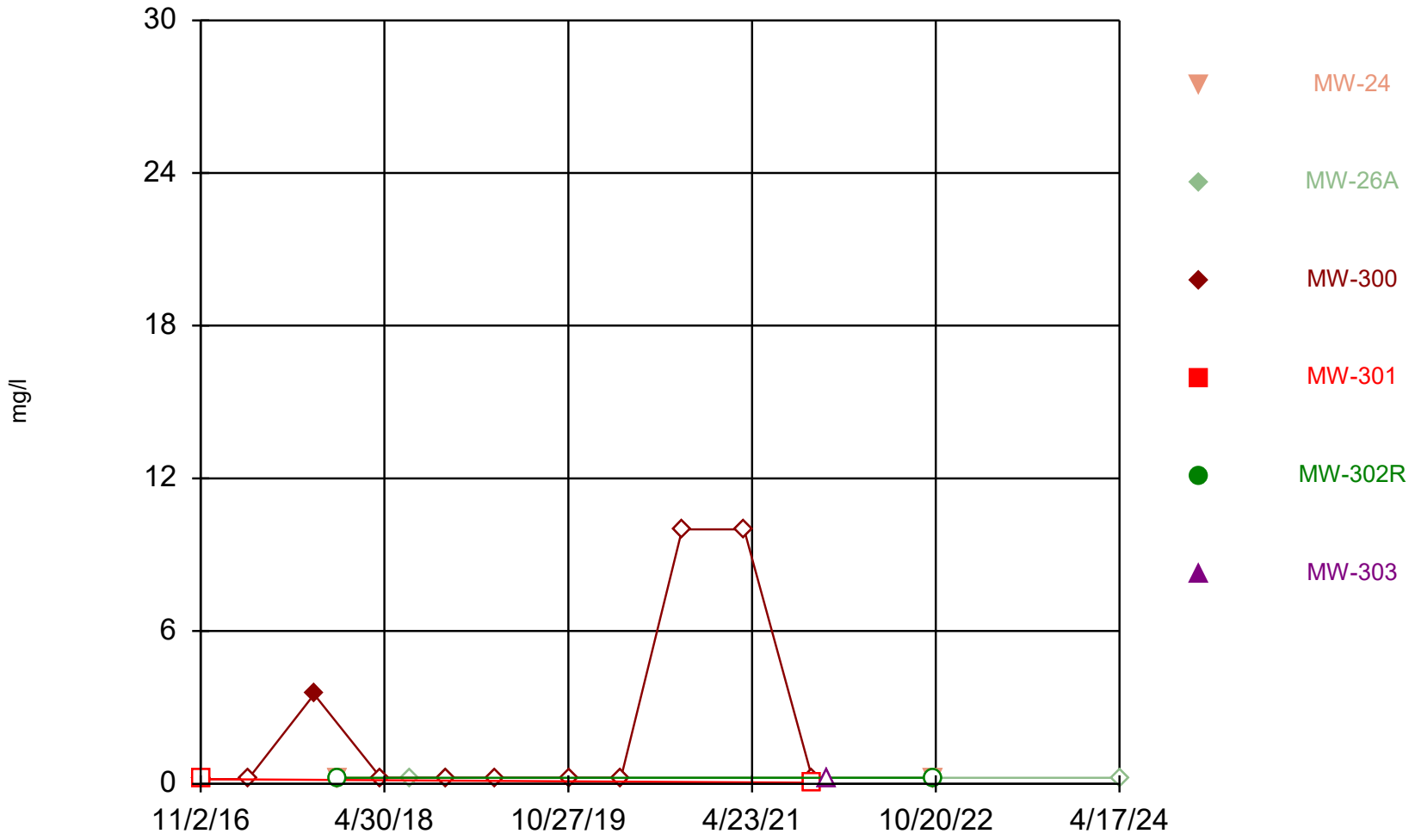


Constituent: Sulfide Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

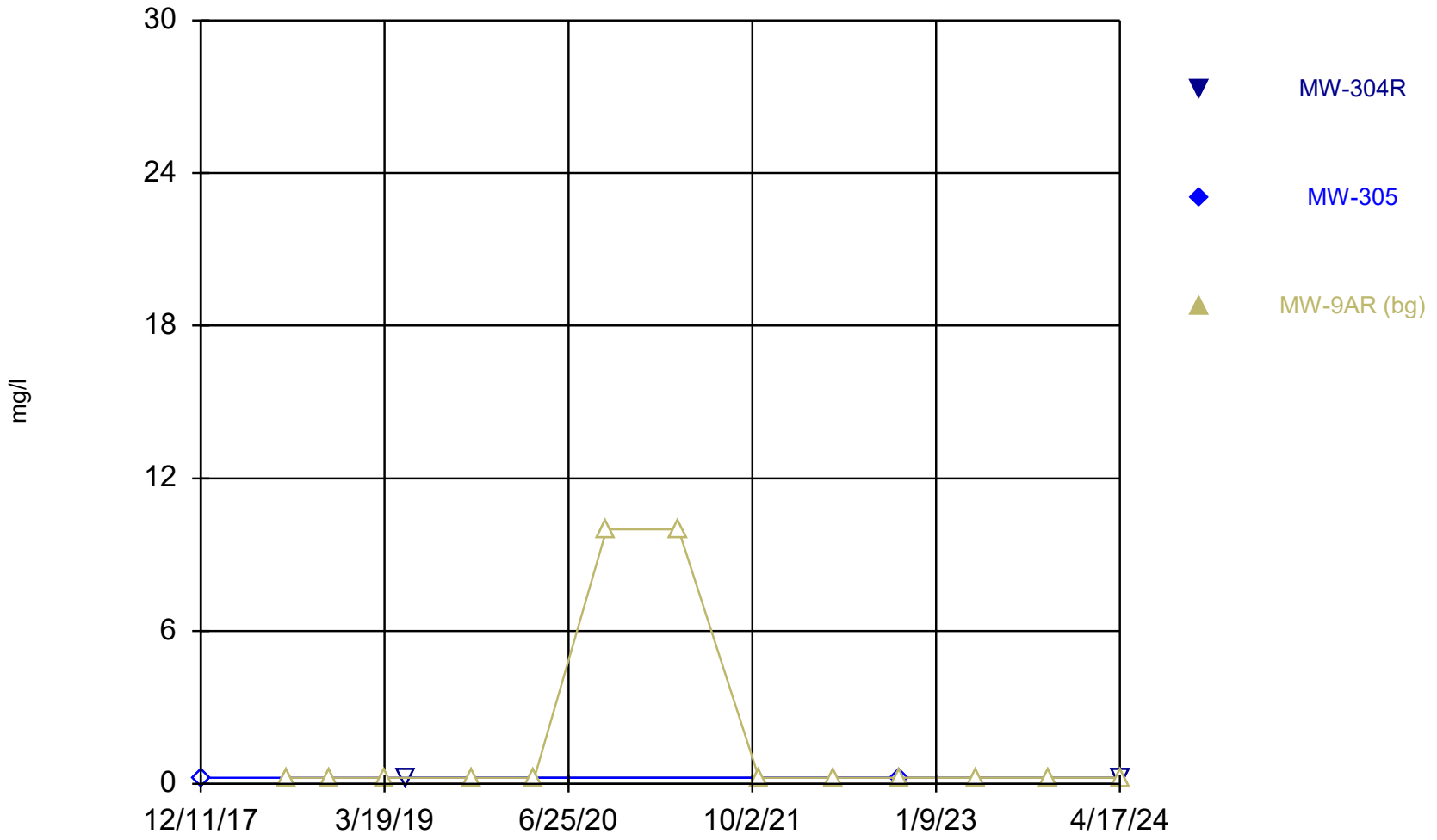


Constituent: Sulfide Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



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Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

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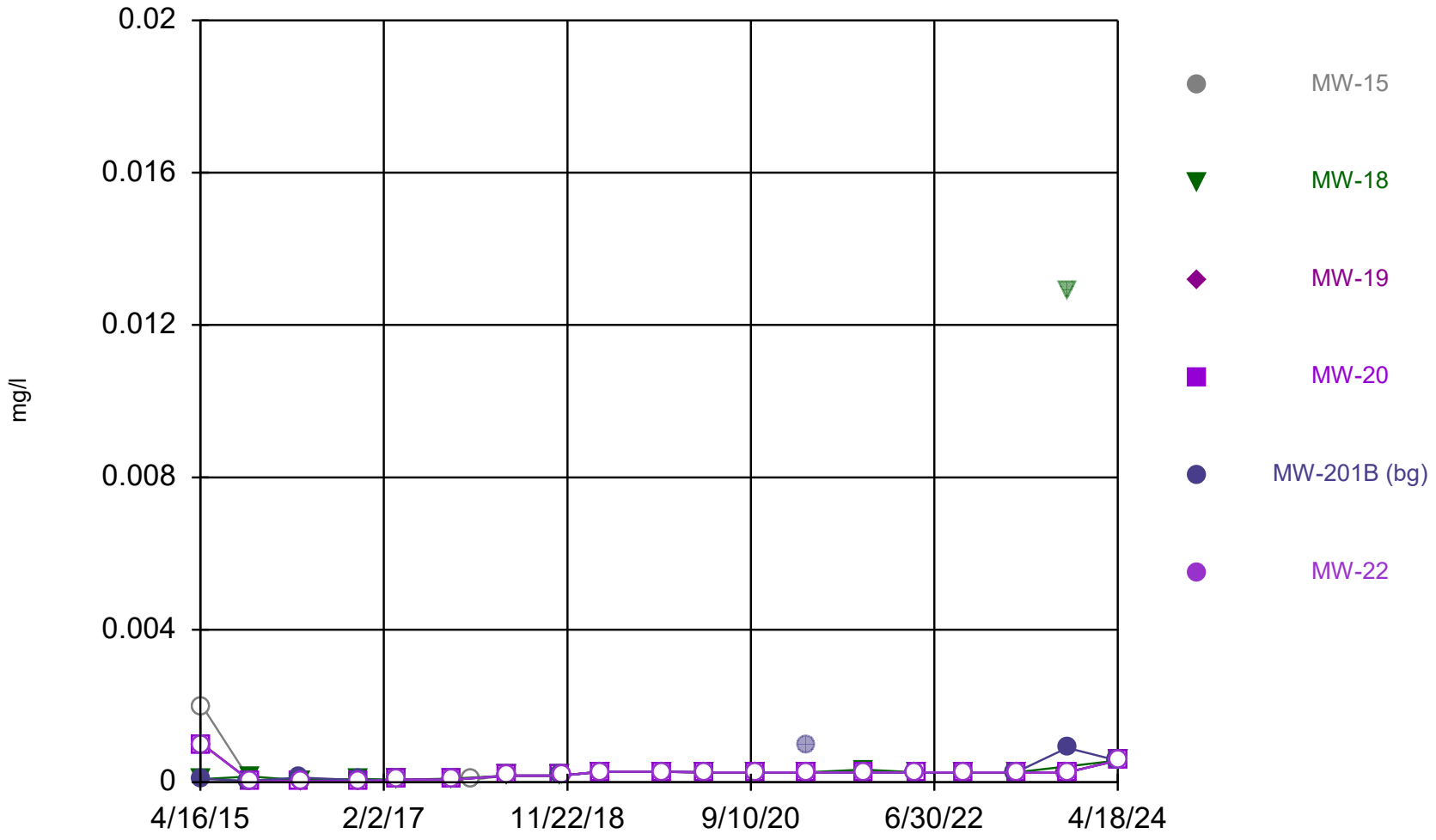

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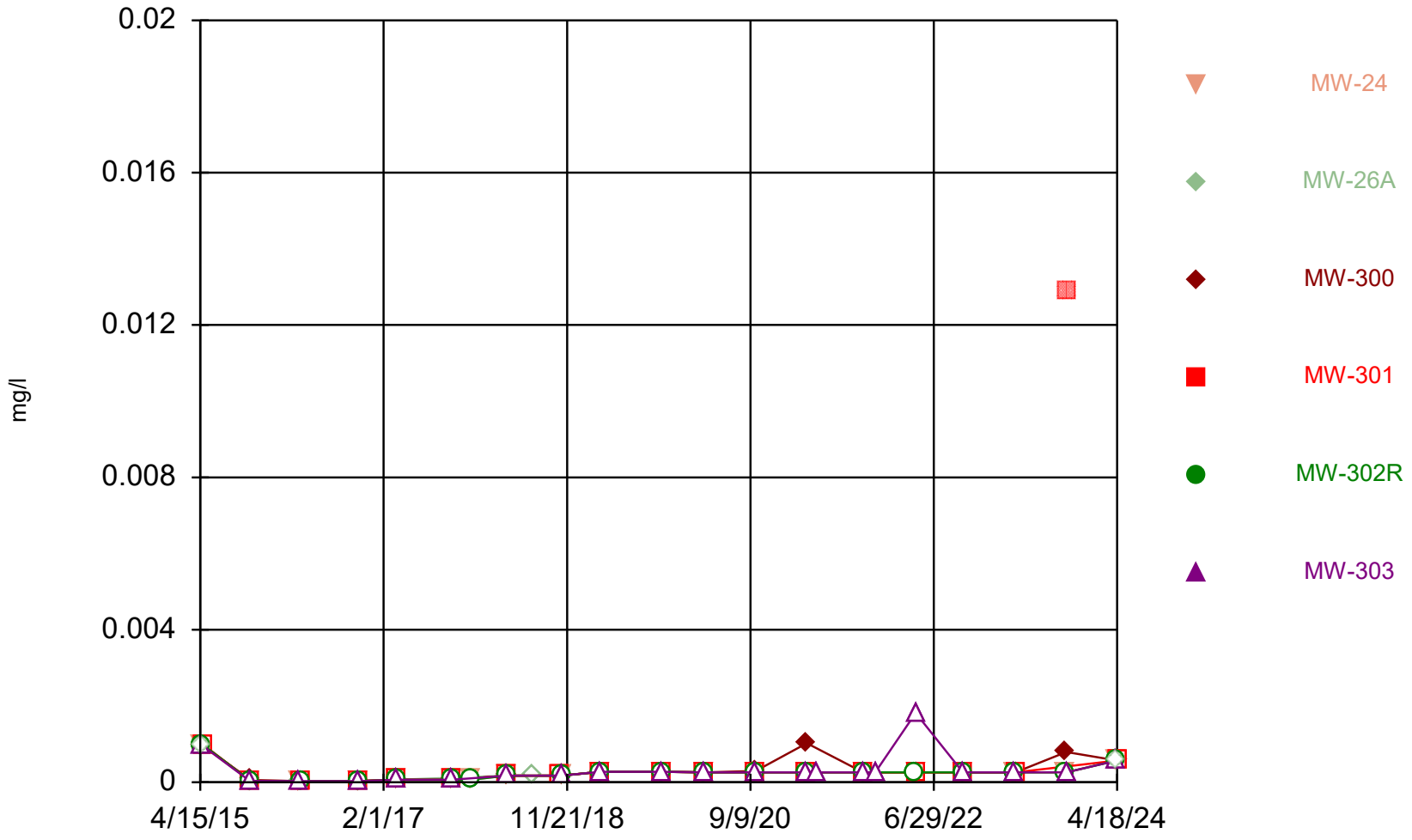
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



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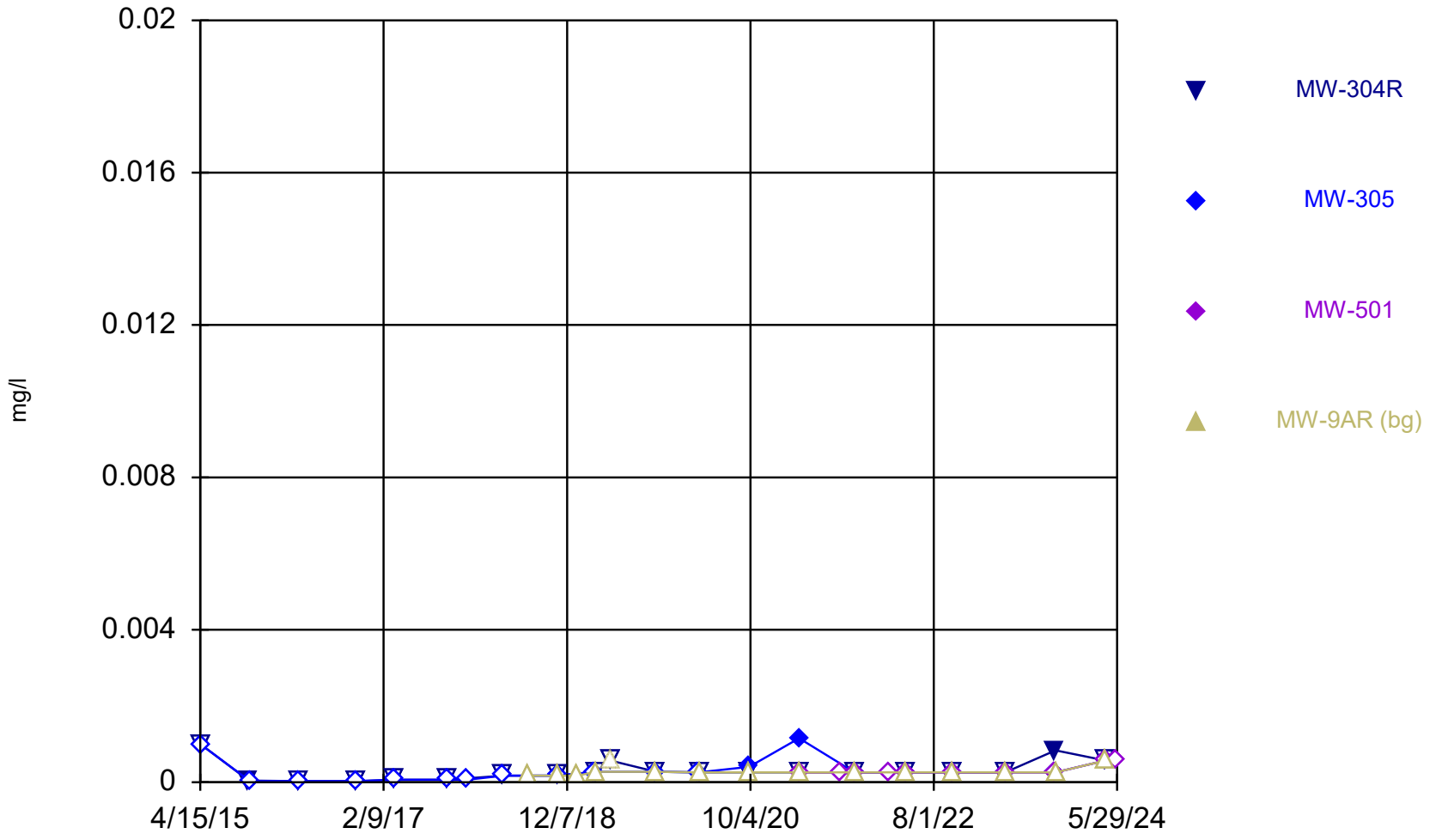
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



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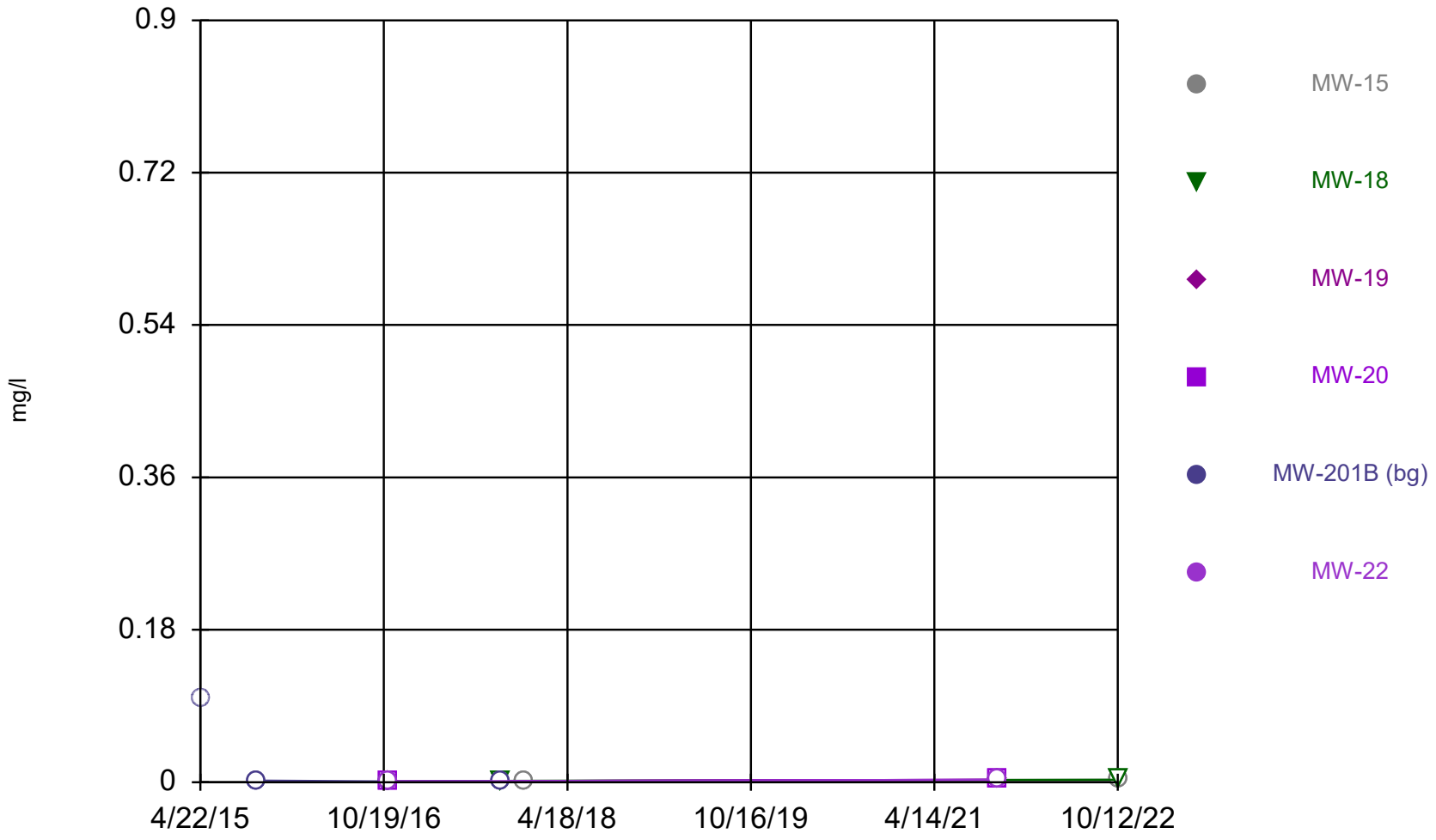
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

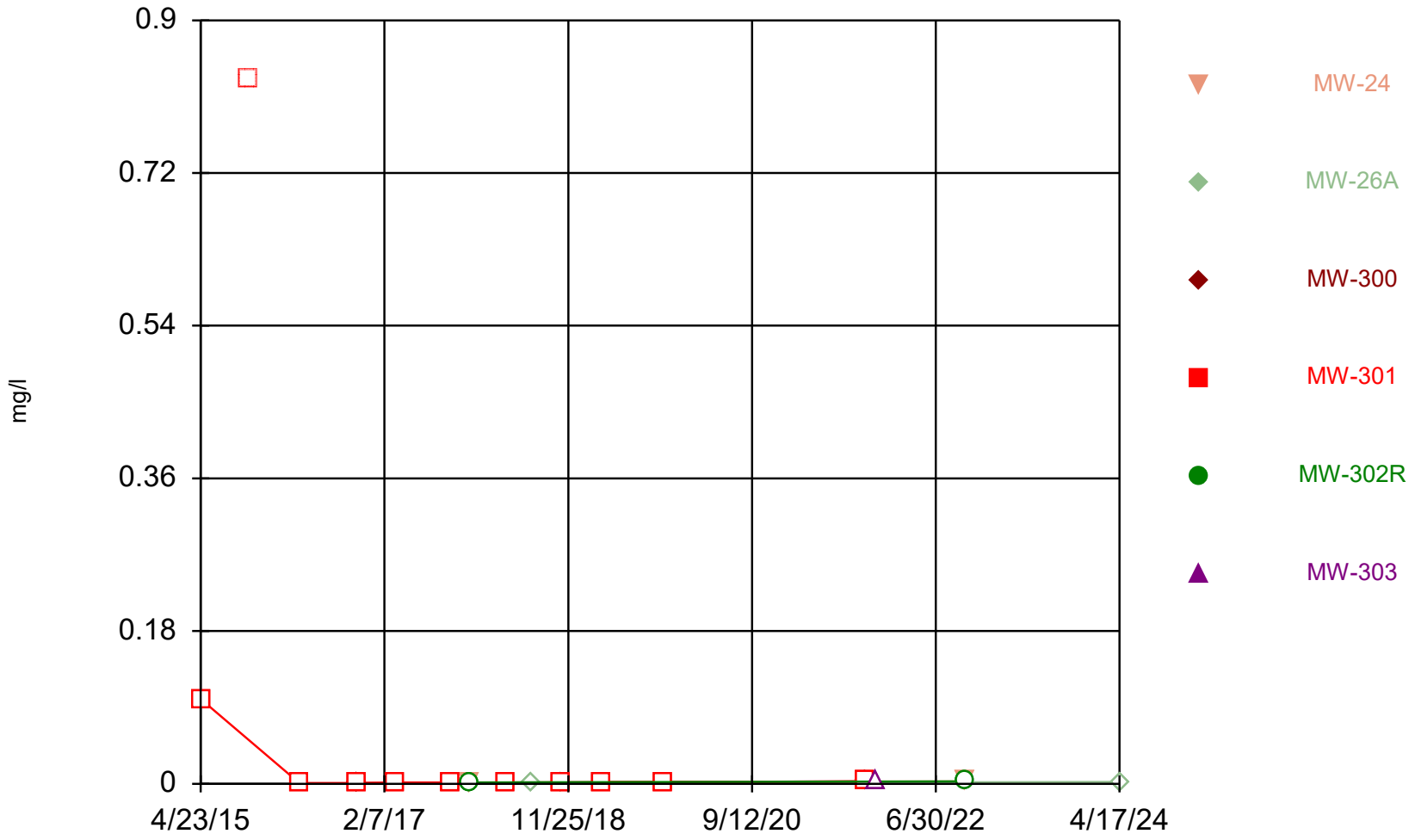


Constituent: Tin Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



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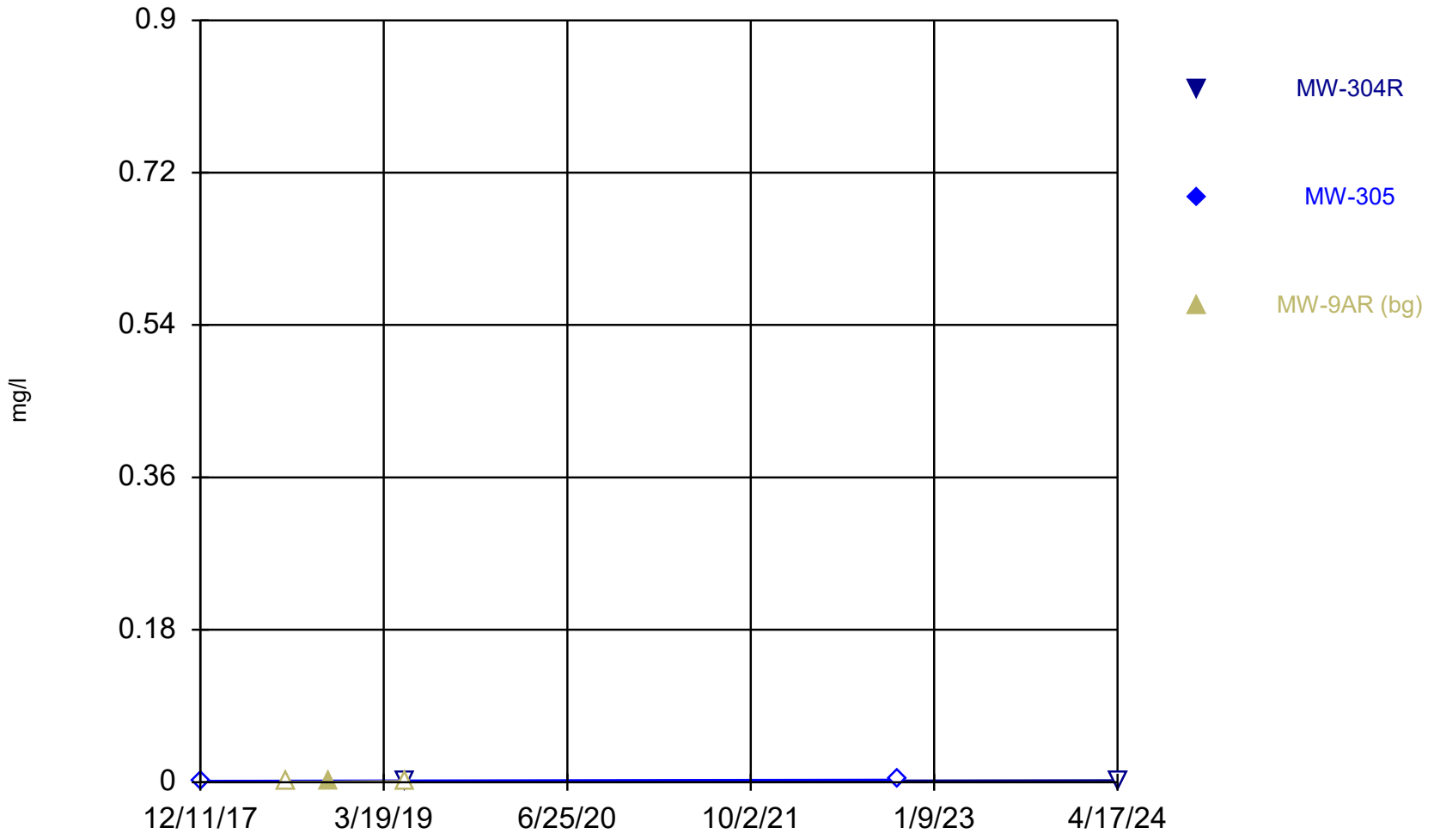
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

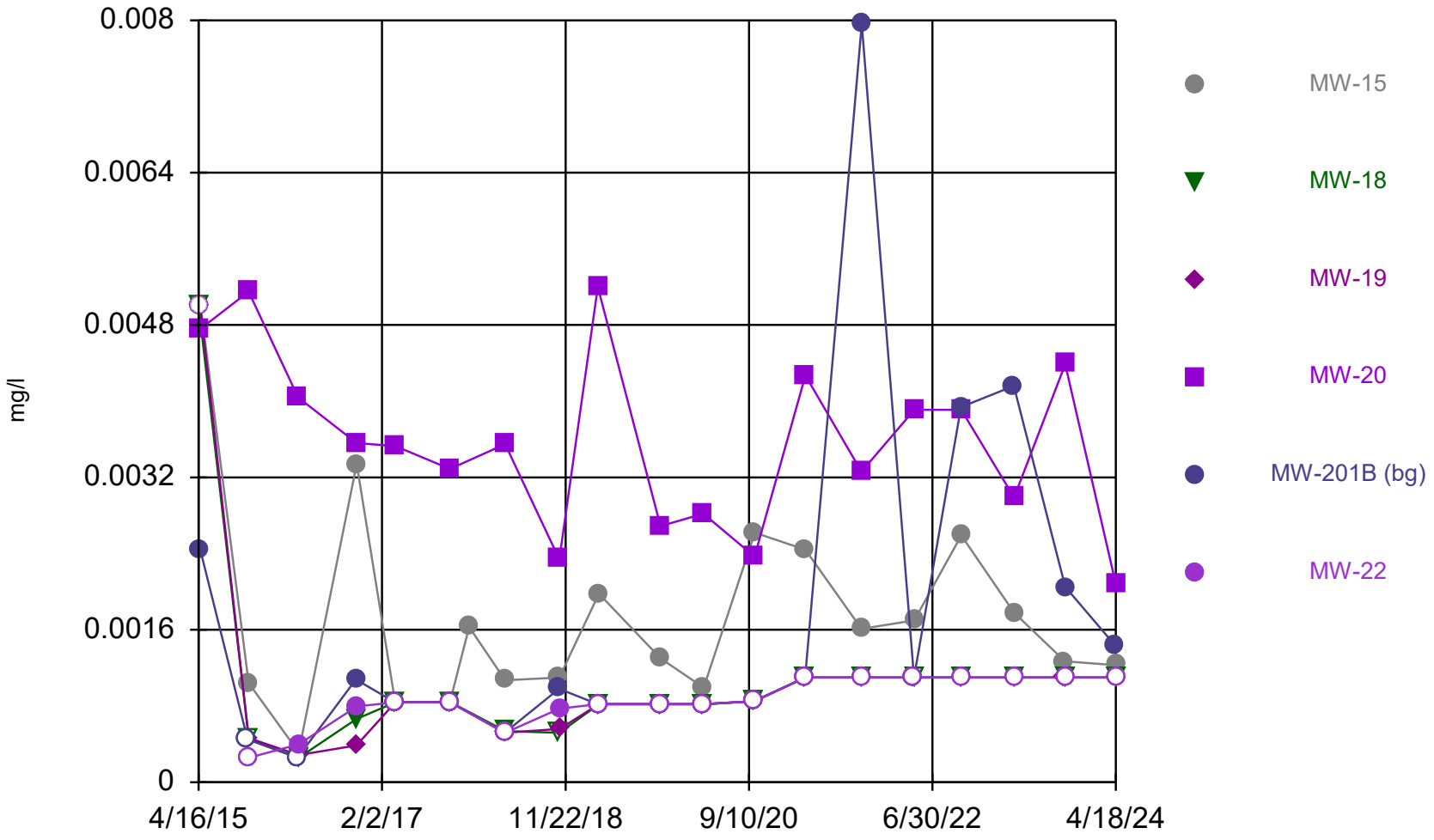


Constituent: Tin Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Sanitas™ v.10.0.15 Software licensed to HDR. UG
Hollow symbols indicate censored values.

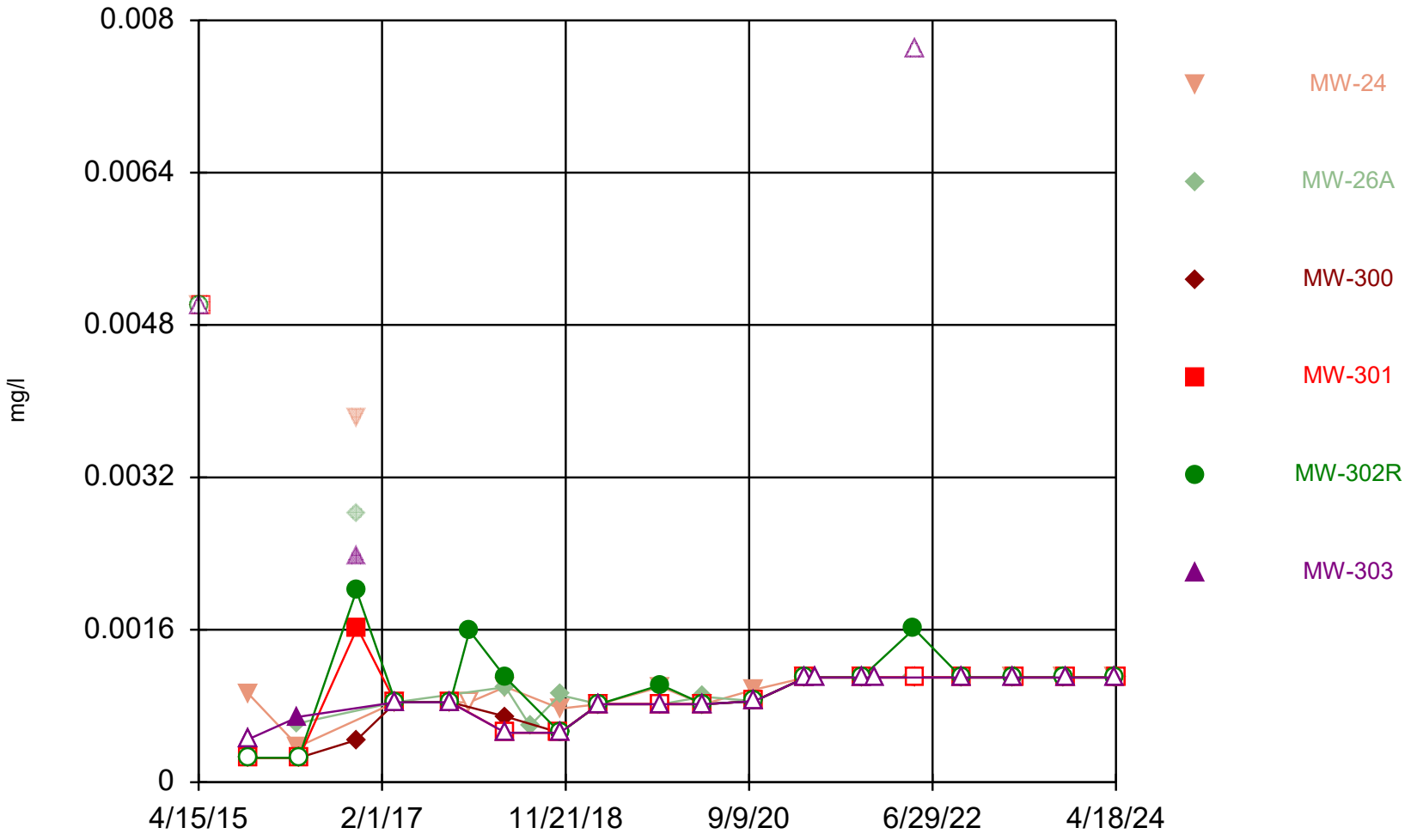
Time Series



Constituent: Vanadium Analysis Run 7/12/2024 1:55 PM View: App I_Metals
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

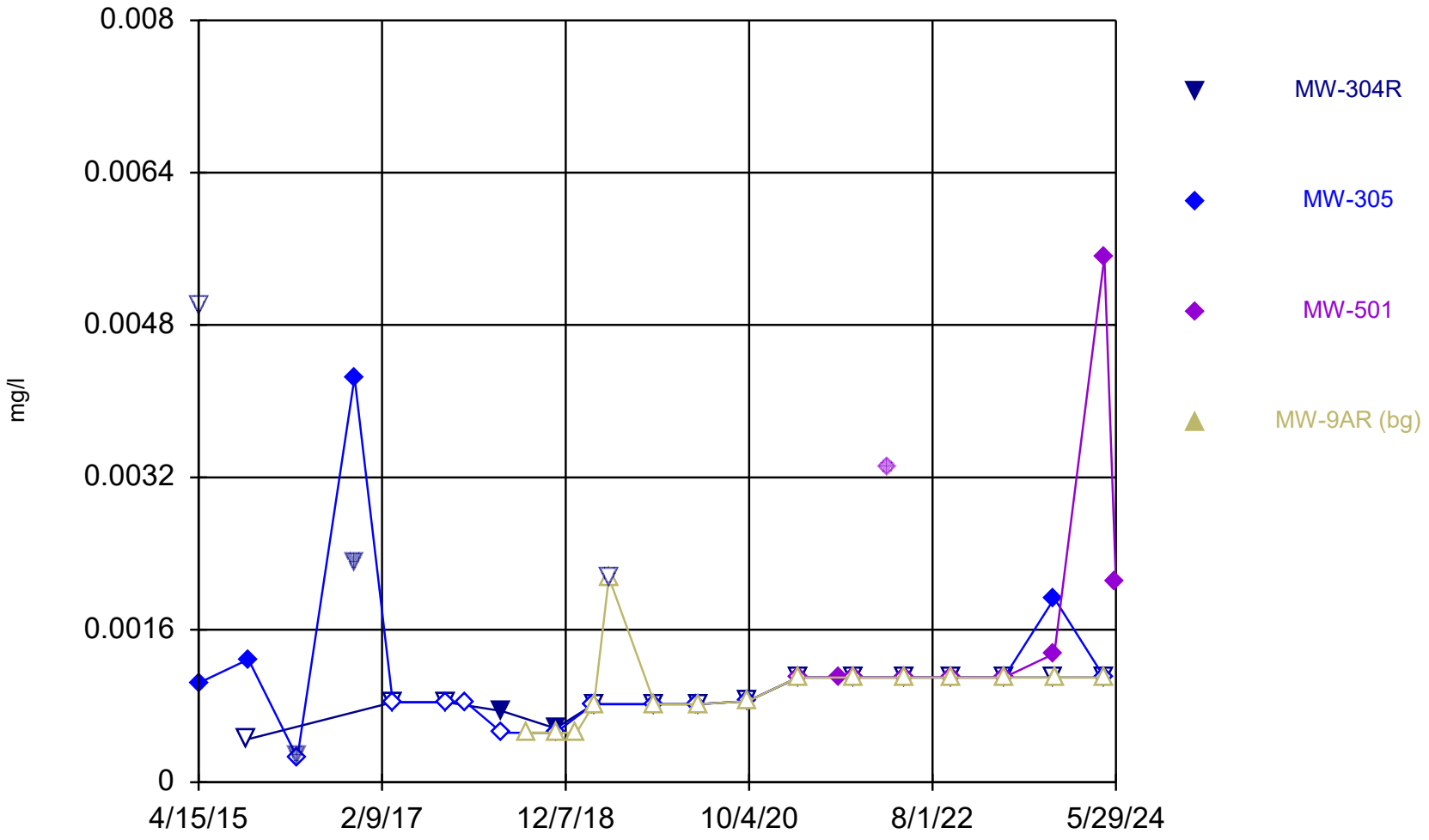


Constituent: Vanadium Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



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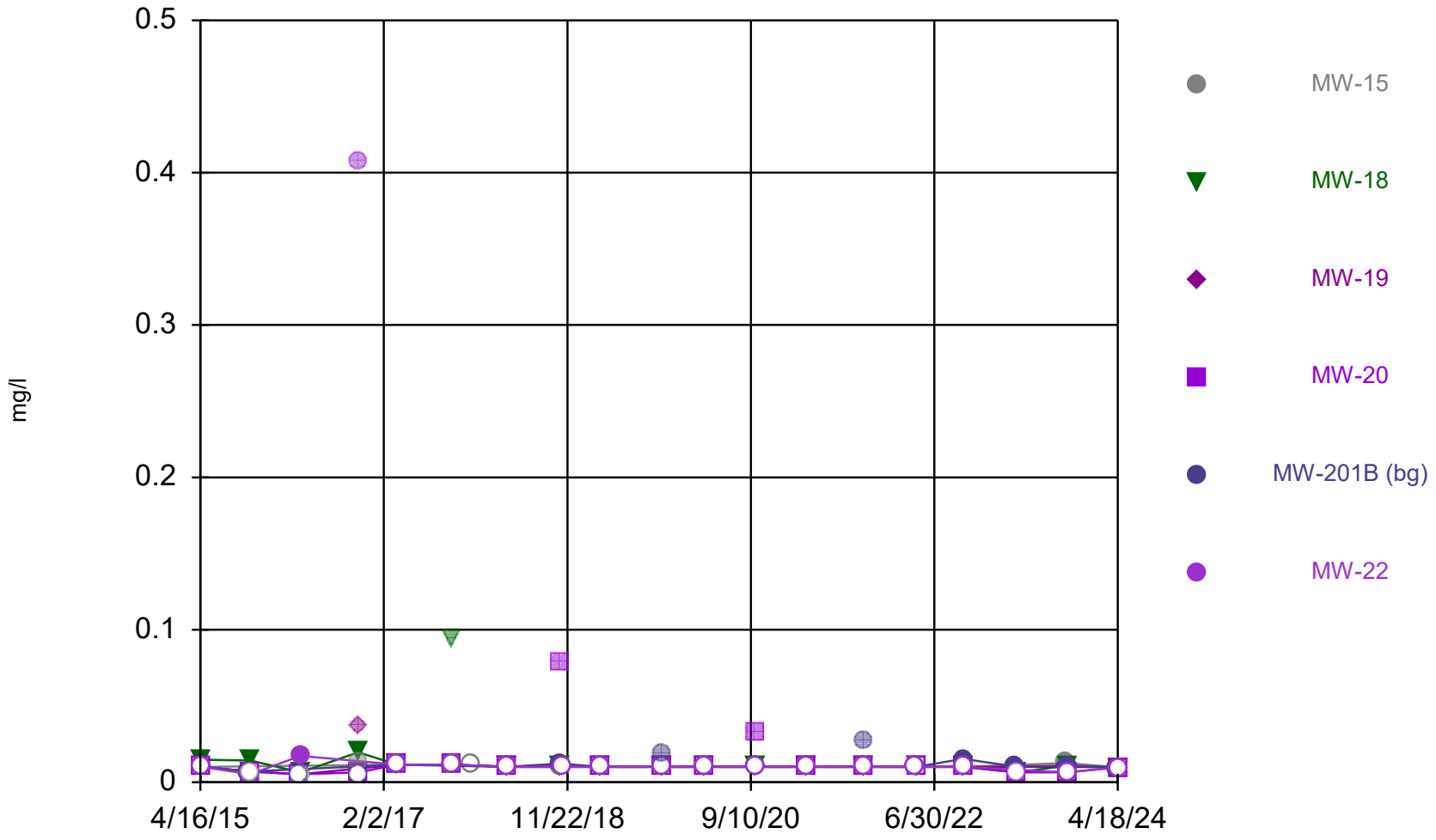
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

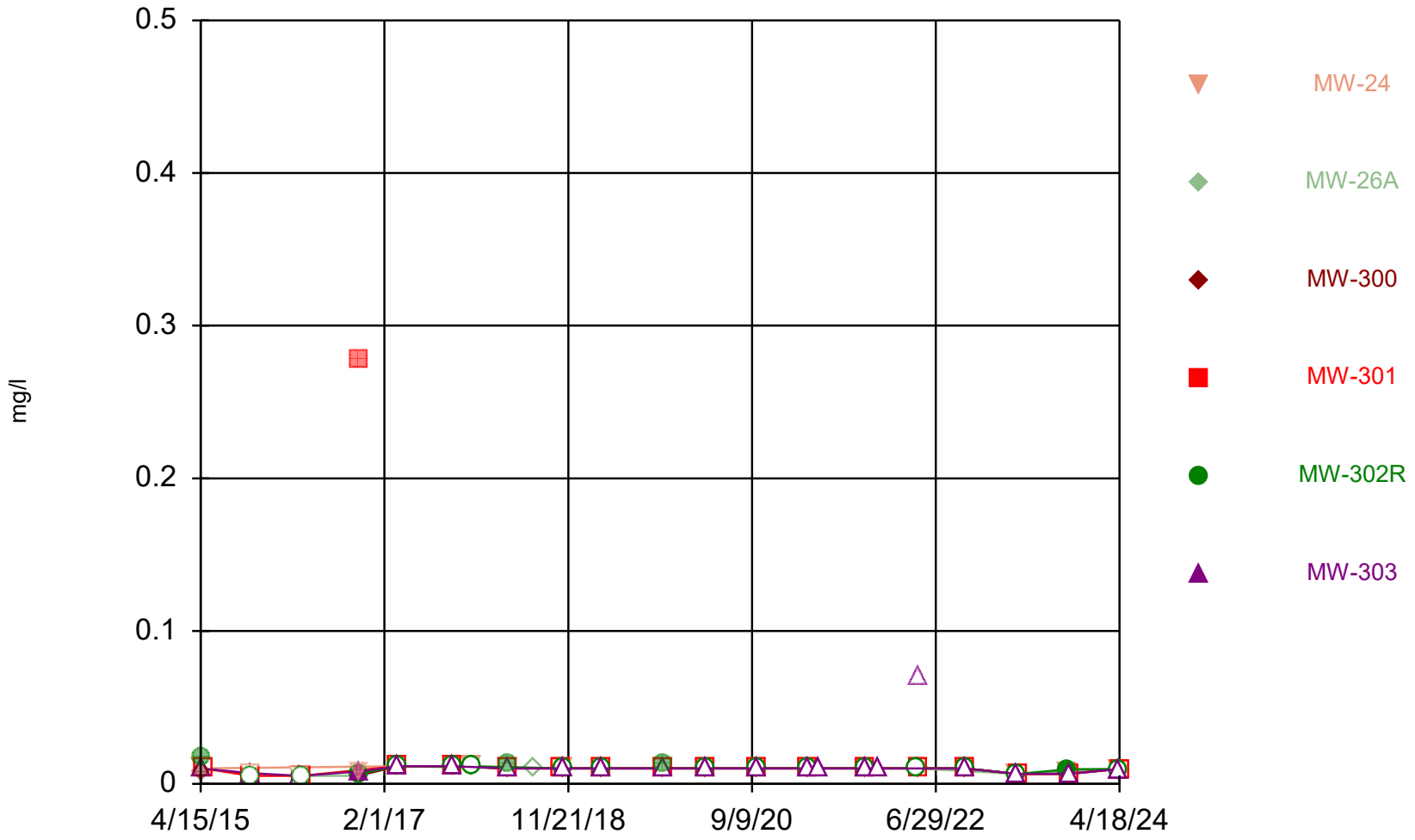


Constituent: Zinc Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



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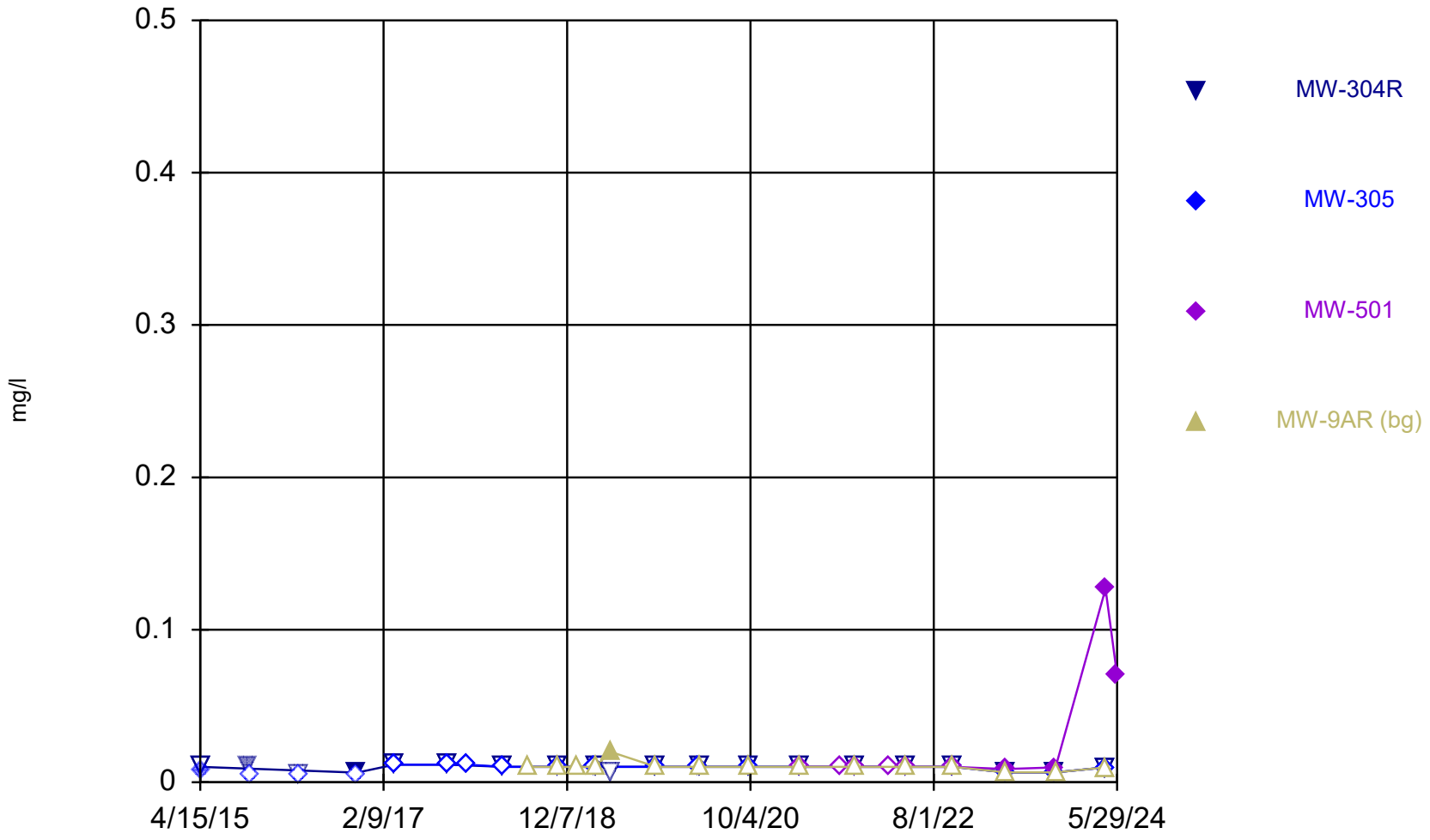
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



Constituent: Zinc Analysis Run 7/12/2024 1:55 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

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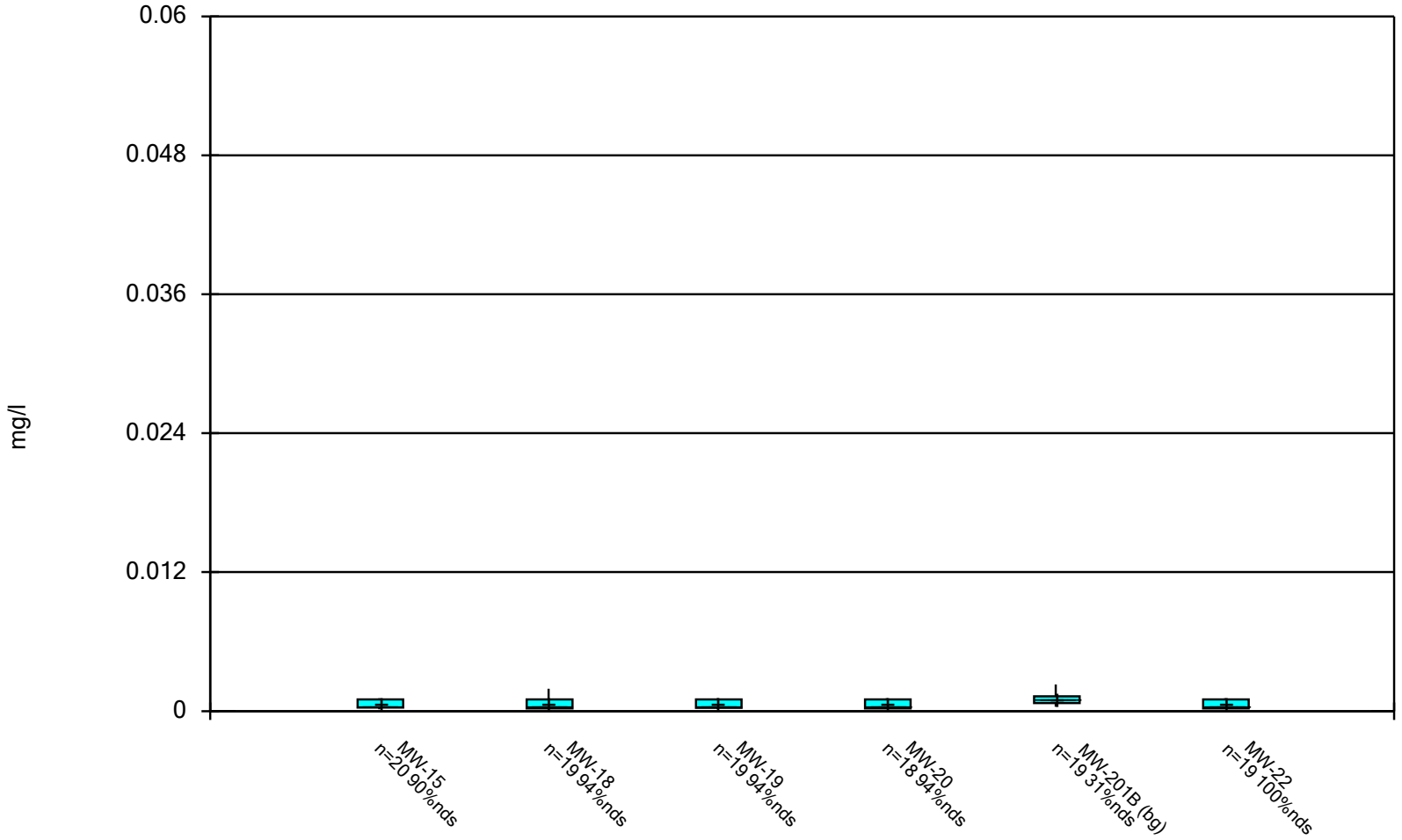
Monitoring Well Inorganic Box & Whiskers Plot – Spring 2024

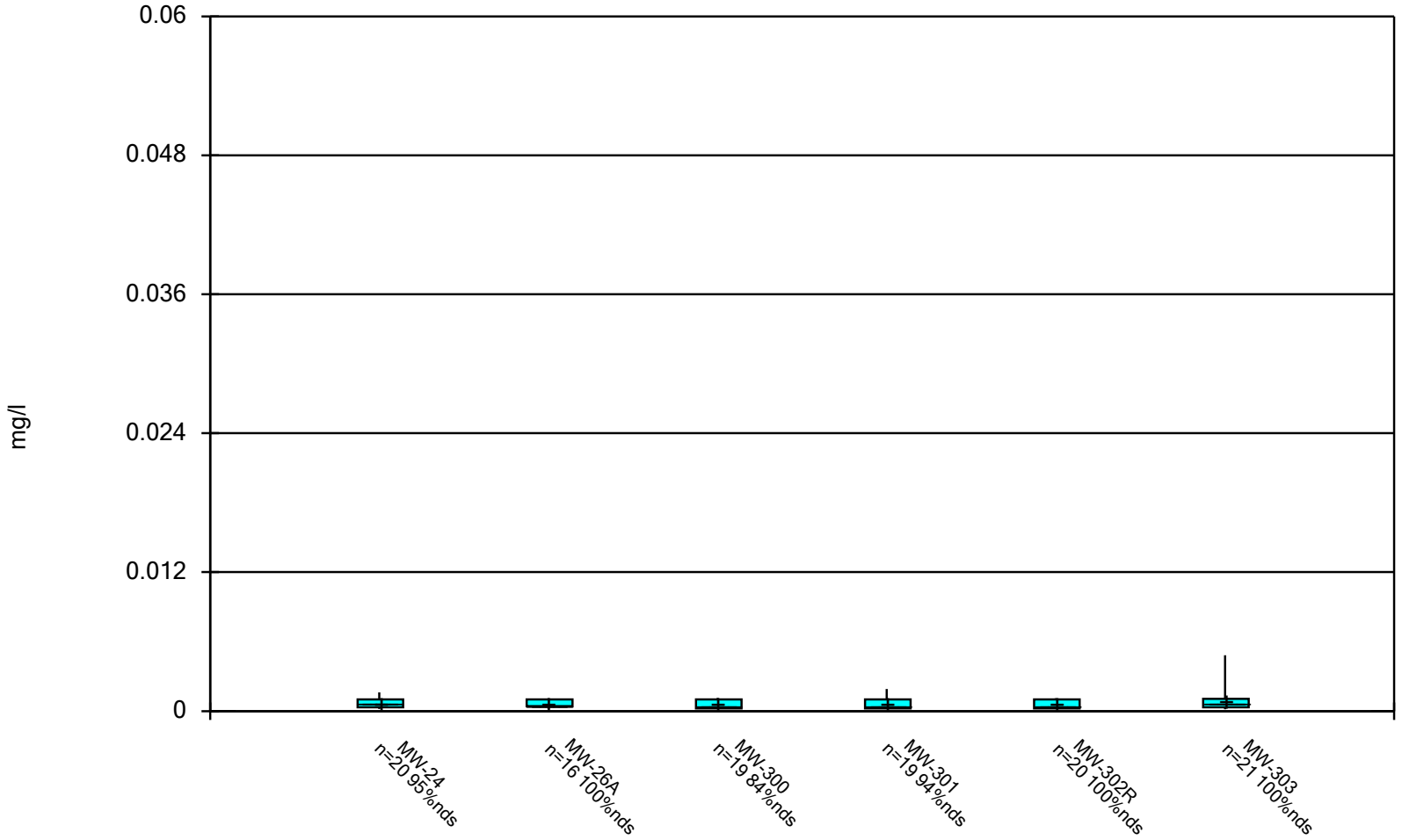
Box & Whiskers Plot



Constituent: Antimony Analysis Run 7/12/2024 2:02 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

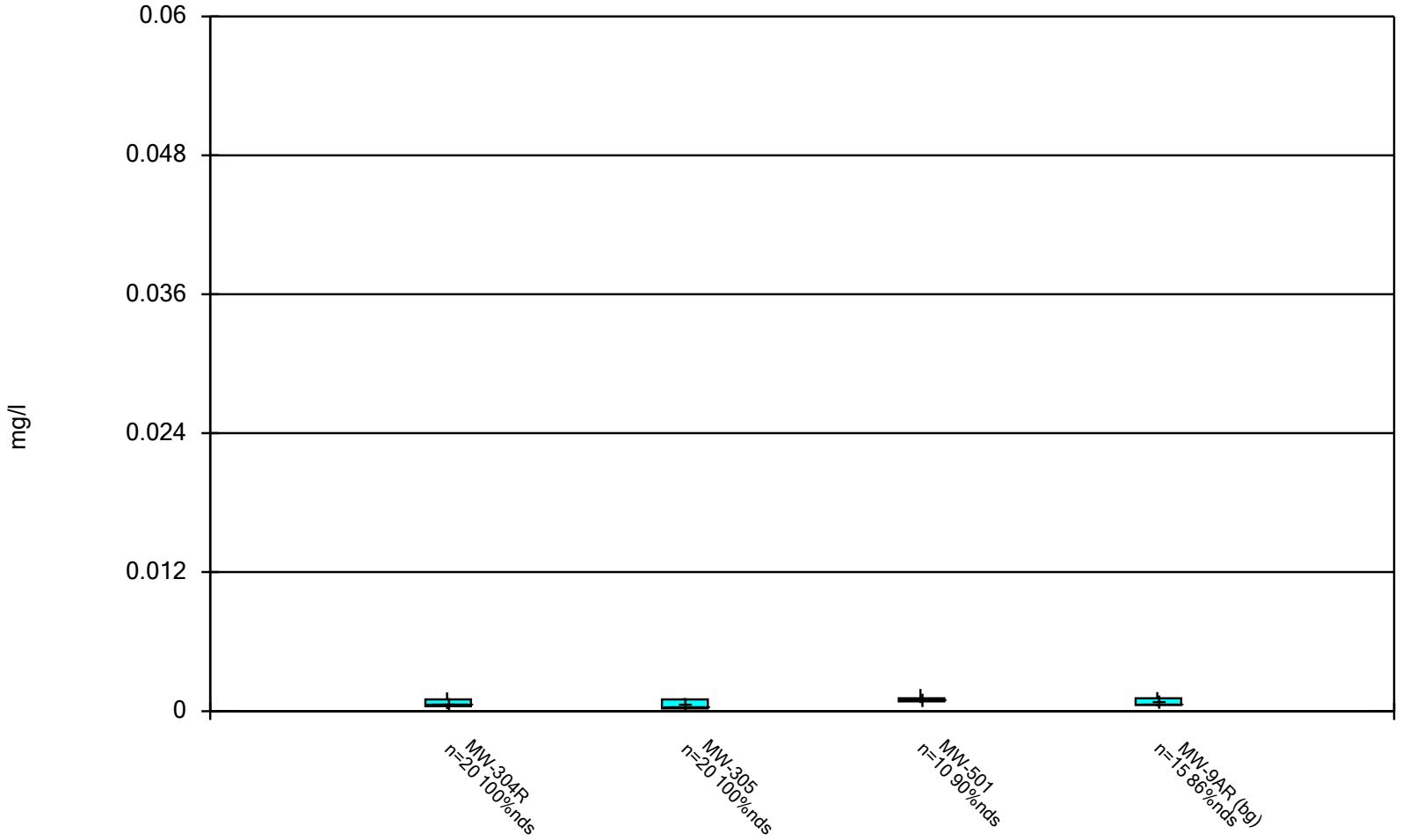
Box & Whiskers Plot



Constituent: Antimony Analysis Run 7/12/2024 2:02 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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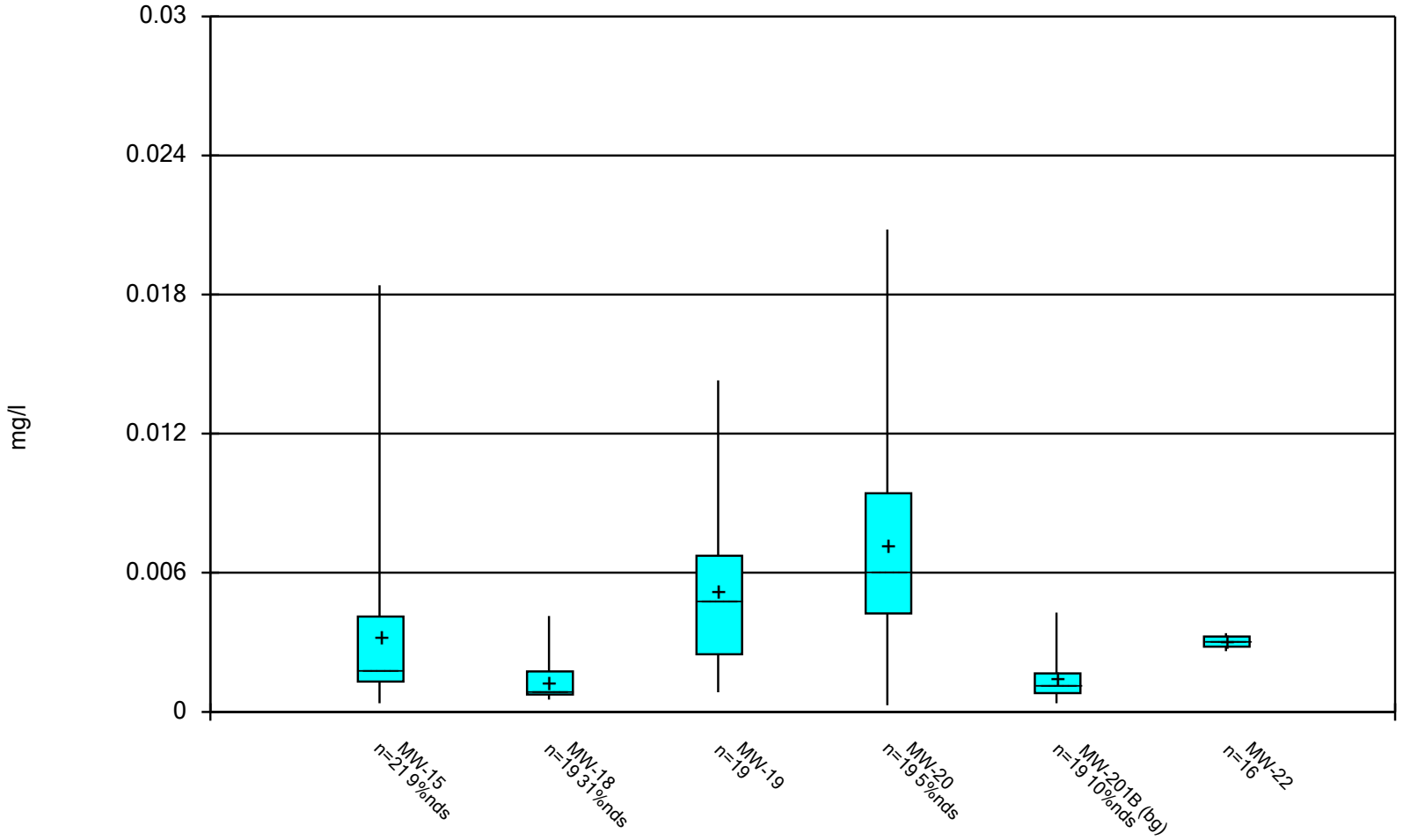
Linn County Data: CRLCSWA_Groundwater Database

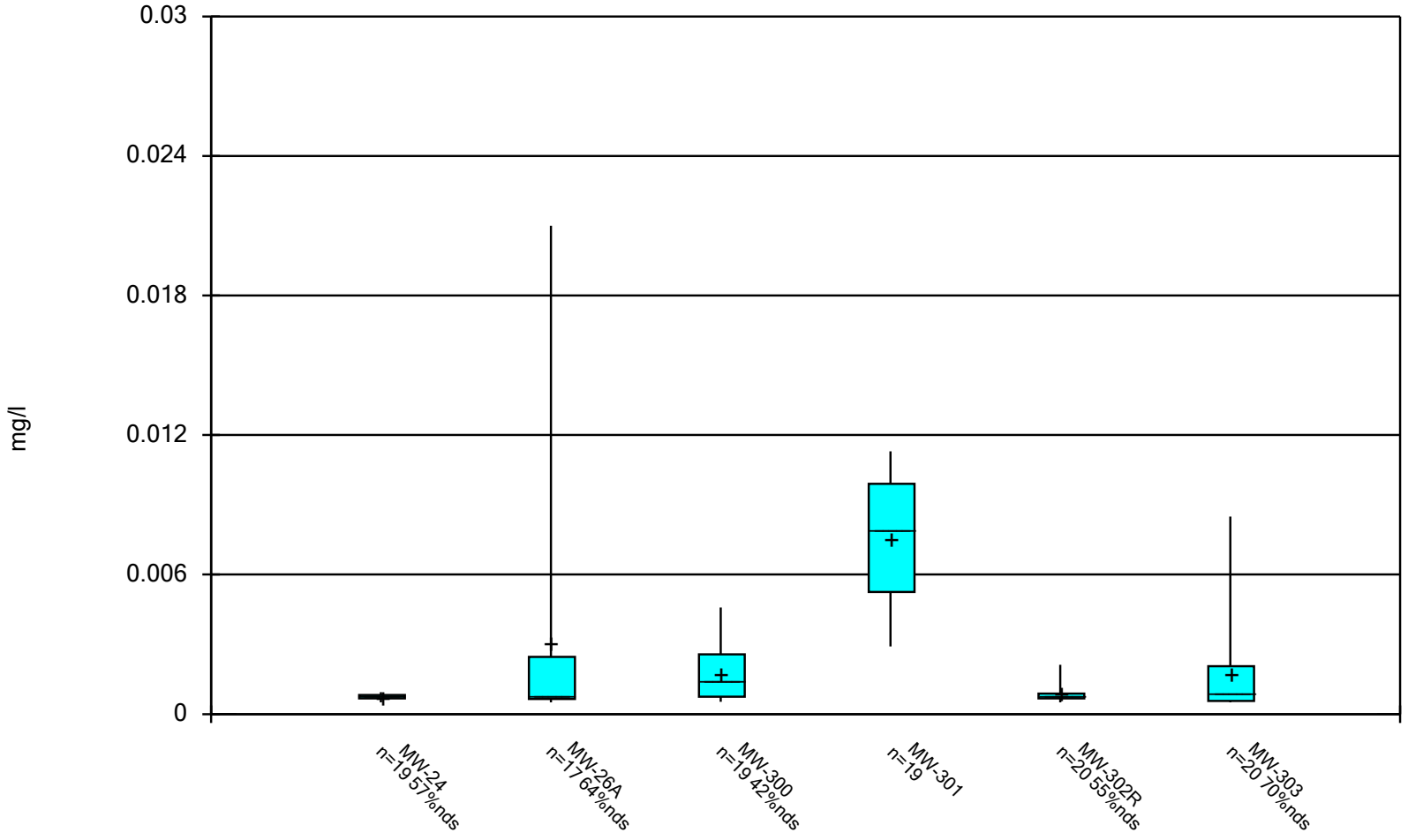
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 7/12/2024 2:02 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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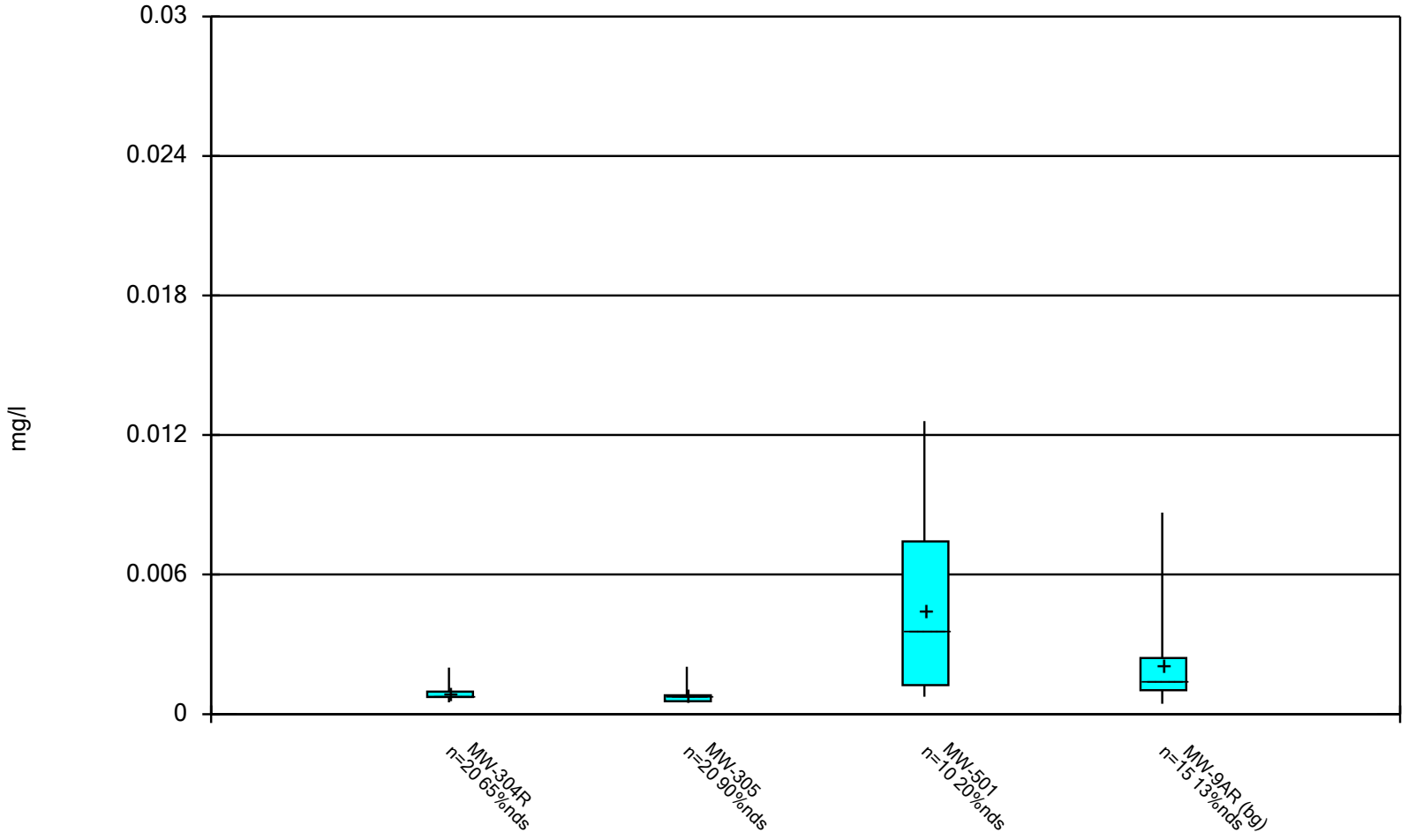
Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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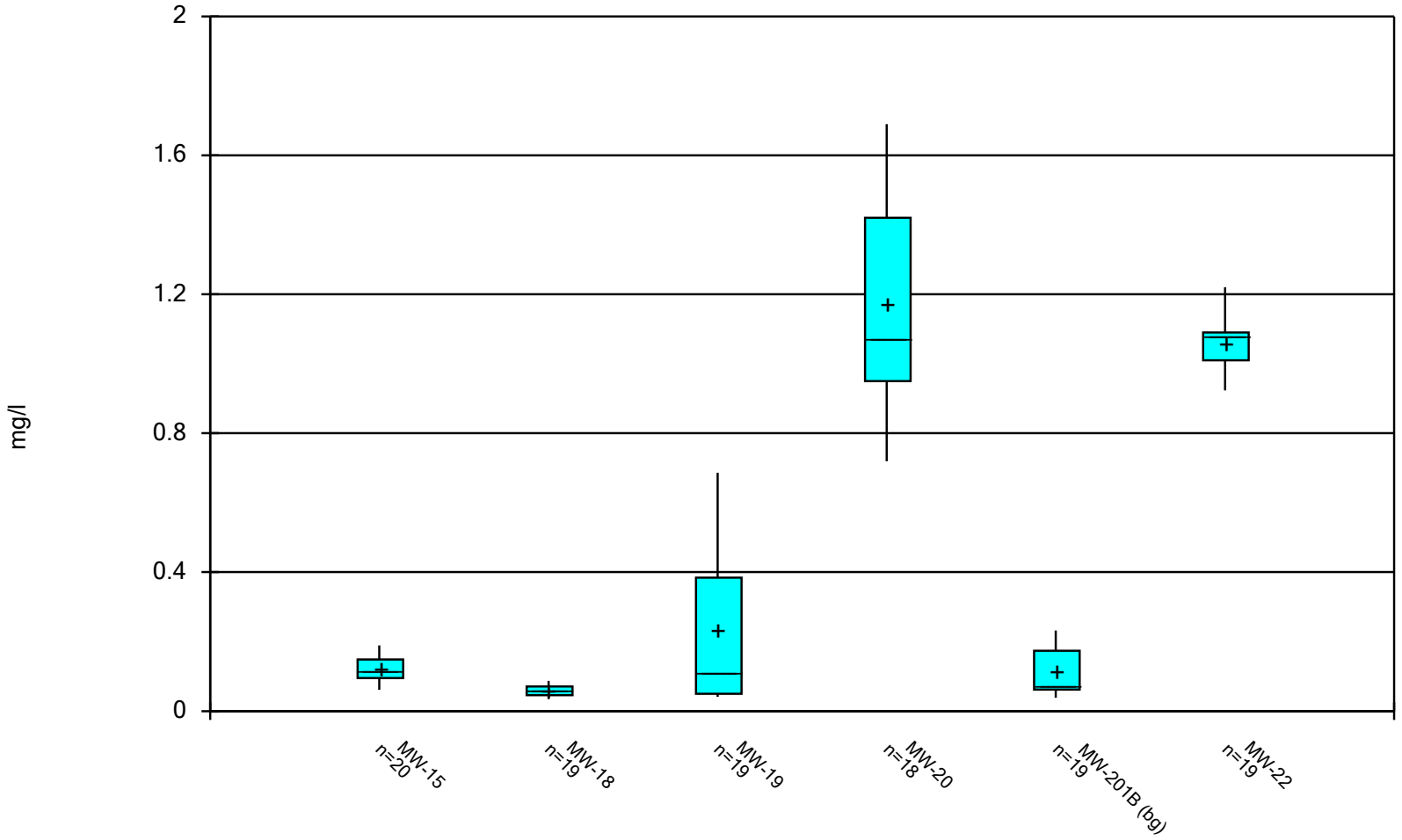
Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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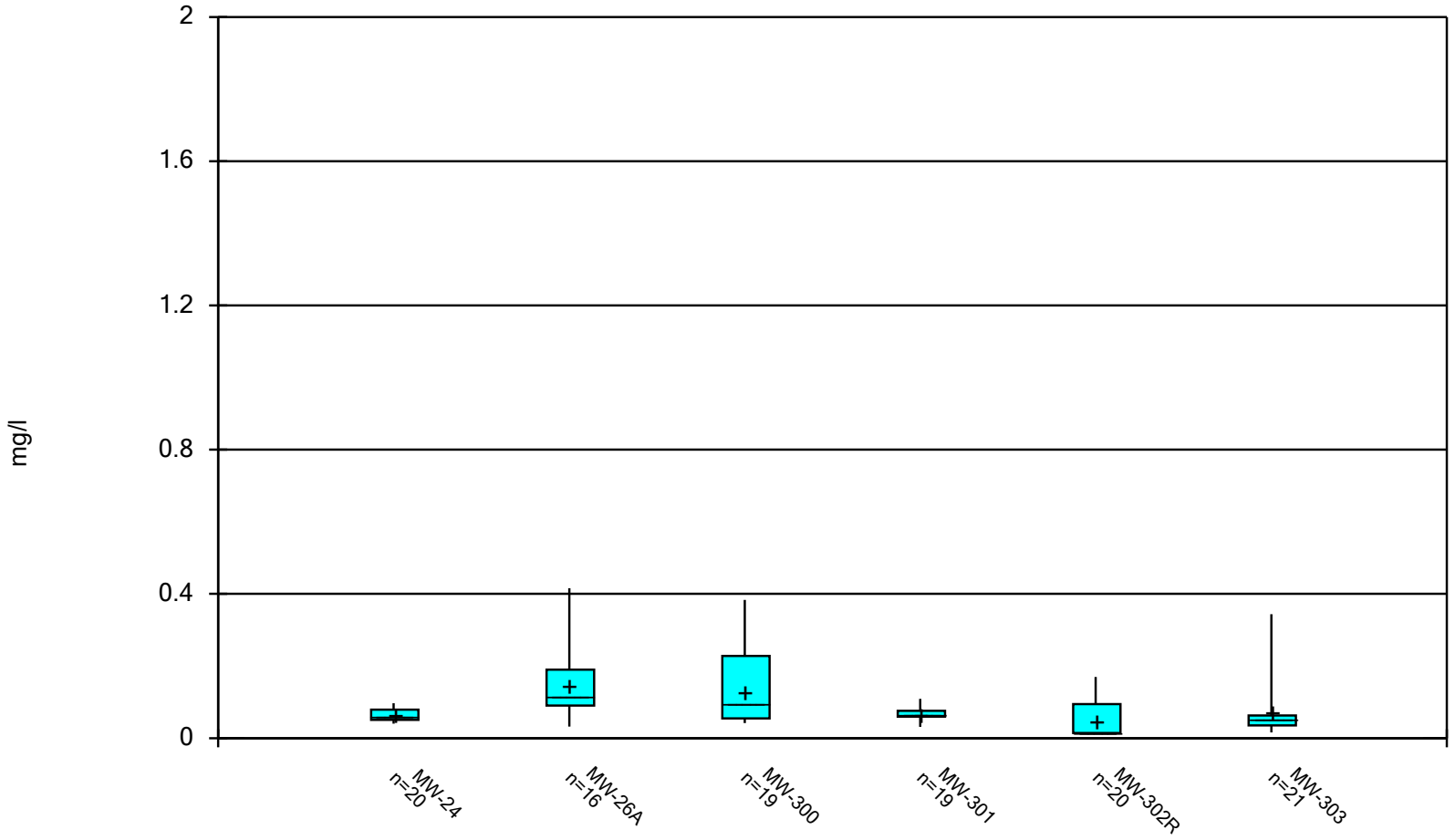
Box & Whiskers Plot



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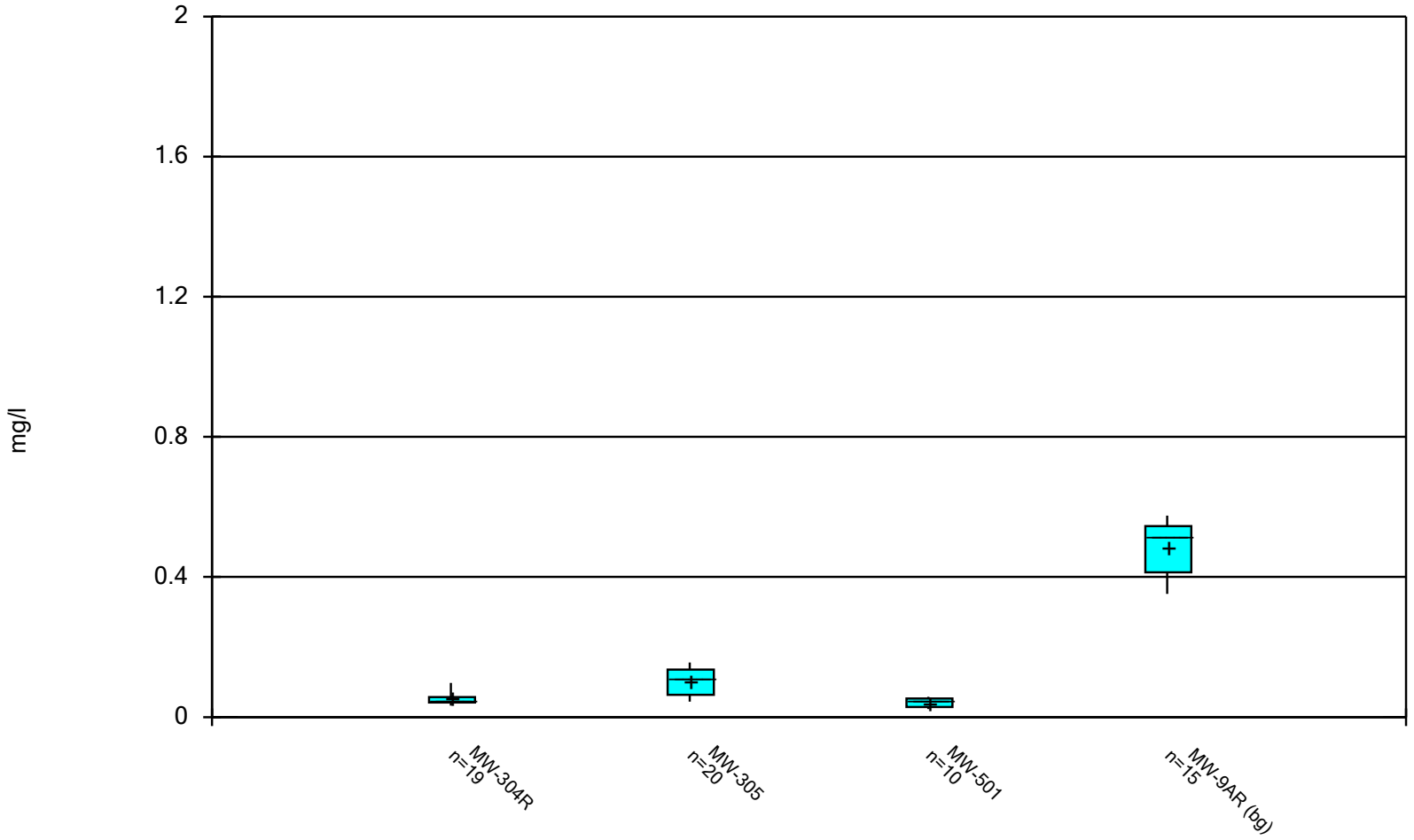
Linn County Data: CRLCSWA_Groundwater Database

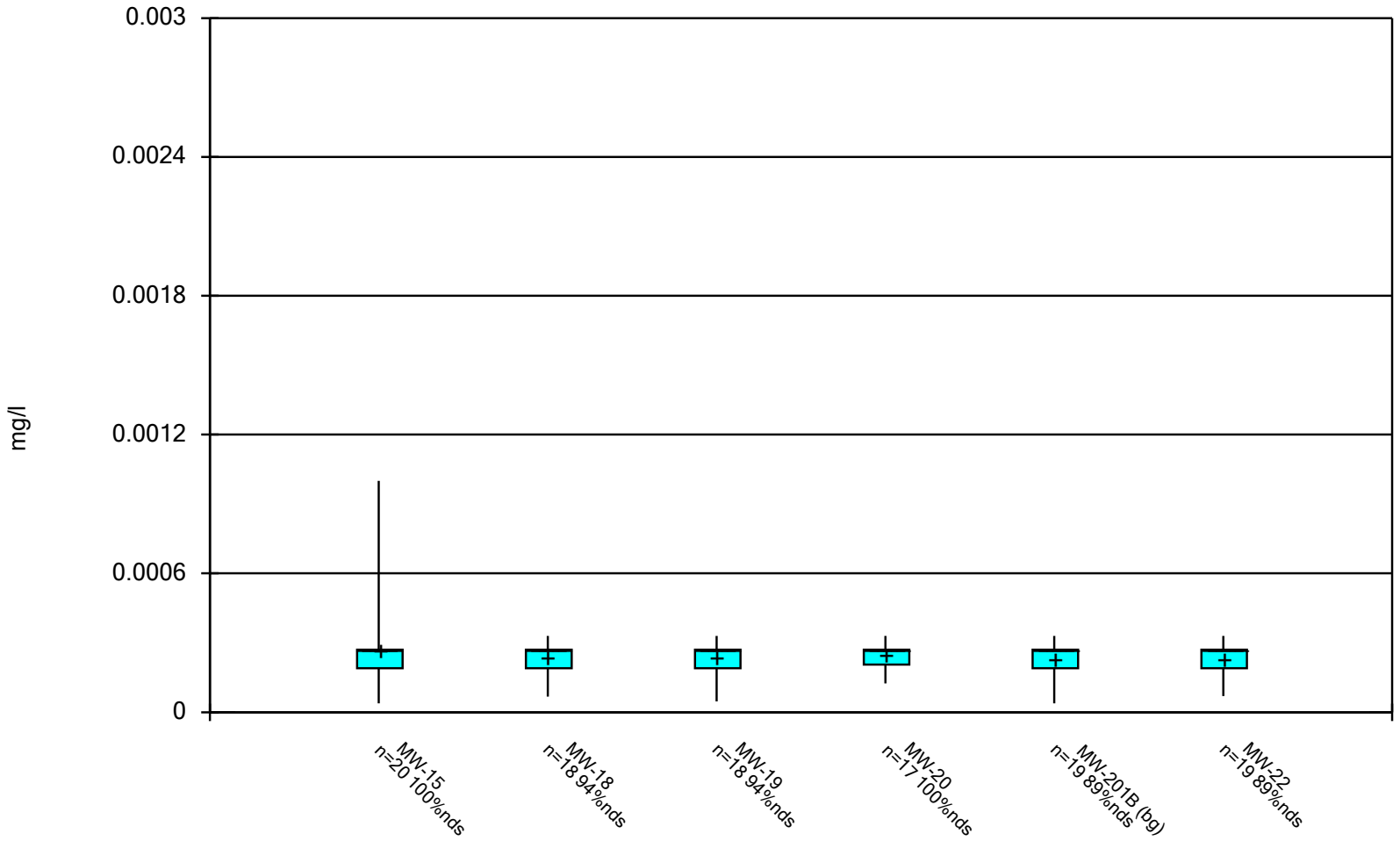
Box & Whiskers Plot



Constituent: Barium Analysis Run 7/12/2024 2:02 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

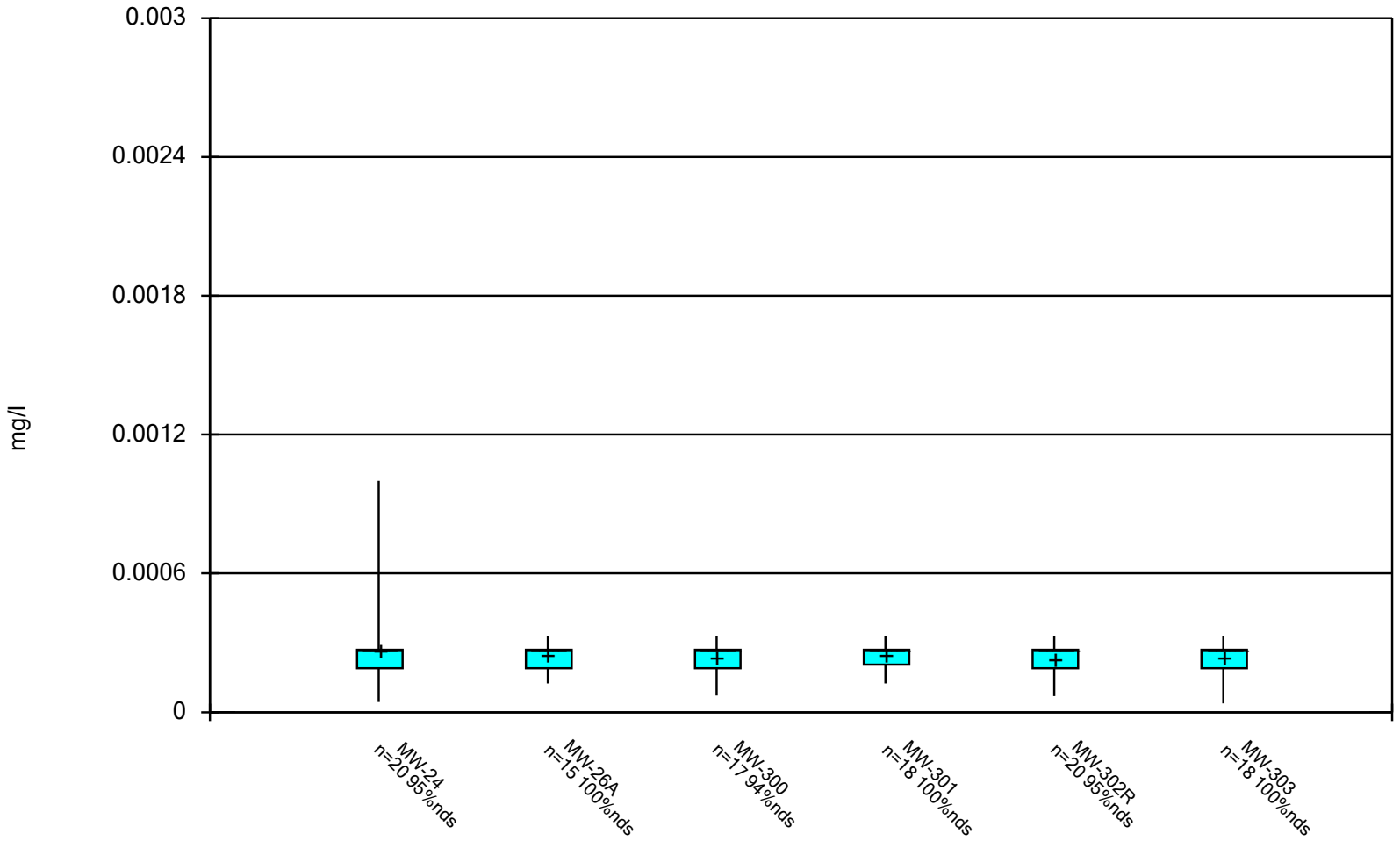
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 7/12/2024 2:02 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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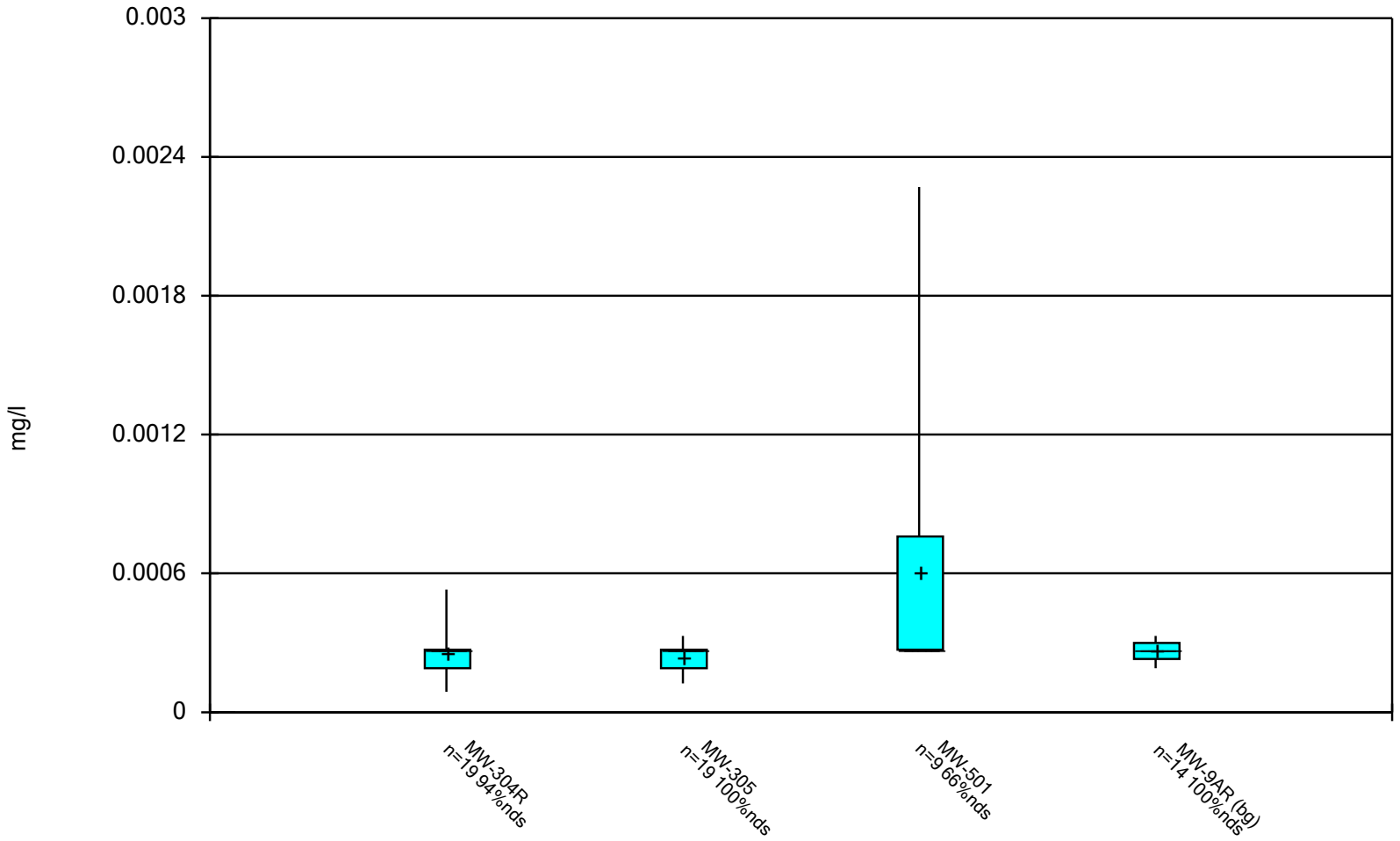
Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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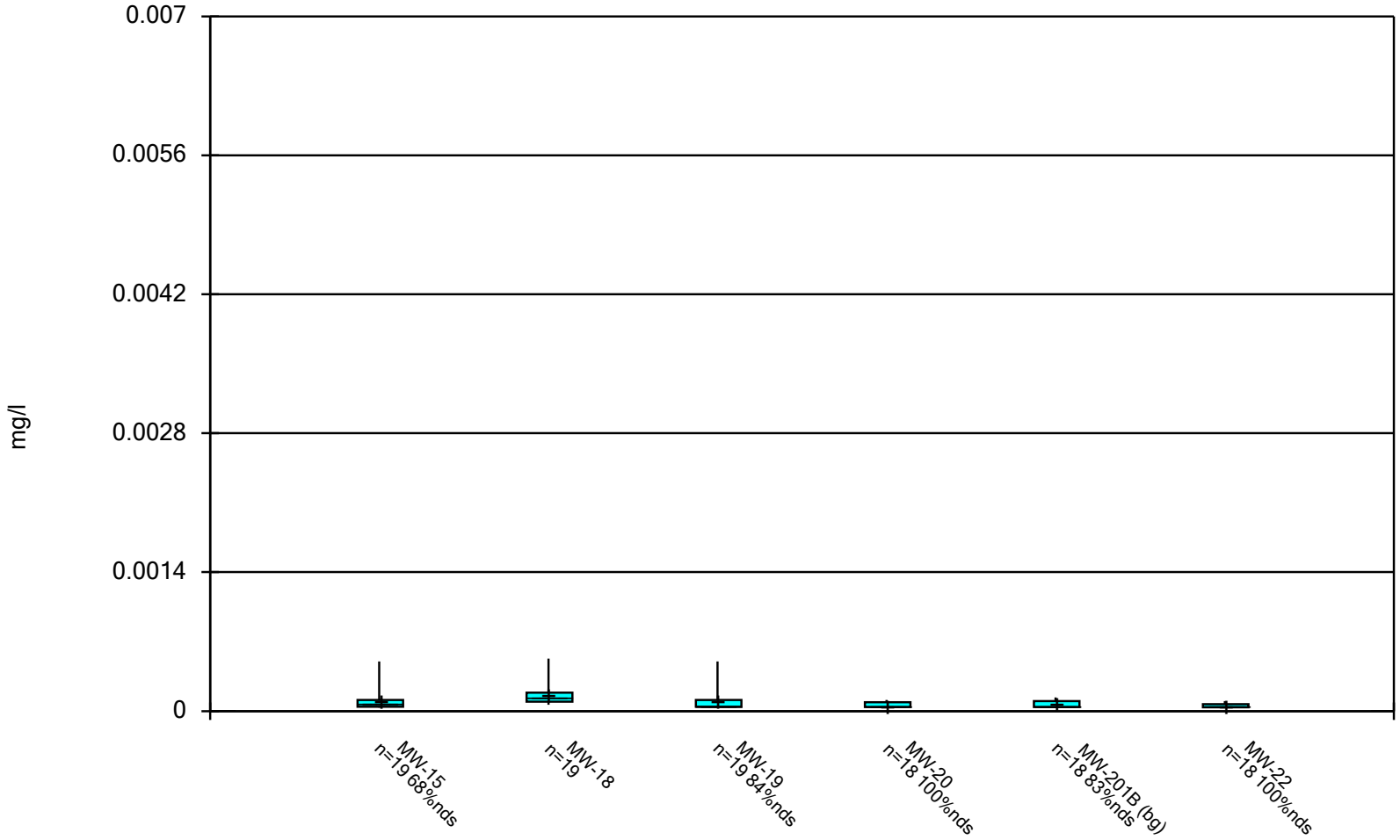
Linn County Data: CRLCSWA_Groundwater Database

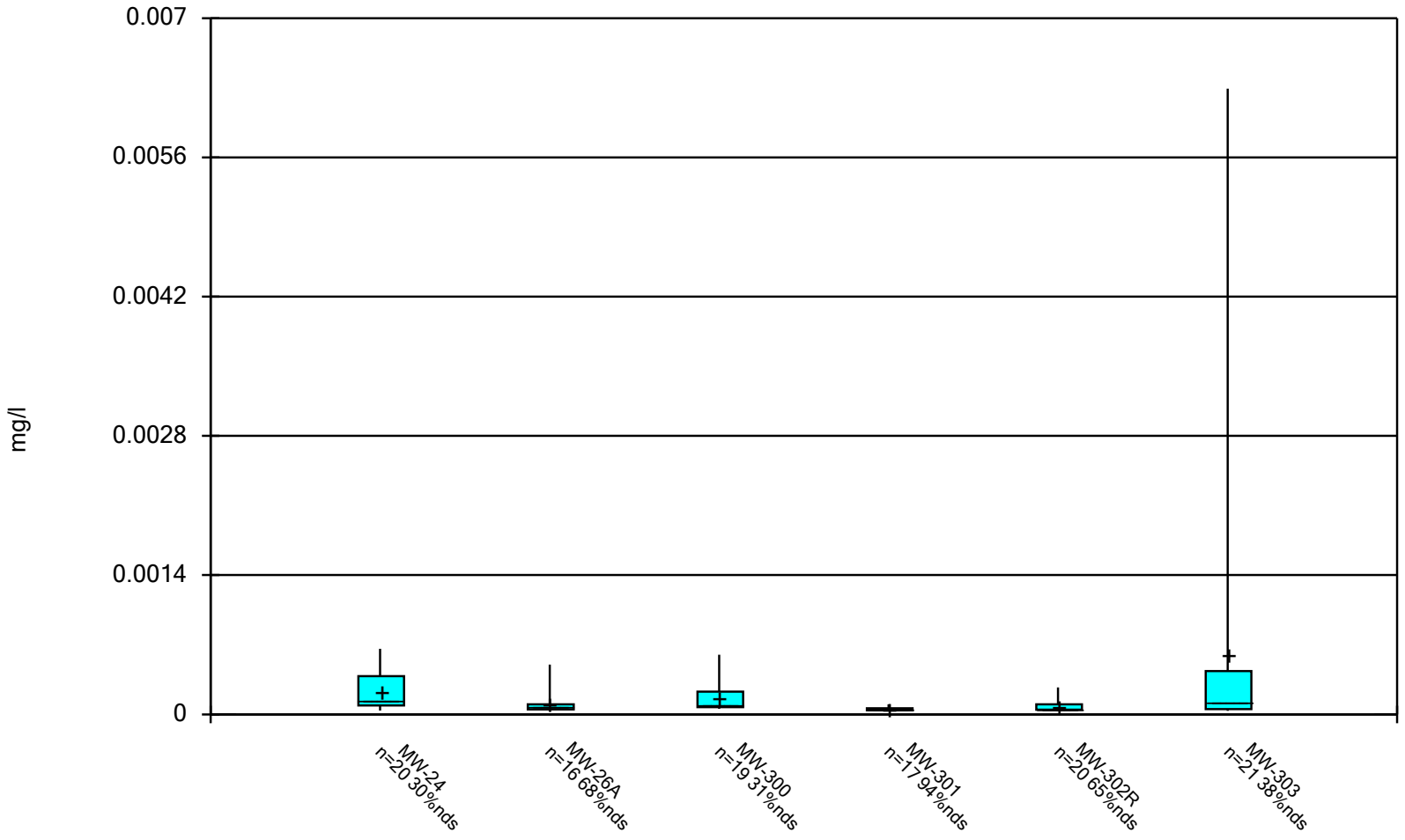
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 7/12/2024 2:02 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

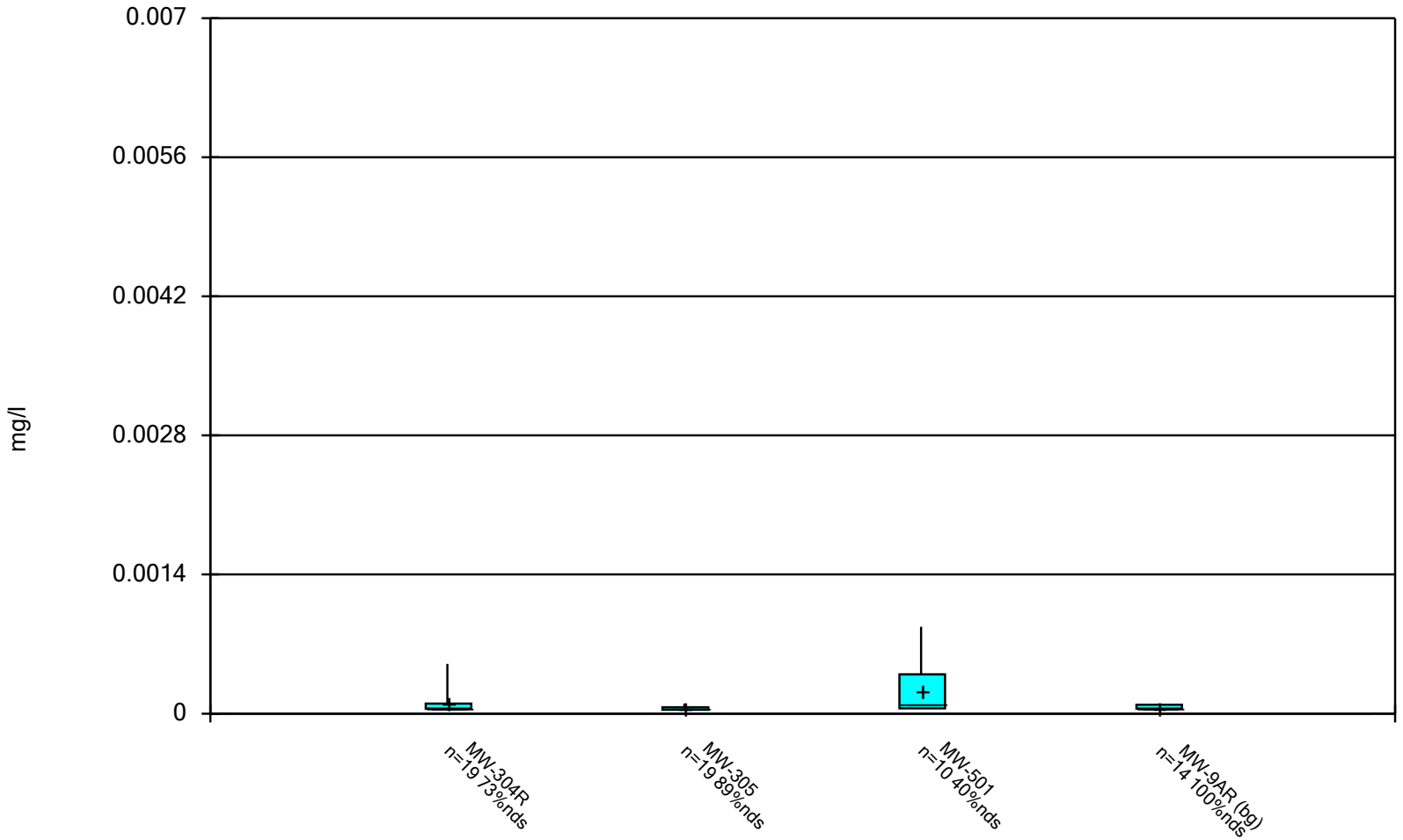
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 7/12/2024 2:02 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

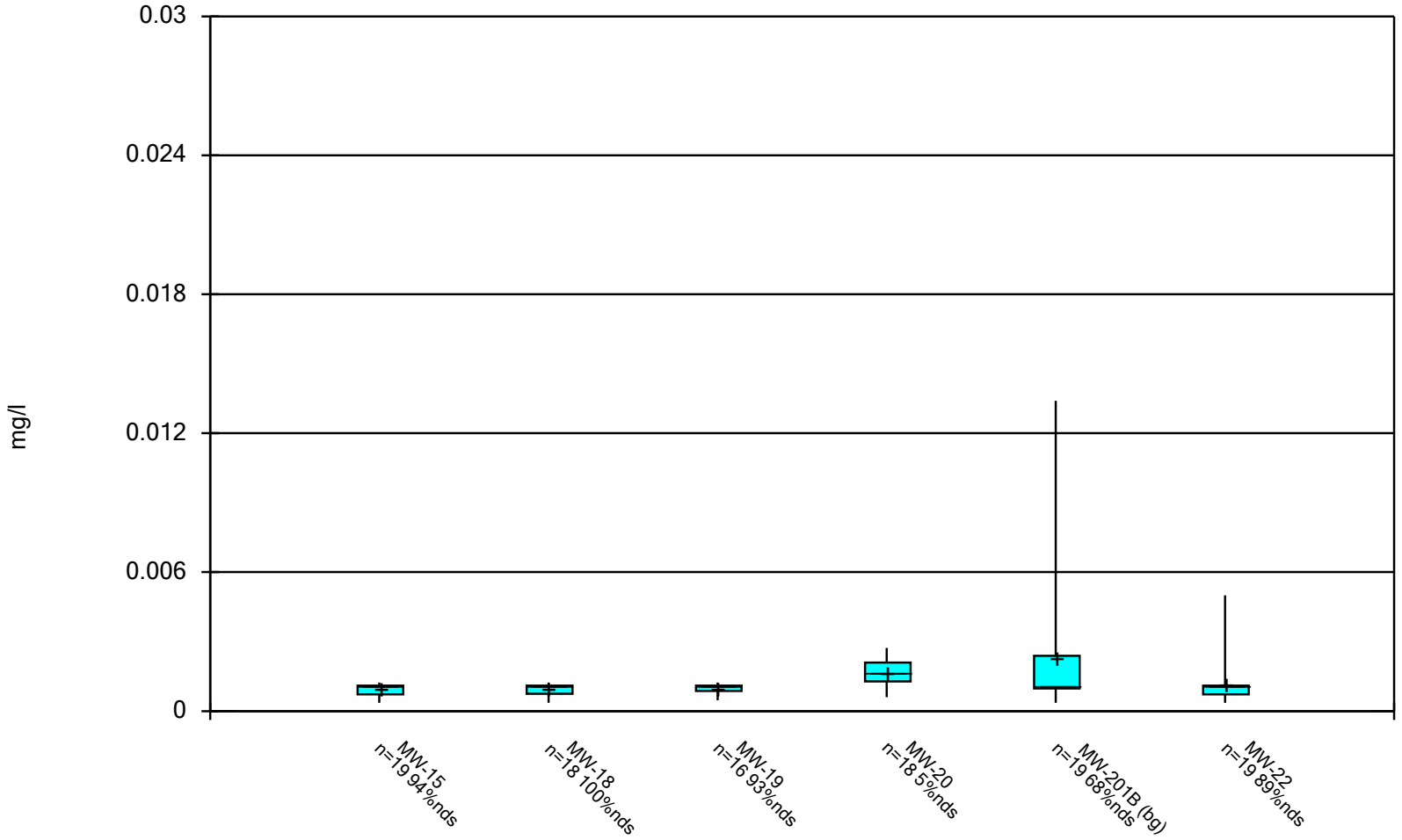
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 7/12/2024 2:02 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

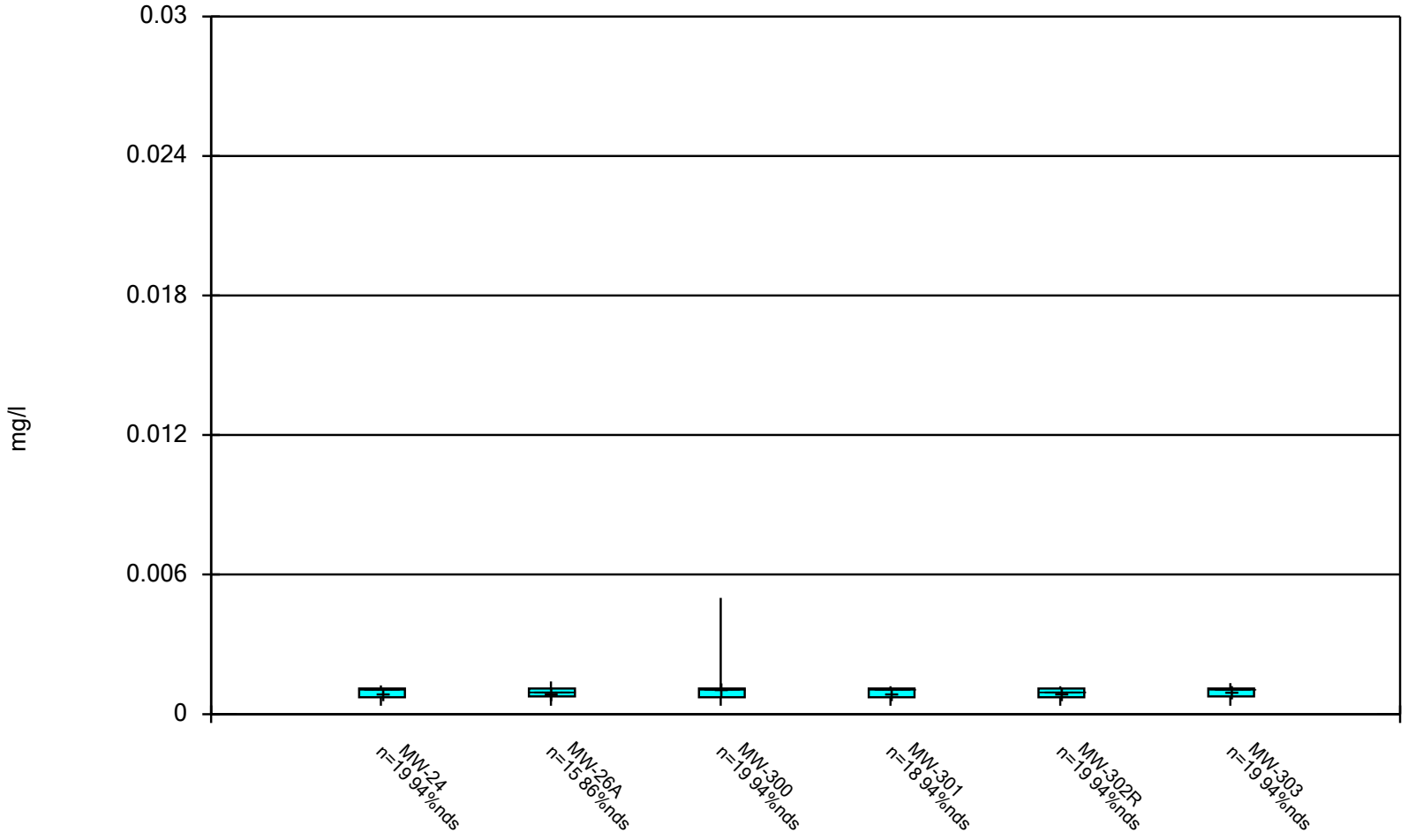
Box & Whiskers Plot



Constituent: Chromium Analysis Run 7/12/2024 2:02 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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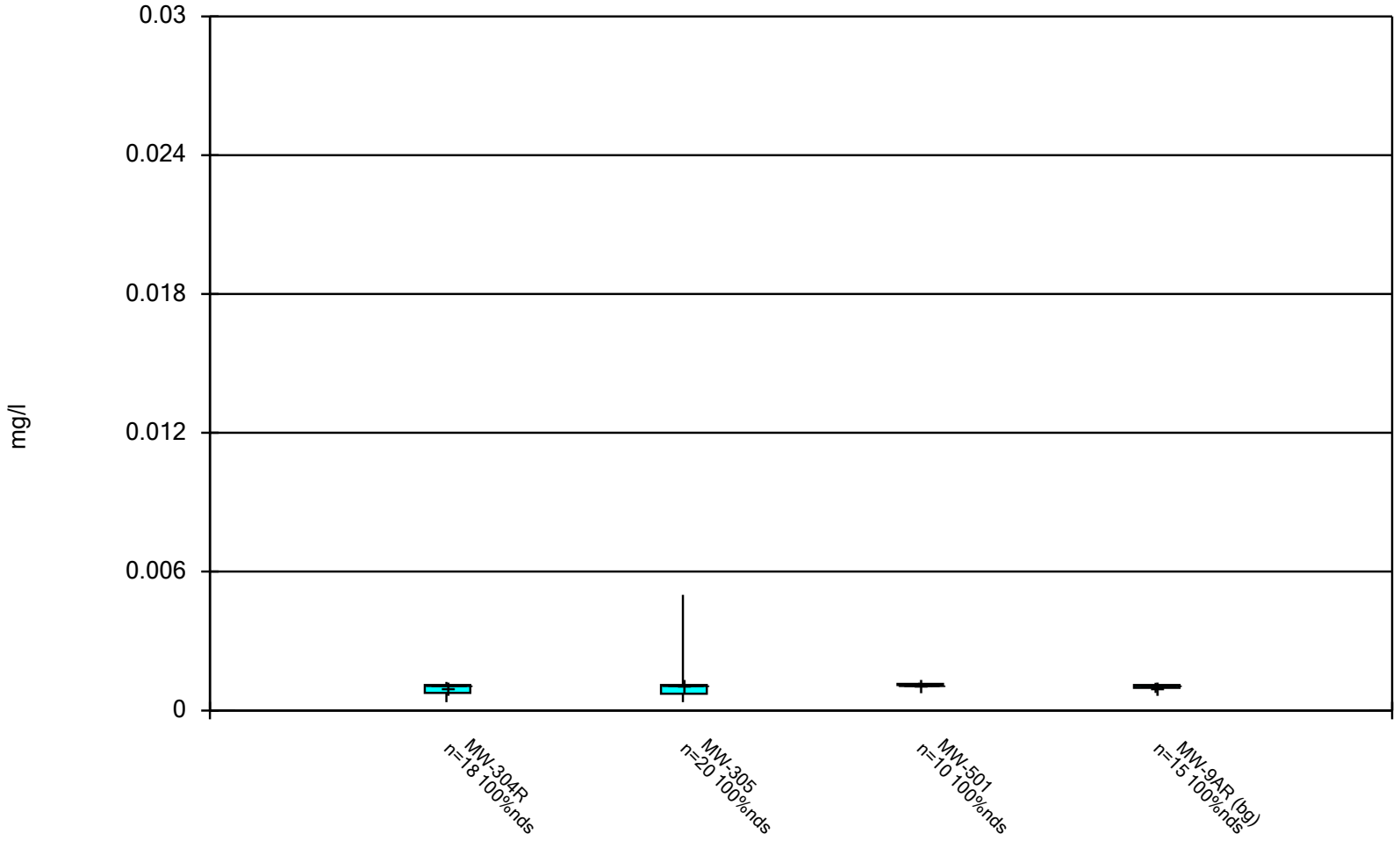
Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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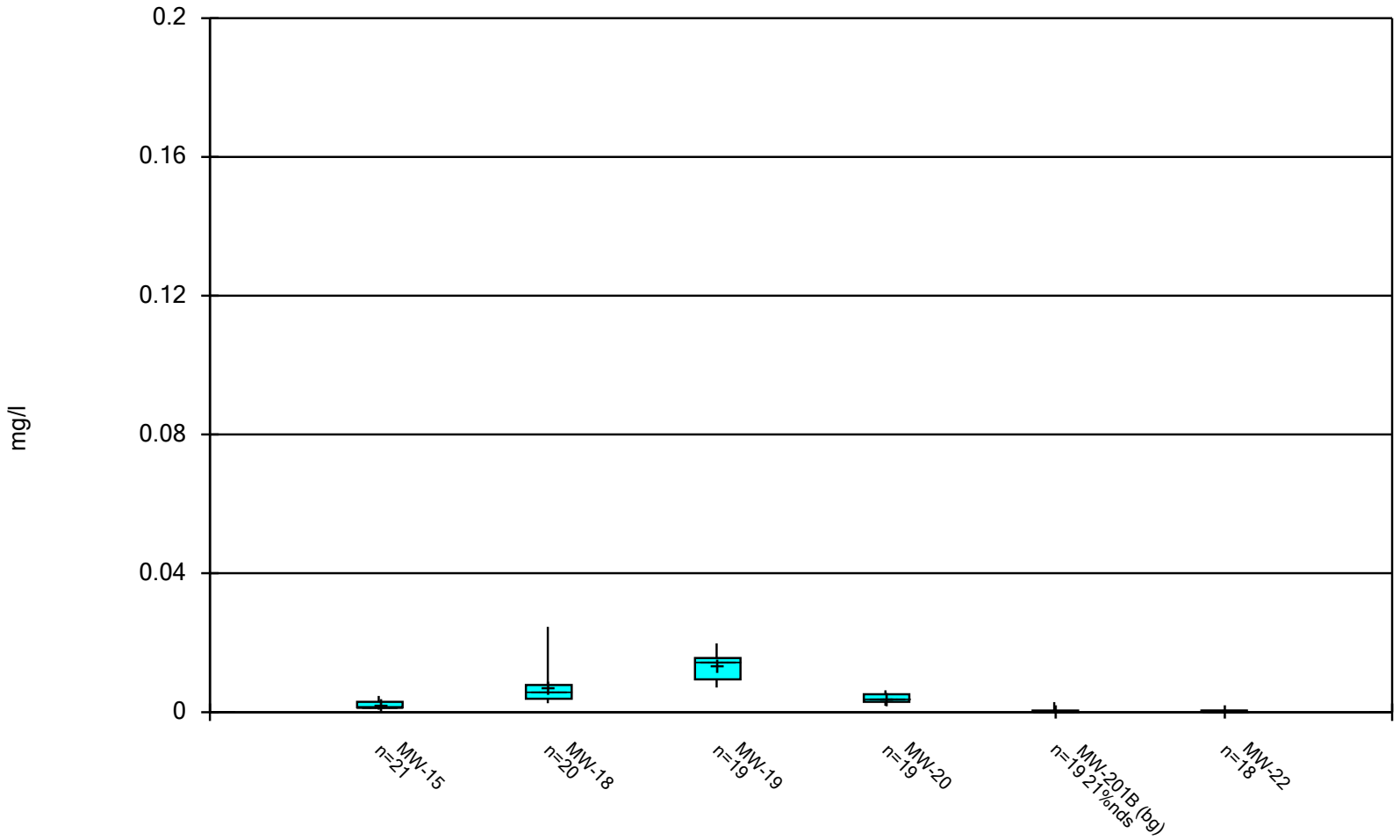
Linn County Data: CRLCSWA_Groundwater Database

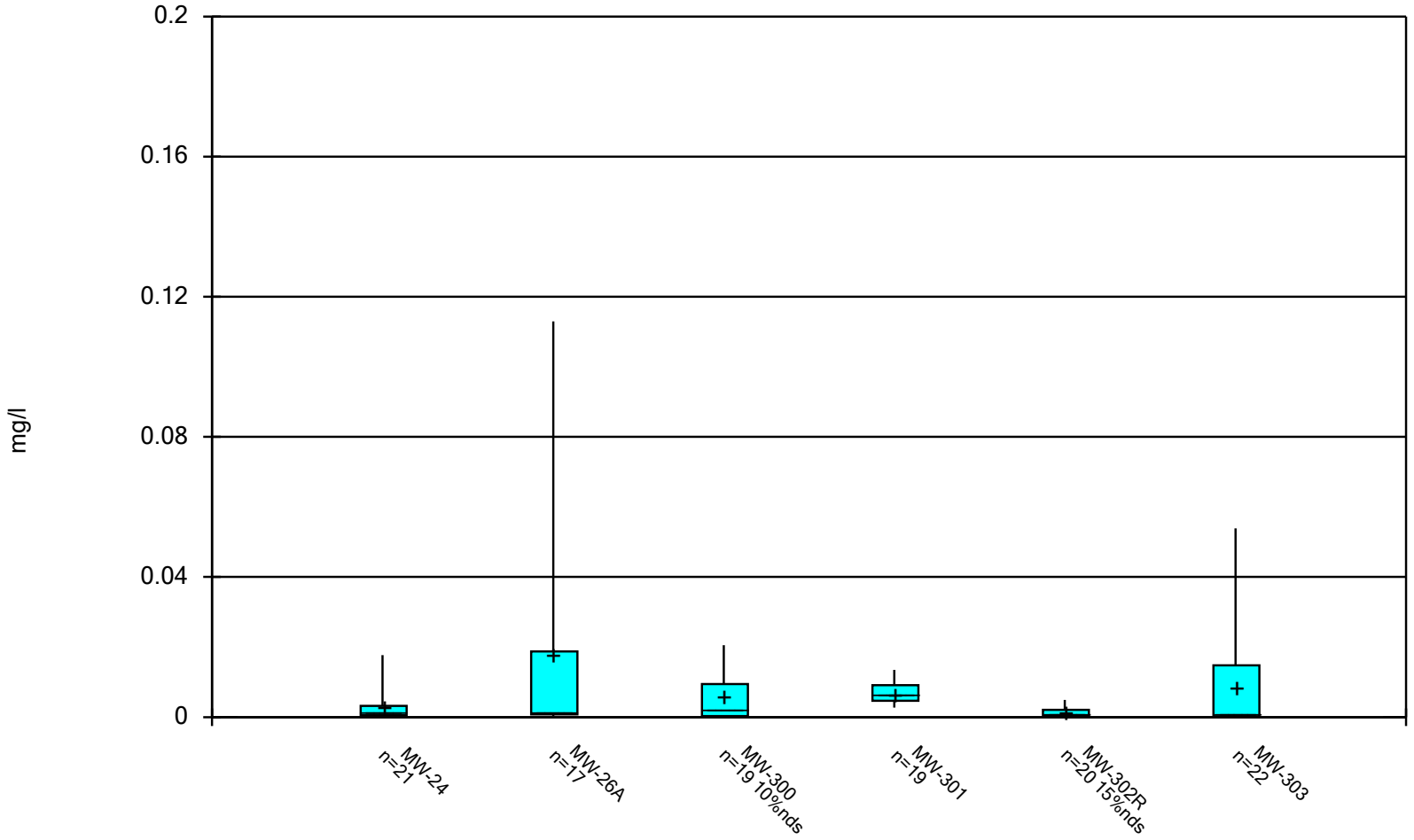
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 7/12/2024 2:02 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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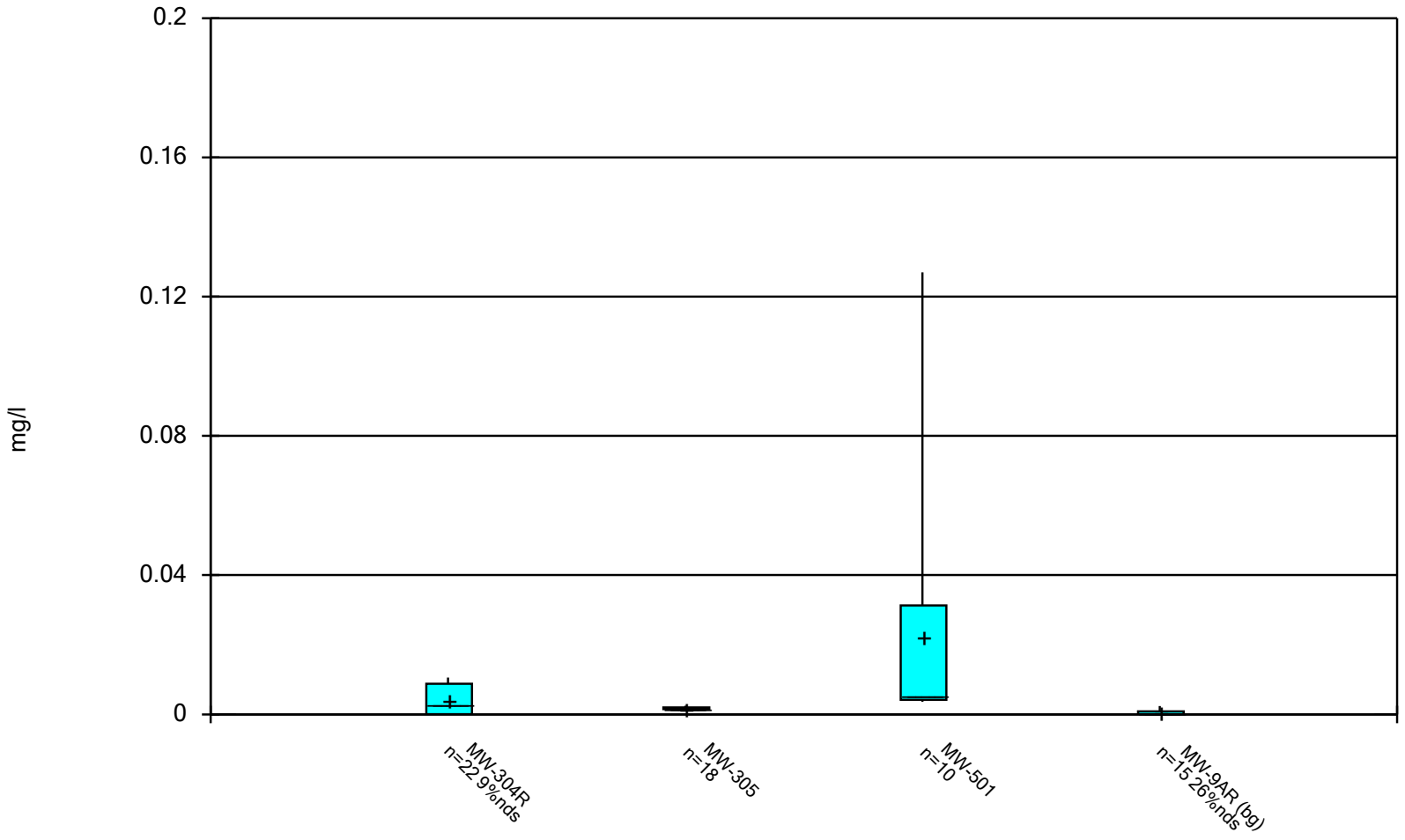
Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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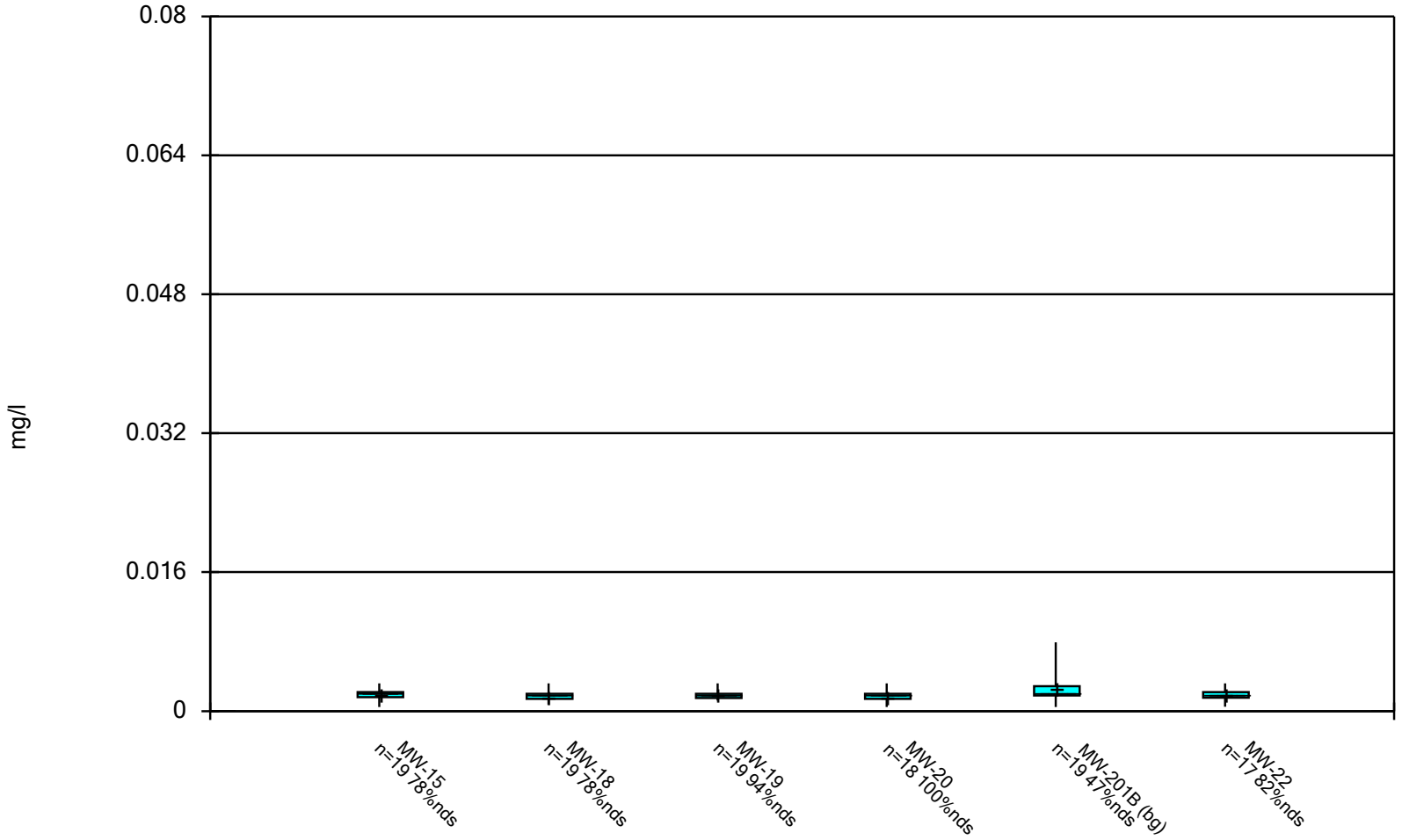
Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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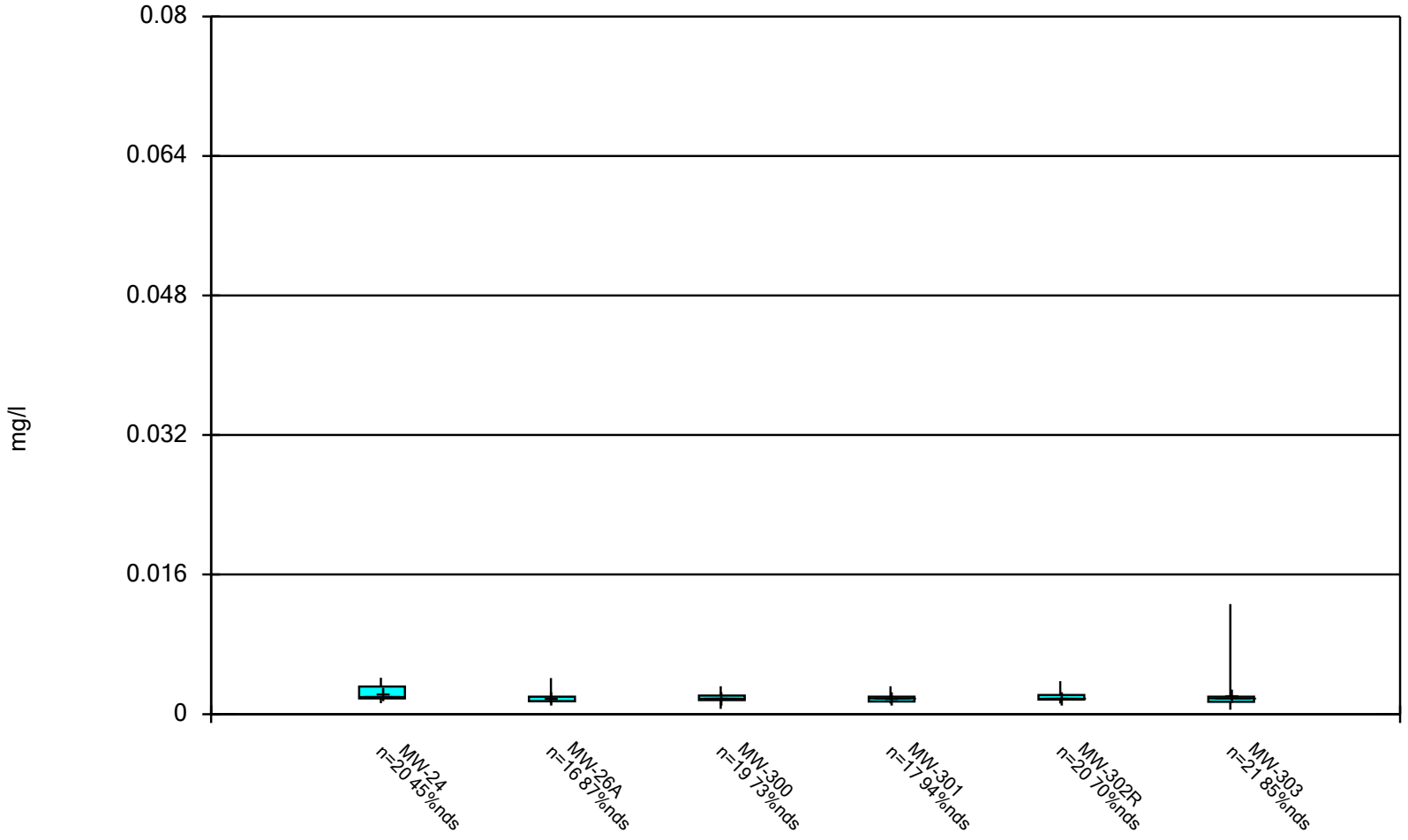
Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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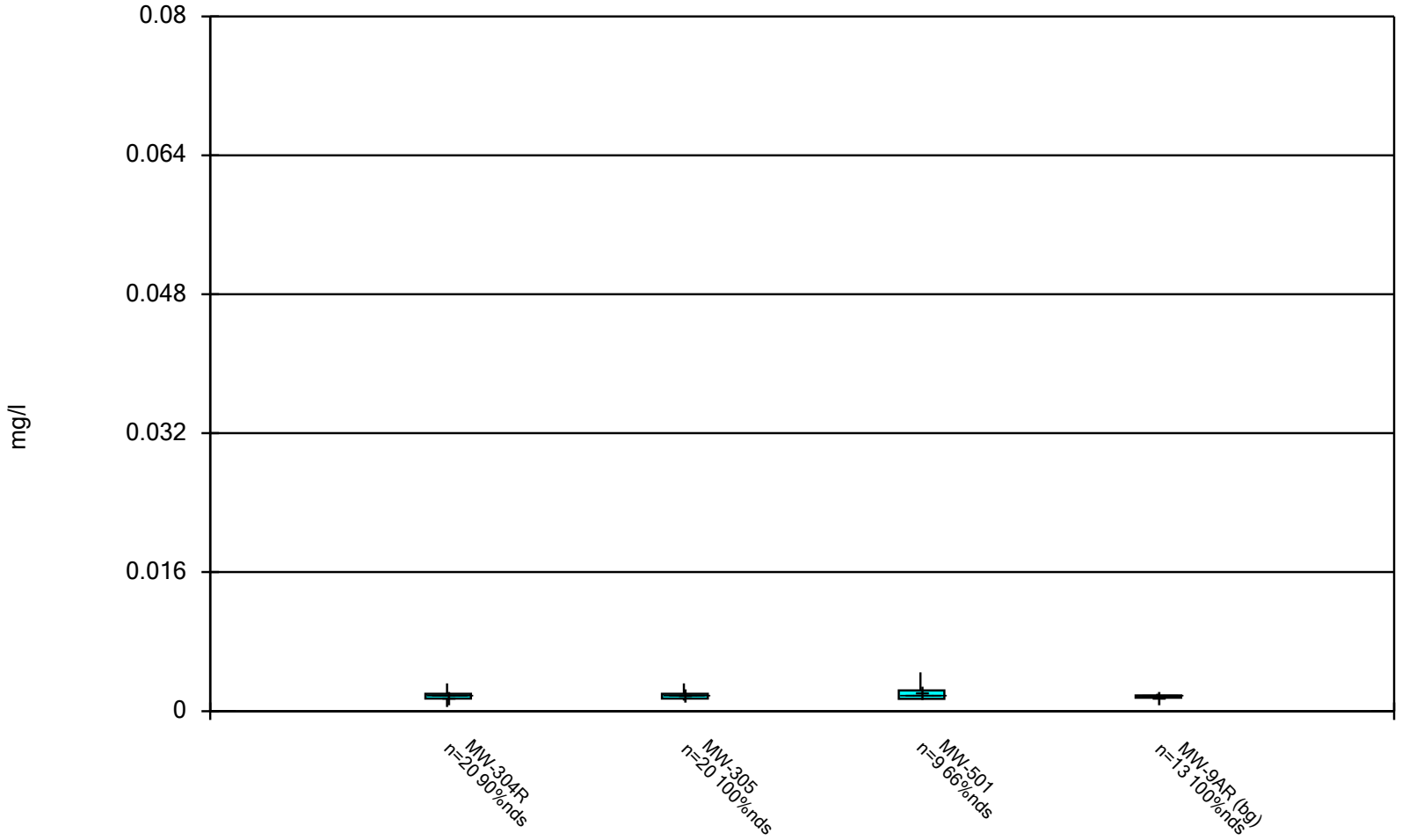
Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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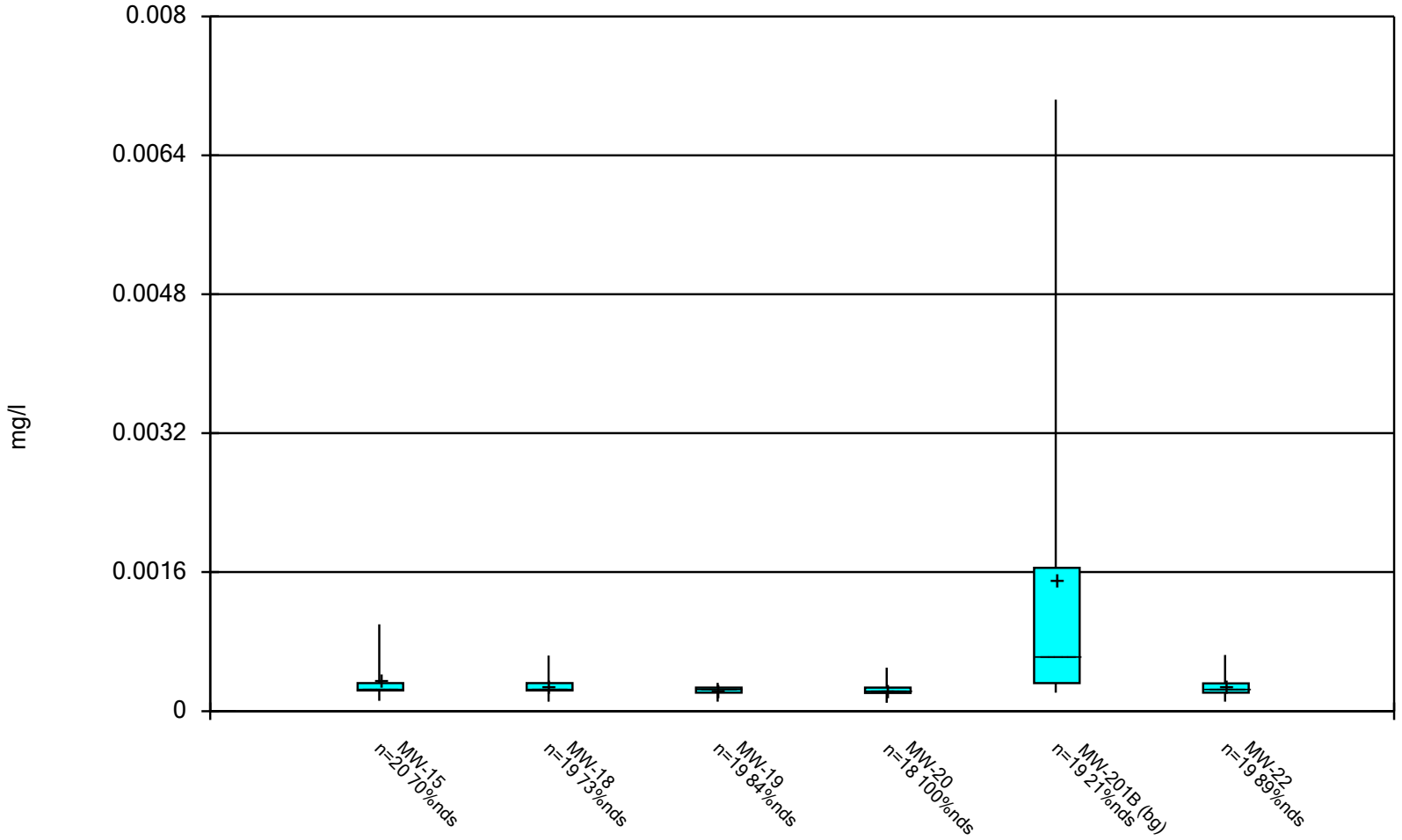
Linn County Data: CRLCSWA_Groundwater Database

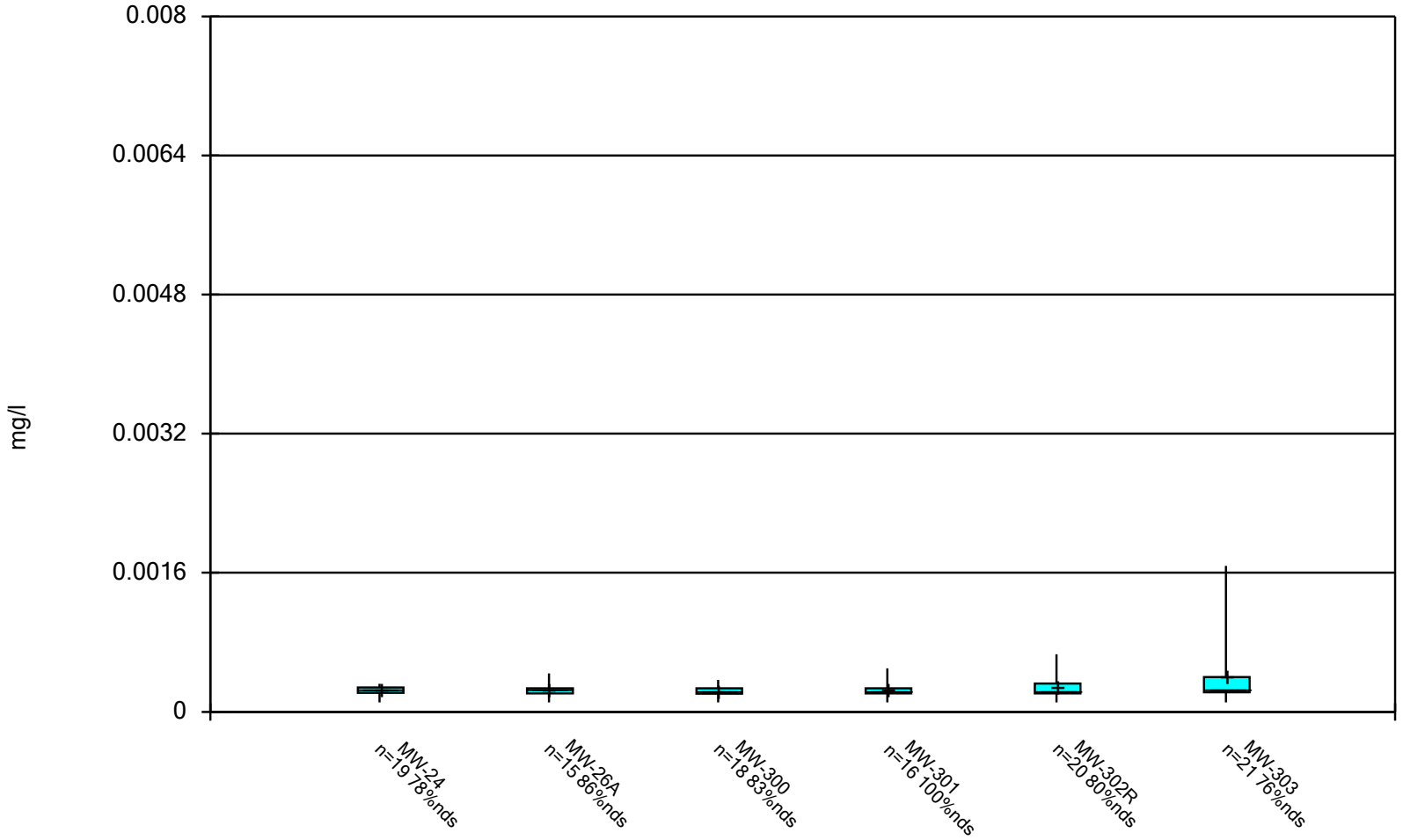
Box & Whiskers Plot



Constituent: Lead Analysis Run 7/12/2024 2:02 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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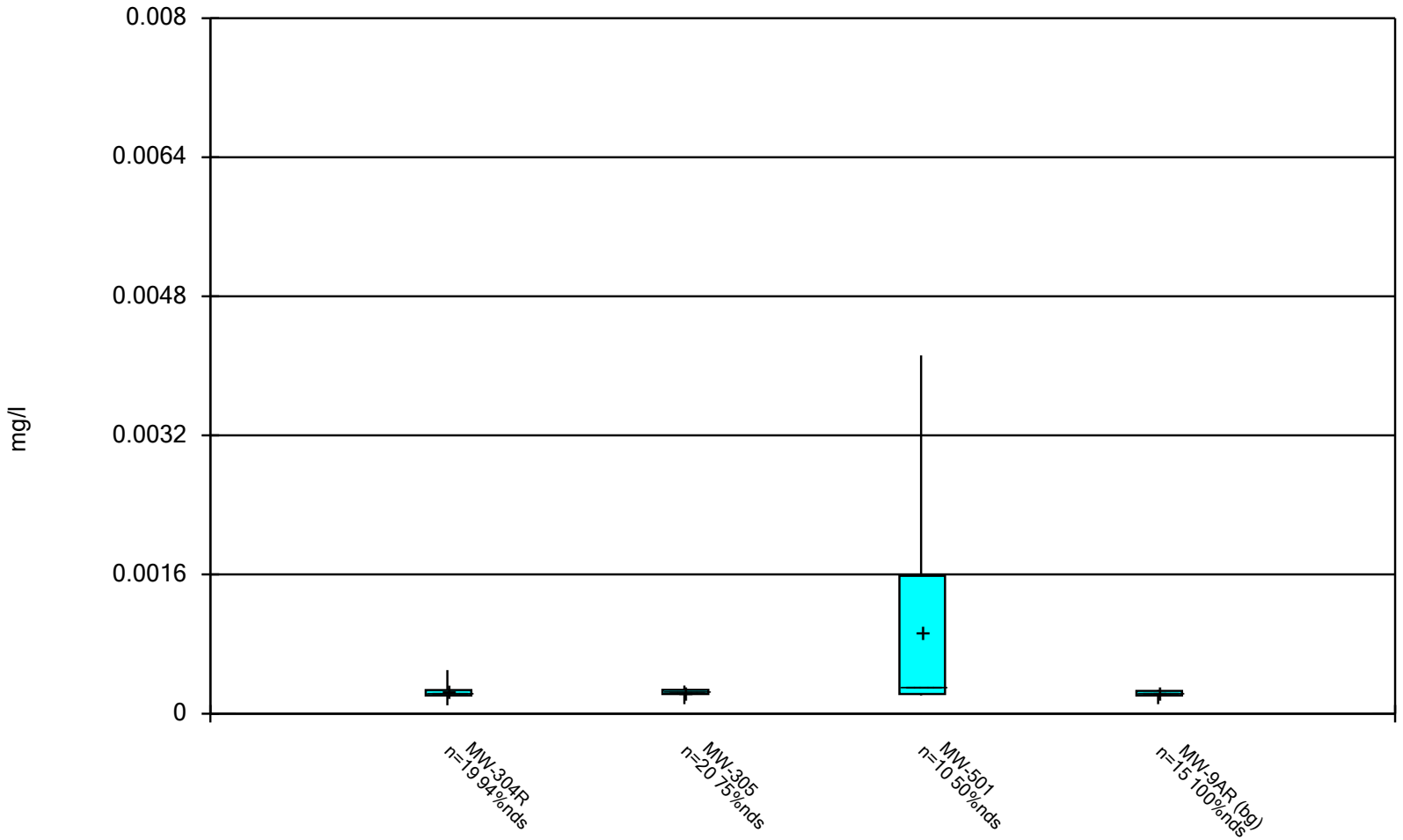
Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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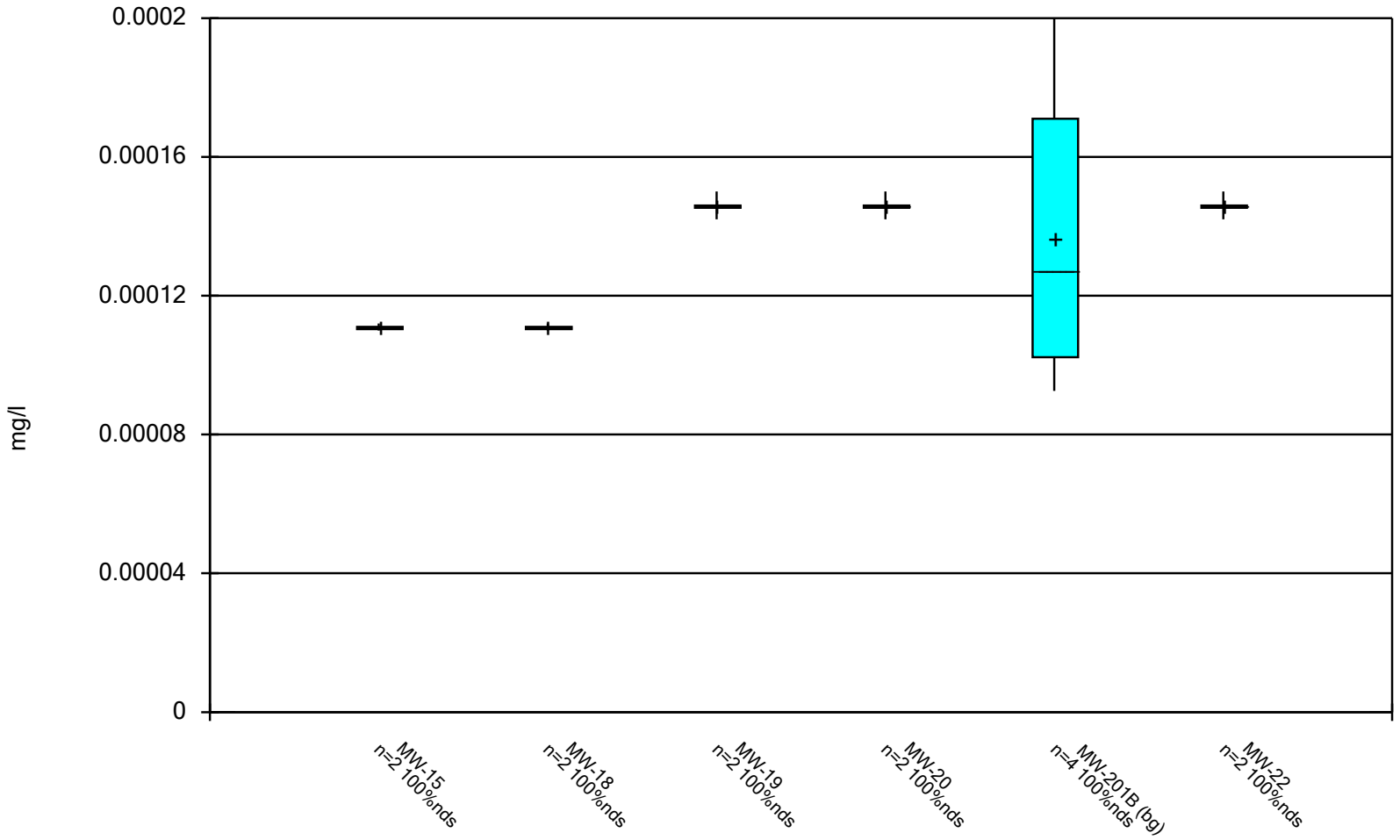
Linn County Data: CRLCSWA_Groundwater Database

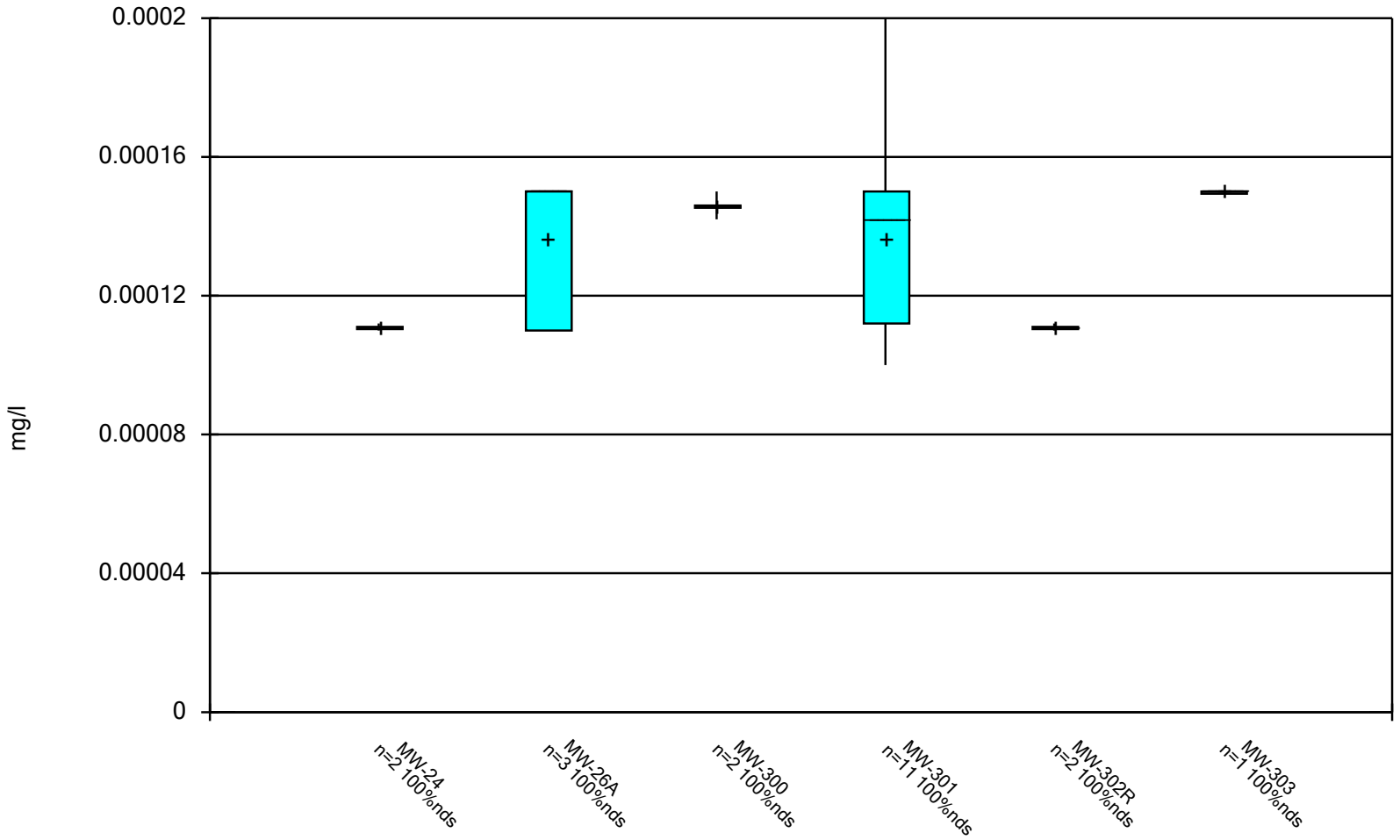
Box & Whiskers Plot



Constituent: Mercury Analysis Run 7/12/2024 2:02 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

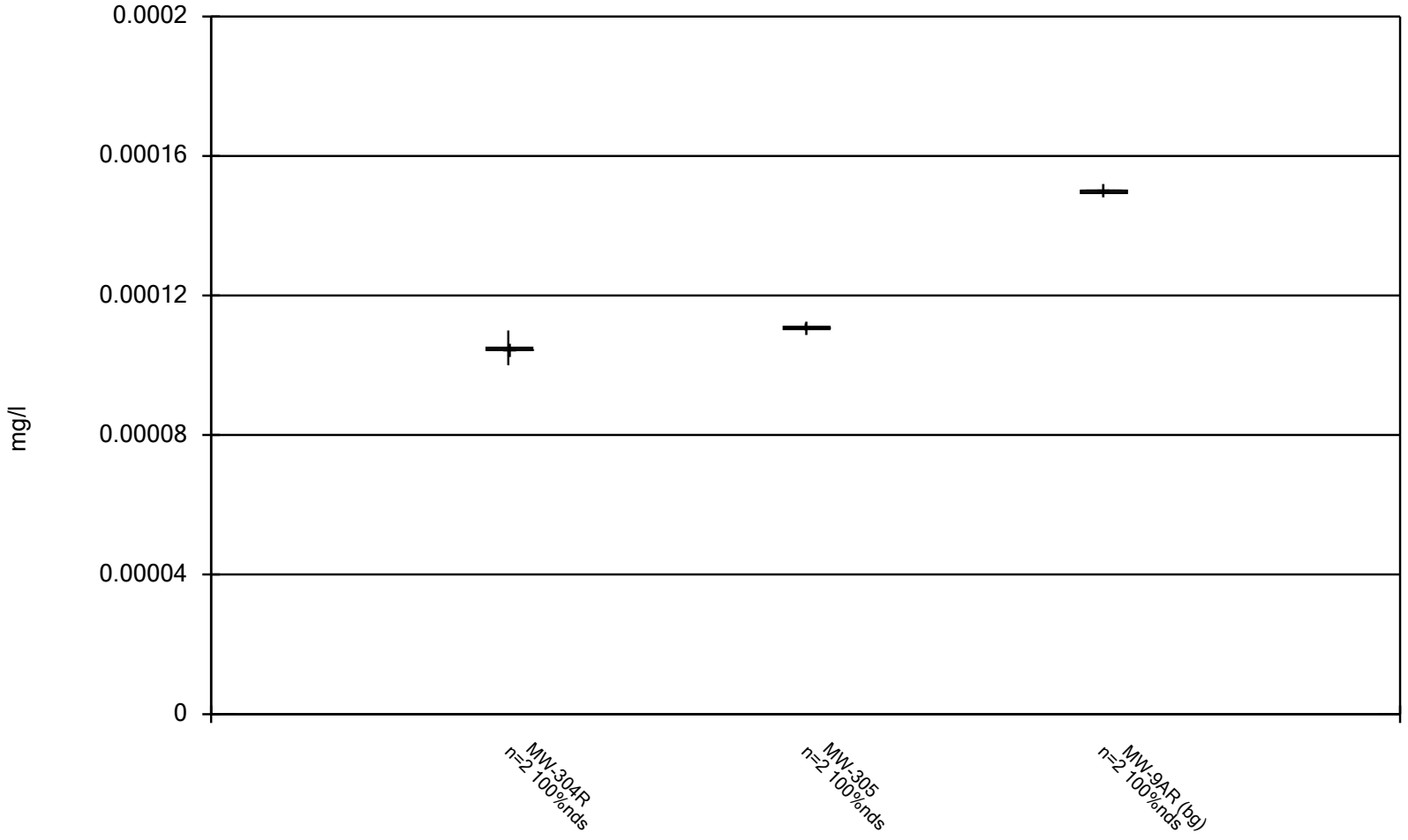
Box & Whiskers Plot



Constituent: Mercury Analysis Run 7/12/2024 2:02 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

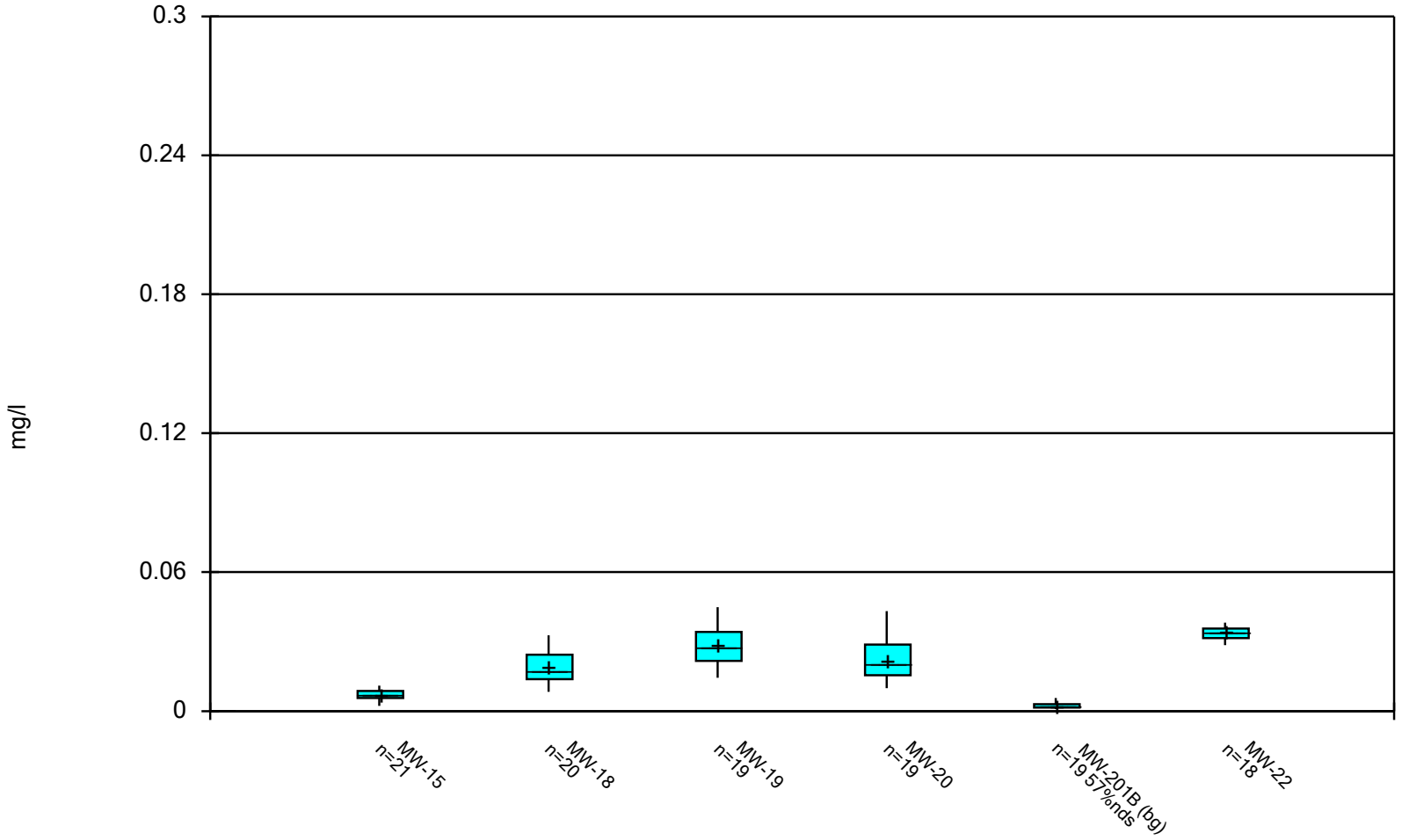
Box & Whiskers Plot



Constituent: Mercury Analysis Run 7/12/2024 2:02 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

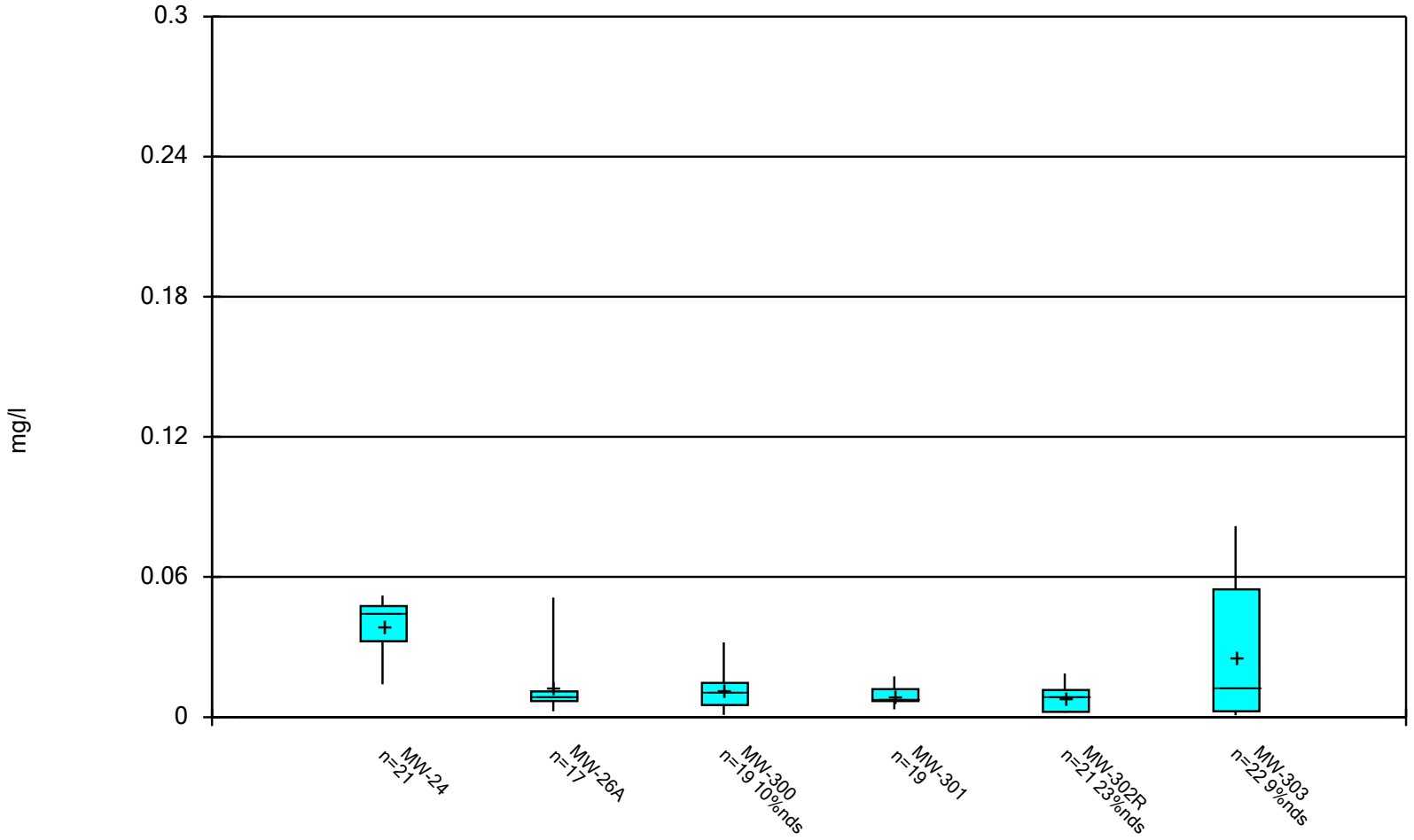
Box & Whiskers Plot



Constituent: Nickel Analysis Run 7/12/2024 2:02 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

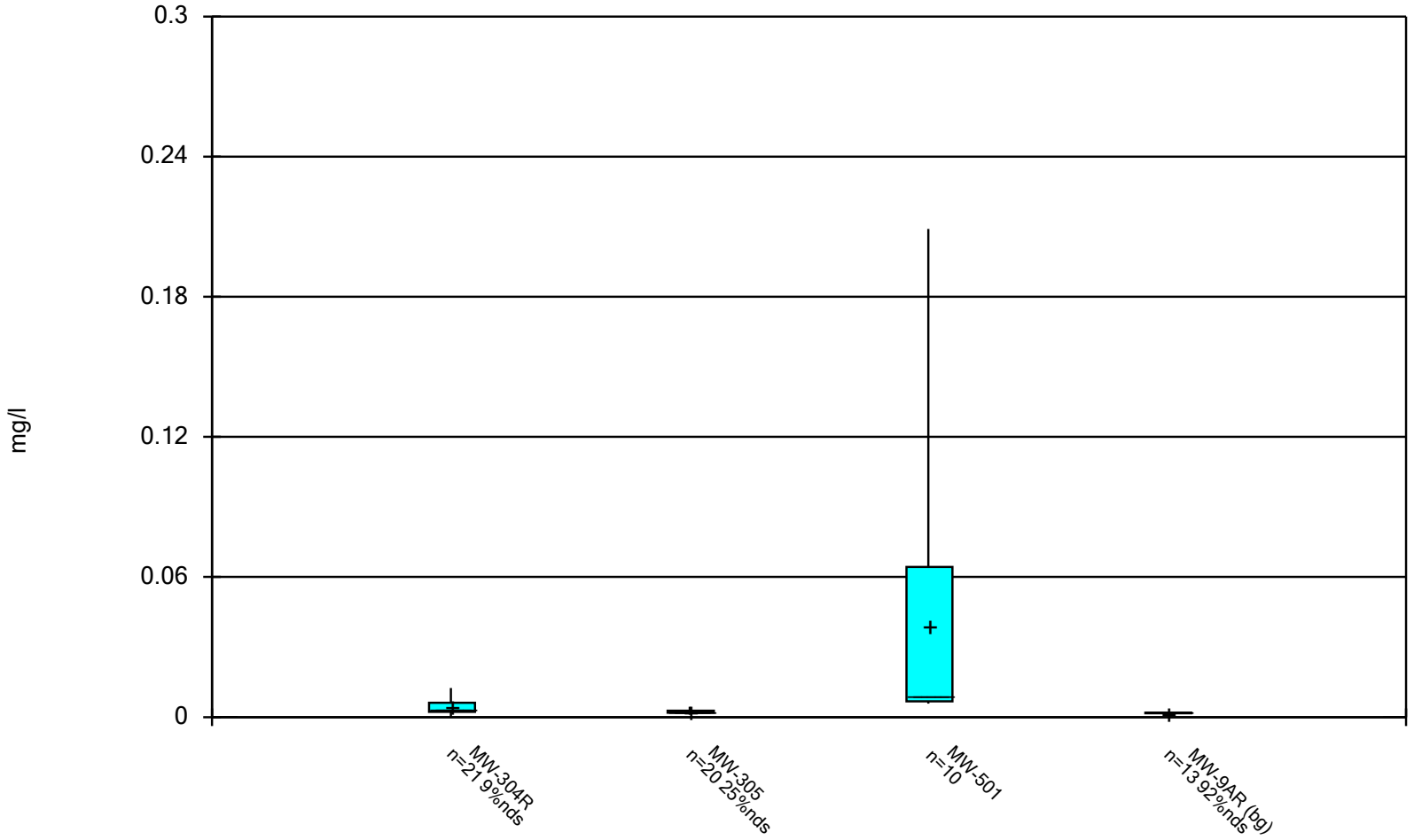
Box & Whiskers Plot



Constituent: Nickel Analysis Run 7/12/2024 2:02 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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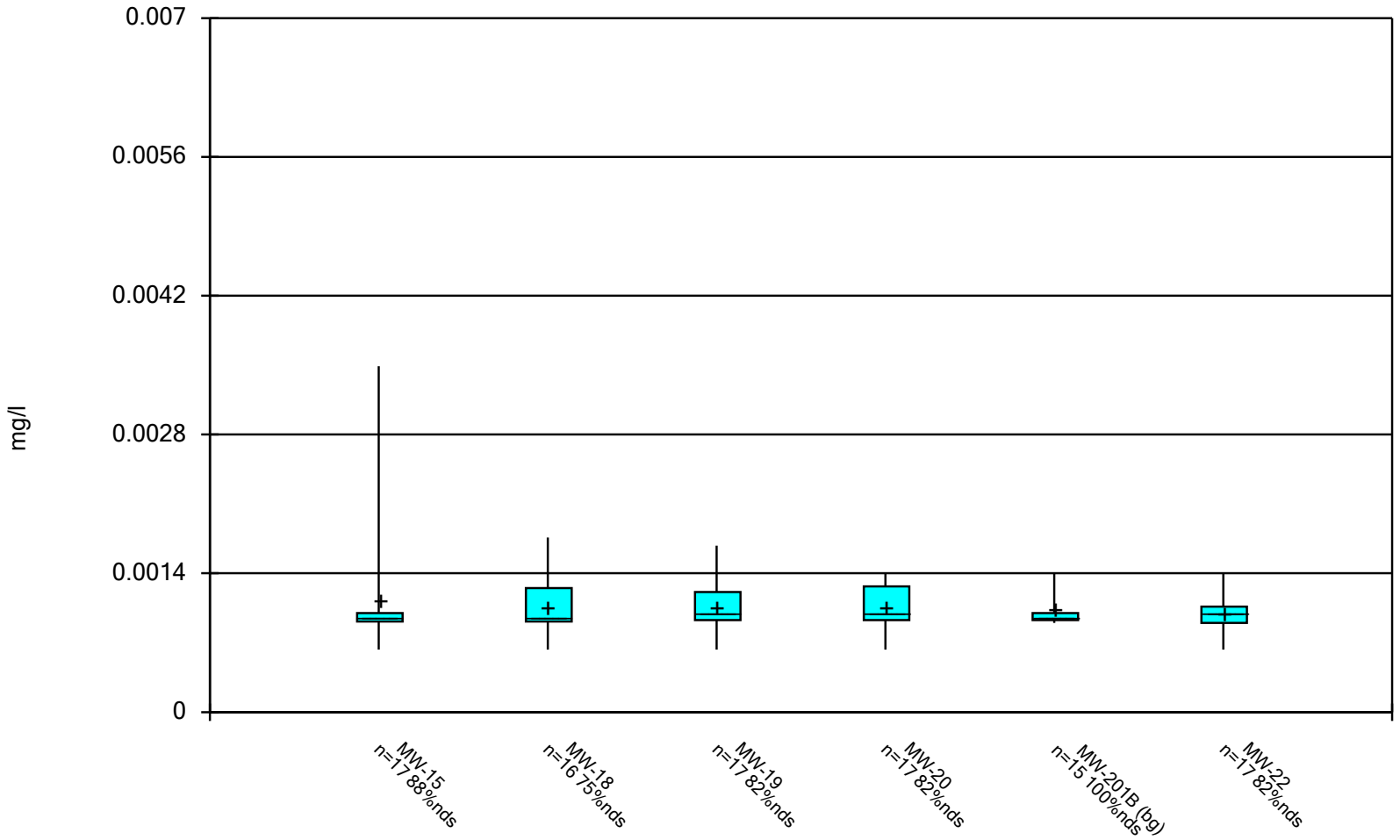
Linn County Data: CRLCSWA_Groundwater Database

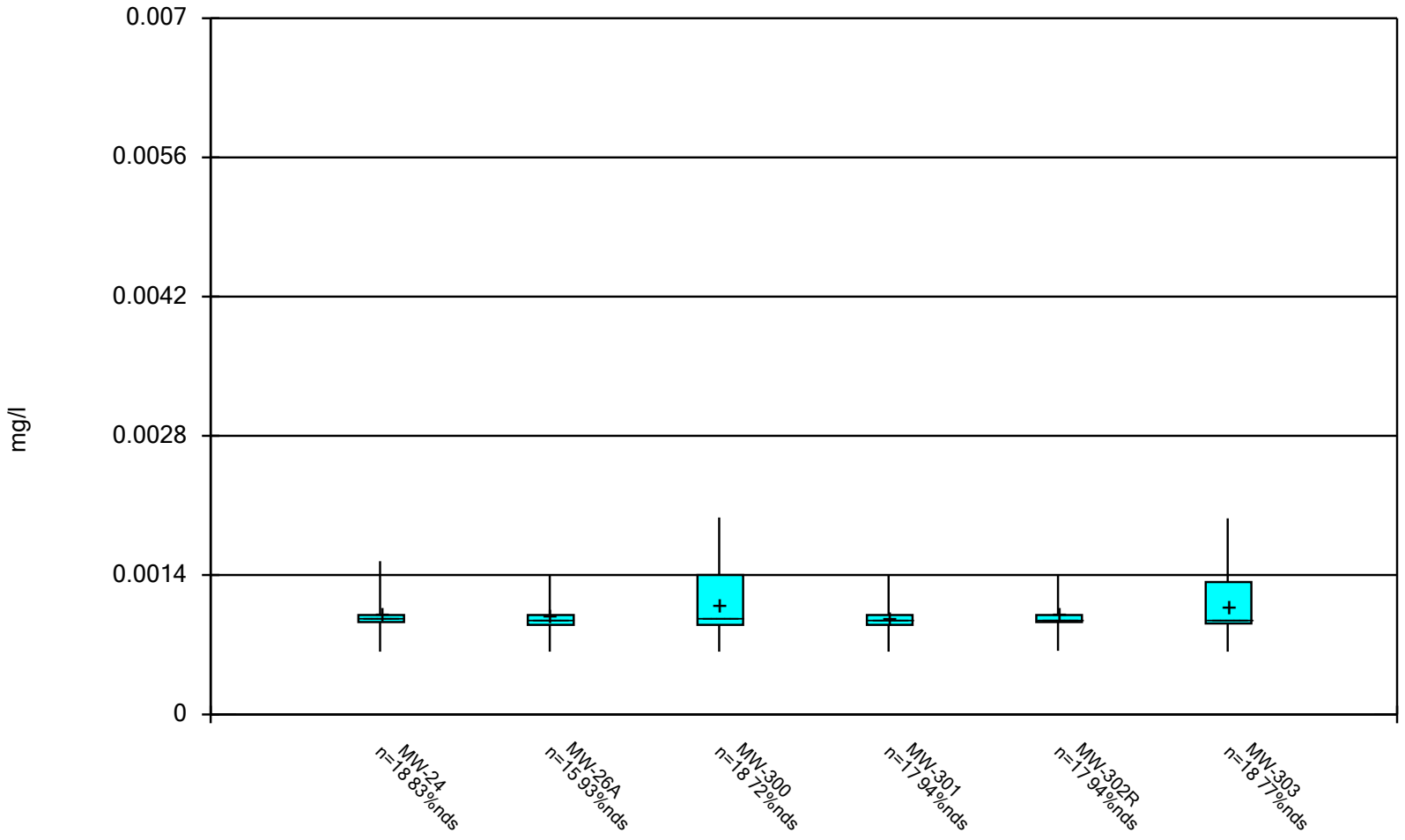
Box & Whiskers Plot



Constituent: Selenium Analysis Run 7/12/2024 2:02 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

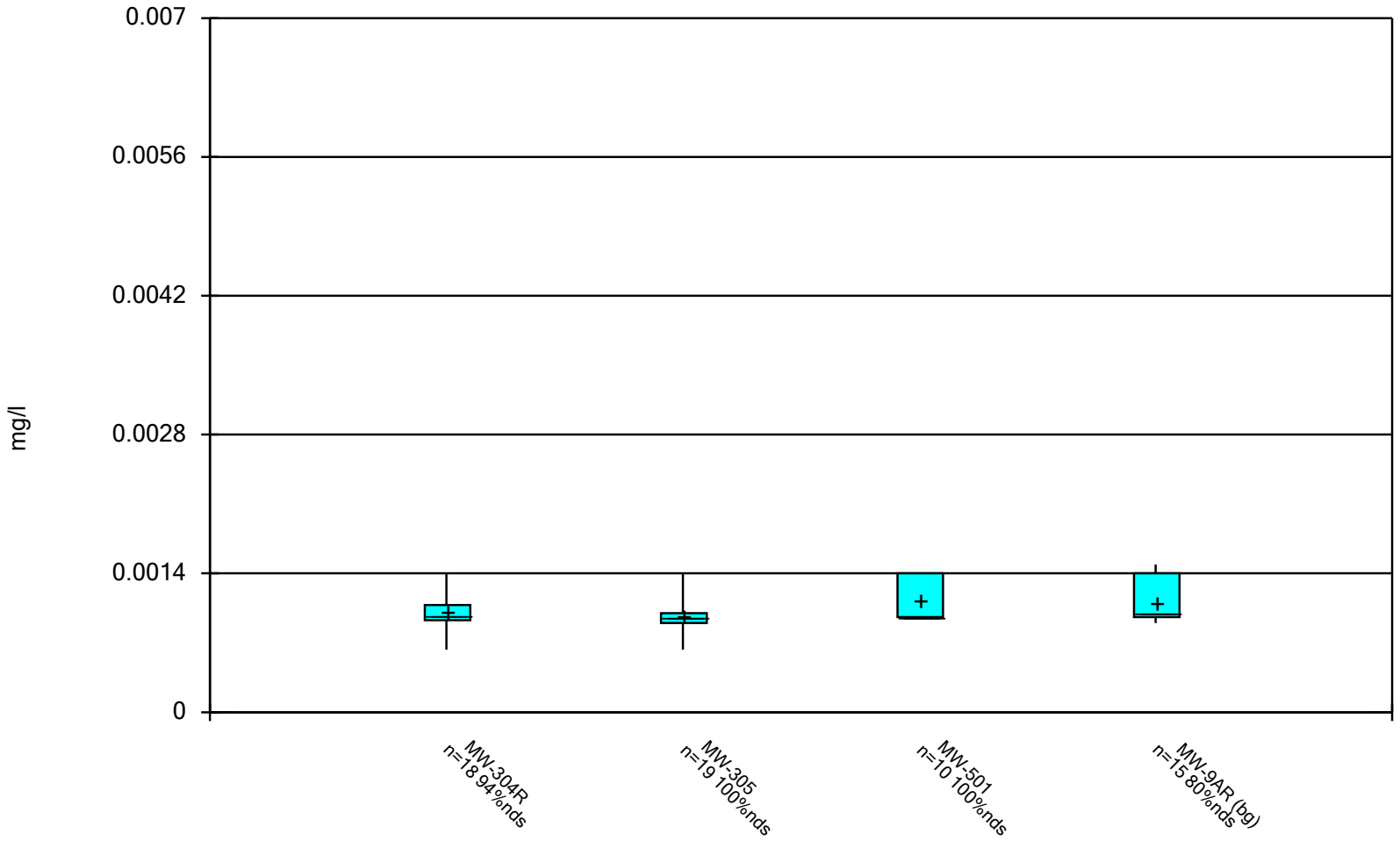
Box & Whiskers Plot



Constituent: Selenium Analysis Run 7/12/2024 2:02 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

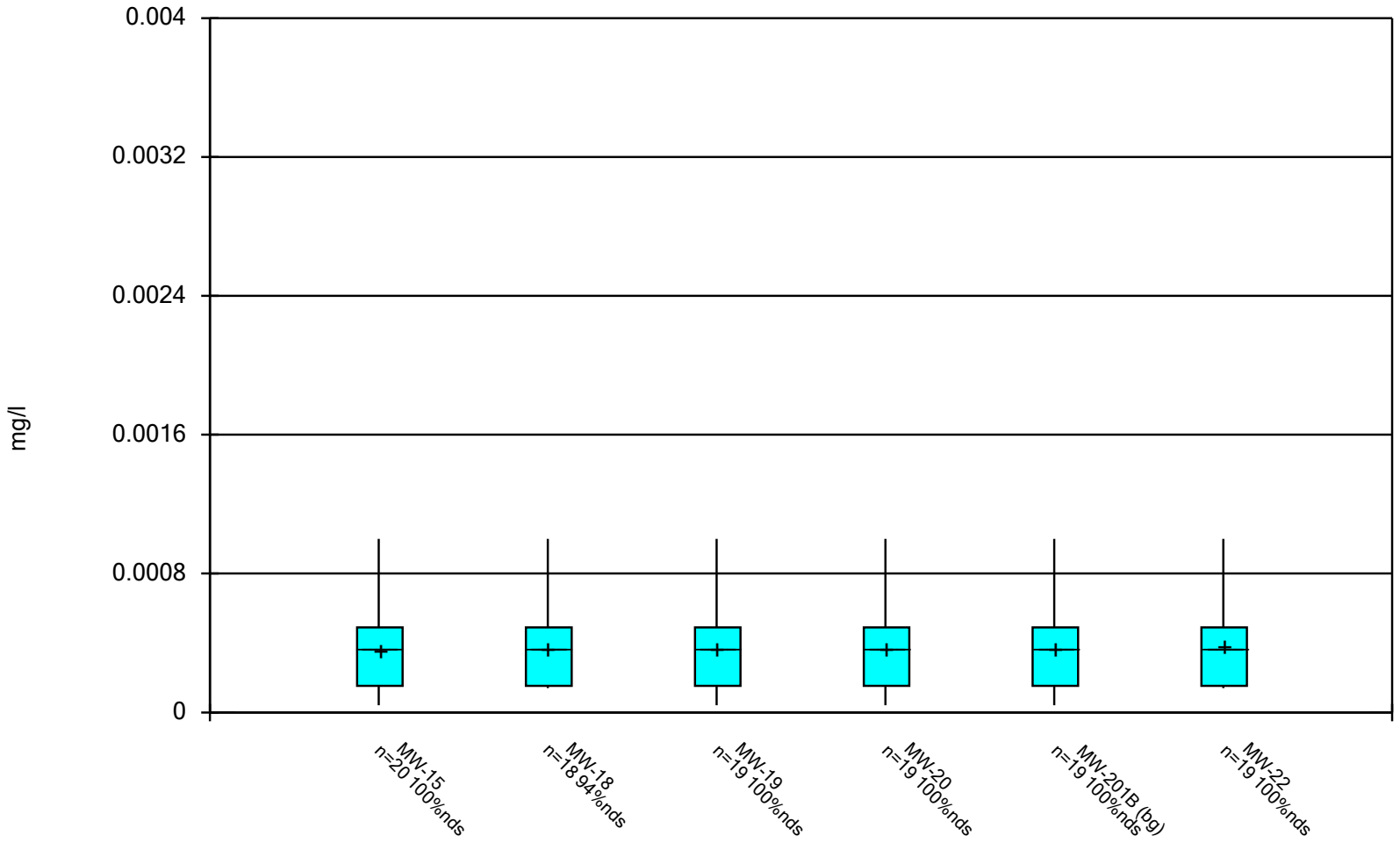
Box & Whiskers Plot



Constituent: Selenium Analysis Run 7/12/2024 2:02 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

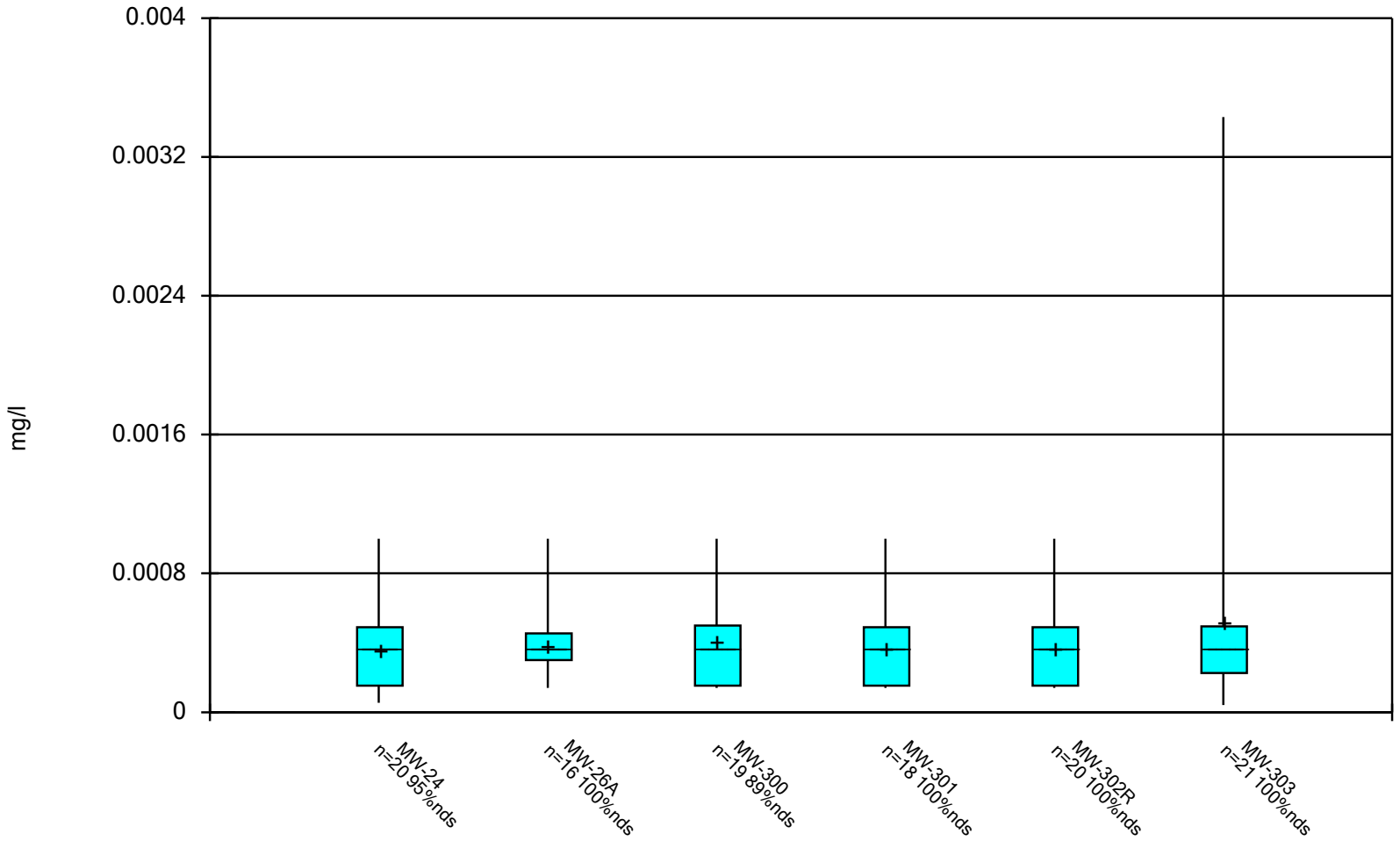
Box & Whiskers Plot



Constituent: Silver Analysis Run 7/12/2024 2:02 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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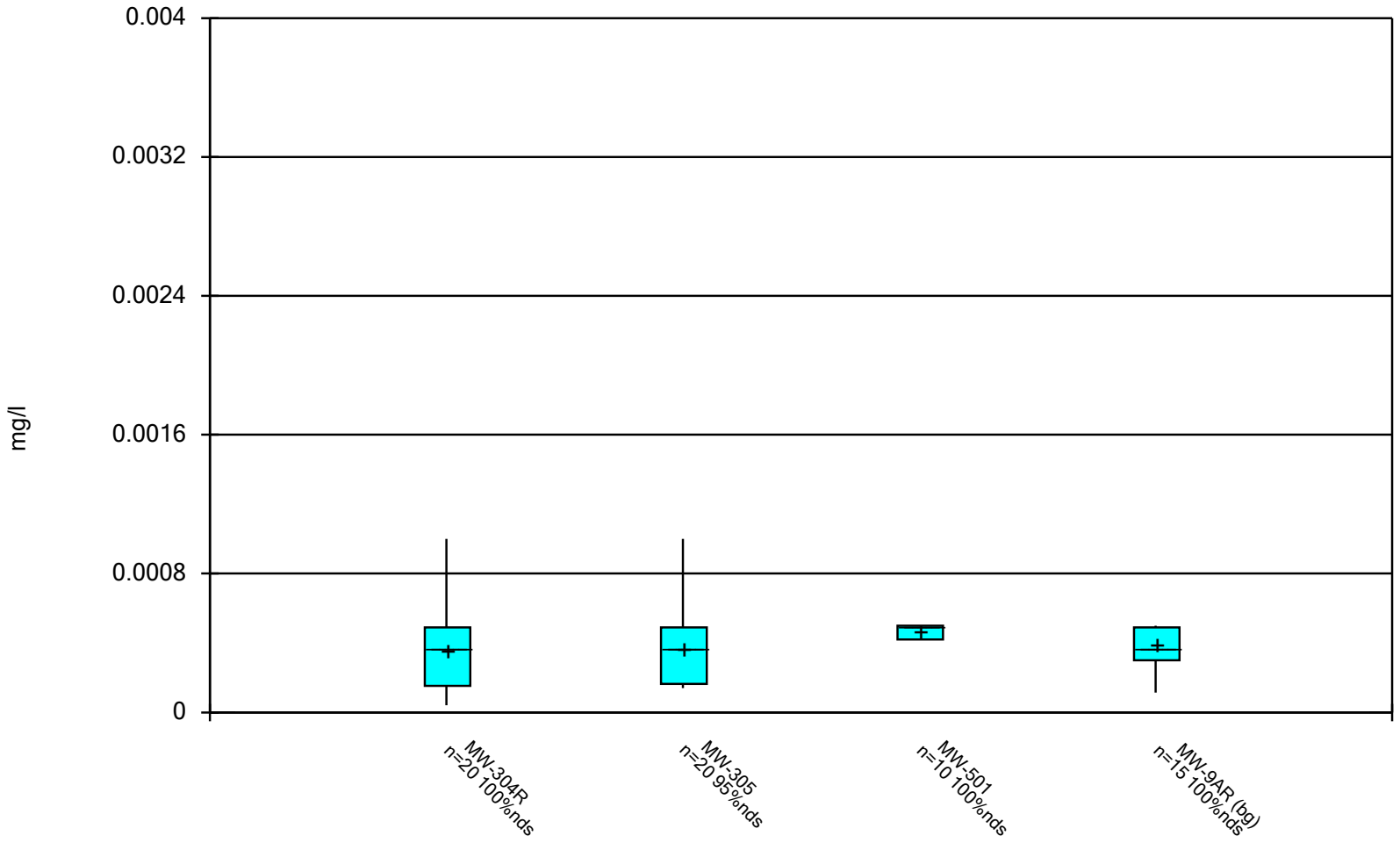
Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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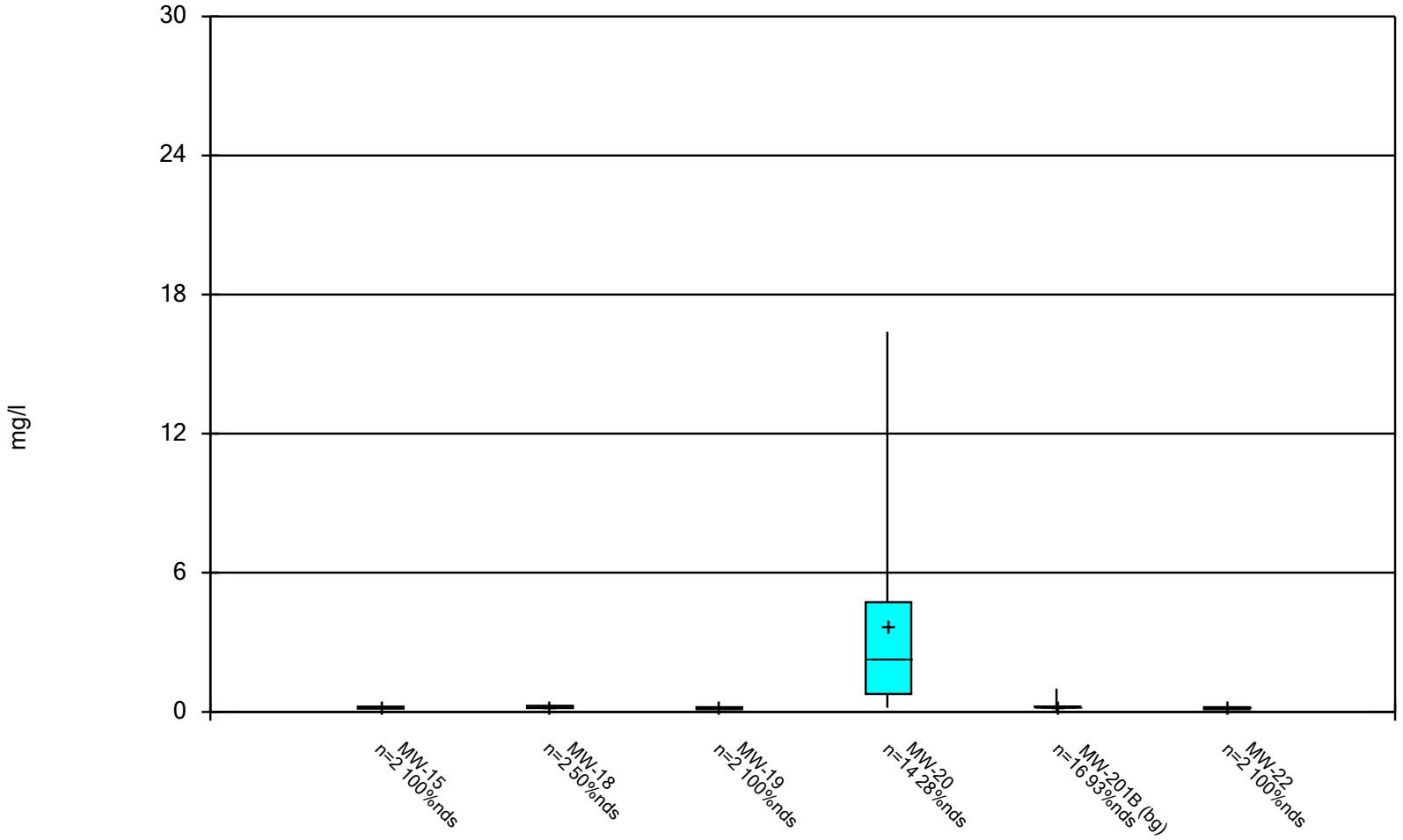
Linn County Data: CRLCSWA_Groundwater Database

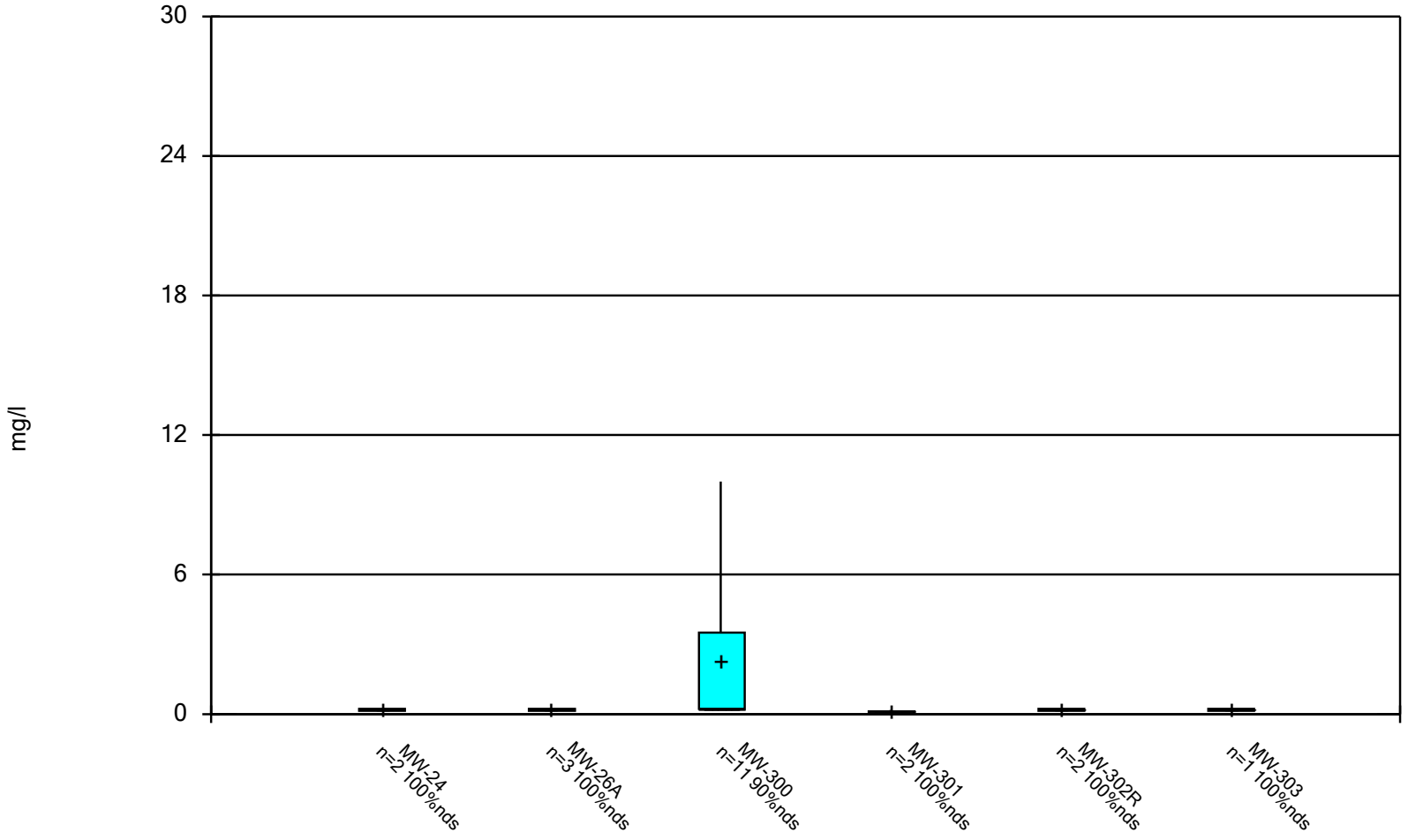
Box & Whiskers Plot



Constituent: Sulfide Analysis Run 7/12/2024 2:02 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

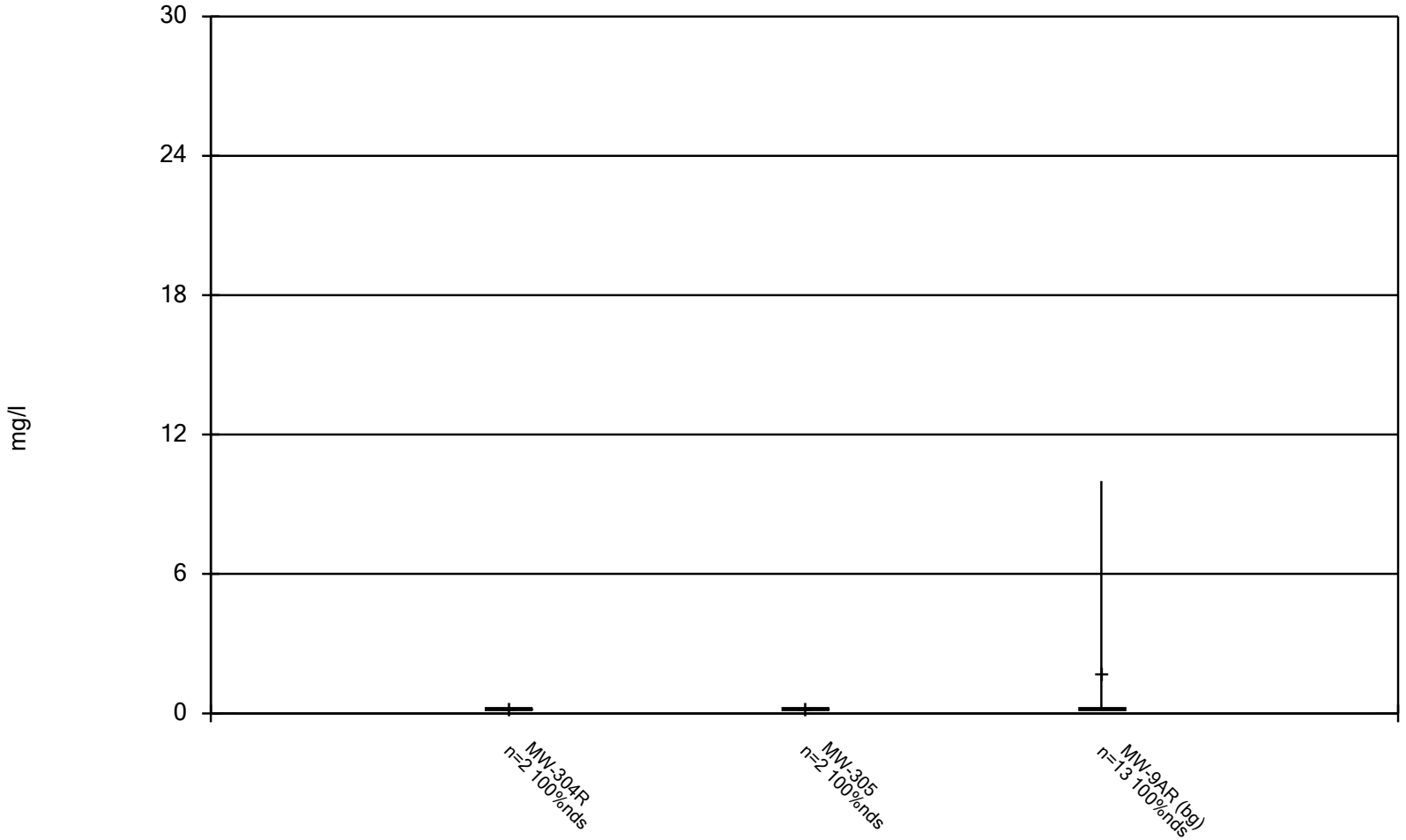
Box & Whiskers Plot



Constituent: Sulfide Analysis Run 7/12/2024 2:02 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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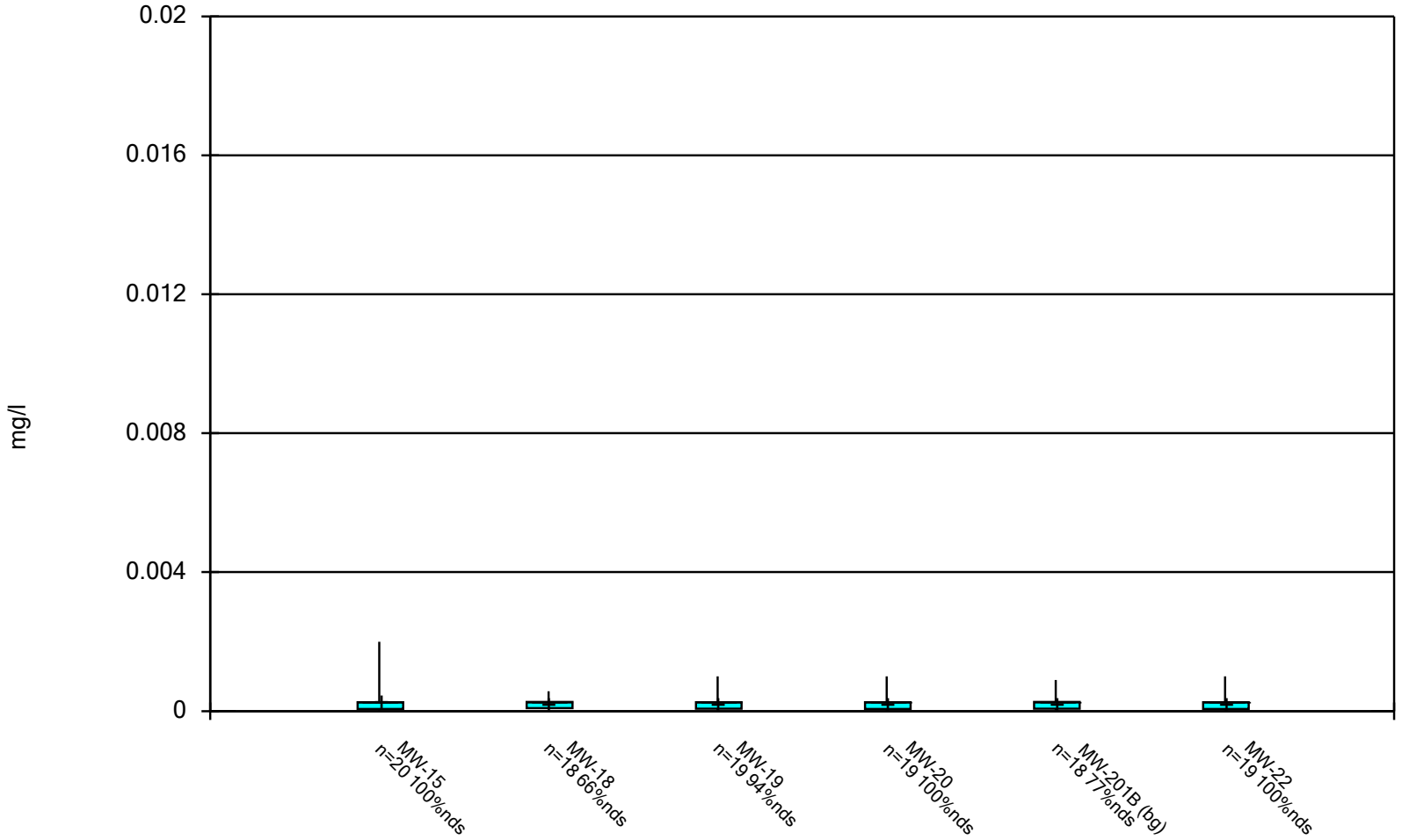
Linn County Data: CRLCSWA_Groundwater Database

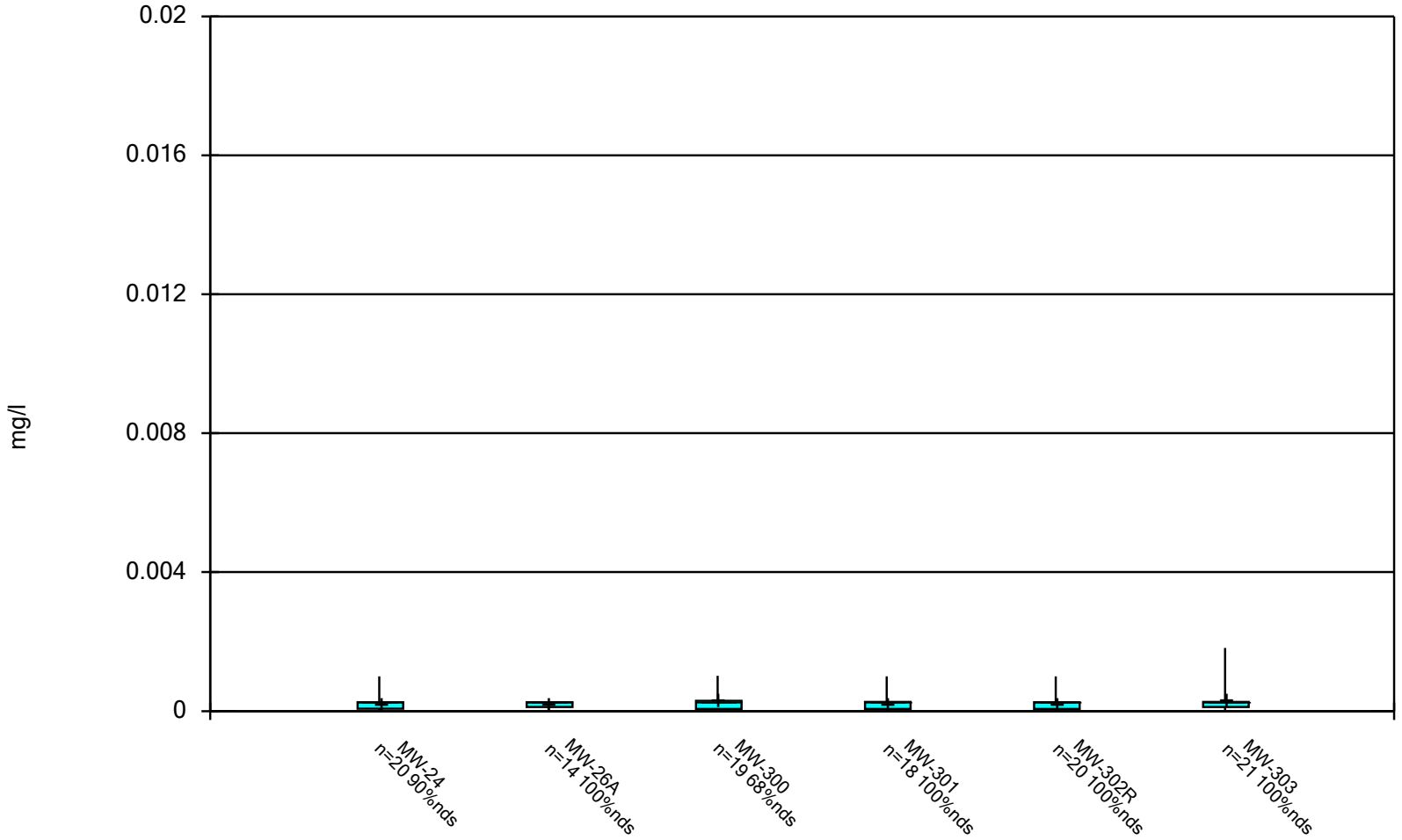
Box & Whiskers Plot



Constituent: Thallium Analysis Run 7/12/2024 2:02 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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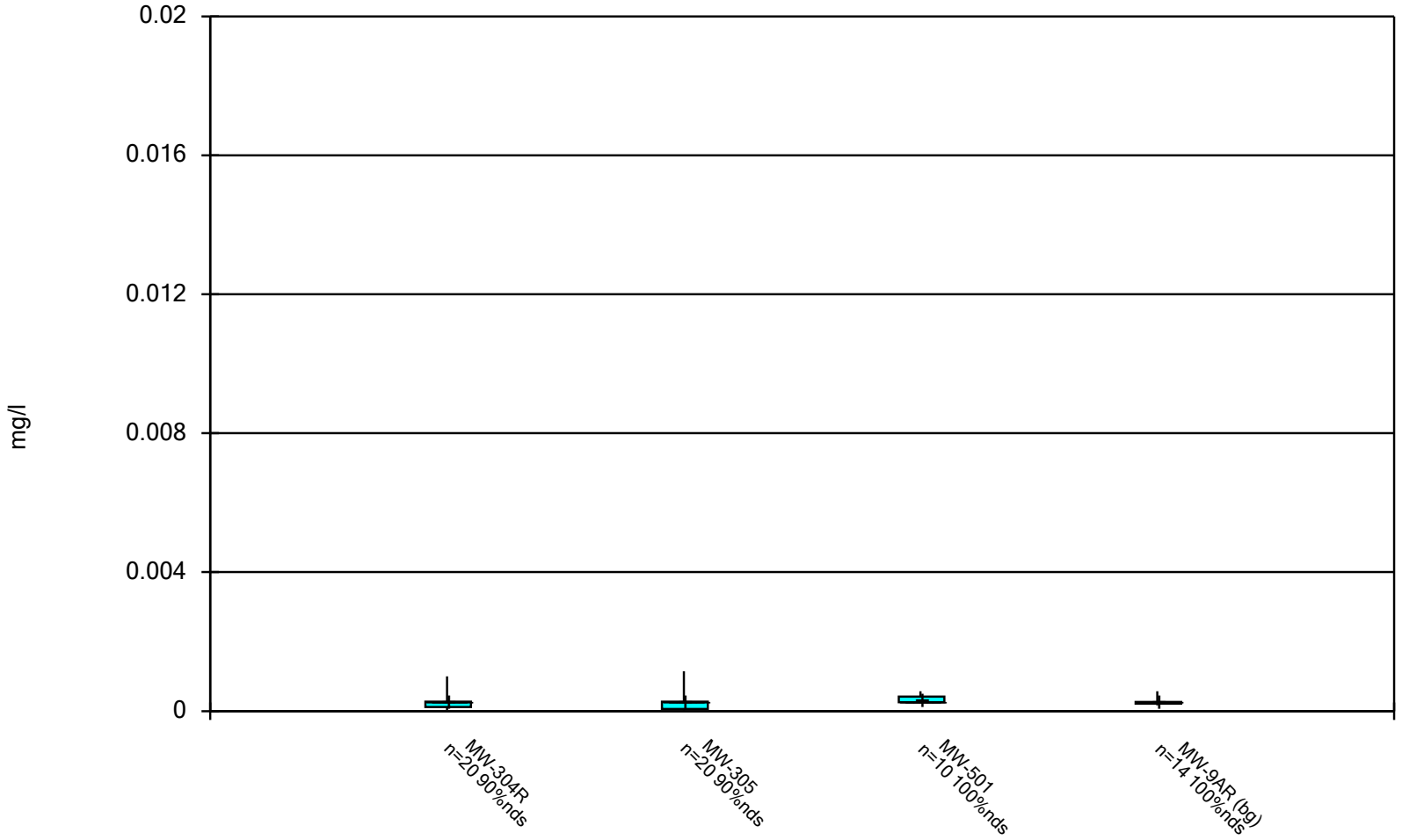
Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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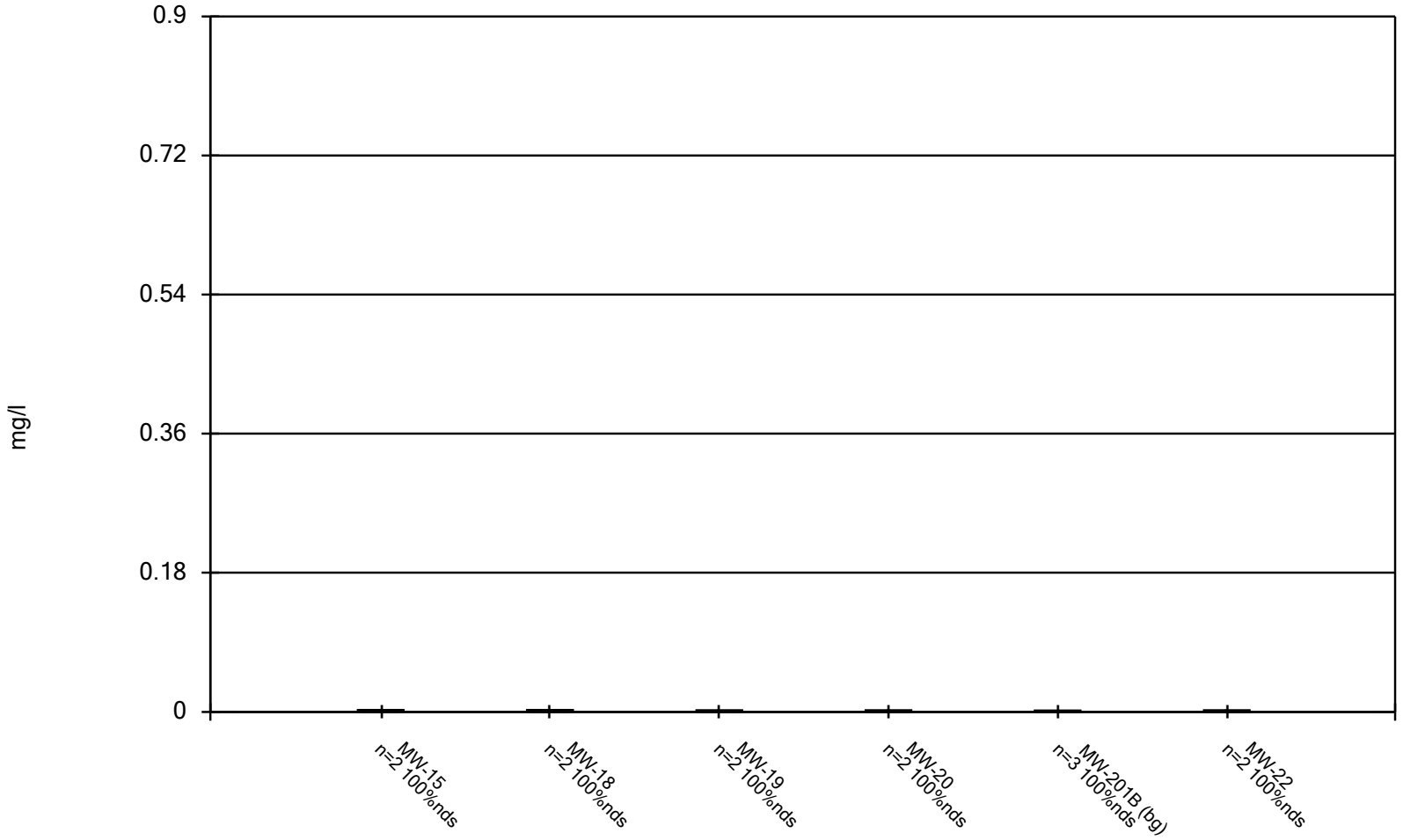
Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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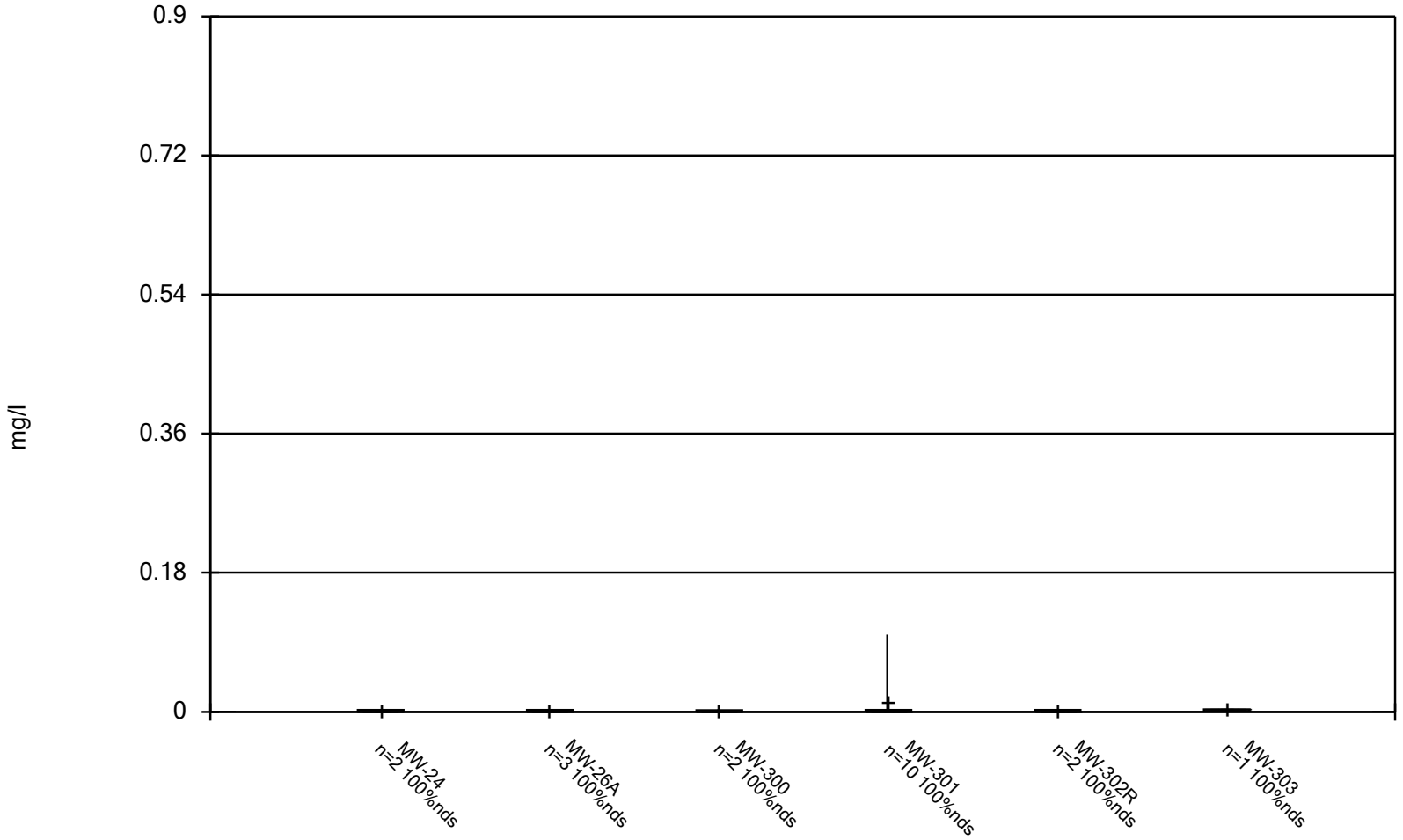
Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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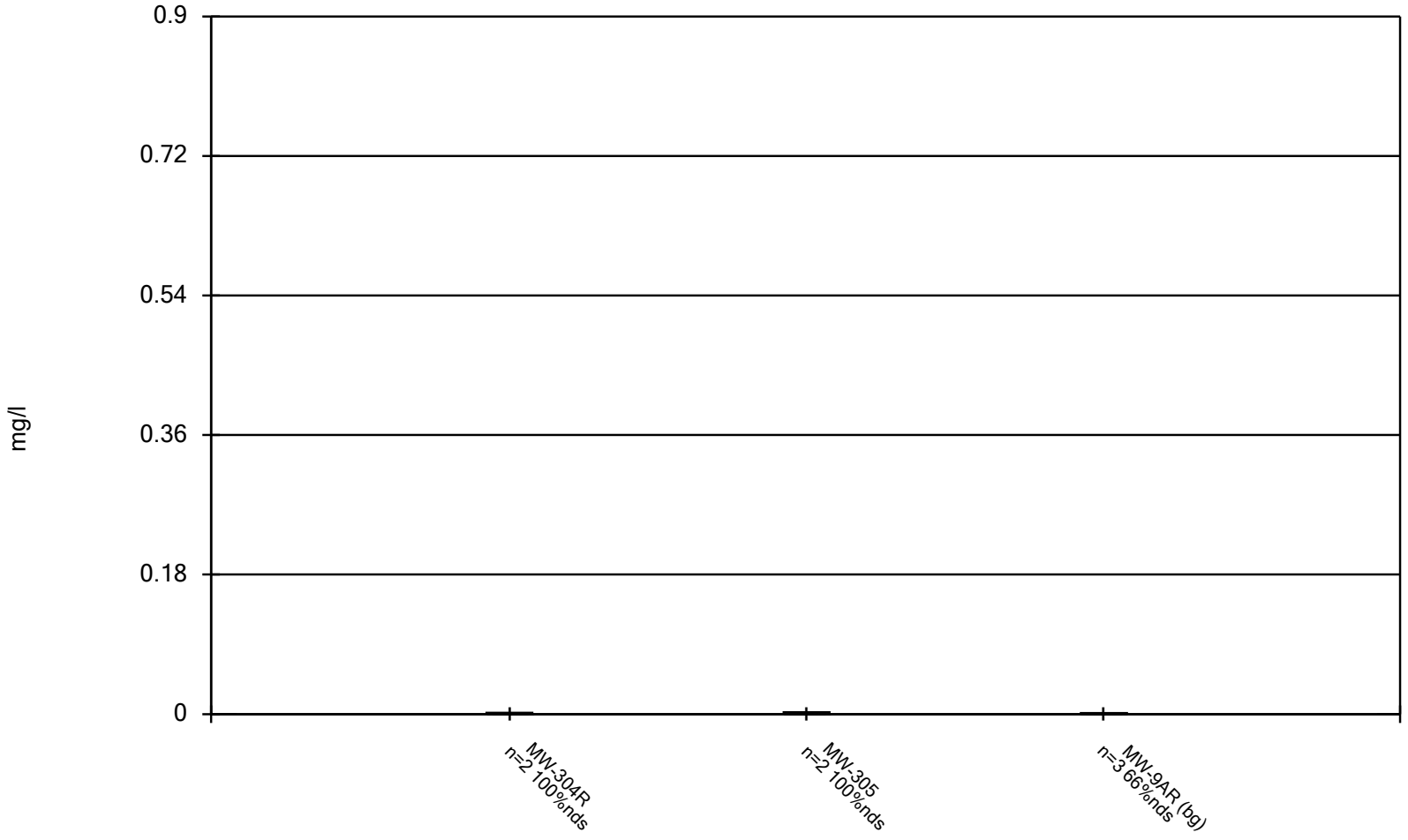
Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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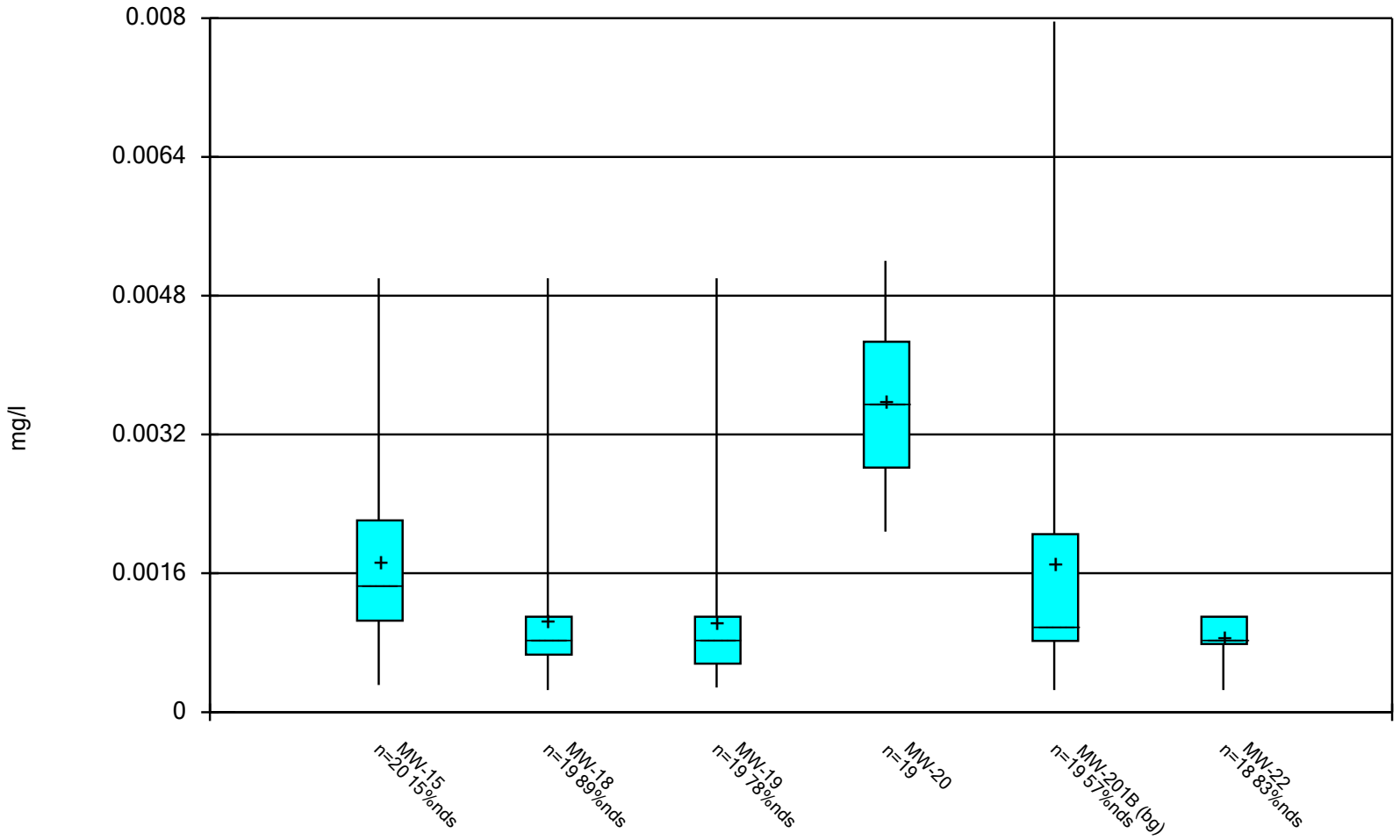
Linn County Data: CRLCSWA_Groundwater Database

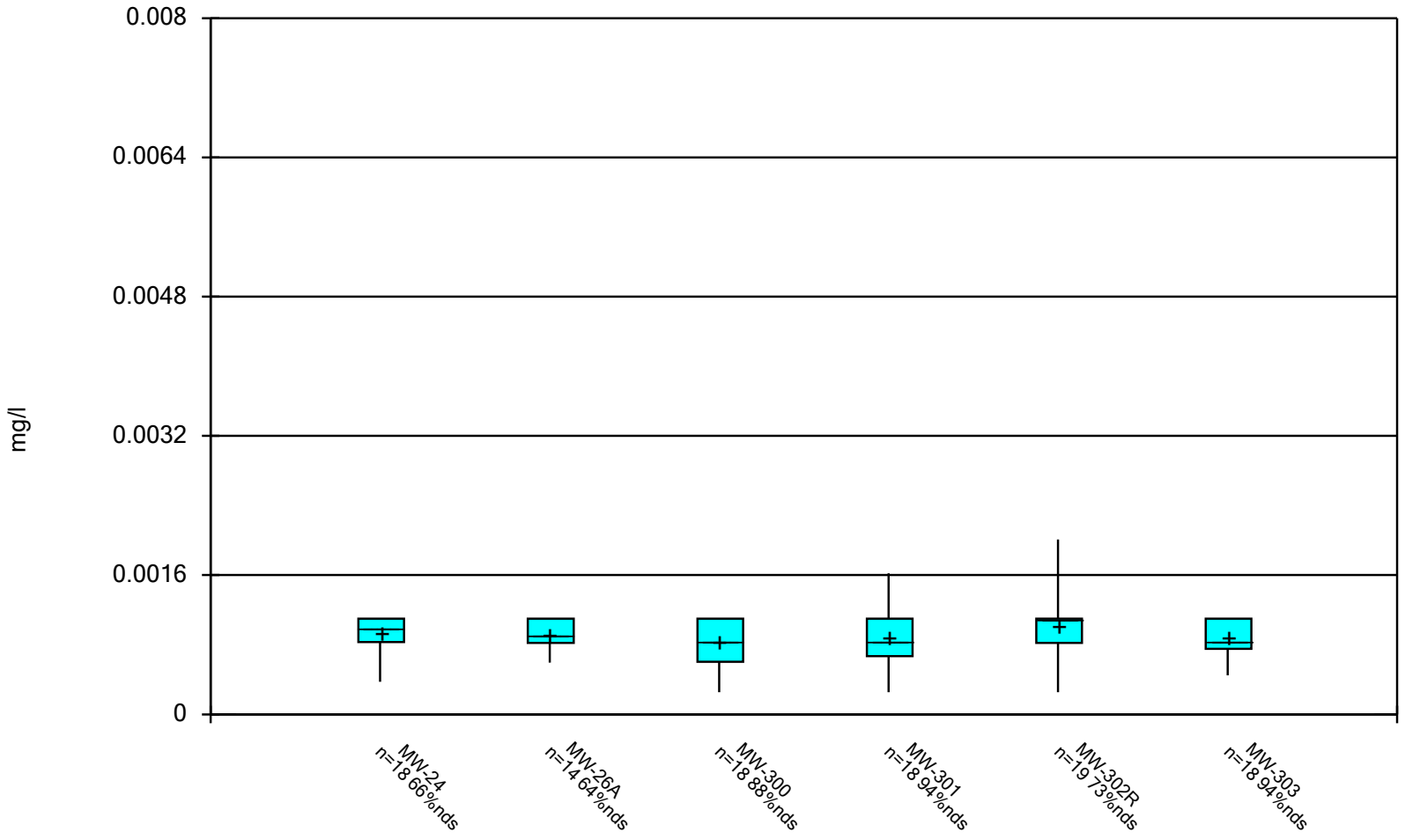
Box & Whiskers Plot



Constituent: Vanadium Analysis Run 7/12/2024 2:02 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

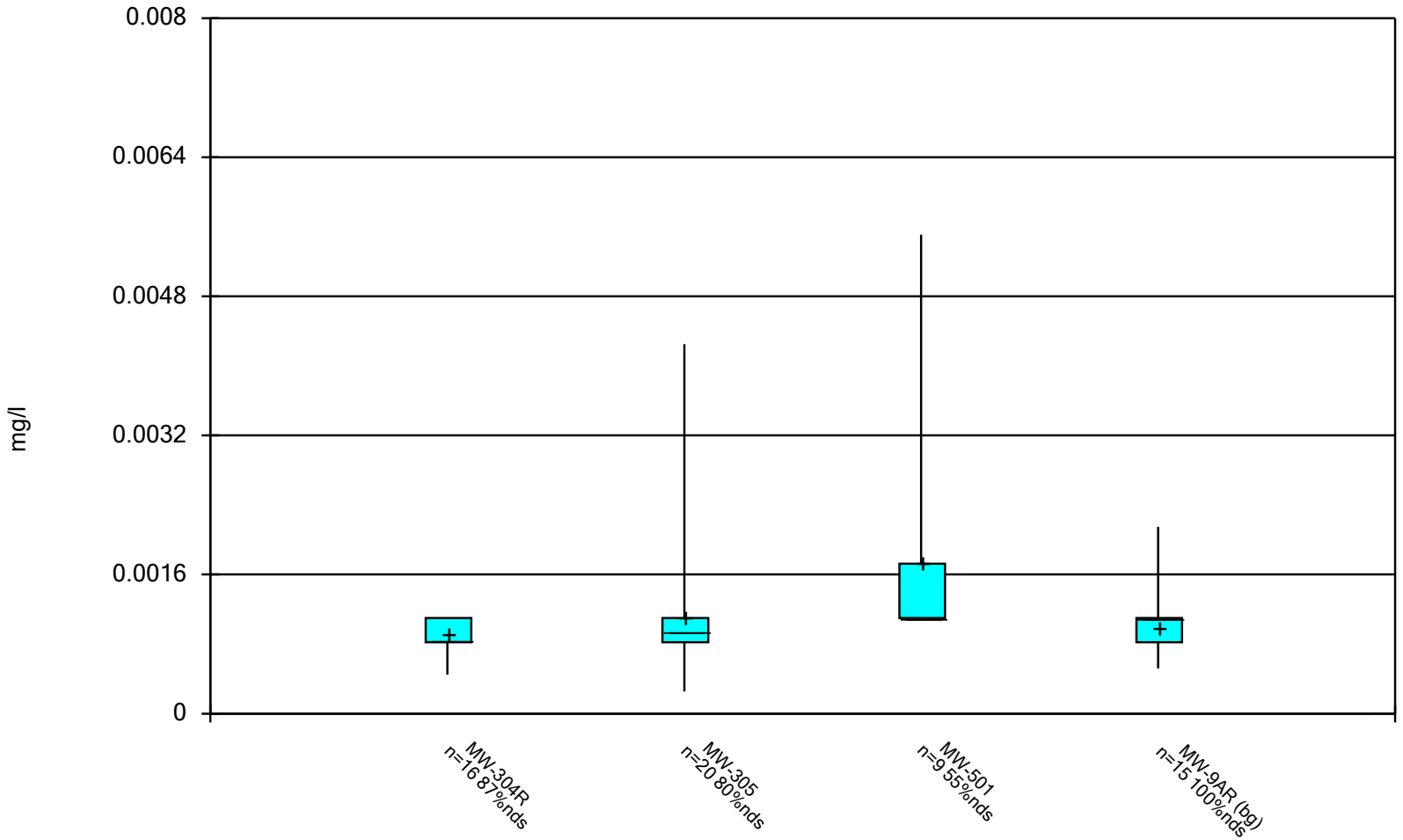
Box & Whiskers Plot



Constituent: Vanadium Analysis Run 7/12/2024 2:02 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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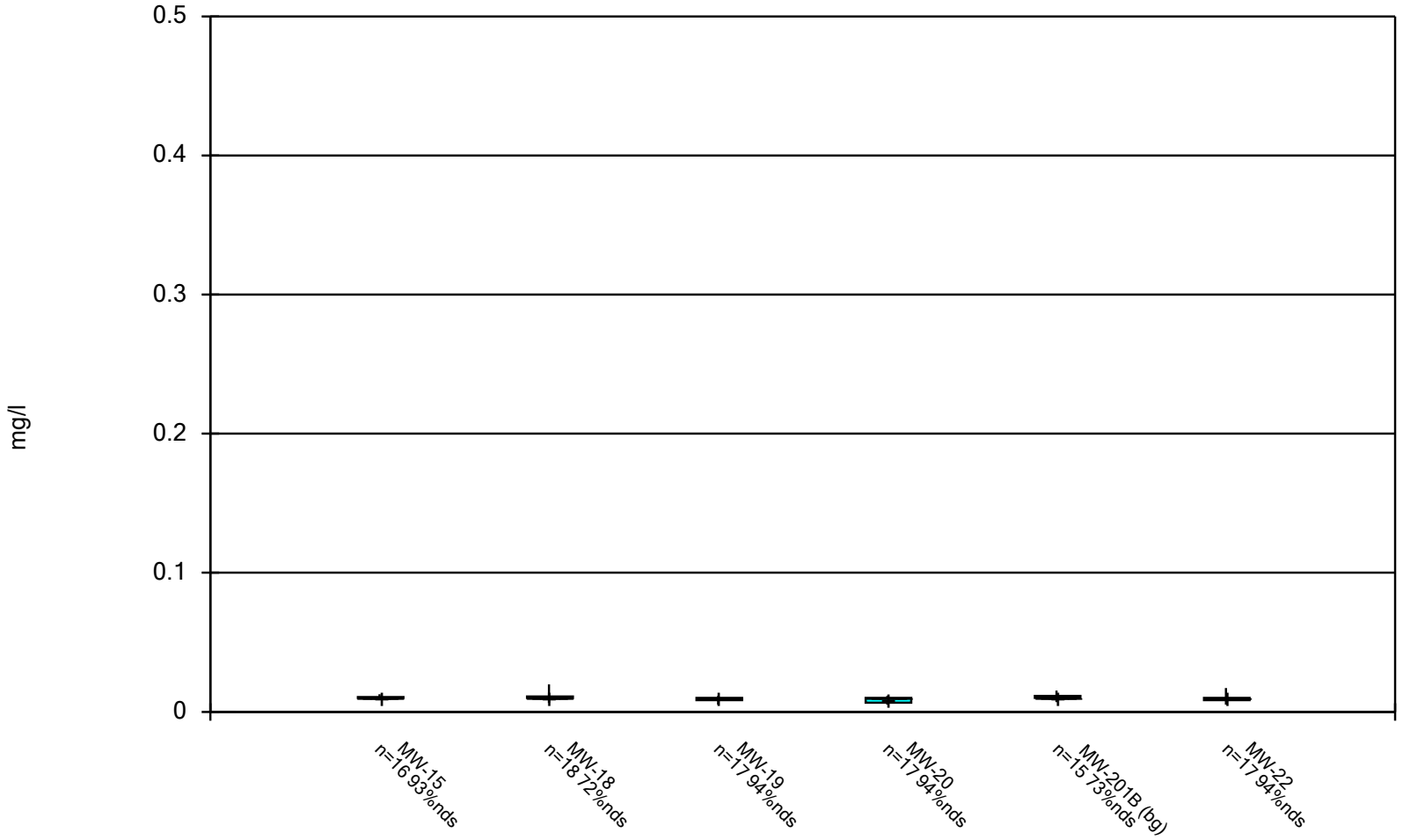
Linn County Data: CRLCSWA_Groundwater Database

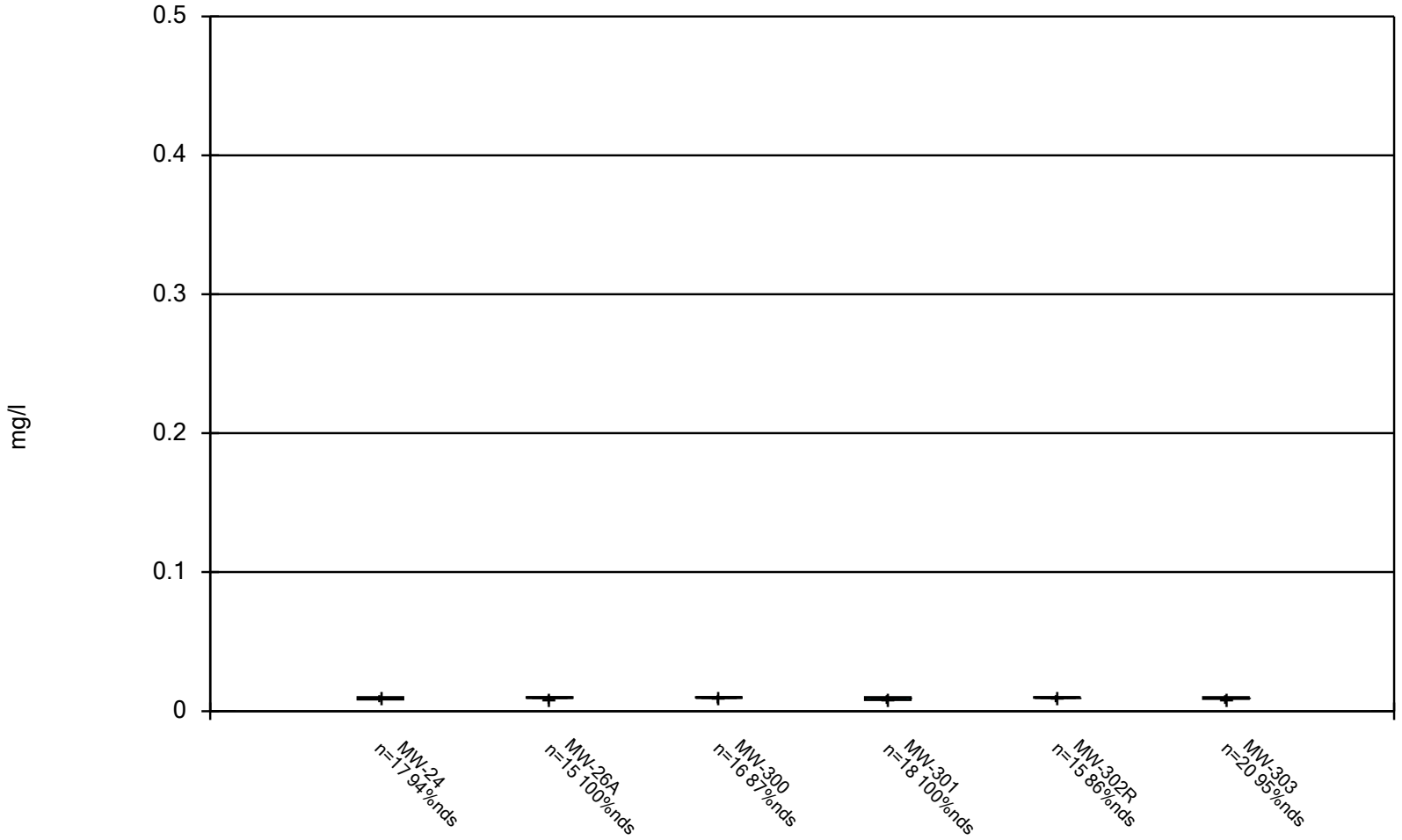
Box & Whiskers Plot



Constituent: Zinc Analysis Run 7/12/2024 2:02 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

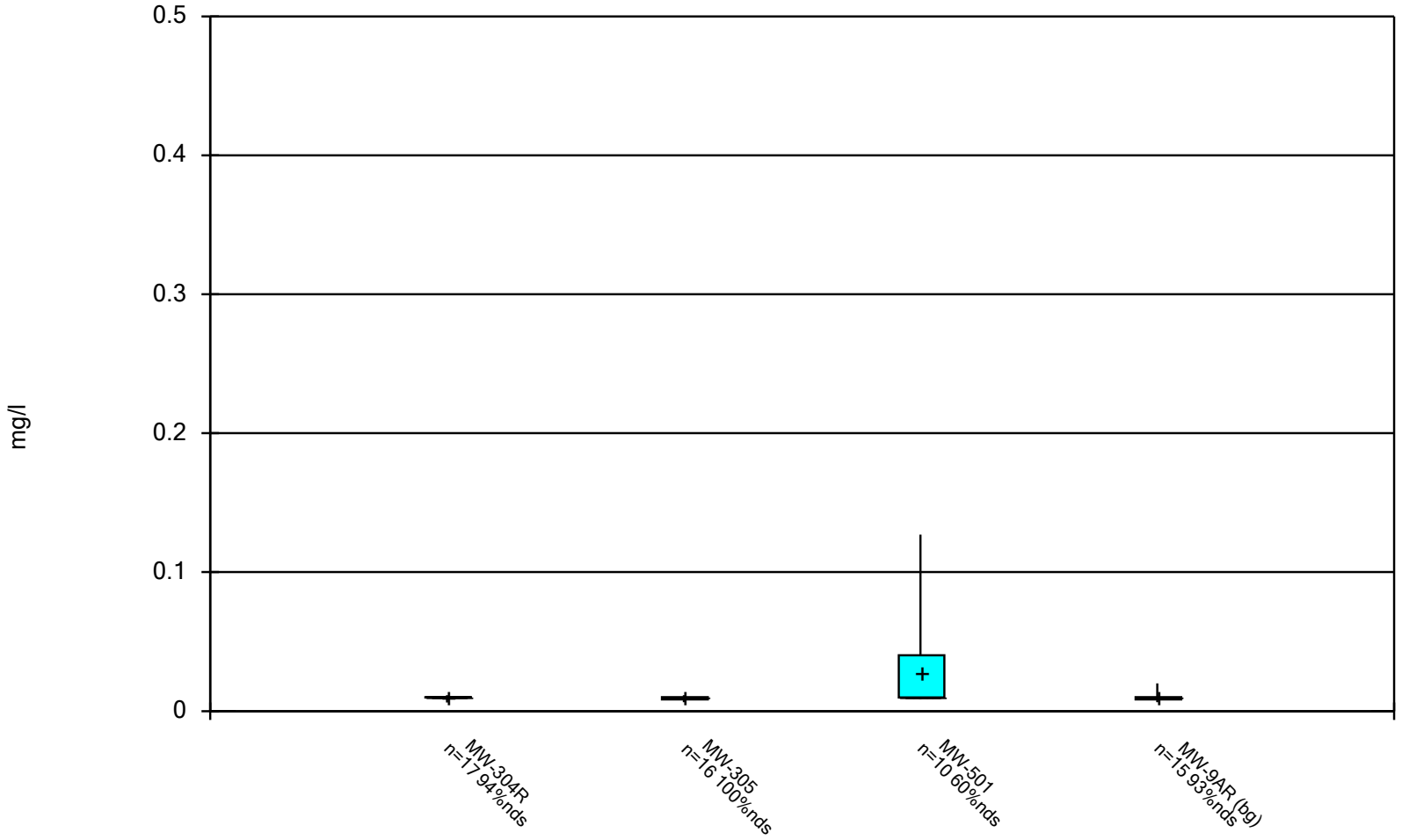
Box & Whiskers Plot



Constituent: Zinc Analysis Run 7/12/2024 2:02 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



Constituent: Zinc Analysis Run 7/12/2024 2:02 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:03 PM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Lower Q.	Upper Q.	Min.	Max.	%NDs
Antimony (mg/l)	MW-15	20	0.0005977	0.000331	0.0000...	0.00053	0.000308	0.001	0.000161	0.0011	90
Antimony (mg/l)	MW-18	19	0.0006582	0.0004463	0.0001024	0.00053	0.000237	0.001	0.000161	0.00193	94.74
Antimony (mg/l)	MW-19	19	0.0006148	0.0003299	0.0000...	0.00053	0.000291	0.001	0.000161	0.0011	94.74
Antimony (mg/l)	MW-20	18	0.0006228	0.0003389	0.0000...	0.000555	0.000237	0.001	0.000185	0.0011	94.44
Antimony (mg/l)	MW-201B (bg)	19	0.001036	0.0005159	0.0001184	0.001	0.000688	0.00129	0.000373	0.0023	31.58
Antimony (mg/l)	MW-22	19	0.0006132	0.0003313	0.0000...	0.00053	0.000237	0.001	0.000185	0.0011	100
Antimony (mg/l)	MW-24	20	0.000676	0.0003913	0.0000...	0.000635	0.0003285	0.001	0.000185	0.00161	95
Antimony (mg/l)	MW-26A	16	0.0006224	0.0003195	0.0000...	0.00053	0.00042	0.001	0.000185	0.0011	100
Antimony (mg/l)	MW-300	19	0.0006182	0.0003597	0.0000...	0.00053	0.000237	0.001	0.000185	0.00113	84.21
Antimony (mg/l)	MW-301	19	0.0006616	0.0004403	0.000101	0.00053	0.000237	0.001	0.000185	0.00192	94.74
Antimony (mg/l)	MW-302R	20	0.0005918	0.0003364	0.0000...	0.00053	0.000237	0.001	0.000185	0.0011	100
Antimony (mg/l)	MW-303	21	0.0008531	0.0009767	0.0002131	0.00058	0.0003285	0.00105	0.000161	0.00483	100
Antimony (mg/l)	MW-304R	20	0.0007172	0.0004046	0.0000...	0.000635	0.00042	0.001	0.000185	0.00161	100
Antimony (mg/l)	MW-305	20	0.0005918	0.0003364	0.0000...	0.00053	0.000237	0.001	0.000185	0.0011	100
Antimony (mg/l)	MW-501	10	0.001059	0.0003359	0.0001062	0.001	0.000845	0.0011	0.00069	0.00191	90
Antimony (mg/l)	MW-9AR (bg)	15	0.0008419	0.0003603	0.0000...	0.00069	0.00053	0.0011	0.00042	0.00165	86.67
Arsenic (mg/l)	MW-15	21	0.003261	0.003899	0.0008507	0.00187	0.001305	0.004115	0.000375	0.0184	9.524
Arsenic (mg/l)	MW-18	19	0.001303	0.0008478	0.0001945	0.00088	0.000751	0.00174	0.00053	0.00413	31.58
Arsenic (mg/l)	MW-19	19	0.005171	0.003695	0.0008478	0.00485	0.00249	0.00673	0.000845	0.0143	0
Arsenic (mg/l)	MW-20	19	0.007183	0.004541	0.001042	0.00604	0.00424	0.00943	0.000285	0.0208	5.263
Arsenic (mg/l)	MW-201B (bg)	19	0.001432	0.0009793	0.0002247	0.00116	0.000805	0.00166	0.000375	0.00428	10.53
Arsenic (mg/l)	MW-22	16	0.003044	0.0002366	0.0000...	0.003065	0.002815	0.003245	0.00262	0.0034	0
Arsenic (mg/l)	MW-24	19	0.0007288	0.0001185	0.0000...	0.00075	0.000672	0.000825	0.000505	0.000945	57.89
Arsenic (mg/l)	MW-26A	17	0.003019	0.00534	0.001295	0.00075	0.0006455	0.00246	0.000505	0.021	64.71
Arsenic (mg/l)	MW-300	19	0.001724	0.001198	0.0002748	0.00149	0.00075	0.00257	0.00053	0.00458	42.11
Arsenic (mg/l)	MW-301	19	0.007553	0.00244	0.0005597	0.00794	0.00525	0.0099	0.00291	0.0113	0
Arsenic (mg/l)	MW-302R	20	0.0008968	0.0004308	0.0000...	0.000753	0.000672	0.00088	0.000505	0.00212	55
Arsenic (mg/l)	MW-303	20	0.001765	0.002004	0.0004481	0.00088	0.00057	0.00206	0.000505	0.0085	70
Arsenic (mg/l)	MW-304R	20	0.0009156	0.0003952	0.0000...	0.000794	0.0007395	0.0009675	0.000505	0.002	65
Arsenic (mg/l)	MW-305	20	0.0008255	0.0004389	0.0000...	0.00075	0.00055	0.000815	0.000505	0.00204	90
Arsenic (mg/l)	MW-501	10	0.004483	0.003762	0.001189	0.003615	0.001245	0.00743	0.00075	0.0126	20
Arsenic (mg/l)	MW-9AR (bg)	15	0.002151	0.00207	0.0005345	0.00147	0.00103	0.00241	0.00044	0.00866	13.33
Barium (mg/l)	MW-15	20	0.1198	0.03571	0.007985	0.115	0.0951	0.149	0.0614	0.189	0
Barium (mg/l)	MW-18	19	0.05761	0.0149	0.003418	0.0564	0.0459	0.0712	0.0343	0.0871	0
Barium (mg/l)	MW-19	19	0.2318	0.2149	0.04931	0.111	0.0503	0.384	0.0413	0.686	0
Barium (mg/l)	MW-20	18	1.169	0.2913	0.06865	1.07	0.95	1.42	0.719	1.69	0
Barium (mg/l)	MW-201B (bg)	19	0.1136	0.06571	0.01508	0.0732	0.062	0.174	0.0387	0.232	0
Barium (mg/l)	MW-22	19	1.059	0.06751	0.01549	1.08	1.01	1.09	0.923	1.22	0
Barium (mg/l)	MW-24	20	0.06371	0.01707	0.003816	0.05665	0.0509	0.0788	0.0399	0.0968	0
Barium (mg/l)	MW-26A	16	0.1447	0.09414	0.02354	0.1185	0.0901	0.19	0.0322	0.416	0
Barium (mg/l)	MW-300	19	0.13	0.09958	0.02284	0.0962	0.0546	0.228	0.042	0.383	0
Barium (mg/l)	MW-301	19	0.06769	0.01495	0.003429	0.0672	0.0599	0.0757	0.0315	0.109	0
Barium (mg/l)	MW-302R	20	0.0496	0.0568	0.0127	0.01705	0.0139	0.09455	0.0112	0.17	0
Barium (mg/l)	MW-303	21	0.07059	0.07725	0.01686	0.0505	0.0355	0.0625	0.0157	0.344	0
Barium (mg/l)	MW-304R	19	0.05078	0.01411	0.003238	0.0494	0.0415	0.0569	0.0328	0.0975	0
Barium (mg/l)	MW-305	20	0.1026	0.03743	0.00837	0.1088	0.0635	0.136	0.0443	0.156	0
Barium (mg/l)	MW-501	10	0.04176	0.0123	0.003889	0.04425	0.02895	0.05305	0.0232	0.0584	0
Barium (mg/l)	MW-9AR (bg)	15	0.487	0.06861	0.01772	0.515	0.413	0.545	0.352	0.575	0
Beryllium (mg/l)	MW-15	20	0.0002693	0.0001889	0.0000...	0.00027	0.00019	0.00027	0.000039	0.001	100
Beryllium (mg/l)	MW-18	18	0.0002383	0.0000...	0.0000...	0.00027	0.00019	0.00027	0.000067	0.00033	94.44

Box & Whiskers Plot

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:03 PM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Lower Q.	Upper Q.	Min.	Max.	%NDs
Beryllium (mg/l)	MW-19	18	0.0002372	0.0000...	0.0000...	0.00027	0.00019	0.00027	0.000047	0.00033	94.44
Beryllium (mg/l)	MW-20	17	0.0002484	0.0000...	0.0000...	0.00027	0.0002055	0.00027	0.000125	0.00033	100
Beryllium (mg/l)	MW-201B (bg)	19	0.0002299	0.0000...	0.0000202	0.00027	0.00019	0.00027	0.000039	0.00033	89.47
Beryllium (mg/l)	MW-22	19	0.0002334	0.0000...	0.0000172	0.00027	0.00019	0.00027	0.00007	0.00033	89.47
Beryllium (mg/l)	MW-24	20	0.0002696	0.0001885	0.0000...	0.00027	0.00019	0.00027	0.000045	0.001	95
Beryllium (mg/l)	MW-26A	15	0.0002458	0.0000557	0.0000...	0.00027	0.00019	0.00027	0.000125	0.00033	100
Beryllium (mg/l)	MW-300	17	0.0002368	0.0000752	0.0000...	0.00027	0.00019	0.00027	0.000073	0.00033	94.12
Beryllium (mg/l)	MW-301	18	0.0002468	0.0000...	0.0000...	0.00027	0.0002055	0.00027	0.000125	0.00033	100
Beryllium (mg/l)	MW-302R	20	0.0002319	0.0000...	0.0000...	0.00027	0.00019	0.00027	0.00007	0.00033	95
Beryllium (mg/l)	MW-303	18	0.0002367	0.0000...	0.0000...	0.00027	0.00019	0.00027	0.000039	0.00033	100
Beryllium (mg/l)	MW-304R	19	0.0002547	0.0000...	0.0000...	0.00027	0.00019	0.00027	0.000088	0.00053	94.74
Beryllium (mg/l)	MW-305	19	0.0002404	0.0000...	0.0000...	0.00027	0.00019	0.00027	0.000125	0.00033	100
Beryllium (mg/l)	MW-501	9	0.0006016	0.0006947	0.0002316	0.00027	0.00027	0.00076	0.00027	0.00227	66.67
Beryllium (mg/l)	MW-9AR (bg)	14	0.0002657	0.0000...	0.0000...	0.00027	0.00023	0.0003	0.00019	0.00033	100
Cadmium (mg/l)	MW-15	19	0.0001009	0.0001027	0.0000...	0.000077	0.0000441	0.000112	0.000...	0.0005	68.42
Cadmium (mg/l)	MW-18	19	0.0001606	0.0001038	0.0000...	0.000132	0.000096	0.000185	0.000063	0.00053	0
Cadmium (mg/l)	MW-19	19	0.00009481	0.0001042	0.0000239	0.00006	0.0000441	0.000112	0.000...	0.0005	84.21
Cadmium (mg/l)	MW-20	18	0.00006147	0.0000...	0.0000...	0.000053	0.00004155	0.0000885	0.000...	0.000112	100
Cadmium (mg/l)	MW-201B (bg)	18	0.00006808	0.0000...	0.0000...	0.000...	0.00004155	0.0001	0.000...	0.000139	83.33
Cadmium (mg/l)	MW-22	18	0.00005719	0.0000224	0.0000...	0.000051	0.000039	0.0000685	0.000...	0.0001	100
Cadmium (mg/l)	MW-24	20	0.0002218	0.0001847	0.0000413	0.000141	0.0000885	0.0003835	0.000039	0.000659	30
Cadmium (mg/l)	MW-26A	16	0.000101	0.0001115	0.0000...	0.000071	0.00005	0.0001	0.000...	0.0005	68.75
Cadmium (mg/l)	MW-300	19	0.0001716	0.0001512	0.0000347	0.0001	0.000073	0.000228	0.000055	0.000599	31.58
Cadmium (mg/l)	MW-301	17	0.0000562	0.0000...	0.0000...	0.000051	0.00004155	0.0000605	0.000...	0.0001	94.12
Cadmium (mg/l)	MW-302R	20	0.00008071	0.0000...	0.0000...	0.000062	0.00004755	0.0001	0.000...	0.000272	65
Cadmium (mg/l)	MW-303	21	0.0006042	0.001365	0.0002978	0.00013	0.000052	0.0004365	0.000...	0.00629	38.1
Cadmium (mg/l)	MW-304R	19	0.00009944	0.0001033	0.0000237	0.000063	0.000049	0.0001	0.000...	0.0005	73.68
Cadmium (mg/l)	MW-305	19	0.00005708	0.0000...	0.0000...	0.000051	0.000039	0.000063	0.000...	0.0001	89.47
Cadmium (mg/l)	MW-501	10	0.0002216	0.0002794	0.0000...	0.000091	0.000053	0.0003945	0.000051	0.000875	40
Cadmium (mg/l)	MW-9AR (bg)	14	0.000064	0.0000...	0.0000...	0.000...	0.00005	0.0000885	0.000039	0.0001	100
Chromium (mg/l)	MW-15	19	0.0009463	0.0002304	0.0000...	0.0011	0.000729	0.0011	0.000355	0.00124	94.74
Chromium (mg/l)	MW-18	18	0.0009382	0.0002661	0.0000...	0.0011	0.0007445	0.0011	0.000355	0.00124	100
Chromium (mg/l)	MW-19	16	0.0009932	0.0002097	0.0000...	0.0011	0.00087	0.0011	0.000473	0.00124	93.75
Chromium (mg/l)	MW-20	18	0.001671	0.0005264	0.0001241	0.001595	0.00128	0.0021	0.0006	0.00273	5.556
Chromium (mg/l)	MW-201B (bg)	19	0.002274	0.003047	0.000699	0.0011	0.00098	0.00239	0.000355	0.0134	68.42
Chromium (mg/l)	MW-22	19	0.001131	0.0009663	0.0002217	0.0011	0.000729	0.0011	0.000355	0.005	89.47
Chromium (mg/l)	MW-24	19	0.0009347	0.0002473	0.0000...	0.0011	0.000729	0.0011	0.000355	0.00124	94.74
Chromium (mg/l)	MW-26A	15	0.0009266	0.0002813	0.0000...	0.00098	0.00076	0.0011	0.000355	0.0014	86.67
Chromium (mg/l)	MW-300	19	0.001106	0.0009838	0.0002257	0.0011	0.000729	0.0011	0.000355	0.005	94.74
Chromium (mg/l)	MW-301	18	0.0008945	0.000278	0.0000...	0.00104	0.000729	0.0011	0.000355	0.0012	94.44
Chromium (mg/l)	MW-302R	19	0.000883	0.0002811	0.0000...	0.00098	0.000729	0.0011	0.000355	0.0012	94.74
Chromium (mg/l)	MW-303	19	0.0009981	0.0002328	0.0000534	0.0011	0.00076	0.0011	0.000355	0.00133	94.74
Chromium (mg/l)	MW-304R	18	0.0009818	0.0002262	0.0000...	0.0011	0.00076	0.0011	0.000355	0.00124	100
Chromium (mg/l)	MW-305	20	0.001087	0.0009612	0.0002149	0.00104	0.000729	0.0011	0.000355	0.005	100
Chromium (mg/l)	MW-501	10	0.00112	0.0000...	0.0000...	0.0011	0.0011	0.00115	0.0011	0.0012	100
Chromium (mg/l)	MW-9AR (bg)	15	0.001025	0.0001473	0.0000...	0.0011	0.00098	0.0011	0.00076	0.0012	100
Cobalt (mg/l)	MW-15	21	0.002102	0.001074	0.0002345	0.00184	0.001395	0.00294	0.000701	0.00467	0
Cobalt (mg/l)	MW-18	20	0.007496	0.005624	0.001258	0.006015	0.003845	0.007815	0.00255	0.0246	0
Cobalt (mg/l)	MW-19	19	0.01364	0.003526	0.000809	0.0147	0.00948	0.0156	0.00707	0.0198	0
Cobalt (mg/l)	MW-20	19	0.004092	0.001279	0.0002935	0.00376	0.00296	0.00516	0.0018	0.00632	0

Box & Whiskers Plot

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:03 PM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Lower Q.	Upper Q.	Min.	Max.	%NDs
Cobalt (mg/l)	MW-201B (bg)	19	0.0005247	0.0007353	0.0001687	0.000198	0.000114	0.000493	0.000091	0.00288	21.05
Cobalt (mg/l)	MW-22	18	0.0003423	0.0001015	0.0000...	0.000319	0.000276	0.0004195	0.000202	0.000581	0
Cobalt (mg/l)	MW-24	21	0.002834	0.004105	0.0008959	0.00171	0.0005315	0.003195	0.00031	0.0177	0
Cobalt (mg/l)	MW-26A	17	0.01751	0.03471	0.008418	0.00129	0.000775	0.01874	0.0003	0.113	0
Cobalt (mg/l)	MW-300	19	0.005716	0.006665	0.001529	0.00249	0.000268	0.00941	0.000085	0.0205	10.53
Cobalt (mg/l)	MW-301	19	0.006708	0.002762	0.0006336	0.0064	0.00465	0.0091	0.00273	0.0135	0
Cobalt (mg/l)	MW-302R	20	0.001331	0.001307	0.0002922	0.000766	0.0002755	0.002115	0.00017	0.00491	15
Cobalt (mg/l)	MW-303	22	0.008198	0.01381	0.002943	0.000...	0.000249	0.0148	0.000185	0.0539	0
Cobalt (mg/l)	MW-304R	22	0.004031	0.003905	0.0008325	0.00256	0.000079	0.008755	0.000...	0.0106	9.091
Cobalt (mg/l)	MW-305	18	0.001781	0.0002913	0.0000...	0.00179	0.00148	0.00197	0.00139	0.00249	0
Cobalt (mg/l)	MW-501	10	0.02238	0.03965	0.01254	0.005415	0.00418	0.0313	0.00363	0.127	0
Cobalt (mg/l)	MW-9AR (bg)	15	0.0006002	0.0007165	0.000185	0.000296	0.000091	0.000891	0.000091	0.00243	26.67
Copper (mg/l)	MW-15	19	0.001933	0.000627	0.0001439	0.002	0.0016	0.00219	0.000485	0.0032	78.95
Copper (mg/l)	MW-18	19	0.00171	0.0005462	0.0001253	0.0018	0.0014	0.002	0.000774	0.0032	78.95
Copper (mg/l)	MW-19	19	0.001816	0.0004456	0.0001022	0.0018	0.0015	0.002	0.00122	0.0032	94.74
Copper (mg/l)	MW-20	18	0.001745	0.0005521	0.0001301	0.0018	0.0014	0.002	0.000485	0.0032	100
Copper (mg/l)	MW-201B (bg)	19	0.002559	0.001655	0.0003796	0.00218	0.0018	0.00287	0.000485	0.00792	47.37
Copper (mg/l)	MW-22	17	0.001866	0.0005766	0.0001398	0.0018	0.00155	0.002185	0.0005	0.0032	82.35
Copper (mg/l)	MW-24	20	0.002391	0.0008361	0.000187	0.00219	0.001805	0.003155	0.00124	0.00415	45
Copper (mg/l)	MW-26A	16	0.00192	0.0007544	0.0001886	0.0017	0.001485	0.002	0.00122	0.00412	87.5
Copper (mg/l)	MW-300	19	0.001822	0.0005633	0.0001292	0.0018	0.0016	0.00214	0.000592	0.0032	73.68
Copper (mg/l)	MW-301	17	0.001789	0.0004611	0.0001118	0.0018	0.00145	0.002	0.00122	0.0032	94.12
Copper (mg/l)	MW-302R	20	0.001994	0.0006248	0.0001397	0.0018	0.00168	0.00219	0.00122	0.00378	70
Copper (mg/l)	MW-303	21	0.002227	0.002433	0.0005309	0.0018	0.0014	0.002	0.0005	0.0126	85.71
Copper (mg/l)	MW-304R	20	0.001734	0.0005796	0.0001296	0.0018	0.00145	0.002	0.000485	0.0032	90
Copper (mg/l)	MW-305	20	0.001796	0.0004608	0.000103	0.0018	0.00145	0.002	0.00122	0.0032	100
Copper (mg/l)	MW-501	9	0.002091	0.001002	0.0003341	0.0018	0.0014	0.002375	0.0014	0.00447	66.67
Copper (mg/l)	MW-9AR (bg)	13	0.0017	0.0002	0.0000...	0.0018	0.00155	0.0018	0.0014	0.002	100
Lead (mg/l)	MW-15	20	0.0003606	0.0002333	0.0000...	0.00027	0.00024	0.000324	0.000118	0.001	70
Lead (mg/l)	MW-18	19	0.0002912	0.0001223	0.0000...	0.00026	0.00024	0.000324	0.00011	0.000641	73.68
Lead (mg/l)	MW-19	19	0.0002464	0.0000...	0.0000...	0.00025	0.000211	0.00027	0.00011	0.000326	84.21
Lead (mg/l)	MW-20	18	0.0002487	0.0000...	0.0000...	0.00024	0.0002105	0.00027	0.000...	0.0005	100
Lead (mg/l)	MW-201B (bg)	19	0.001512	0.002102	0.0004822	0.00063	0.000324	0.00165	0.000211	0.00704	21.05
Lead (mg/l)	MW-22	19	0.0002972	0.0001403	0.0000...	0.00025	0.000211	0.000321	0.00011	0.000648	89.47
Lead (mg/l)	MW-24	19	0.0002529	0.0000...	0.0000...	0.00025	0.00022	0.000279	0.00011	0.000324	78.95
Lead (mg/l)	MW-26A	15	0.00026	0.0000...	0.0000...	0.00025	0.000211	0.00027	0.00011	0.000444	86.67
Lead (mg/l)	MW-300	18	0.0002429	0.0000648	0.0000...	0.000245	0.0002105	0.00027	0.00011	0.000369	83.33
Lead (mg/l)	MW-301	16	0.0002541	0.0000...	0.0000...	0.000245	0.000211	0.00027	0.00011	0.0005	100
Lead (mg/l)	MW-302R	20	0.0002989	0.0001342	0.0000...	0.00025	0.000211	0.0003245	0.00011	0.000663	80
Lead (mg/l)	MW-303	21	0.0004143	0.0003869	0.0000...	0.00026	0.0002255	0.0004	0.00011	0.00168	76.19
Lead (mg/l)	MW-304R	19	0.0002519	0.0000...	0.0000...	0.00024	0.00021	0.00027	0.000...	0.0005	94.74
Lead (mg/l)	MW-305	20	0.0002497	0.0000...	0.0000...	0.000255	0.0002255	0.0002725	0.00011	0.000324	75
Lead (mg/l)	MW-501	10	0.000943	0.001293	0.0004088	0.000...	0.000225	0.001585	0.00021	0.00412	50
Lead (mg/l)	MW-9AR (bg)	15	0.0002331	0.0000...	0.0000...	0.00024	0.00021	0.00026	0.00011	0.00027	100
Mercury (mg/l)	MW-15	2	0.000111	0.0000...	0.000001	0.000111	0.000111	0.000111	0.00011	0.000112	100
Mercury (mg/l)	MW-18	2	0.000111	0.0000...	0.000001	0.000111	0.000111	0.000111	0.00011	0.000112	100
Mercury (mg/l)	MW-19	2	0.000146	0.0000...	0.000004	0.000146	0.000146	0.000146	0.000142	0.00015	100
Mercury (mg/l)	MW-20	2	0.000146	0.0000...	0.000004	0.000146	0.000146	0.000146	0.000142	0.00015	100
Mercury (mg/l)	MW-201B (bg)	4	0.0001367	0.0000...	0.0000...	0.000127	0.0001023	0.000171	0.000...	0.0002	100
Mercury (mg/l)	MW-22	2	0.000146	0.0000...	0.000004	0.000146	0.000146	0.000146	0.000142	0.00015	100

Box & Whiskers Plot

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:03 PM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Lower Q.	Upper Q.	Min.	Max.	%NDs
Mercury (mg/l)	MW-24	2	0.000111	0.0000...	0.000001	0.000111	0.000111	0.000111	0.00011	0.000112	100
Mercury (mg/l)	MW-26A	3	0.0001367	0.0000...	0.0000...	0.00015	0.00011	0.00015	0.00011	0.00015	100
Mercury (mg/l)	MW-300	2	0.000146	0.0000...	0.000004	0.000146	0.000146	0.000146	0.000142	0.00015	100
Mercury (mg/l)	MW-301	11	0.0001364	0.0000...	0.0000...	0.000142	0.000112	0.00015	0.0001	0.0002	100
Mercury (mg/l)	MW-302R	2	0.000111	0.0000...	0.000001	0.000111	0.000111	0.000111	0.00011	0.000112	100
Mercury (mg/l)	MW-303	1	0.00015	0	0	0.00015	0.00015	0.00015	0.00015	0.00015	100
Mercury (mg/l)	MW-304R	2	0.000105	0.0000...	0.000005	0.000105	0.000105	0.000105	0.0001	0.00011	100
Mercury (mg/l)	MW-305	2	0.000111	0.0000...	0.000001	0.000111	0.000111	0.000111	0.00011	0.000112	100
Mercury (mg/l)	MW-9AR (bg)	2	0.00015	0	0	0.00015	0.00015	0.00015	0.00015	0.00015	100
Nickel (mg/l)	MW-15	21	0.007219	0.002126	0.000464	0.00737	0.005645	0.008735	0.00231	0.011	0
Nickel (mg/l)	MW-18	20	0.01875	0.006806	0.001522	0.01725	0.01375	0.0244	0.00831	0.0327	0
Nickel (mg/l)	MW-19	19	0.02856	0.008766	0.002011	0.0275	0.0217	0.0342	0.0144	0.0449	0
Nickel (mg/l)	MW-20	19	0.02224	0.008892	0.00204	0.0204	0.0155	0.0287	0.00997	0.0432	0
Nickel (mg/l)	MW-201B (bg)	19	0.002433	0.001369	0.000314	0.0019	0.00153	0.00296	0.000929	0.00561	57.89
Nickel (mg/l)	MW-22	18	0.03381	0.002638	0.0006217	0.0344	0.0315	0.03565	0.0285	0.0382	0
Nickel (mg/l)	MW-24	21	0.03881	0.01082	0.00236	0.0441	0.03245	0.04755	0.014	0.052	0
Nickel (mg/l)	MW-26A	17	0.01289	0.01329	0.003223	0.00856	0.00691	0.01102	0.00256	0.0512	0
Nickel (mg/l)	MW-300	19	0.01135	0.008598	0.001972	0.011	0.00523	0.0147	0.00095	0.032	10.53
Nickel (mg/l)	MW-301	19	0.009207	0.00402	0.0009223	0.00796	0.00692	0.012	0.00333	0.0174	0
Nickel (mg/l)	MW-302R	21	0.008242	0.005154	0.001125	0.00846	0.00224	0.0116	0.0019	0.0187	23.81
Nickel (mg/l)	MW-303	22	0.0262	0.02842	0.006058	0.01295	0.00255	0.05475	0.00085	0.0818	9.091
Nickel (mg/l)	MW-304R	21	0.00467	0.003314	0.0007233	0.00339	0.002225	0.006165	0.0005	0.0125	9.524
Nickel (mg/l)	MW-305	20	0.002394	0.0008333	0.0001863	0.00214	0.001875	0.00281	0.001	0.00449	25
Nickel (mg/l)	MW-501	10	0.03922	0.06721	0.02125	0.008835	0.0068	0.0643	0.00576	0.209	0
Nickel (mg/l)	MW-9AR (bg)	13	0.00173	0.0003426	0.0000...	0.0019	0.001695	0.0019	0.001	0.0021	92.31
Selenium (mg/l)	MW-15	17	0.001118	0.0006409	0.0001554	0.00096	0.000914	0.001	0.00063	0.00349	88.24
Selenium (mg/l)	MW-18	16	0.001062	0.0002852	0.0000...	0.00096	0.000914	0.00125	0.00063	0.00176	75
Selenium (mg/l)	MW-19	17	0.001064	0.0002558	0.0000...	0.001	0.000928	0.001212	0.00063	0.00168	82.35
Selenium (mg/l)	MW-20	17	0.001064	0.0002181	0.0000...	0.001	0.000928	0.001268	0.00063	0.0014	82.35
Selenium (mg/l)	MW-201B (bg)	15	0.001046	0.000186	0.0000...	0.00096	0.000928	0.001	0.0009	0.0014	100
Selenium (mg/l)	MW-22	17	0.0009943	0.0002383	0.0000...	0.001	0.0009	0.001065	0.00063	0.0014	82.35
Selenium (mg/l)	MW-24	18	0.001022	0.0002144	0.0000...	0.000...	0.000928	0.001	0.00063	0.00154	83.33
Selenium (mg/l)	MW-26A	15	0.0009845	0.0002162	0.0000...	0.00096	0.0009	0.001	0.00063	0.0014	93.33
Selenium (mg/l)	MW-300	18	0.0011	0.000348	0.0000...	0.00098	0.0009	0.0014	0.00063	0.00198	72.22
Selenium (mg/l)	MW-301	17	0.0009709	0.0002312	0.0000...	0.00096	0.0009	0.001	0.00063	0.0014	94.12
Selenium (mg/l)	MW-302R	17	0.001016	0.0002012	0.0000...	0.00096	0.000928	0.001	0.00064	0.0014	94.12
Selenium (mg/l)	MW-303	18	0.001077	0.0003127	0.0000737	0.00096	0.000914	0.00133	0.00063	0.00197	77.78
Selenium (mg/l)	MW-304R	18	0.001011	0.0002175	0.0000...	0.000971	0.000928	0.00108	0.00063	0.0014	94.44
Selenium (mg/l)	MW-305	19	0.0009744	0.0002261	0.0000...	0.00096	0.0009	0.001	0.00063	0.0014	100
Selenium (mg/l)	MW-501	10	0.001136	0.0002272	0.0000...	0.00096	0.00096	0.0014	0.00096	0.0014	100
Selenium (mg/l)	MW-9AR (bg)	15	0.001098	0.0002168	0.0000...	0.001	0.00096	0.0014	0.0009	0.00149	80
Silver (mg/l)	MW-15	20	0.0003584	0.0002114	0.0000...	0.00037	0.000153	0.00049	0.000042	0.001	100
Silver (mg/l)	MW-18	18	0.0003686	0.0002062	0.0000...	0.00037	0.000153	0.00049	0.00014	0.001	94.44
Silver (mg/l)	MW-19	19	0.0003699	0.0002107	0.0000...	0.00037	0.000153	0.00049	0.000042	0.001	100
Silver (mg/l)	MW-20	19	0.0003699	0.0002107	0.0000...	0.00037	0.000153	0.00049	0.000042	0.001	100
Silver (mg/l)	MW-201B (bg)	19	0.0003699	0.0002107	0.0000...	0.00037	0.000153	0.00049	0.000042	0.001	100
Silver (mg/l)	MW-22	19	0.0003757	0.0002024	0.0000...	0.00037	0.000153	0.00049	0.00014	0.001	100
Silver (mg/l)	MW-24	20	0.0003591	0.0002104	0.0000...	0.00037	0.000153	0.00049	0.000055	0.001	95
Silver (mg/l)	MW-26A	16	0.0003848	0.0002014	0.0000...	0.00037	0.0003	0.000455	0.00014	0.001	100
Silver (mg/l)	MW-300	19	0.0004091	0.0002423	0.0000...	0.00037	0.000153	0.0005	0.00014	0.001	89.47

Box & Whiskers Plot

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:03 PM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Lower Q.	Upper Q.	Min.	Max.	%NDs
Silver (mg/l)	MW-301	18	0.0003688	0.000206	0.0000...	0.00037	0.000153	0.00049	0.00014	0.001	100
Silver (mg/l)	MW-302R	20	0.000364	0.000204	0.0000...	0.00037	0.000153	0.00049	0.00014	0.001	100
Silver (mg/l)	MW-303	21	0.0005147	0.0006969	0.0001521	0.00037	0.0002265	0.000495	0.000042	0.00343	100
Silver (mg/l)	MW-304R	20	0.0003572	0.0002128	0.0000...	0.00037	0.000153	0.00049	0.000042	0.001	100
Silver (mg/l)	MW-305	20	0.0003658	0.000202	0.0000...	0.00037	0.000165	0.00049	0.00014	0.001	95
Silver (mg/l)	MW-501	10	0.000473	0.0000...	0.0000...	0.00049	0.00042	0.0005	0.00042	0.0005	100
Silver (mg/l)	MW-9AR (bg)	15	0.0003877	0.0001068	0.0000...	0.00037	0.0003	0.00049	0.000115	0.0005	100
Sulfide (mg/l)	MW-15	2	0.231	0	0	0.231	0.231	0.231	0.231	0.231	100
Sulfide (mg/l)	MW-18	2	0.2625	0.04455	0.0315	0.2625	0.2625	0.2625	0.231	0.294	50
Sulfide (mg/l)	MW-19	2	0.2055	0.03606	0.0255	0.2055	0.2055	0.2055	0.18	0.231	100
Sulfide (mg/l)	MW-20	14	3.725	4.47	1.195	2.255	0.7755	4.735	0.18	16.4	28.57
Sulfide (mg/l)	MW-201B (bg)	16	0.2729	0.2111	0.05277	0.231	0.1995	0.231	0.0462	1	93.75
Sulfide (mg/l)	MW-22	2	0.2055	0.03606	0.0255	0.2055	0.2055	0.2055	0.18	0.231	100
Sulfide (mg/l)	MW-24	2	0.231	0	0	0.231	0.231	0.231	0.231	0.231	100
Sulfide (mg/l)	MW-26A	3	0.231	0	0	0.231	0.231	0.231	0.231	0.231	100
Sulfide (mg/l)	MW-300	11	2.296	3.933	1.186	0.231	0.231	3.51	0.18	10	90.91
Sulfide (mg/l)	MW-301	2	0.1131	0.09461	0.0669	0.1131	0.1131	0.1131	0.0462	0.18	100
Sulfide (mg/l)	MW-302R	2	0.231	0	0	0.231	0.231	0.231	0.231	0.231	100
Sulfide (mg/l)	MW-303	1	0.231	0	0	0.231	0.231	0.231	0.231	0.231	100
Sulfide (mg/l)	MW-304R	2	0.231	0	0	0.231	0.231	0.231	0.231	0.231	100
Sulfide (mg/l)	MW-305	2	0.231	0	0	0.231	0.231	0.231	0.231	0.231	100
Sulfide (mg/l)	MW-9AR (bg)	13	1.734	3.669	1.017	0.231	0.231	0.231	0.231	10	100
Thallium (mg/l)	MW-15	20	0.0002903	0.0004229	0.0000...	0.00026	0.0000644	0.00026	0.000...	0.002	100
Thallium (mg/l)	MW-18	18	0.0002147	0.0001249	0.0000...	0.00026	0.0000885	0.000265	0.000051	0.00057	66.67
Thallium (mg/l)	MW-19	19	0.0002499	0.0002228	0.0000...	0.00026	0.000071	0.00026	0.000...	0.001	94.74
Thallium (mg/l)	MW-20	19	0.0002496	0.0002231	0.0000...	0.00026	0.0000644	0.00026	0.000...	0.001	100
Thallium (mg/l)	MW-201B (bg)	18	0.0002406	0.0002078	0.0000...	0.00026	0.0000732	0.000265	0.000...	0.000899	77.78
Thallium (mg/l)	MW-22	19	0.0002492	0.0002235	0.0000...	0.00026	0.0000644	0.00026	0.000...	0.001	100
Thallium (mg/l)	MW-24	20	0.0002415	0.00022	0.0000...	0.00026	0.0000672	0.00026	0.000...	0.001	90
Thallium (mg/l)	MW-26A	14	0.0001947	0.0000...	0.0000...	0.00026	0.0001172	0.00026	0.000...	0.00027	100
Thallium (mg/l)	MW-300	19	0.000321	0.0003048	0.0000...	0.00026	0.0000644	0.000294	0.000027	0.00102	68.42
Thallium (mg/l)	MW-301	18	0.0002486	0.00023	0.0000...	0.00026	0.0000644	0.000265	0.000...	0.001	100
Thallium (mg/l)	MW-302R	20	0.00024	0.0002215	0.0000...	0.00026	0.0000644	0.00026	0.000...	0.001	100
Thallium (mg/l)	MW-303	21	0.0003249	0.0004027	0.0000...	0.00026	0.0001172	0.000265	0.000...	0.00182	100
Thallium (mg/l)	MW-304R	20	0.000295	0.0002611	0.0000...	0.00026	0.0001172	0.00027	0.000...	0.001	90
Thallium (mg/l)	MW-305	20	0.0002917	0.000302	0.0000...	0.00026	0.0000644	0.00027	0.000...	0.00115	90
Thallium (mg/l)	MW-501	10	0.000322	0.0001307	0.0000...	0.00026	0.00026	0.000415	0.00026	0.00057	100
Thallium (mg/l)	MW-9AR (bg)	14	0.0002643	0.0000...	0.0000...	0.00026	0.000215	0.000265	0.00017	0.00057	100
Tin (mg/l)	MW-15	2	0.00231	0.0009758	0.00069	0.00231	0.00231	0.00231	0.00162	0.003	100
Tin (mg/l)	MW-18	2	0.00231	0.0009758	0.00069	0.00231	0.00231	0.00231	0.00162	0.003	100
Tin (mg/l)	MW-19	2	0.001916	0.001533	0.001084	0.001916	0.001916	0.001916	0.000832	0.003	100
Tin (mg/l)	MW-20	2	0.001916	0.001533	0.001084	0.001916	0.001916	0.001916	0.000832	0.003	100
Tin (mg/l)	MW-201B (bg)	3	0.001417	0.0005148	0.0002972	0.00162	0.000832	0.0018	0.000832	0.0018	100
Tin (mg/l)	MW-22	2	0.001916	0.001533	0.001084	0.001916	0.001916	0.001916	0.000832	0.003	100
Tin (mg/l)	MW-24	2	0.00231	0.0009758	0.00069	0.00231	0.00231	0.00231	0.00162	0.003	100
Tin (mg/l)	MW-26A	3	0.001253	0.0009064	0.0005233	0.00073	0.00073	0.0023	0.00073	0.0023	100
Tin (mg/l)	MW-300	2	0.001916	0.001533	0.001084	0.001916	0.001916	0.001916	0.000832	0.003	100
Tin (mg/l)	MW-301	10	0.0113	0.03118	0.009858	0.00162	0.000781	0.0024	0.00073	0.1	100
Tin (mg/l)	MW-302R	2	0.00231	0.0009758	0.00069	0.00231	0.00231	0.00231	0.00162	0.003	100
Tin (mg/l)	MW-303	1	0.003	0	0	0.003	0.003	0.003	0.003	0.003	100

Box & Whiskers Plot

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:03 PM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Lower Q.	Upper Q.	Min.	Max.	%NDs
Tin (mg/l)	MW-304R	2	0.0018	0.0007071	0.0005	0.0018	0.0018	0.0018	0.0013	0.0023	100
Tin (mg/l)	MW-305	2	0.00231	0.0009758	0.00069	0.00231	0.00231	0.00231	0.00162	0.003	100
Tin (mg/l)	MW-9AR (bg)	3	0.0009203	0.0003288	0.0001898	0.000731	0.00073	0.0013	0.00073	0.0013	66.67
Vanadium (mg/l)	MW-15	20	0.001734	0.001064	0.0002379	0.001455	0.001055	0.00221	0.000313	0.005	15
Vanadium (mg/l)	MW-18	19	0.001059	0.0009886	0.0002268	0.00084	0.000663	0.0011	0.000255	0.005	89.47
Vanadium (mg/l)	MW-19	19	0.001048	0.0009944	0.0002281	0.00084	0.000559	0.0011	0.000284	0.005	78.95
Vanadium (mg/l)	MW-20	19	0.003585	0.000919	0.0002108	0.00355	0.00282	0.00427	0.00208	0.0052	0
Vanadium (mg/l)	MW-201B (bg)	19	0.001708	0.001859	0.0004264	0.000981	0.00082	0.00205	0.000255	0.00796	57.89
Vanadium (mg/l)	MW-22	18	0.0008574	0.0002562	0.0000...	0.00084	0.0007855	0.0011	0.000255	0.0011	83.33
Vanadium (mg/l)	MW-24	18	0.0009394	0.0001871	0.0000...	0.000...	0.00083	0.0011	0.000374	0.0011	66.67
Vanadium (mg/l)	MW-26A	14	0.0009184	0.0001745	0.0000...	0.000...	0.00082	0.0011	0.000594	0.0011	64.29
Vanadium (mg/l)	MW-300	18	0.0008251	0.0002908	0.0000...	0.00084	0.000604	0.0011	0.000255	0.0011	88.89
Vanadium (mg/l)	MW-301	18	0.0008811	0.000338	0.0000...	0.000845	0.00067	0.0011	0.000255	0.00162	94.44
Vanadium (mg/l)	MW-302R	19	0.001007	0.0004274	0.0000...	0.0011	0.00082	0.0011	0.000255	0.00201	73.68
Vanadium (mg/l)	MW-303	18	0.0008869	0.000228	0.0000...	0.000845	0.000753	0.0011	0.000449	0.0011	94.44
Vanadium (mg/l)	MW-304R	16	0.0009032	0.0002079	0.0000...	0.000845	0.00082	0.0011	0.000449	0.0011	87.5
Vanadium (mg/l)	MW-305	20	0.001112	0.0008123	0.0001816	0.000945	0.00082	0.0011	0.000255	0.00425	80
Vanadium (mg/l)	MW-501	9	0.001729	0.001456	0.0004852	0.0011	0.0011	0.001725	0.0011	0.00551	55.56
Vanadium (mg/l)	MW-9AR (bg)	15	0.0009813	0.0003962	0.0001023	0.0011	0.00082	0.0011	0.00052	0.00215	100
Zinc (mg/l)	MW-15	16	0.01042	0.000845	0.0002112	0.01	0.01	0.01075	0.0097	0.0126	93.75
Zinc (mg/l)	MW-18	18	0.01074	0.002997	0.0007063	0.01	0.01	0.01115	0.0064	0.0197	72.22
Zinc (mg/l)	MW-19	17	0.009704	0.001486	0.0003605	0.01	0.01	0.01	0.00521	0.0115	94.12
Zinc (mg/l)	MW-20	17	0.009066	0.001944	0.0004714	0.01	0.006705	0.01	0.00521	0.0115	94.12
Zinc (mg/l)	MW-201B (bg)	15	0.01056	0.001757	0.0004536	0.01	0.01	0.0115	0.00695	0.0153	73.33
Zinc (mg/l)	MW-22	17	0.01009	0.002401	0.0005822	0.01	0.01	0.01	0.00521	0.0172	94.12
Zinc (mg/l)	MW-24	17	0.009857	0.001338	0.0003245	0.01	0.01	0.01	0.0064	0.0115	94.12
Zinc (mg/l)	MW-26A	15	0.009201	0.00192	0.0004958	0.01	0.0097	0.01	0.00521	0.0115	100
Zinc (mg/l)	MW-300	16	0.009465	0.001691	0.0004229	0.01	0.00985	0.01	0.00562	0.0115	87.5
Zinc (mg/l)	MW-301	18	0.009218	0.001961	0.0004622	0.01	0.00805	0.01	0.00521	0.0115	100
Zinc (mg/l)	MW-302R	15	0.009786	0.001484	0.0003832	0.01	0.0097	0.01	0.0064	0.0115	86.67
Zinc (mg/l)	MW-303	20	0.009285	0.001723	0.0003852	0.01	0.00887	0.01	0.00521	0.0115	95
Zinc (mg/l)	MW-304R	17	0.009516	0.00159	0.0003856	0.01	0.00985	0.01	0.00627	0.0115	94.12
Zinc (mg/l)	MW-305	16	0.009812	0.001465	0.0003663	0.01	0.01	0.01	0.0064	0.0115	100
Zinc (mg/l)	MW-501	10	0.02755	0.03977	0.01258	0.01	0.00982	0.0401	0.00864	0.127	60
Zinc (mg/l)	MW-9AR (bg)	15	0.01017	0.002995	0.0007733	0.01	0.01	0.01	0.0064	0.02	93.33

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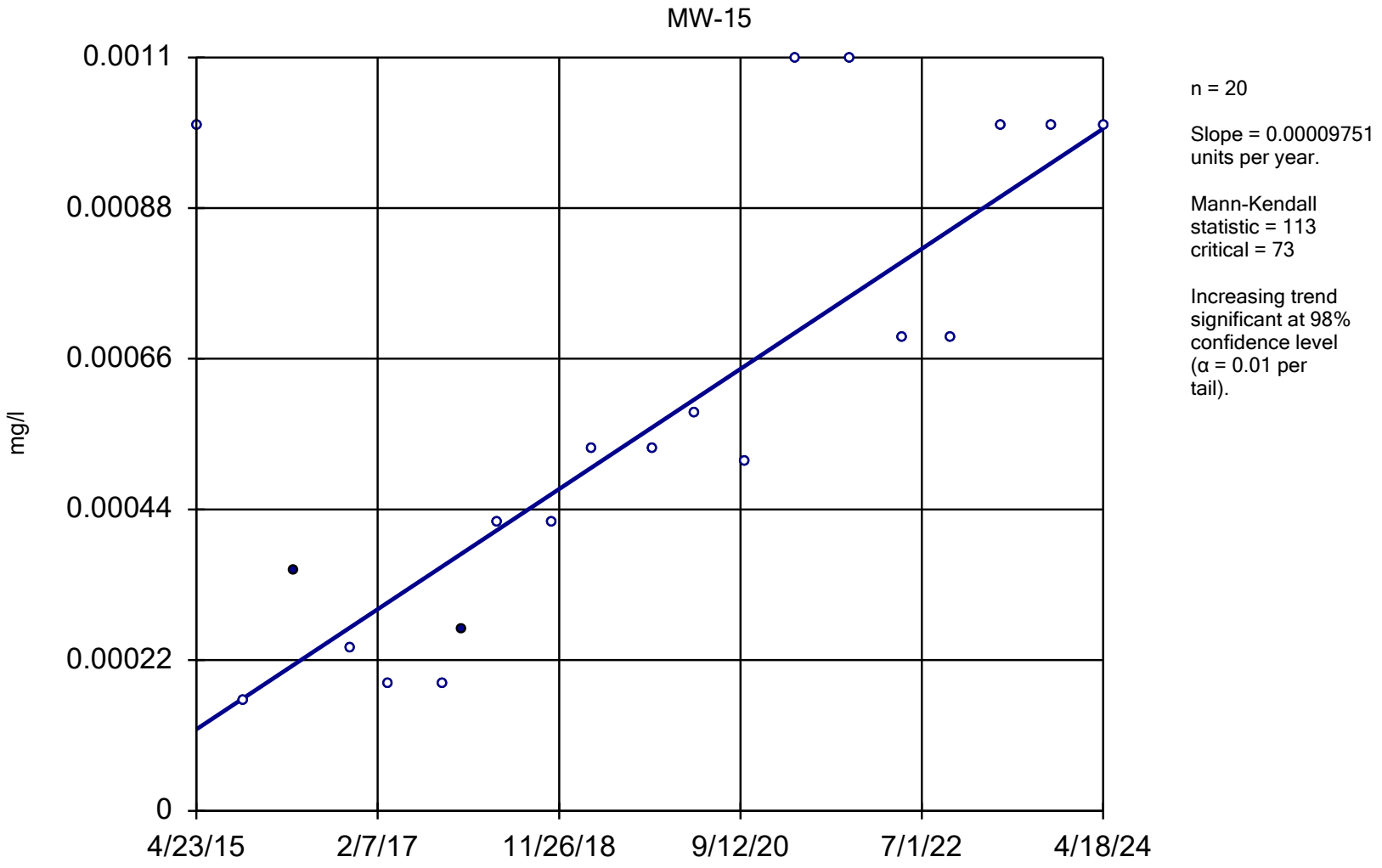
Monitoring Well Inorganic Trend Analysis – Full Dataset – Spring 2024

Hollow symbols indicate censored values.

Sen's Slope Estimator

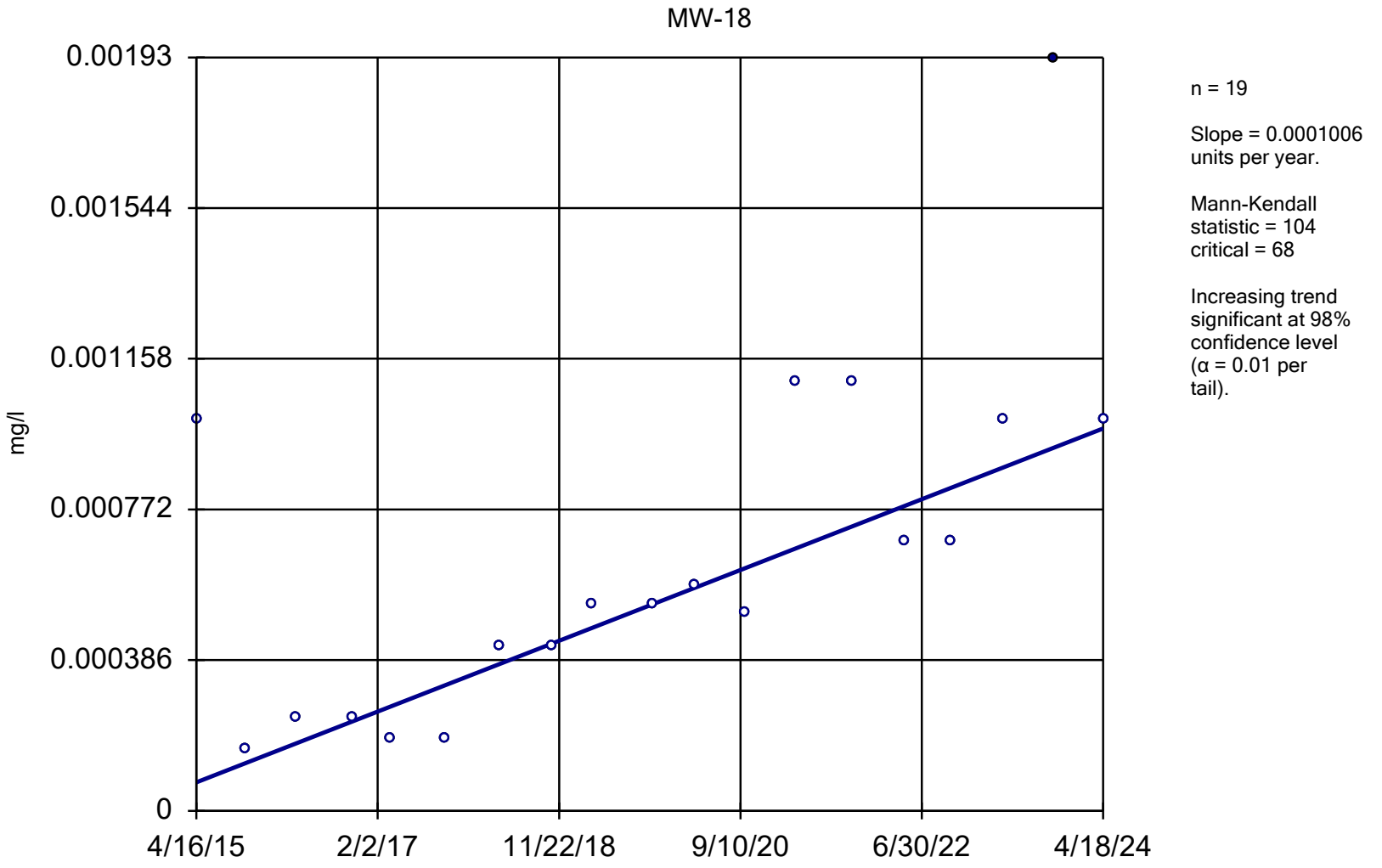


Constituent: Antimony Analysis Run 7/12/2024 2:04 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



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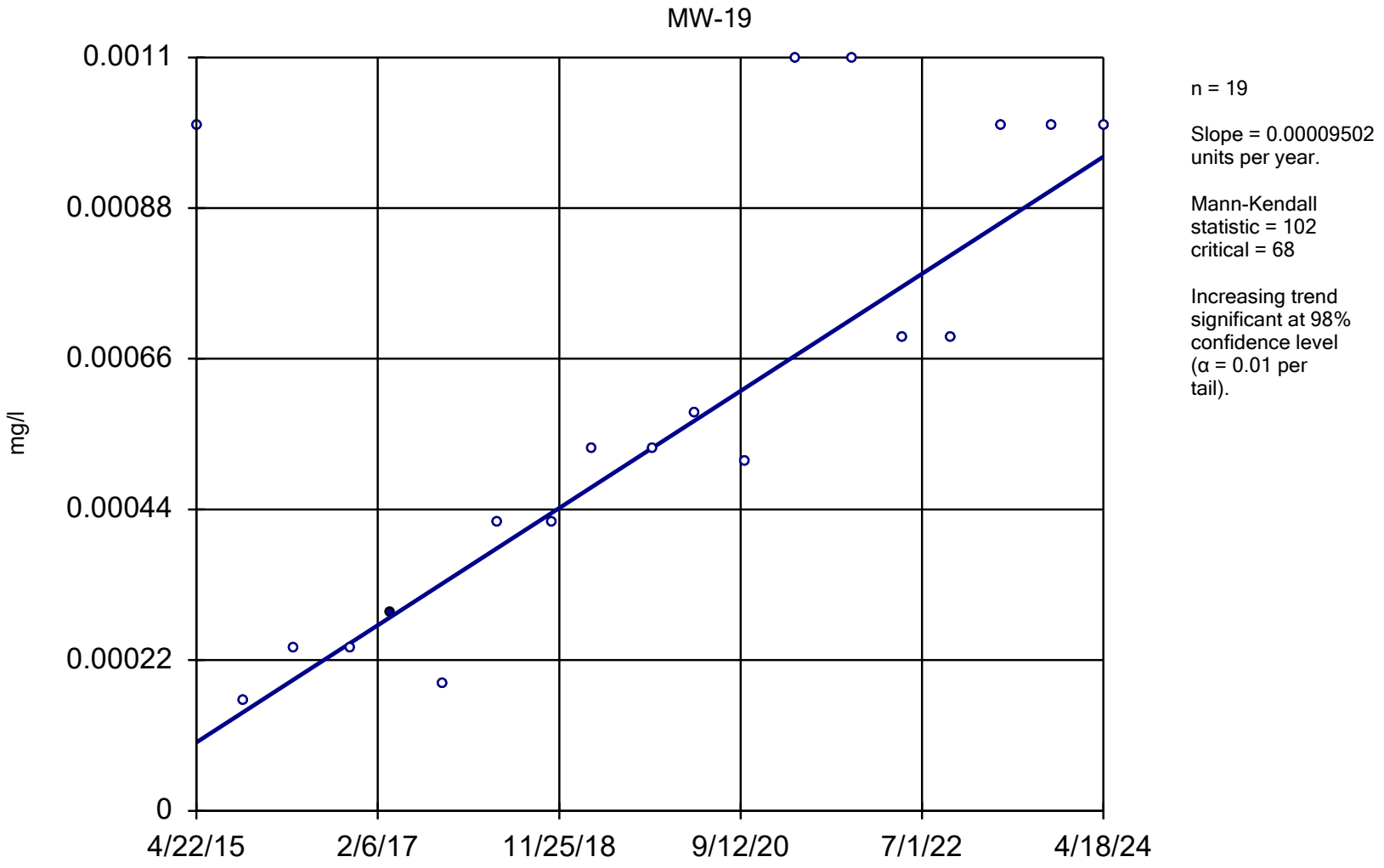
Sen's Slope Estimator



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Linn County Data: CRLCSWA_Groundwater Database

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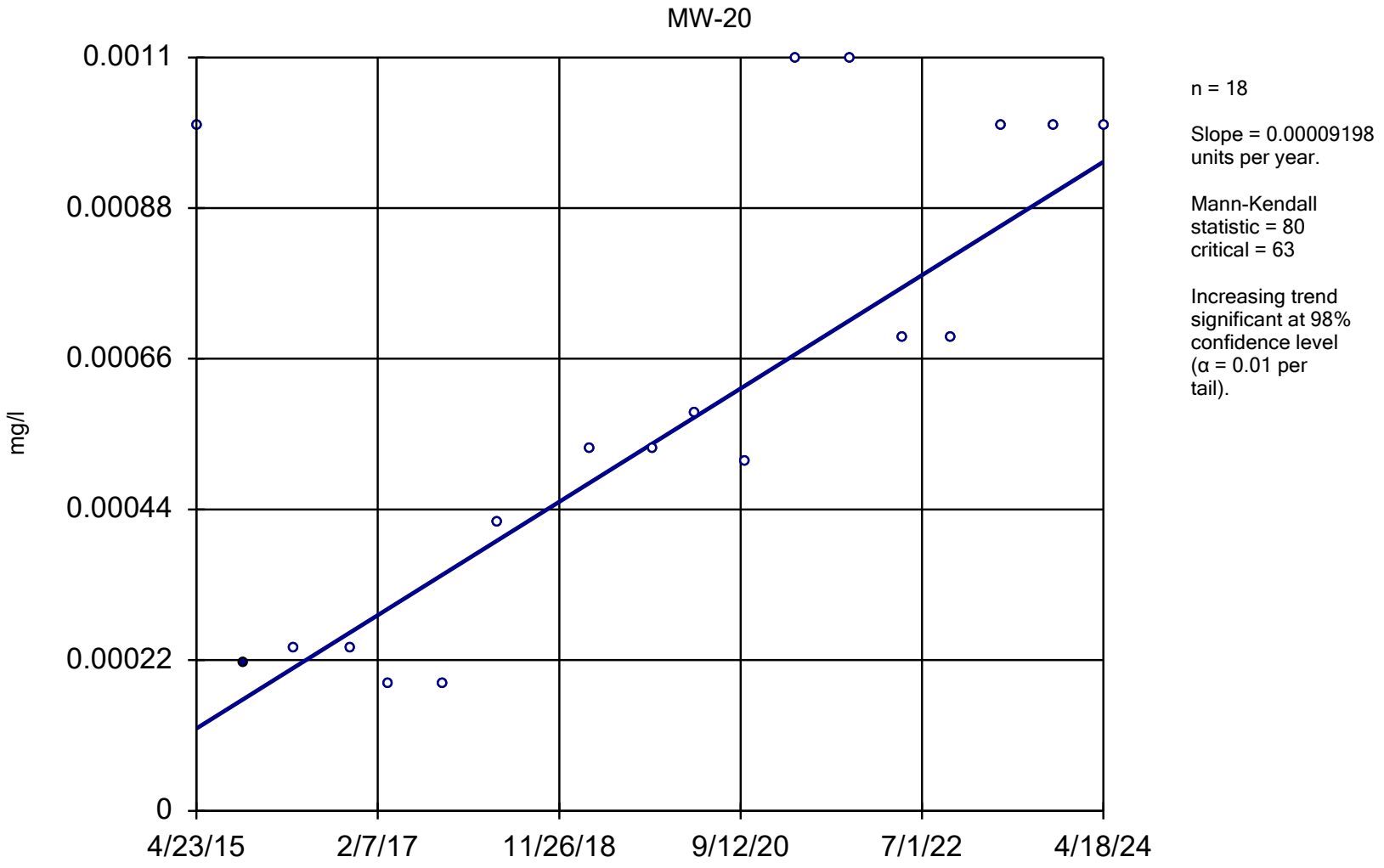
Sen's Slope Estimator



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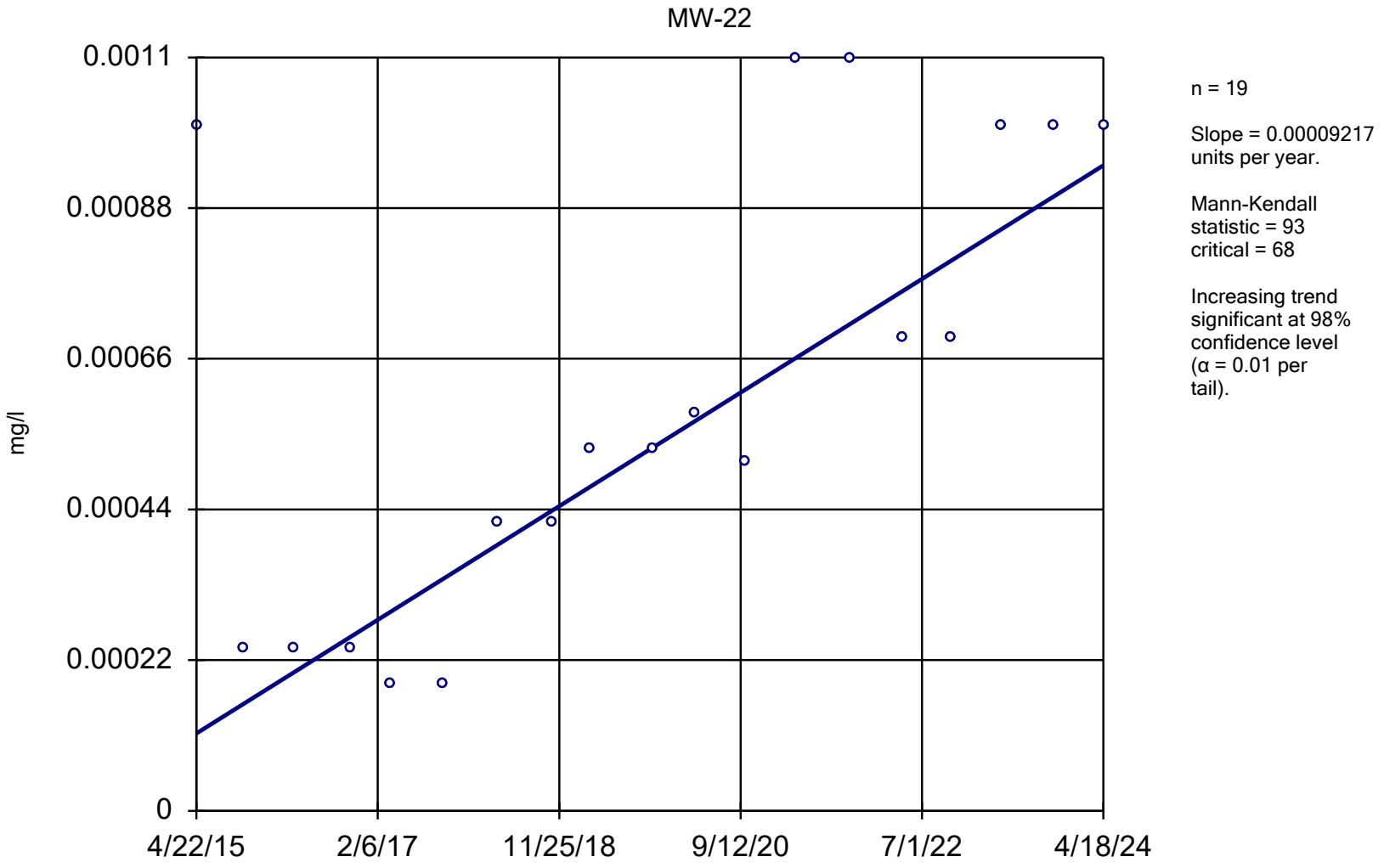
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



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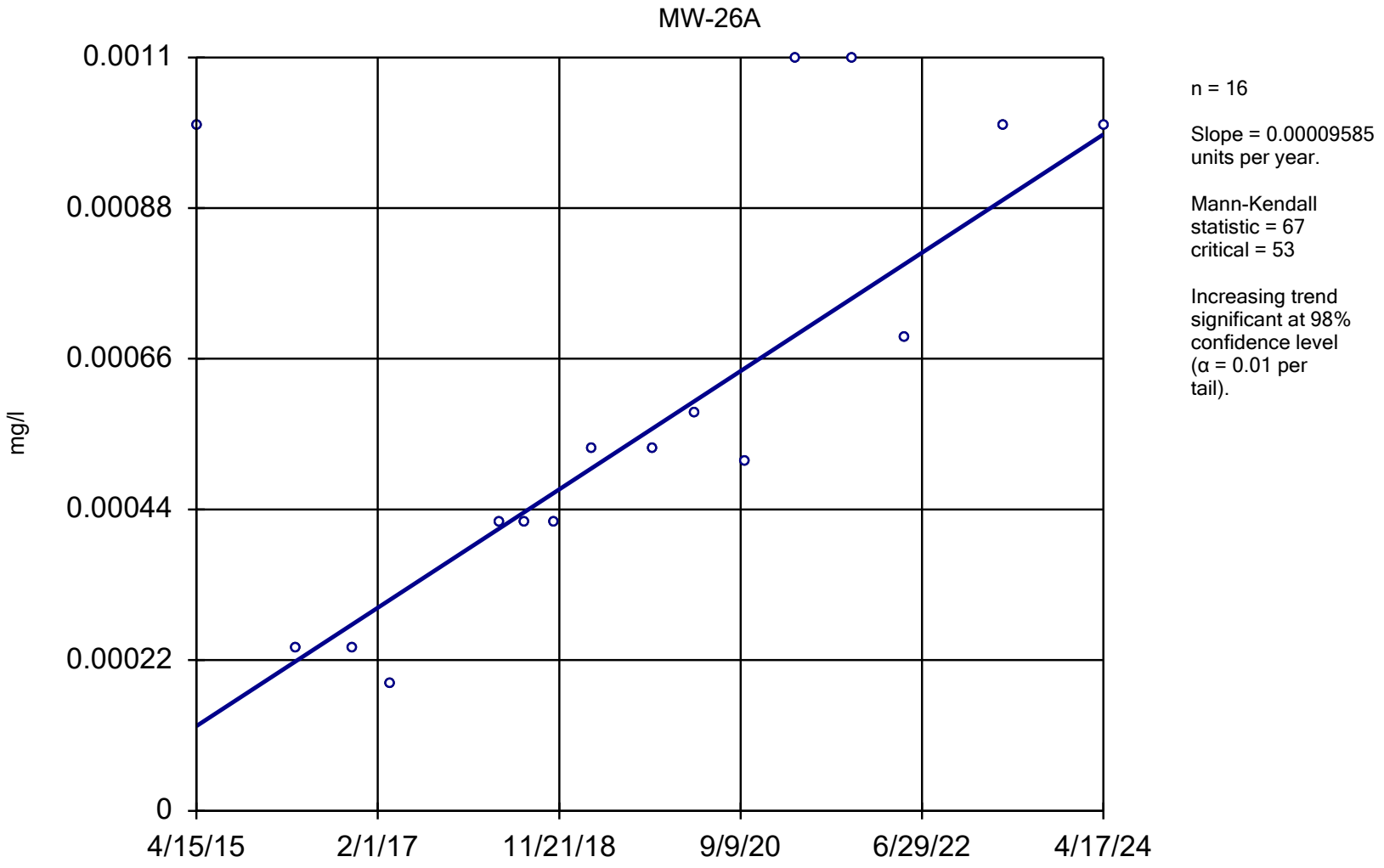
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



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Linn County Data: CRLCSWA_Groundwater Database

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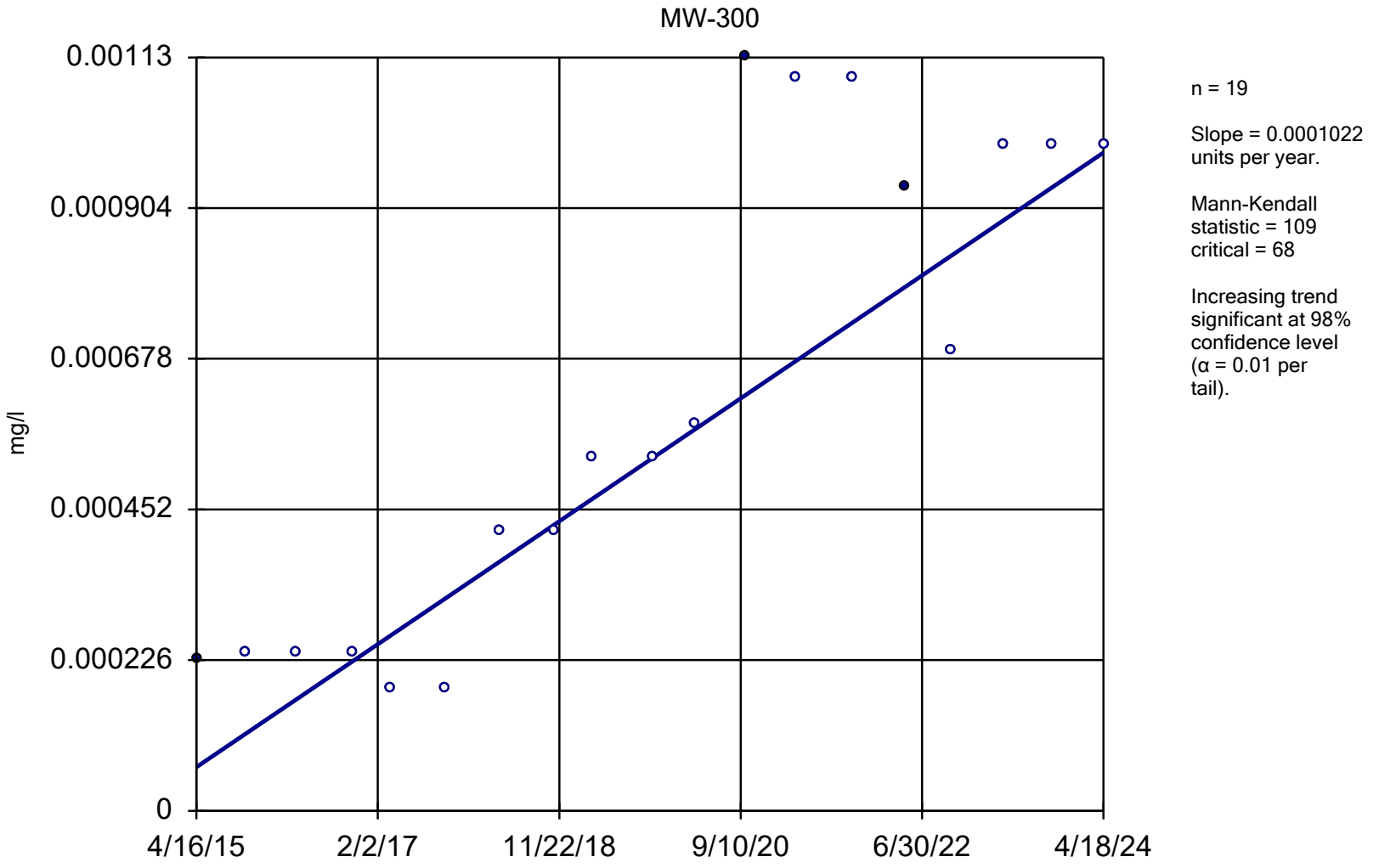
Sen's Slope Estimator



n = 19

Slope = 0.0001022 units per year.

Mann-Kendall statistic = 109
critical = 68

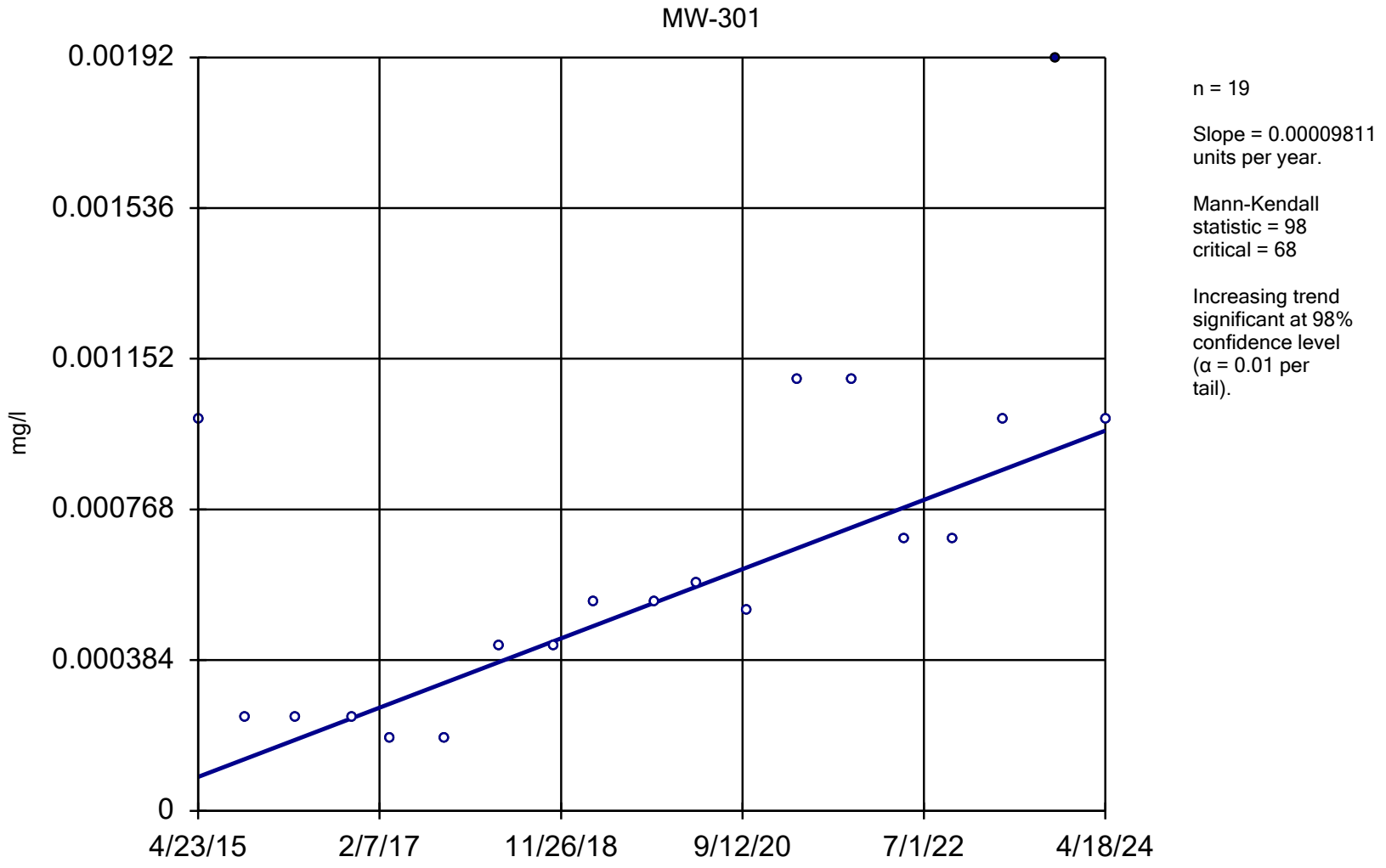
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Antimony Analysis Run 7/12/2024 2:04 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



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Linn County Data: CRLCSWA_Groundwater Database

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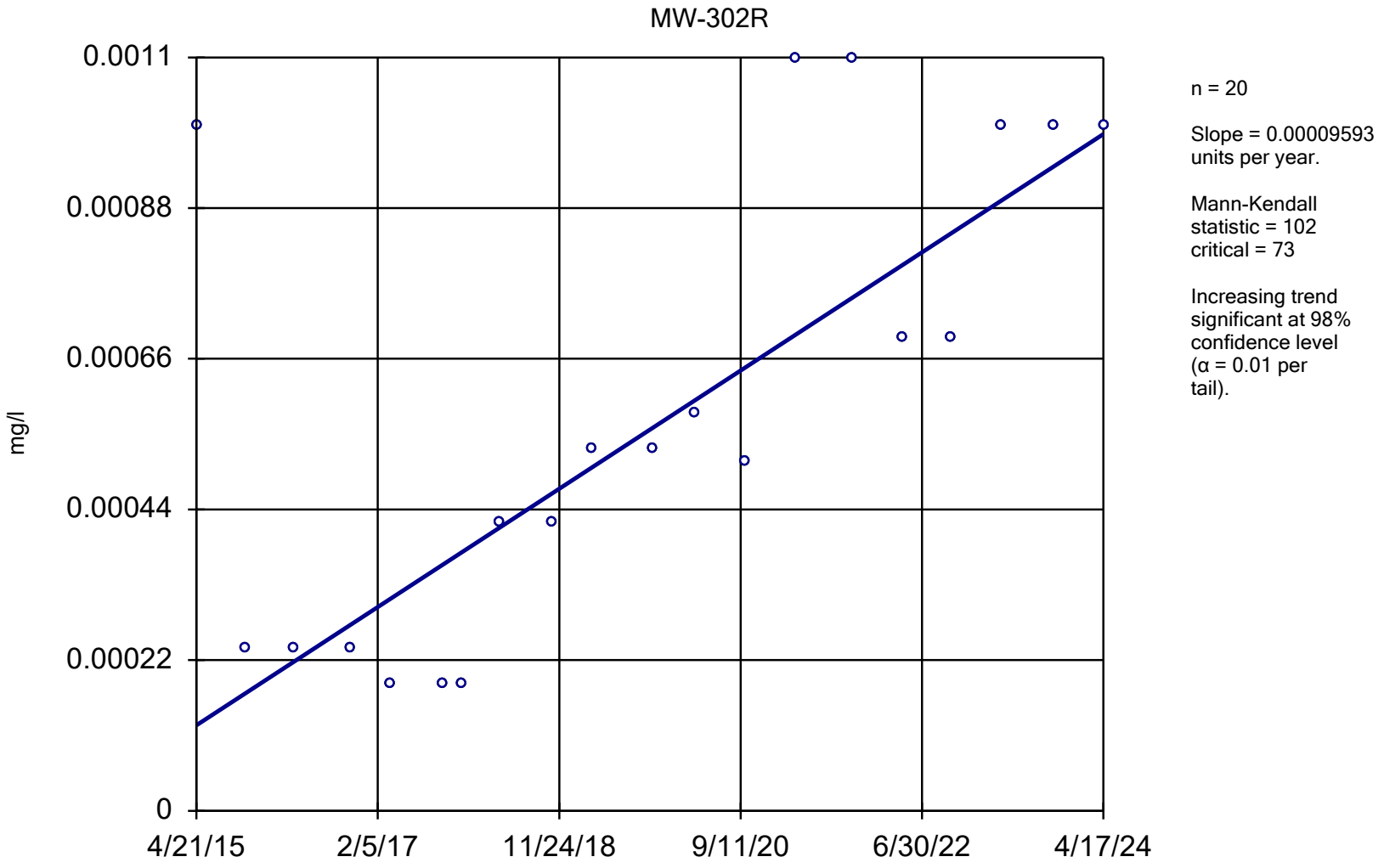
Sen's Slope Estimator



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Linn County Data: CRLCSWA_Groundwater Database

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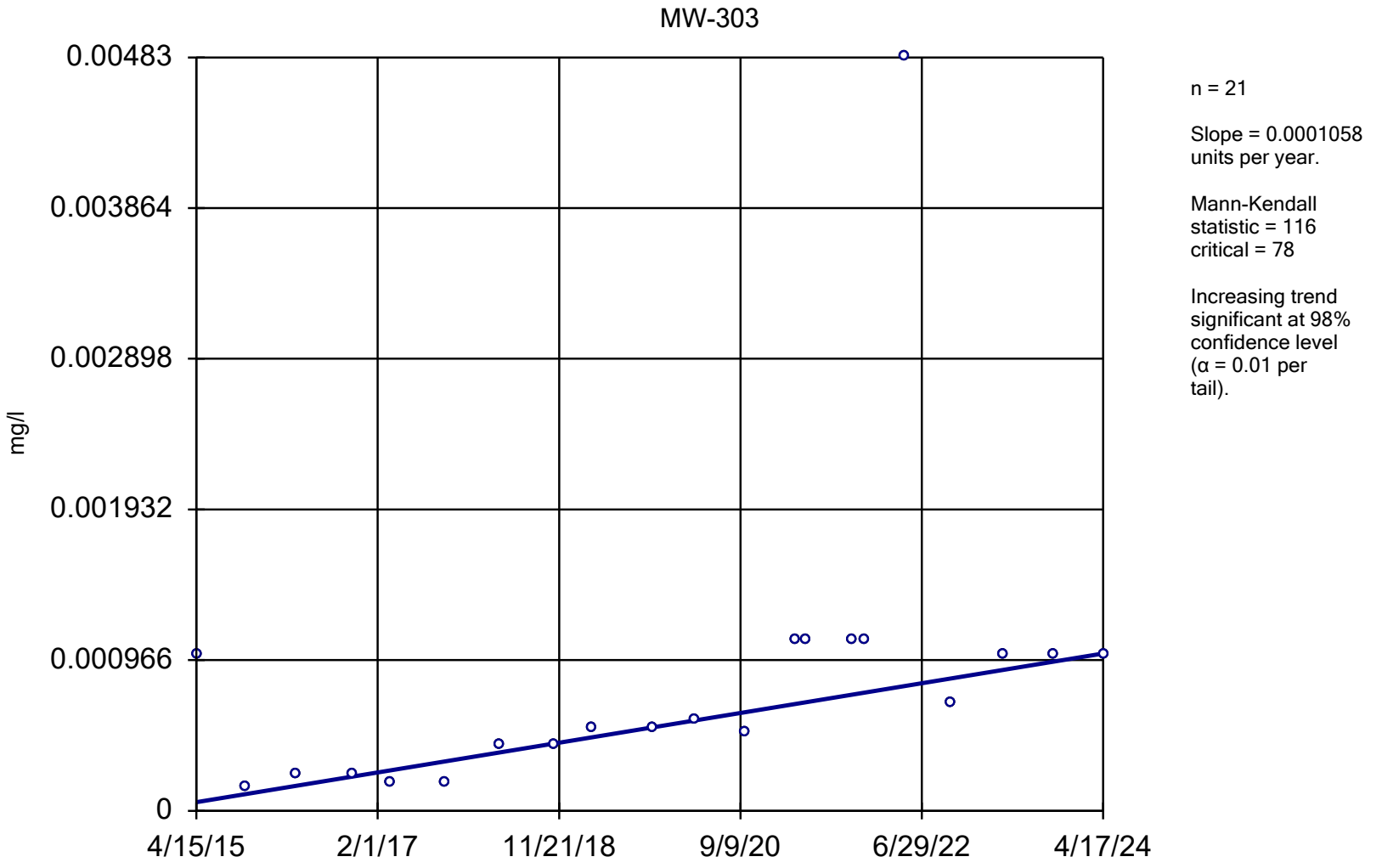
Sen's Slope Estimator



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Linn County Data: CRLCSWA_Groundwater Database

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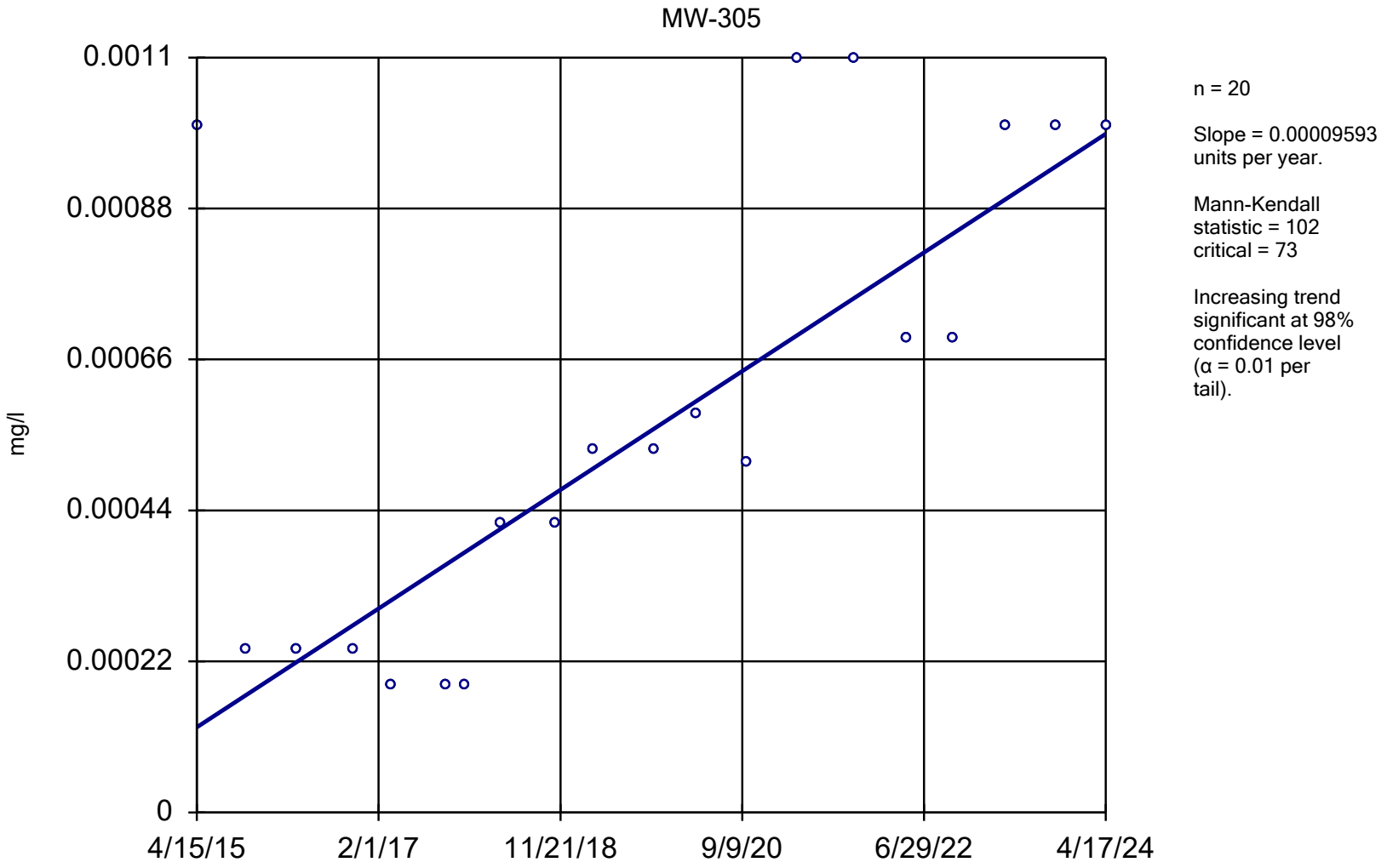
Sen's Slope Estimator

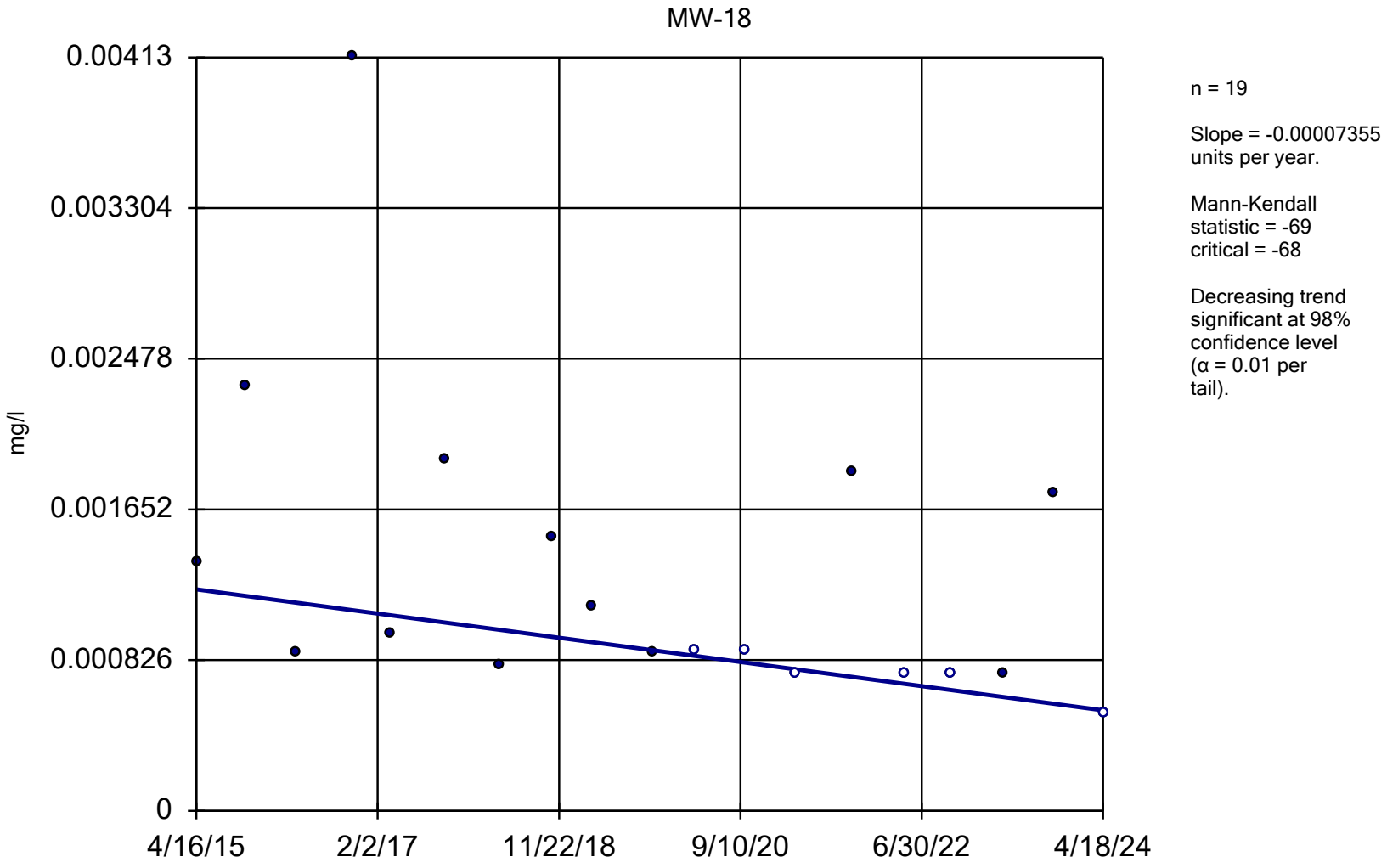


Constituent: Antimony Analysis Run 7/12/2024 2:05 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

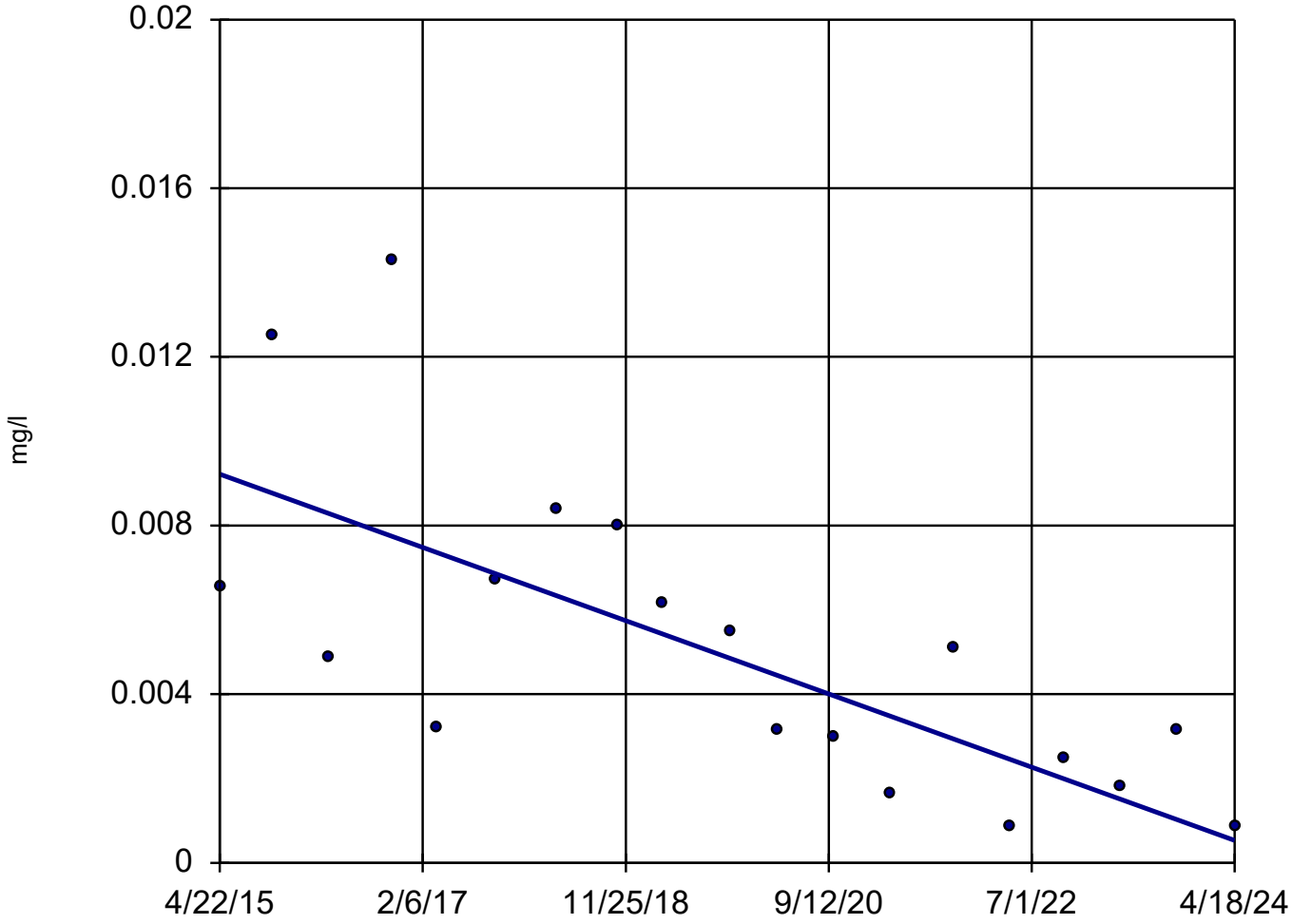


Constituent: Arsenic Analysis Run 7/12/2024 2:05 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Sen's Slope Estimator

MW-19



n = 19

Slope = -0.000965 units per year.

Mann-Kendall statistic = -105
critical = -68

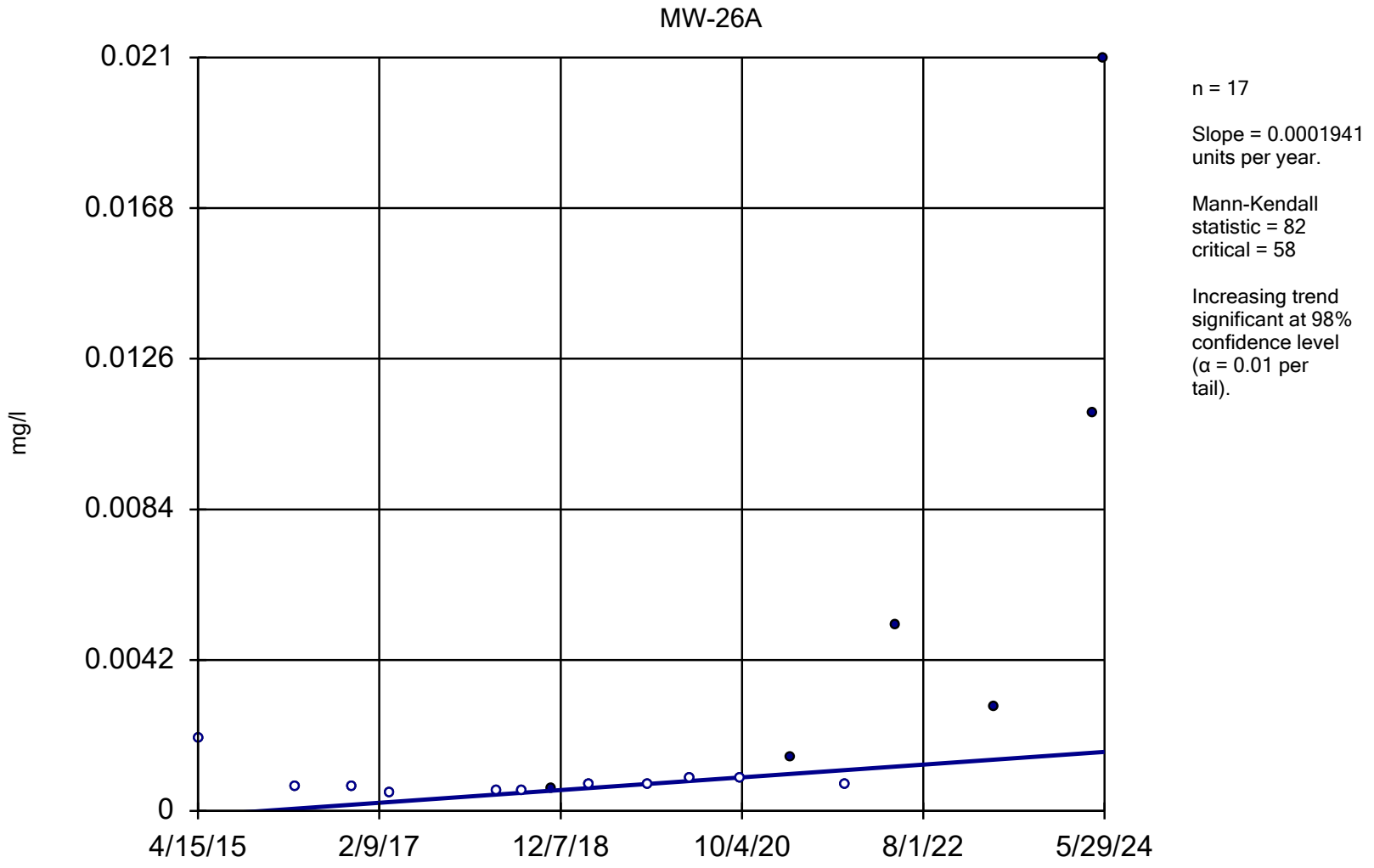
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Arsenic Analysis Run 7/12/2024 2:05 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

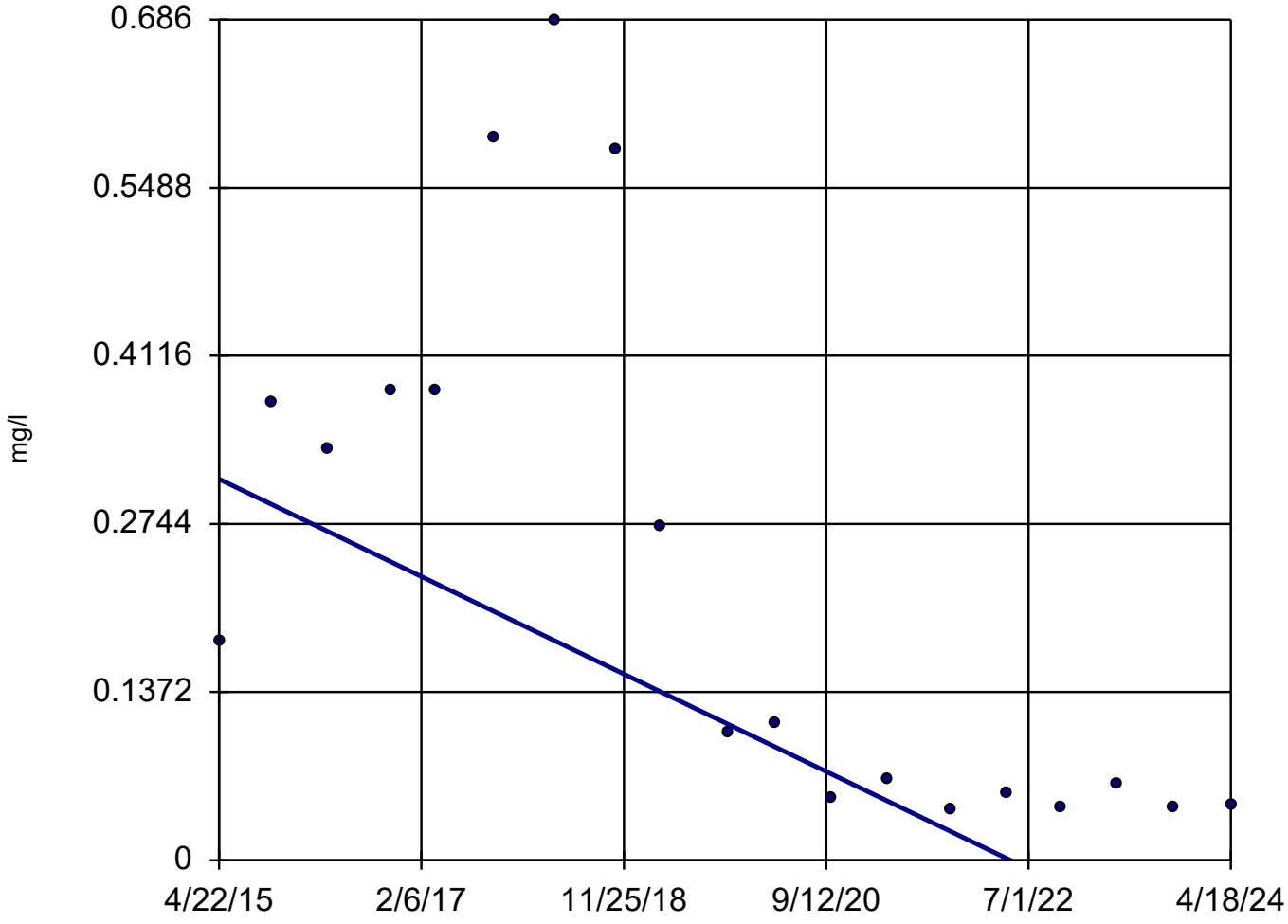


Constituent: Arsenic Analysis Run 7/12/2024 2:05 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Sen's Slope Estimator

MW-19



n = 19

Slope = -0.0442 units per year.

Mann-Kendall statistic = -94
critical = -68

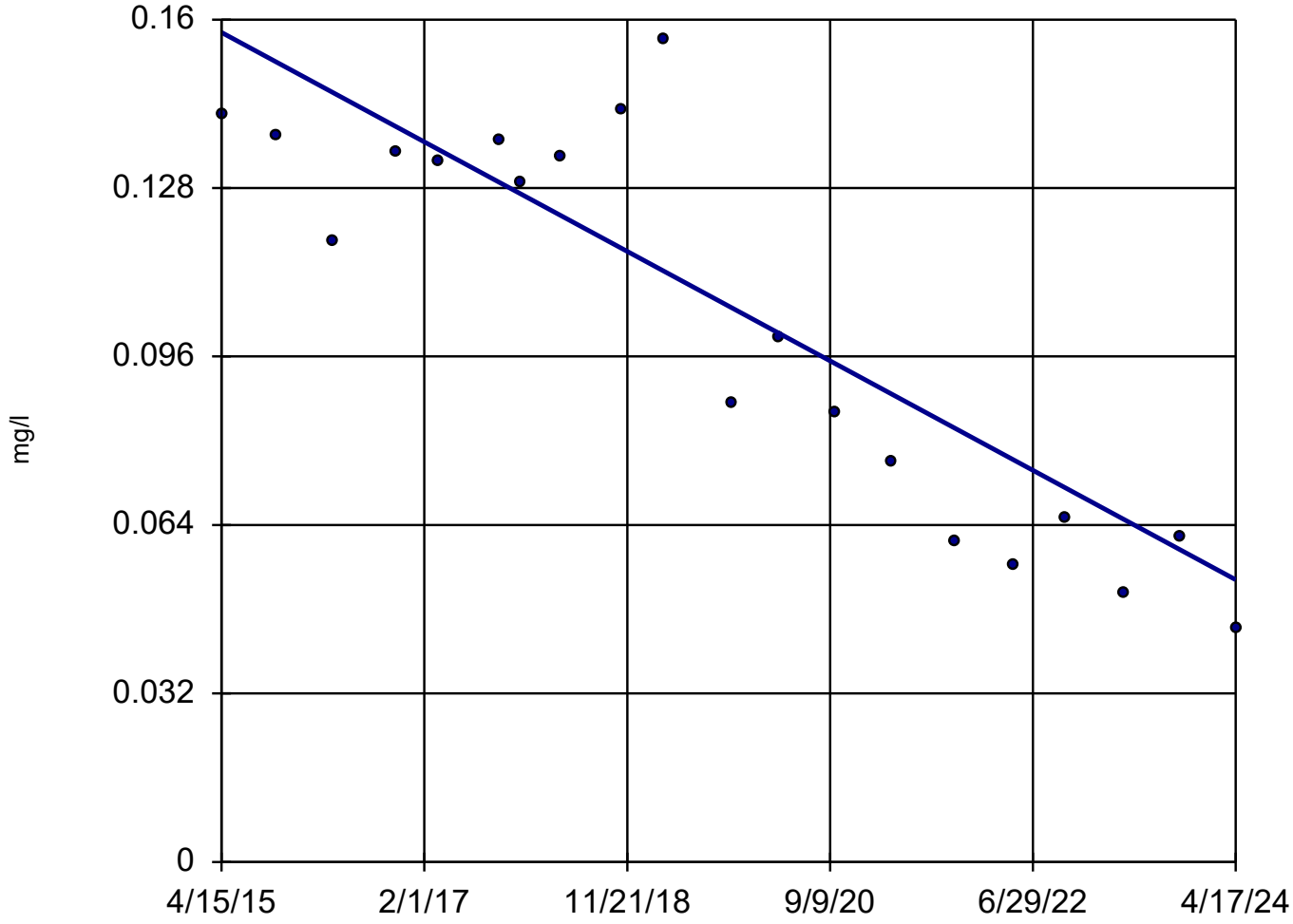
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Barium Analysis Run 7/12/2024 2:05 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Sen's Slope Estimator

MW-305



n = 20

Slope = -0.01154 units per year.

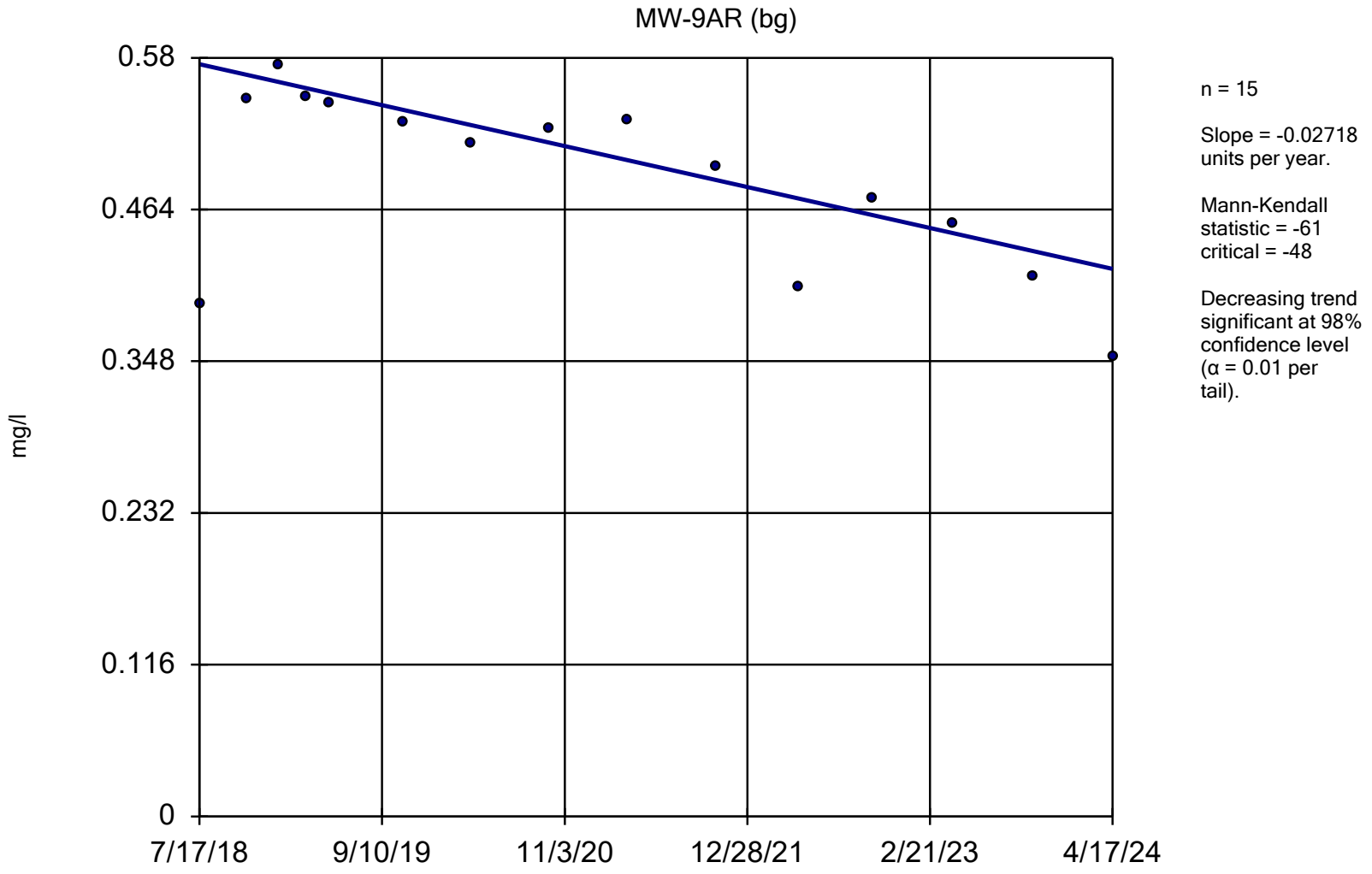
Mann-Kendall statistic = -126
critical = -73

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Barium Analysis Run 7/12/2024 2:05 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Sen's Slope Estimator



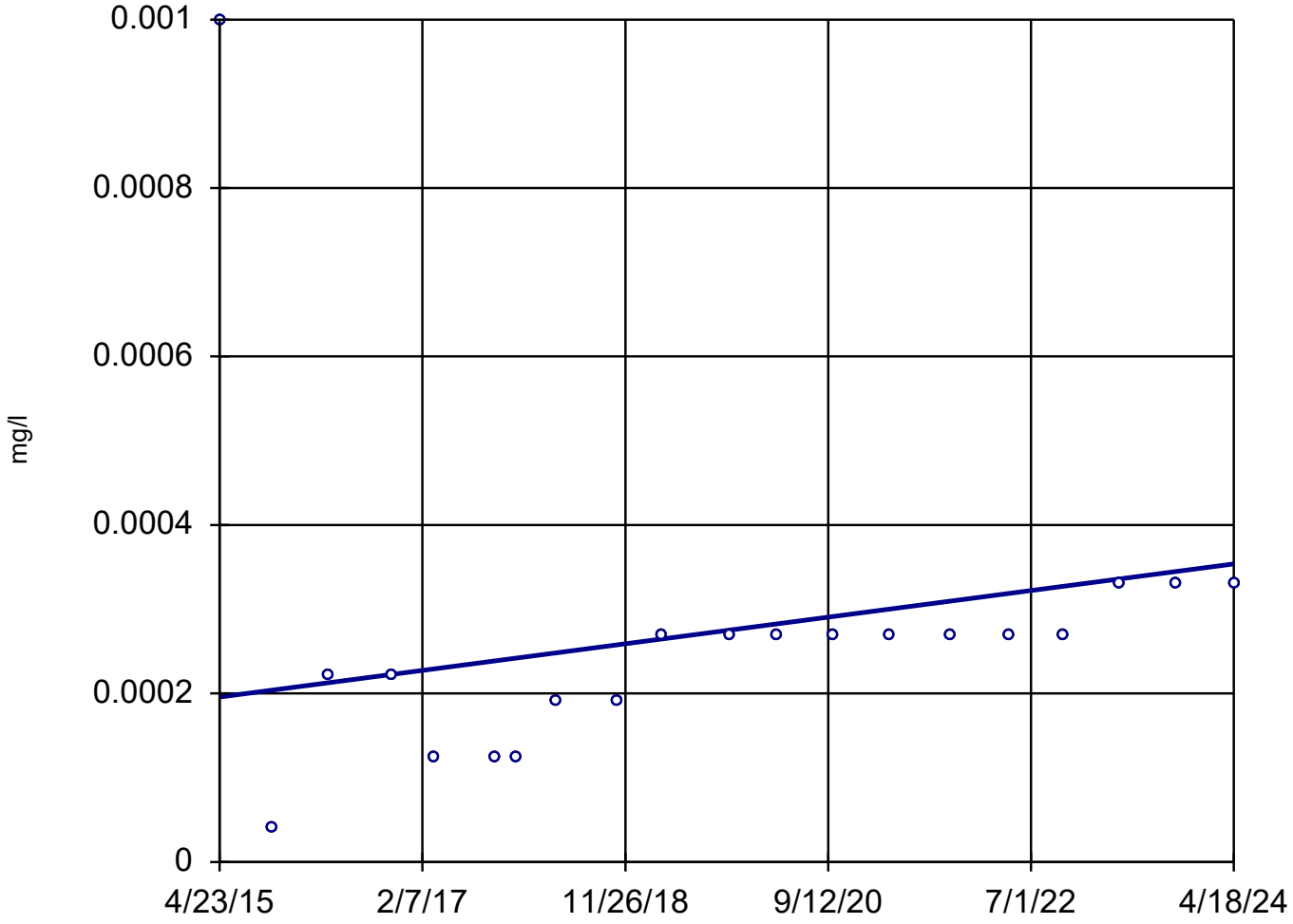
Constituent: Barium Analysis Run 7/12/2024 2:05 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-15



n = 20

Slope = 0.00001755 units per year.

Mann-Kendall statistic = 96
critical = 73

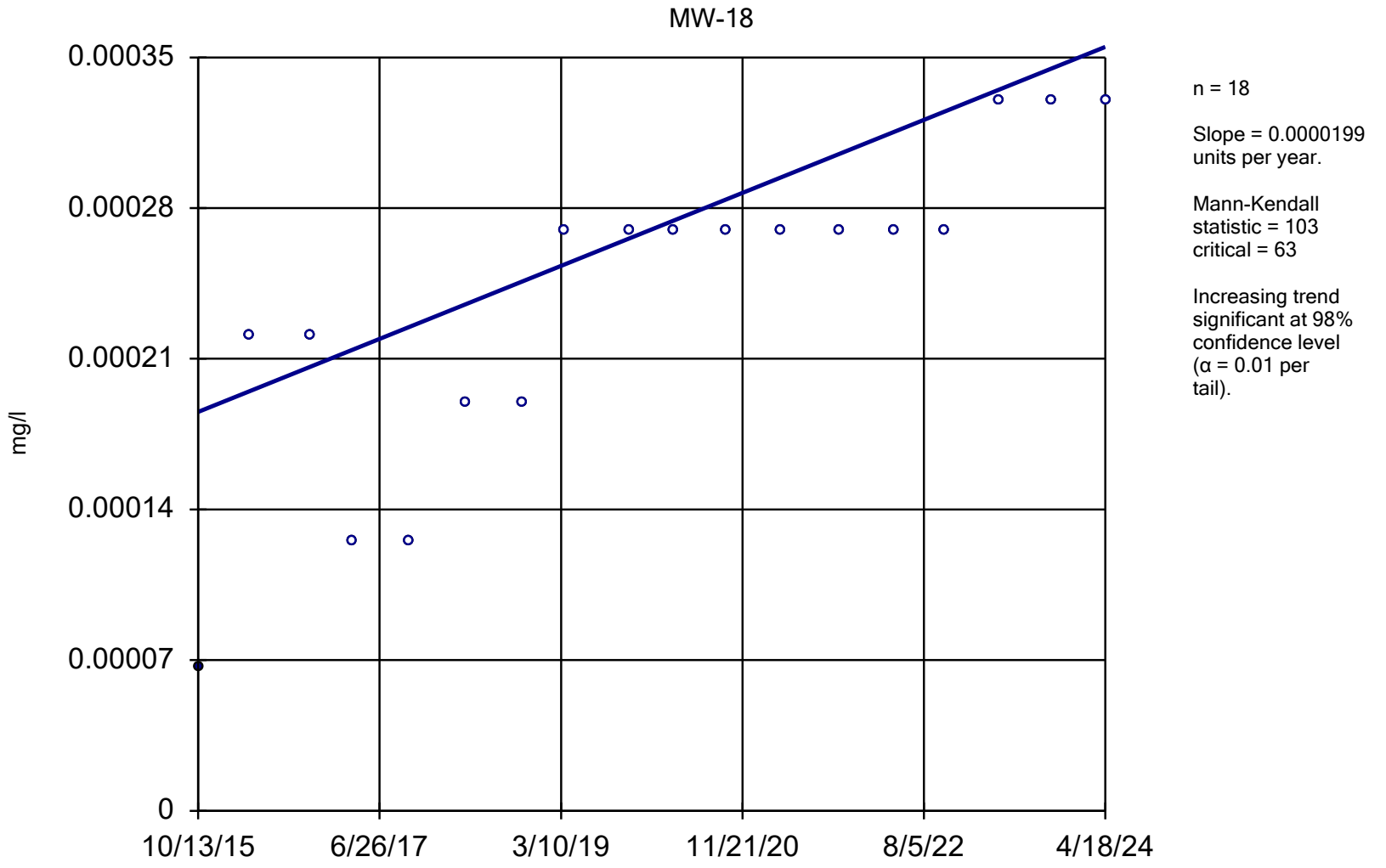
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Beryllium Analysis Run 7/12/2024 2:05 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

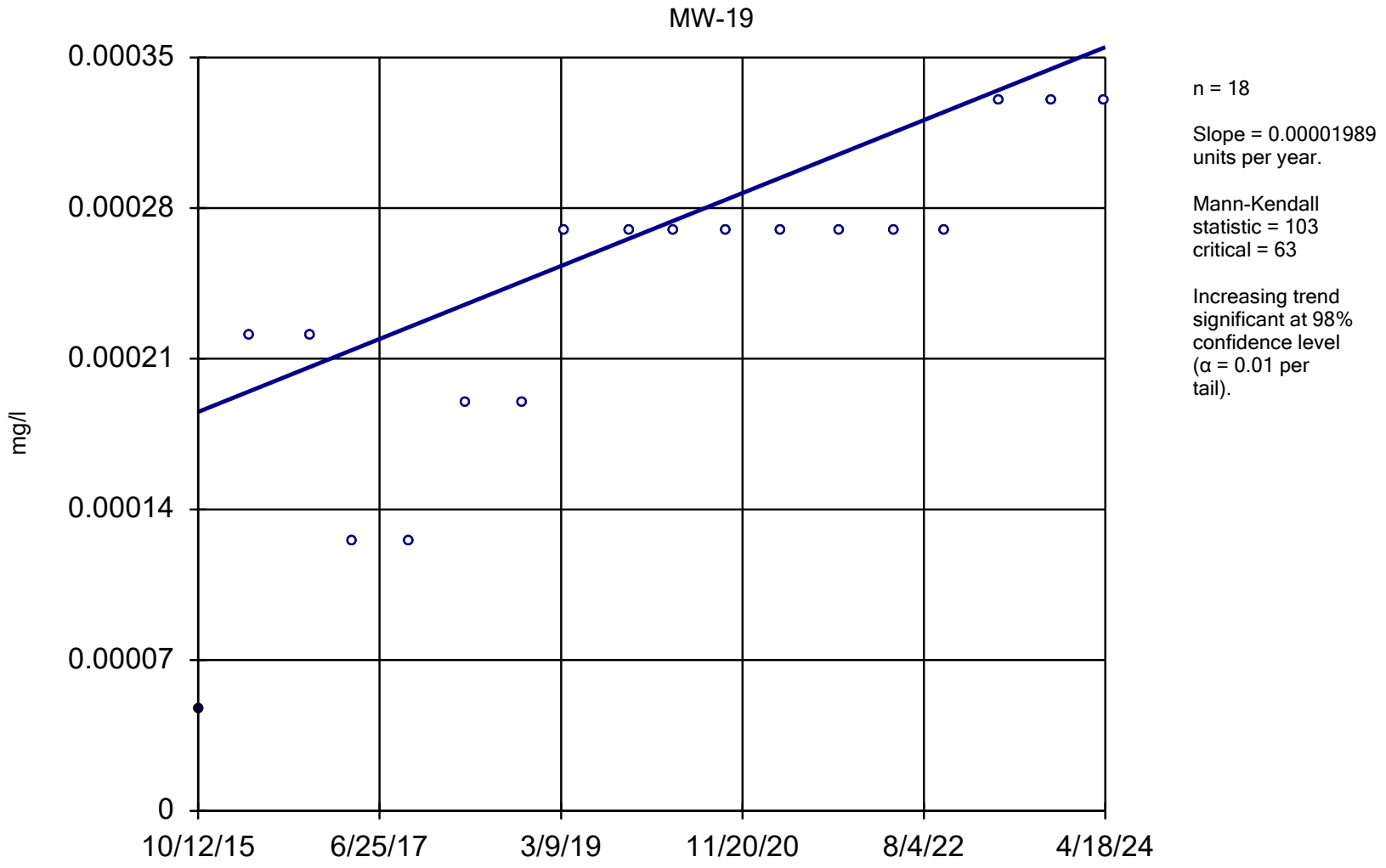


Constituent: Beryllium Analysis Run 7/12/2024 2:05 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

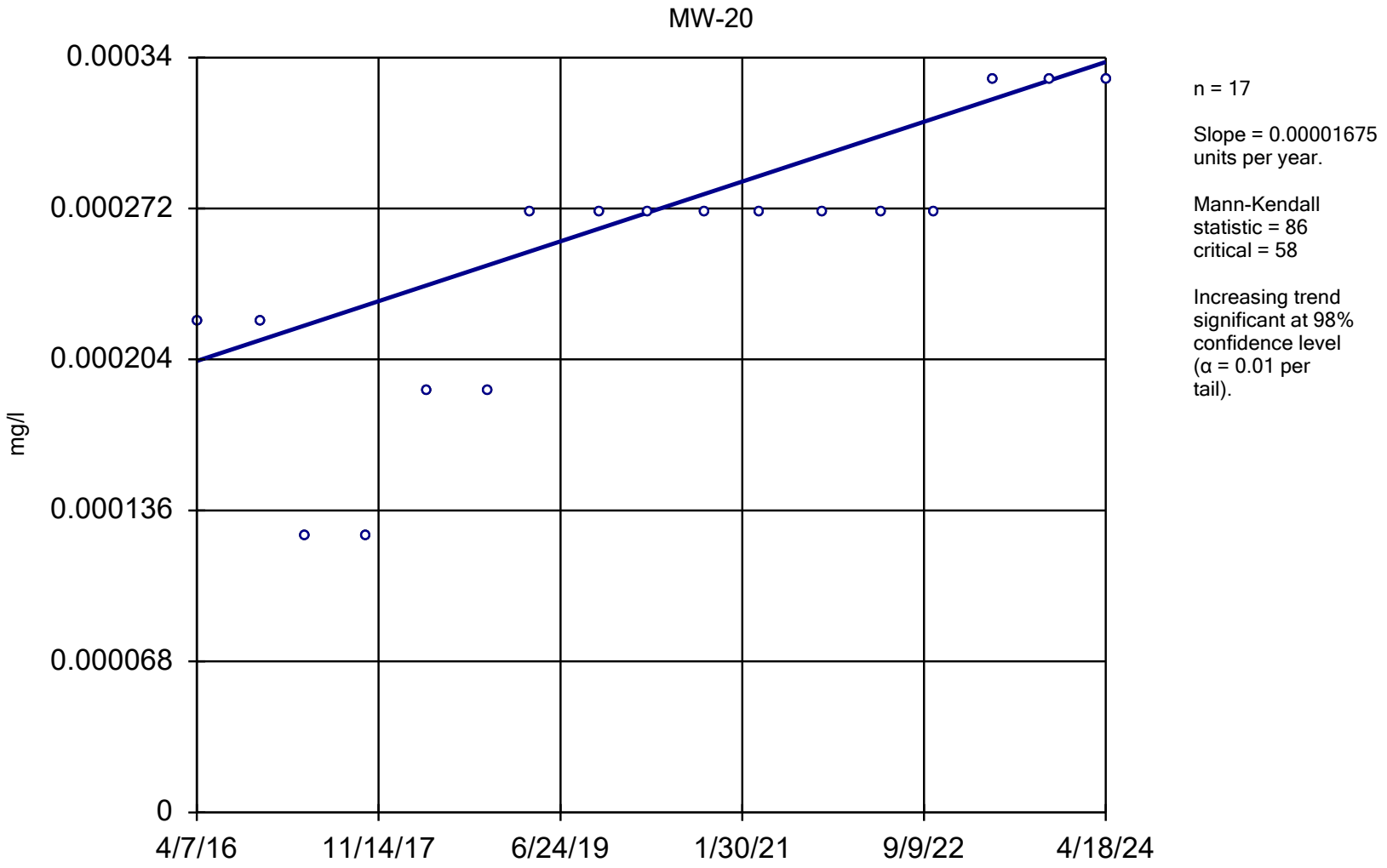


Constituent: Beryllium Analysis Run 7/12/2024 2:05 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



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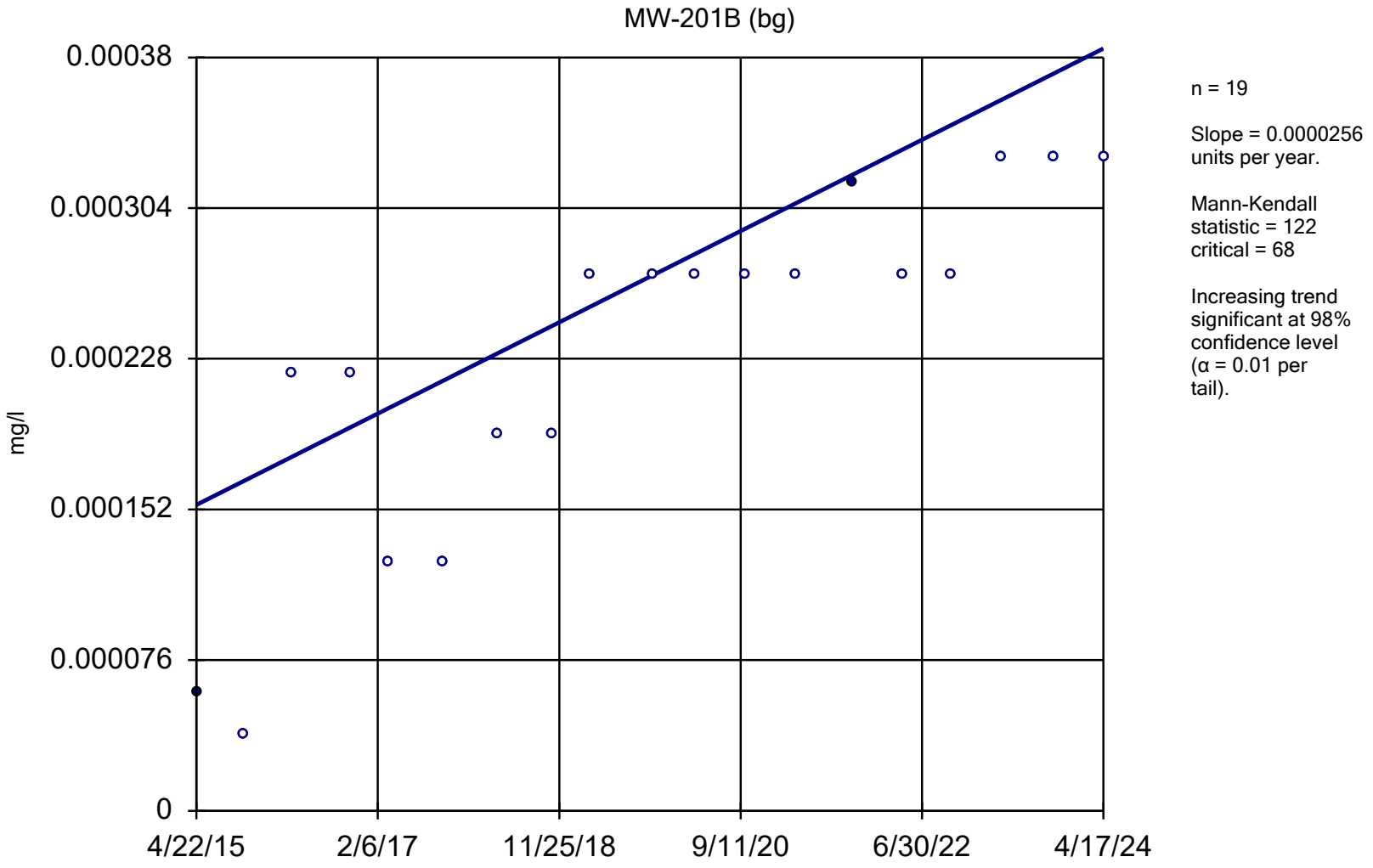
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

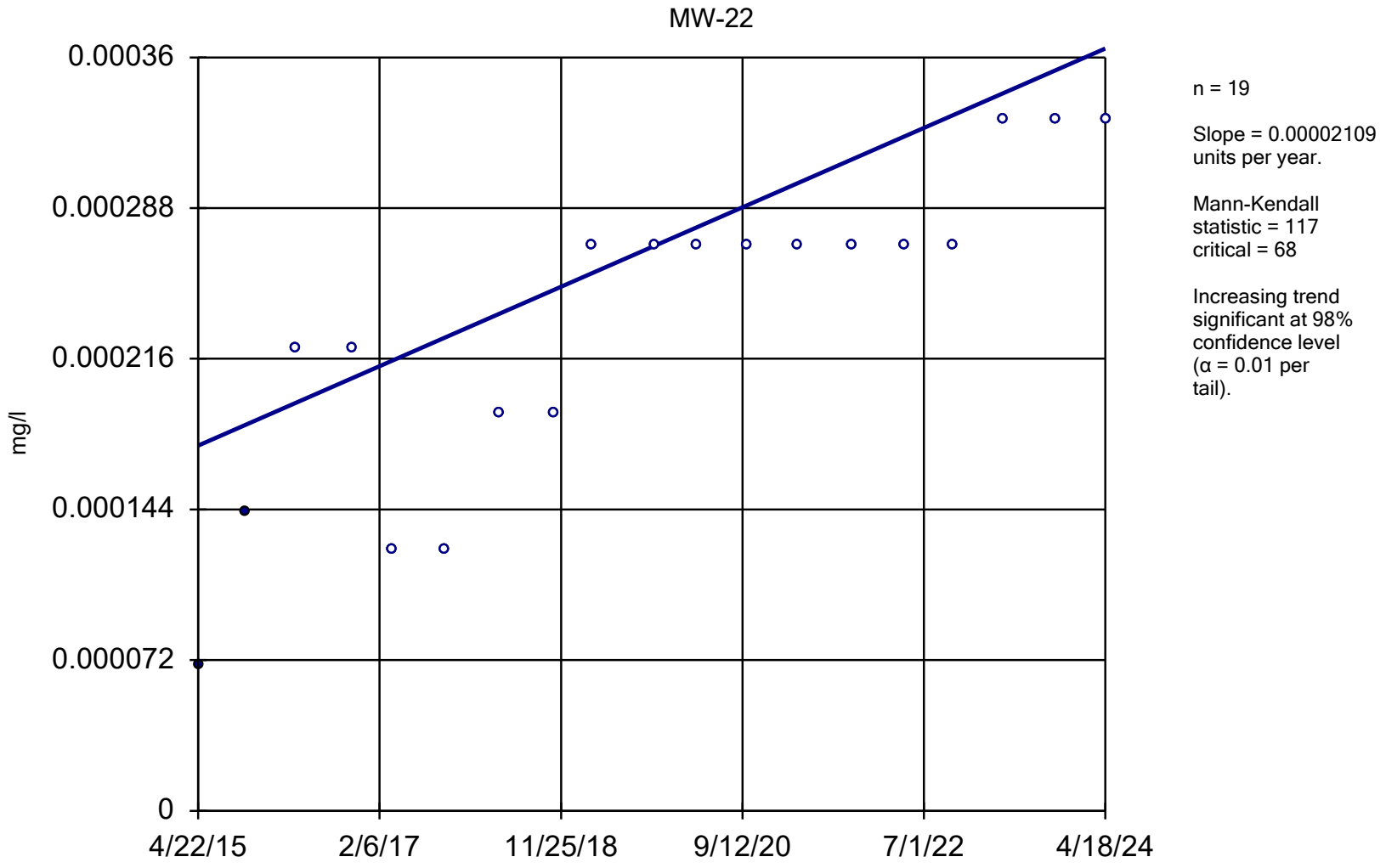


Constituent: Beryllium Analysis Run 7/12/2024 2:05 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



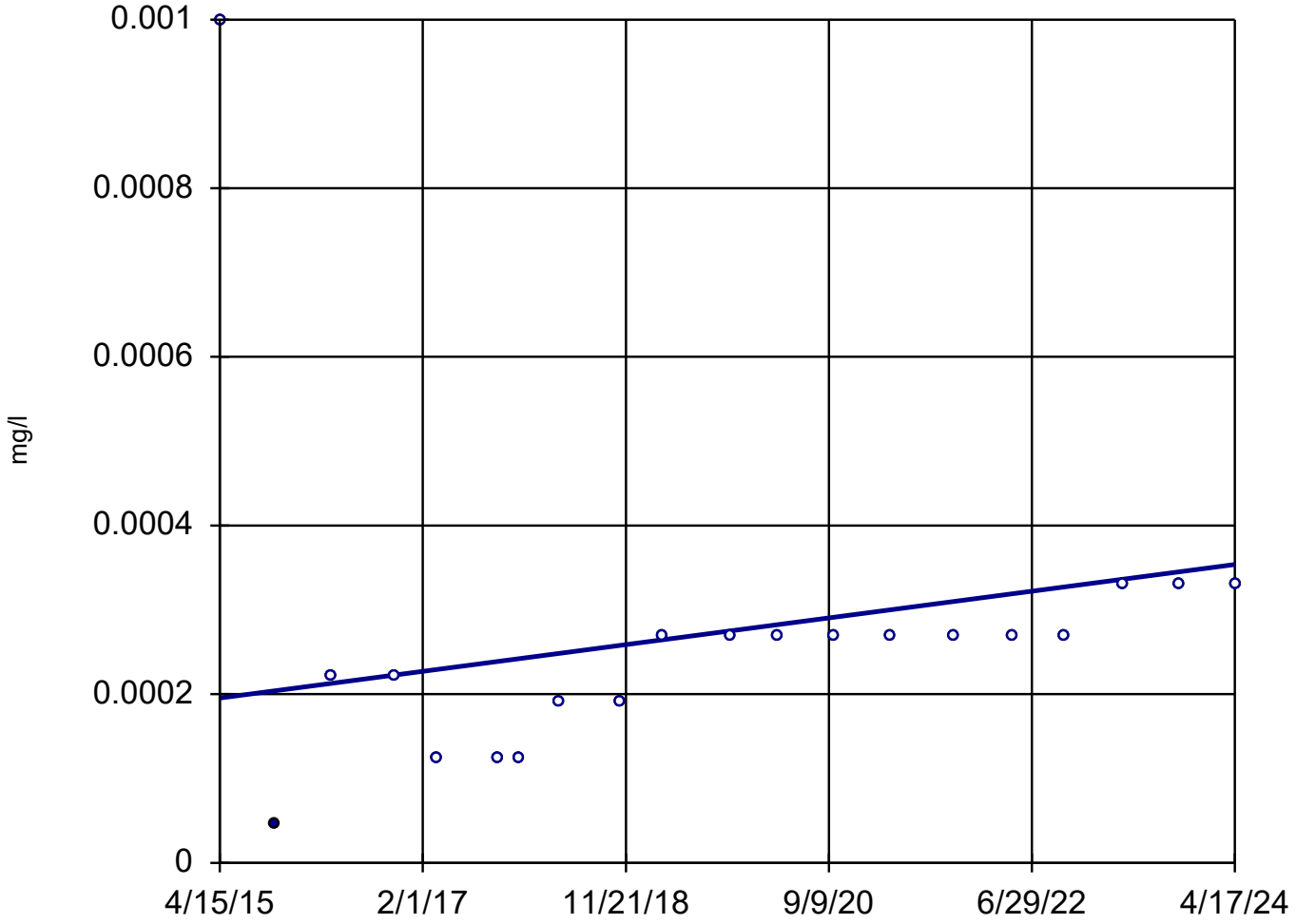
Constituent: Beryllium Analysis Run 7/12/2024 2:05 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-24



n = 20

Slope = 0.00001757 units per year.

Mann-Kendall statistic = 96
critical = 73

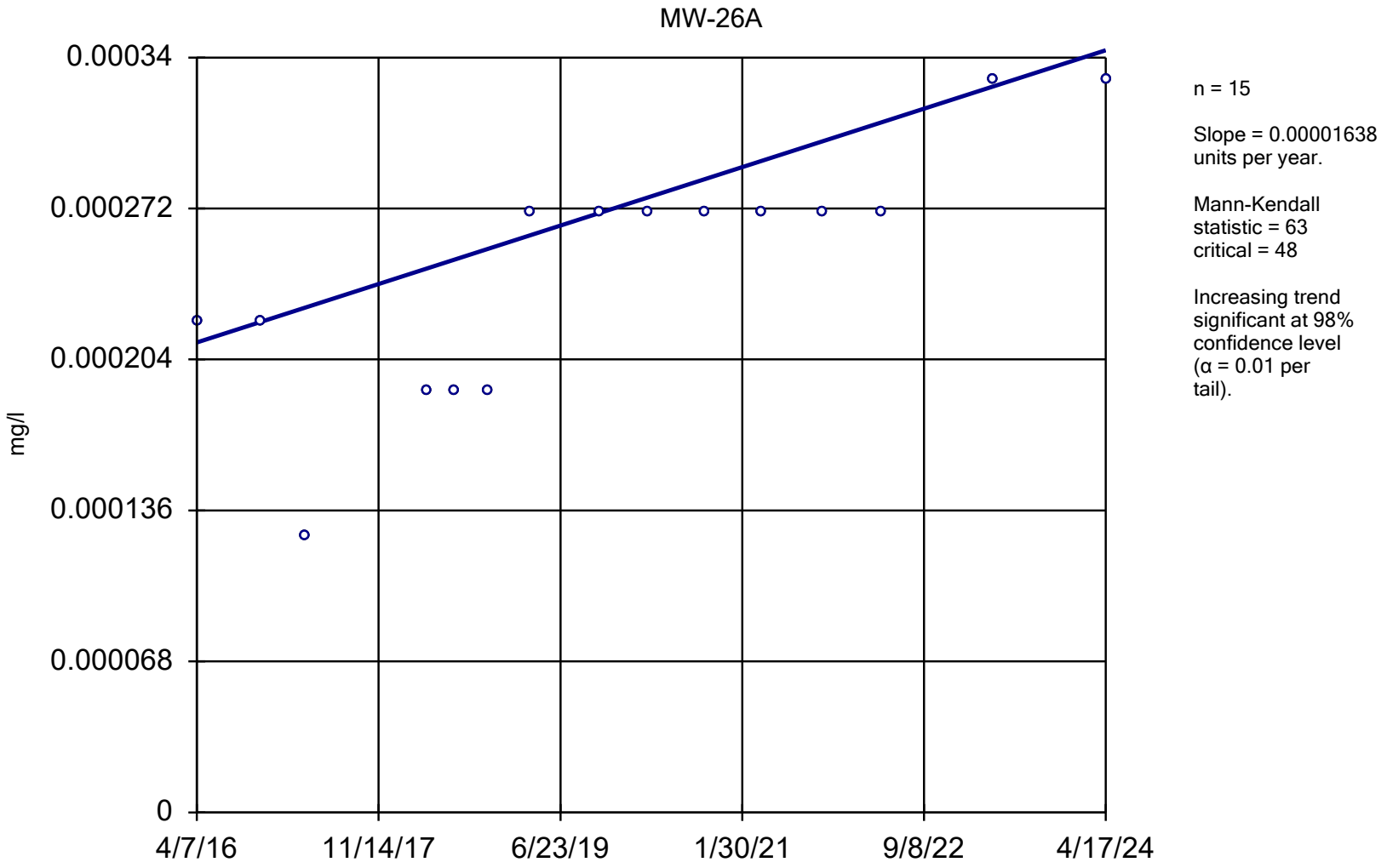
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Beryllium Analysis Run 7/12/2024 2:05 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



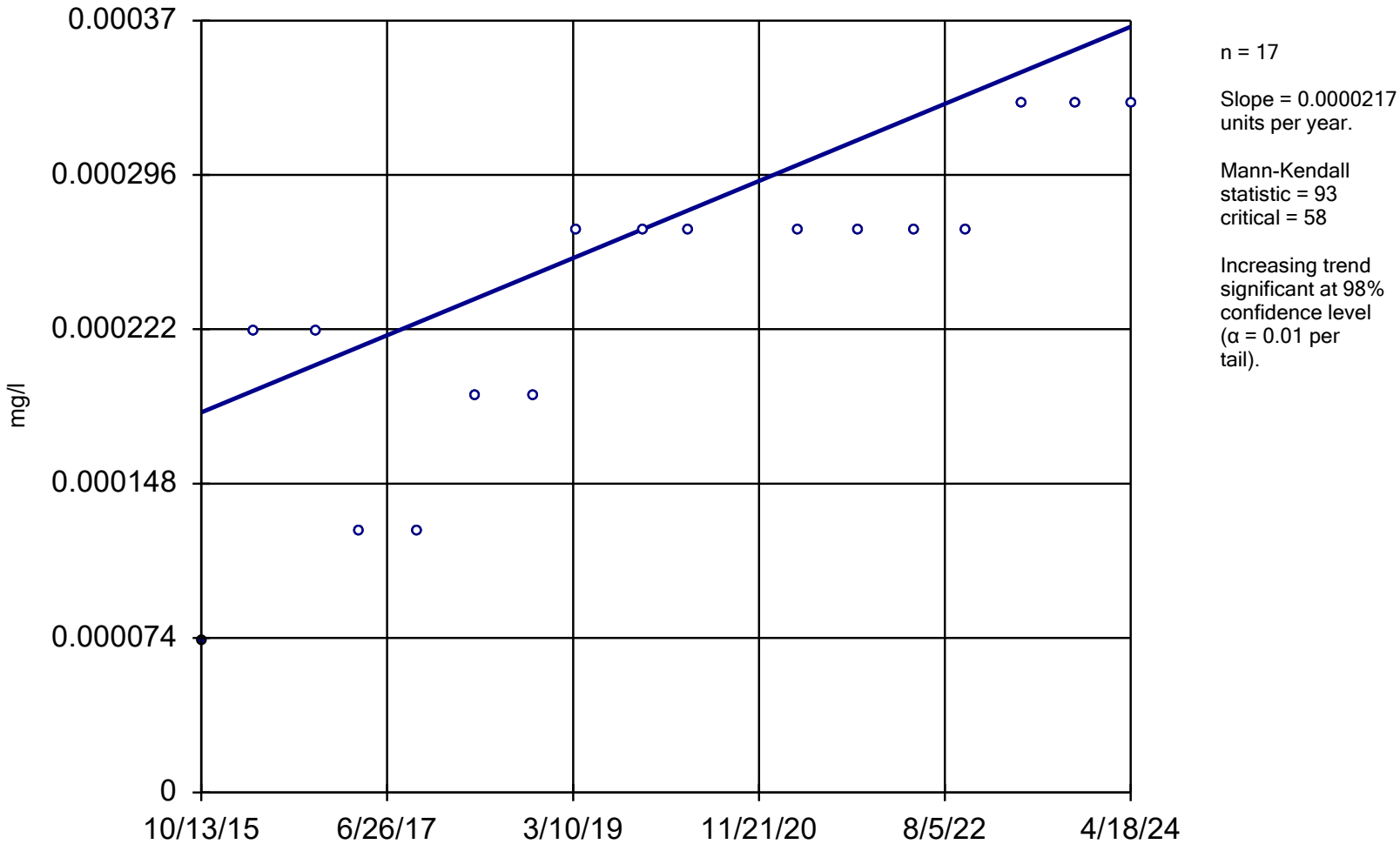
Constituent: Beryllium Analysis Run 7/12/2024 2:05 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-300



n = 17

Slope = 0.0000217 units per year.

Mann-Kendall statistic = 93
critical = 58

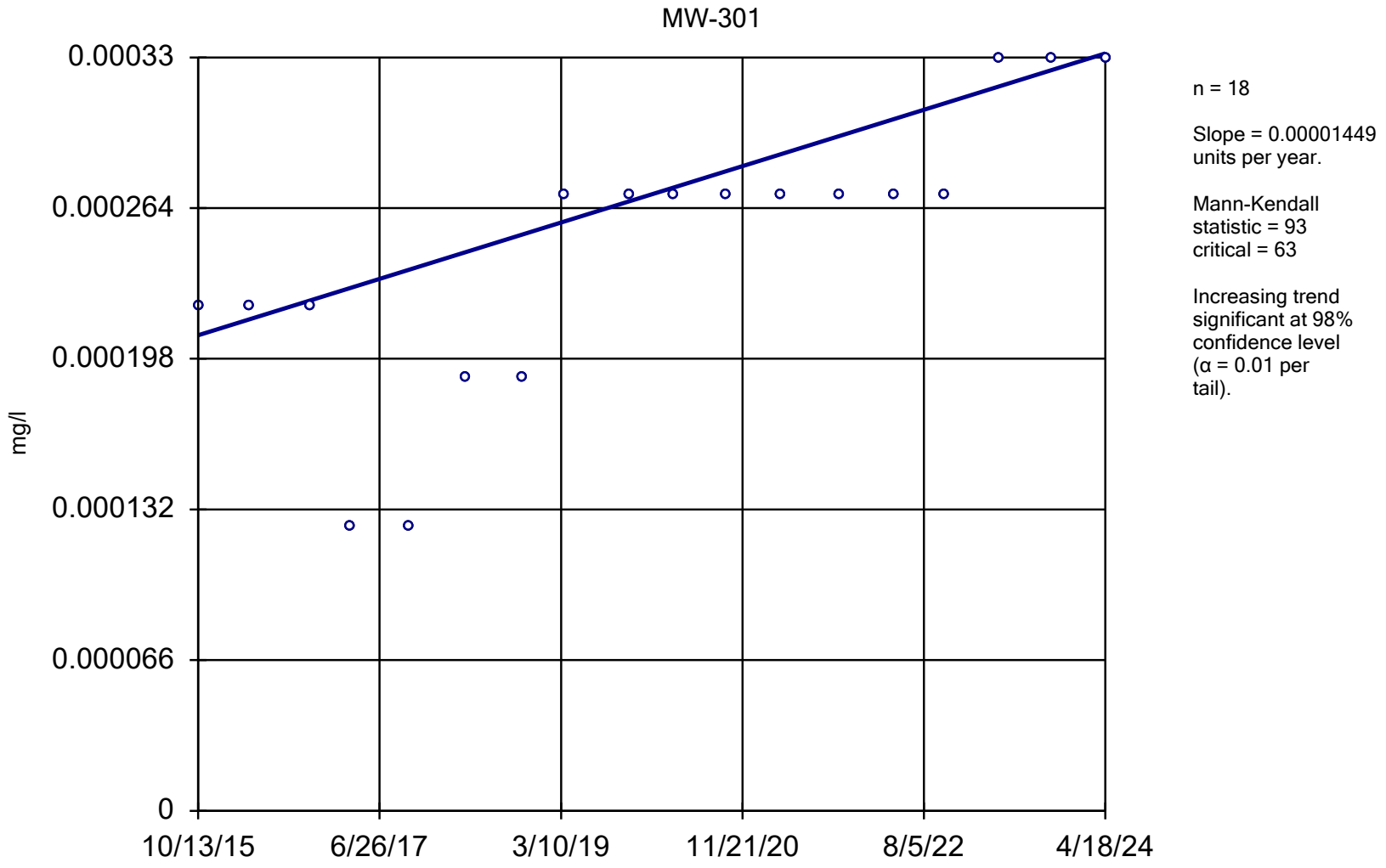
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Beryllium Analysis Run 7/12/2024 2:05 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



n = 18

Slope = 0.00001449 units per year.

Mann-Kendall statistic = 93
critical = 63

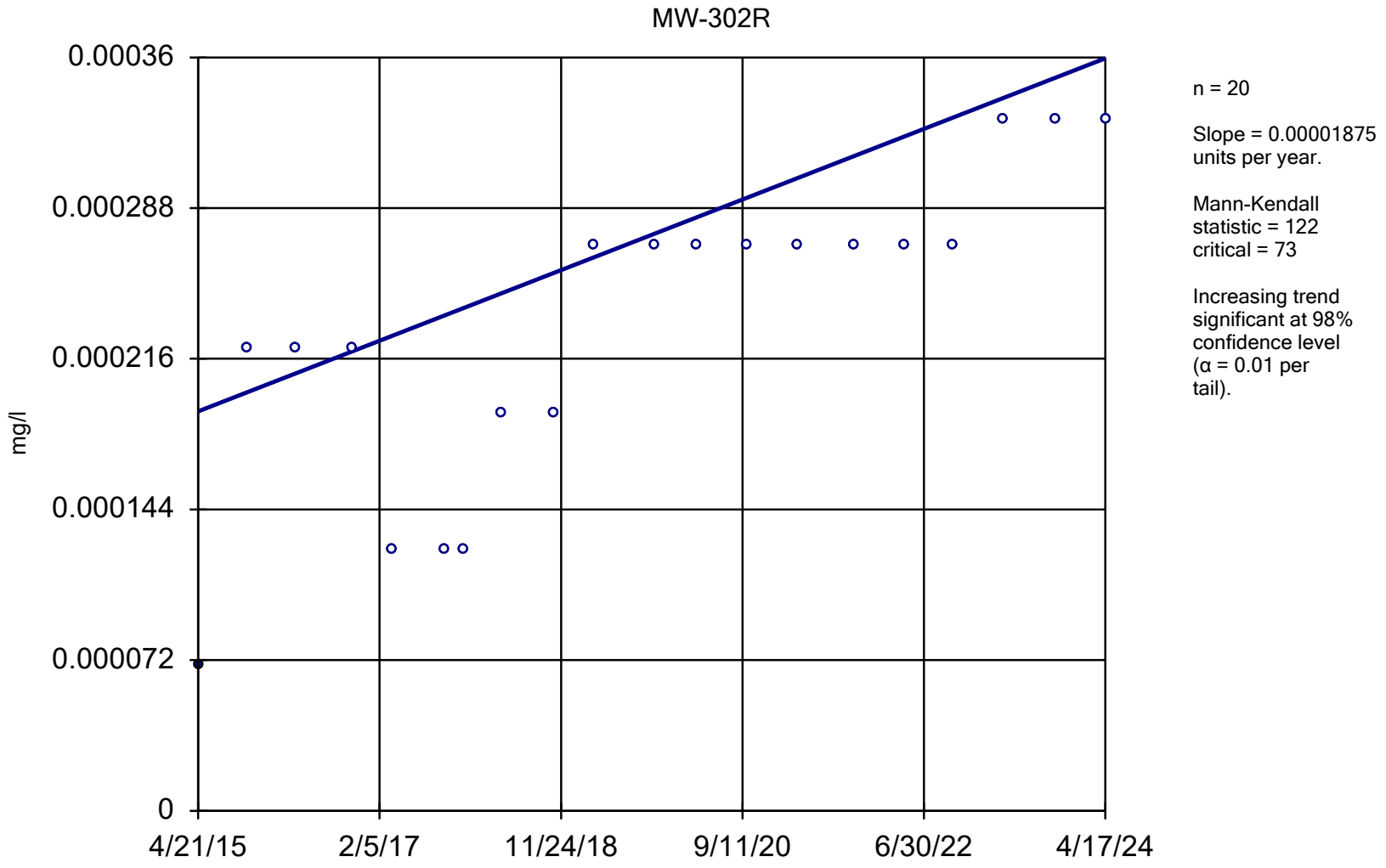
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Beryllium Analysis Run 7/12/2024 2:05 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

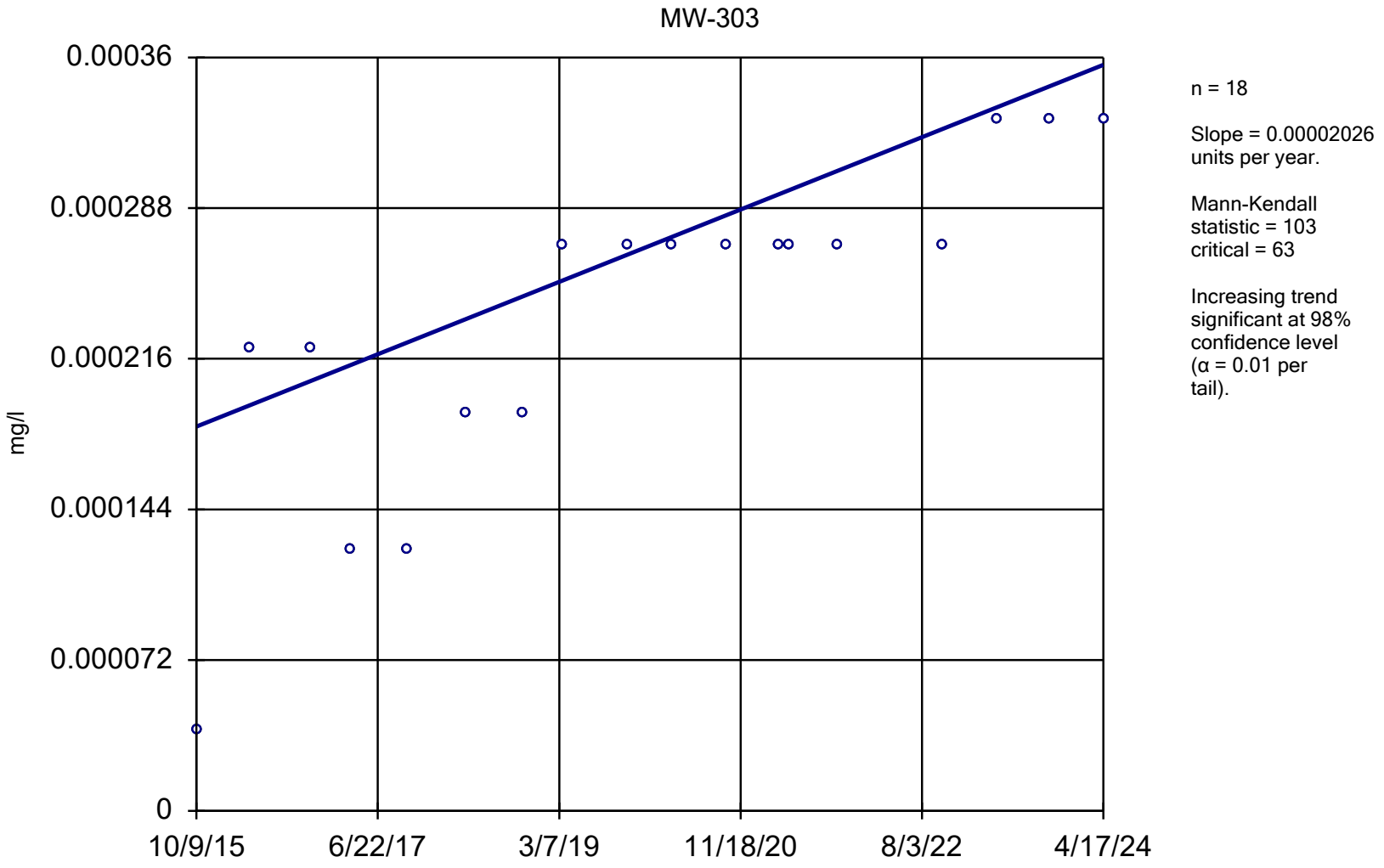


Constituent: Beryllium Analysis Run 7/12/2024 2:05 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

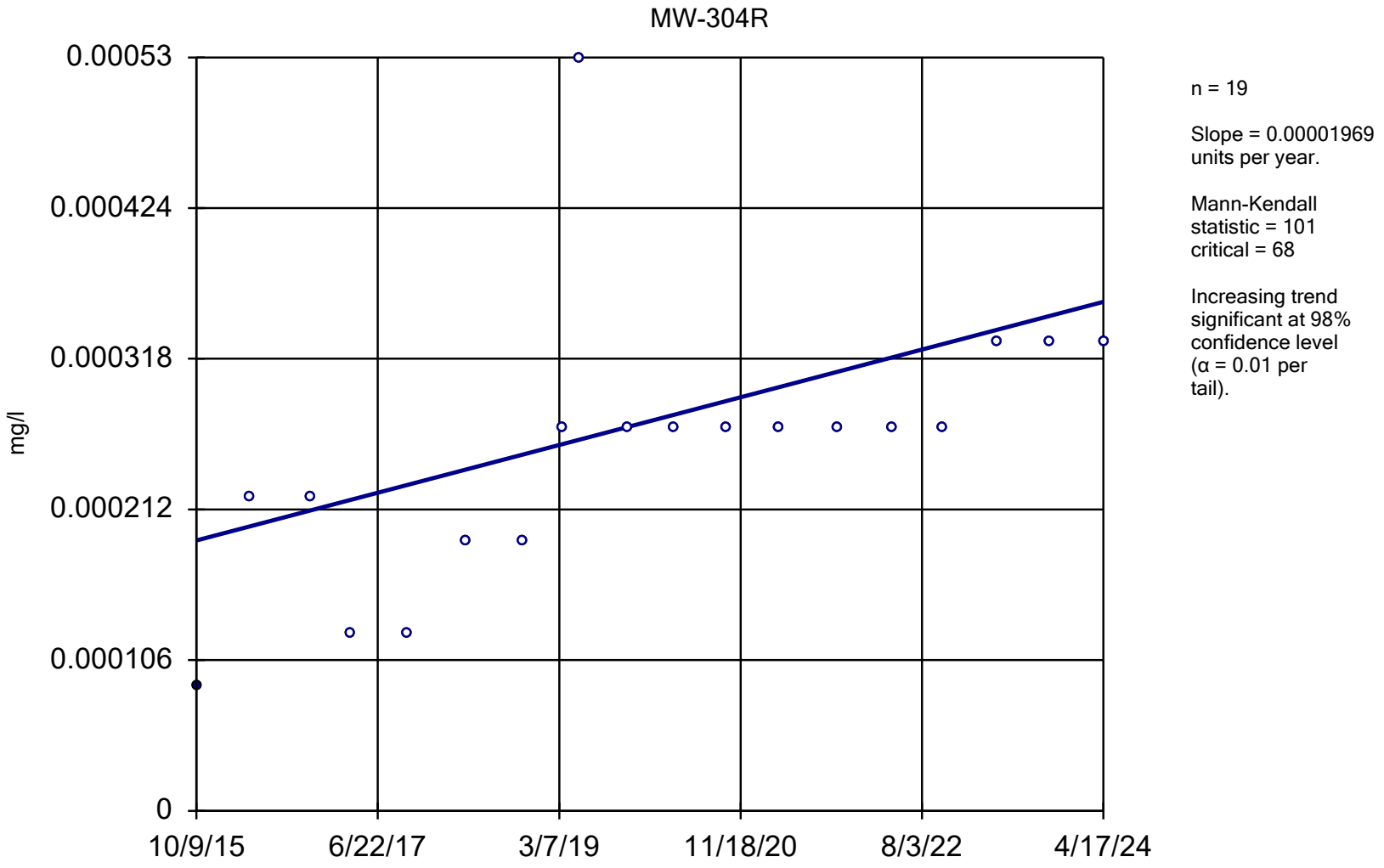


Constituent: Beryllium Analysis Run 7/12/2024 2:05 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



n = 19

Slope = 0.00001969 units per year.

Mann-Kendall statistic = 101
critical = 68

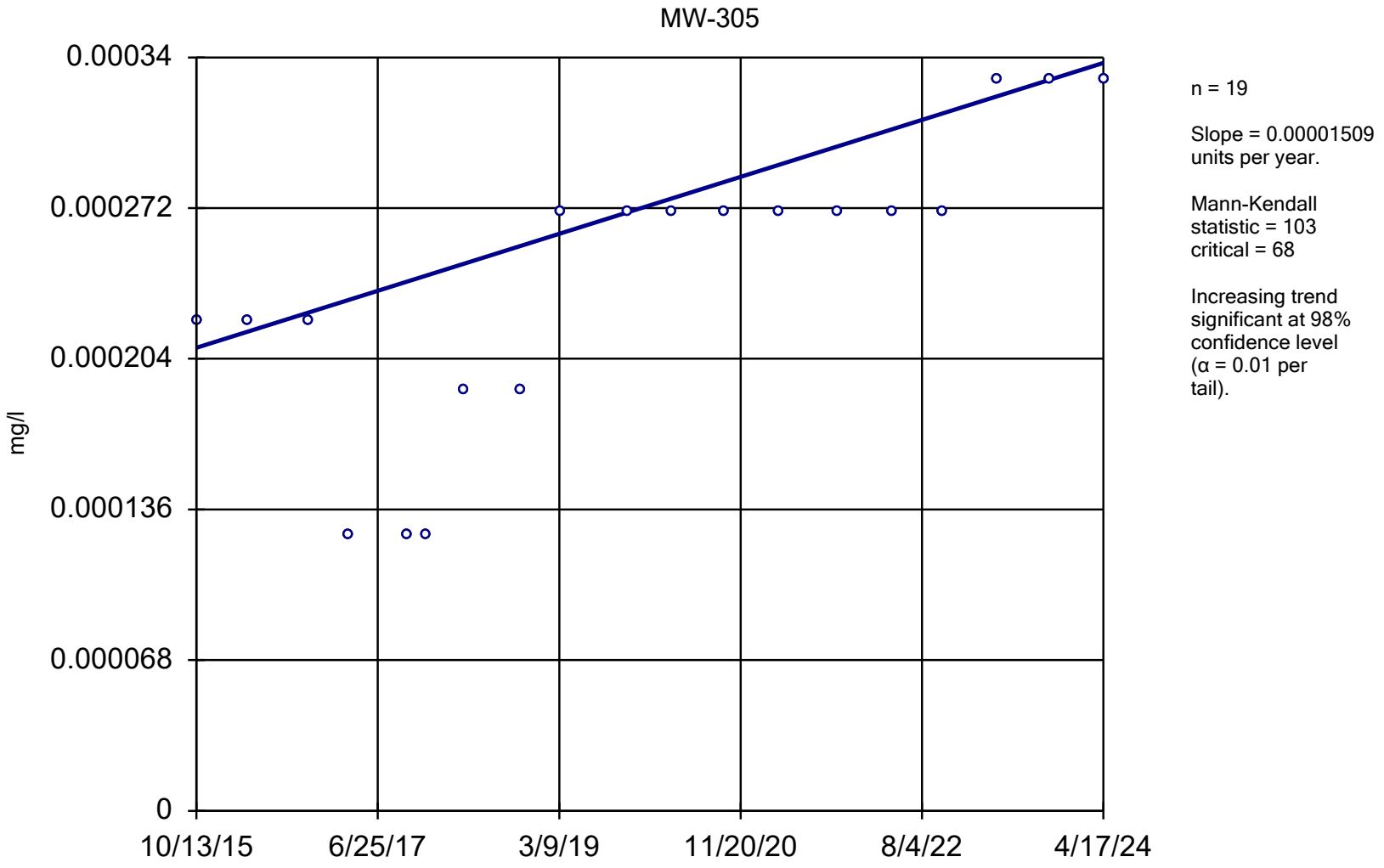
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Beryllium Analysis Run 7/12/2024 2:05 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

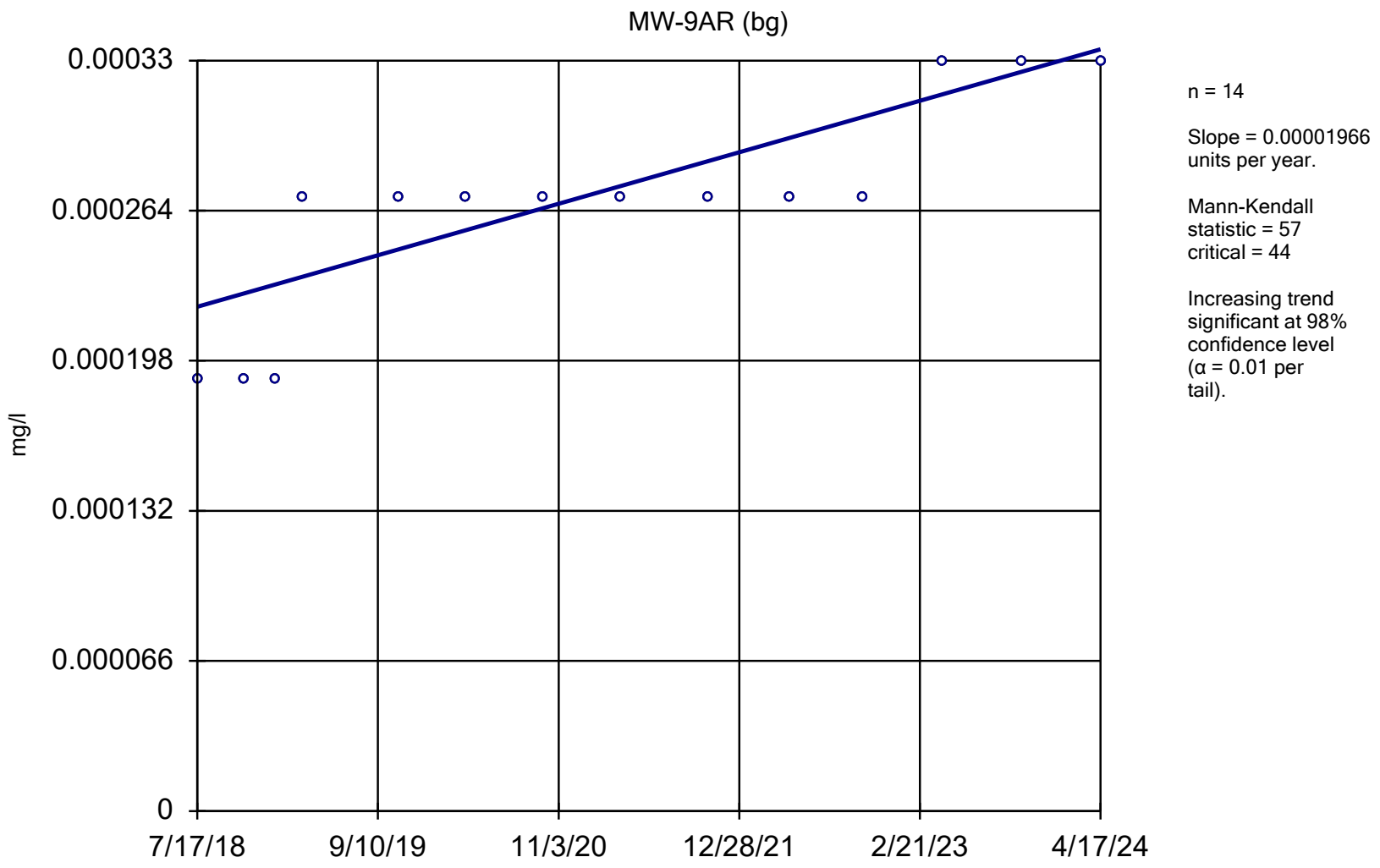


Constituent: Beryllium Analysis Run 7/12/2024 2:05 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

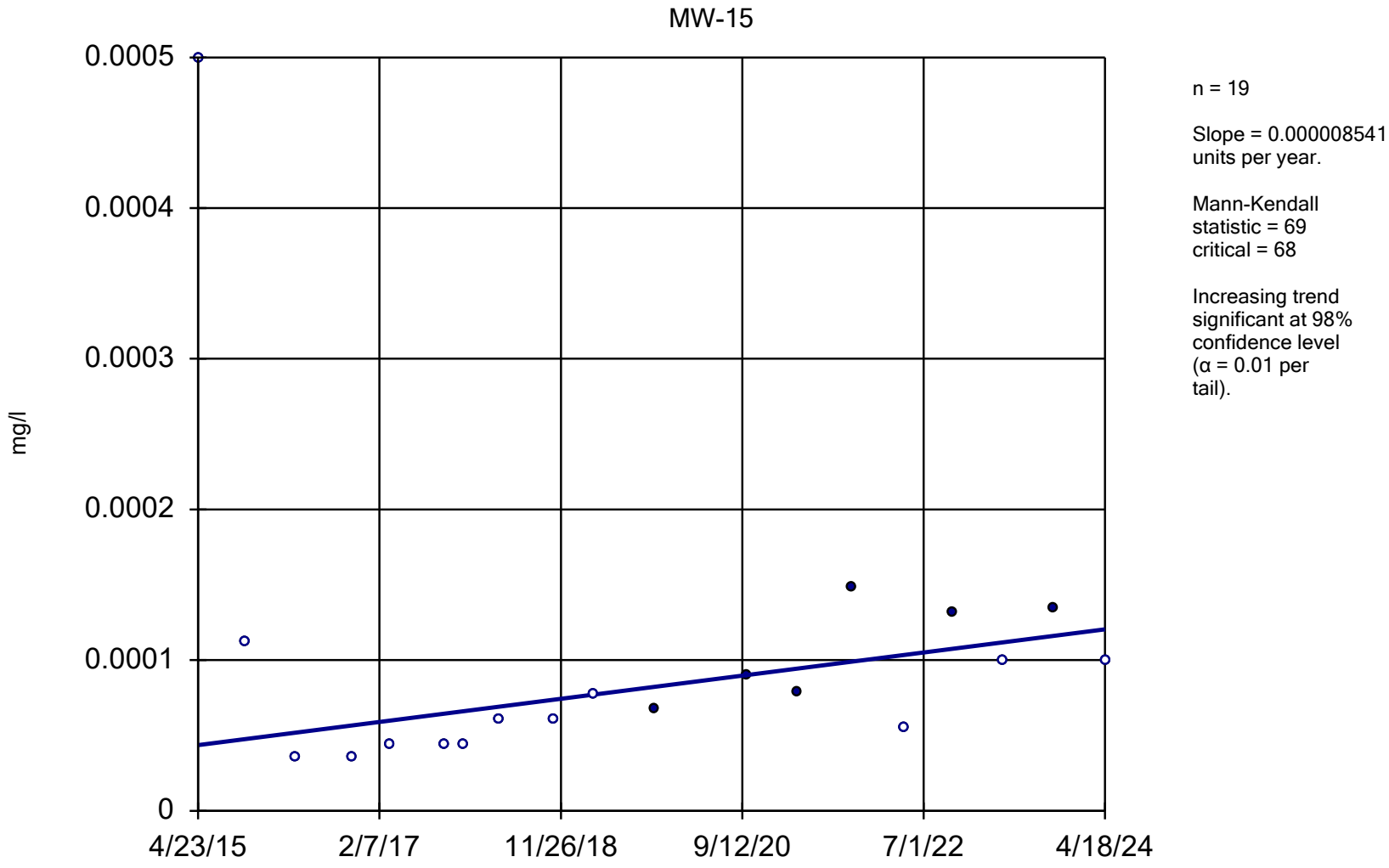


Constituent: Beryllium Analysis Run 7/12/2024 2:05 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

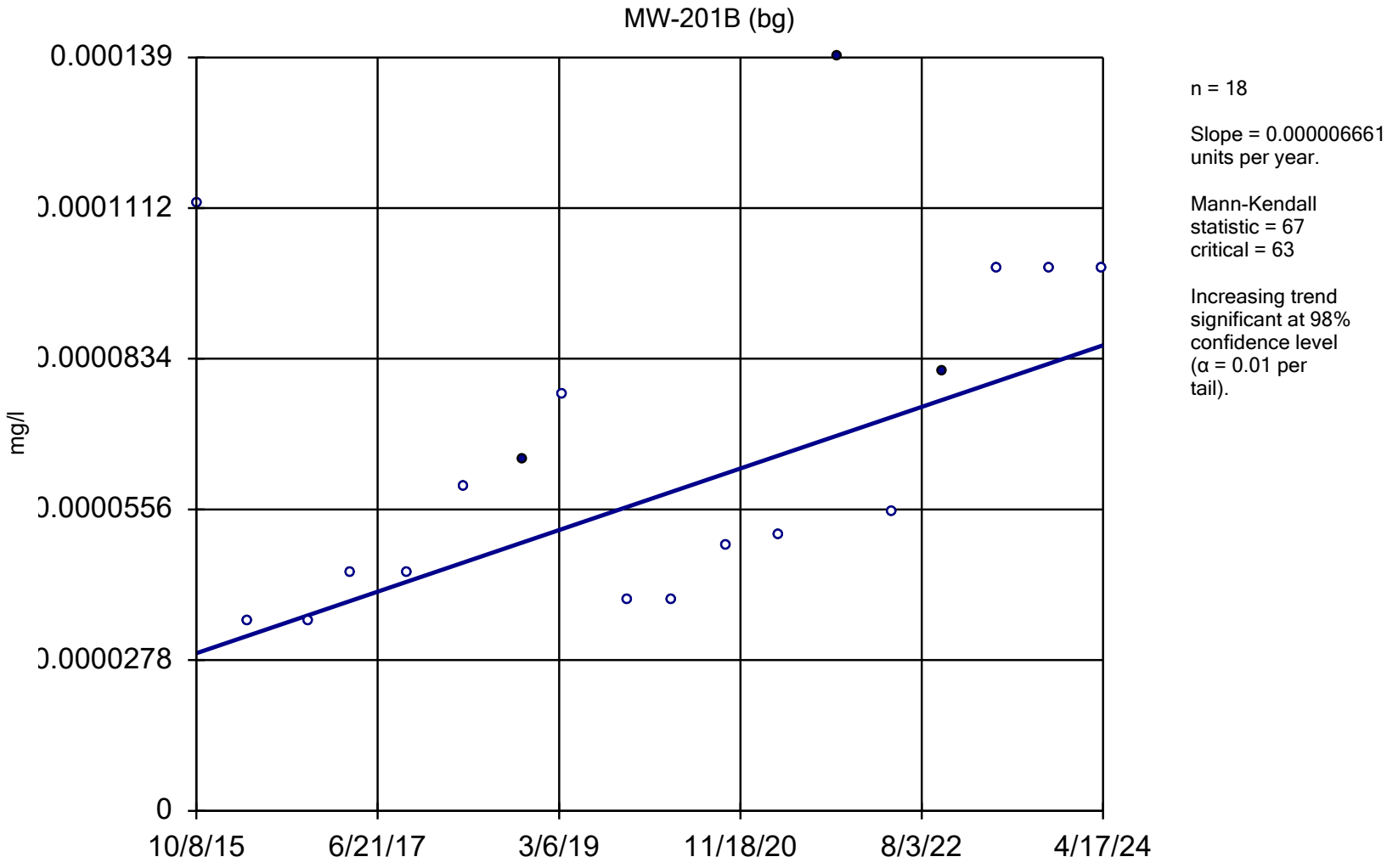


Constituent: Cadmium Analysis Run 7/12/2024 2:05 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



n = 18

Slope = 0.000006661 units per year.

Mann-Kendall statistic = 67
critical = 63

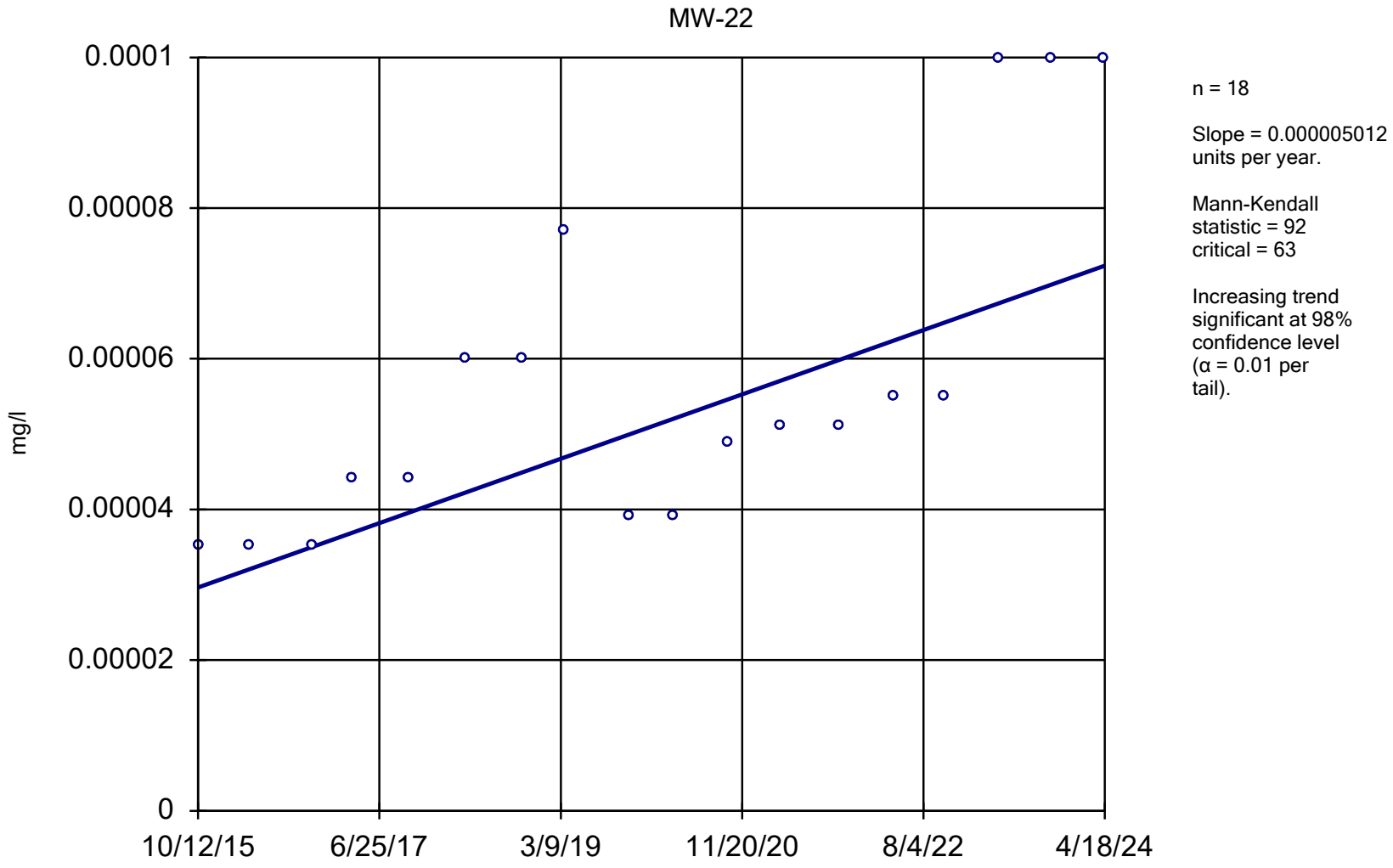
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Cadmium Analysis Run 7/12/2024 2:05 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

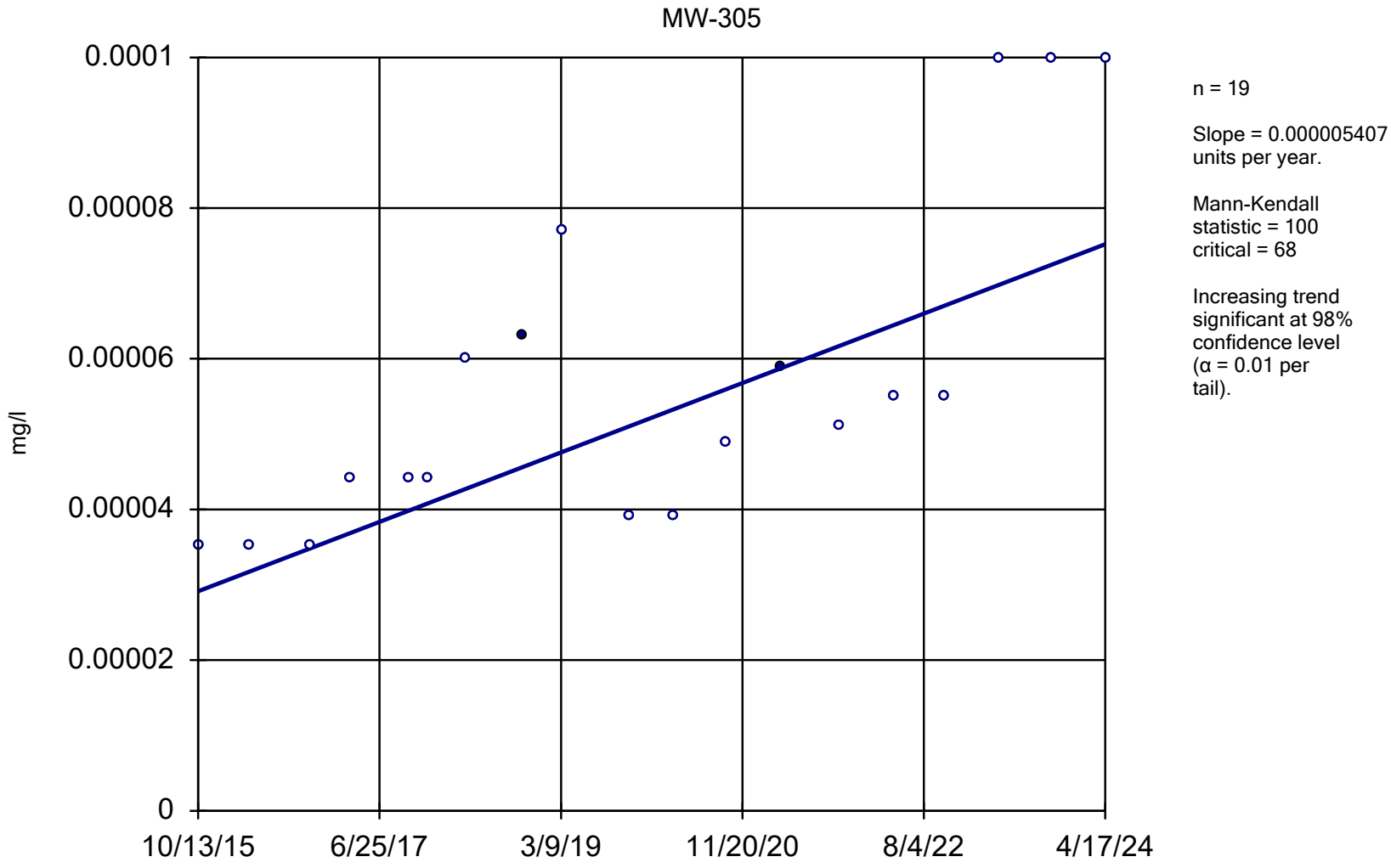


Constituent: Cadmium Analysis Run 7/12/2024 2:05 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



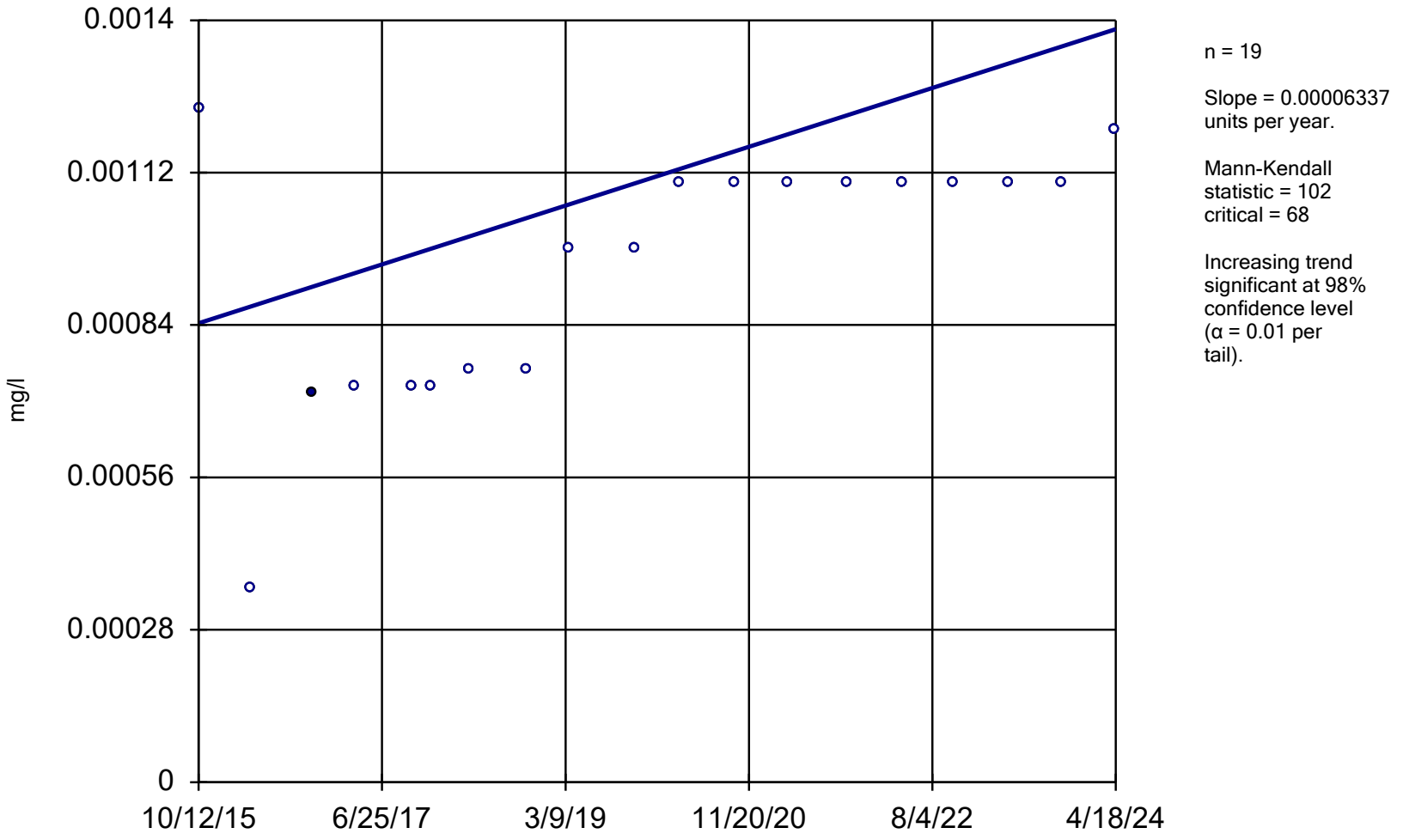
Constituent: Cadmium Analysis Run 7/12/2024 2:05 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-15



n = 19

Slope = 0.00006337 units per year.

Mann-Kendall statistic = 102
critical = 68

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

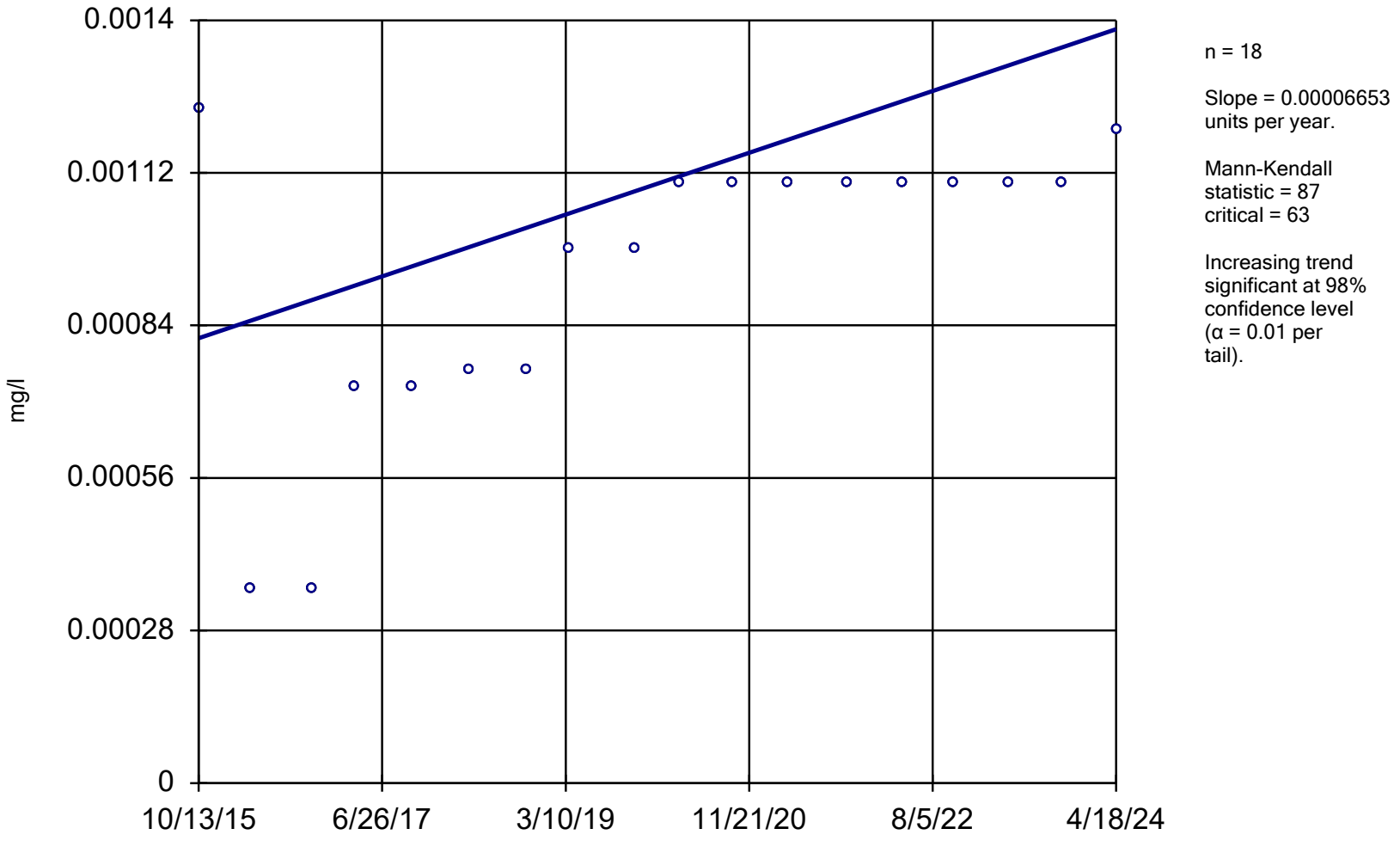
Constituent: Chromium Analysis Run 7/12/2024 2:05 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-18



n = 18

Slope = 0.00006653 units per year.

Mann-Kendall statistic = 87
critical = 63

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

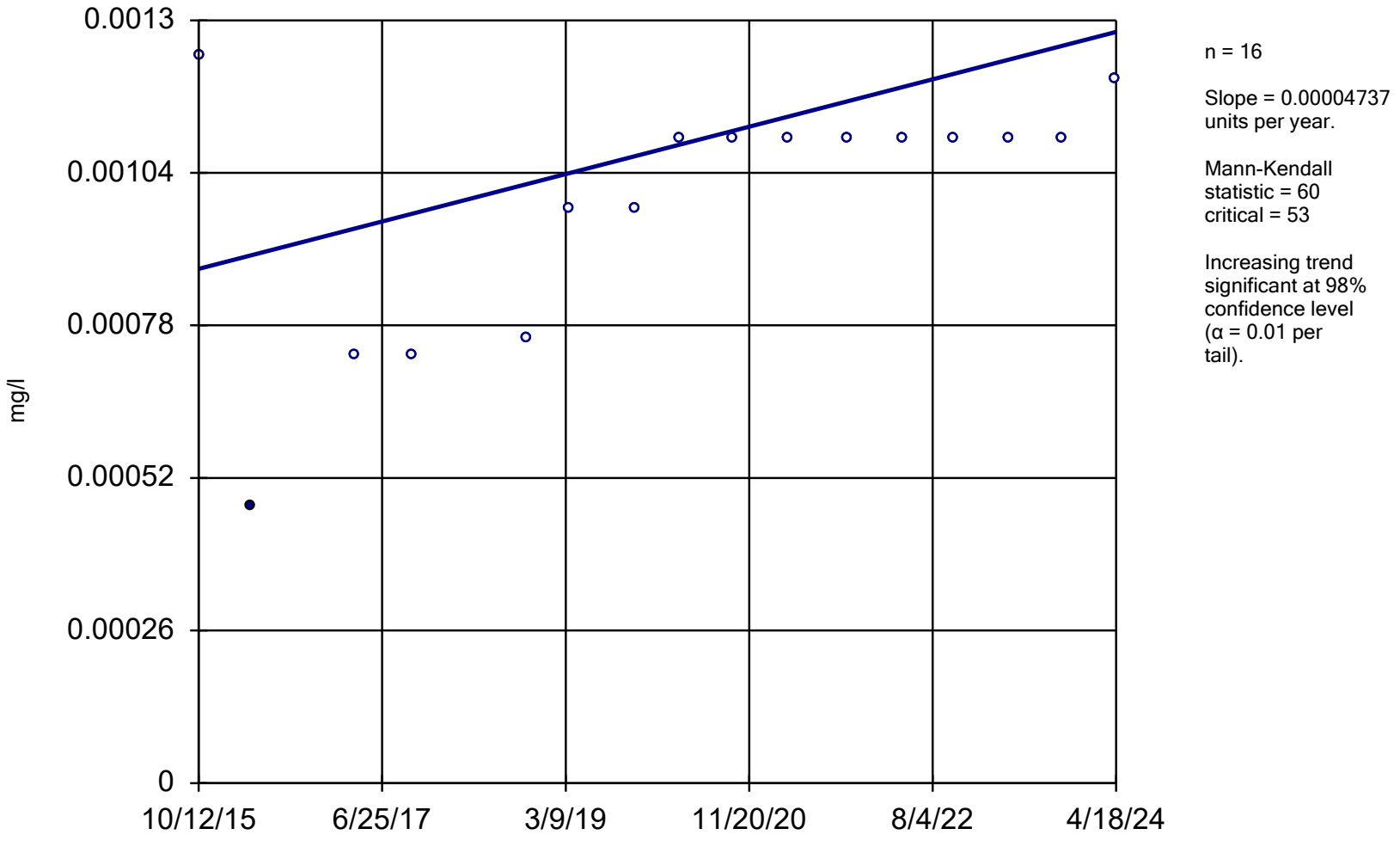
Constituent: Chromium Analysis Run 7/12/2024 2:06 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-19



n = 16

Slope = 0.00004737 units per year.

Mann-Kendall statistic = 60
critical = 53

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

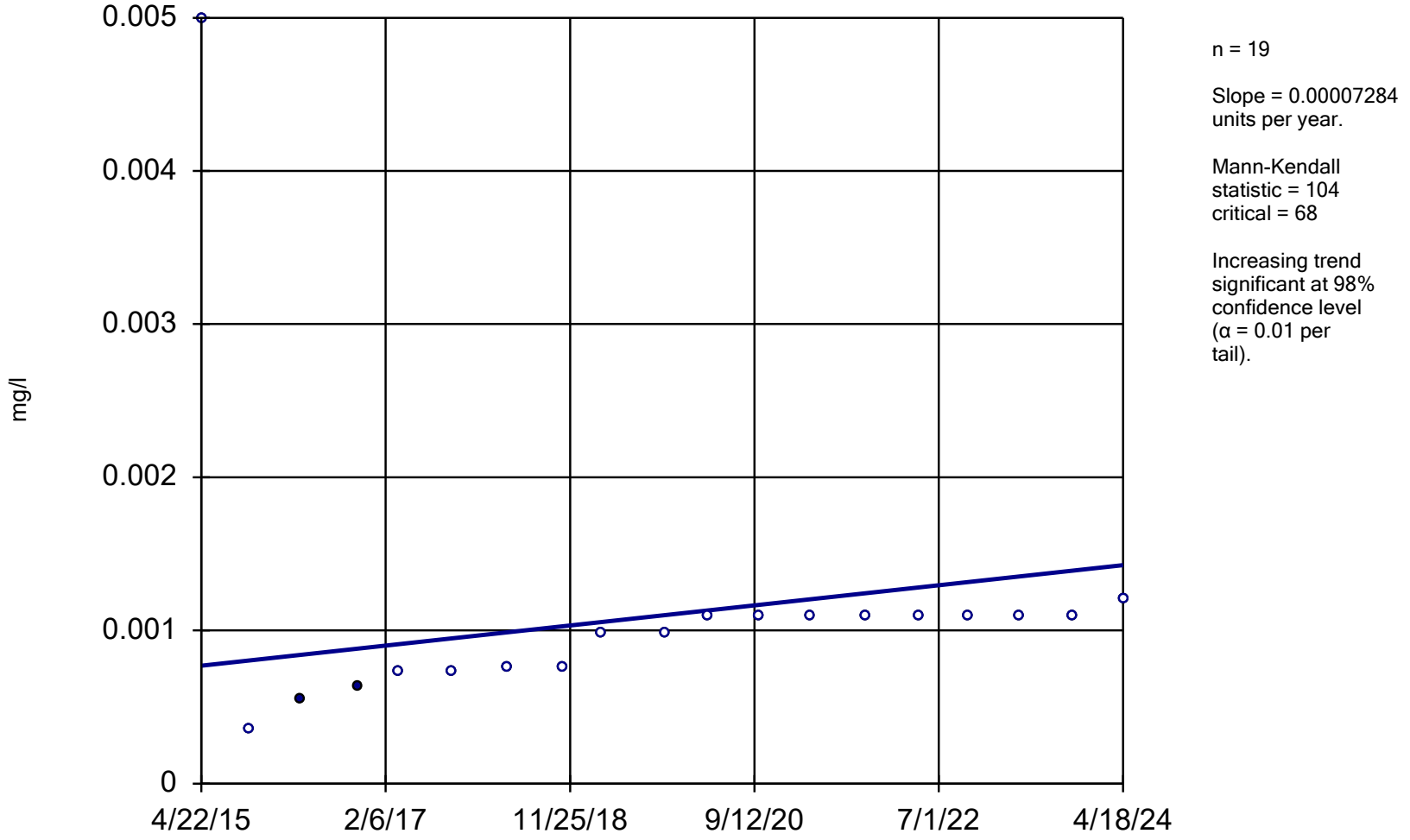
Constituent: Chromium Analysis Run 7/12/2024 2:06 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-22



n = 19

Slope = 0.00007284 units per year.

Mann-Kendall statistic = 104
critical = 68

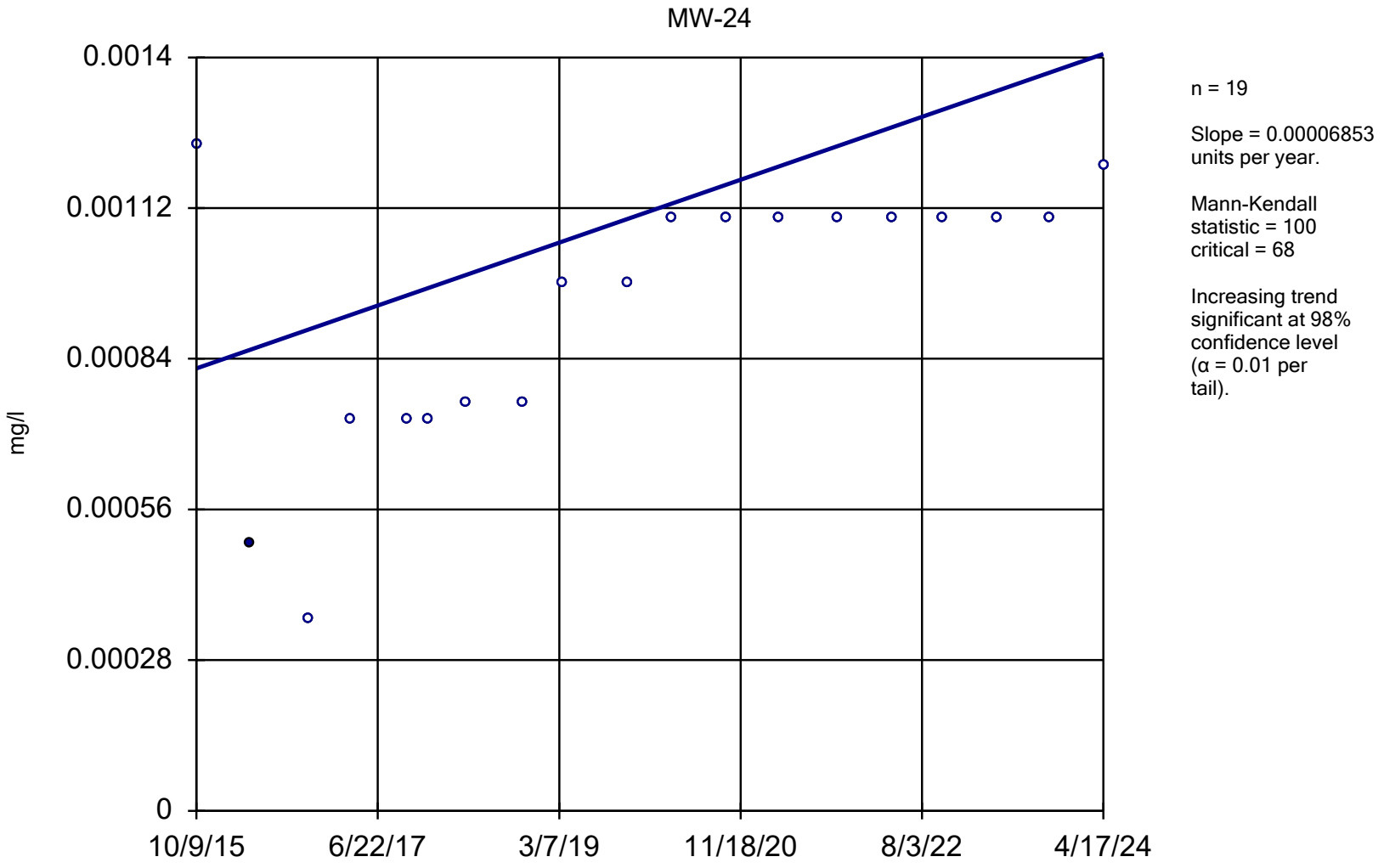
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chromium Analysis Run 7/12/2024 2:06 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



n = 19

Slope = 0.00006853 units per year.

Mann-Kendall statistic = 100
critical = 68

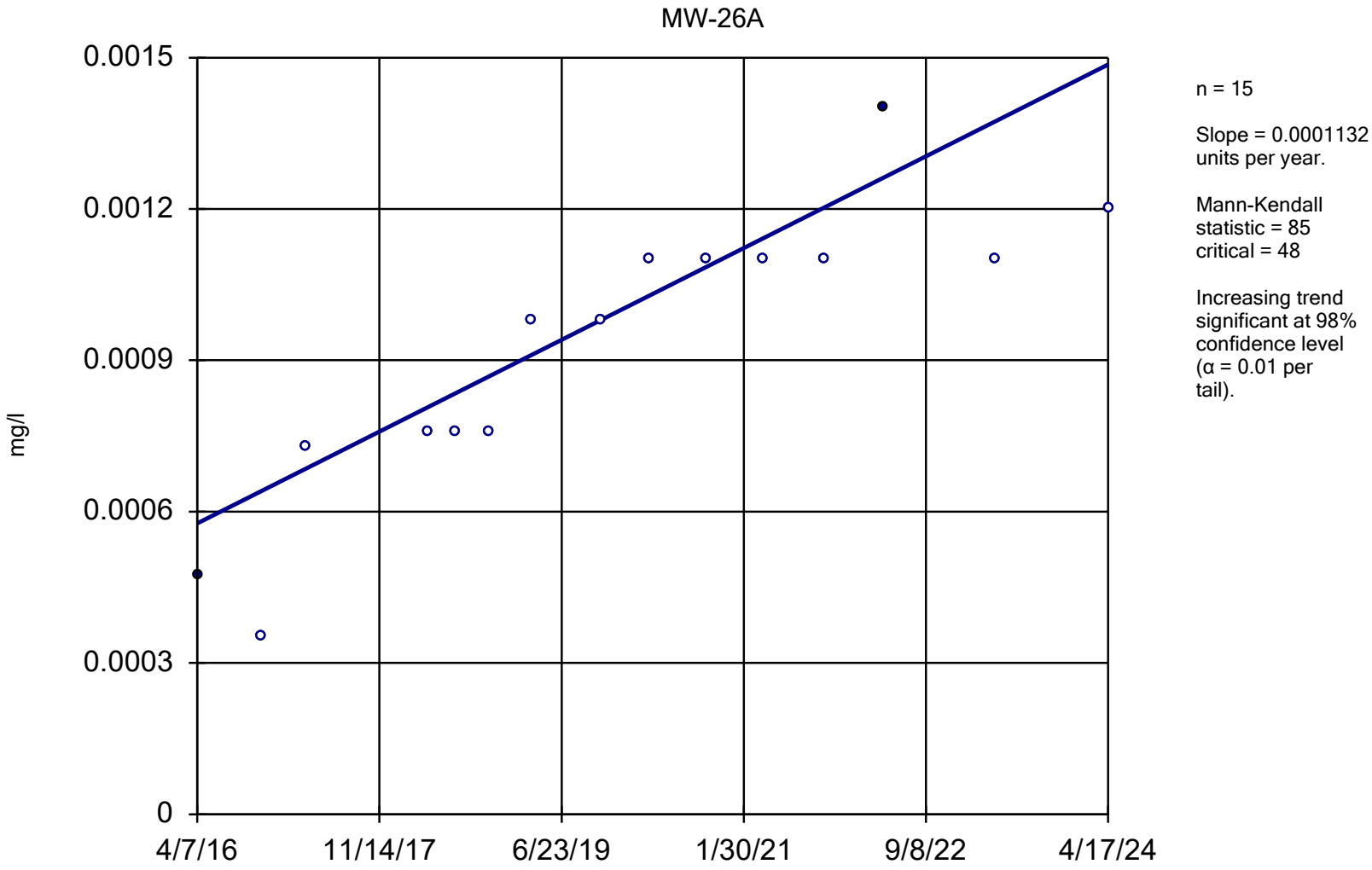
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chromium Analysis Run 7/12/2024 2:06 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



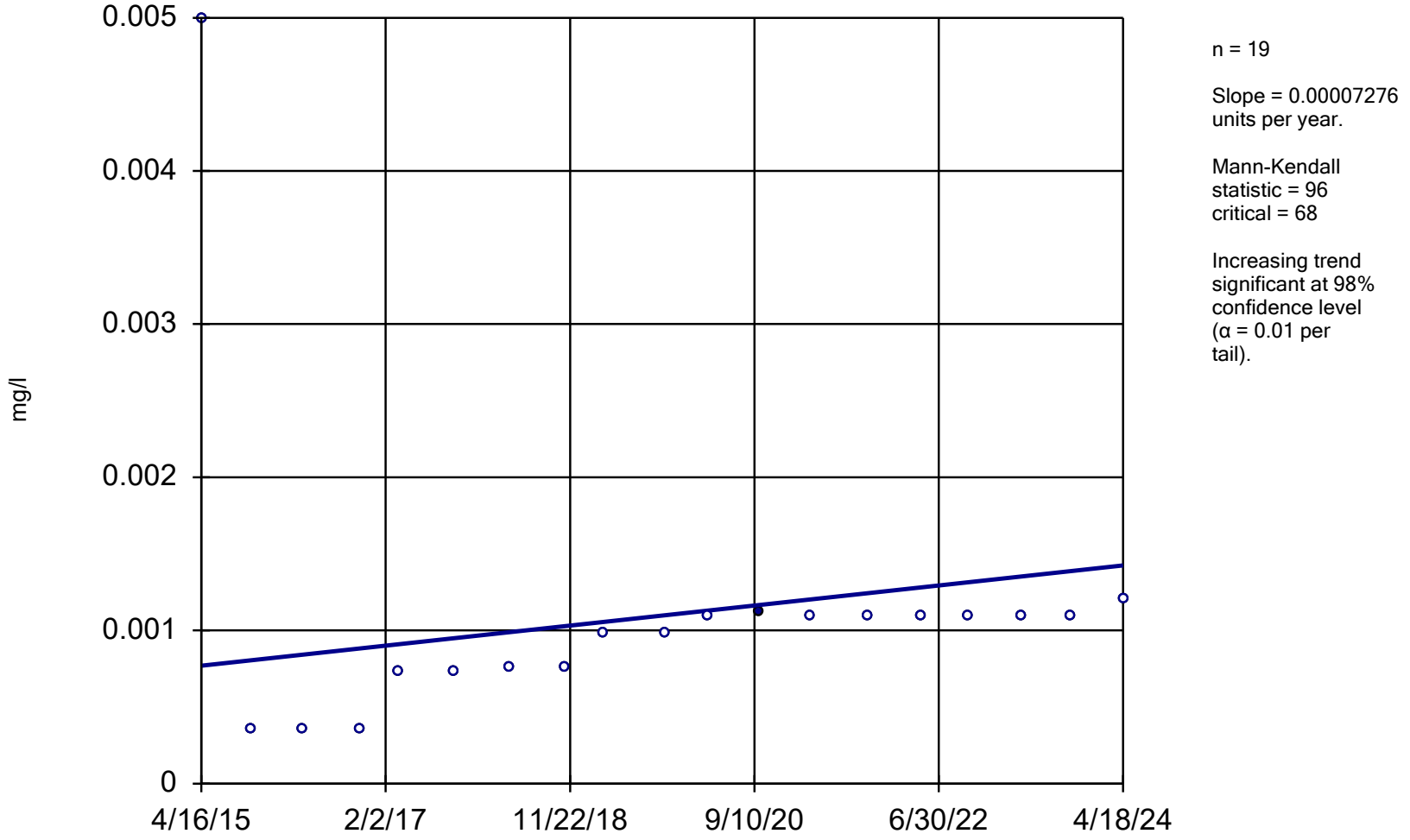
Constituent: Chromium Analysis Run 7/12/2024 2:06 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-300



n = 19

Slope = 0.00007276 units per year.

Mann-Kendall statistic = 96
critical = 68

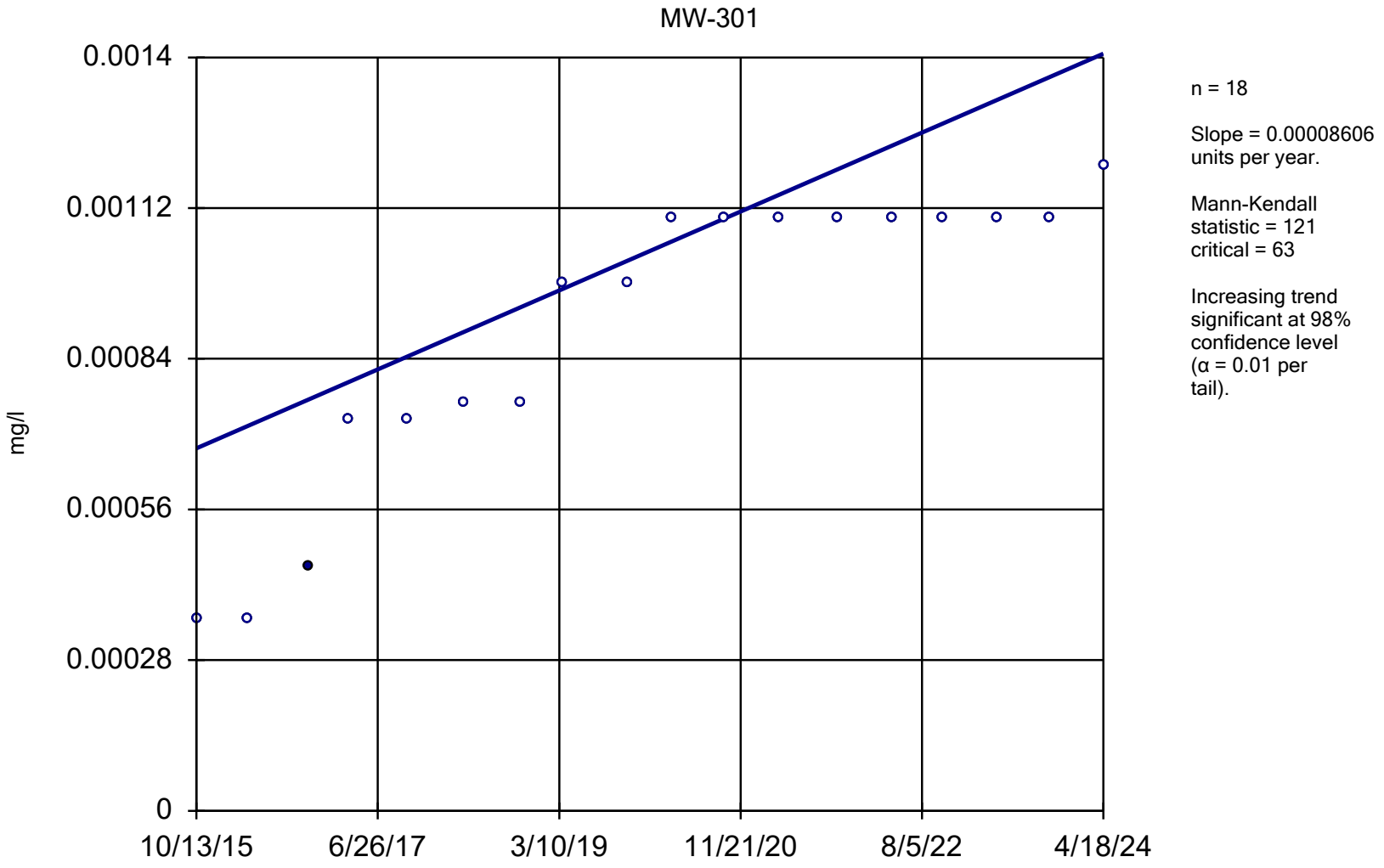
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chromium Analysis Run 7/12/2024 2:06 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

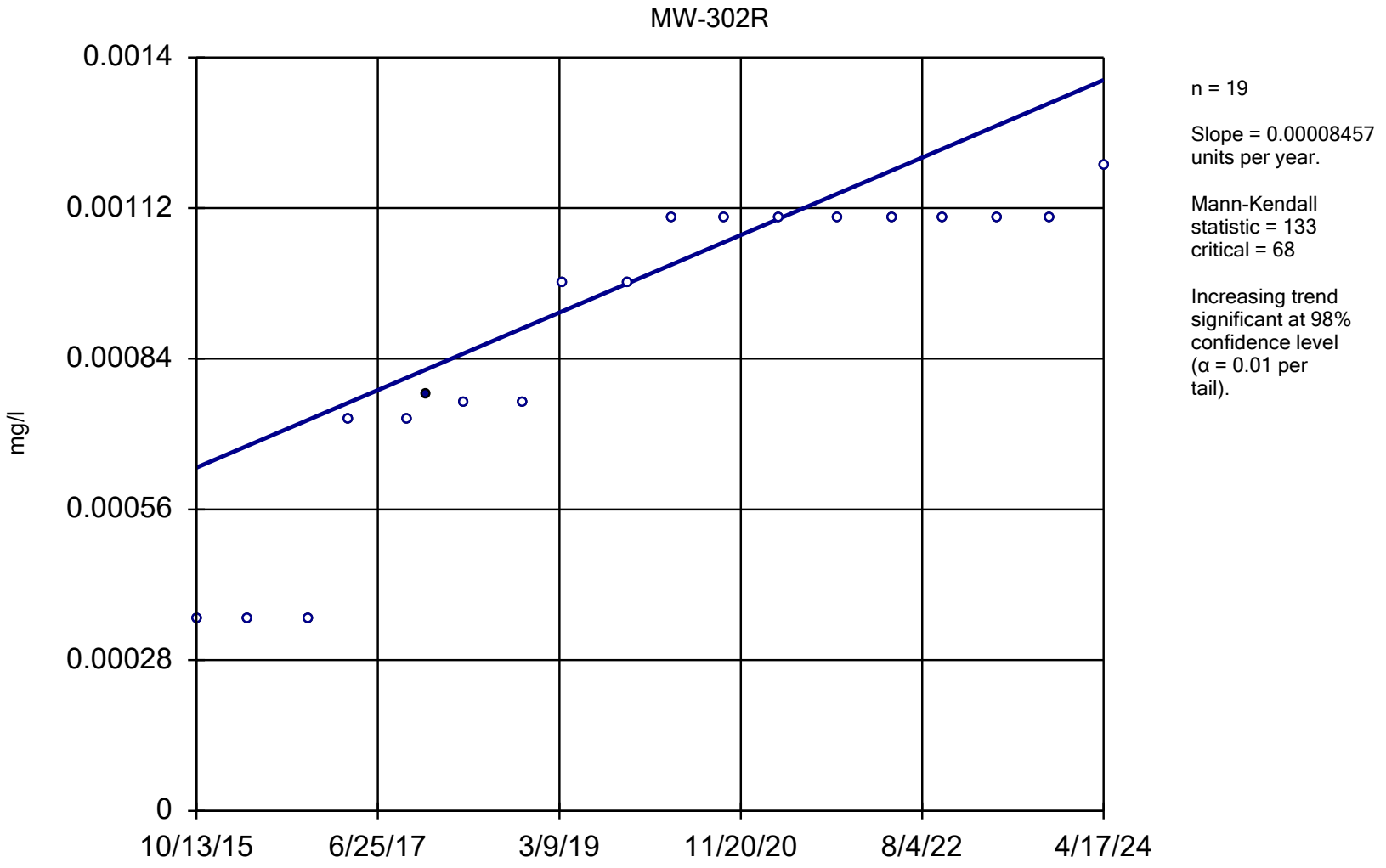


Constituent: Chromium Analysis Run 7/12/2024 2:06 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

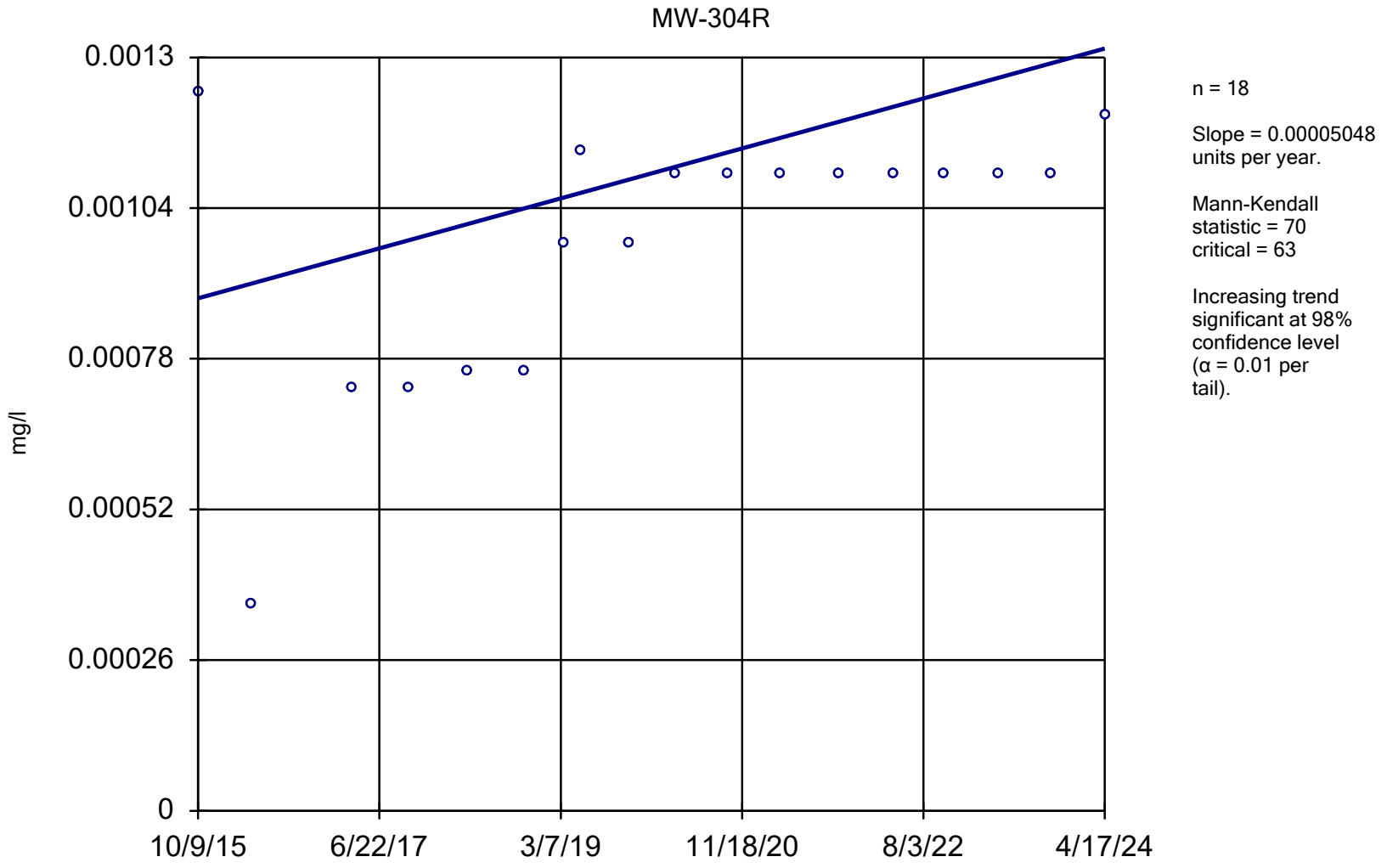


Constituent: Chromium Analysis Run 7/12/2024 2:06 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



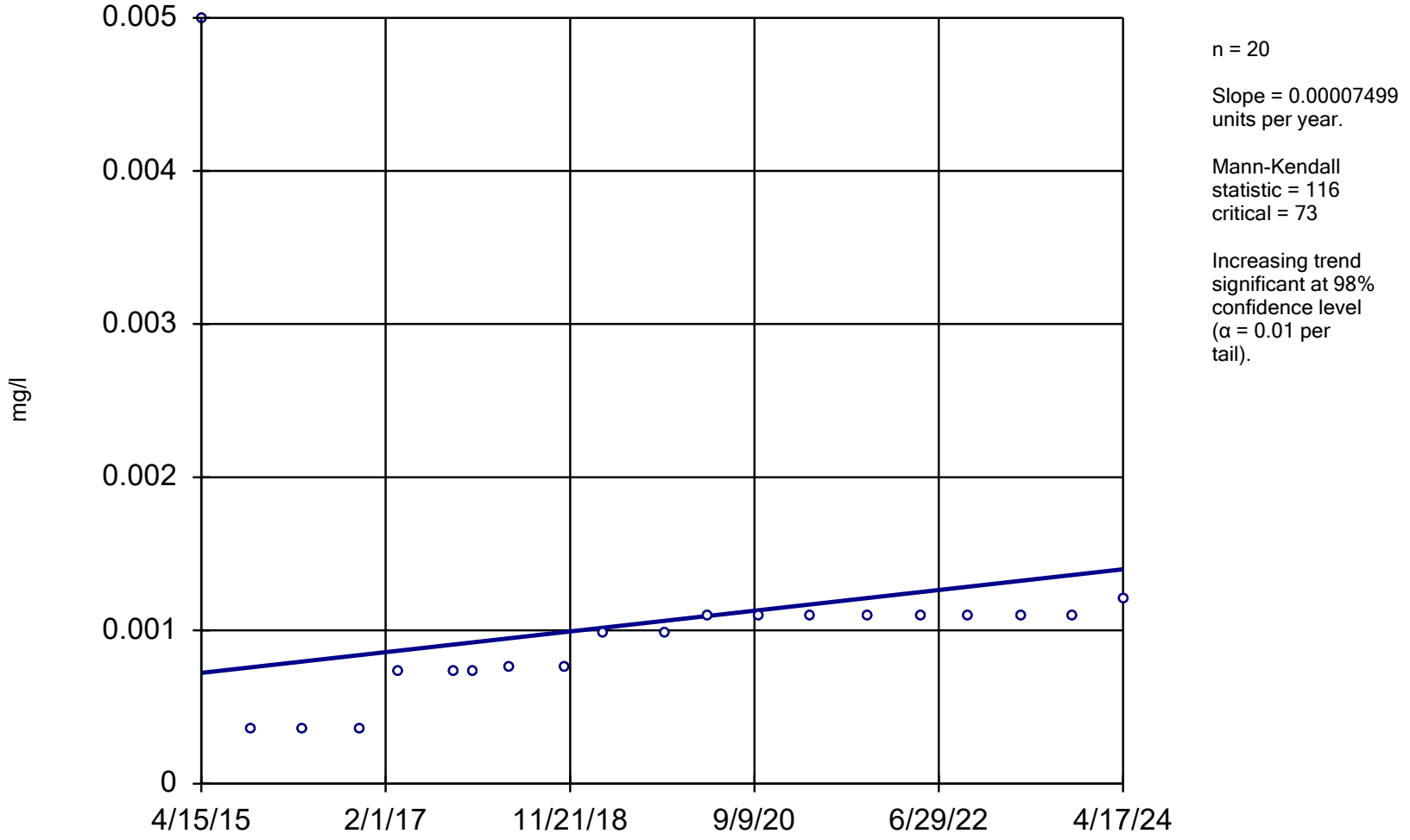
Constituent: Chromium Analysis Run 7/12/2024 2:06 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-305



n = 20

Slope = 0.00007499 units per year.

Mann-Kendall statistic = 116
critical = 73

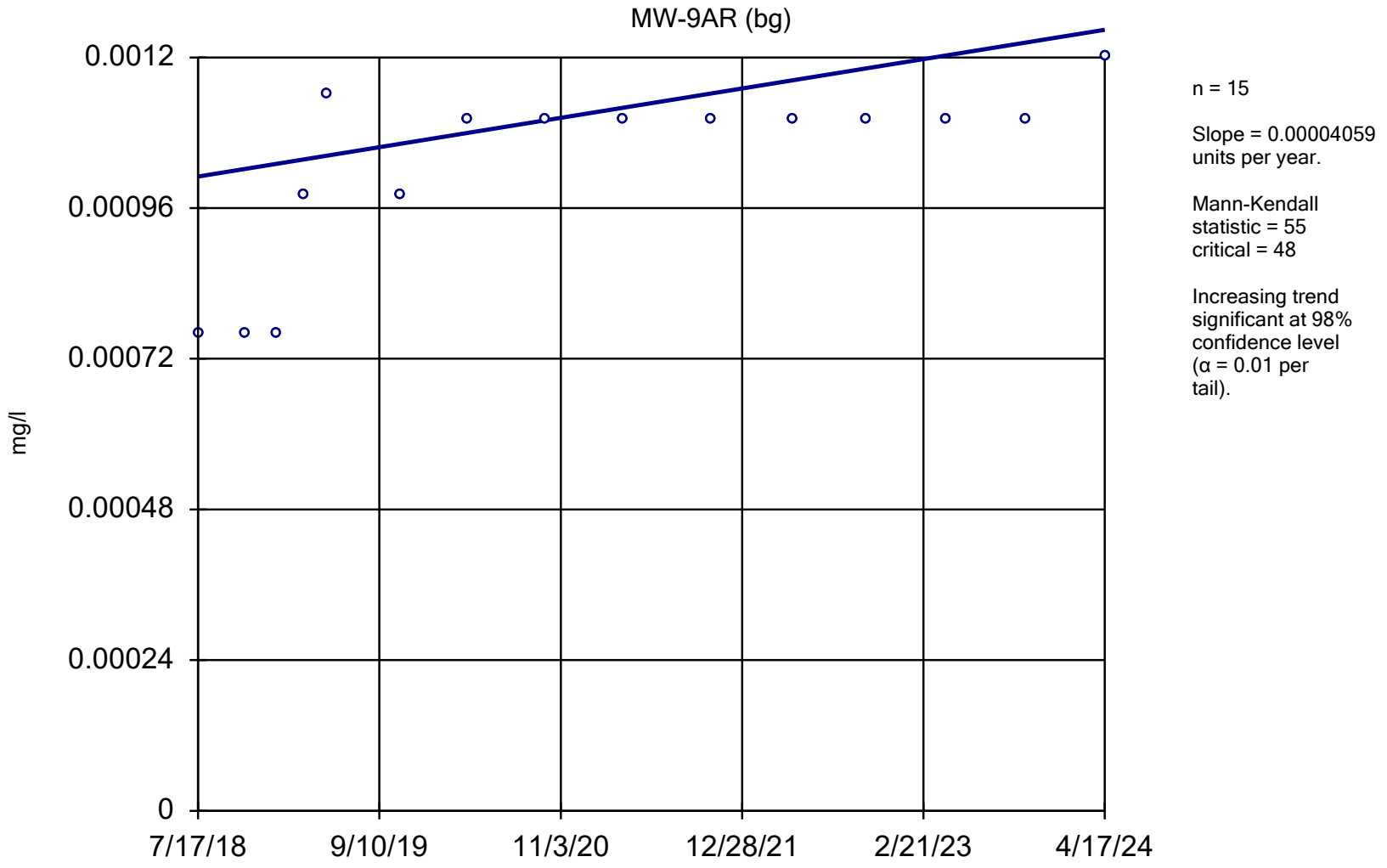
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chromium Analysis Run 7/12/2024 2:06 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

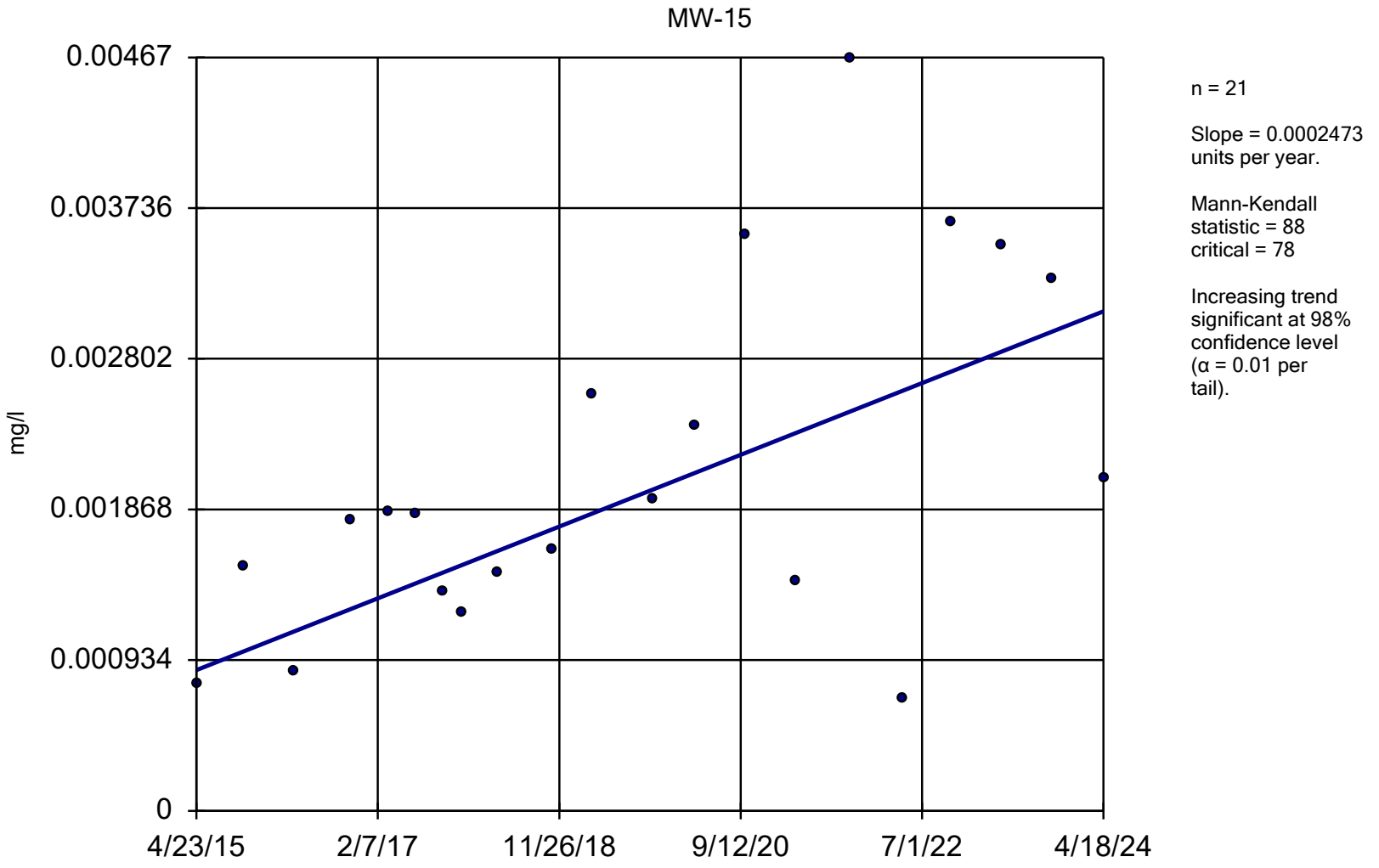
Sen's Slope Estimator



Constituent: Chromium Analysis Run 7/12/2024 2:06 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Sen's Slope Estimator

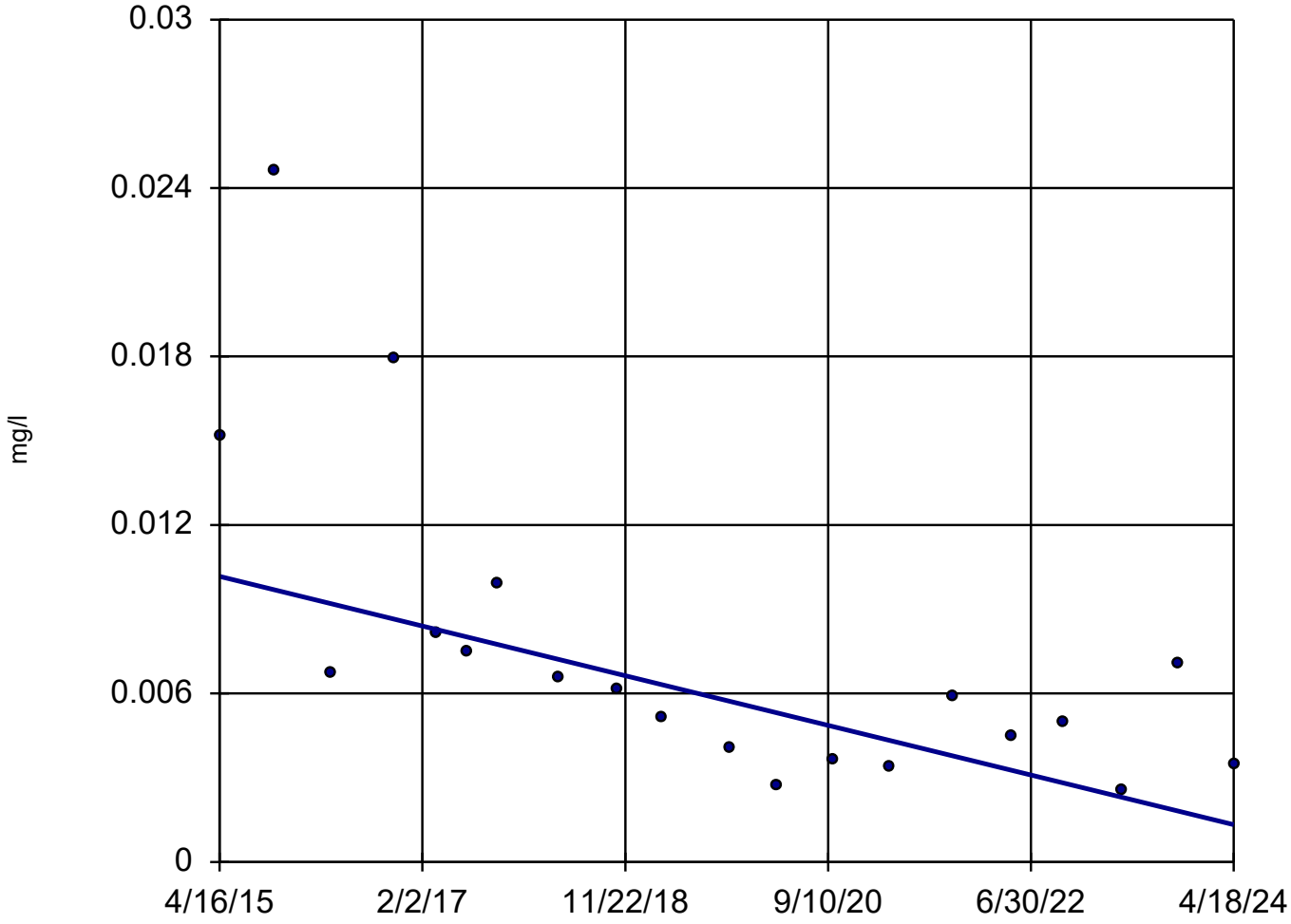


Constituent: Cobalt Analysis Run 7/12/2024 2:06 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Sen's Slope Estimator

MW-18



n = 20

Slope = -0.0009804 units per year.

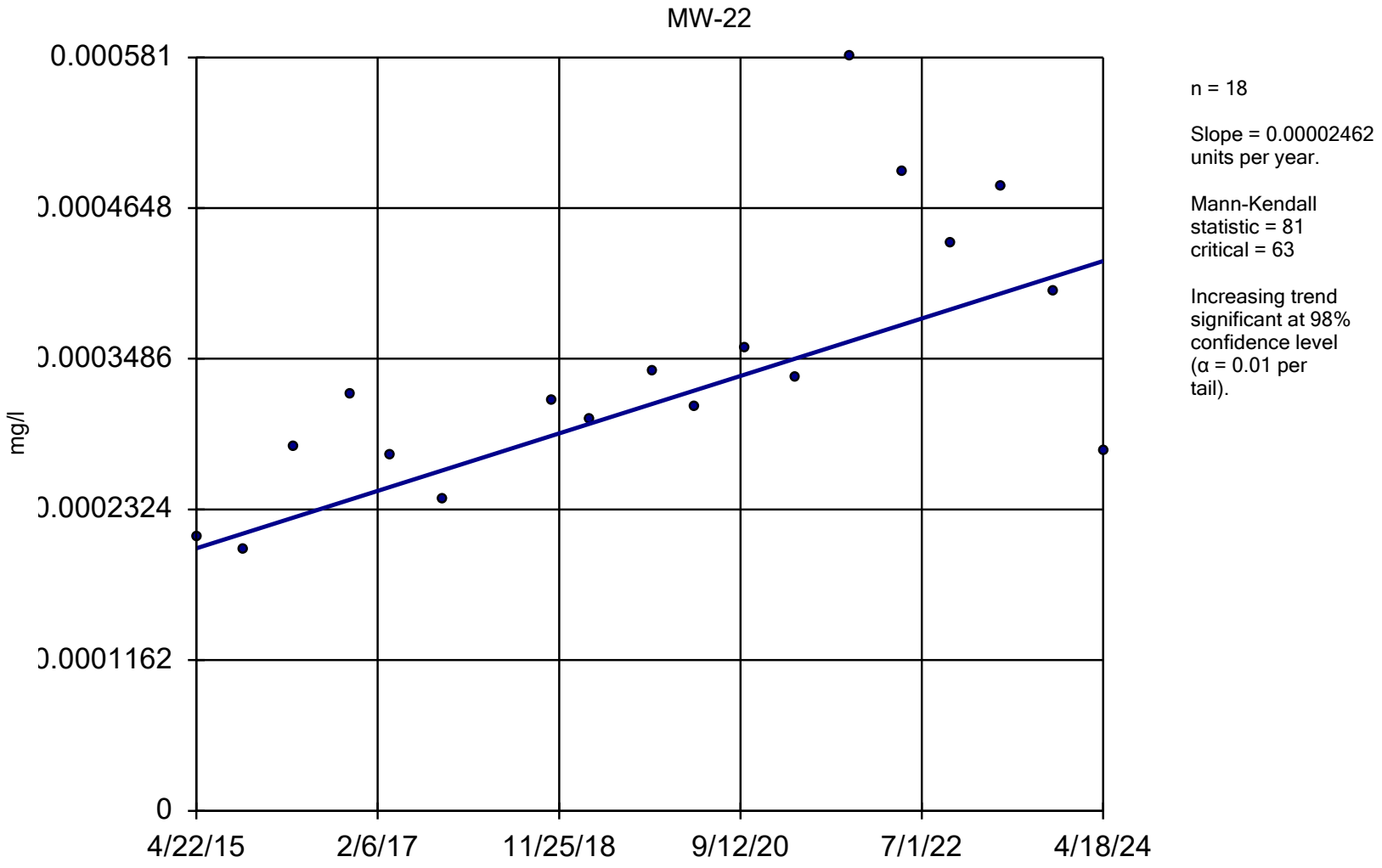
Mann-Kendall statistic = -112
critical = -73

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Cobalt Analysis Run 7/12/2024 2:06 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

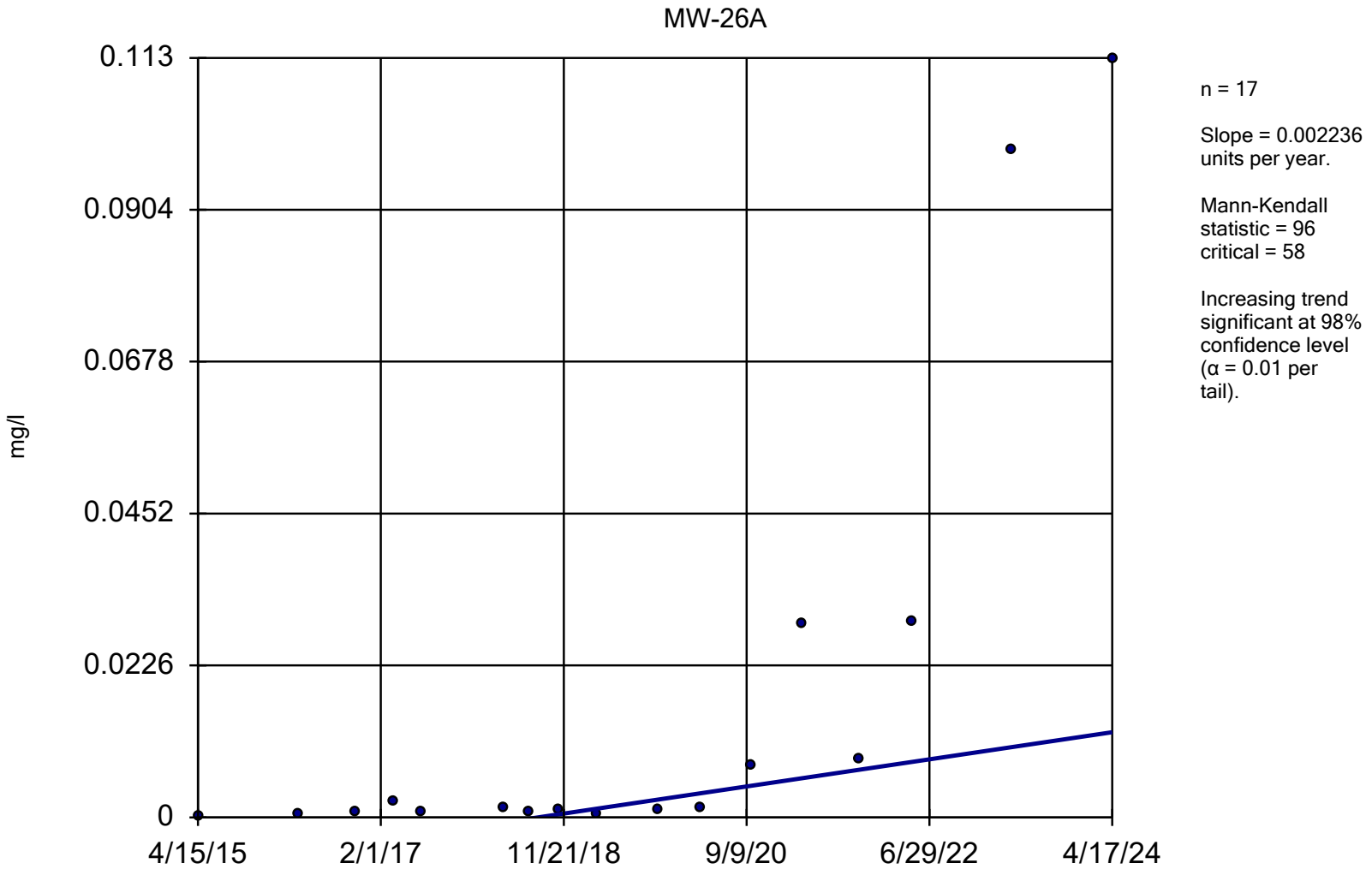
Sen's Slope Estimator



Constituent: Cobalt Analysis Run 7/12/2024 2:06 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Sen's Slope Estimator

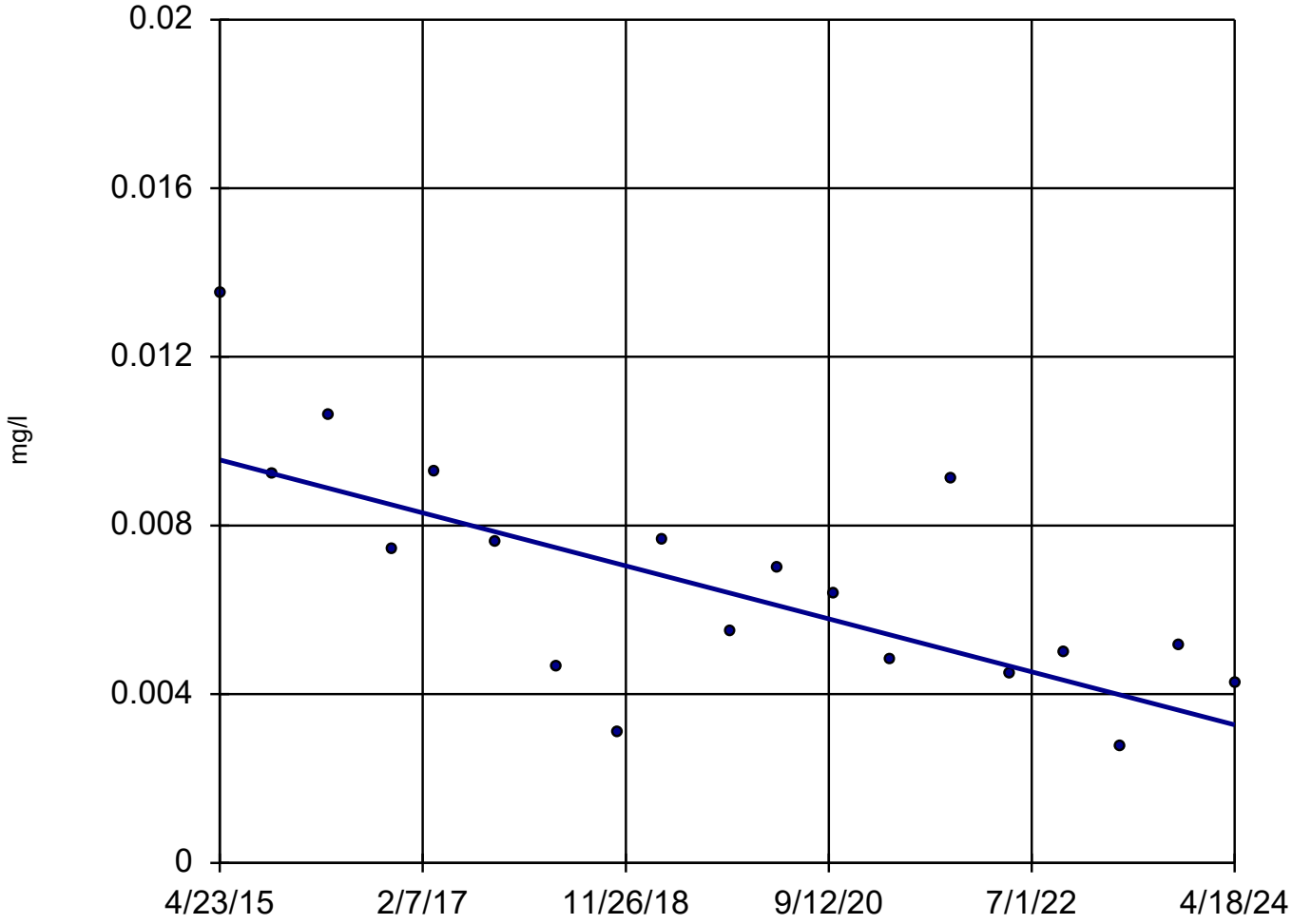


Constituent: Cobalt Analysis Run 7/12/2024 2:06 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Sen's Slope Estimator

MW-301



n = 19

Slope = -0.0006985 units per year.

Mann-Kendall statistic = -91
critical = -68

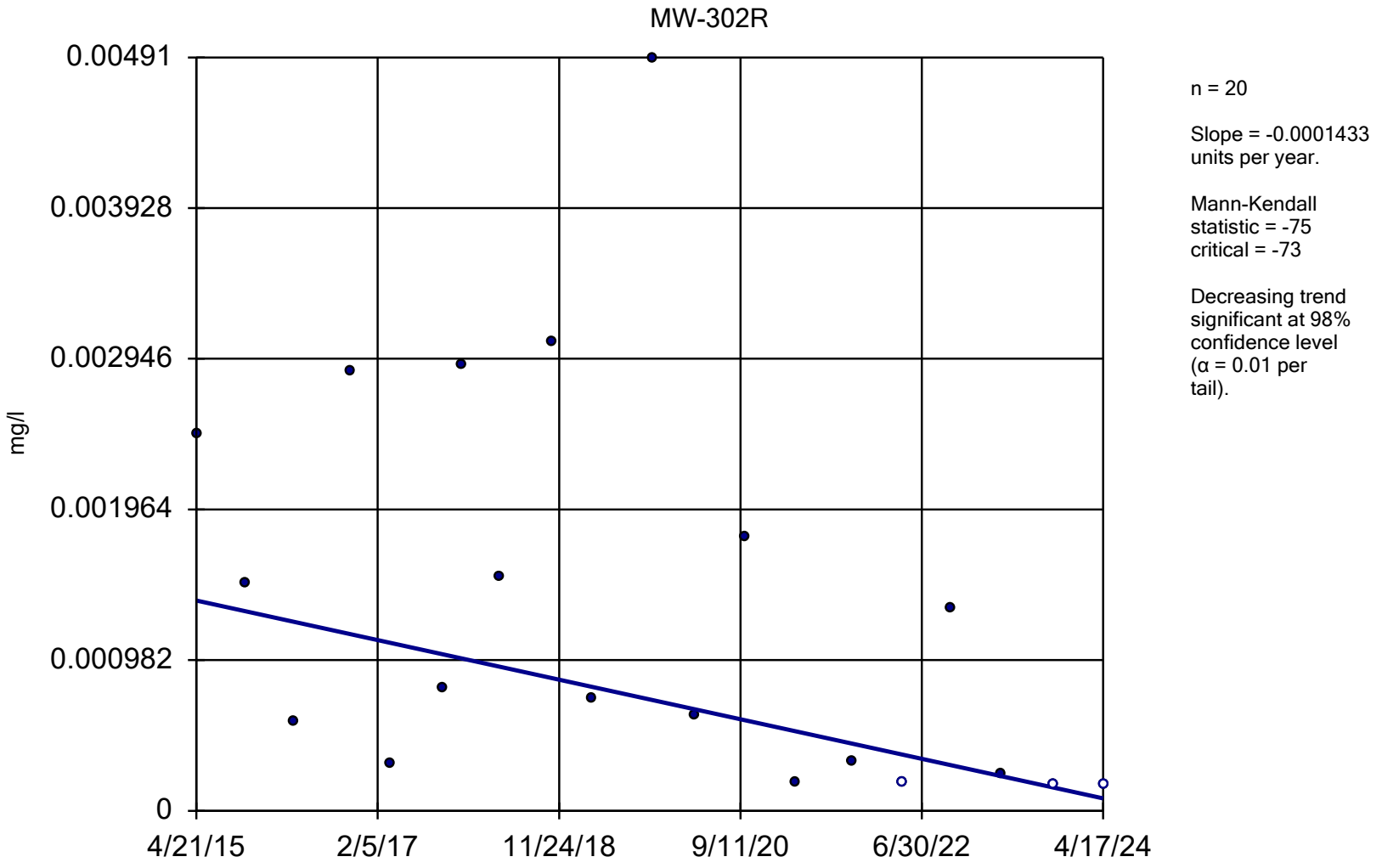
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Cobalt Analysis Run 7/12/2024 2:06 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



n = 20

Slope = -0.0001433 units per year.

Mann-Kendall statistic = -75
critical = -73

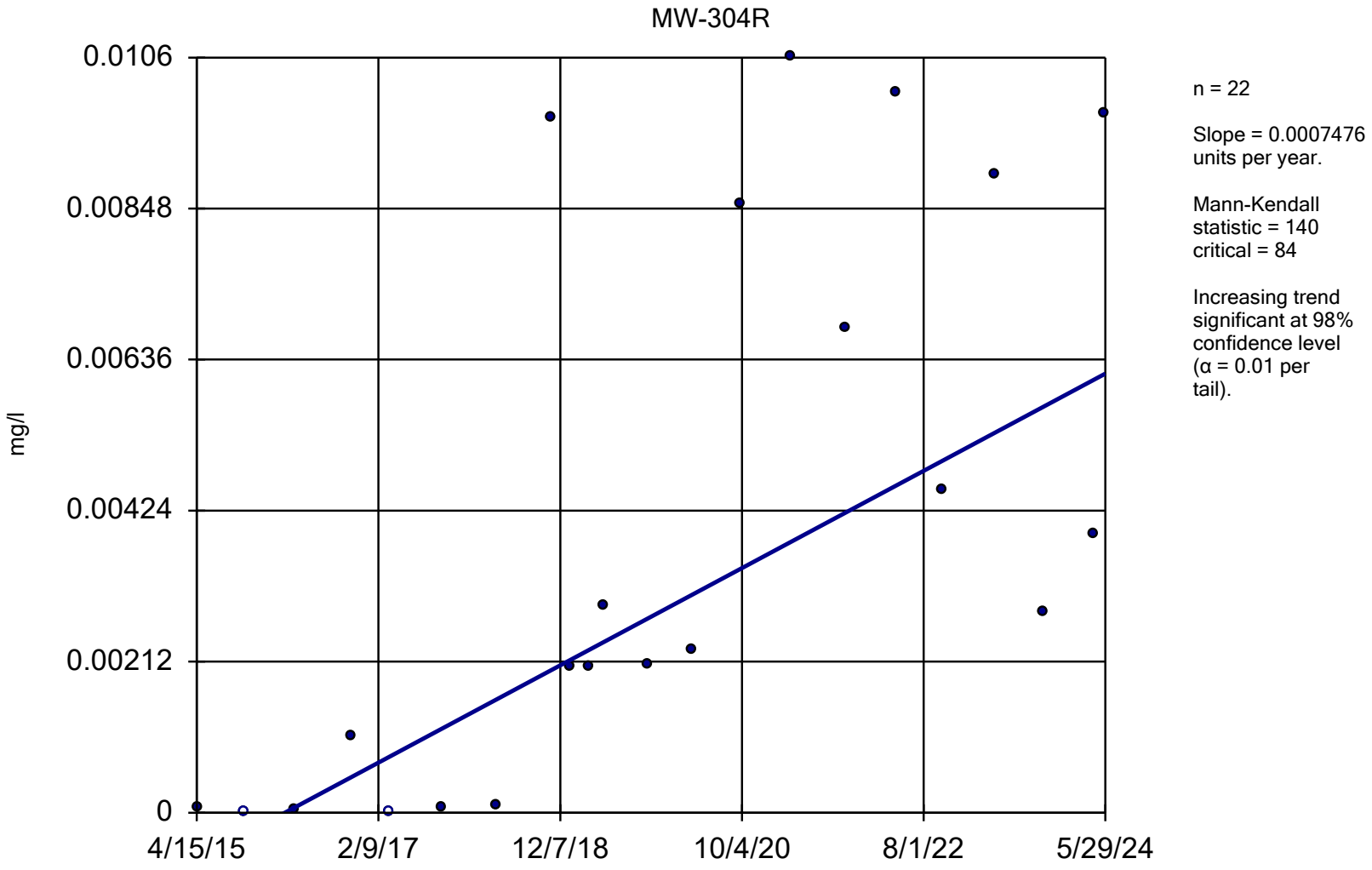
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Cobalt Analysis Run 7/12/2024 2:06 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

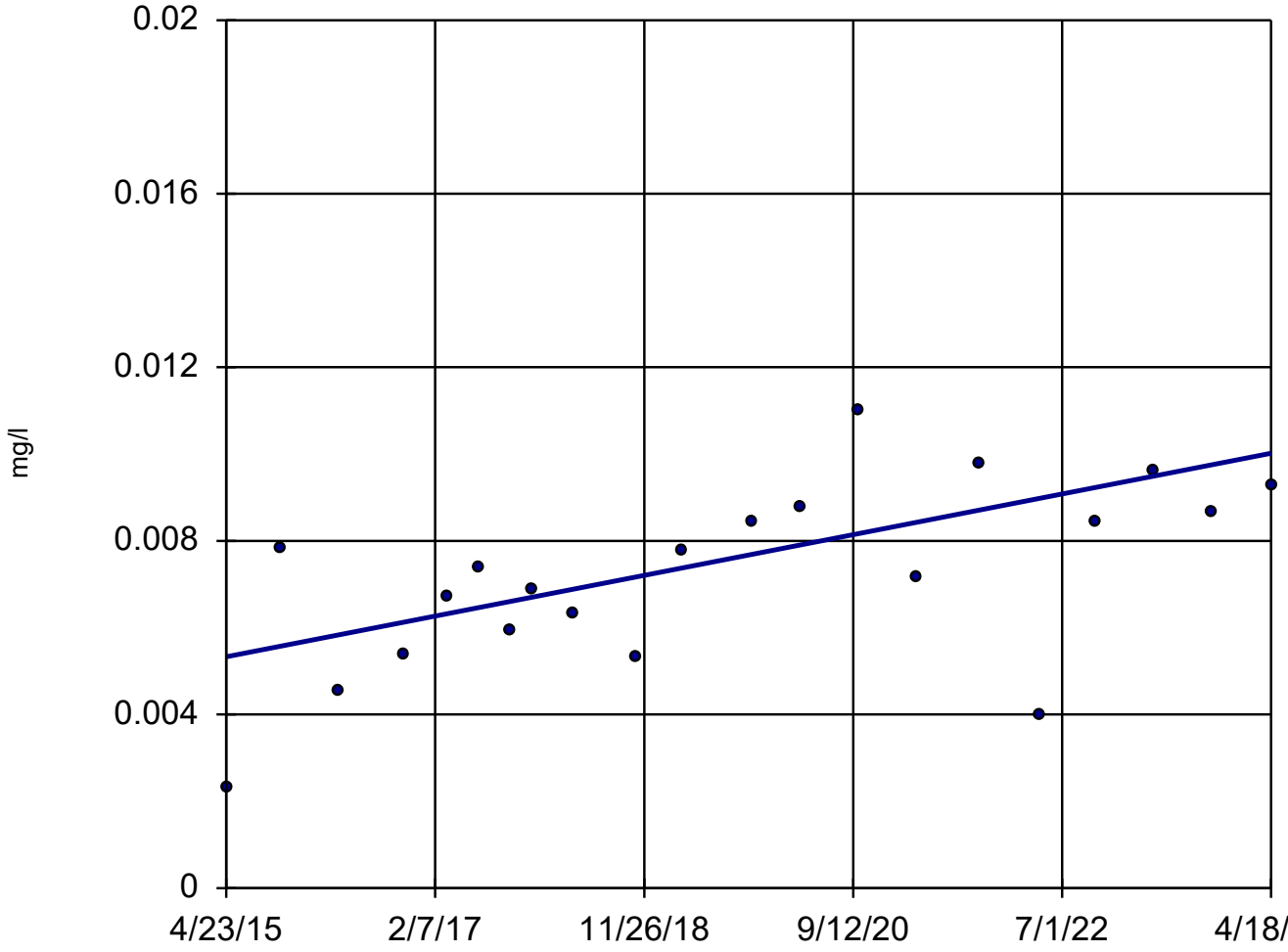


Constituent: Cobalt Analysis Run 7/12/2024 2:06 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Sen's Slope Estimator

MW-15



n = 21

Slope = 0.0005217 units per year.

Mann-Kendall statistic = 98
critical = 78

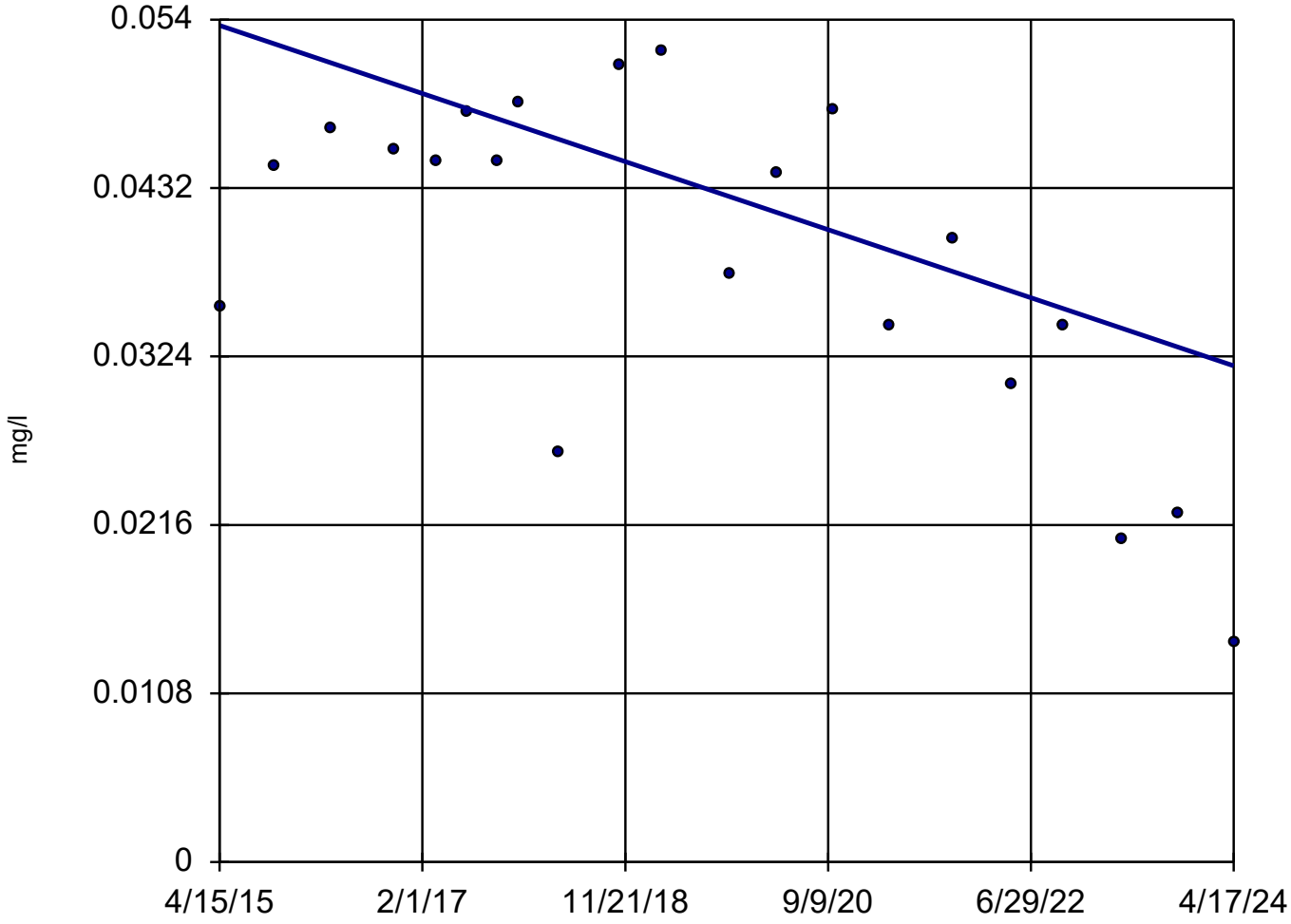
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Nickel Analysis Run 7/12/2024 2:07 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Sen's Slope Estimator

MW-24



n = 21

Slope = -0.002421 units per year.

Mann-Kendall statistic = -81
critical = -78

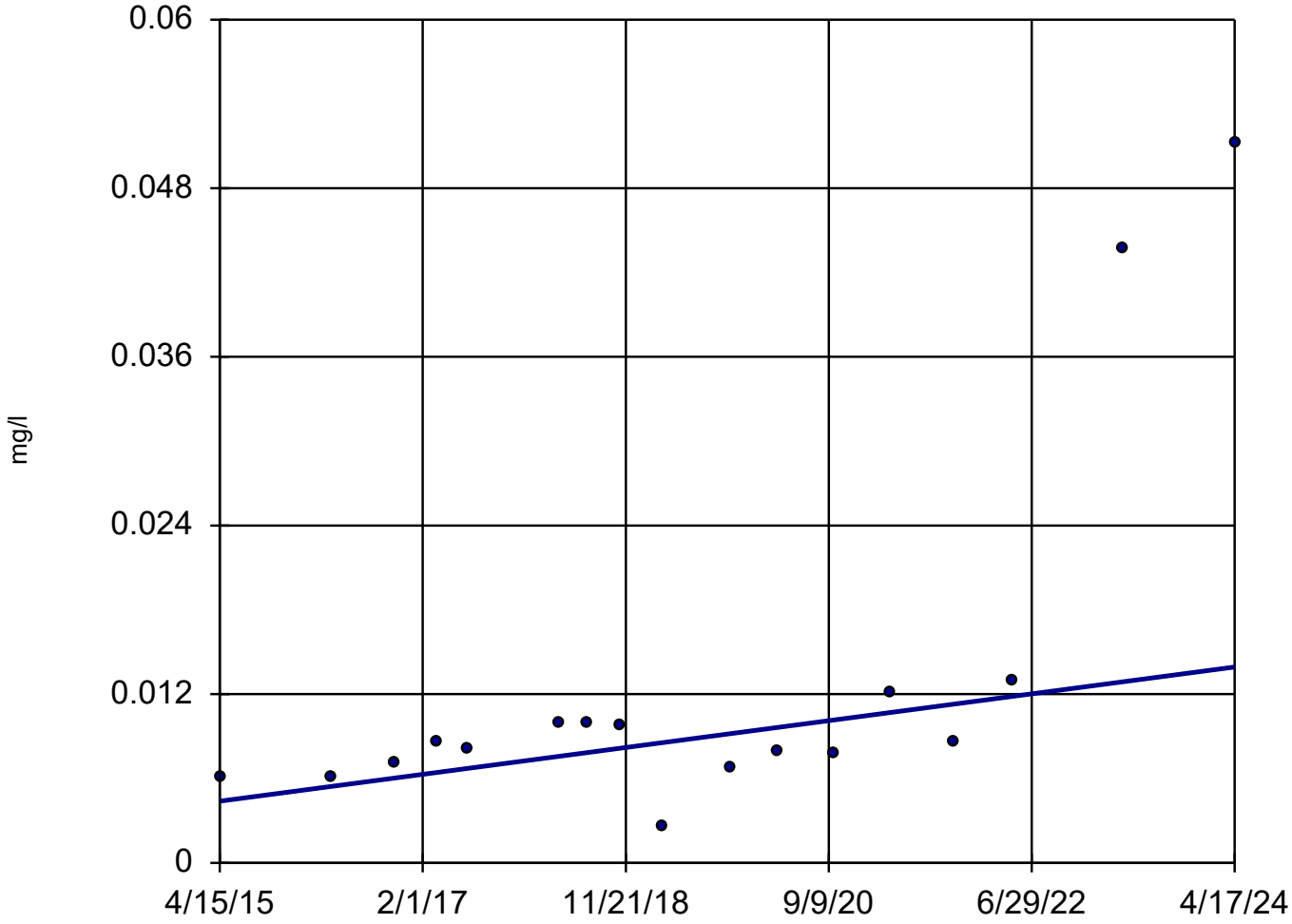
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Nickel Analysis Run 7/12/2024 2:07 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Sen's Slope Estimator

MW-26A



n = 17

Slope = 0.00106 units per year.

Mann-Kendall statistic = 72
critical = 58

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

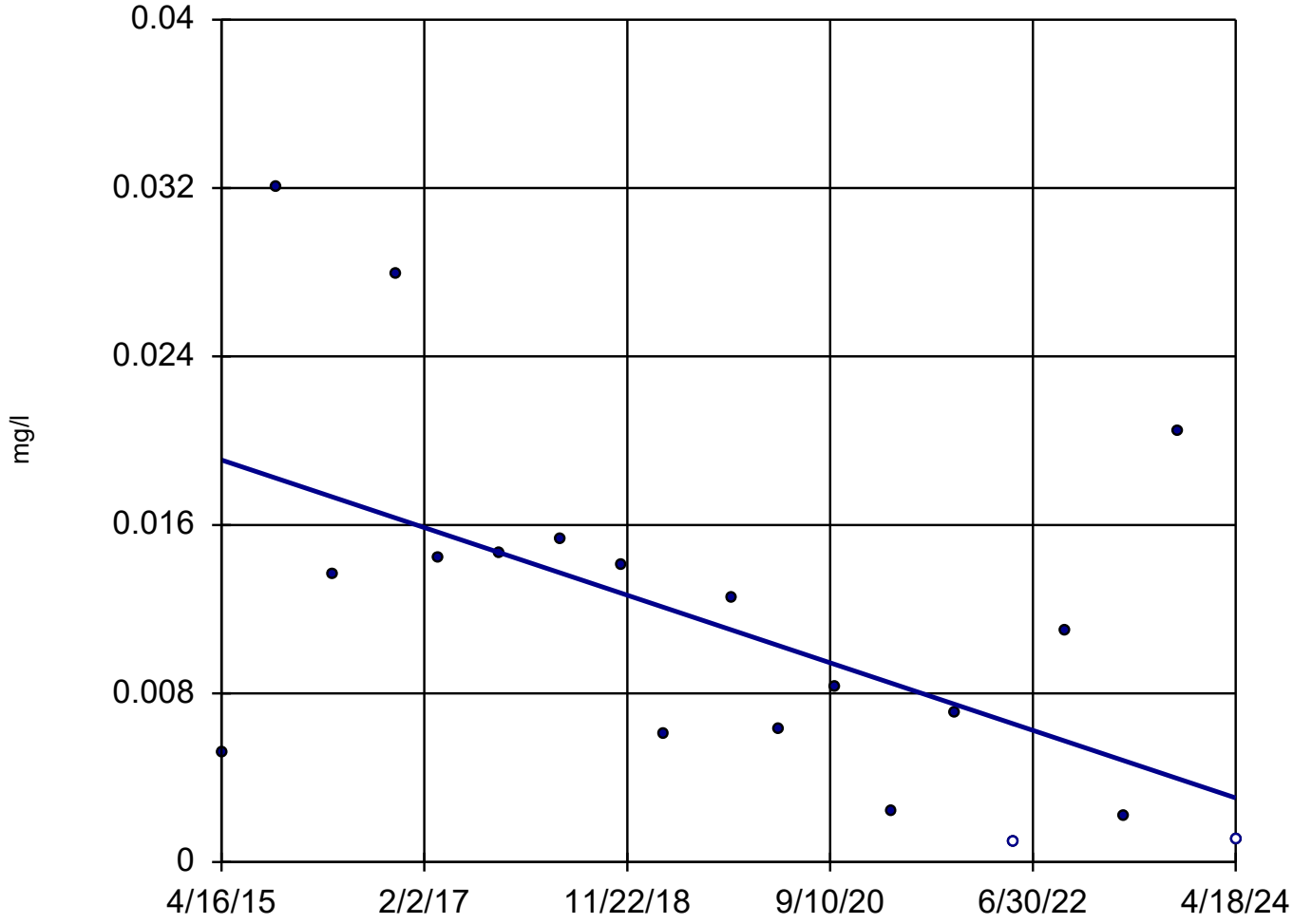
Constituent: Nickel Analysis Run 7/12/2024 2:07 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-300



n = 19

Slope = -0.001781 units per year.

Mann-Kendall statistic = -69
critical = -68

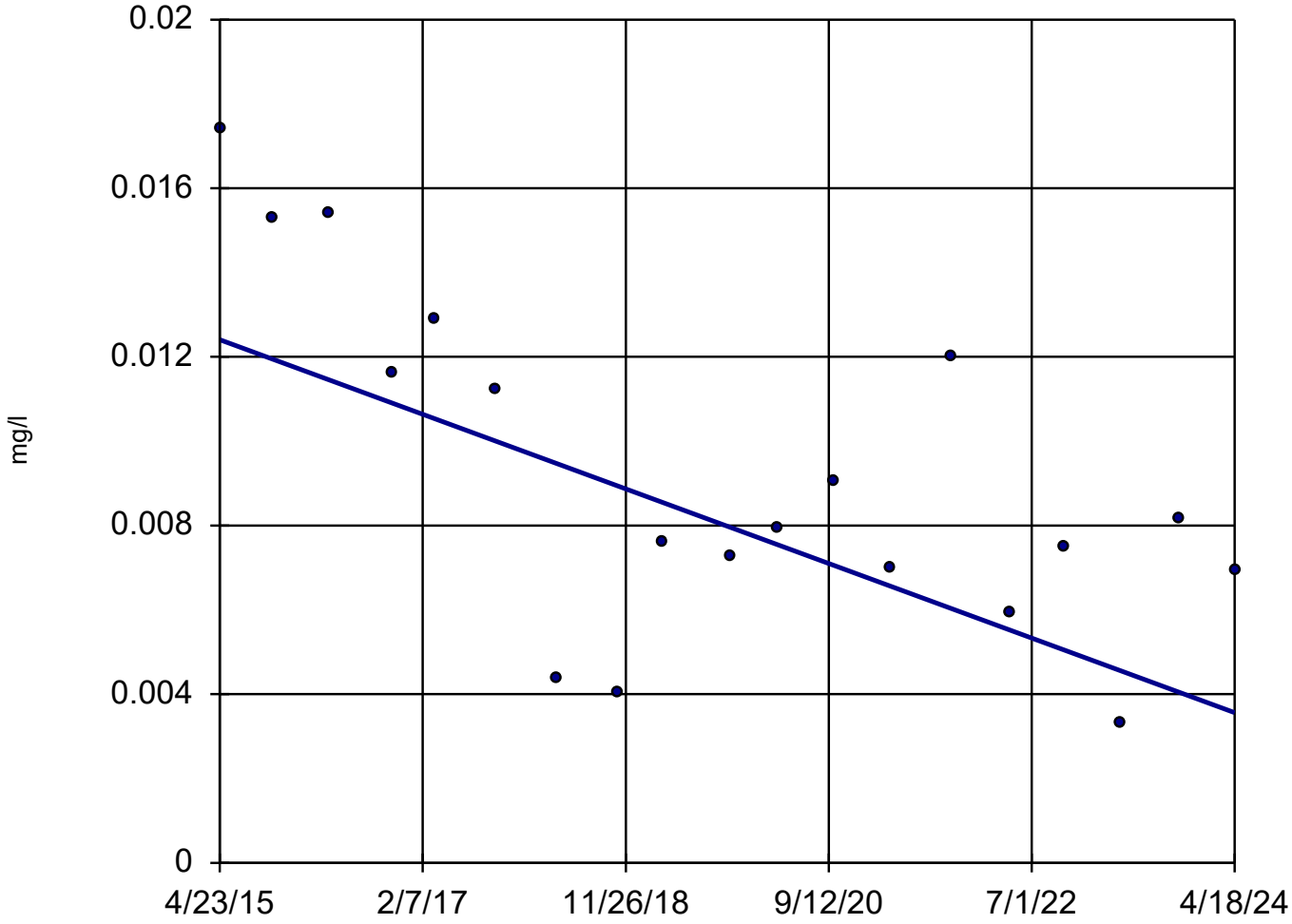
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Nickel Analysis Run 7/12/2024 2:07 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Sen's Slope Estimator

MW-301



n = 19

Slope = -0.0009835 units per year.

Mann-Kendall statistic = -79
critical = -68

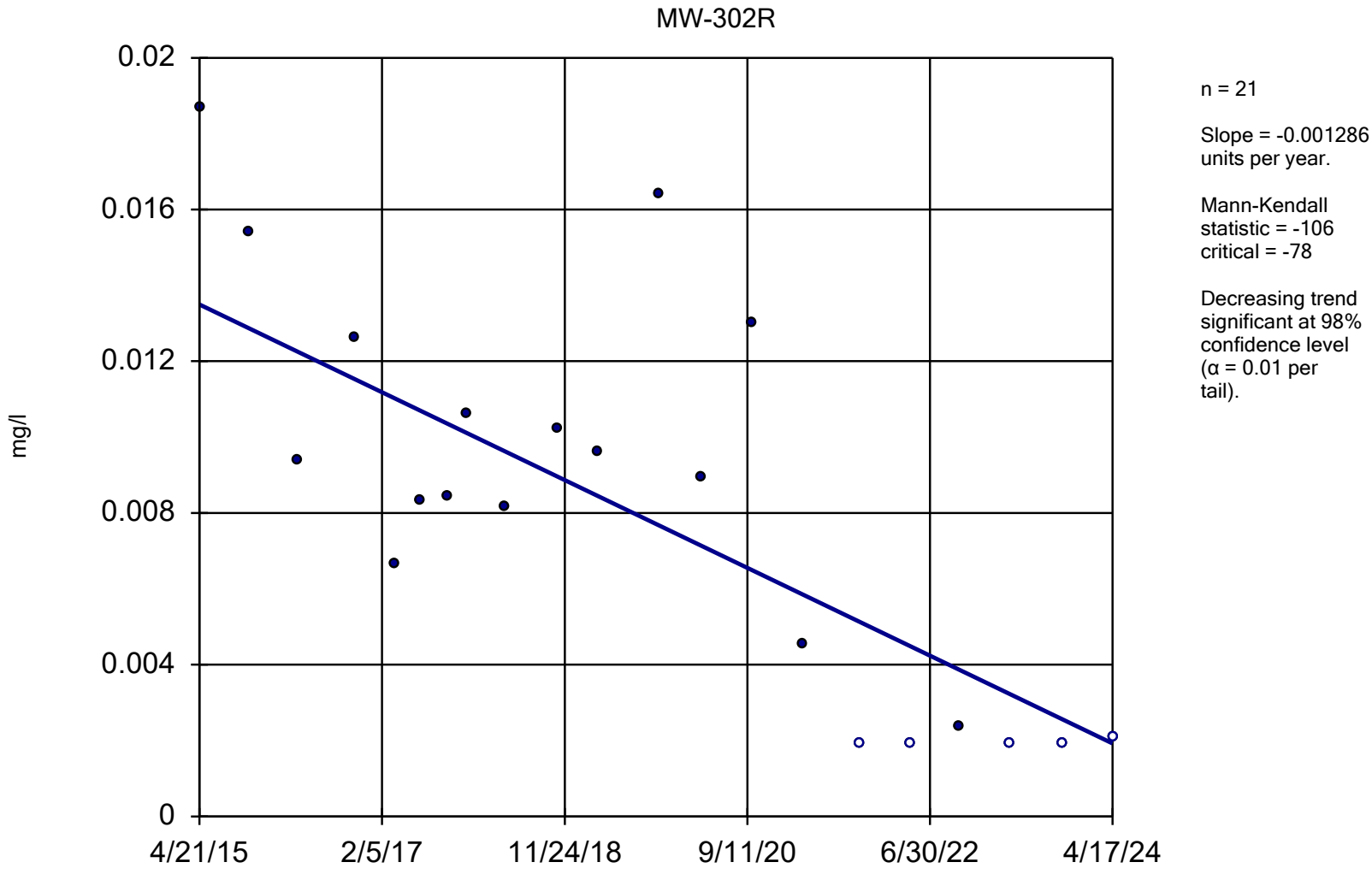
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Nickel Analysis Run 7/12/2024 2:07 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

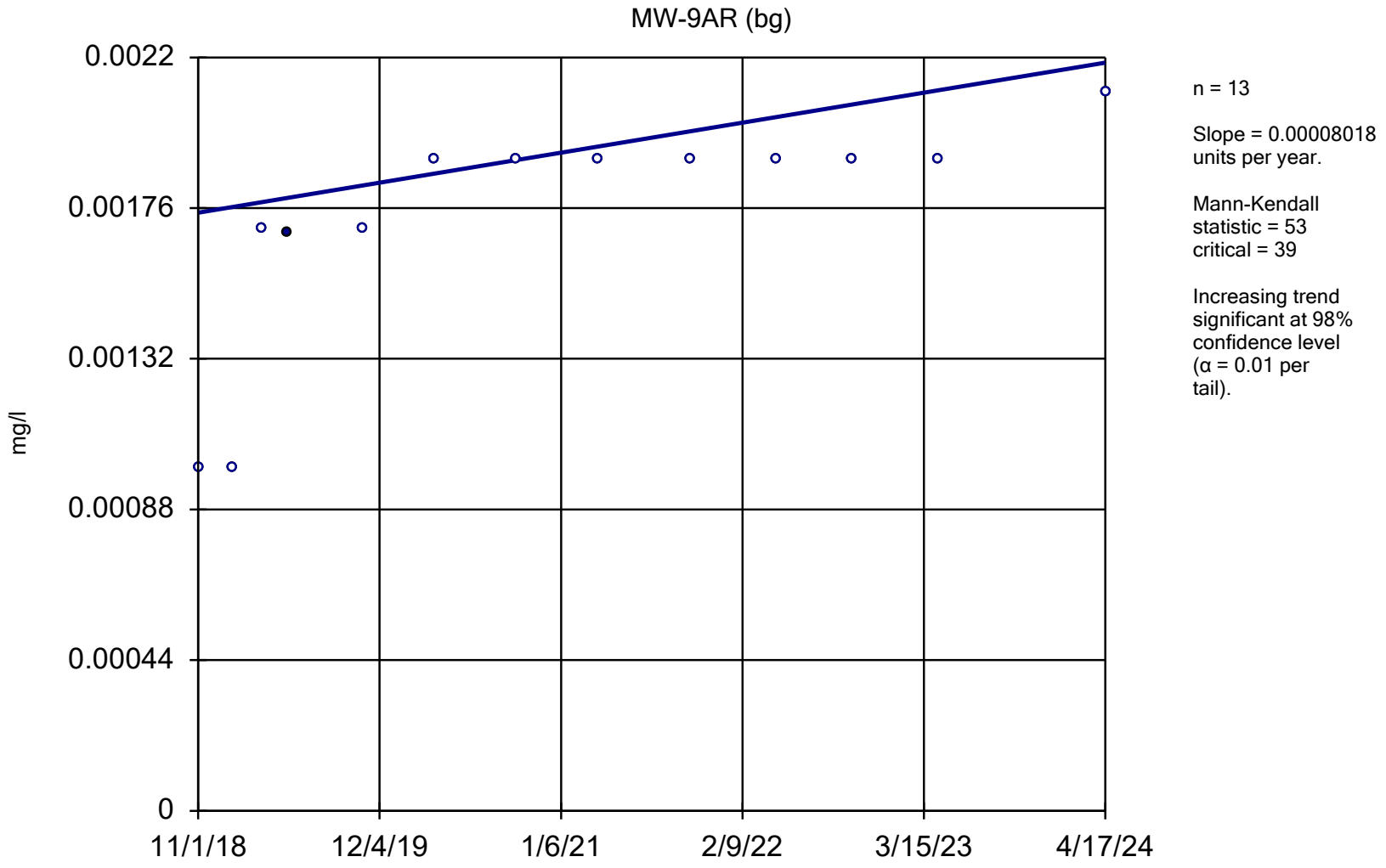


Constituent: Nickel Analysis Run 7/12/2024 2:07 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



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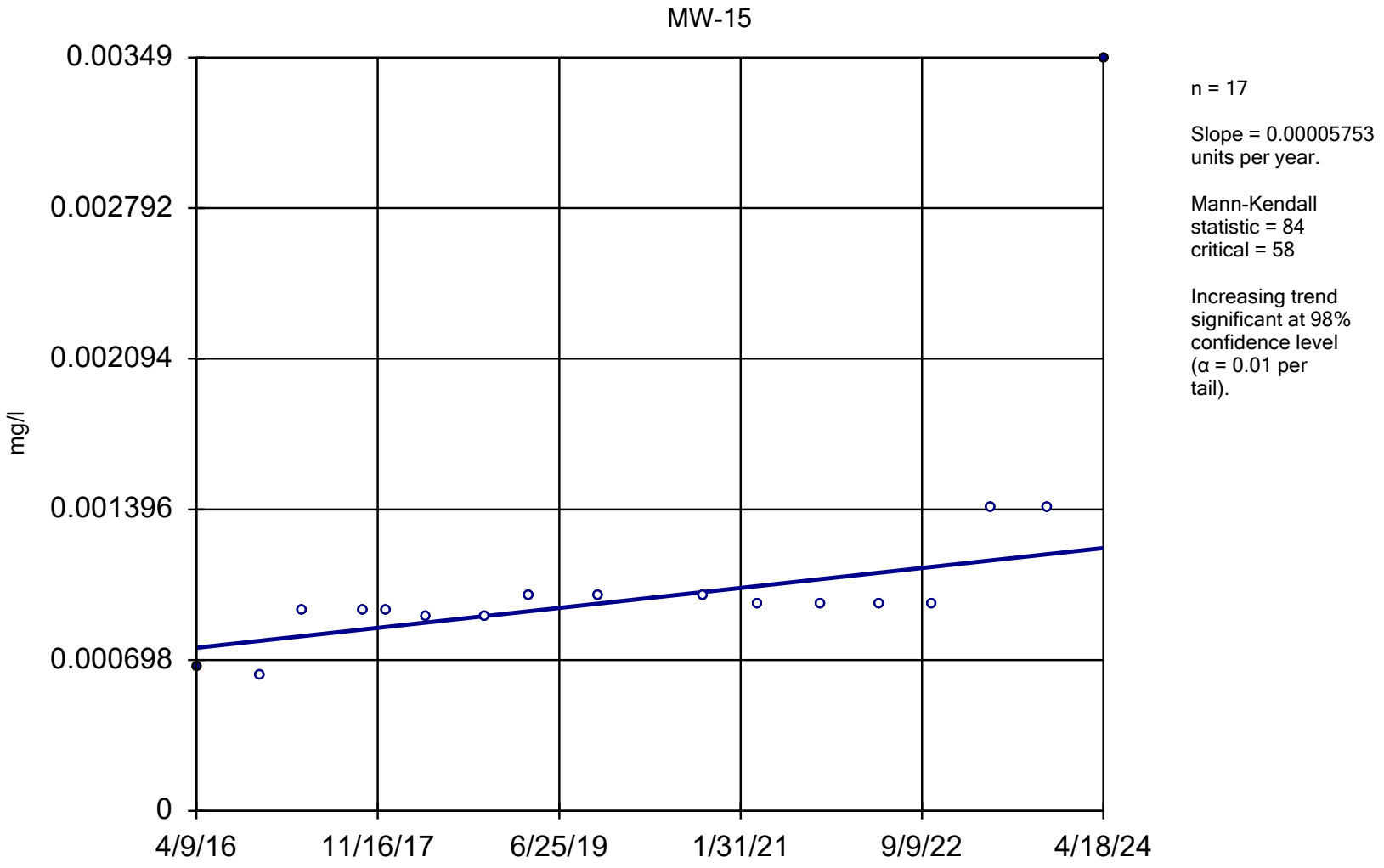
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

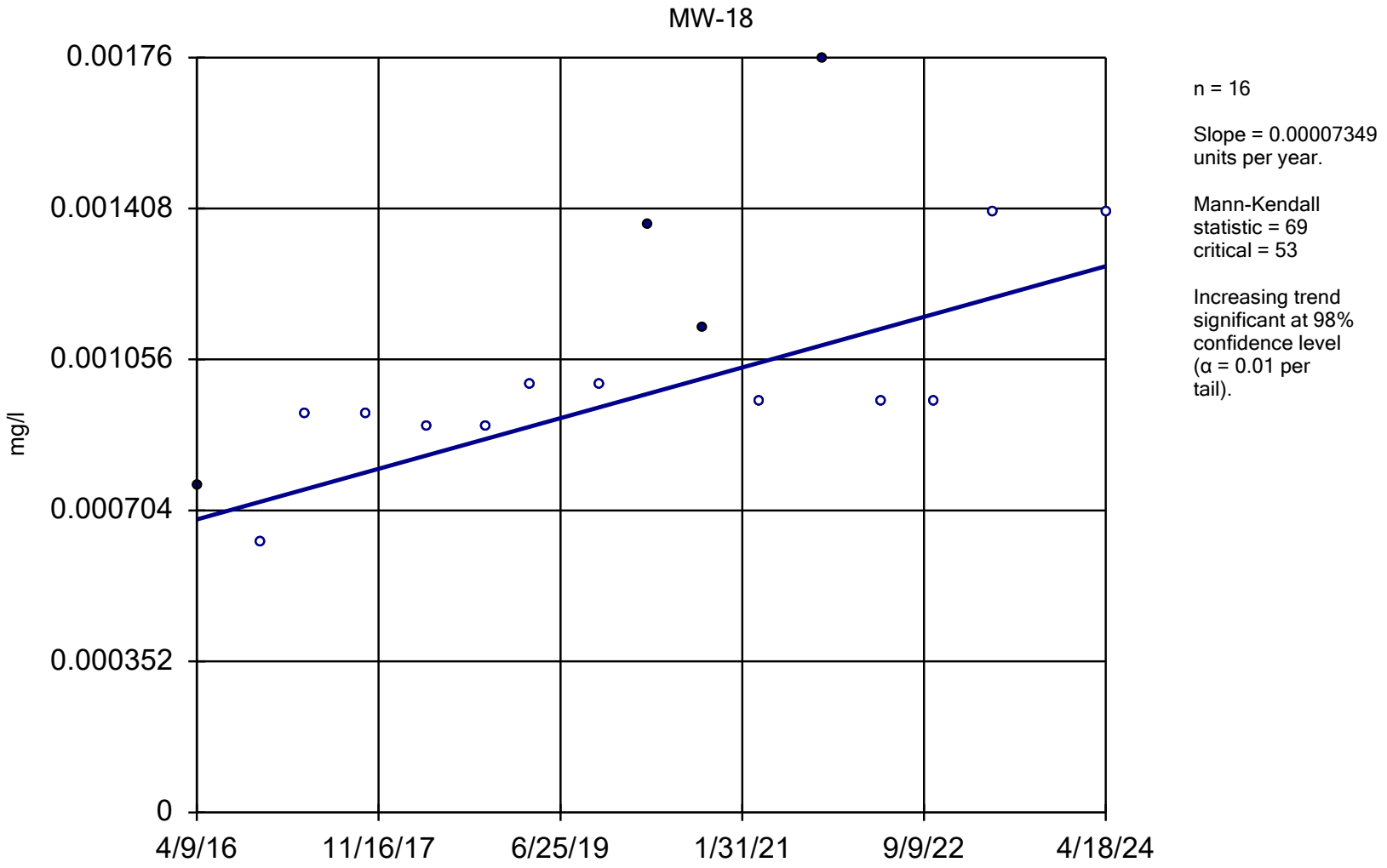


Constituent: Selenium Analysis Run 7/12/2024 2:07 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

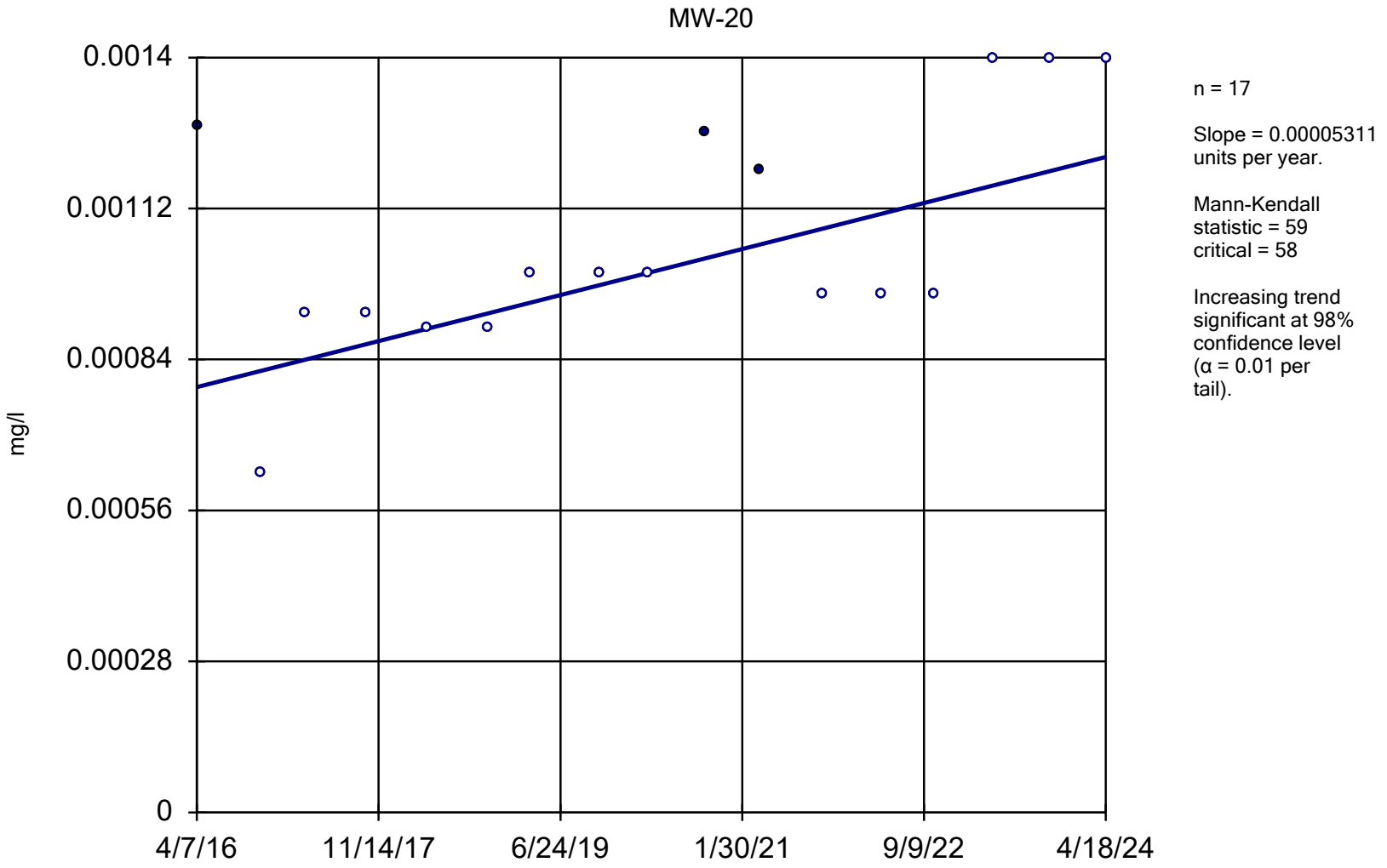


Constituent: Selenium Analysis Run 7/12/2024 2:07 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



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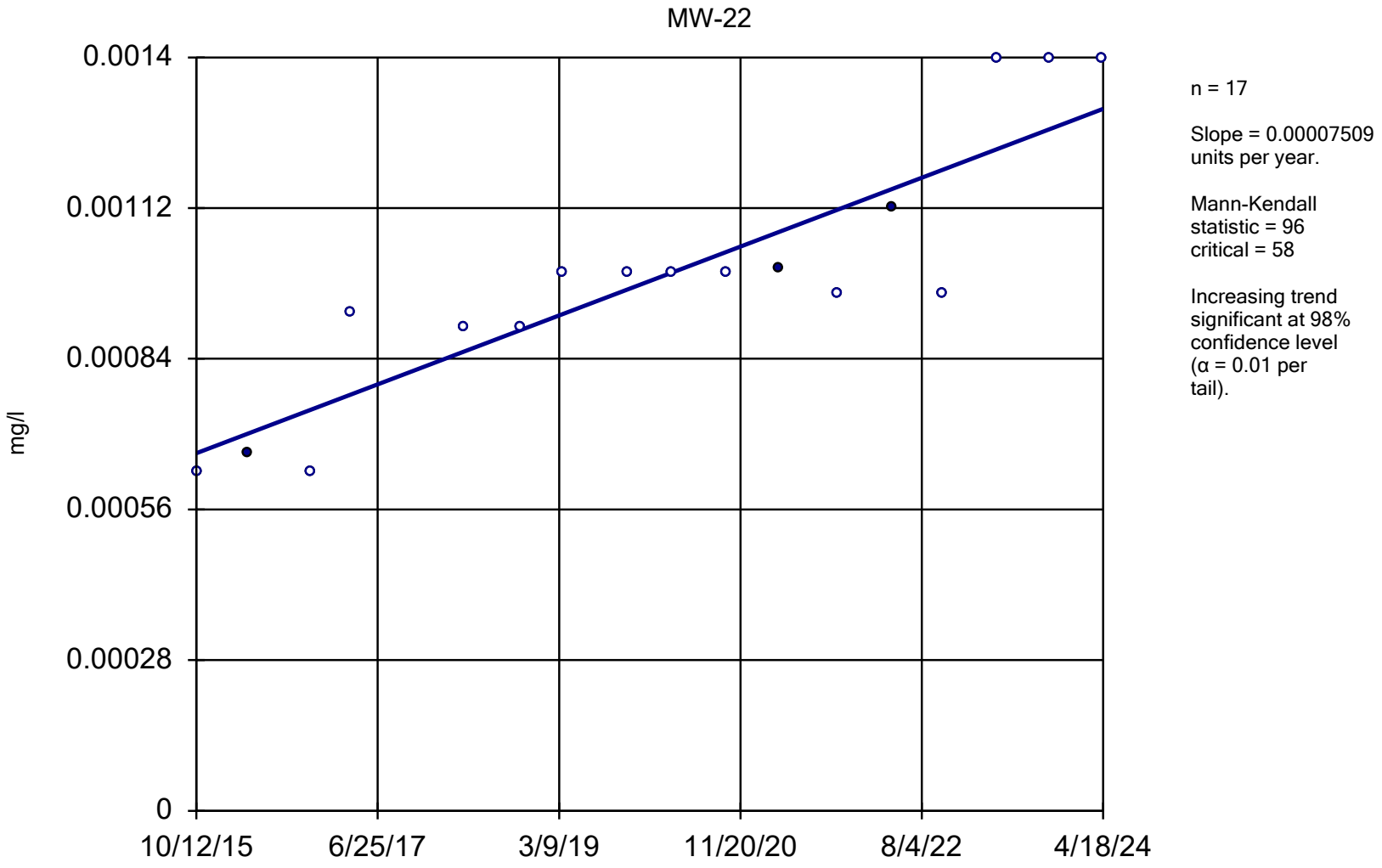
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



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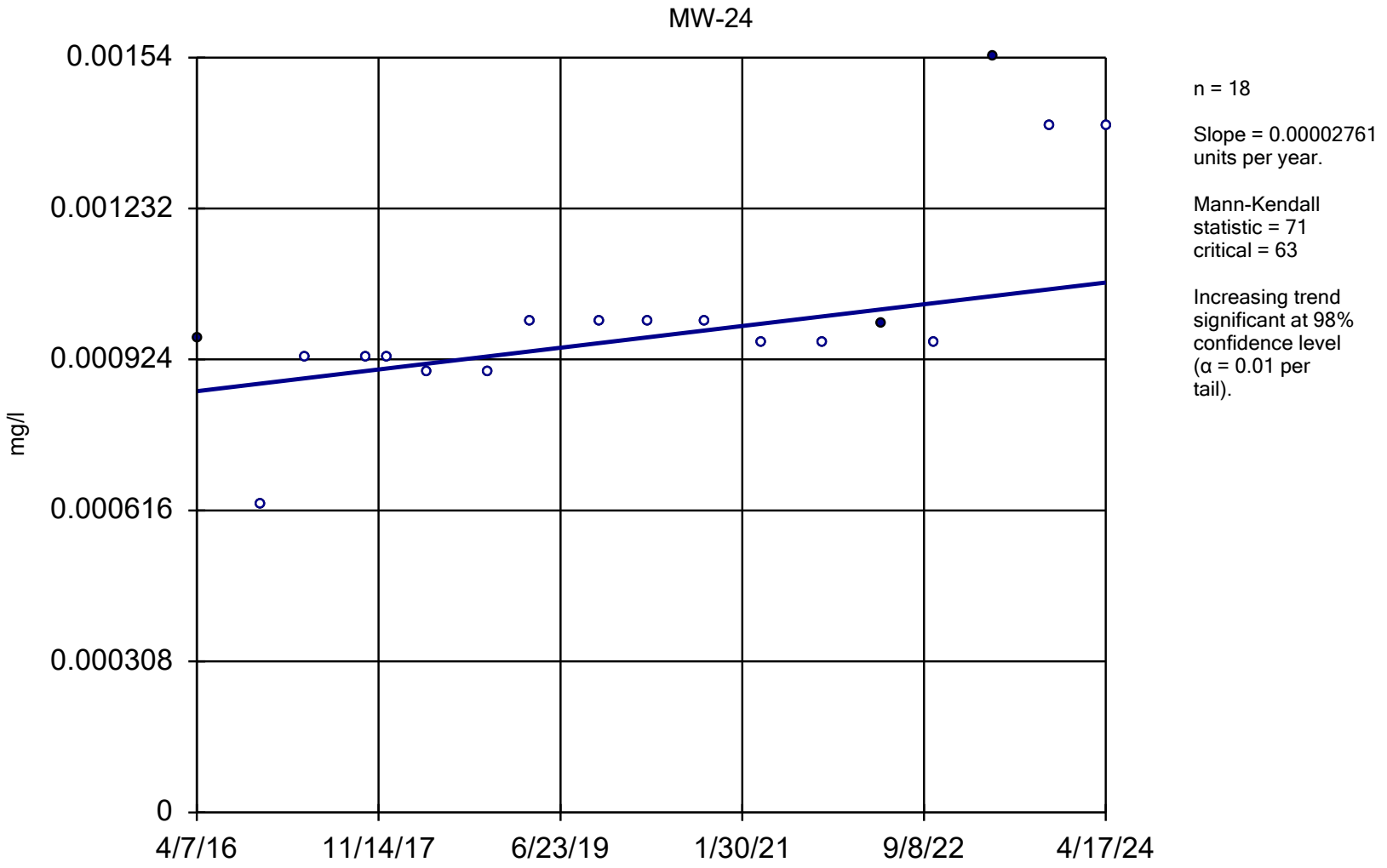
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



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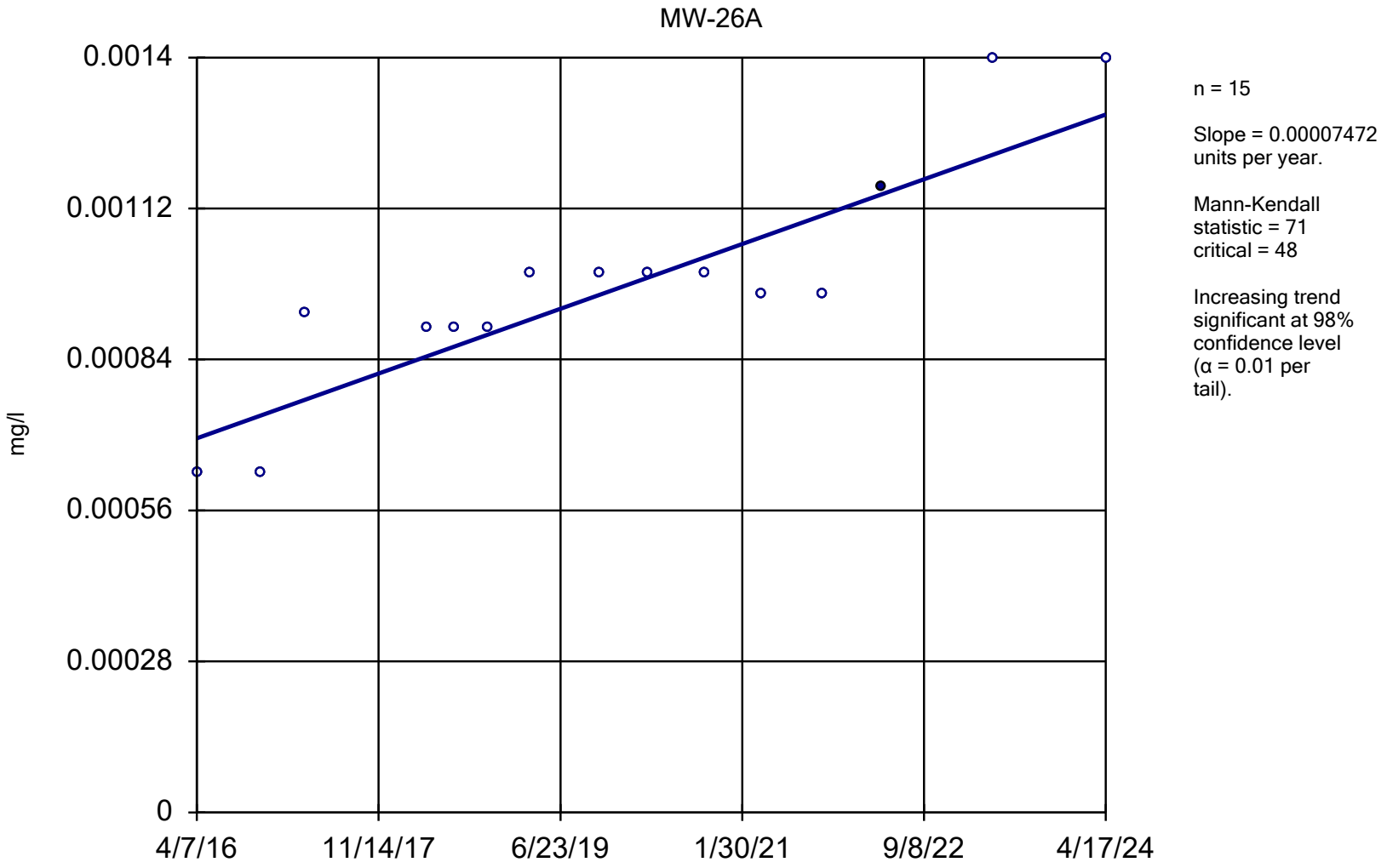
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

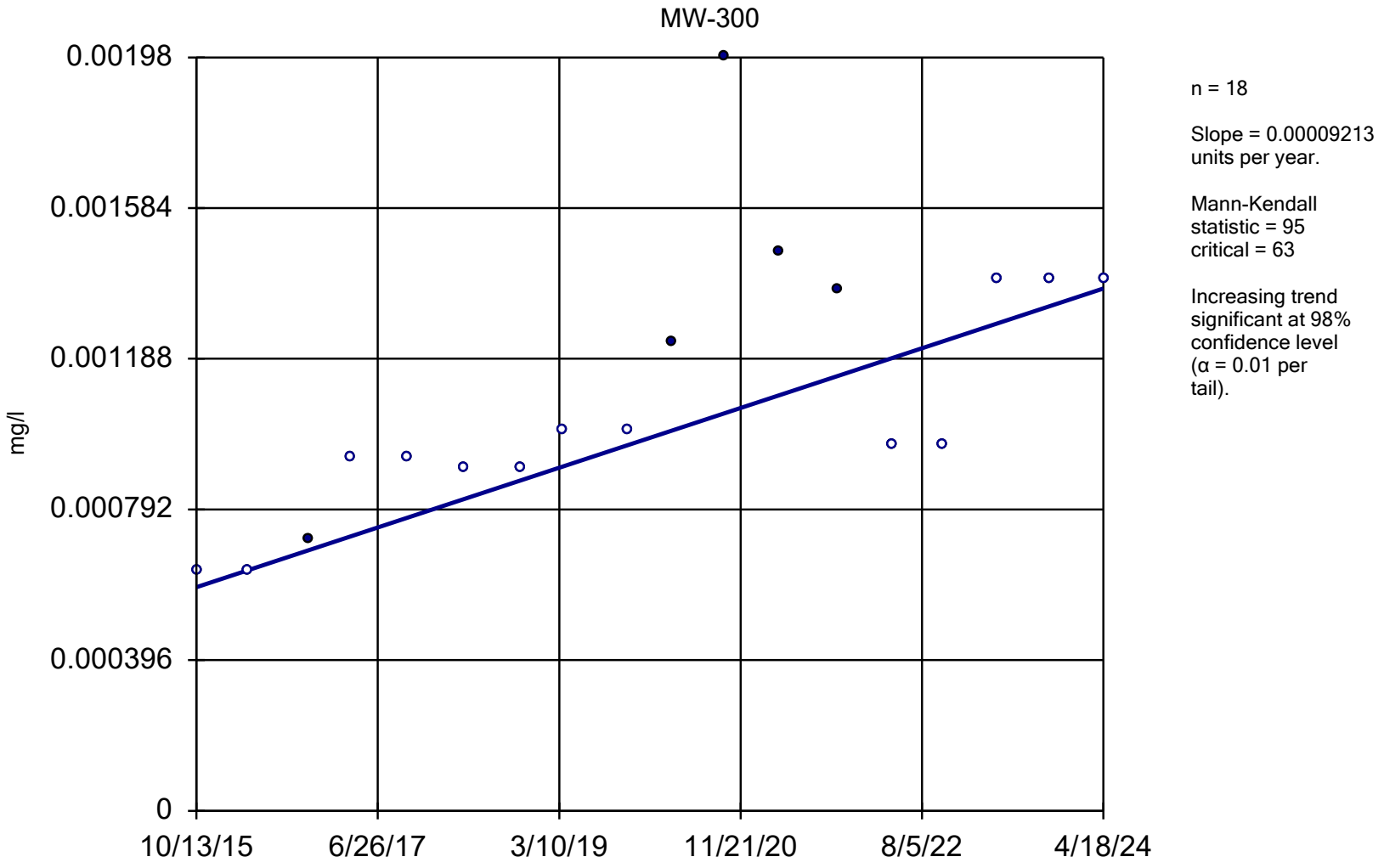


Constituent: Selenium Analysis Run 7/12/2024 2:07 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



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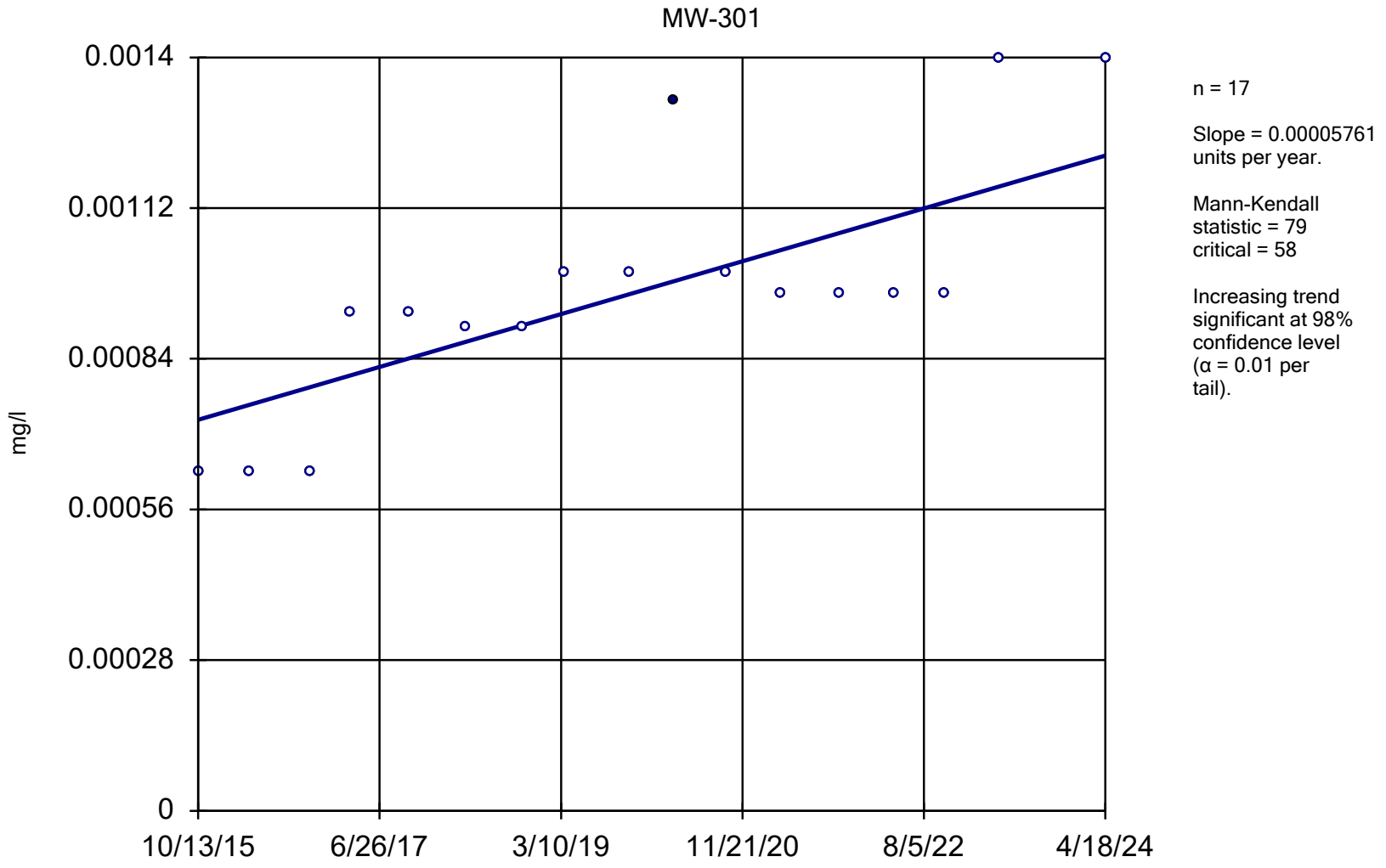
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



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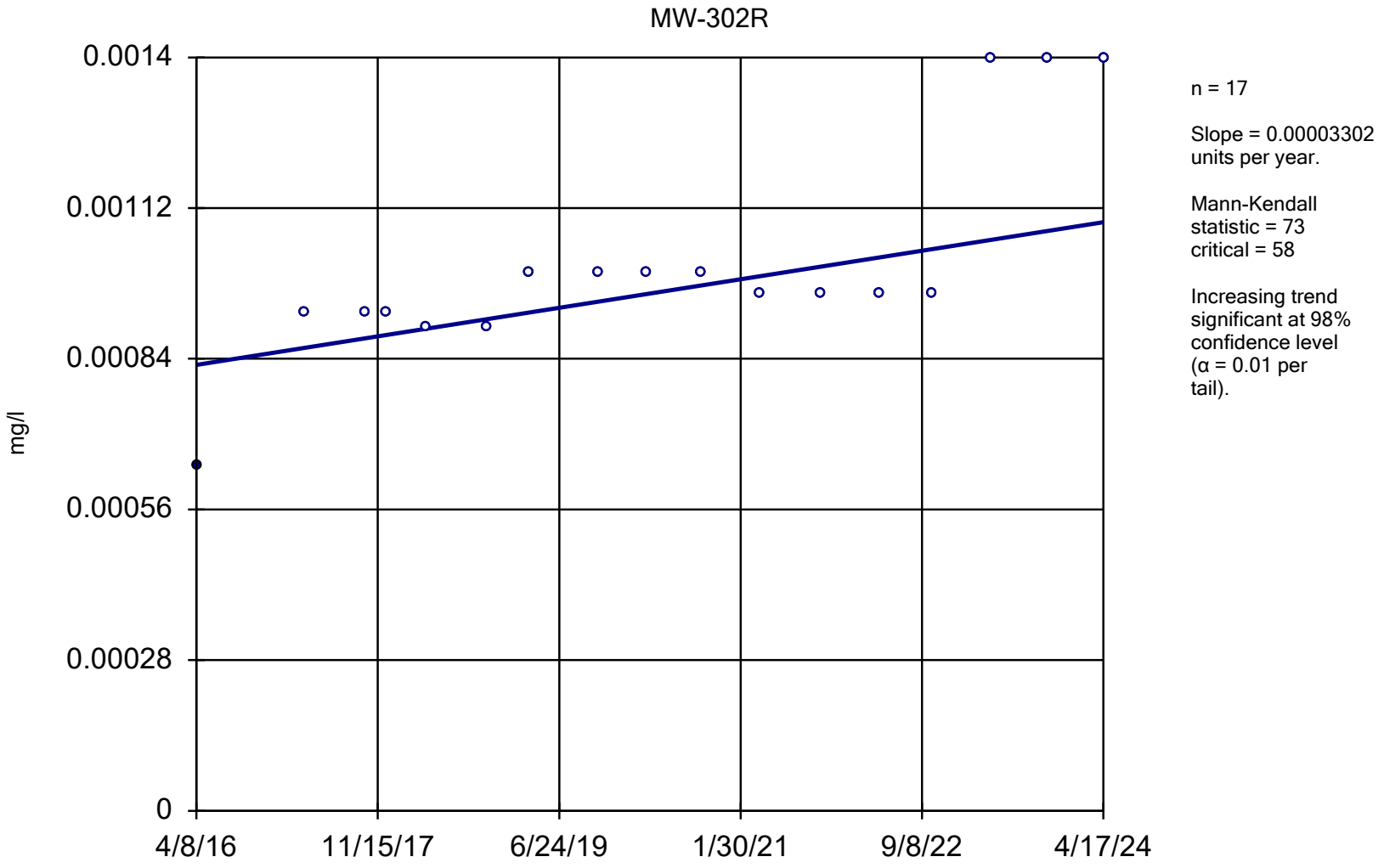
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



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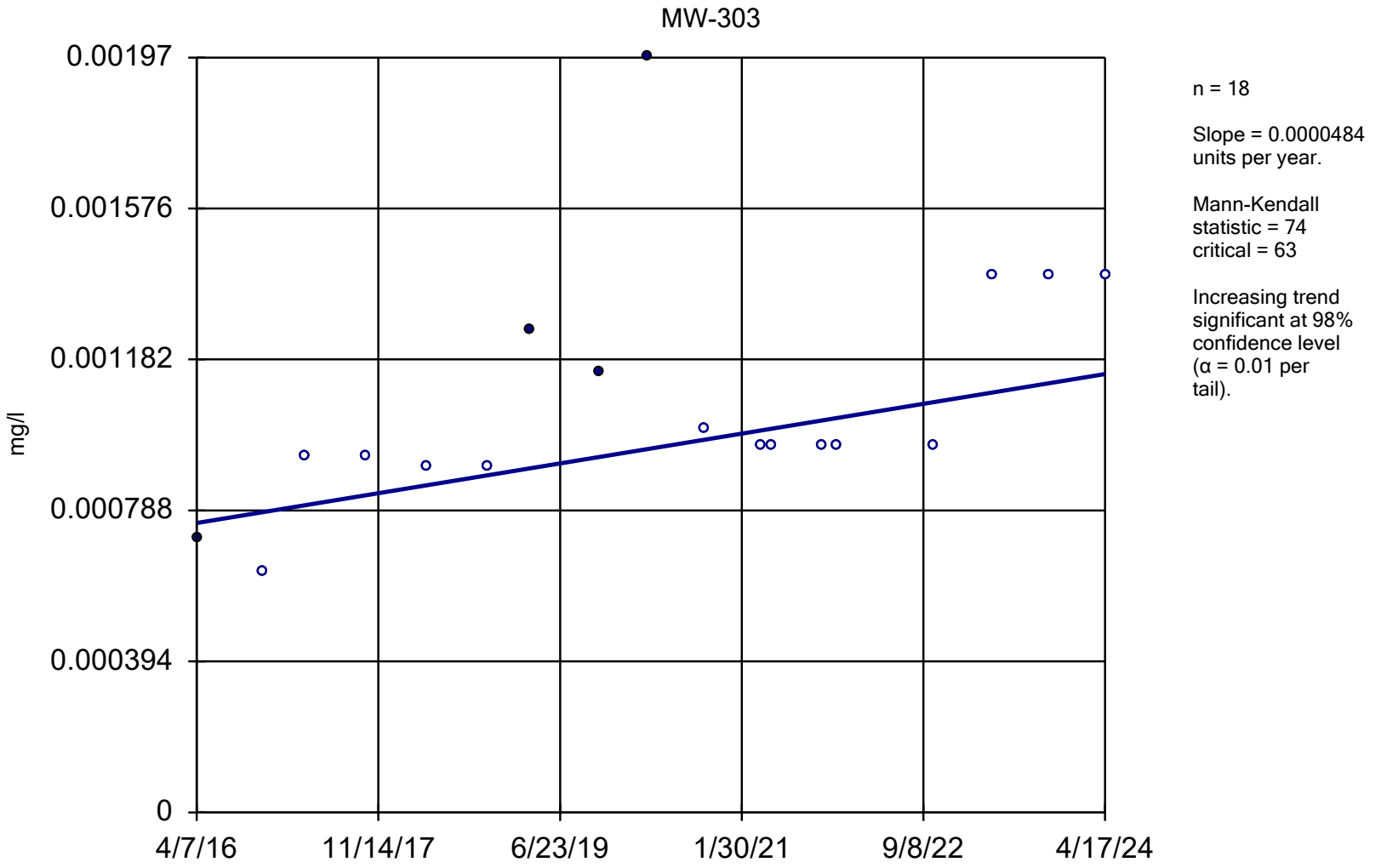
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

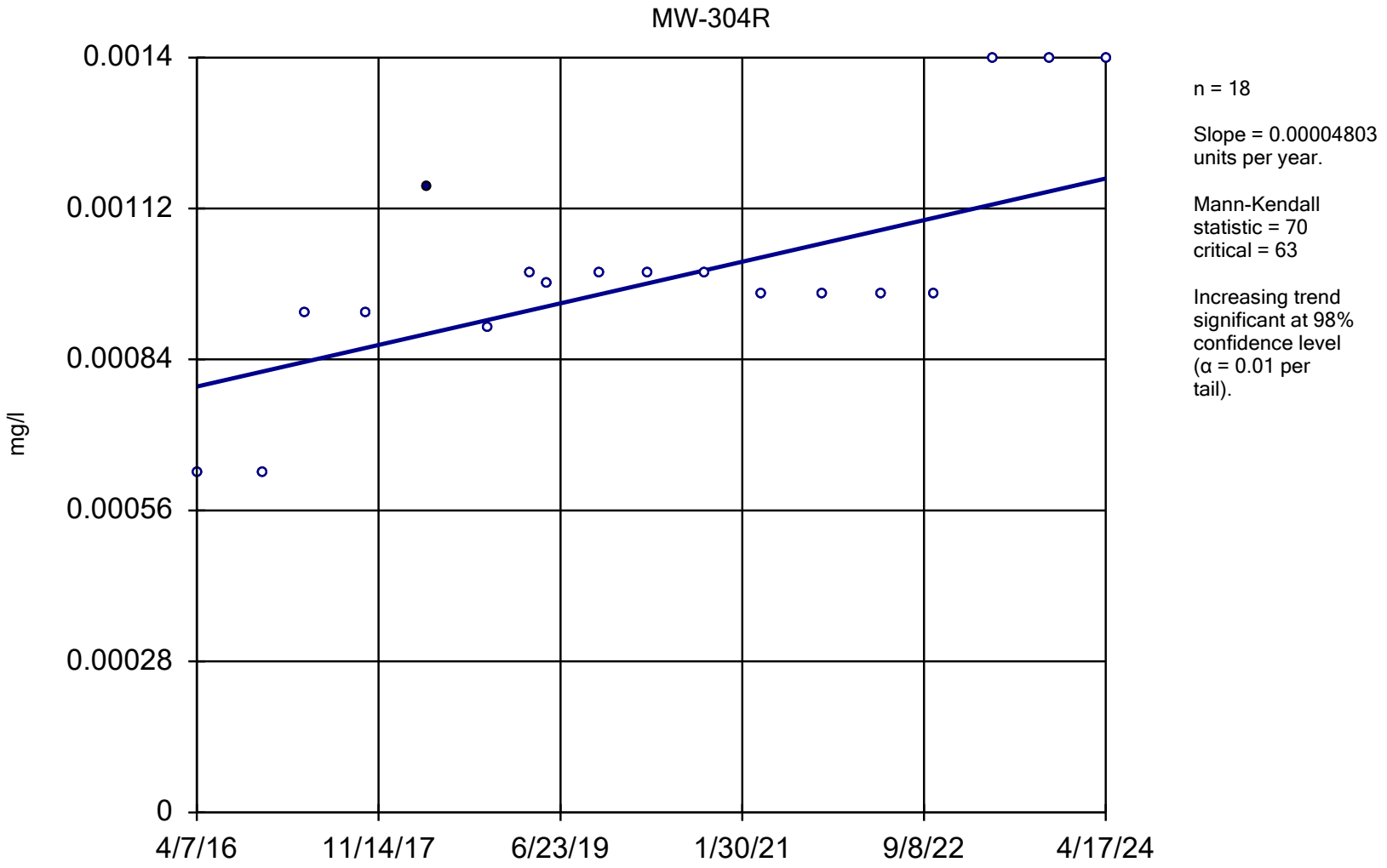


Constituent: Selenium Analysis Run 7/12/2024 2:07 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

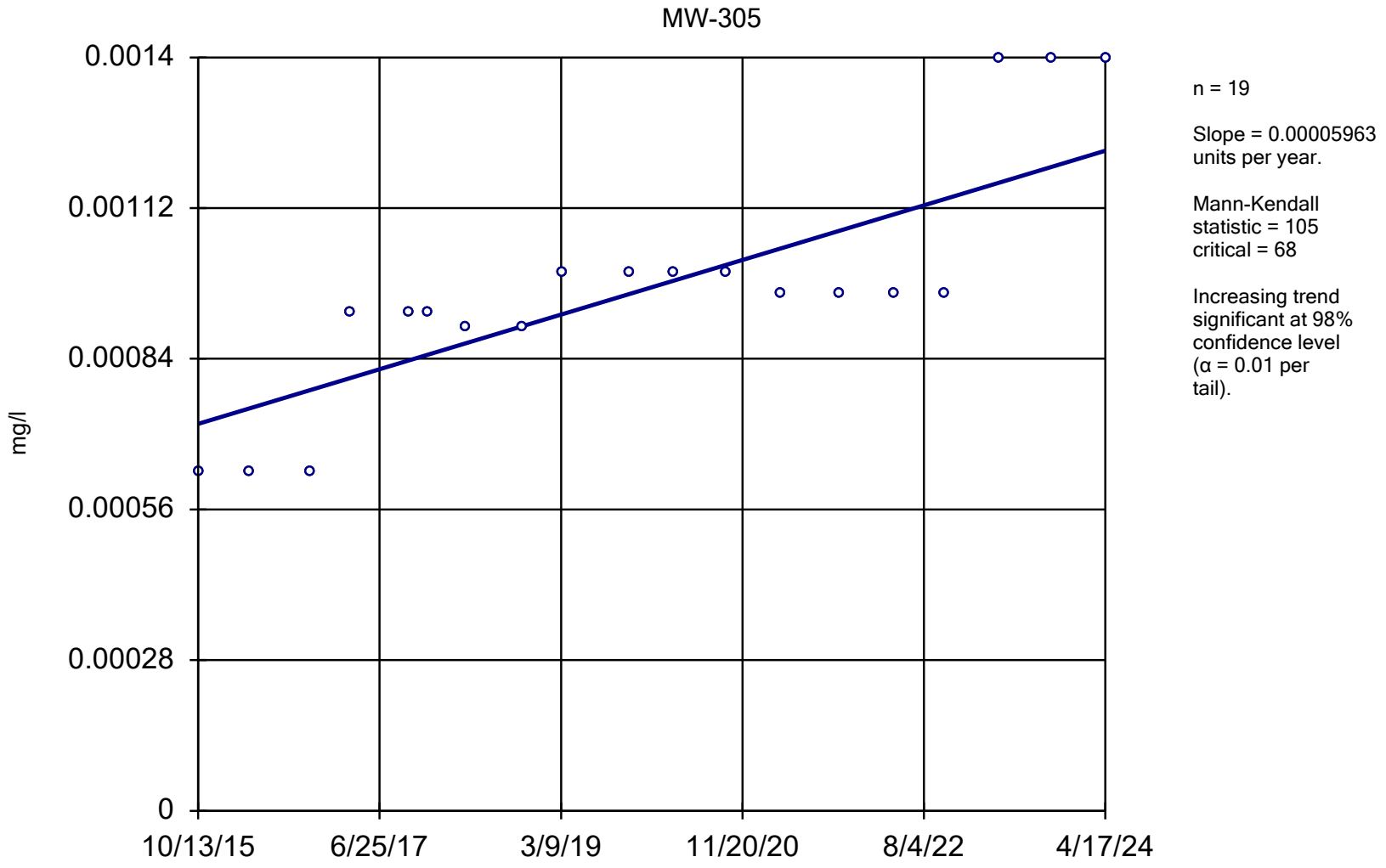


Constituent: Selenium Analysis Run 7/12/2024 2:07 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



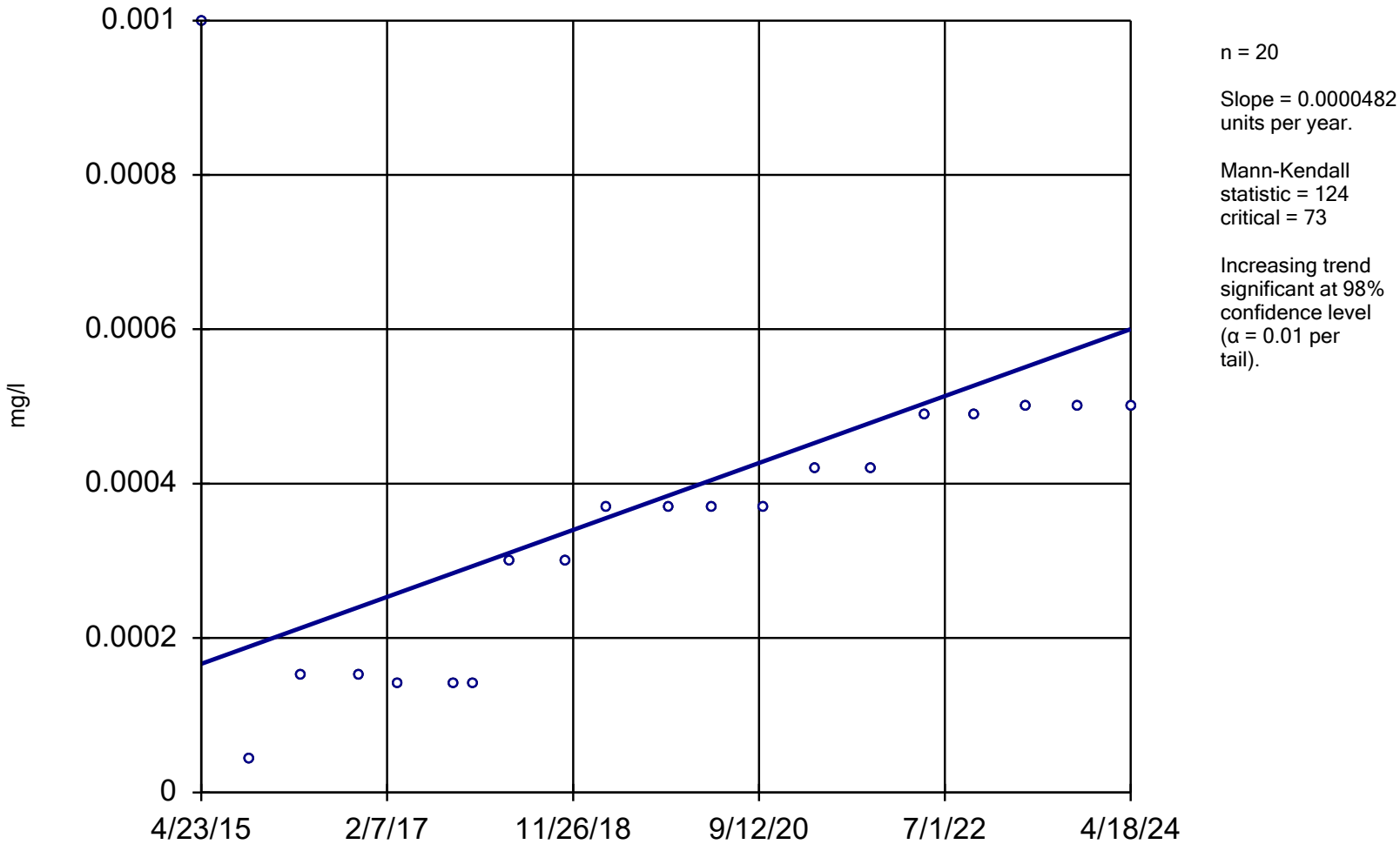
Constituent: Selenium Analysis Run 7/12/2024 2:07 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-15



n = 20

Slope = 0.0000482 units per year.

Mann-Kendall statistic = 124
critical = 73

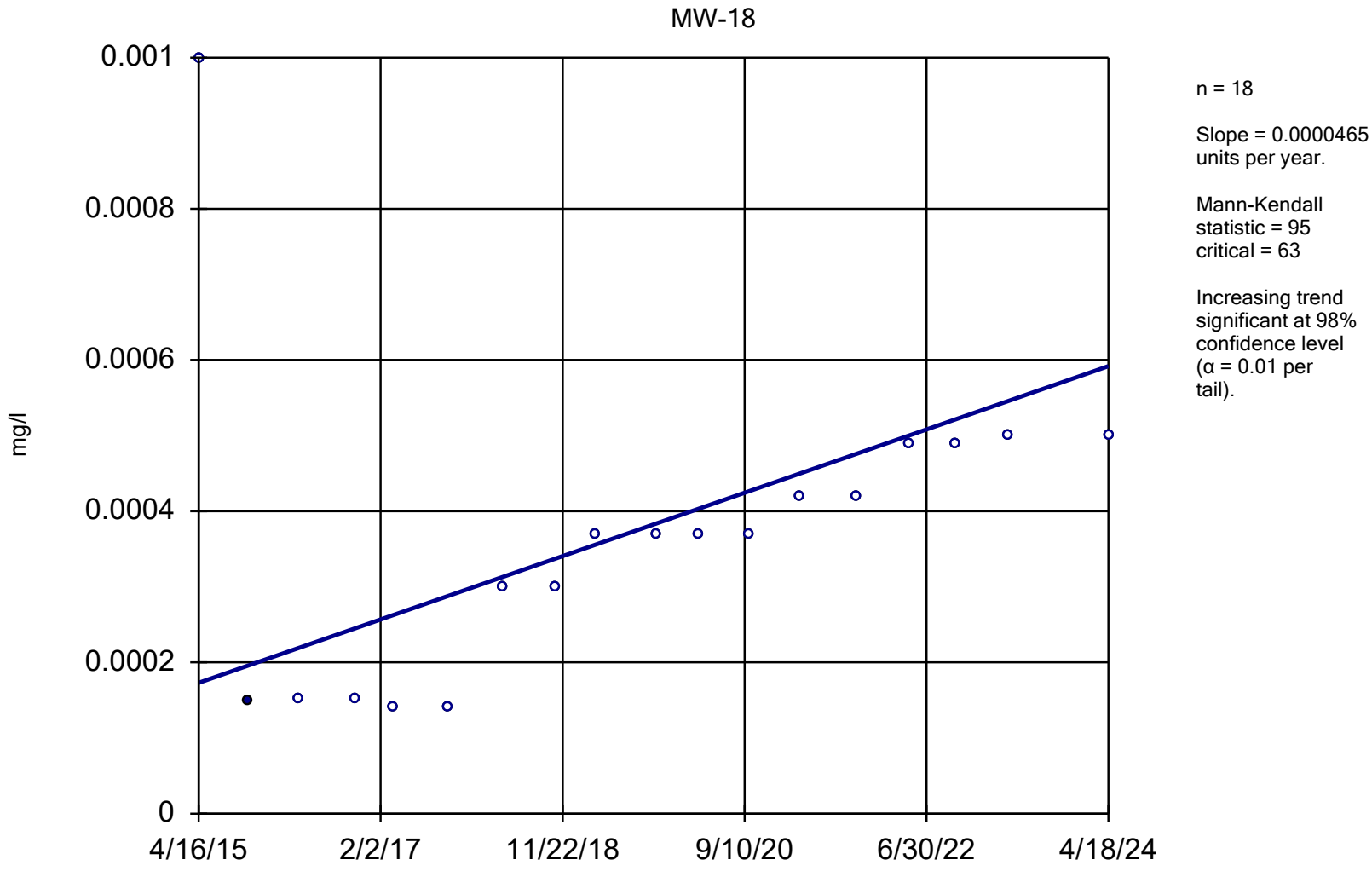
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Silver Analysis Run 7/12/2024 2:07 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



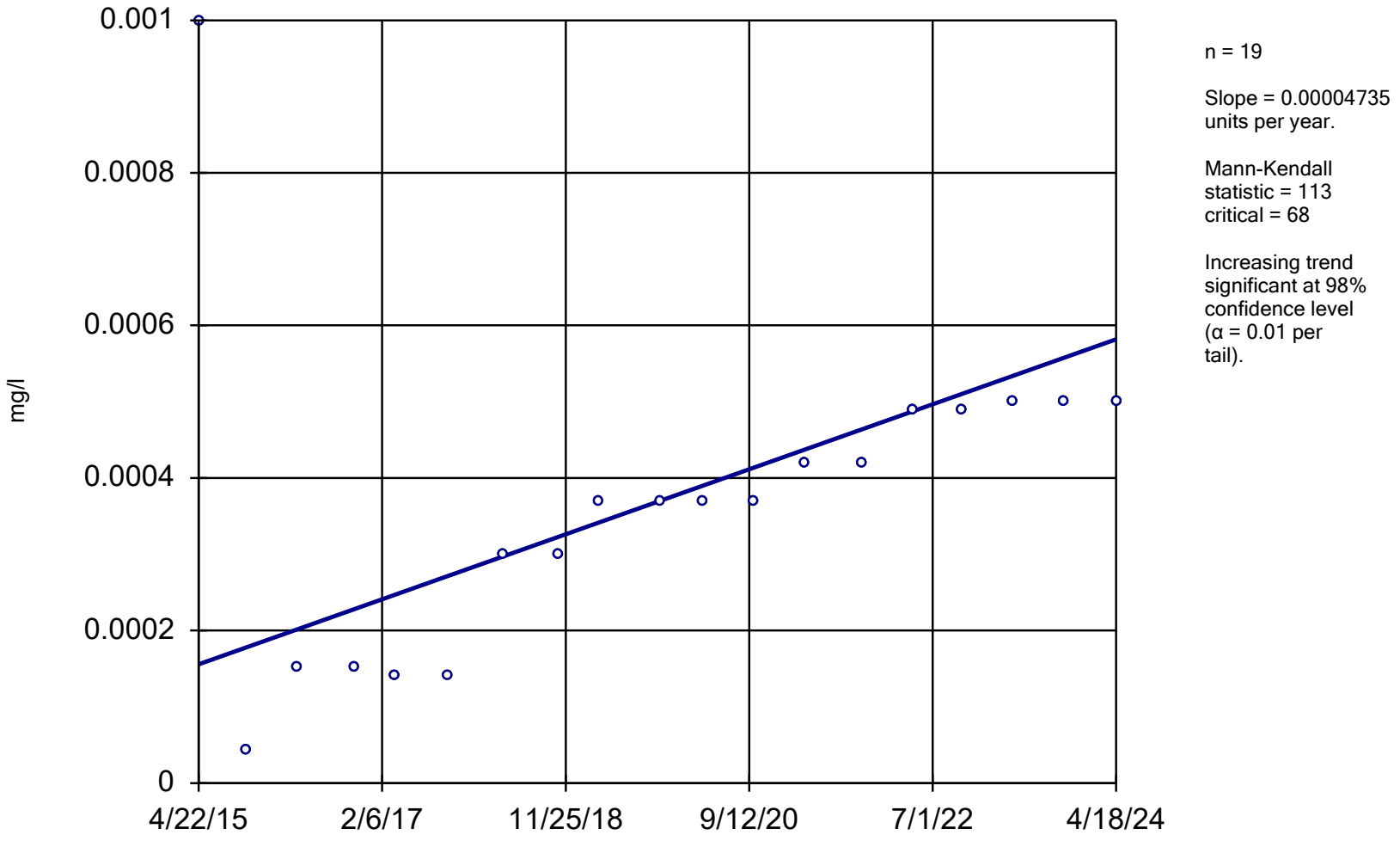
Constituent: Silver Analysis Run 7/12/2024 2:07 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-19



n = 19

Slope = 0.00004735 units per year.

Mann-Kendall statistic = 113
critical = 68

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

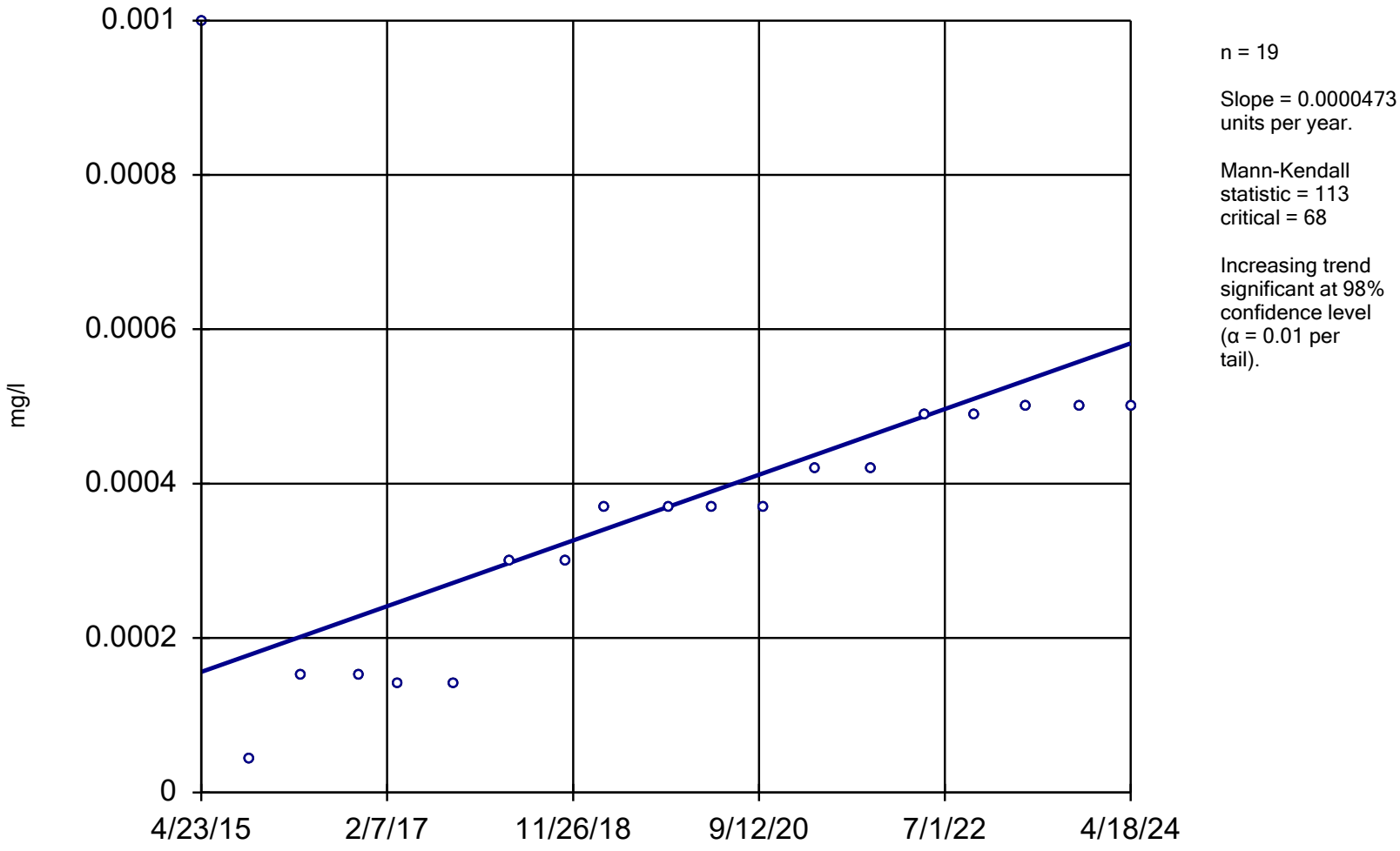
Constituent: Silver Analysis Run 7/12/2024 2:07 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-20



n = 19

Slope = 0.0000473 units per year.

Mann-Kendall statistic = 113
critical = 68

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

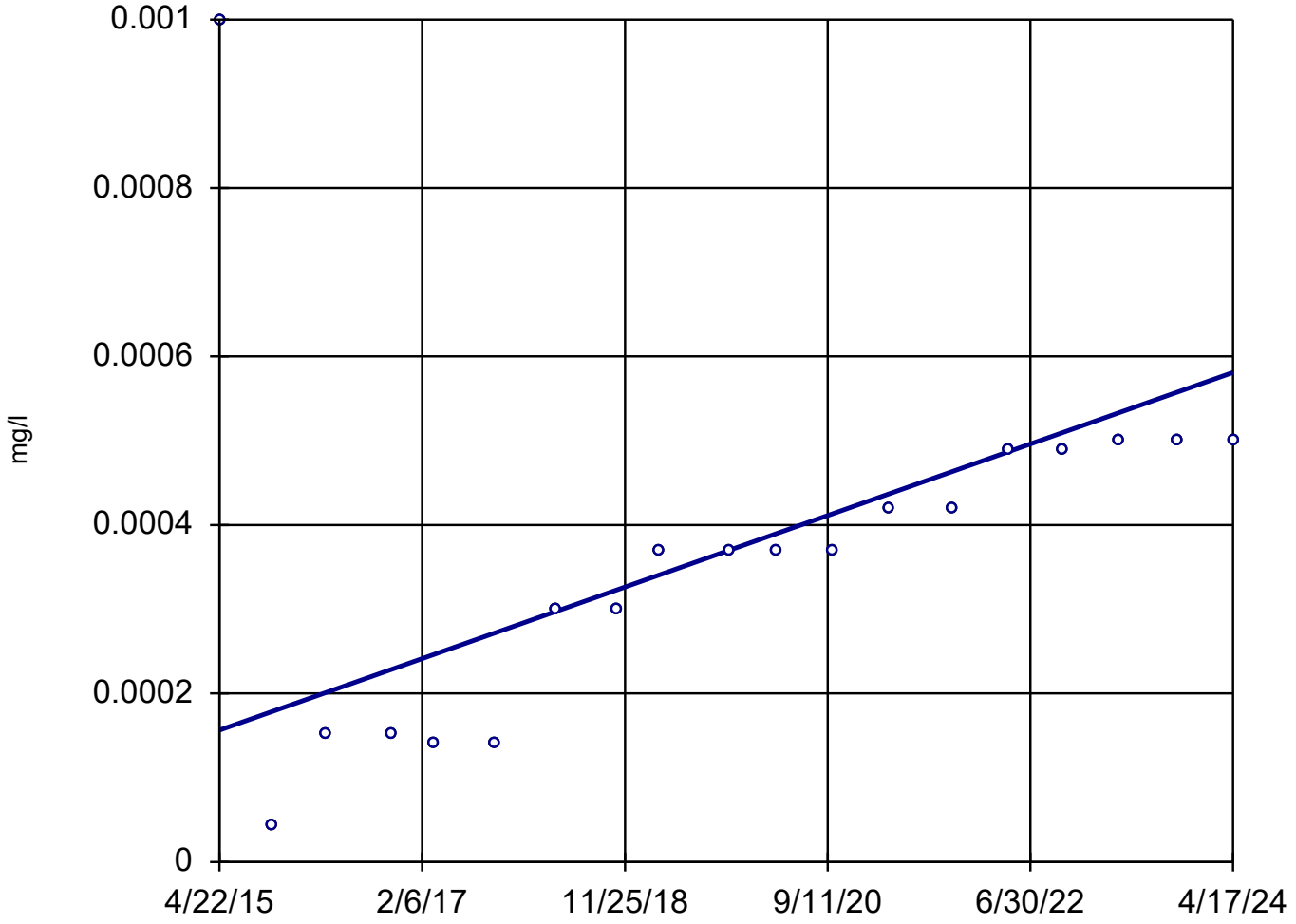
Constituent: Silver Analysis Run 7/12/2024 2:07 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-201B (bg)



n = 19

Slope = 0.00004721 units per year.

Mann-Kendall statistic = 113
critical = 68

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

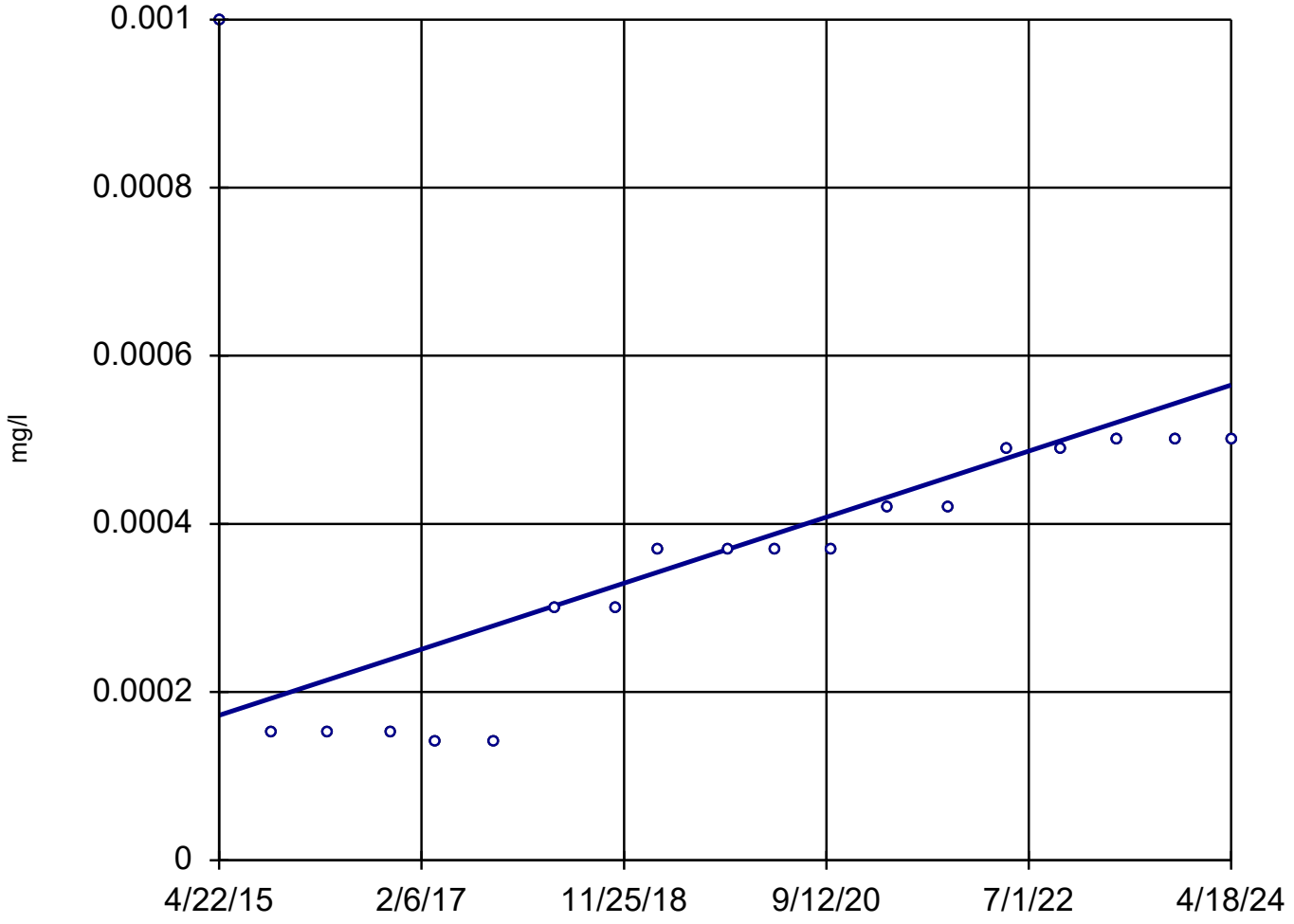
Constituent: Silver Analysis Run 7/12/2024 2:07 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-22



n = 19

Slope = 0.00004364 units per year.

Mann-Kendall statistic = 107
critical = 68

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

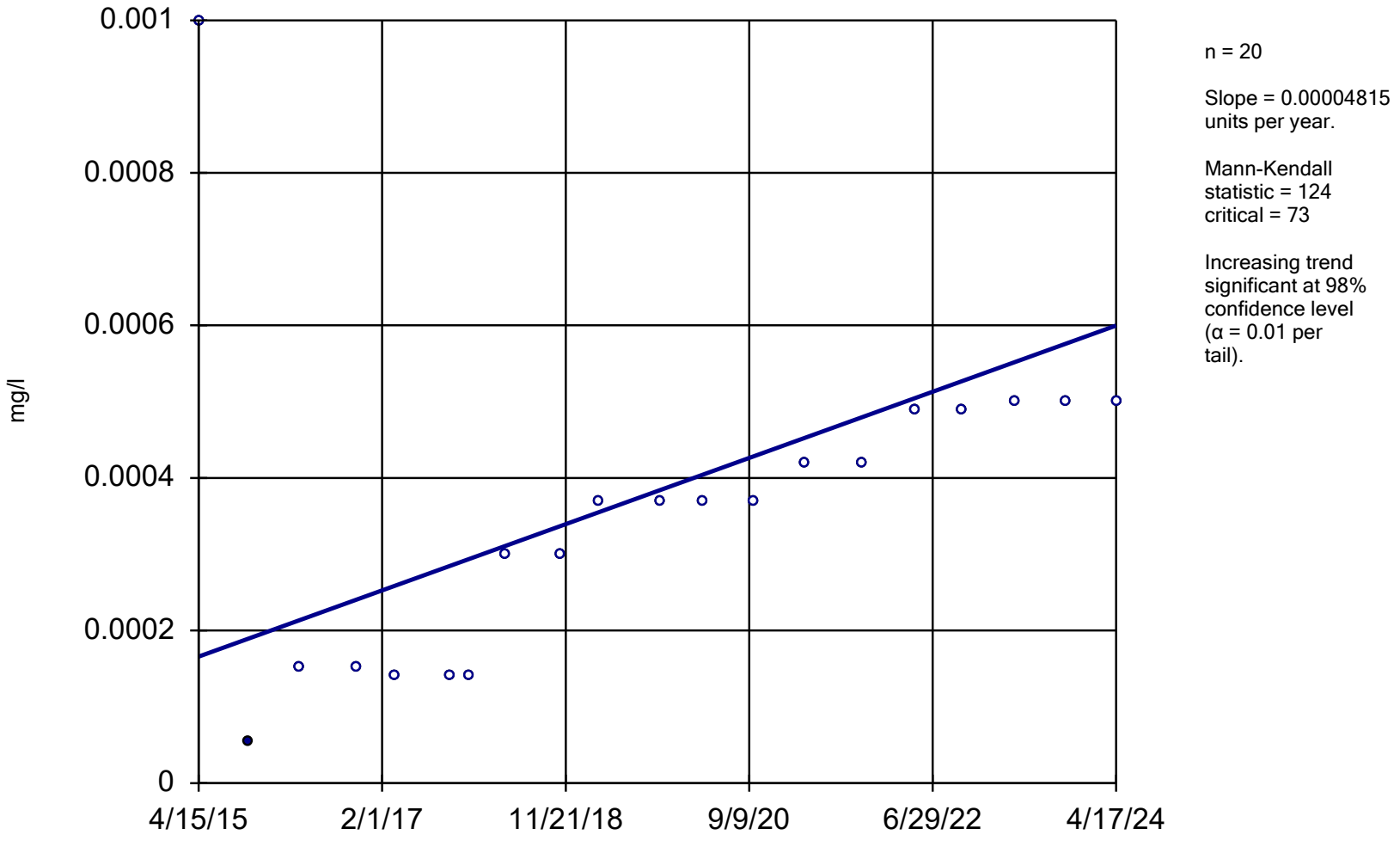
Constituent: Silver Analysis Run 7/12/2024 2:07 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-24



n = 20

Slope = 0.00004815 units per year.

Mann-Kendall statistic = 124
critical = 73

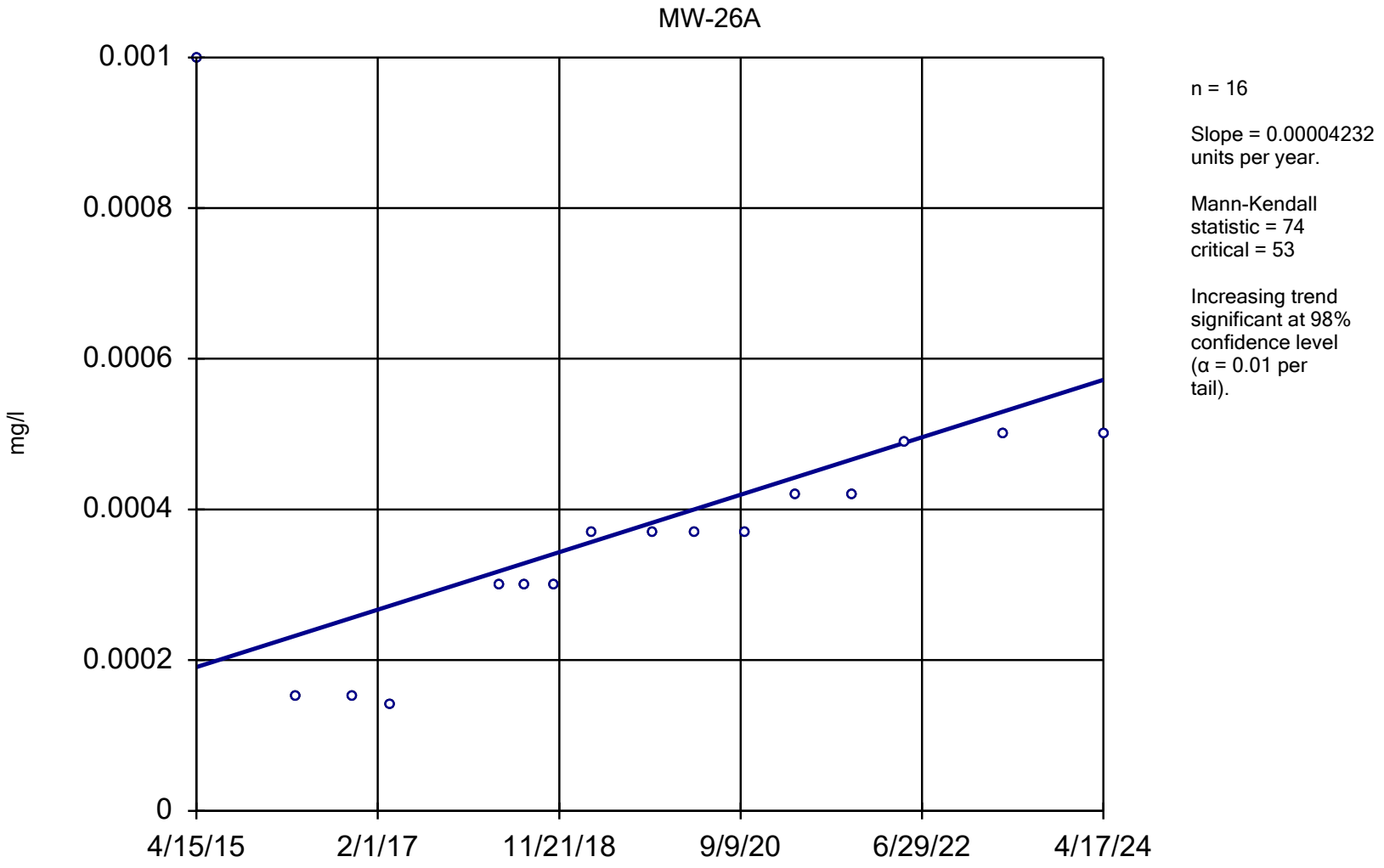
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Silver Analysis Run 7/12/2024 2:07 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



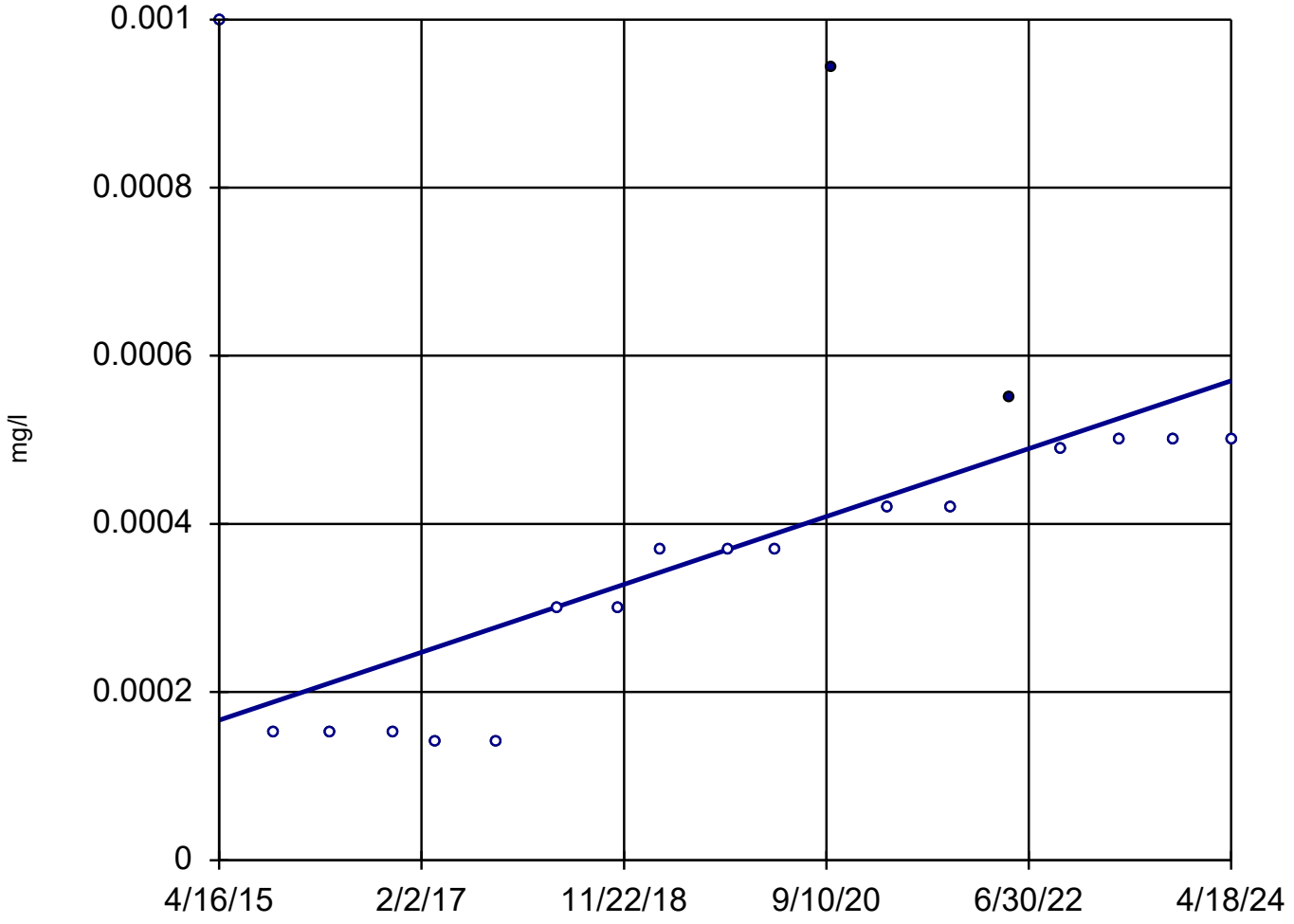
Constituent: Silver Analysis Run 7/12/2024 2:07 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-300



n = 19

Slope = 0.00004479 units per year.

Mann-Kendall statistic = 89
critical = 68

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

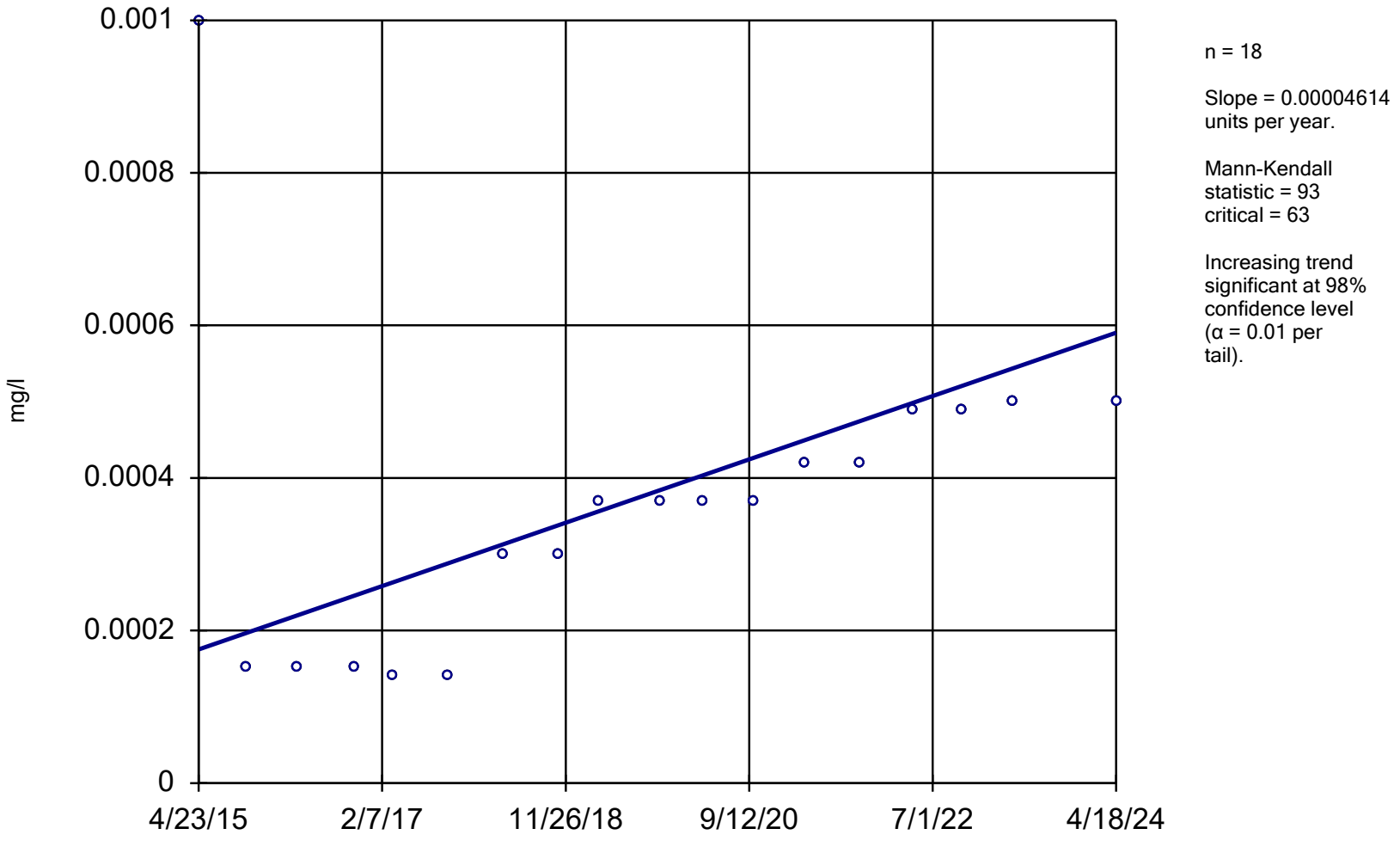
Constituent: Silver Analysis Run 7/12/2024 2:07 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-301



n = 18

Slope = 0.00004614 units per year.

Mann-Kendall statistic = 93
critical = 63

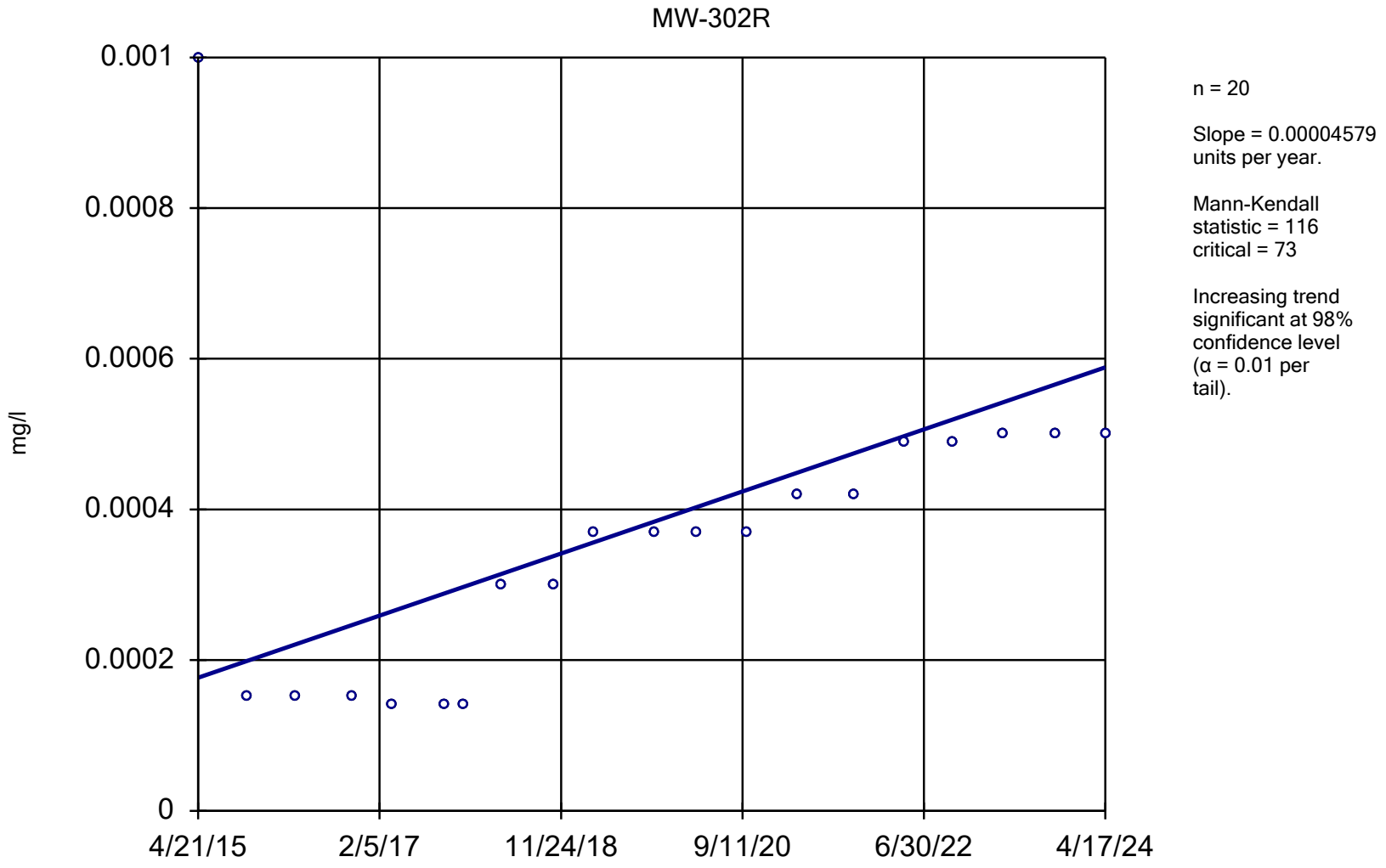
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Silver Analysis Run 7/12/2024 2:07 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



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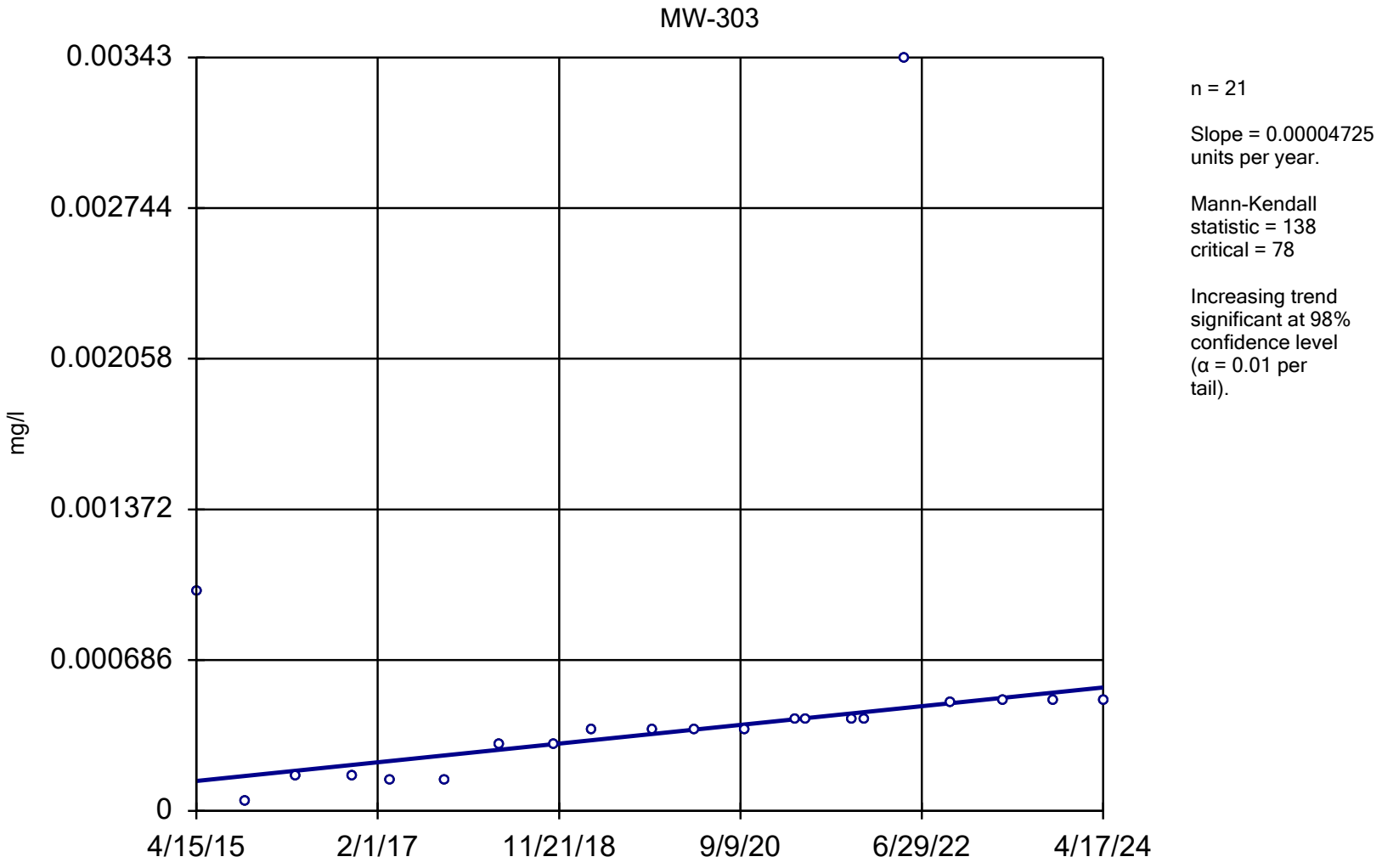
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

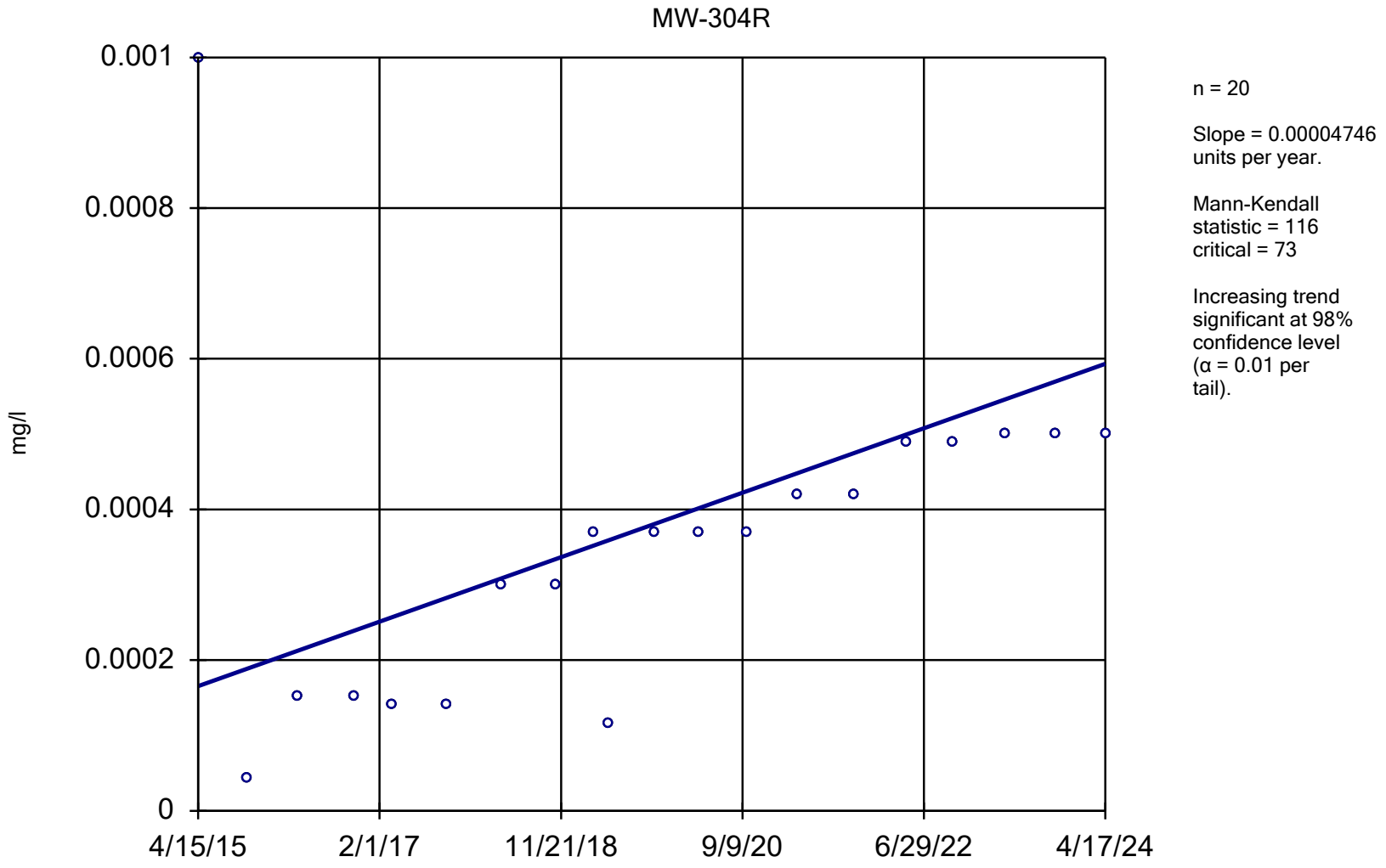


Constituent: Silver Analysis Run 7/12/2024 2:07 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



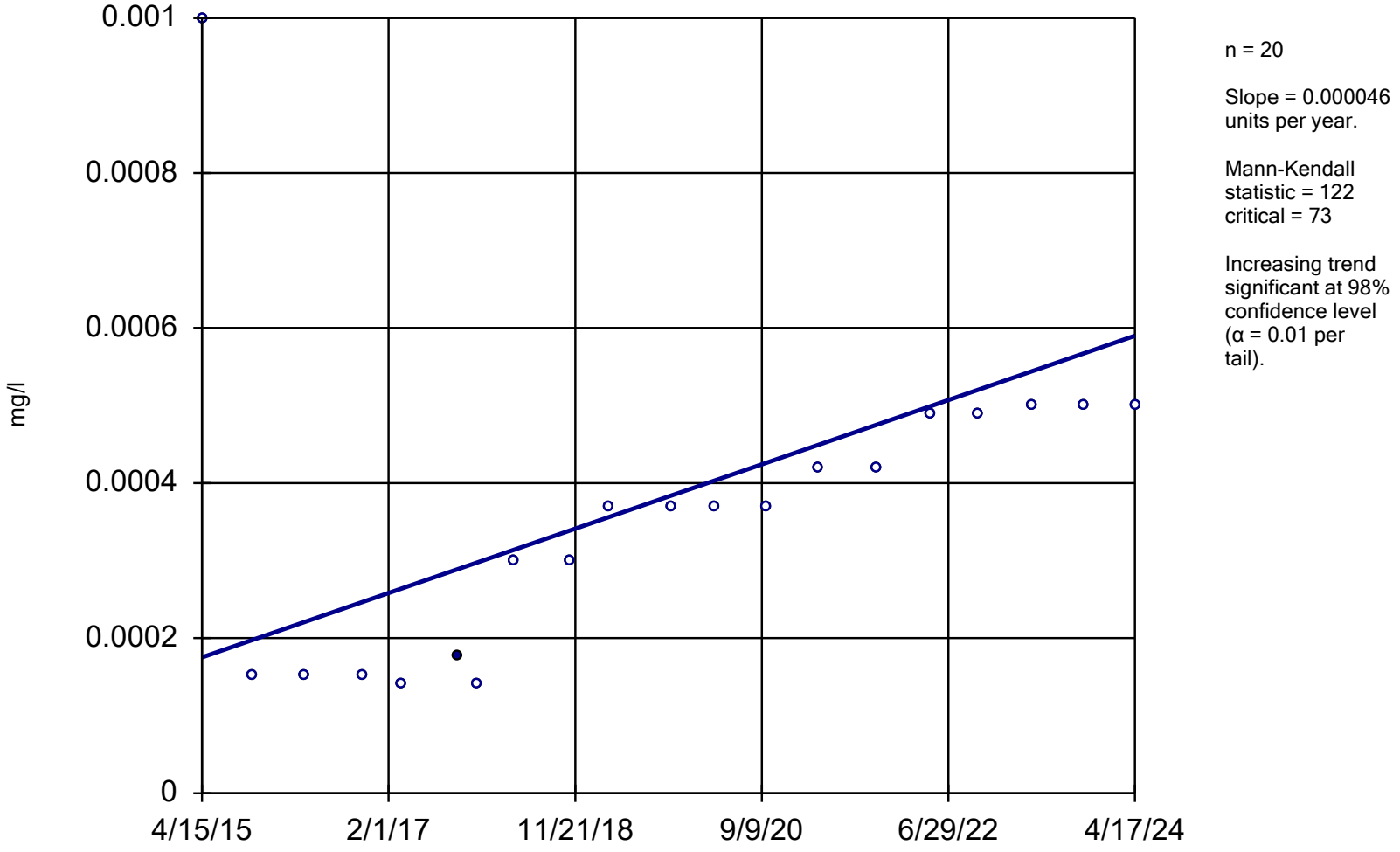
Constituent: Silver Analysis Run 7/12/2024 2:07 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-305



n = 20

Slope = 0.000046 units per year.

Mann-Kendall statistic = 122
critical = 73

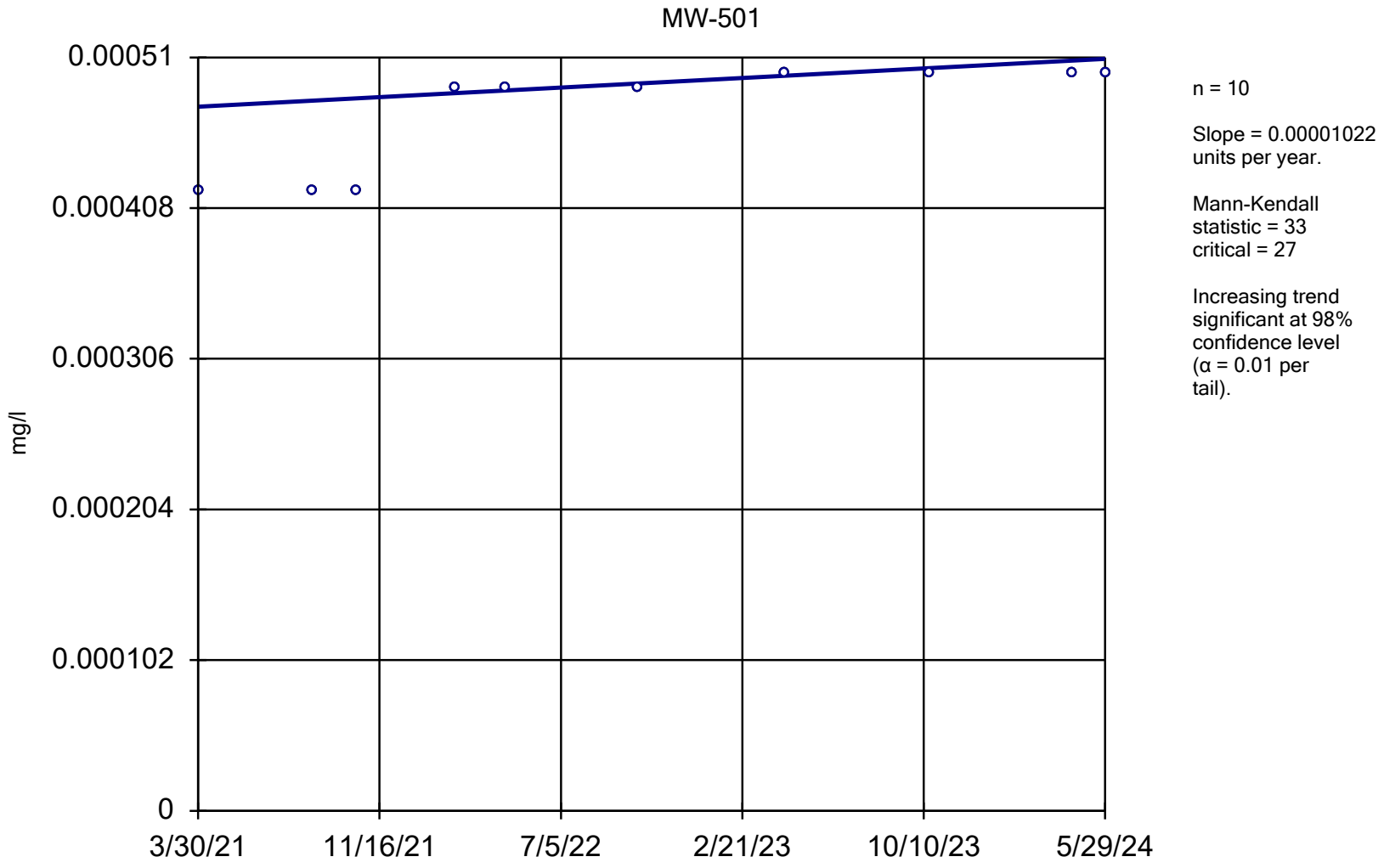
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Silver Analysis Run 7/12/2024 2:07 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

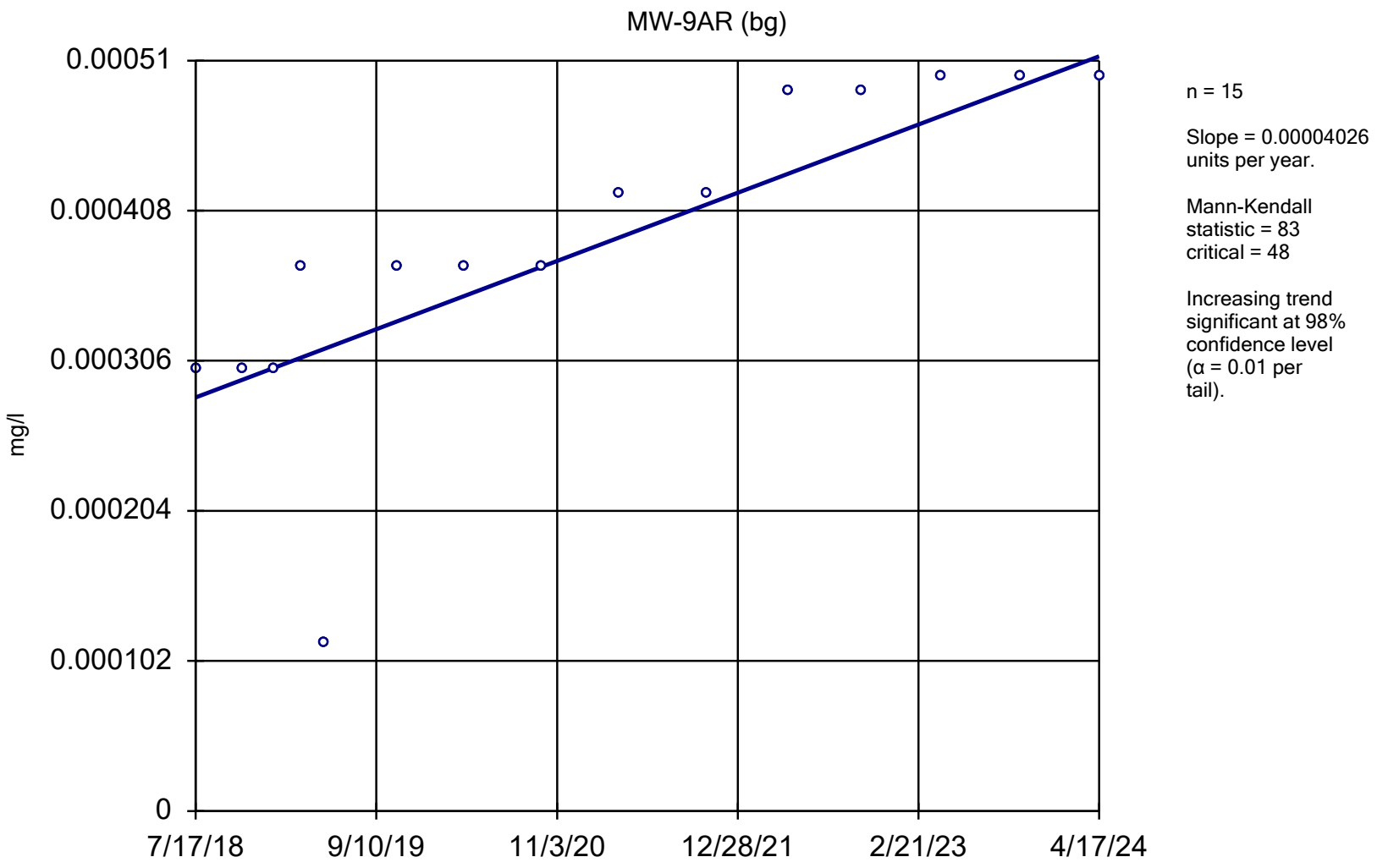


Constituent: Silver Analysis Run 7/12/2024 2:07 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

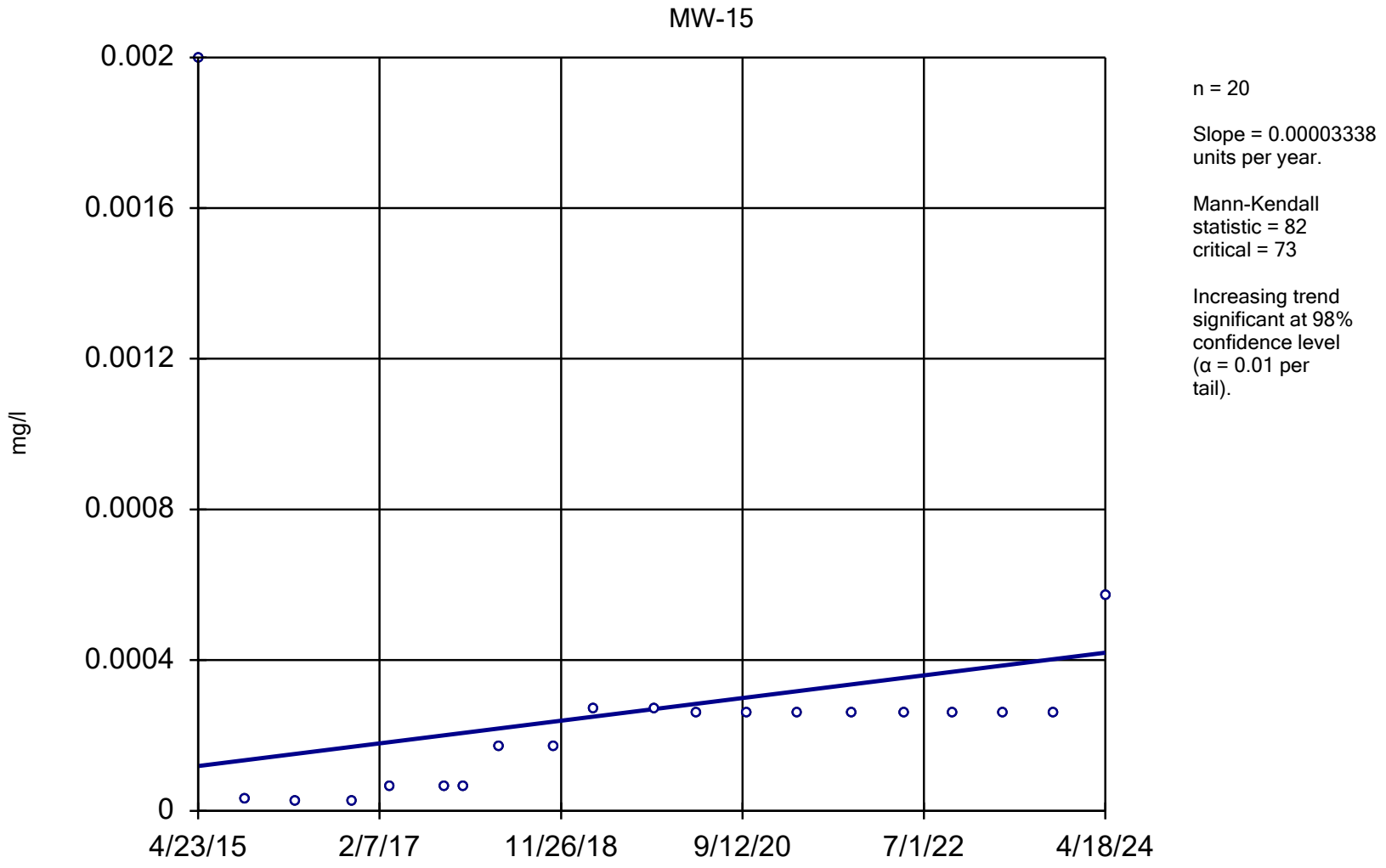


Constituent: Silver Analysis Run 7/12/2024 2:07 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

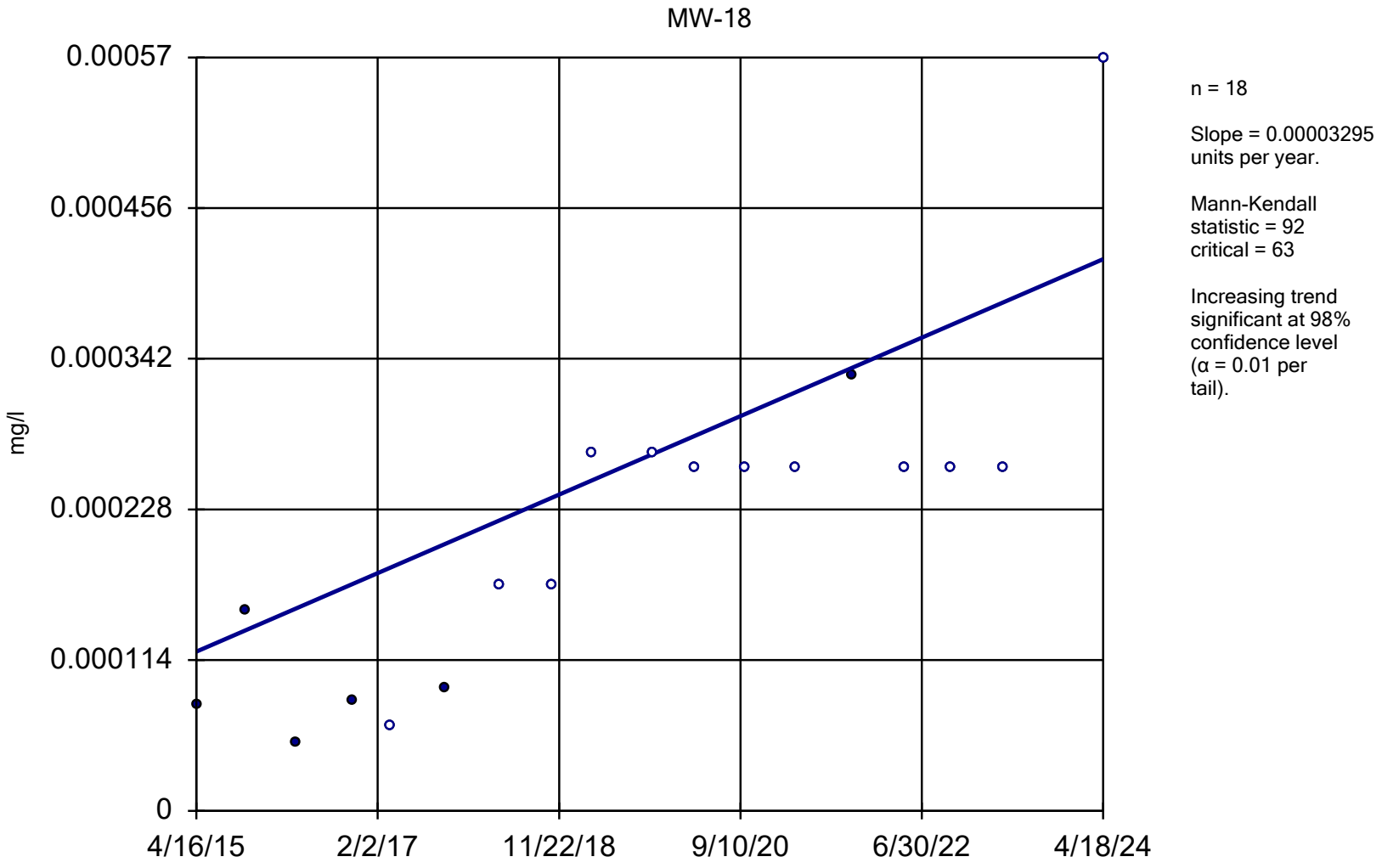


Constituent: Thallium Analysis Run 7/12/2024 2:07 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



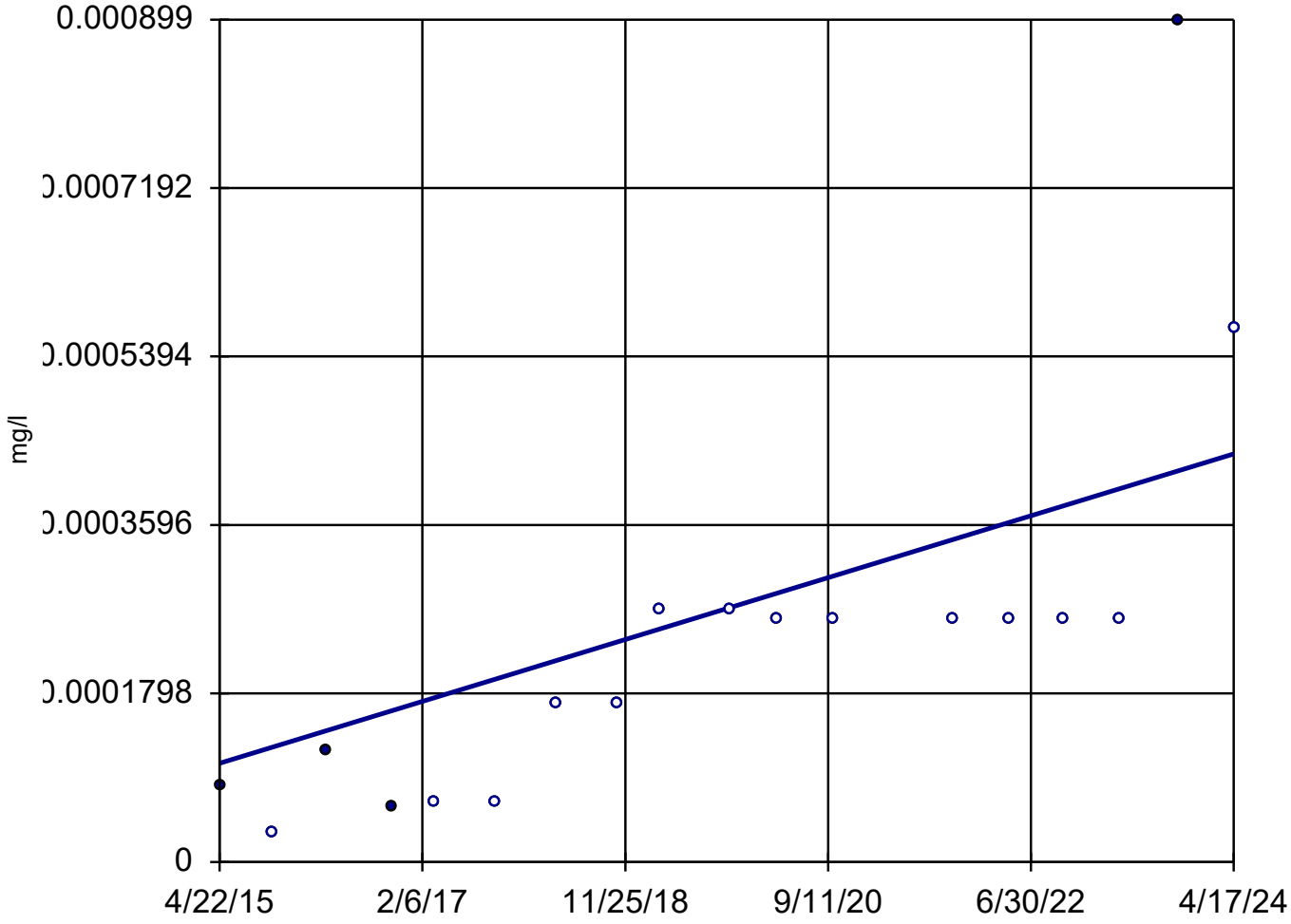
Constituent: Thallium Analysis Run 7/12/2024 2:08 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-201B (bg)



n = 18

Slope = 0.0000367 units per year.

Mann-Kendall statistic = 95
critical = 63

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

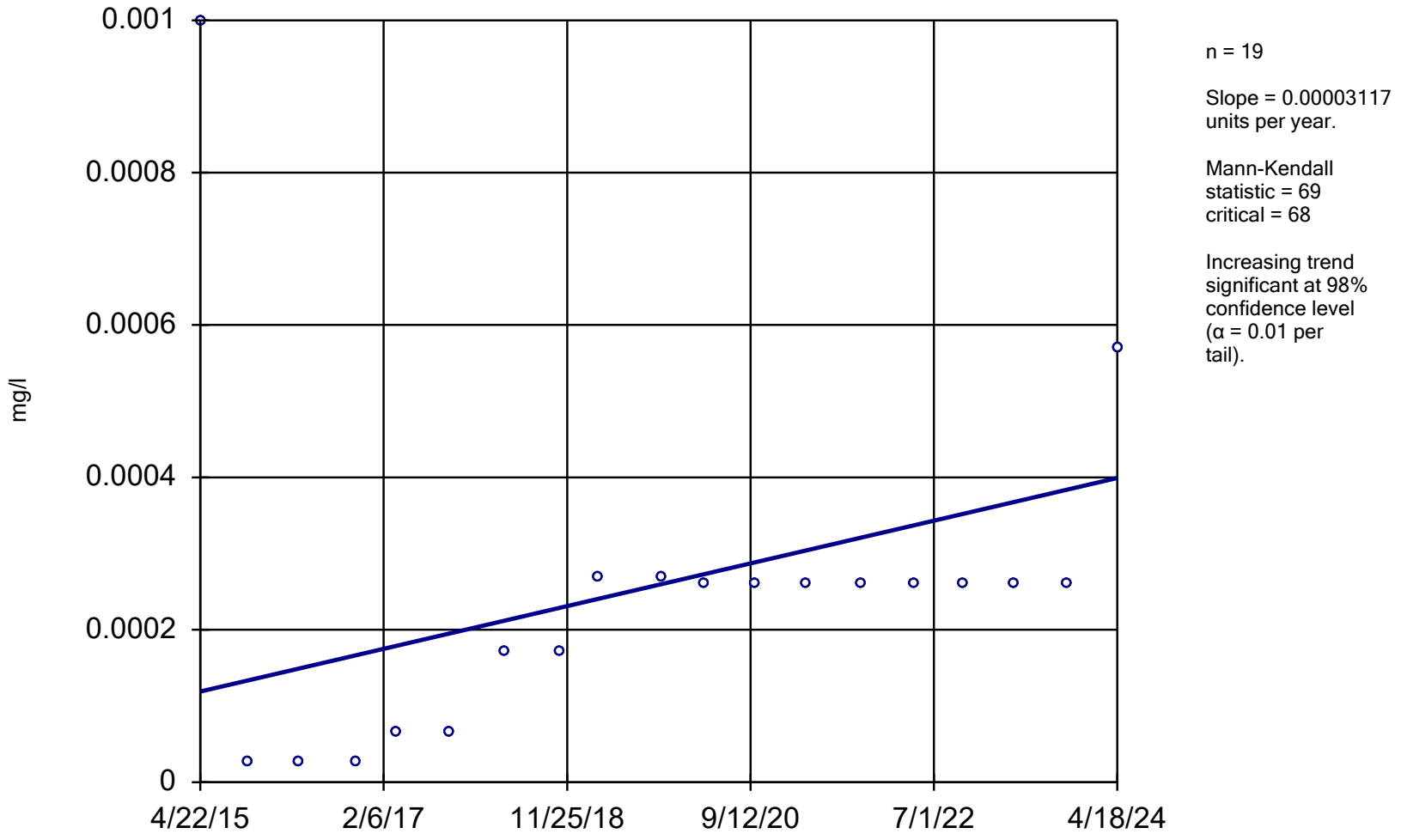
Constituent: Thallium Analysis Run 7/12/2024 2:08 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-22



n = 19

Slope = 0.00003117 units per year.

Mann-Kendall statistic = 69
critical = 68

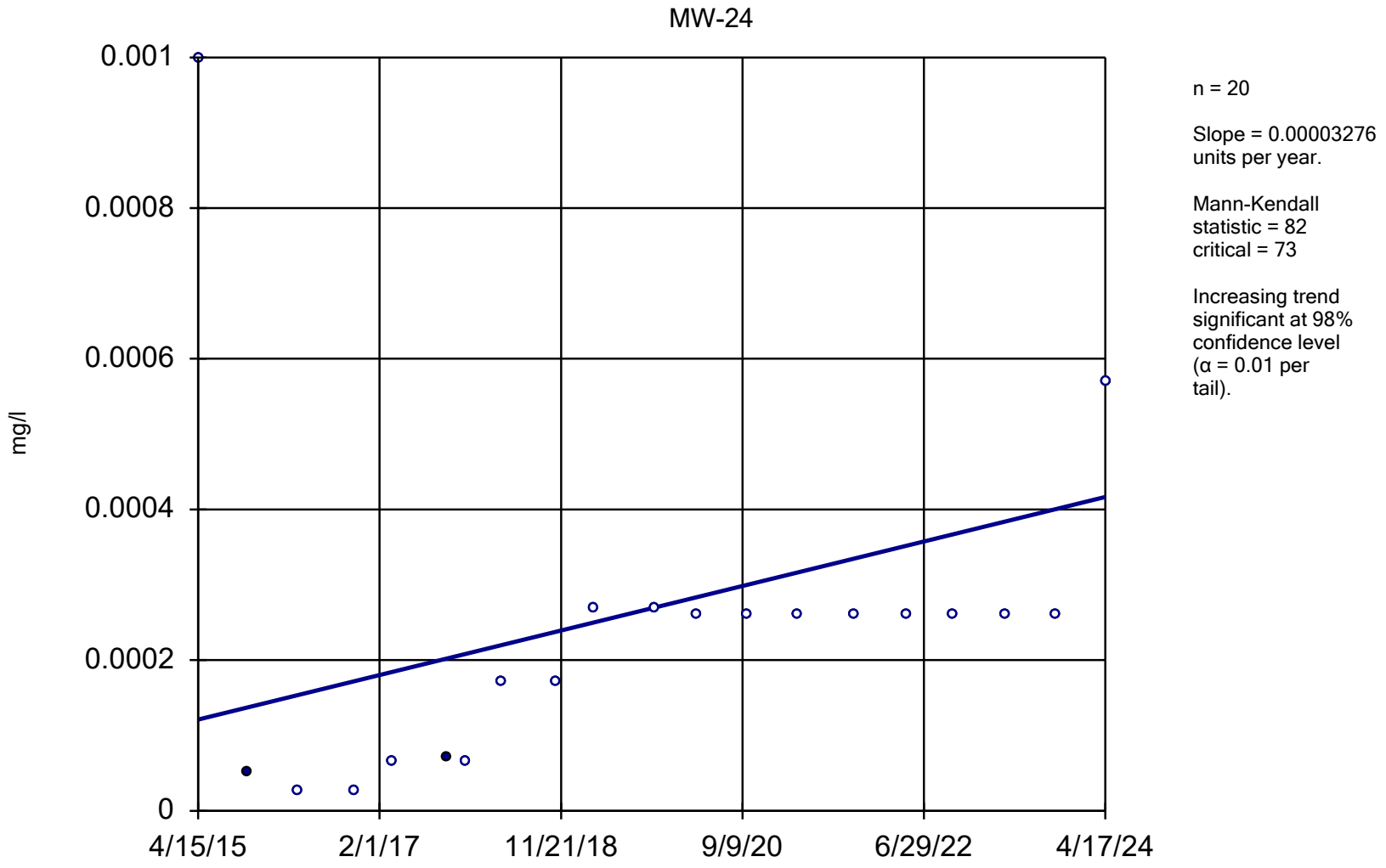
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Thallium Analysis Run 7/12/2024 2:08 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

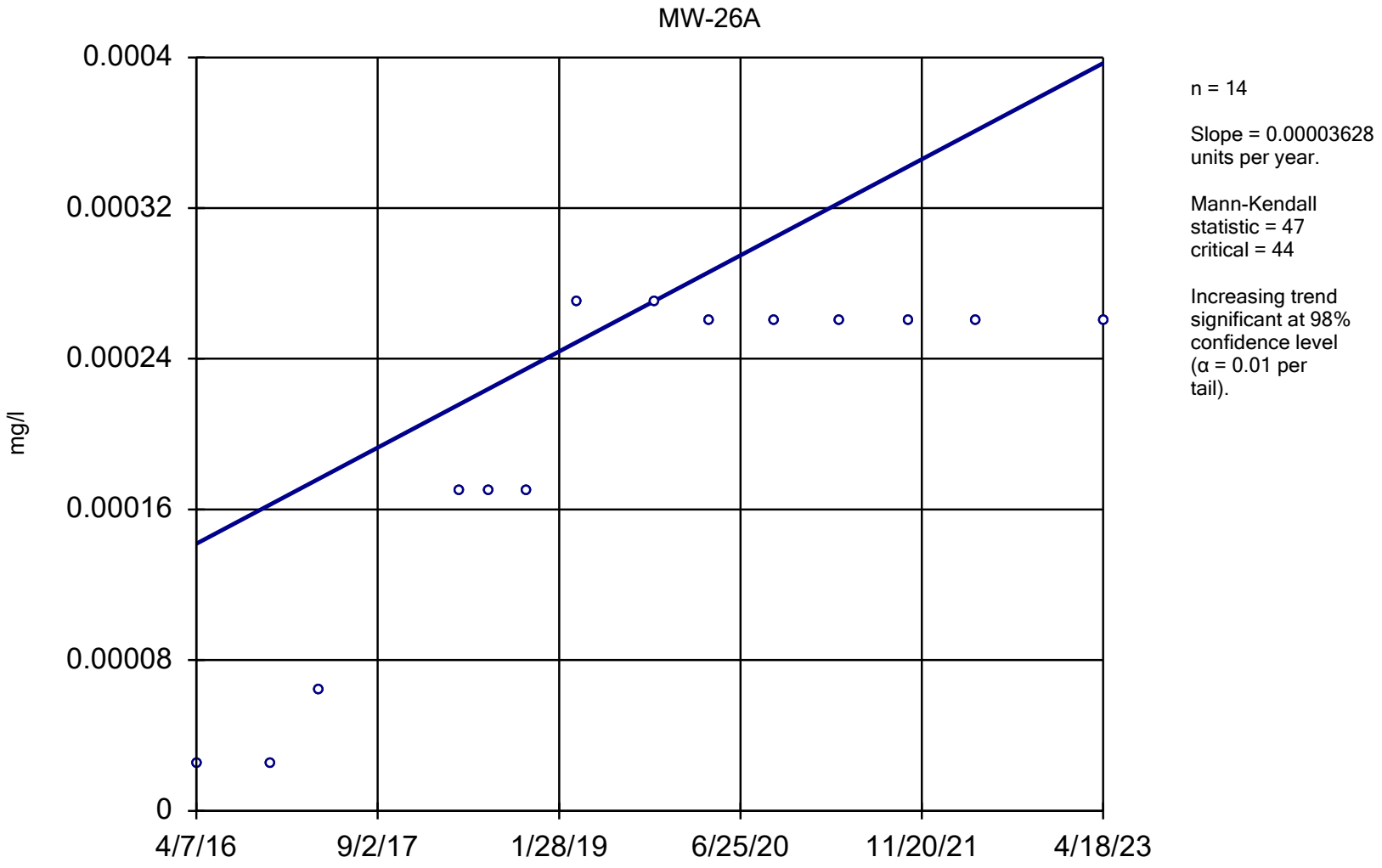


Constituent: Thallium Analysis Run 7/12/2024 2:08 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

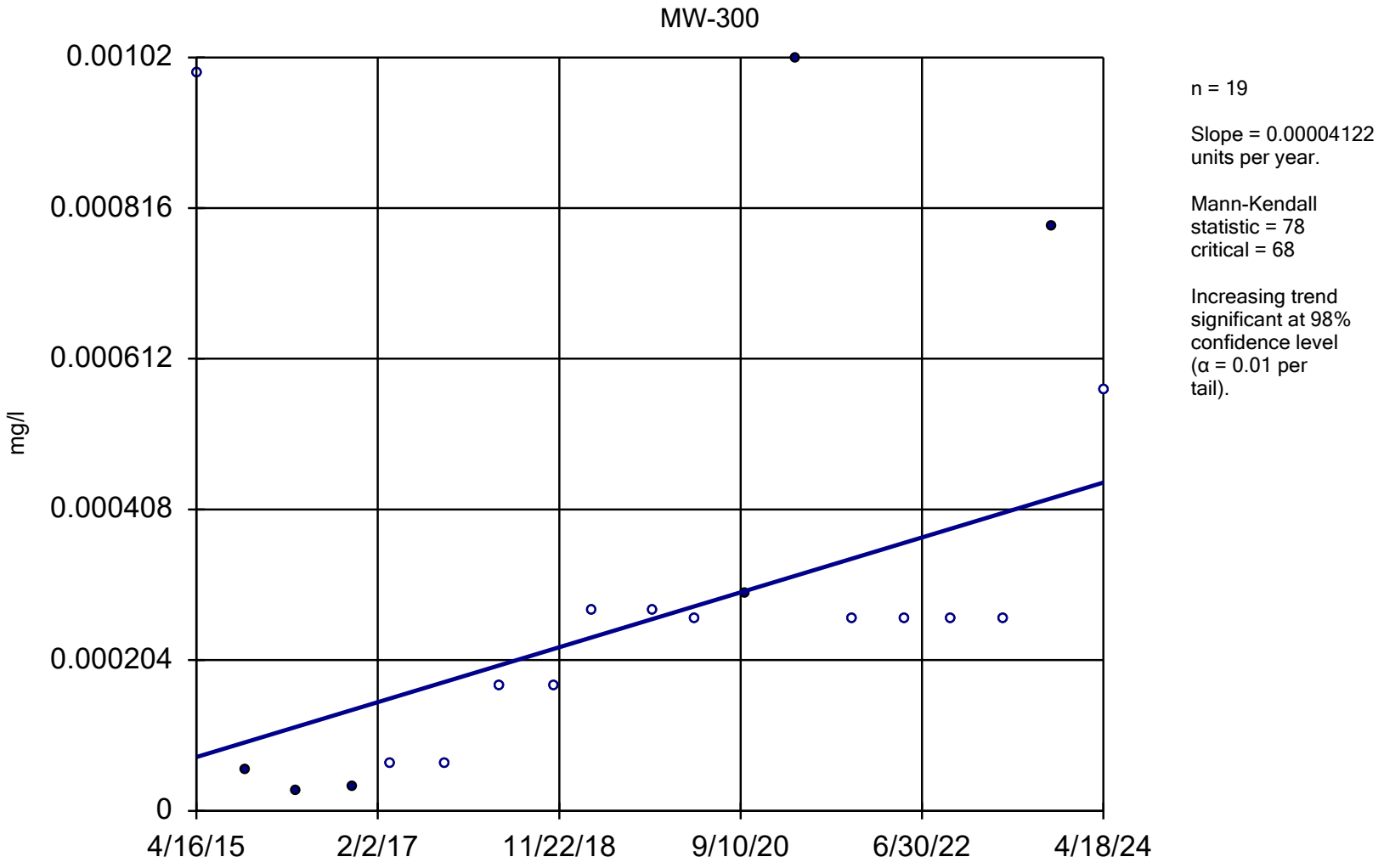


Constituent: Thallium Analysis Run 7/12/2024 2:08 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



n = 19

Slope = 0.00004122 units per year.

Mann-Kendall statistic = 78
critical = 68

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

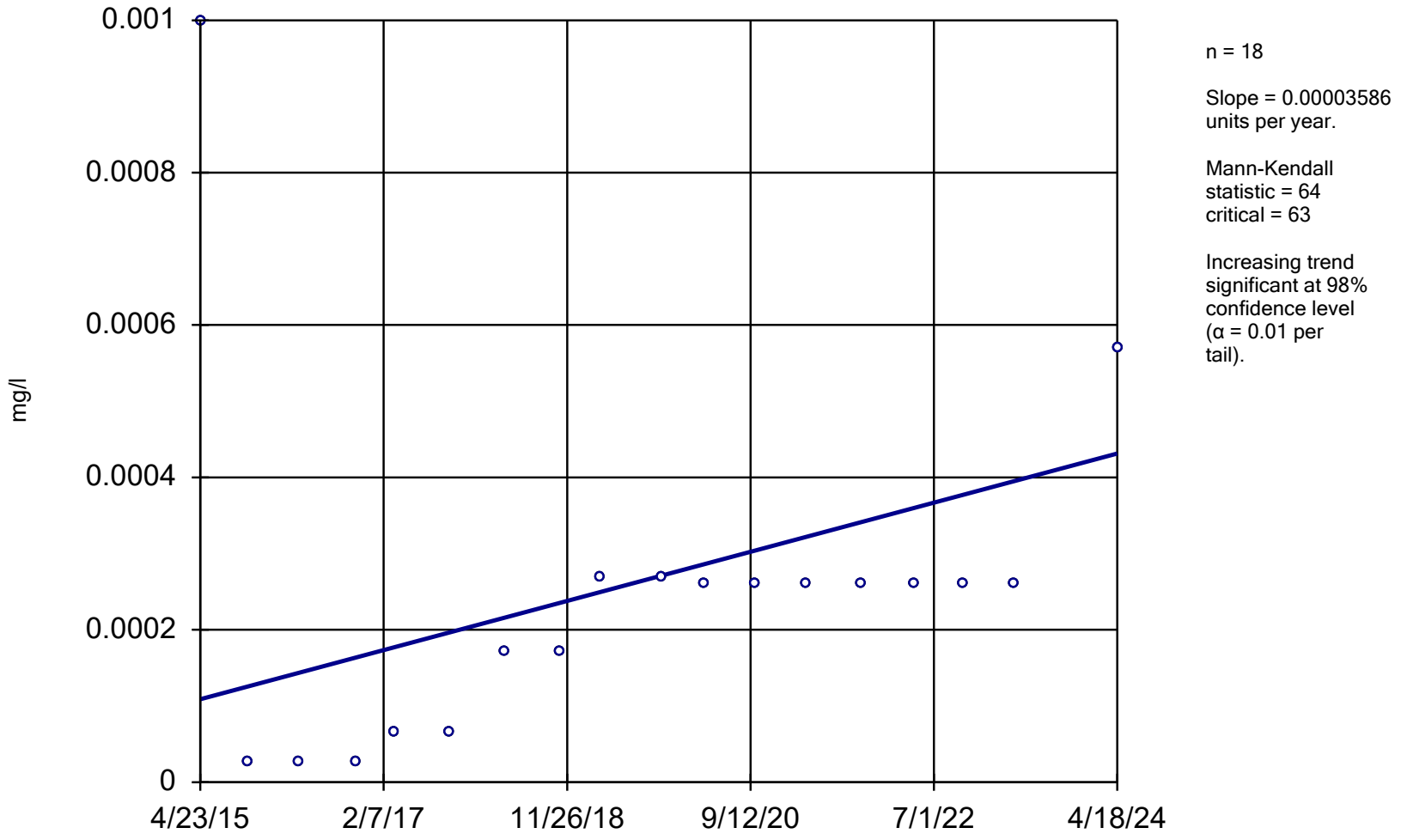
Constituent: Thallium Analysis Run 7/12/2024 2:08 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-301



n = 18

Slope = 0.00003586 units per year.

Mann-Kendall statistic = 64
critical = 63

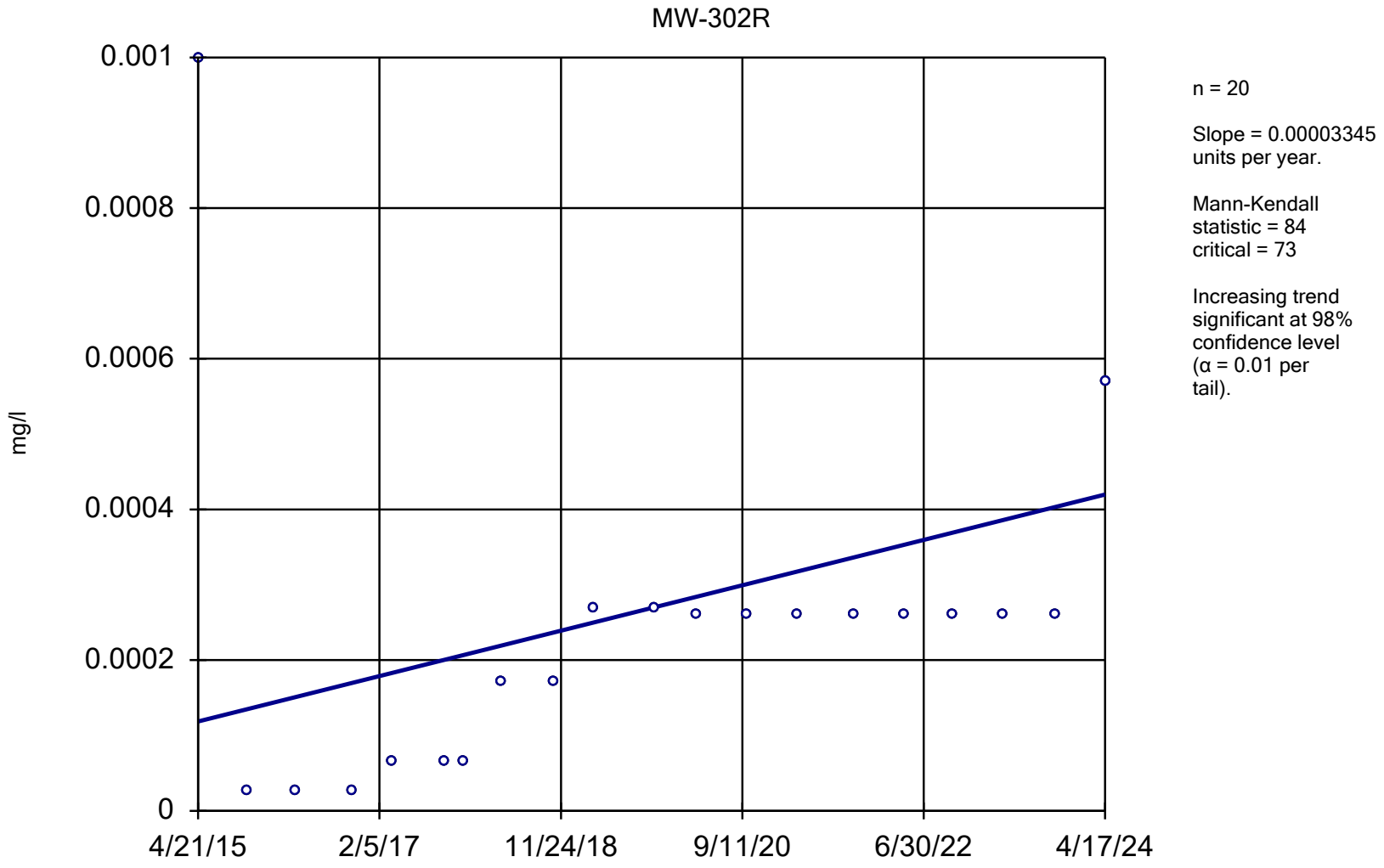
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Thallium Analysis Run 7/12/2024 2:08 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

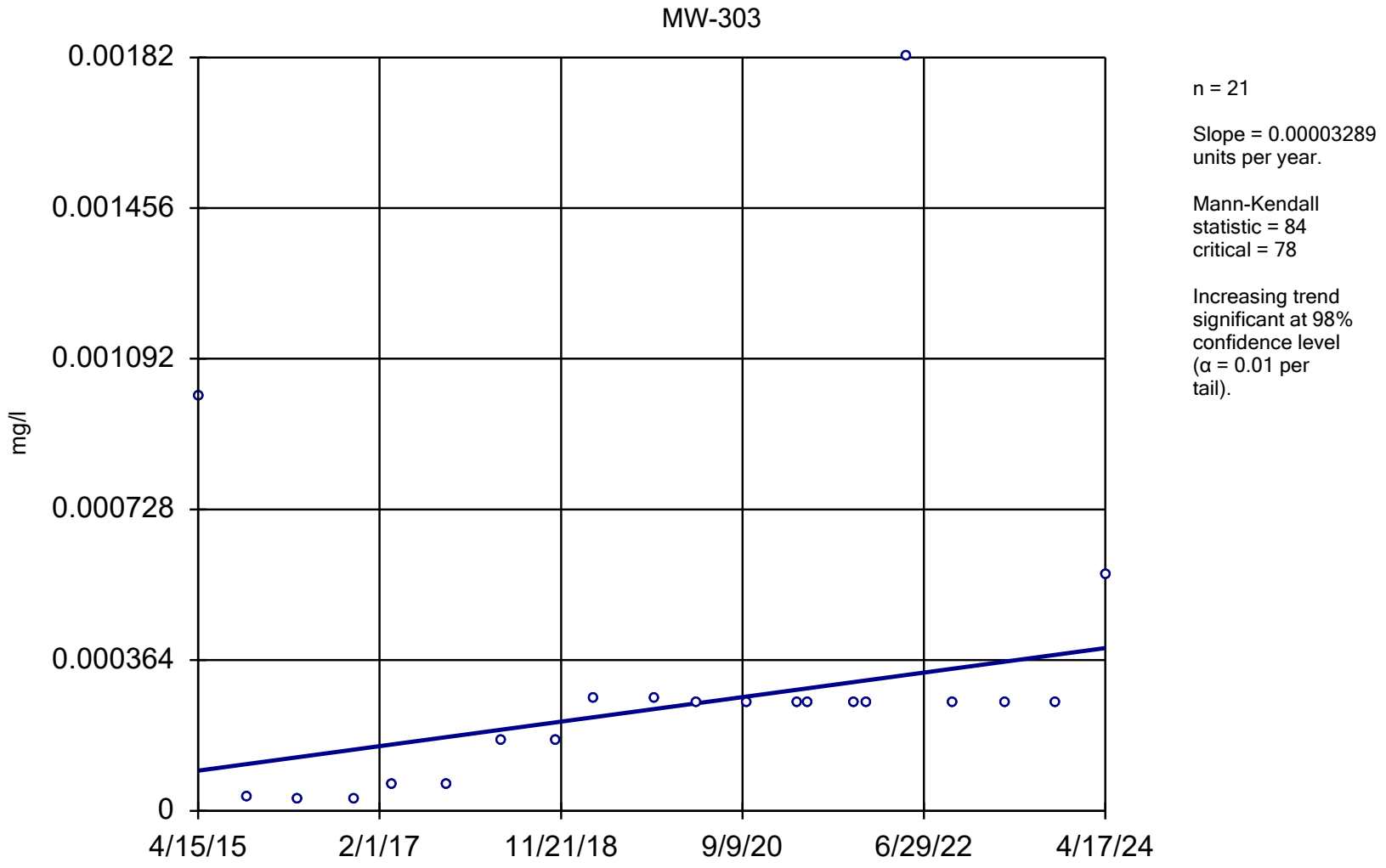


Constituent: Thallium Analysis Run 7/12/2024 2:08 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



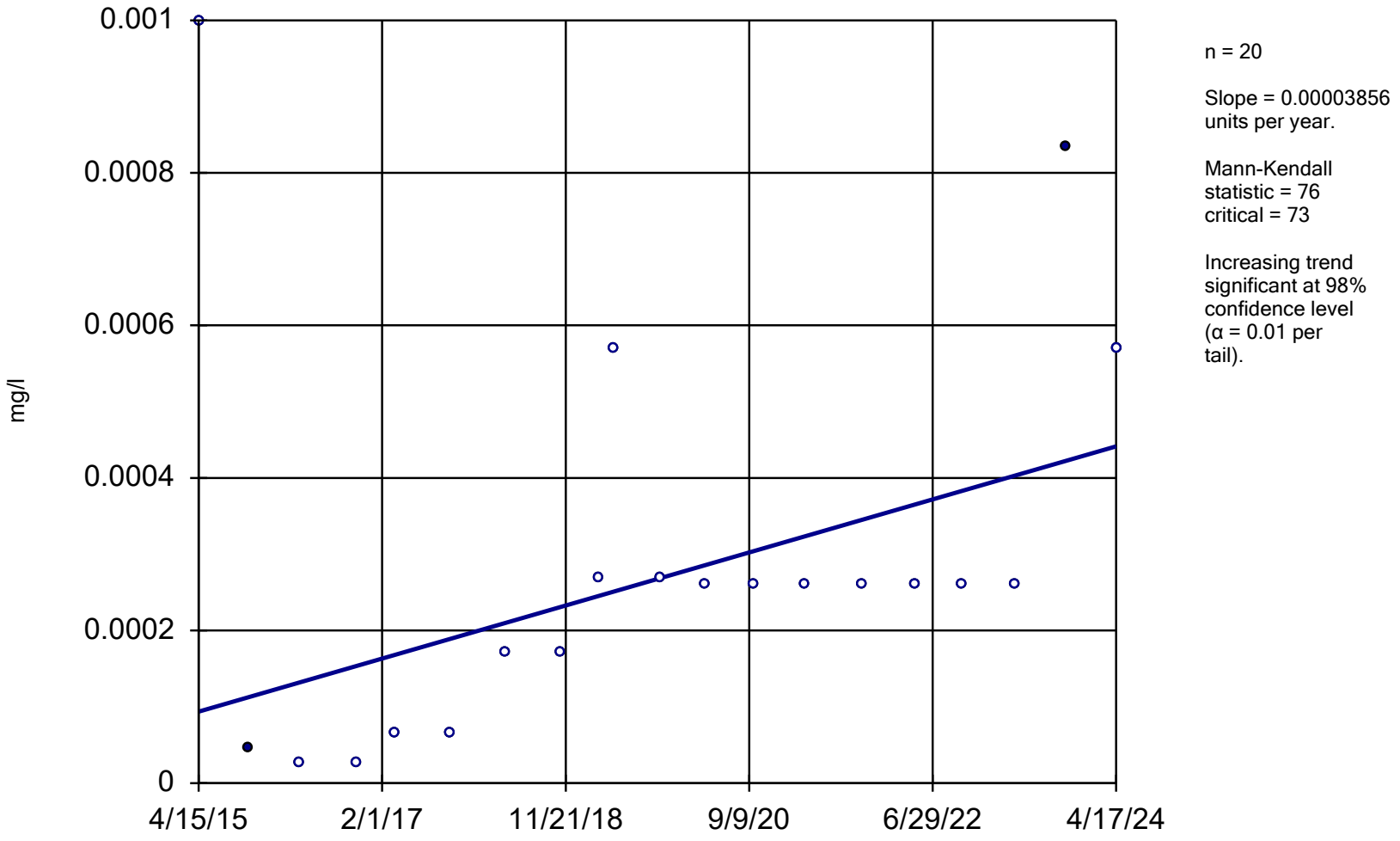
Constituent: Thallium Analysis Run 7/12/2024 2:08 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-304R



n = 20

Slope = 0.00003856 units per year.

Mann-Kendall statistic = 76
critical = 73

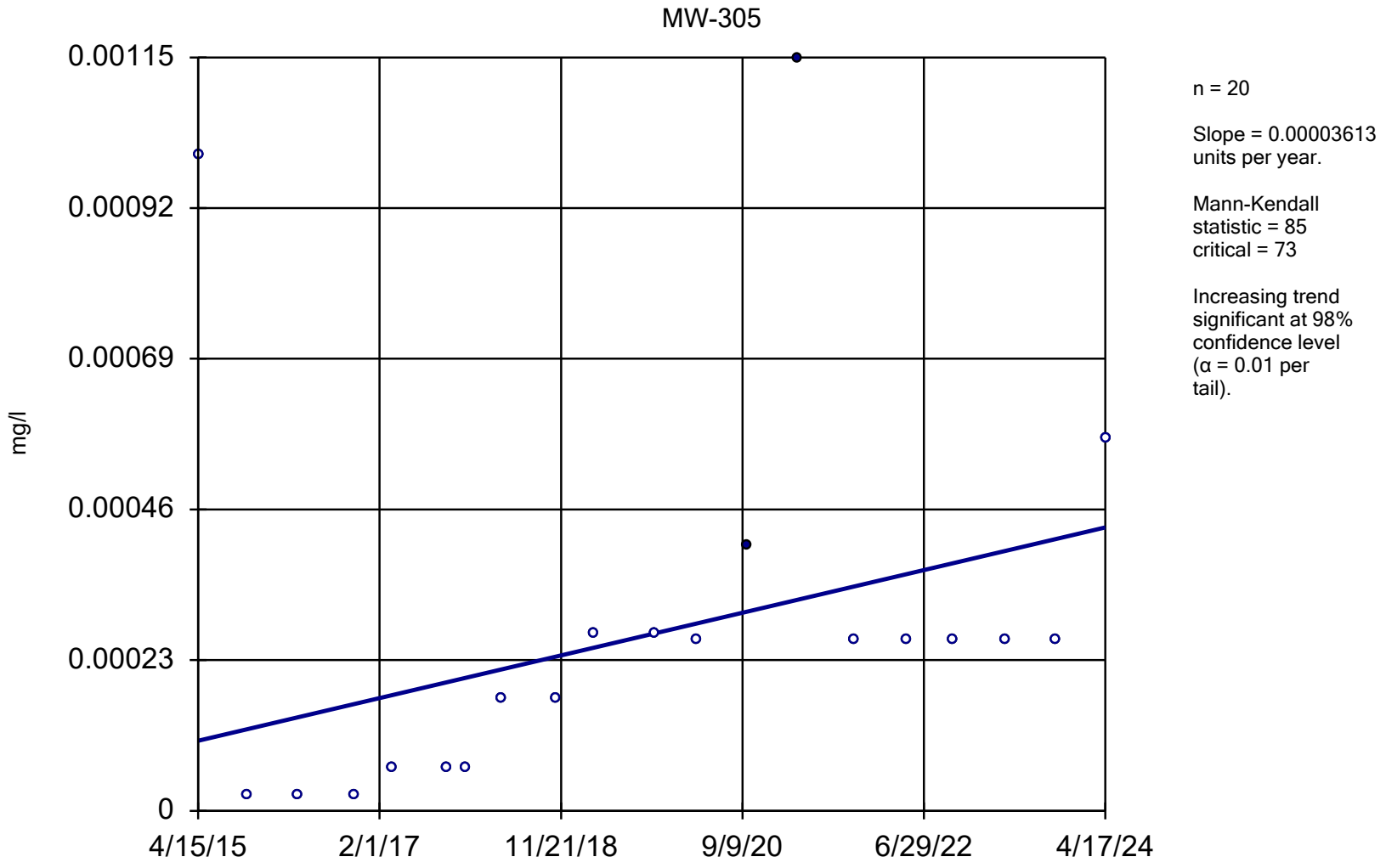
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Thallium Analysis Run 7/12/2024 2:08 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

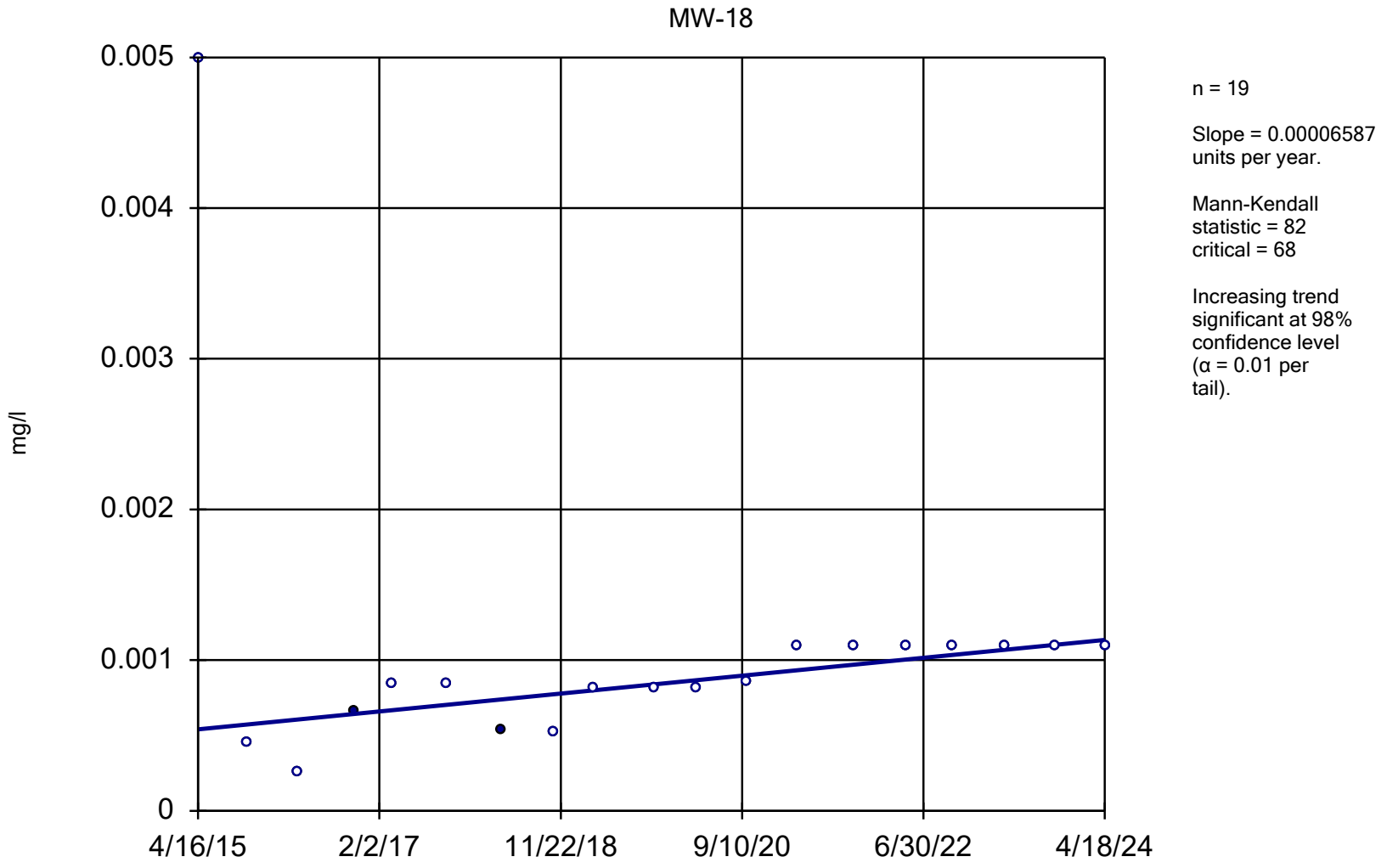


Constituent: Thallium Analysis Run 7/12/2024 2:08 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

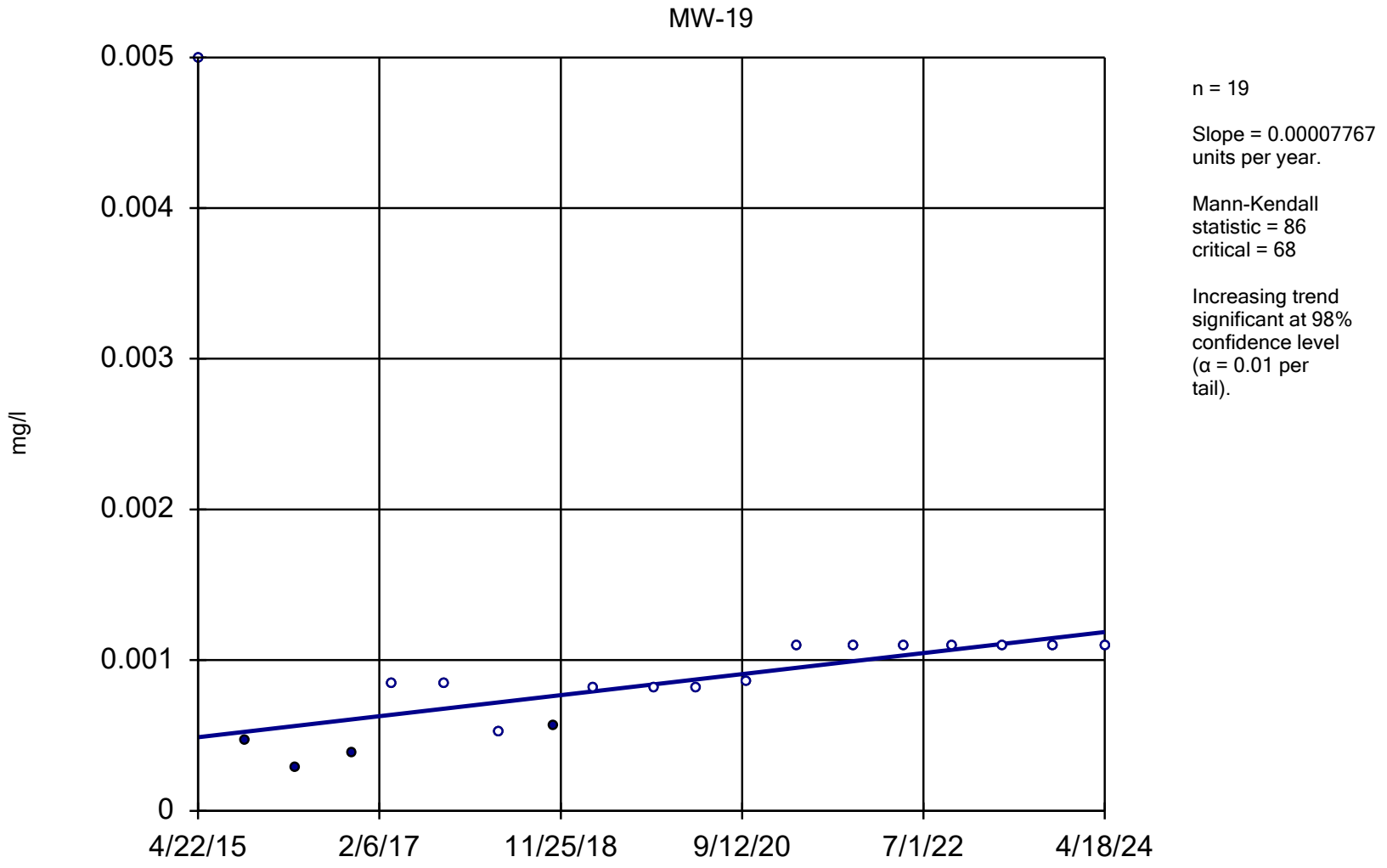


Constituent: Vanadium Analysis Run 7/12/2024 2:08 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

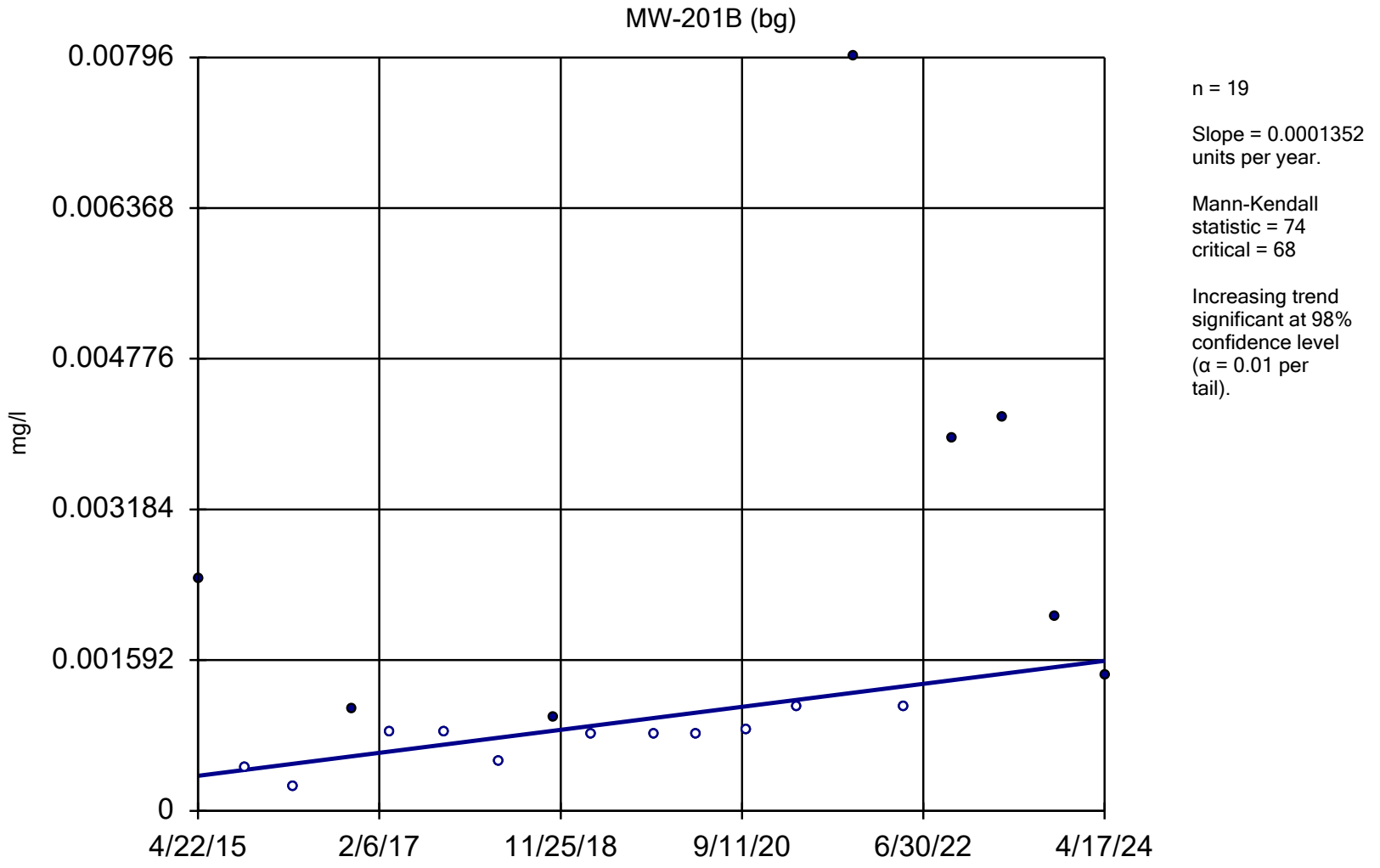


Constituent: Vanadium Analysis Run 7/12/2024 2:08 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

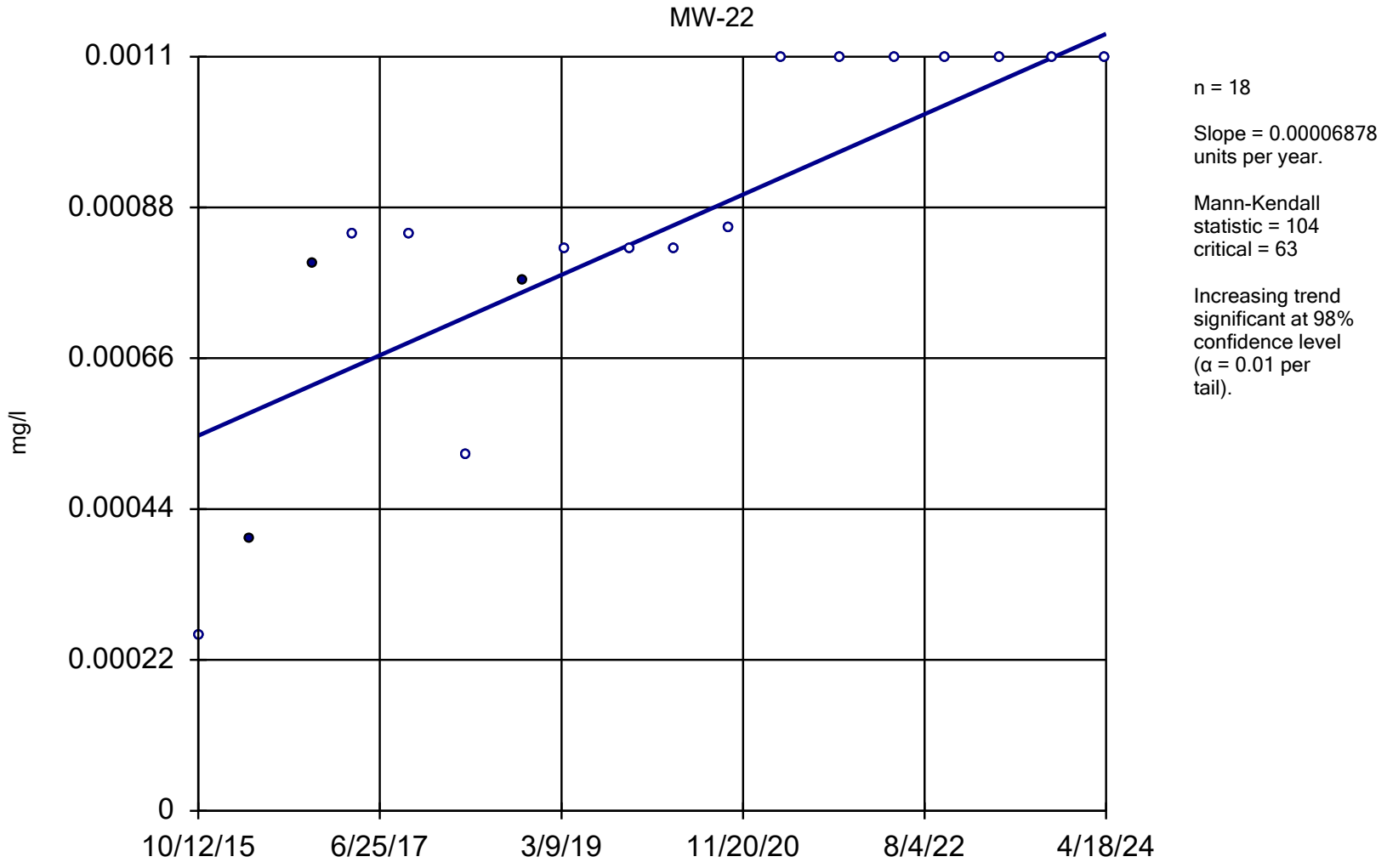


Constituent: Vanadium Analysis Run 7/12/2024 2:08 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



n = 18

Slope = 0.00006878 units per year.

Mann-Kendall statistic = 104
critical = 63

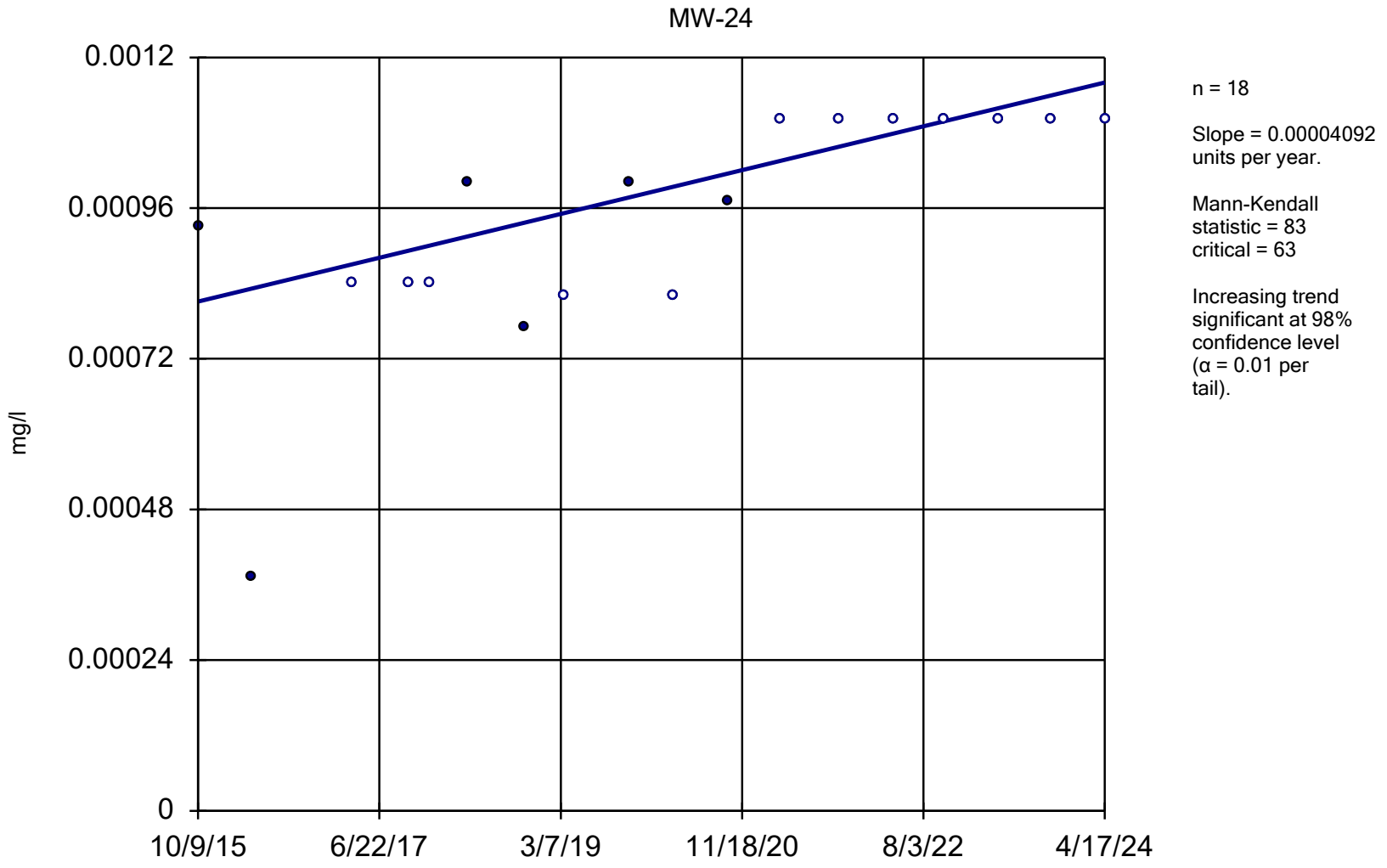
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Vanadium Analysis Run 7/12/2024 2:08 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

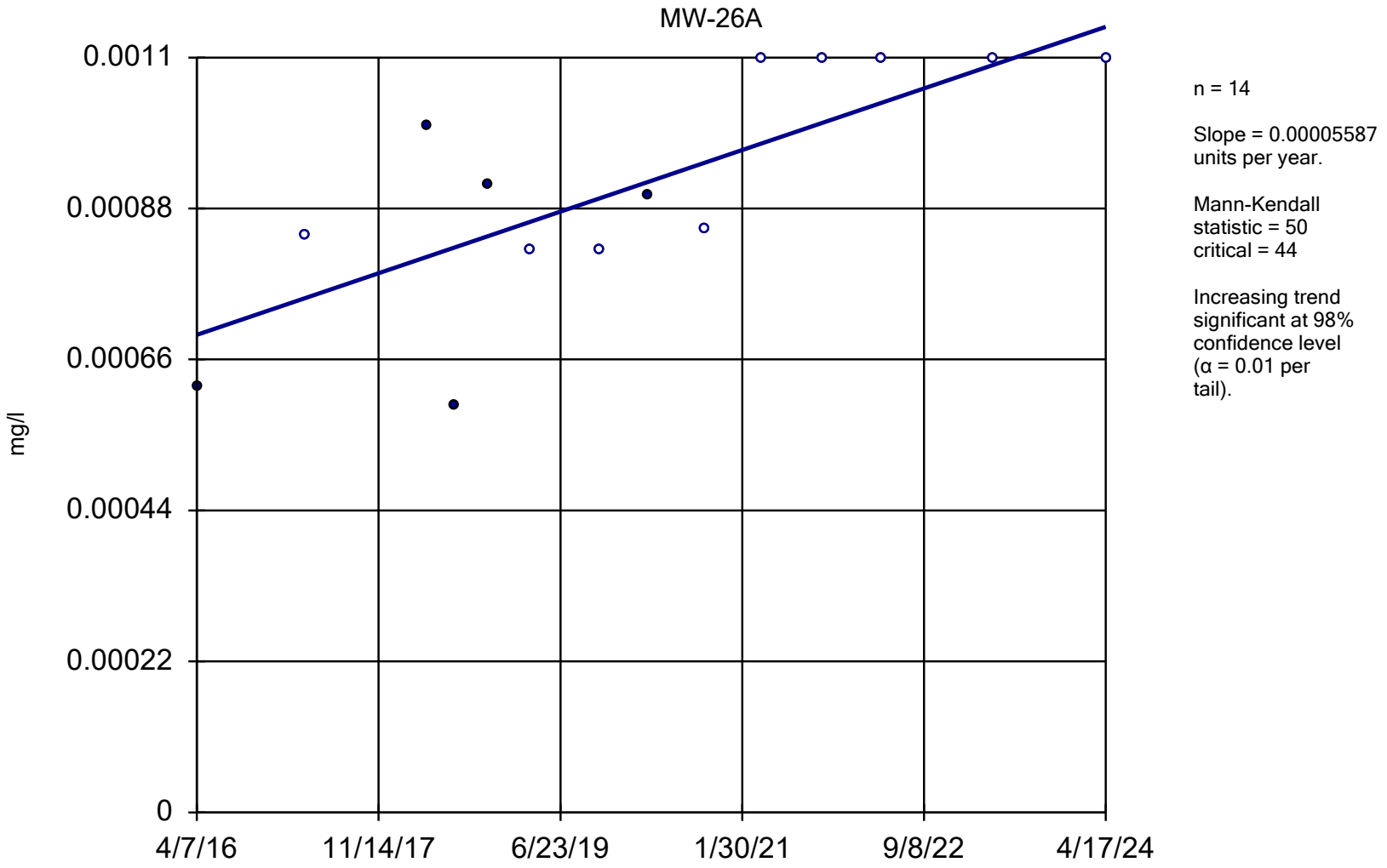


Constituent: Vanadium Analysis Run 7/12/2024 2:08 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



n = 14

Slope = 0.00005587 units per year.

Mann-Kendall statistic = 50
critical = 44

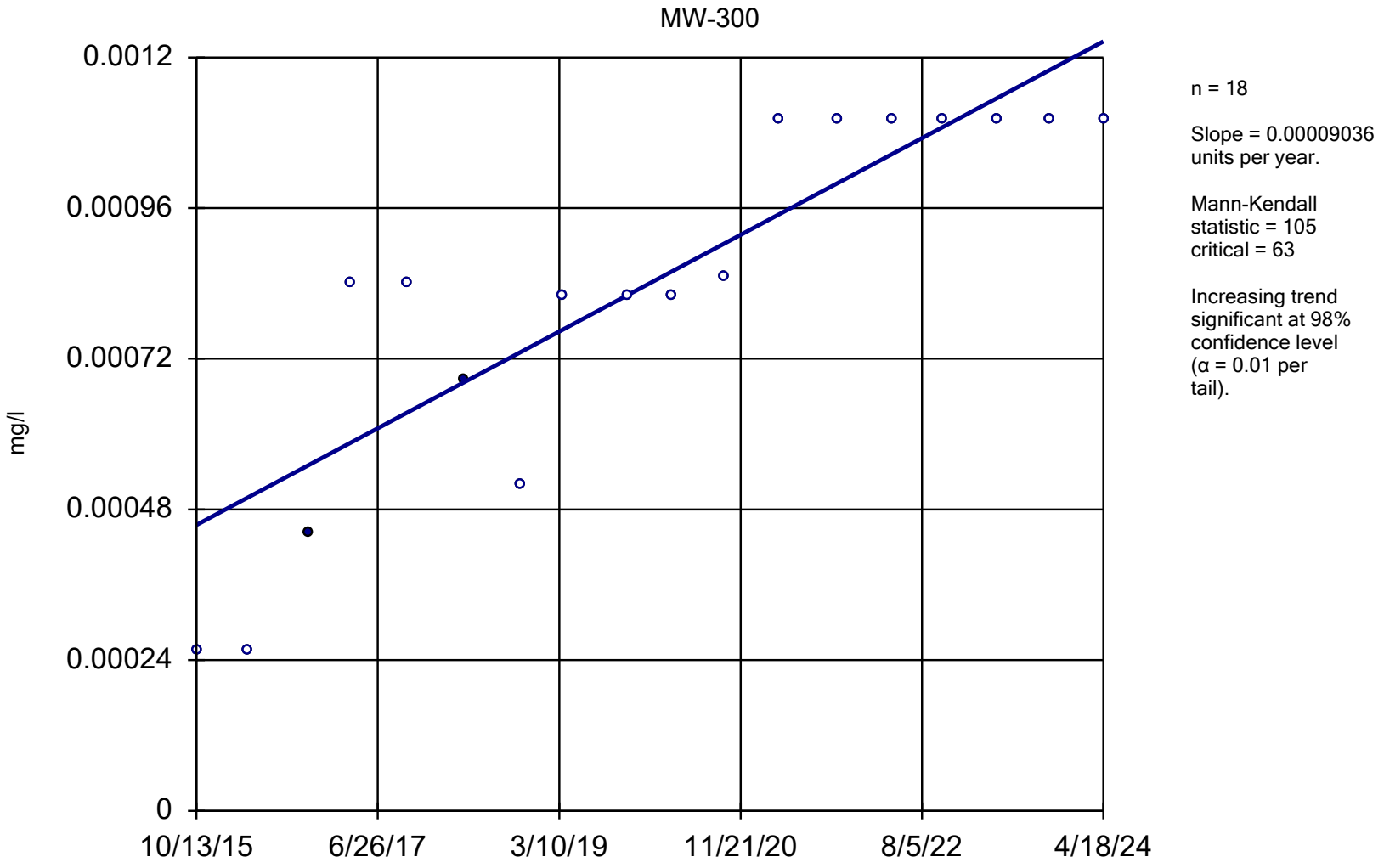
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Vanadium Analysis Run 7/12/2024 2:08 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



n = 18

Slope = 0.00009036 units per year.

Mann-Kendall statistic = 105
critical = 63

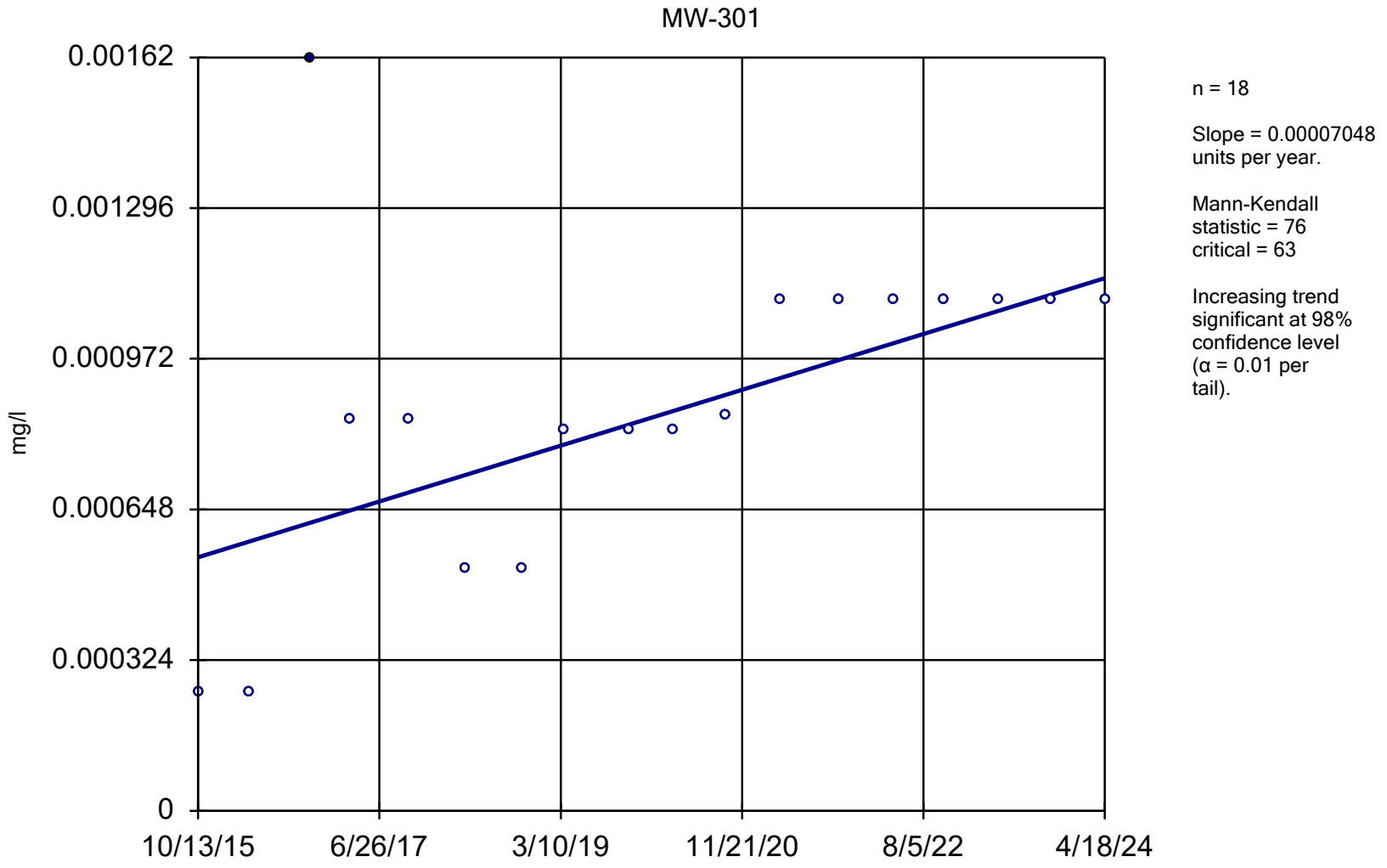
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Vanadium Analysis Run 7/12/2024 2:08 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

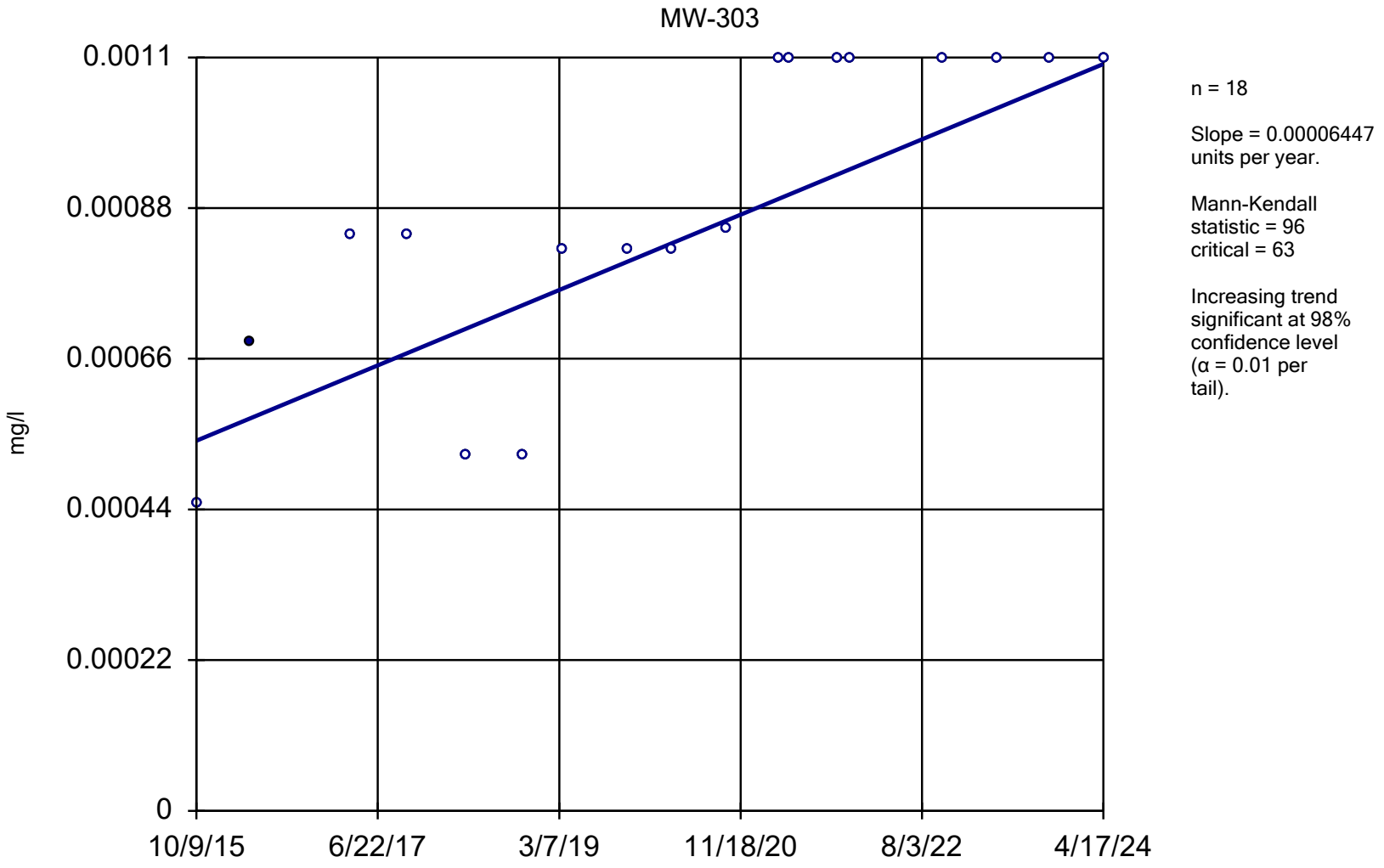


Constituent: Vanadium Analysis Run 7/12/2024 2:08 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

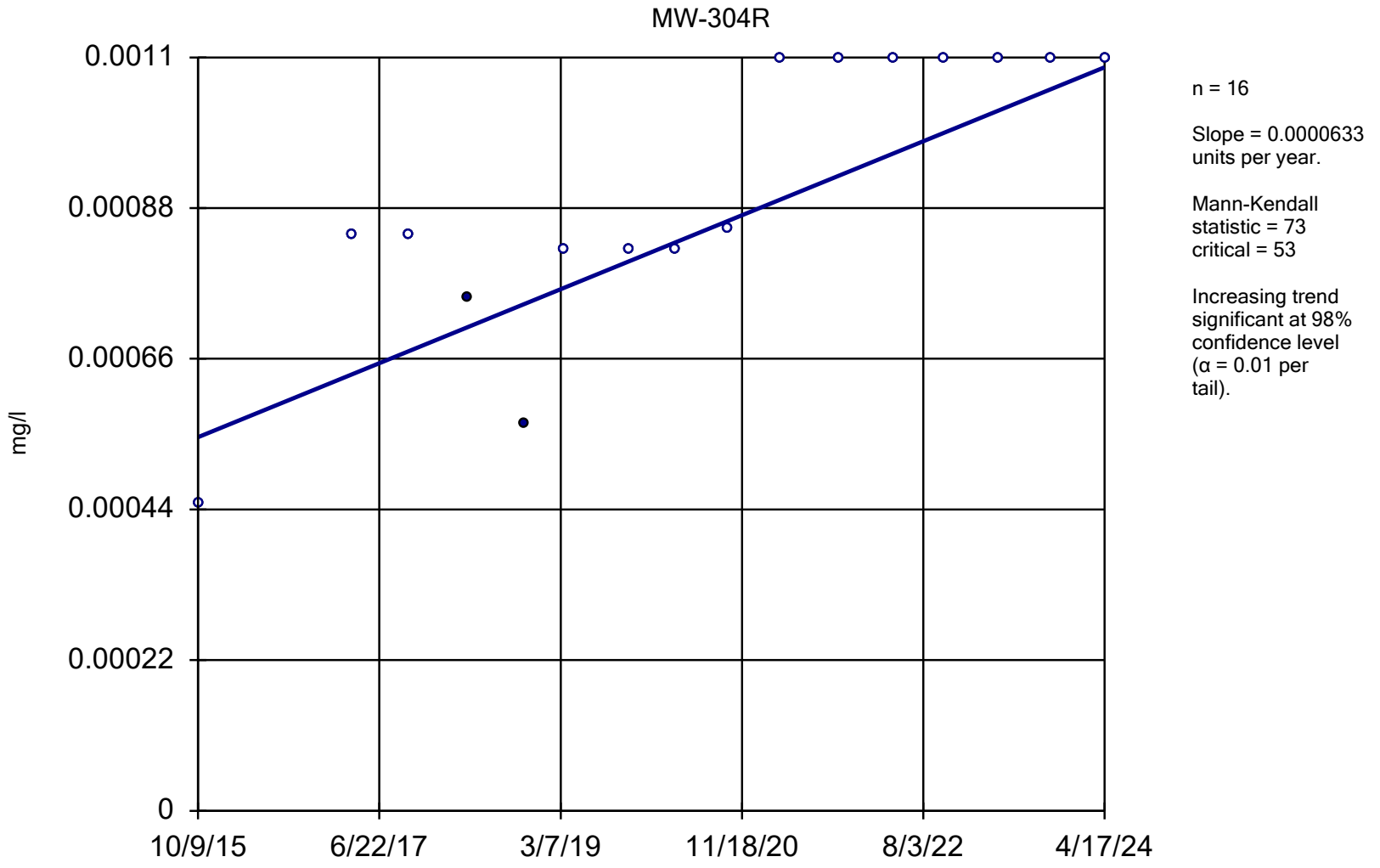


Constituent: Vanadium Analysis Run 7/12/2024 2:08 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

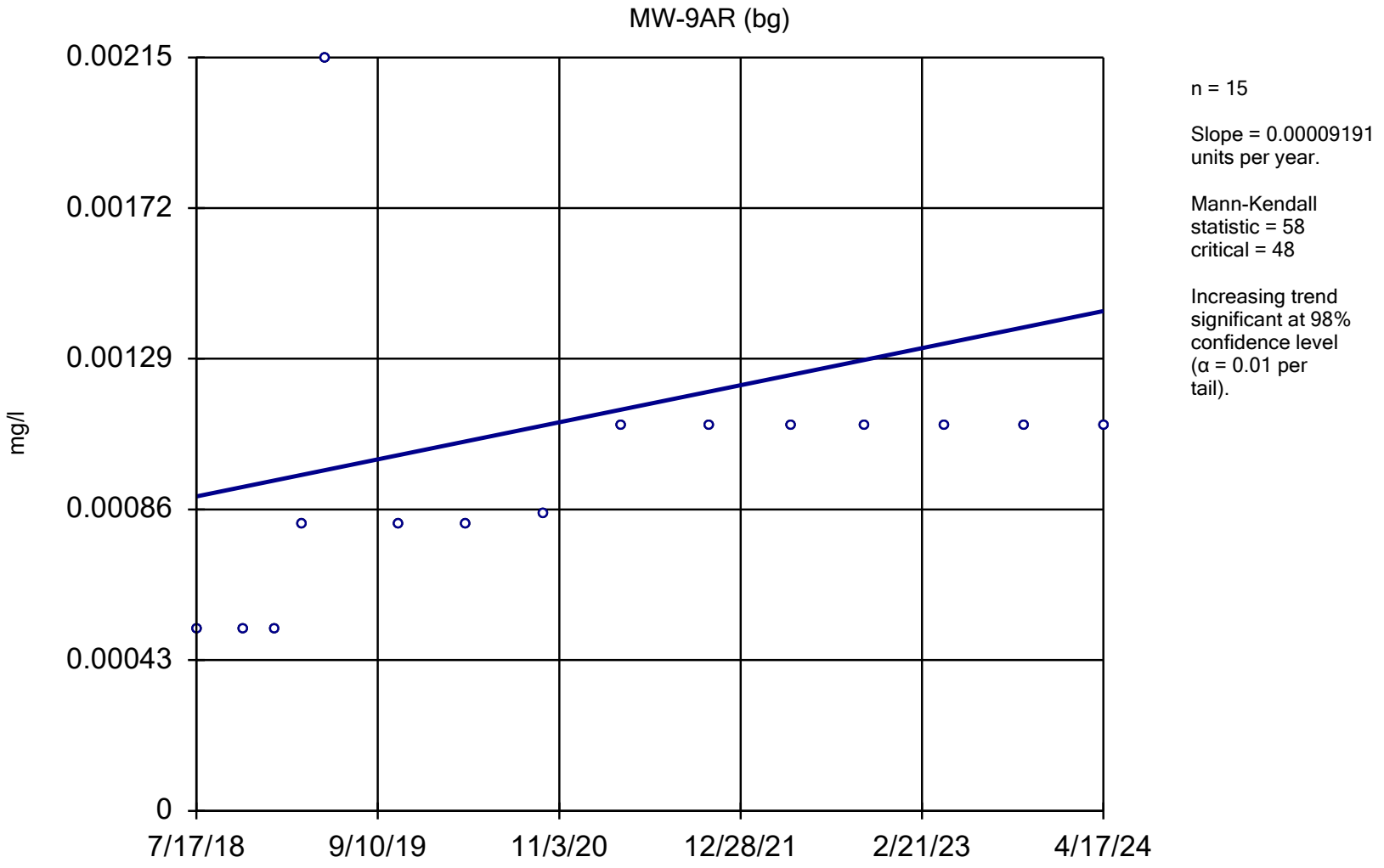


Constituent: Vanadium Analysis Run 7/12/2024 2:08 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



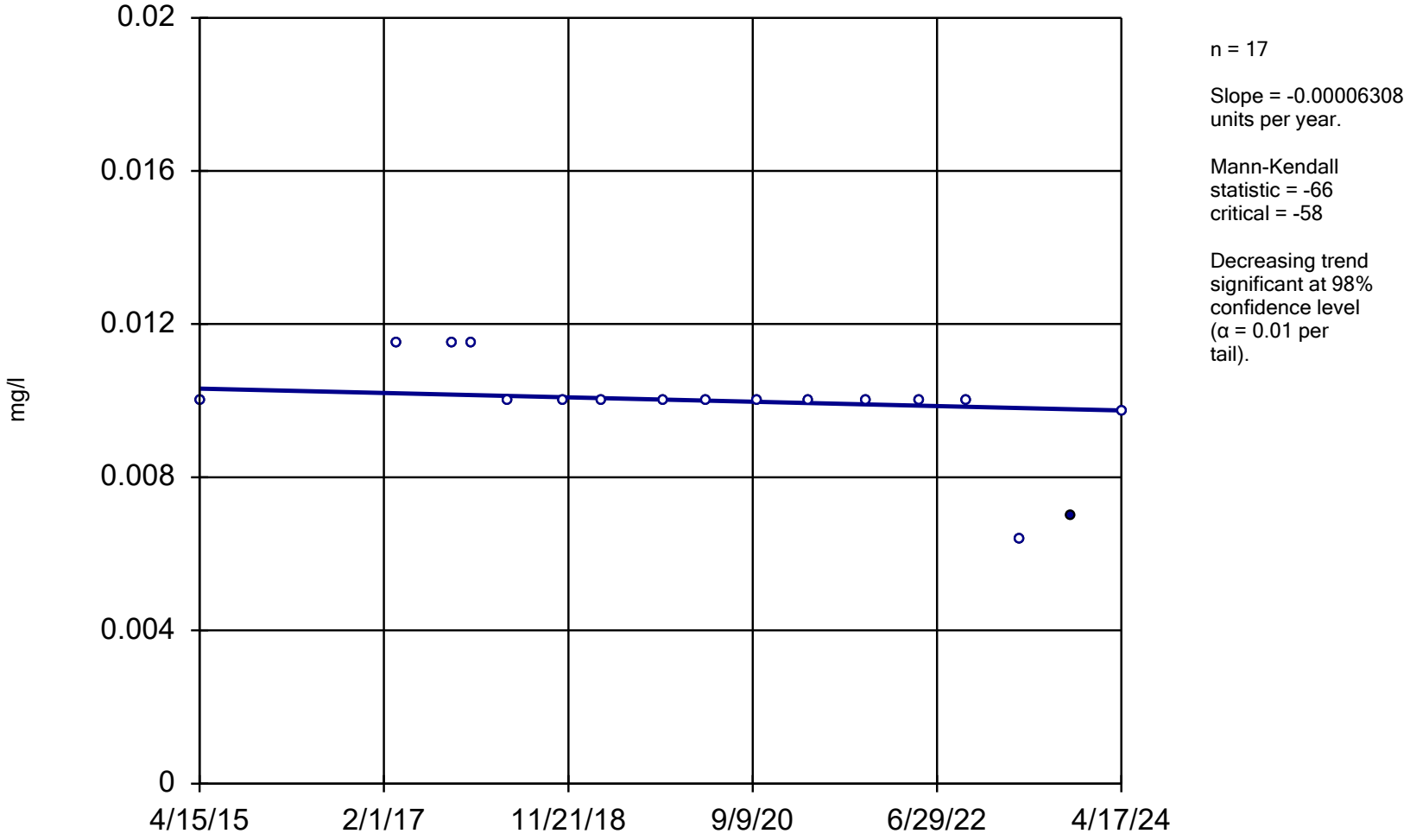
Constituent: Vanadium Analysis Run 7/12/2024 2:08 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-24



n = 17

Slope = -0.00006308 units per year.

Mann-Kendall statistic = -66
critical = -58

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

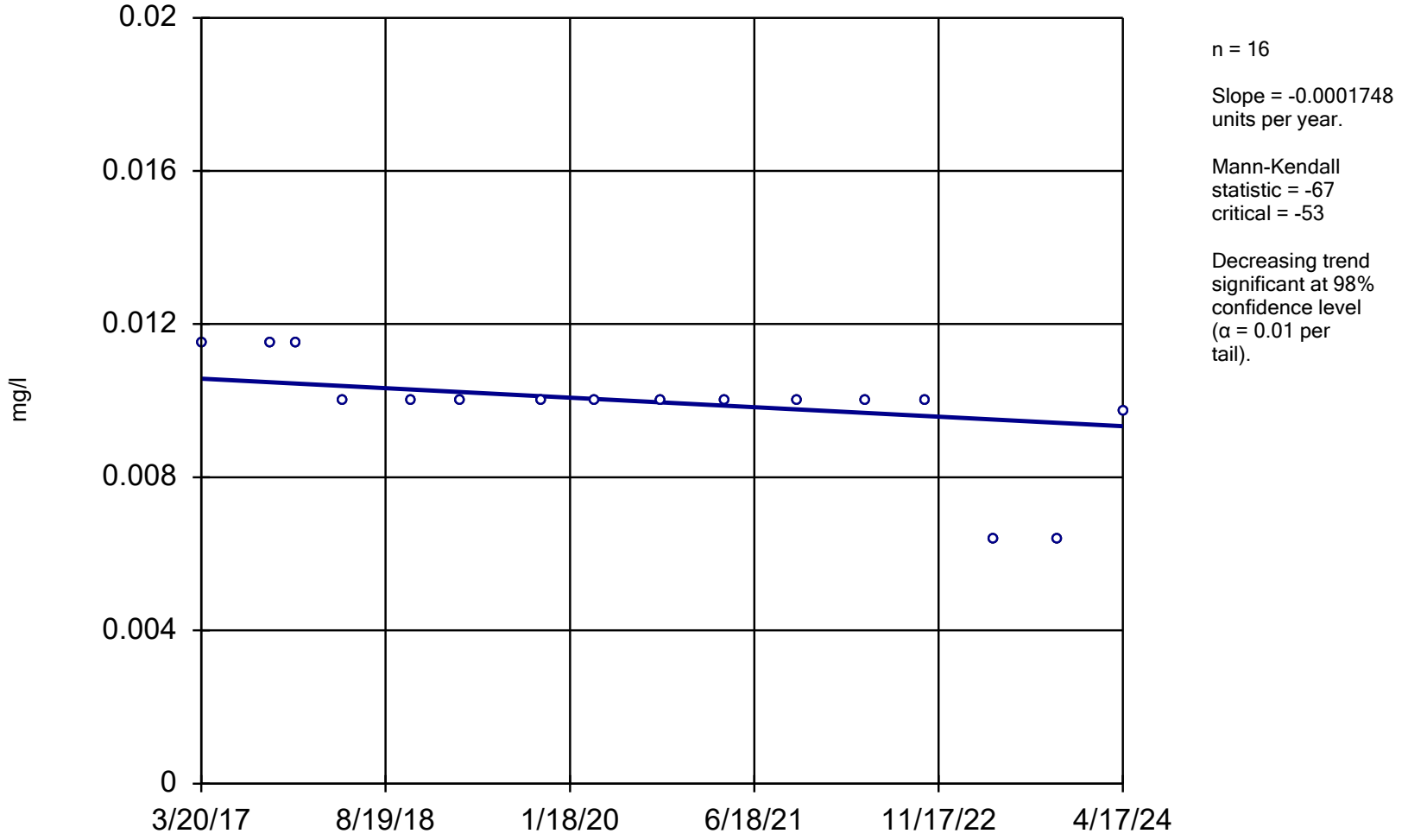
Constituent: Zinc Analysis Run 7/12/2024 2:08 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-305



n = 16

Slope = -0.0001748 units per year.

Mann-Kendall statistic = -67
critical = -53

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Zinc Analysis Run 7/12/2024 2:08 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Trend Test

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:09 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Antimony (mg/l)	**MW-15**	**0.00009751**	**113**	**73**	**Yes**	**20**	**90**	**0.02**	**NP**
Antimony (mg/l)	**MW-18**	**0.0001006**	**104**	**68**	**Yes**	**19**	**94.74**	**0.02**	**NP**
Antimony (mg/l)	**MW-19**	**0.00009502**	**102**	**68**	**Yes**	**19**	**94.74**	**0.02**	**NP**
Antimony (mg/l)	**MW-20**	**0.00009198**	**80**	**63**	**Yes**	**18**	**94.44**	**0.02**	**NP**
Antimony (mg/l)	MW-201B...	0.00004482	23	68	No	19	31.58	0.02	NP
Antimony (mg/l)	**MW-22**	**0.00009217**	**93**	**68**	**Yes**	**19**	**100**	**0.02**	**NP**
Antimony (mg/l)	MW-24	0.00008916	65	73	No	20	95	0.02	NP
Antimony (mg/l)	**MW-26A**	**0.00009585**	**67**	**53**	**Yes**	**16**	**100**	**0.02**	**NP**
Antimony (mg/l)	**MW-300**	**0.0001022**	**109**	**68**	**Yes**	**19**	**84.21**	**0.02**	**NP**
Antimony (mg/l)	**MW-301**	**0.00009811**	**98**	**68**	**Yes**	**19**	**94.74**	**0.02**	**NP**
Antimony (mg/l)	**MW-302R**	**0.00009593**	**102**	**73**	**Yes**	**20**	**100**	**0.02**	**NP**
Antimony (mg/l)	**MW-303**	**0.0001058**	**116**	**78**	**Yes**	**21**	**100**	**0.02**	**NP**
Antimony (mg/l)	MW-304R	0.0000844	64	73	No	20	100	0.02	NP
Antimony (mg/l)	**MW-305**	**0.00009593**	**102**	**73**	**Yes**	**20**	**100**	**0.02**	**NP**
Antimony (mg/l)	MW-501	-0.0000...	-13	-27	No	10	90	0.02	NP
Antimony (mg/l)	MW-9AR ...	0.00007225	31	48	No	15	86.67	0.02	NP
Arsenic (mg/l)	MW-15	-0.0002547	-67	-78	No	21	9.524	0.02	NP
Arsenic (mg/l)	**MW-18**	**-0.0000...**	**-69**	**-68**	**Yes**	**19**	**31.58**	**0.02**	**NP**
Arsenic (mg/l)	**MW-19**	**-0.000965**	**-105**	**-68**	**Yes**	**19**	**0**	**0.02**	**NP**
Arsenic (mg/l)	MW-20	-0.0004581	-39	-68	No	19	5.263	0.02	NP
Arsenic (mg/l)	MW-201B...	0.0001333	67	68	No	19	10.53	0.02	NP
Arsenic (mg/l)	MW-22	-0.0000...	-8	-53	No	16	0	0.02	NP
Arsenic (mg/l)	MW-24	0	-5	-68	No	19	57.89	0.02	NP
Arsenic (mg/l)	**MW-26A**	**0.0001941**	**82**	**58**	**Yes**	**17**	**64.71**	**0.02**	**NP**
Arsenic (mg/l)	MW-300	-0.0000...	-31	-68	No	19	42.11	0.02	NP
Arsenic (mg/l)	MW-301	-0.000468	-52	-68	No	19	0	0.02	NP
Arsenic (mg/l)	MW-302R	0.00001546	42	73	No	20	55	0.02	NP
Arsenic (mg/l)	MW-303	0.0001266	51	73	No	20	70	0.02	NP
Arsenic (mg/l)	MW-304R	0.00001648	32	73	No	20	65	0.02	NP
Arsenic (mg/l)	MW-305	0	16	73	No	20	90	0.02	NP
Arsenic (mg/l)	MW-501	0.001402	12	27	No	10	20	0.02	NP
Arsenic (mg/l)	MW-9AR ...	0.00023	21	48	No	15	13.33	0.02	NP
Barium (mg/l)	MW-15	-0.001256	-8	-73	No	20	0	0.02	NP
Barium (mg/l)	MW-18	-0.0003357	-3	-68	No	19	0	0.02	NP
Barium (mg/l)	**MW-19**	**-0.0442**	**-94**	**-68**	**Yes**	**19**	**0**	**0.02**	**NP**
Barium (mg/l)	MW-20	0.01966	18	63	No	18	0	0.02	NP
Barium (mg/l)	MW-201B...	0.00112	10	68	No	19	0	0.02	NP
Barium (mg/l)	MW-22	0.001427	19	68	No	19	0	0.02	NP
Barium (mg/l)	MW-24	0.0008459	18	73	No	20	0	0.02	NP
Barium (mg/l)	MW-26A	0.0106	30	53	No	16	0	0.02	NP
Barium (mg/l)	MW-300	-0.004297	-27	-68	No	19	0	0.02	NP
Barium (mg/l)	MW-301	-0.0006553	-26	-68	No	19	0	0.02	NP
Barium (mg/l)	MW-302R	0.003895	65	73	No	20	0	0.02	NP
Barium (mg/l)	MW-303	-0.001638	-30	-78	No	21	0	0.02	NP
Barium (mg/l)	MW-304R	0.00006703	5	68	No	19	0	0.02	NP
Barium (mg/l)	**MW-305**	**-0.01154**	**-126**	**-73**	**Yes**	**20**	**0**	**0.02**	**NP**
Barium (mg/l)	MW-501	-0.007625	-19	-27	No	10	0	0.02	NP
Barium (mg/l)	**MW-9AR ...**	**-0.02718**	**-61**	**-48**	**Yes**	**15**	**0**	**0.02**	**NP**
Beryllium (mg/l)	**MW-15**	**0.00001755**	**96**	**73**	**Yes**	**20**	**100**	**0.02**	**NP**
Beryllium (mg/l)	**MW-18**	**0.0000199**	**103**	**63**	**Yes**	**18**	**94.44**	**0.02**	**NP**

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Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Beryllium (mg/l)	**MW-19**	**0.00001989**	**103**	**63**	**Yes**	**18**	**94.44**	**0.02**	**NP**
Beryllium (mg/l)	**MW-20**	**0.00001675**	**86**	**58**	**Yes**	**17**	**100**	**0.02**	**NP**
Beryllium (mg/l)	**MW-201B...**	**0.0000256**	**122**	**68**	**Yes**	**19**	**89.47**	**0.02**	**NP**
Beryllium (mg/l)	**MW-22**	**0.00002109**	**117**	**68**	**Yes**	**19**	**89.47**	**0.02**	**NP**
Beryllium (mg/l)	**MW-24**	**0.00001757**	**96**	**73**	**Yes**	**20**	**95**	**0.02**	**NP**
Beryllium (mg/l)	**MW-26A**	**0.00001638**	**63**	**48**	**Yes**	**15**	**100**	**0.02**	**NP**
Beryllium (mg/l)	**MW-300**	**0.0000217**	**93**	**58**	**Yes**	**17**	**94.12**	**0.02**	**NP**
Beryllium (mg/l)	**MW-301**	**0.00001449**	**93**	**63**	**Yes**	**18**	**100**	**0.02**	**NP**
Beryllium (mg/l)	**MW-302R**	**0.00001875**	**122**	**73**	**Yes**	**20**	**95**	**0.02**	**NP**
Beryllium (mg/l)	**MW-303**	**0.00002026**	**103**	**63**	**Yes**	**18**	**100**	**0.02**	**NP**
Beryllium (mg/l)	**MW-304R**	**0.00001969**	**101**	**68**	**Yes**	**19**	**94.74**	**0.02**	**NP**
Beryllium (mg/l)	**MW-305**	**0.00001509**	**103**	**68**	**Yes**	**19**	**100**	**0.02**	**NP**
Beryllium (mg/l)	MW-501	0.00003197	22	23	No	9	66.67	0.02	NP
Beryllium (mg/l)	**MW-9AR ...**	**0.00001966**	**57**	**44**	**Yes**	**14**	**100**	**0.02**	**NP**
Cadmium (mg/l)	**MW-15**	**0.00000...**	**69**	**68**	**Yes**	**19**	**68.42**	**0.02**	**NP**
Cadmium (mg/l)	MW-18	0.00000...	13	68	No	19	0	0.02	NP
Cadmium (mg/l)	MW-19	0.00000...	26	68	No	19	84.21	0.02	NP
Cadmium (mg/l)	MW-20	0.00000...	60	63	No	18	100	0.02	NP
Cadmium (mg/l)	**MW-201B...**	**0.00000...**	**67**	**63**	**Yes**	**18**	**83.33**	**0.02**	**NP**
Cadmium (mg/l)	**MW-22**	**0.00000...**	**92**	**63**	**Yes**	**18**	**100**	**0.02**	**NP**
Cadmium (mg/l)	MW-24	-0.0000...	-16	-73	No	20	30	0.02	NP
Cadmium (mg/l)	MW-26A	0.00000...	8	53	No	16	68.75	0.02	NP
Cadmium (mg/l)	MW-300	-0.000015	-47	-68	No	19	31.58	0.02	NP
Cadmium (mg/l)	MW-301	0.00000...	57	58	No	17	94.12	0.02	NP
Cadmium (mg/l)	MW-302R	0.00000...	22	73	No	20	65	0.02	NP
Cadmium (mg/l)	MW-303	0.00001747	43	78	No	21	38.1	0.02	NP
Cadmium (mg/l)	MW-304R	0.00000...	44	68	No	19	73.68	0.02	NP
Cadmium (mg/l)	**MW-305**	**0.00000...**	**100**	**68**	**Yes**	**19**	**89.47**	**0.02**	**NP**
Cadmium (mg/l)	MW-501	0.00005987	26	27	No	10	40	0.02	NP
Cadmium (mg/l)	MW-9AR ...	0.00000...	26	44	No	14	100	0.02	NP
Chromium (mg/l)	**MW-15**	**0.00006337**	**102**	**68**	**Yes**	**19**	**94.74**	**0.02**	**NP**
Chromium (mg/l)	**MW-18**	**0.00006653**	**87**	**63**	**Yes**	**18**	**100**	**0.02**	**NP**
Chromium (mg/l)	**MW-19**	**0.00004737**	**60**	**53**	**Yes**	**16**	**93.75**	**0.02**	**NP**
Chromium (mg/l)	MW-20	-0.0000...	-46	-63	No	18	5.556	0.02	NP
Chromium (mg/l)	MW-201B...	0.00009206	52	68	No	19	68.42	0.02	NP
Chromium (mg/l)	**MW-22**	**0.00007284**	**104**	**68**	**Yes**	**19**	**89.47**	**0.02**	**NP**
Chromium (mg/l)	**MW-24**	**0.00006853**	**100**	**68**	**Yes**	**19**	**94.74**	**0.02**	**NP**
Chromium (mg/l)	**MW-26A**	**0.0001132**	**85**	**48**	**Yes**	**15**	**86.67**	**0.02**	**NP**
Chromium (mg/l)	**MW-300**	**0.00007276**	**96**	**68**	**Yes**	**19**	**94.74**	**0.02**	**NP**
Chromium (mg/l)	**MW-301**	**0.00008606**	**121**	**63**	**Yes**	**18**	**94.44**	**0.02**	**NP**
Chromium (mg/l)	**MW-302R**	**0.00008457**	**133**	**68**	**Yes**	**19**	**94.74**	**0.02**	**NP**
Chromium (mg/l)	MW-303	0.00004059	66	68	No	19	94.74	0.02	NP
Chromium (mg/l)	**MW-304R**	**0.00005048**	**70**	**63**	**Yes**	**18**	**100**	**0.02**	**NP**
Chromium (mg/l)	**MW-305**	**0.00007499**	**116**	**73**	**Yes**	**20**	**100**	**0.02**	**NP**
Chromium (mg/l)	MW-501	0	16	27	No	10	100	0.02	NP
Chromium (mg/l)	**MW-9AR ...**	**0.00004059**	**55**	**48**	**Yes**	**15**	**100**	**0.02**	**NP**
Cobalt (mg/l)	**MW-15**	**0.0002473**	**88**	**78**	**Yes**	**21**	**0**	**0.02**	**NP**
Cobalt (mg/l)	**MW-18**	**-0.0009804**	**-112**	**-73**	**Yes**	**20**	**0**	**0.02**	**NP**
Cobalt (mg/l)	MW-19	0.0001695	22	68	No	19	0	0.02	NP
Cobalt (mg/l)	MW-20	-0.0000...	-17	-68	No	19	0	0.02	NP

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Cobalt (mg/l)	MW-201B...	0.00000...	4	68	No	19	21.05	0.02	NP
Cobalt (mg/l)	**MW-22**	**0.00002462**	**81**	**63**	**Yes**	**18**	**0**	**0.02**	**NP**
Cobalt (mg/l)	MW-24	0.00002714	8	78	No	21	0	0.02	NP
Cobalt (mg/l)	**MW-26A**	**0.002236**	**96**	**58**	**Yes**	**17**	**0**	**0.02**	**NP**
Cobalt (mg/l)	MW-300	-0.0005379	-53	-68	No	19	10.53	0.02	NP
Cobalt (mg/l)	**MW-301**	**-0.0006985**	**-91**	**-68**	**Yes**	**19**	**0**	**0.02**	**NP**
Cobalt (mg/l)	**MW-302R**	**-0.0001433**	**-75**	**-73**	**Yes**	**20**	**15**	**0.02**	**NP**
Cobalt (mg/l)	MW-303	0.001171	61	84	No	22	0	0.02	NP
Cobalt (mg/l)	**MW-304R**	**0.0007476**	**140**	**84**	**Yes**	**22**	**9.091**	**0.02**	**NP**
Cobalt (mg/l)	MW-305	0.00004921	35	63	No	18	0	0.02	NP
Cobalt (mg/l)	MW-501	0.003283	25	27	No	10	0	0.02	NP
Cobalt (mg/l)	MW-9AR ...	0.00006974	29	48	No	15	26.67	0.02	NP
Copper (mg/l)	MW-15	0.0000976	46	68	No	19	78.95	0.02	NP
Copper (mg/l)	MW-18	0.00008974	49	68	No	19	78.95	0.02	NP
Copper (mg/l)	MW-19	0	-8	-68	No	19	94.74	0.02	NP
Copper (mg/l)	MW-20	0	11	63	No	18	100	0.02	NP
Copper (mg/l)	MW-201B...	0.0001195	41	68	No	19	47.37	0.02	NP
Copper (mg/l)	MW-22	0	4	58	No	17	82.35	0.02	NP
Copper (mg/l)	MW-24	0.0001476	53	73	No	20	45	0.02	NP
Copper (mg/l)	MW-26A	0.0000355	14	53	No	16	87.5	0.02	NP
Copper (mg/l)	MW-300	0.00003626	24	68	No	19	73.68	0.02	NP
Copper (mg/l)	MW-301	0	10	58	No	17	94.12	0.02	NP
Copper (mg/l)	MW-302R	-0.0000...	-15	-73	No	20	70	0.02	NP
Copper (mg/l)	MW-303	0.00003438	18	78	No	21	85.71	0.02	NP
Copper (mg/l)	MW-304R	0	-6	-73	No	20	90	0.02	NP
Copper (mg/l)	MW-305	0	7	73	No	20	100	0.02	NP
Copper (mg/l)	MW-501	0.0004625	22	23	No	9	66.67	0.02	NP
Copper (mg/l)	MW-9AR ...	0	9	39	No	13	100	0.02	NP
Lead (mg/l)	MW-15	-0.0000...	-27	-73	No	20	70	0.02	NP
Lead (mg/l)	MW-18	-0.0000...	-19	-68	No	19	73.68	0.02	NP
Lead (mg/l)	MW-19	0	-5	-68	No	19	84.21	0.02	NP
Lead (mg/l)	MW-20	-2.0e-7	-15	-63	No	18	100	0.02	NP
Lead (mg/l)	MW-201B...	0.00006095	55	68	No	19	21.05	0.02	NP
Lead (mg/l)	MW-22	-0.0000...	-48	-68	No	19	89.47	0.02	NP
Lead (mg/l)	MW-24	0	0	68	No	19	78.95	0.02	NP
Lead (mg/l)	MW-26A	0	-4	-48	No	15	86.67	0.02	NP
Lead (mg/l)	MW-300	0	-10	-63	No	18	83.33	0.02	NP
Lead (mg/l)	MW-301	-0.0000...	-21	-53	No	16	100	0.02	NP
Lead (mg/l)	MW-302R	-0.0000...	-32	-73	No	20	80	0.02	NP
Lead (mg/l)	MW-303	-0.0000...	-21	-78	No	21	76.19	0.02	NP
Lead (mg/l)	MW-304R	-0.0000...	-19	-68	No	19	94.74	0.02	NP
Lead (mg/l)	MW-305	-8.9e-7	-16	-73	No	20	75	0.02	NP
Lead (mg/l)	MW-501	0.00005794	17	27	No	10	50	0.02	NP
Lead (mg/l)	MW-9AR ...	0	-8	-48	No	15	100	0.02	NP
Mercury (mg/l)	MW-15	-4.1e-7	NaN	NaN	No	2	100	NaN	NP
Mercury (mg/l)	MW-18	-4.0e-7	NaN	NaN	No	2	100	NaN	NP
Mercury (mg/l)	MW-19	0.00000...	NaN	NaN	No	2	100	NaN	NP
Mercury (mg/l)	MW-20	0.00000...	NaN	NaN	No	2	100	NaN	NP
Mercury (mg/l)	MW-201B...	-0.0000...	-2	-8	No	4	100	0.02	NP
Mercury (mg/l)	MW-22	0.00000...	NaN	NaN	No	2	100	NaN	NP

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Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Mercury (mg/l)	MW-24	-4.1e-7	NaN	NaN	No	2	100	NaN	NP
Mercury (mg/l)	MW-26A	-0.0000...	NaN	NaN	No	3	100	NaN	NP
Mercury (mg/l)	MW-300	0.00000...	NaN	NaN	No	2	100	NaN	NP
Mercury (mg/l)	MW-301	-0.0000...	-13	-31	No	11	100	0.02	NP
Mercury (mg/l)	MW-302R	-4.1e-7	NaN	NaN	No	2	100	NaN	NP
Mercury (mg/l)	MW-304R	0.00000...	NaN	NaN	No	2	100	NaN	NP
Mercury (mg/l)	MW-305	-4.1e-7	NaN	NaN	No	2	100	NaN	NP
Mercury (mg/l)	MW-9AR ...	0	NaN	NaN	No	2	100	NaN	NP
Nickel (mg/l)	**MW-15**	**0.0005217**	**98**	**78**	**Yes**	**21**	**0**	**0.02**	**NP**
Nickel (mg/l)	MW-18	-0.0006672	-27	-73	No	20	0	0.02	NP
Nickel (mg/l)	MW-19	-0.00159	-65	-68	No	19	0	0.02	NP
Nickel (mg/l)	MW-20	0.0004163	27	68	No	19	0	0.02	NP
Nickel (mg/l)	MW-201B...	0.0001304	56	68	No	19	57.89	0.02	NP
Nickel (mg/l)	MW-22	-0.0000...	-13	-63	No	18	0	0.02	NP
Nickel (mg/l)	**MW-24**	**-0.002421**	**-81**	**-78**	**Yes**	**21**	**0**	**0.02**	**NP**
Nickel (mg/l)	**MW-26A**	**0.00106**	**72**	**58**	**Yes**	**17**	**0**	**0.02**	**NP**
Nickel (mg/l)	**MW-300**	**-0.001781**	**-69**	**-68**	**Yes**	**19**	**10.53**	**0.02**	**NP**
Nickel (mg/l)	**MW-301**	**-0.0009835**	**-79**	**-68**	**Yes**	**19**	**0**	**0.02**	**NP**
Nickel (mg/l)	**MW-302R**	**-0.001286**	**-106**	**-78**	**Yes**	**21**	**23.81**	**0.02**	**NP**
Nickel (mg/l)	MW-303	0.005315	59	84	No	22	9.091	0.02	NP
Nickel (mg/l)	MW-304R	0.0003208	44	78	No	21	9.524	0.02	NP
Nickel (mg/l)	MW-305	0.00000...	5	73	No	20	25	0.02	NP
Nickel (mg/l)	MW-501	0.006779	17	27	No	10	0	0.02	NP
Nickel (mg/l)	**MW-9AR ...**	**0.00008018**	**53**	**39**	**Yes**	**13**	**92.31**	**0.02**	**NP**
Selenium (mg/l)	**MW-15**	**0.00005753**	**84**	**58**	**Yes**	**17**	**88.24**	**0.02**	**NP**
Selenium (mg/l)	**MW-18**	**0.00007349**	**69**	**53**	**Yes**	**16**	**75**	**0.02**	**NP**
Selenium (mg/l)	MW-19	0.00003538	53	58	No	17	82.35	0.02	NP
Selenium (mg/l)	**MW-20**	**0.00005311**	**59**	**58**	**Yes**	**17**	**82.35**	**0.02**	**NP**
Selenium (mg/l)	MW-201B...	0.0000204	48	48	No	15	100	0.02	NP
Selenium (mg/l)	**MW-22**	**0.00007509**	**96**	**58**	**Yes**	**17**	**82.35**	**0.02**	**NP**
Selenium (mg/l)	**MW-24**	**0.00002761**	**71**	**63**	**Yes**	**18**	**83.33**	**0.02**	**NP**
Selenium (mg/l)	**MW-26A**	**0.00007472**	**71**	**48**	**Yes**	**15**	**93.33**	**0.02**	**NP**
Selenium (mg/l)	**MW-300**	**0.00009213**	**95**	**63**	**Yes**	**18**	**72.22**	**0.02**	**NP**
Selenium (mg/l)	**MW-301**	**0.00005761**	**79**	**58**	**Yes**	**17**	**94.12**	**0.02**	**NP**
Selenium (mg/l)	**MW-302R**	**0.00003302**	**73**	**58**	**Yes**	**17**	**94.12**	**0.02**	**NP**
Selenium (mg/l)	**MW-303**	**0.0000484**	**74**	**63**	**Yes**	**18**	**77.78**	**0.02**	**NP**
Selenium (mg/l)	**MW-304R**	**0.00004803**	**70**	**63**	**Yes**	**18**	**94.44**	**0.02**	**NP**
Selenium (mg/l)	**MW-305**	**0.00005963**	**105**	**68**	**Yes**	**19**	**100**	**0.02**	**NP**
Selenium (mg/l)	MW-501	0.0001442	24	27	No	10	100	0.02	NP
Selenium (mg/l)	MW-9AR ...	0.00007799	45	48	No	15	80	0.02	NP
Silver (mg/l)	**MW-15**	**0.0000482**	**124**	**73**	**Yes**	**20**	**100**	**0.02**	**NP**
Silver (mg/l)	**MW-18**	**0.0000465**	**95**	**63**	**Yes**	**18**	**94.44**	**0.02**	**NP**
Silver (mg/l)	**MW-19**	**0.00004735**	**113**	**68**	**Yes**	**19**	**100**	**0.02**	**NP**
Silver (mg/l)	**MW-20**	**0.0000473**	**113**	**68**	**Yes**	**19**	**100**	**0.02**	**NP**
Silver (mg/l)	**MW-201B...**	**0.00004721**	**113**	**68**	**Yes**	**19**	**100**	**0.02**	**NP**
Silver (mg/l)	**MW-22**	**0.00004364**	**107**	**68**	**Yes**	**19**	**100**	**0.02**	**NP**
Silver (mg/l)	**MW-24**	**0.00004815**	**124**	**73**	**Yes**	**20**	**95**	**0.02**	**NP**
Silver (mg/l)	**MW-26A**	**0.00004232**	**74**	**53**	**Yes**	**16**	**100**	**0.02**	**NP**
Silver (mg/l)	**MW-300**	**0.00004479**	**89**	**68**	**Yes**	**19**	**89.47**	**0.02**	**NP**
Silver (mg/l)	**MW-301**	**0.00004614**	**93**	**63**	**Yes**	**18**	**100**	**0.02**	**NP**

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Silver (mg/l)	**MW-302R**	**0.00004579**	**116**	**73**	**Yes**	**20**	**100**	**0.02**	**NP**
Silver (mg/l)	**MW-303**	**0.00004725**	**138**	**78**	**Yes**	**21**	**100**	**0.02**	**NP**
Silver (mg/l)	**MW-304R**	**0.00004746**	**116**	**73**	**Yes**	**20**	**100**	**0.02**	**NP**
Silver (mg/l)	**MW-305**	**0.000046**	**122**	**73**	**Yes**	**20**	**95**	**0.02**	**NP**
Silver (mg/l)	**MW-501**	**0.00001022**	**33**	**27**	**Yes**	**10**	**100**	**0.02**	**NP**
Silver (mg/l)	**MW-9AR ...**	**0.00004026**	**83**	**48**	**Yes**	**15**	**100**	**0.02**	**NP**
Sulfide (mg/l)	MW-15	0	NaN	NaN	No	2	100	NaN	NP
Sulfide (mg/l)	MW-18	-0.01255	NaN	NaN	No	2	50	NaN	NP
Sulfide (mg/l)	MW-19	0.01027	NaN	NaN	No	2	100	NaN	NP
Sulfide (mg/l)	MW-20	0.4492	30	44	No	14	28.57	0.02	NP
Sulfide (mg/l)	MW-201B...	0	19	53	No	16	93.75	0.02	NP
Sulfide (mg/l)	MW-22	0.01029	NaN	NaN	No	2	100	NaN	NP
Sulfide (mg/l)	MW-24	0	NaN	NaN	No	2	100	NaN	NP
Sulfide (mg/l)	MW-26A	0	NaN	NaN	No	3	100	NaN	NP
Sulfide (mg/l)	MW-300	0.01495	22	31	No	11	90.91	0.02	NP
Sulfide (mg/l)	MW-301	-0.02698	NaN	NaN	No	2	100	NaN	NP
Sulfide (mg/l)	MW-302R	0	NaN	NaN	No	2	100	NaN	NP
Sulfide (mg/l)	MW-304R	0	NaN	NaN	No	2	100	NaN	NP
Sulfide (mg/l)	MW-305	0	NaN	NaN	No	2	100	NaN	NP
Sulfide (mg/l)	MW-9AR ...	0	-2	-39	No	13	100	0.02	NP
Thallium (mg/l)	**MW-15**	**0.00003338**	**82**	**73**	**Yes**	**20**	**100**	**0.02**	**NP**
Thallium (mg/l)	**MW-18**	**0.00003295**	**92**	**63**	**Yes**	**18**	**66.67**	**0.02**	**NP**
Thallium (mg/l)	MW-19	0.00003109	66	68	No	19	94.74	0.02	NP
Thallium (mg/l)	MW-20	0.00003111	67	68	No	19	100	0.02	NP
Thallium (mg/l)	**MW-201B...**	**0.0000367**	**95**	**63**	**Yes**	**18**	**77.78**	**0.02**	**NP**
Thallium (mg/l)	**MW-22**	**0.00003117**	**69**	**68**	**Yes**	**19**	**100**	**0.02**	**NP**
Thallium (mg/l)	**MW-24**	**0.00003276**	**82**	**73**	**Yes**	**20**	**90**	**0.02**	**NP**
Thallium (mg/l)	**MW-26A**	**0.00003628**	**47**	**44**	**Yes**	**14**	**100**	**0.02**	**NP**
Thallium (mg/l)	**MW-300**	**0.00004122**	**78**	**68**	**Yes**	**19**	**68.42**	**0.02**	**NP**
Thallium (mg/l)	**MW-301**	**0.00003586**	**64**	**63**	**Yes**	**18**	**100**	**0.02**	**NP**
Thallium (mg/l)	**MW-302R**	**0.00003345**	**84**	**73**	**Yes**	**20**	**100**	**0.02**	**NP**
Thallium (mg/l)	**MW-303**	**0.00003289**	**84**	**78**	**Yes**	**21**	**100**	**0.02**	**NP**
Thallium (mg/l)	**MW-304R**	**0.00003856**	**76**	**73**	**Yes**	**20**	**90**	**0.02**	**NP**
Thallium (mg/l)	**MW-305**	**0.00003613**	**85**	**73**	**Yes**	**20**	**90**	**0.02**	**NP**
Thallium (mg/l)	MW-501	0	16	27	No	10	100	0.02	NP
Thallium (mg/l)	MW-9AR ...	0	27	44	No	14	100	0.02	NP
Tin (mg/l)	MW-15	0.0002852	NaN	NaN	No	2	100	NaN	NP
Tin (mg/l)	MW-18	0.0002748	NaN	NaN	No	2	100	NaN	NP
Tin (mg/l)	MW-19	0.0004367	NaN	NaN	No	2	100	NaN	NP
Tin (mg/l)	MW-20	0.000437	NaN	NaN	No	2	100	NaN	NP
Tin (mg/l)	MW-201B...	-0.0000...	NaN	NaN	No	3	100	NaN	NP
Tin (mg/l)	MW-22	0.0004374	NaN	NaN	No	2	100	NaN	NP
Tin (mg/l)	MW-24	0.0002852	NaN	NaN	No	2	100	NaN	NP
Tin (mg/l)	MW-26A	0.0002728	NaN	NaN	No	3	100	NaN	NP
Tin (mg/l)	MW-300	0.0004367	NaN	NaN	No	2	100	NaN	NP
Tin (mg/l)	MW-301	0.0000869	7	27	No	10	100	0.02	NP
Tin (mg/l)	MW-302R	0.0002852	NaN	NaN	No	2	100	NaN	NP
Tin (mg/l)	MW-304R	0.0002028	NaN	NaN	No	2	100	NaN	NP
Tin (mg/l)	MW-305	0.0002852	NaN	NaN	No	2	100	NaN	NP
Tin (mg/l)	MW-9AR ...	0.0006912	NaN	NaN	No	3	66.67	NaN	NP

Trend Test

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:09 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Vanadium (mg/l)	MW-15	0.00005904	29	73	No	20	15	0.02	NP
Vanadium (mg/l)	**MW-18**	**0.00006587**	**82**	**68**	**Yes**	**19**	**89.47**	**0.02**	**NP**
Vanadium (mg/l)	**MW-19**	**0.00007767**	**86**	**68**	**Yes**	**19**	**78.95**	**0.02**	**NP**
Vanadium (mg/l)	MW-20	-0.0001409	-42	-68	No	19	0	0.02	NP
Vanadium (mg/l)	**MW-201B...**	**0.0001352**	**74**	**68**	**Yes**	**19**	**57.89**	**0.02**	**NP**
Vanadium (mg/l)	**MW-22**	**0.00006878**	**104**	**63**	**Yes**	**18**	**83.33**	**0.02**	**NP**
Vanadium (mg/l)	**MW-24**	**0.00004092**	**83**	**63**	**Yes**	**18**	**66.67**	**0.02**	**NP**
Vanadium (mg/l)	**MW-26A**	**0.00005587**	**50**	**44**	**Yes**	**14**	**64.29**	**0.02**	**NP**
Vanadium (mg/l)	**MW-300**	**0.00009036**	**105**	**63**	**Yes**	**18**	**88.89**	**0.02**	**NP**
Vanadium (mg/l)	**MW-301**	**0.00007048**	**76**	**63**	**Yes**	**18**	**94.44**	**0.02**	**NP**
Vanadium (mg/l)	MW-302R	0.00005172	57	68	No	19	73.68	0.02	NP
Vanadium (mg/l)	**MW-303**	**0.00006447**	**96**	**63**	**Yes**	**18**	**94.44**	**0.02**	**NP**
Vanadium (mg/l)	**MW-304R**	**0.0000633**	**73**	**53**	**Yes**	**16**	**87.5**	**0.02**	**NP**
Vanadium (mg/l)	MW-305	0.00004473	52	73	No	20	80	0.02	NP
Vanadium (mg/l)	MW-501	0.0001206	19	23	No	9	55.56	0.02	NP
Vanadium (mg/l)	**MW-9AR ...**	**0.00009191**	**58**	**48**	**Yes**	**15**	**100**	**0.02**	**NP**
Zinc (mg/l)	MW-15	0	-28	-53	No	16	93.75	0.02	NP
Zinc (mg/l)	MW-18	-0.0000...	-52	-63	No	18	72.22	0.02	NP
Zinc (mg/l)	MW-19	0	2	58	No	17	94.12	0.02	NP
Zinc (mg/l)	MW-20	0	-18	-58	No	17	94.12	0.02	NP
Zinc (mg/l)	MW-201B...	0	5	48	No	15	73.33	0.02	NP
Zinc (mg/l)	MW-22	0	-42	-58	No	17	94.12	0.02	NP
Zinc (mg/l)	**MW-24**	**-0.0000...**	**-66**	**-58**	**Yes**	**17**	**94.12**	**0.02**	**NP**
Zinc (mg/l)	MW-26A	0	-5	-48	No	15	100	0.02	NP
Zinc (mg/l)	MW-300	0	-38	-53	No	16	87.5	0.02	NP
Zinc (mg/l)	MW-301	0	-27	-63	No	18	100	0.02	NP
Zinc (mg/l)	MW-302R	-0.0000...	-42	-48	No	15	86.67	0.02	NP
Zinc (mg/l)	MW-303	0	-22	-73	No	20	95	0.02	NP
Zinc (mg/l)	MW-304R	0	-41	-58	No	17	94.12	0.02	NP
Zinc (mg/l)	**MW-305**	**-0.0001748**	**-67**	**-53**	**Yes**	**16**	**100**	**0.02**	**NP**
Zinc (mg/l)	MW-501	0	4	27	No	10	60	0.02	NP
Zinc (mg/l)	MW-9AR ...	0	-37	-48	No	15	93.33	0.02	NP

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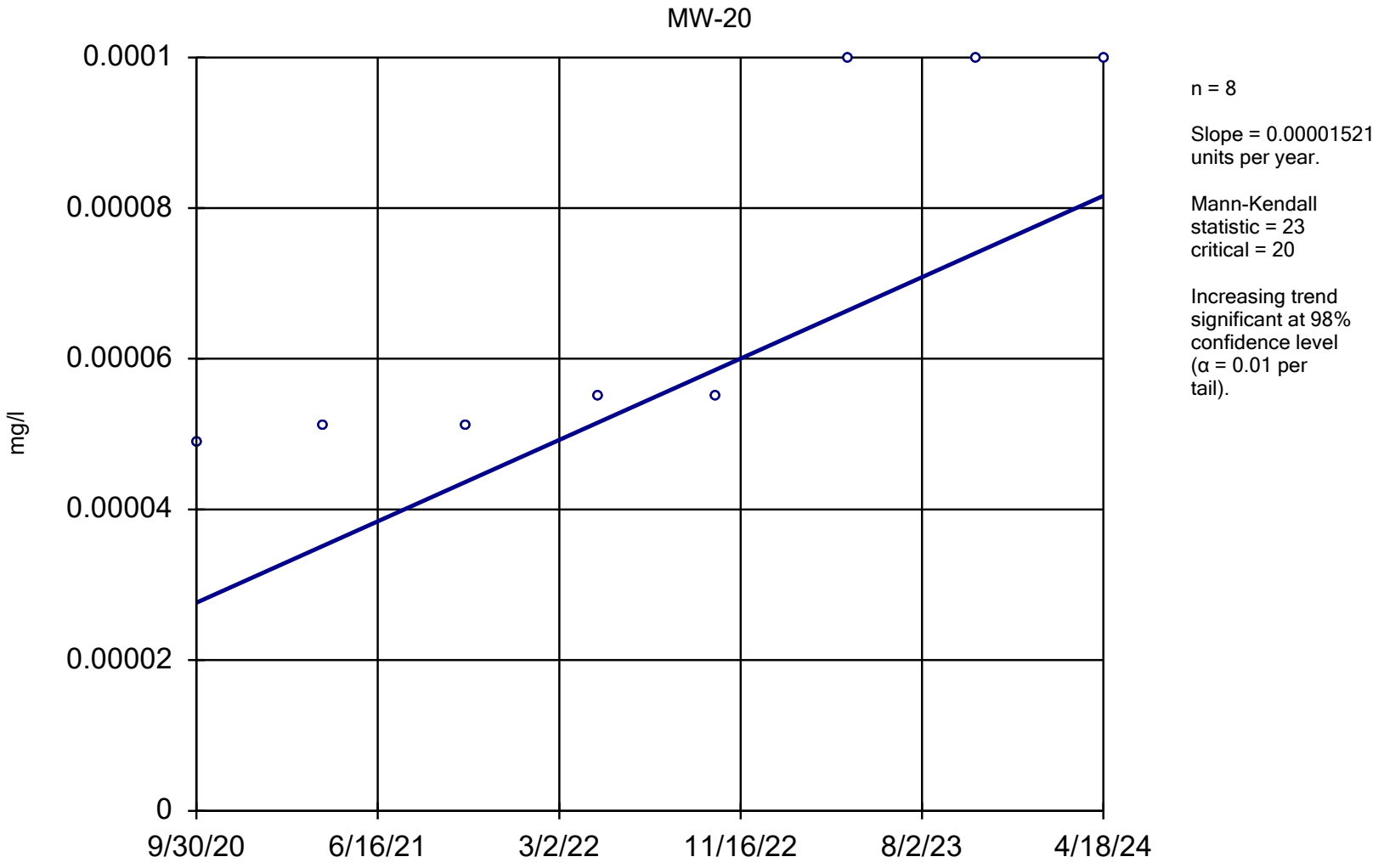
Monitoring Well Inorganic Trend Analysis – Recent Events Dataset – Spring 2024

Hollow symbols indicate censored values.

Sen's Slope Estimator

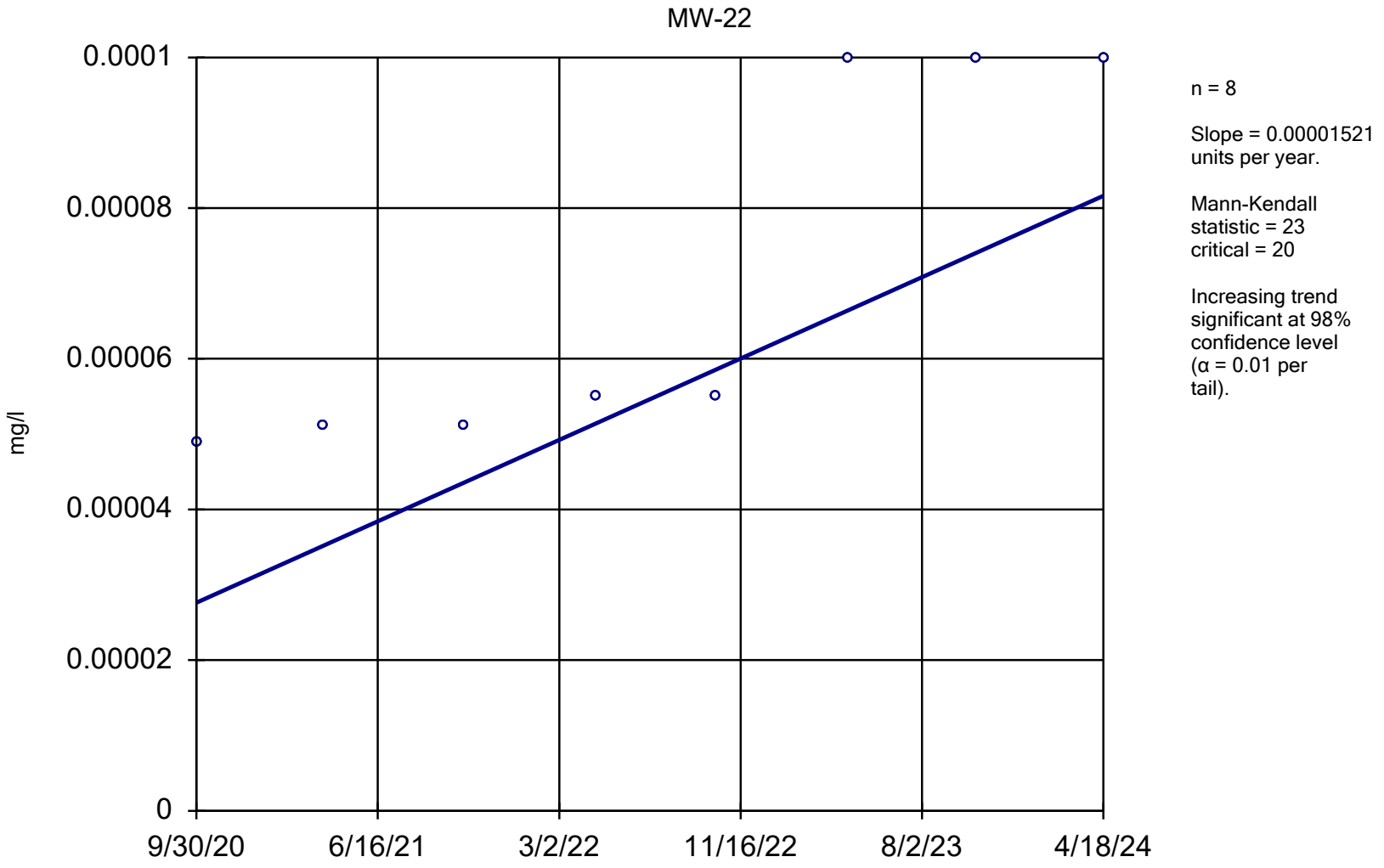


Constituent: Cadmium Analysis Run 7/12/2024 2:11 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



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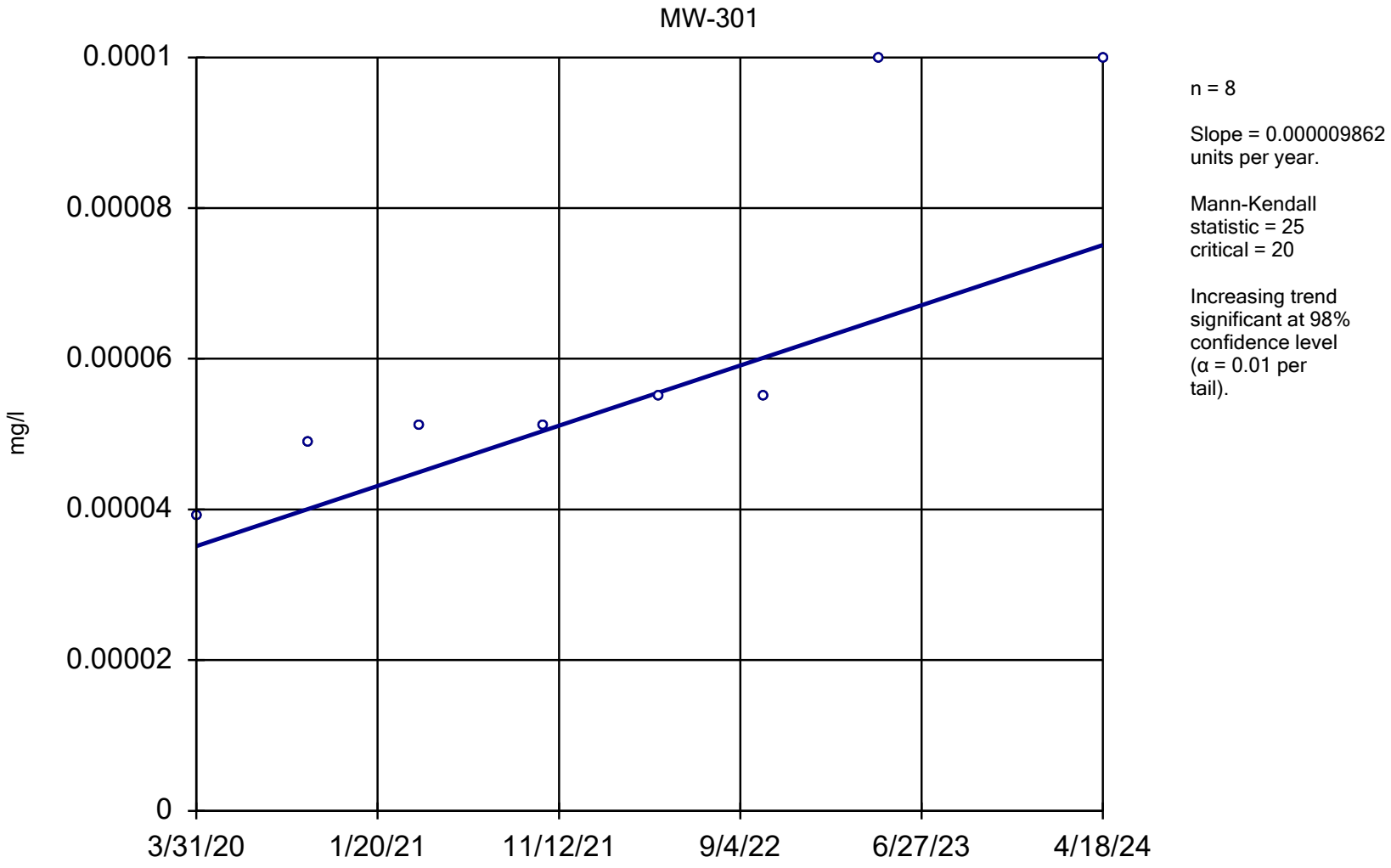
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



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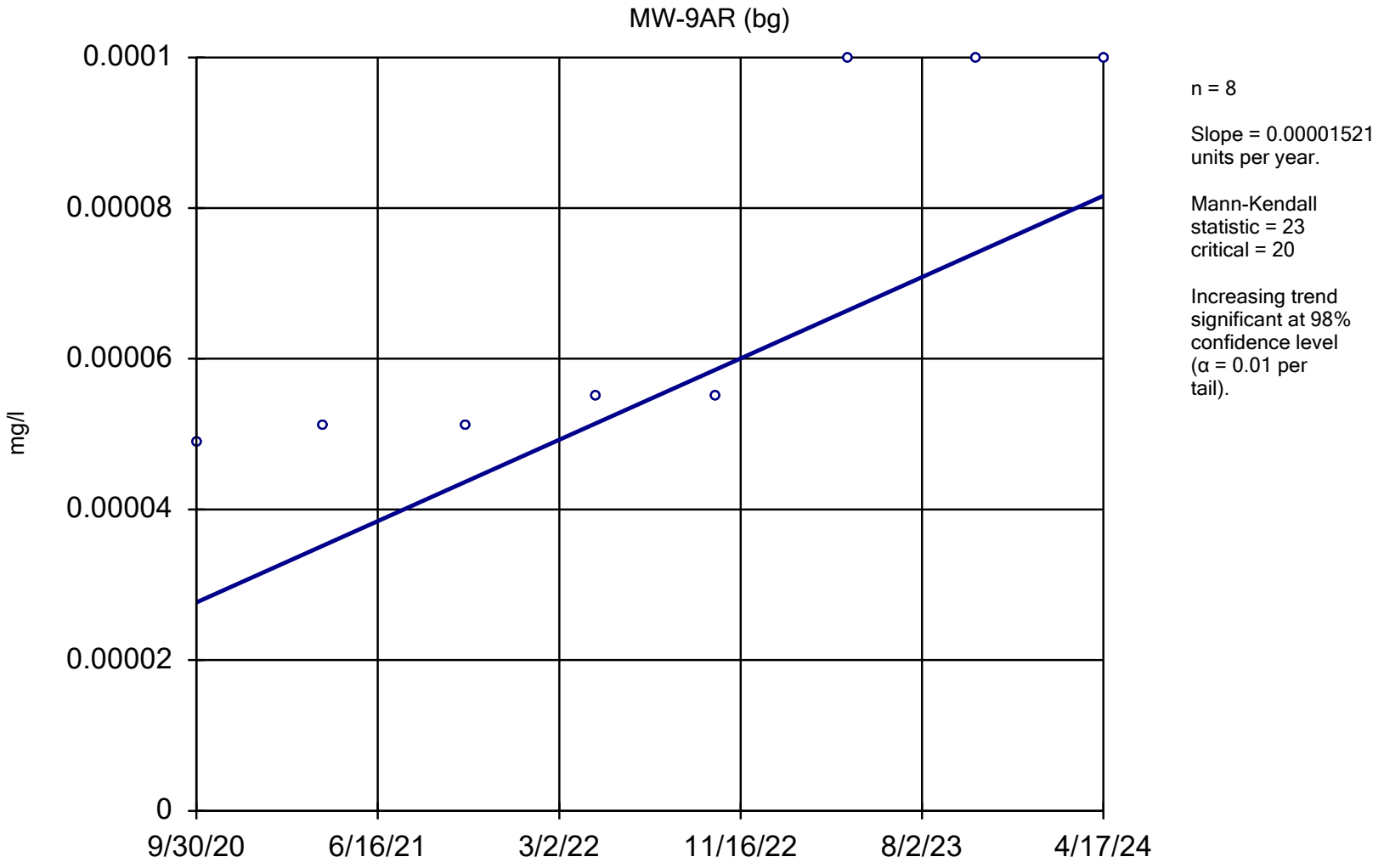
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



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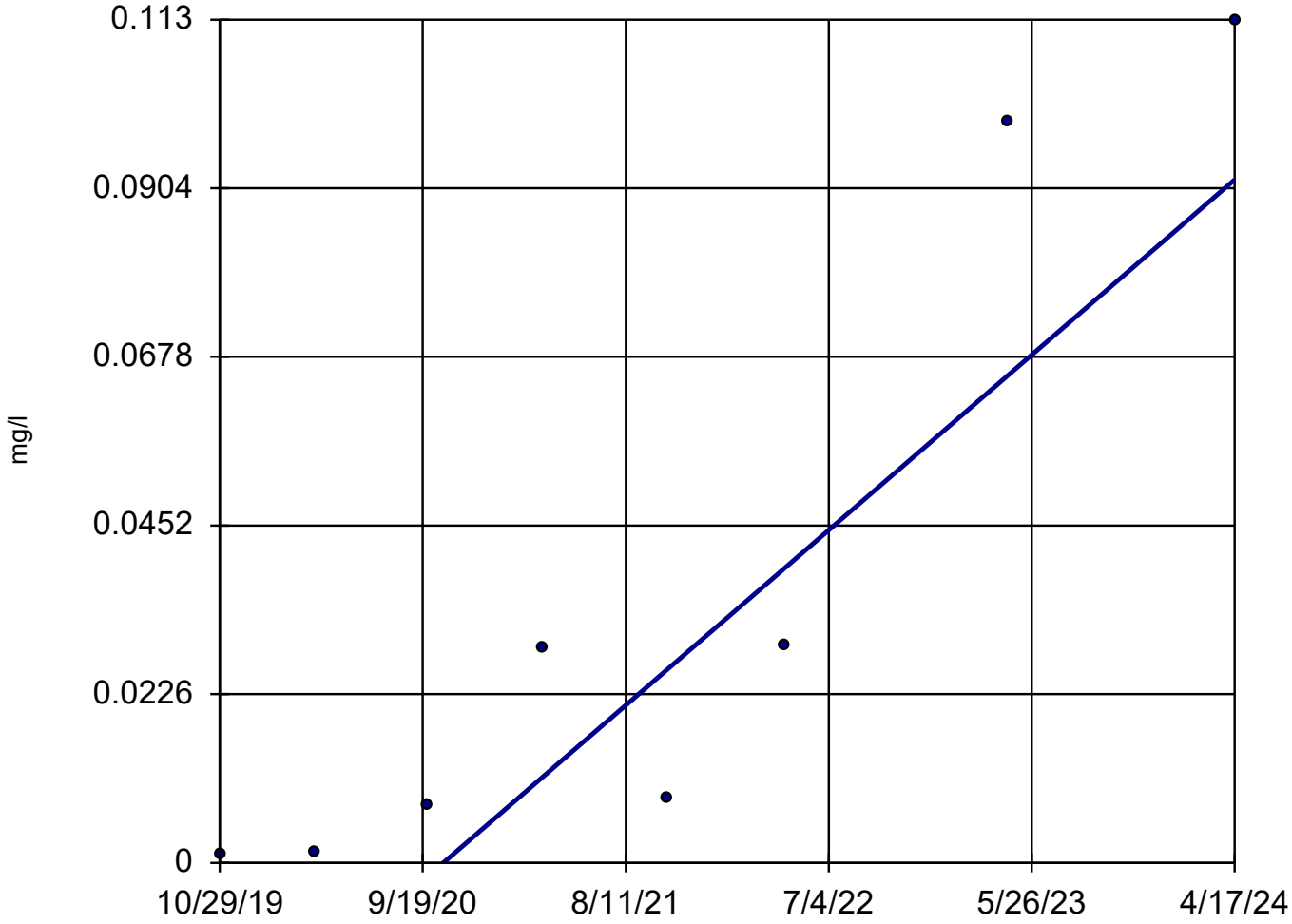
Linn County Data: CRLCSWA_Groundwater Database

Sen's Slope Estimator

MW-26A



n = 8

Slope = 0.02625 units per year.

Mann-Kendall statistic = 26
critical = 20

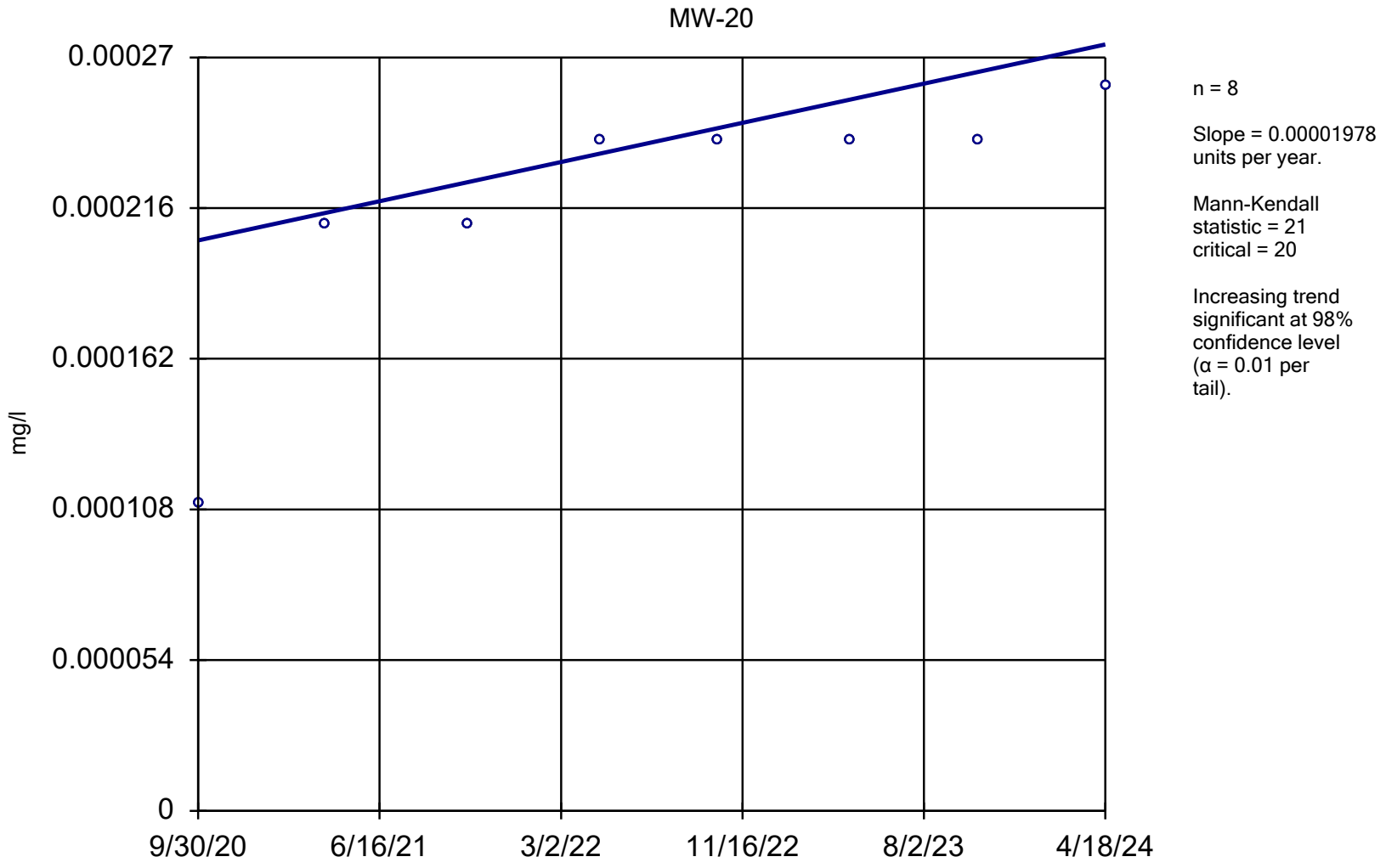
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Cobalt Analysis Run 7/12/2024 2:11 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

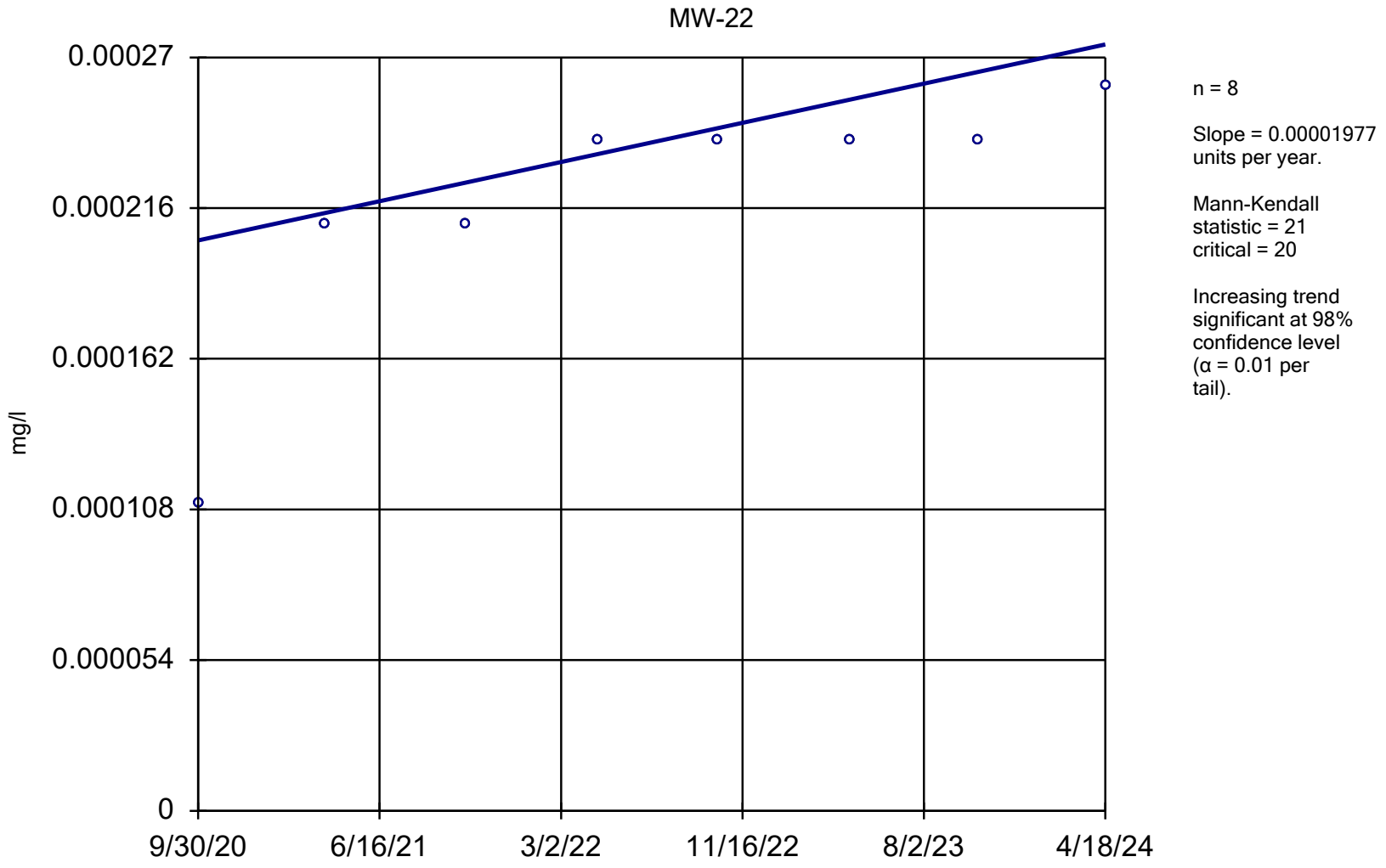


Constituent: Lead Analysis Run 7/12/2024 2:12 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



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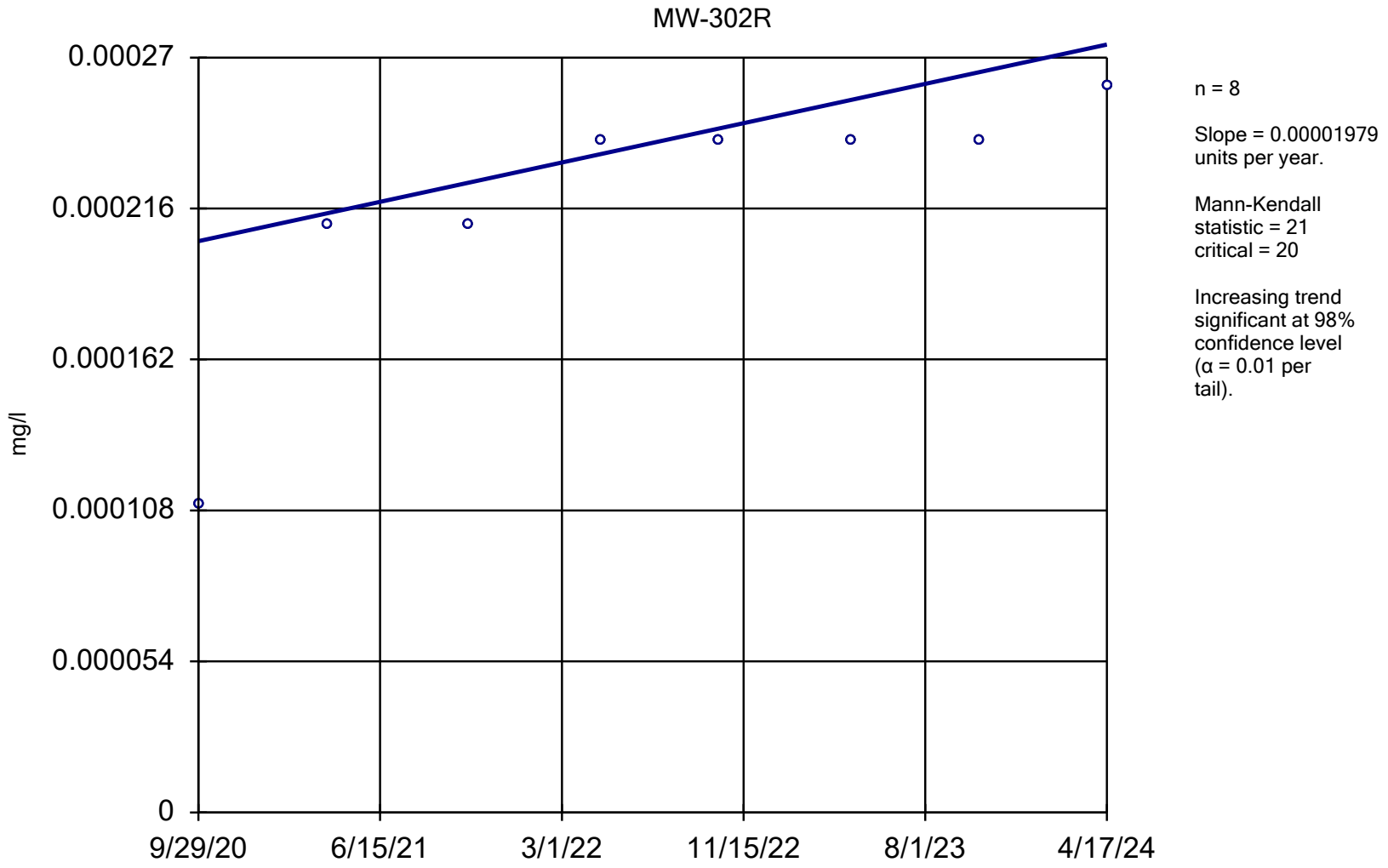
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

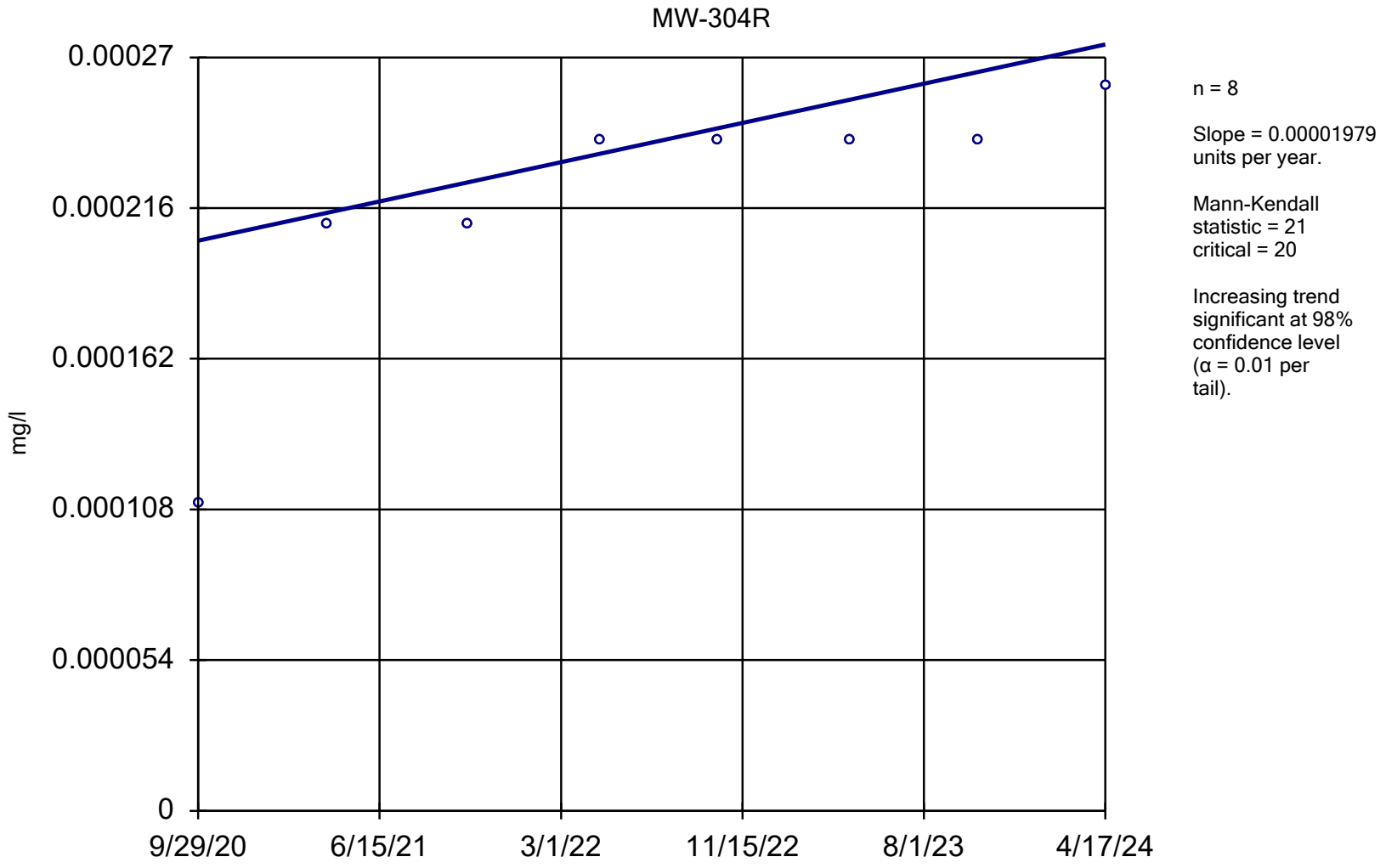


Constituent: Lead Analysis Run 7/12/2024 2:12 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



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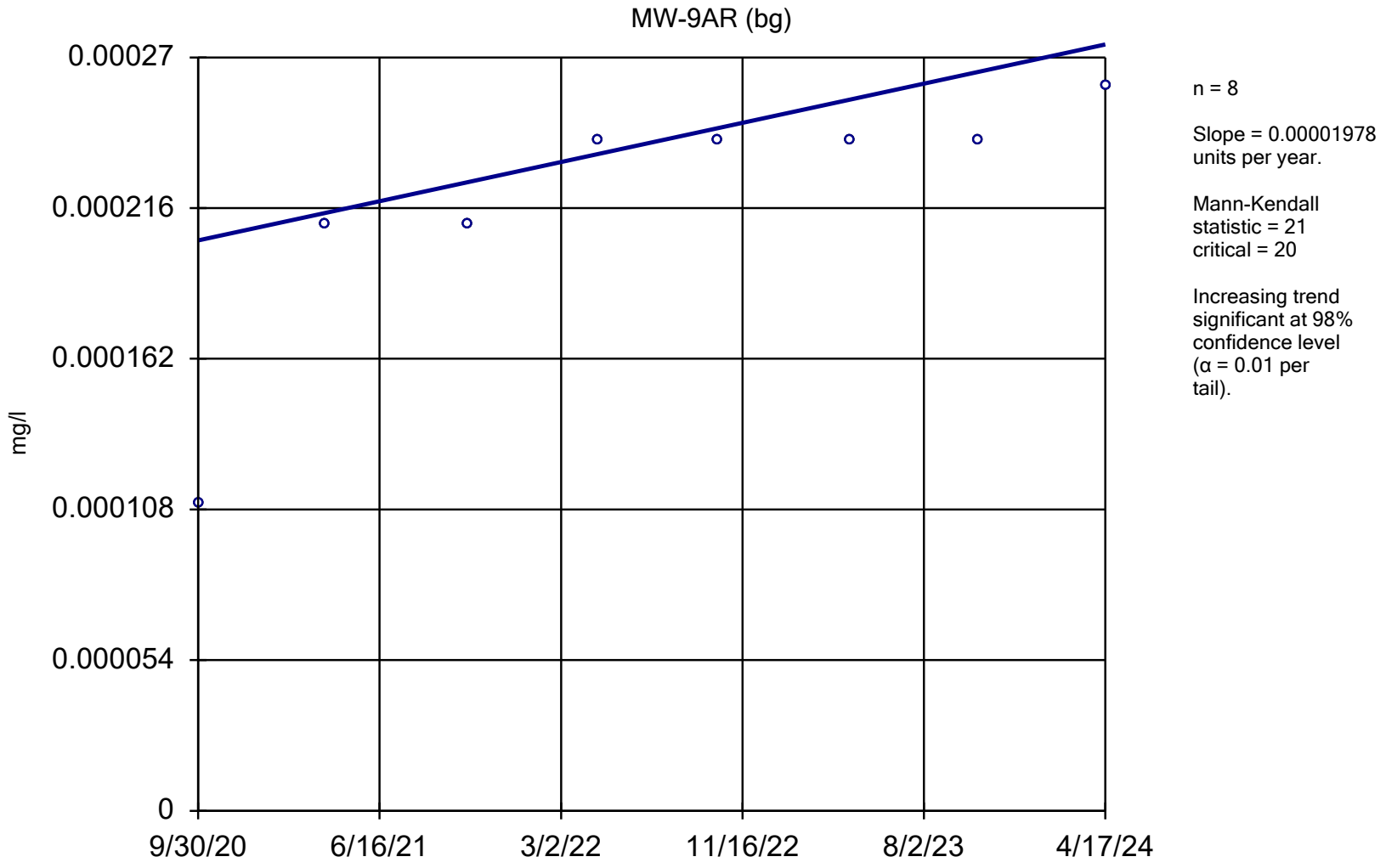
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

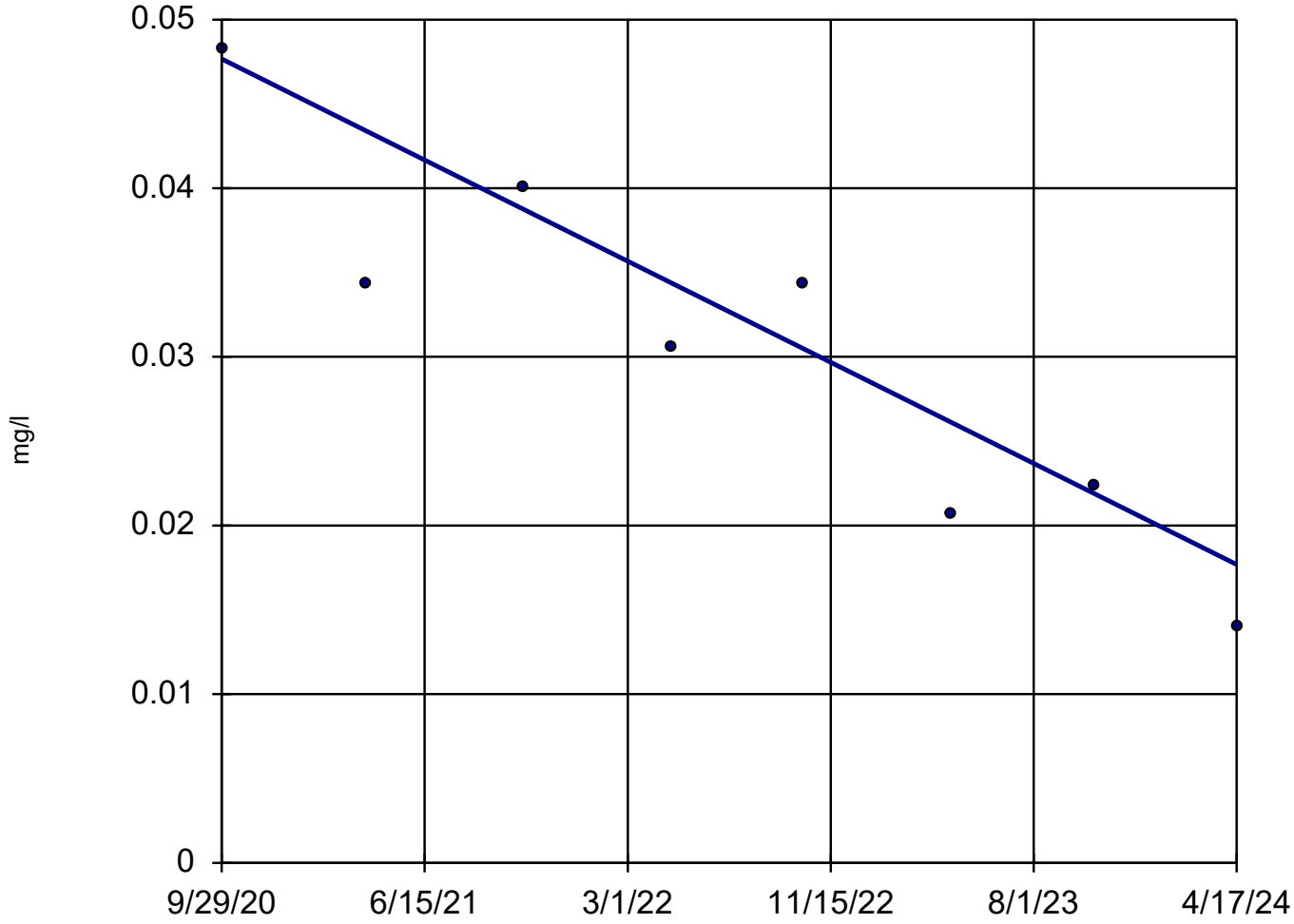


Constituent: Lead Analysis Run 7/12/2024 2:12 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Sen's Slope Estimator

MW-24



n = 8

Slope = -0.008439 units per year.

Mann-Kendall statistic = -22
critical = -20

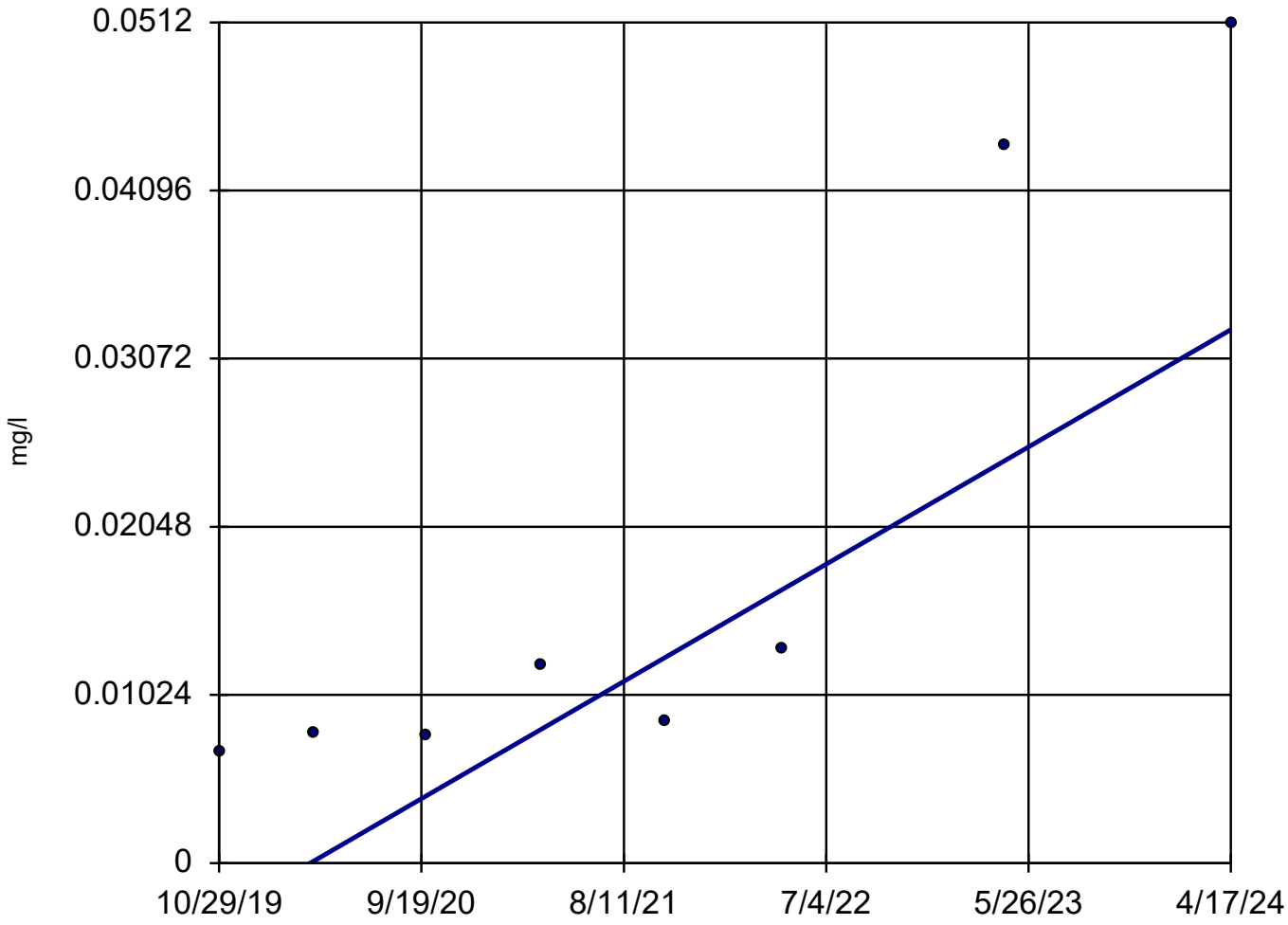
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Nickel Analysis Run 7/12/2024 2:12 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Sen's Slope Estimator

MW-26A



n = 8

Slope = 0.007985 units per year.

Mann-Kendall statistic = 24
critical = 20

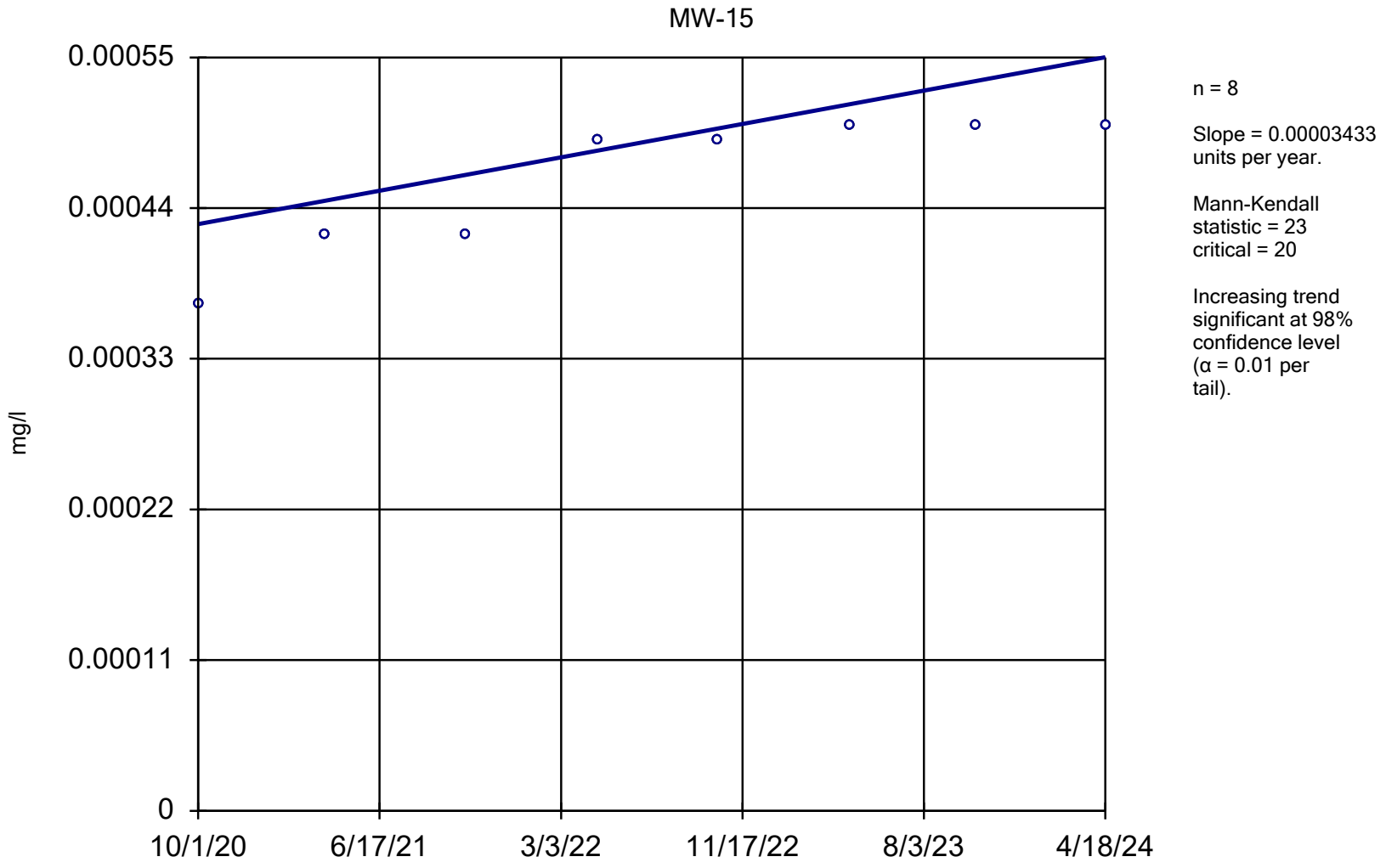
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Nickel Analysis Run 7/12/2024 2:12 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

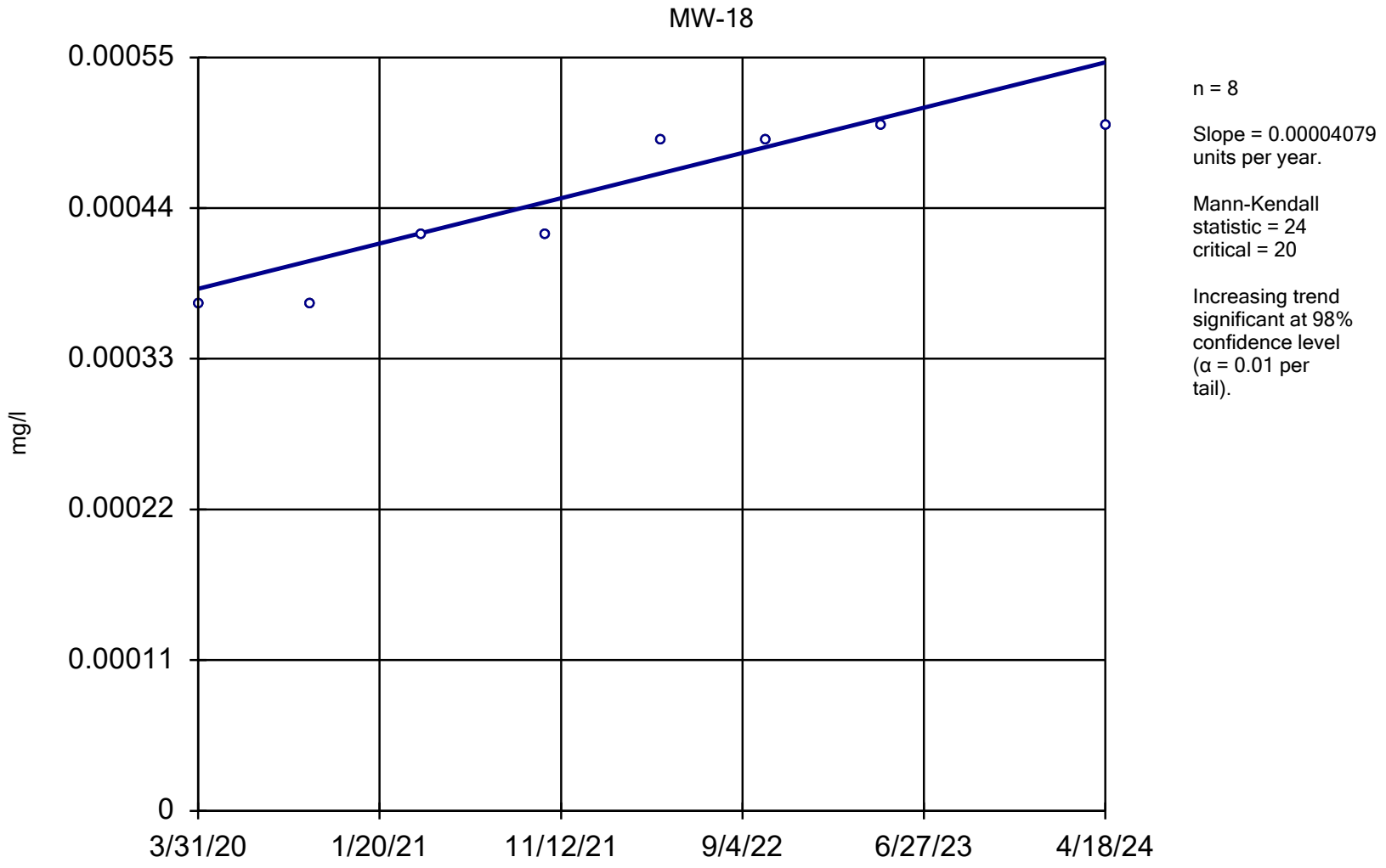


Constituent: Silver Analysis Run 7/12/2024 2:13 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



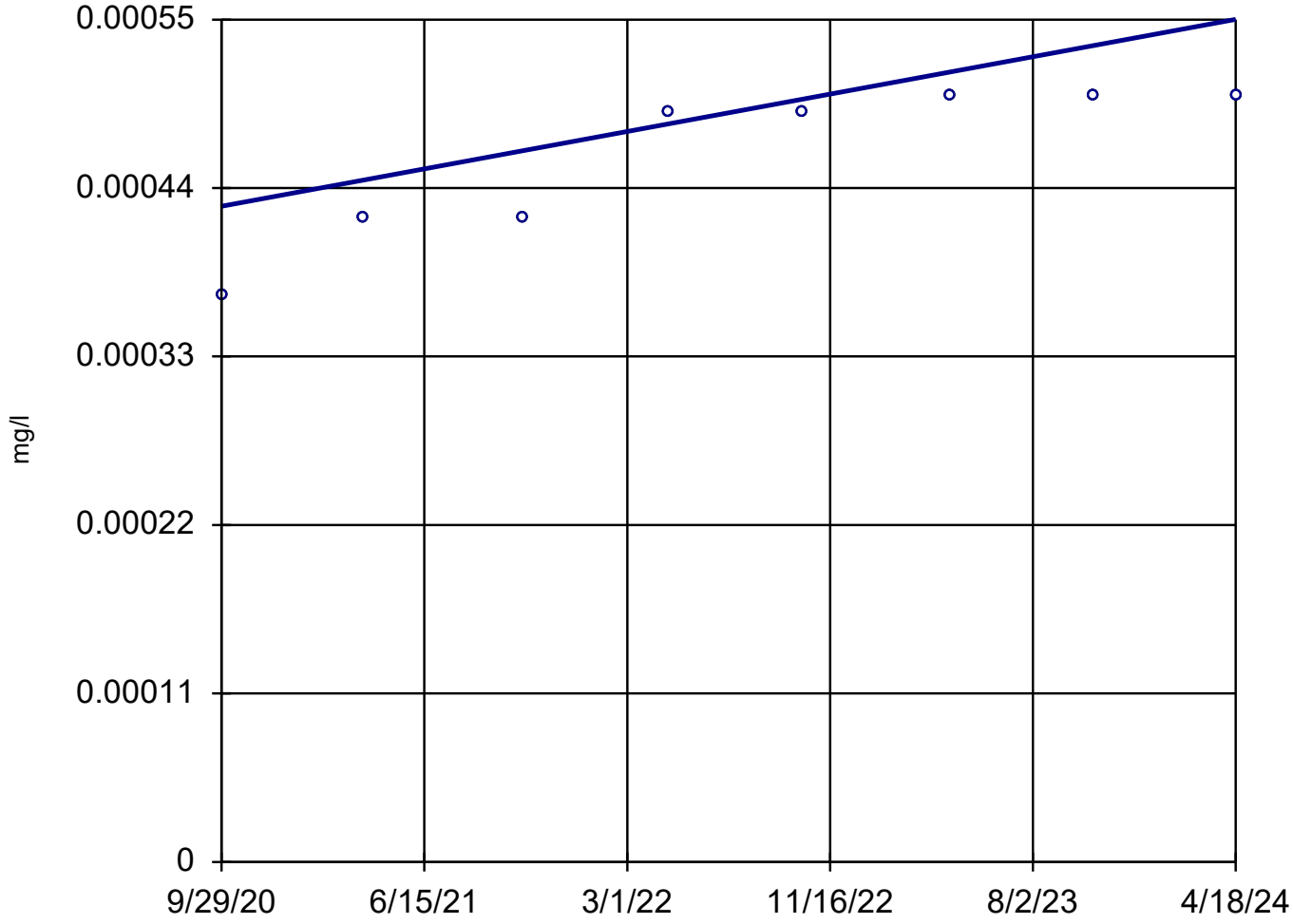
Constituent: Silver Analysis Run 7/12/2024 2:13 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-19



n = 8

Slope = 0.0000343 units per year.

Mann-Kendall statistic = 23
critical = 20

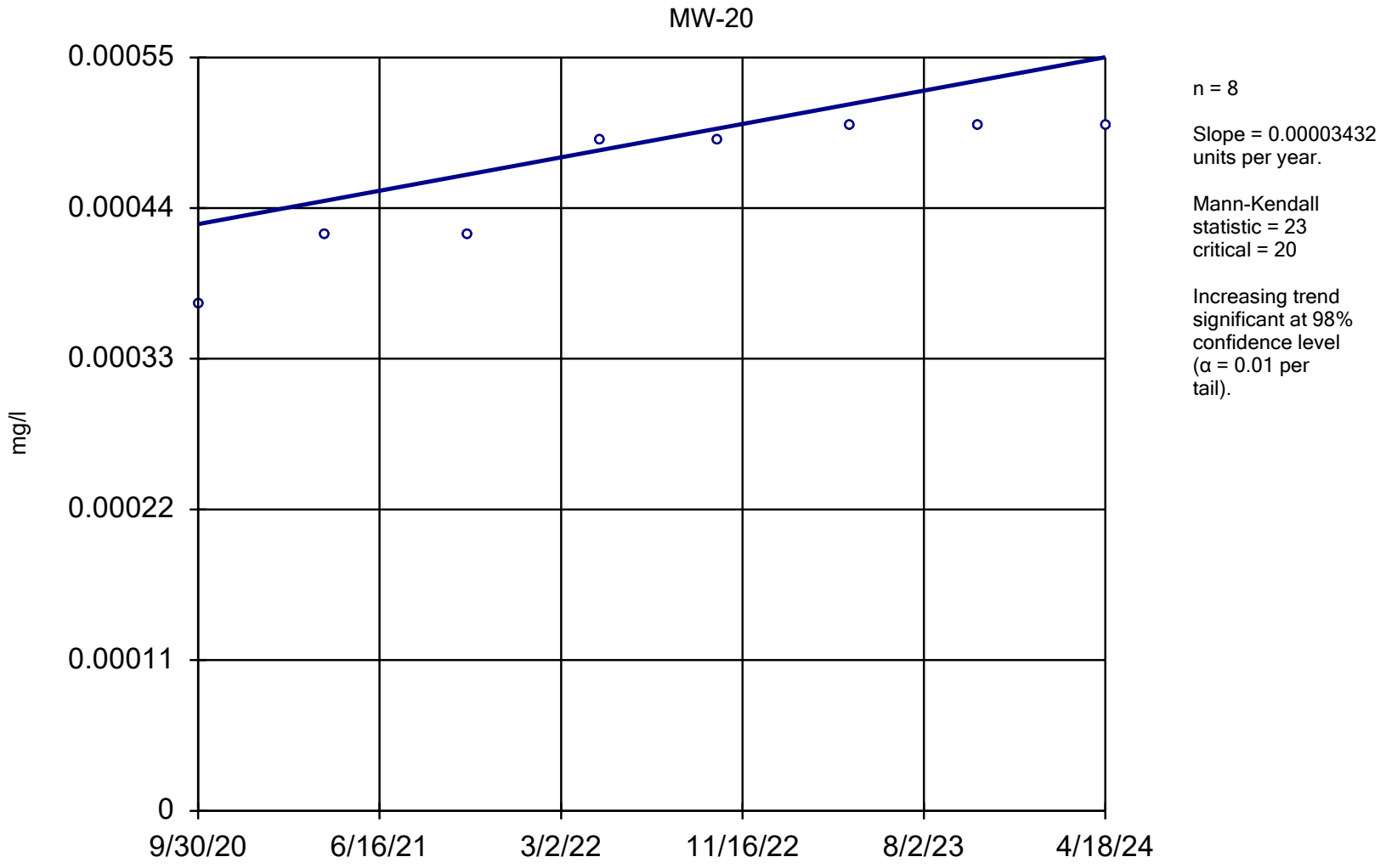
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Silver Analysis Run 7/12/2024 2:13 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

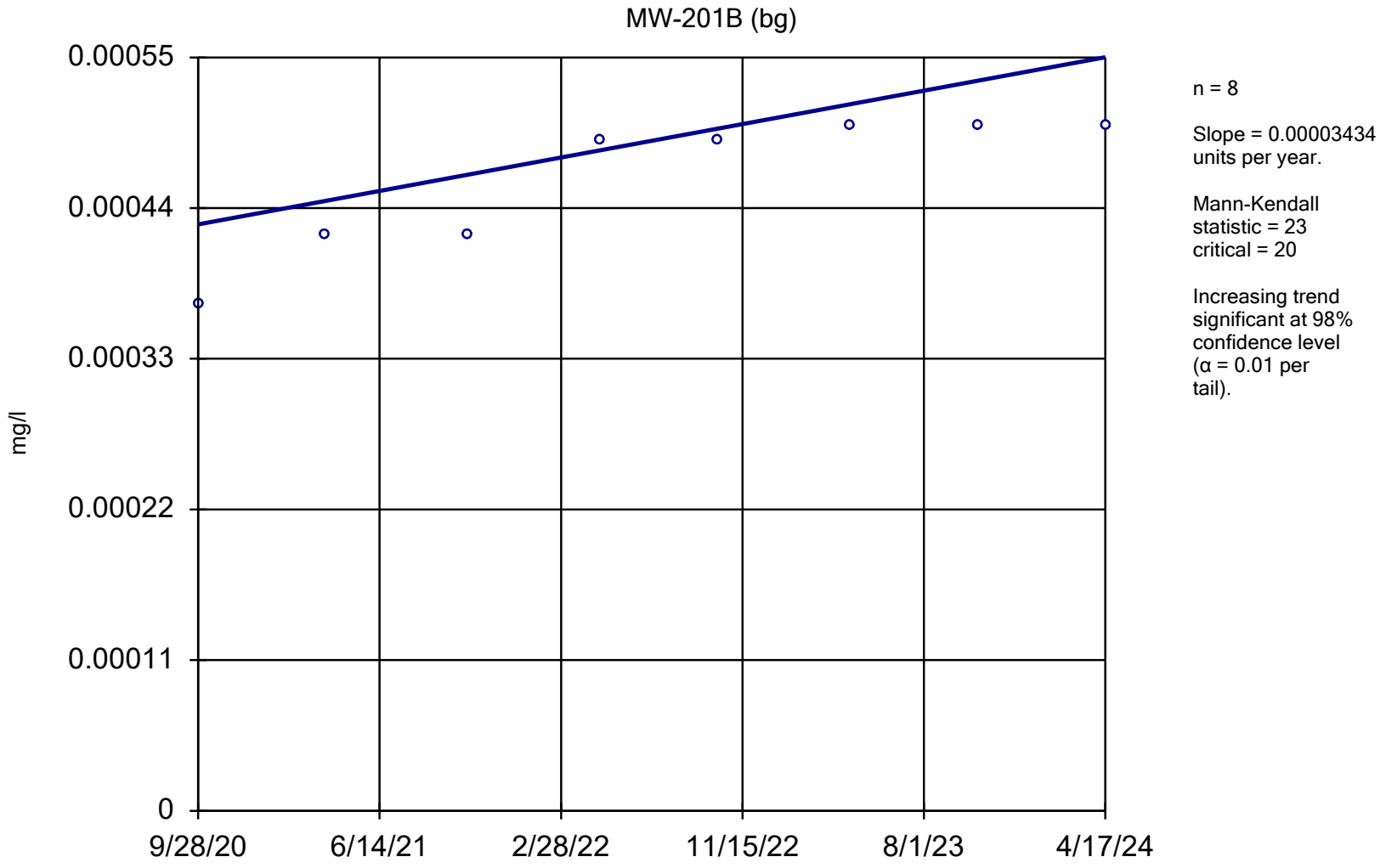


Constituent: Silver Analysis Run 7/12/2024 2:13 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

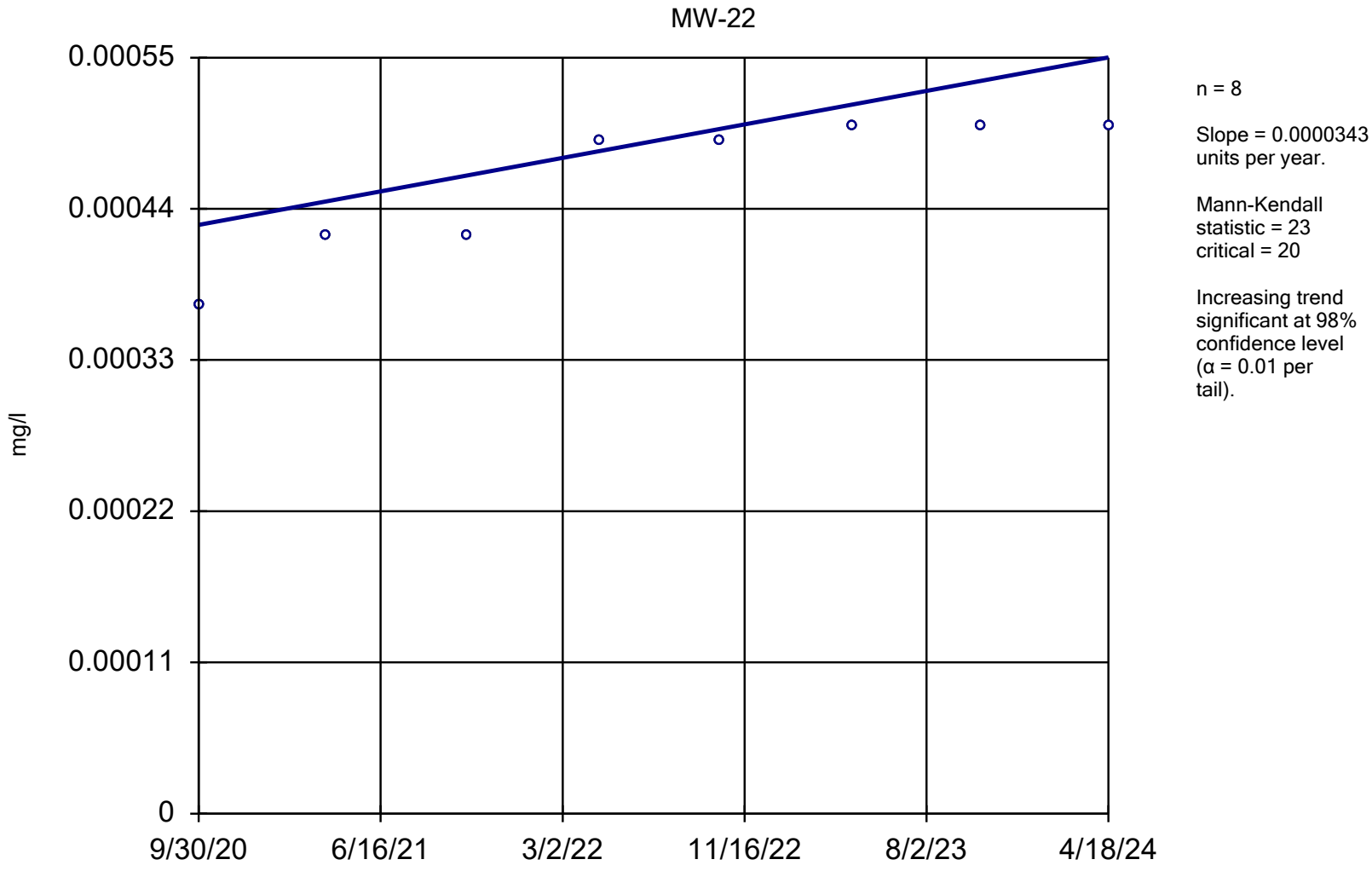


Constituent: Silver Analysis Run 7/12/2024 2:13 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



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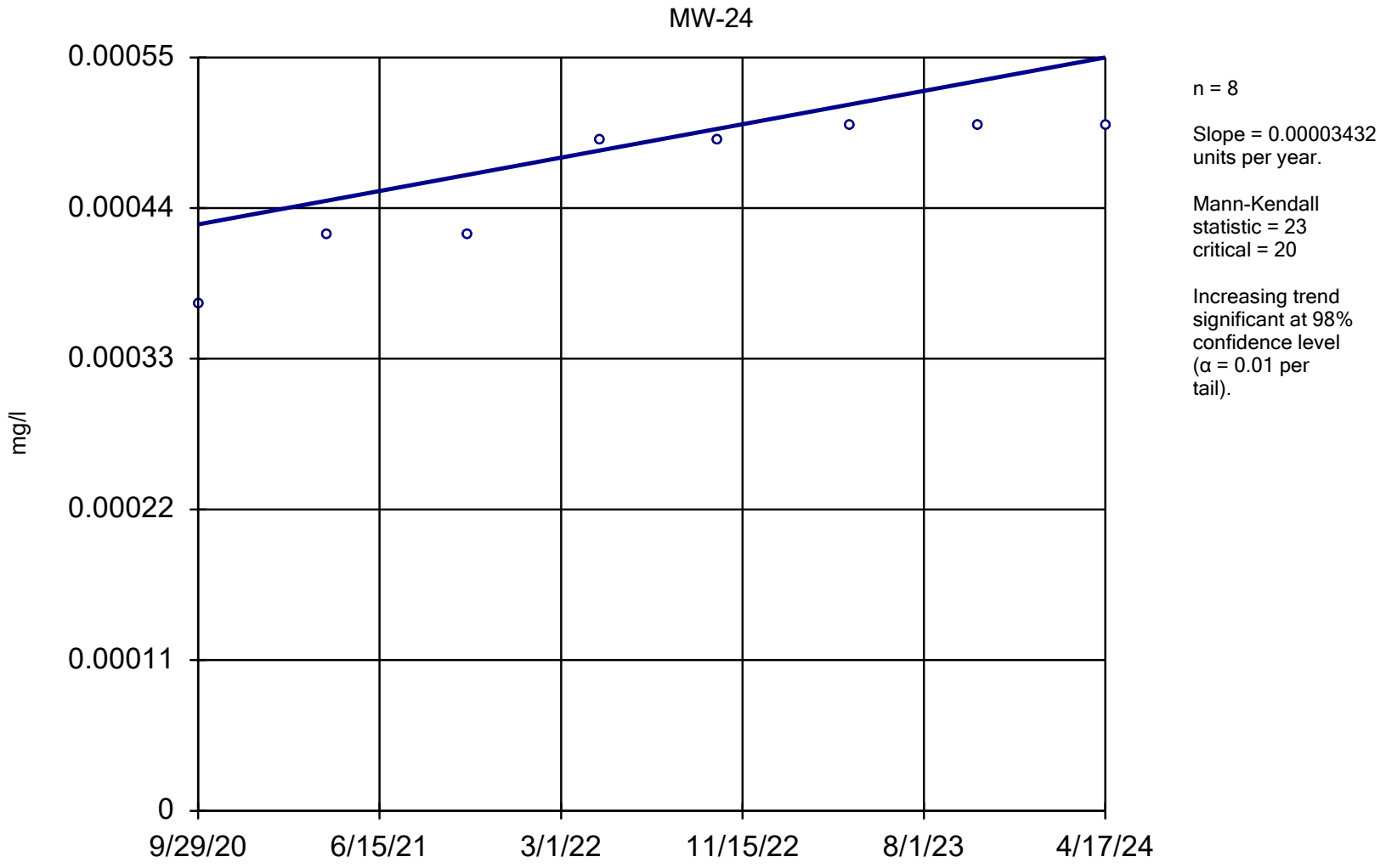
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



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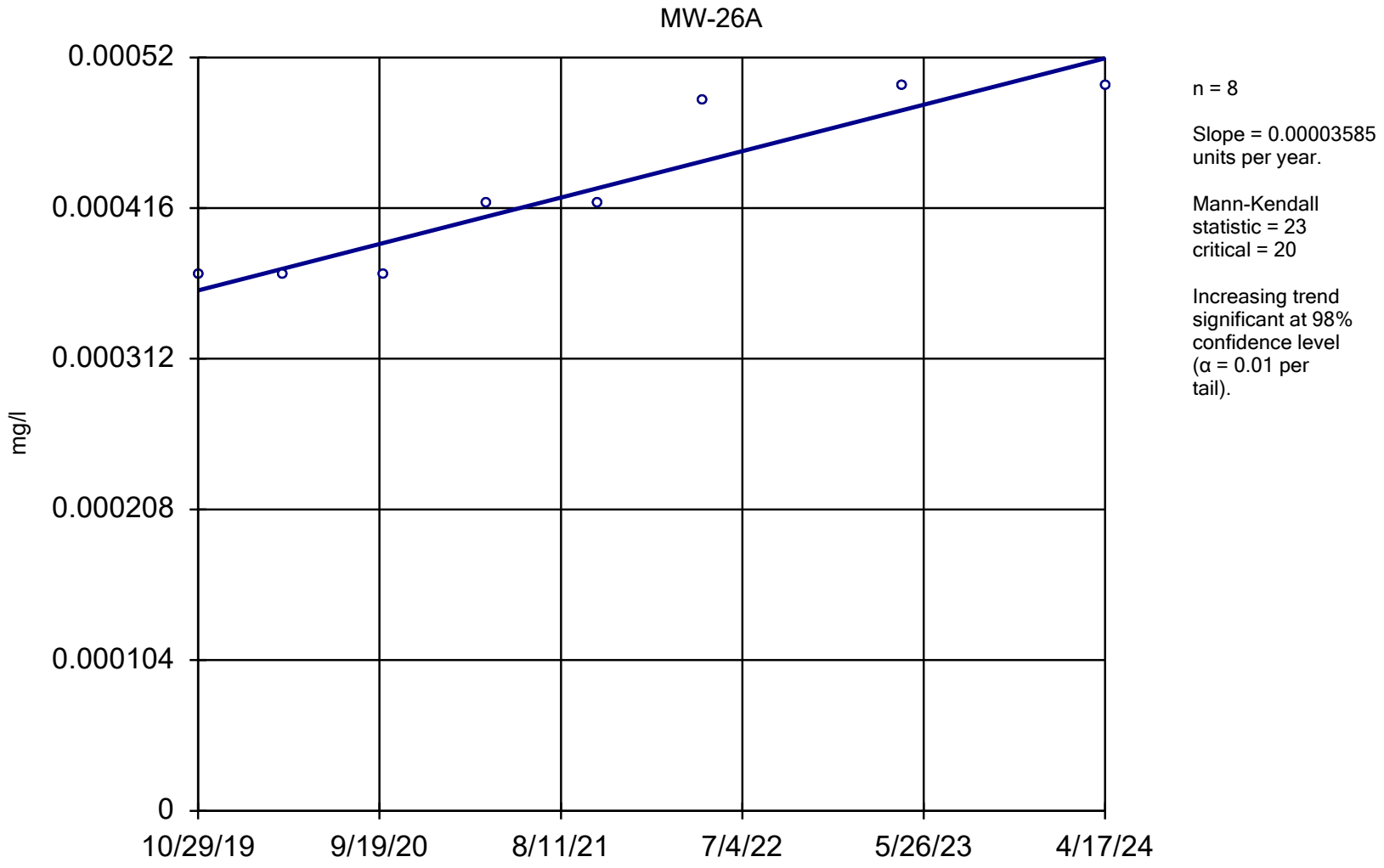
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

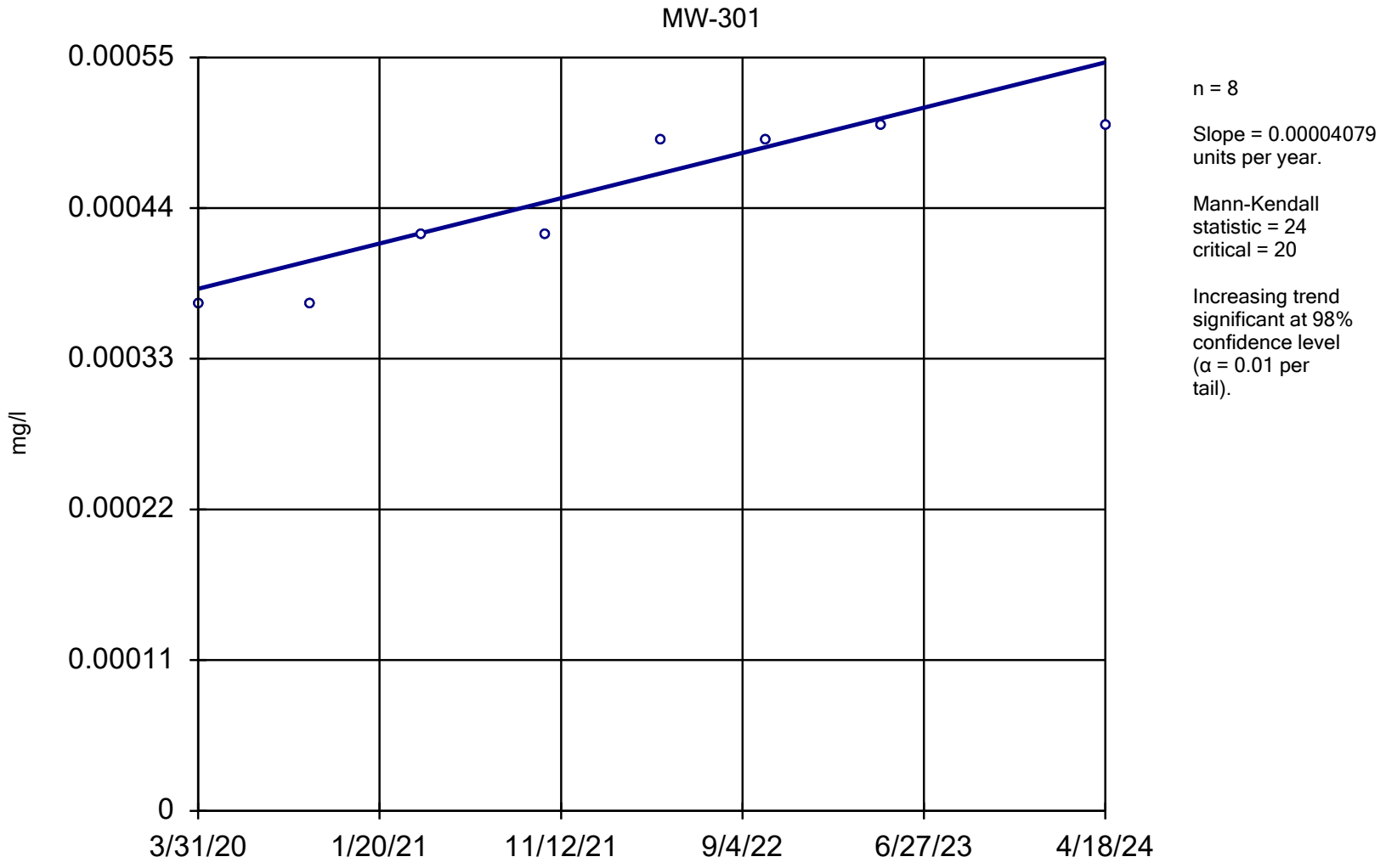


Constituent: Silver Analysis Run 7/12/2024 2:13 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

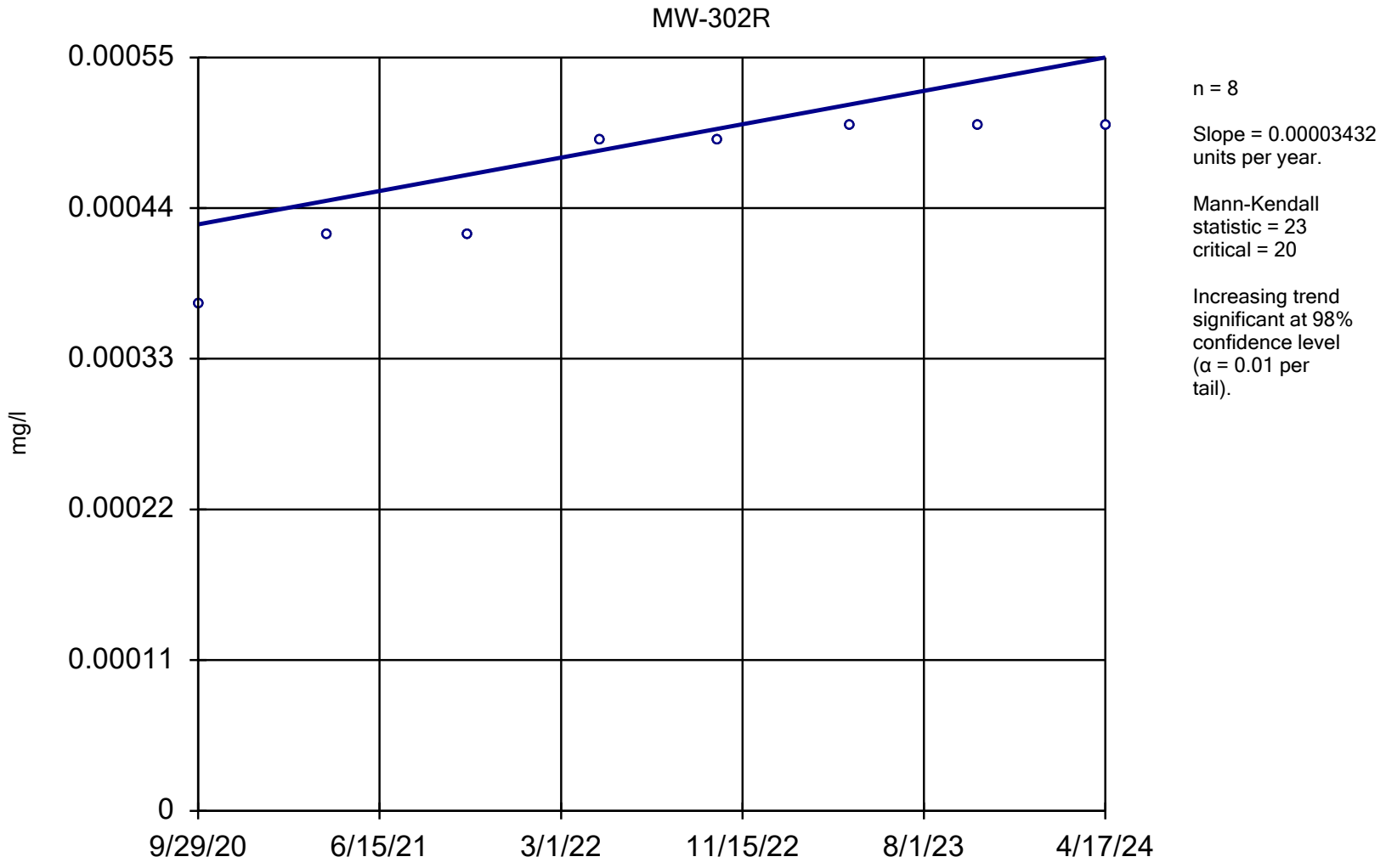


Constituent: Silver Analysis Run 7/12/2024 2:13 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

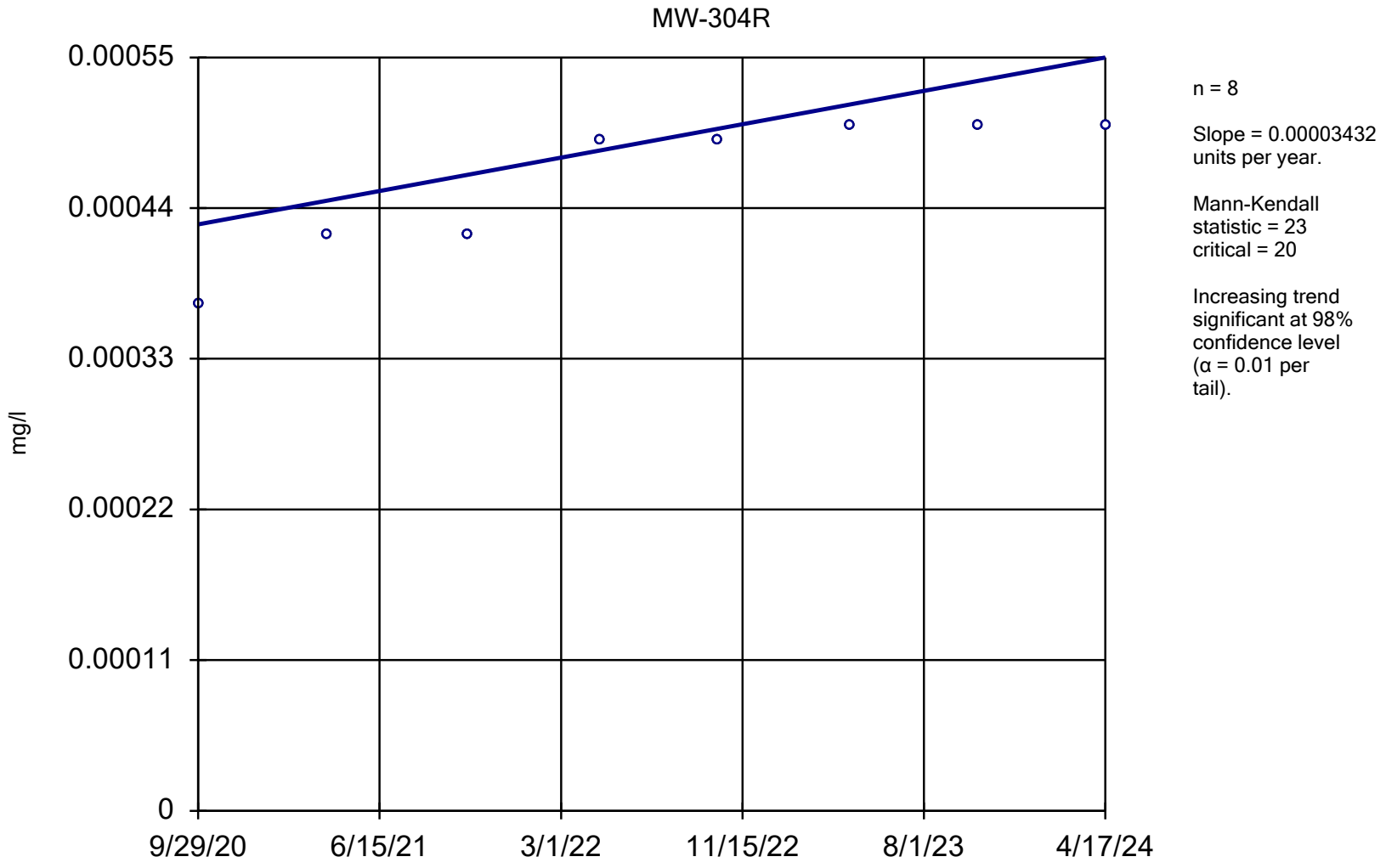


Constituent: Silver Analysis Run 7/12/2024 2:13 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



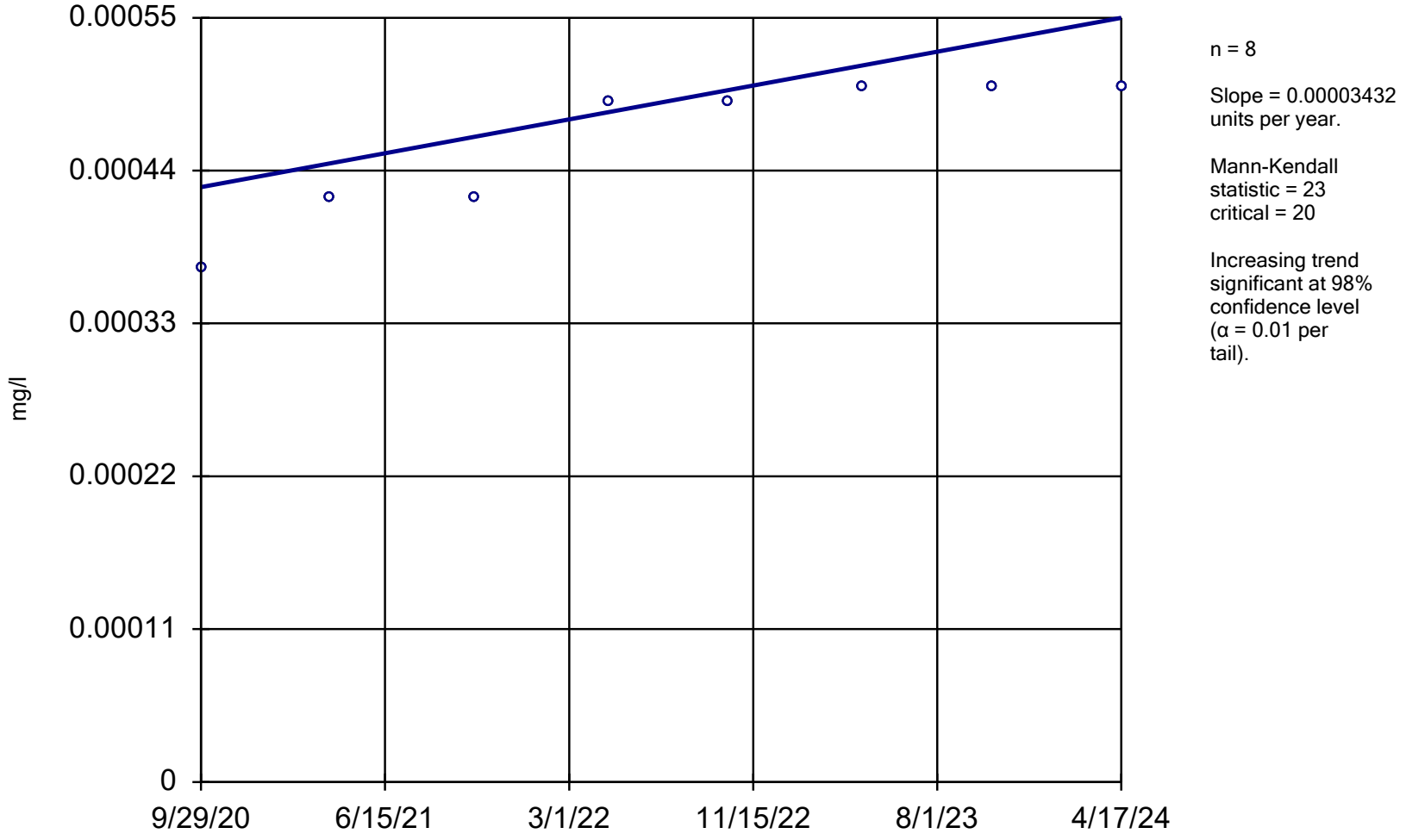
Constituent: Silver Analysis Run 7/12/2024 2:13 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-305



n = 8

Slope = 0.00003432 units per year.

Mann-Kendall statistic = 23
critical = 20

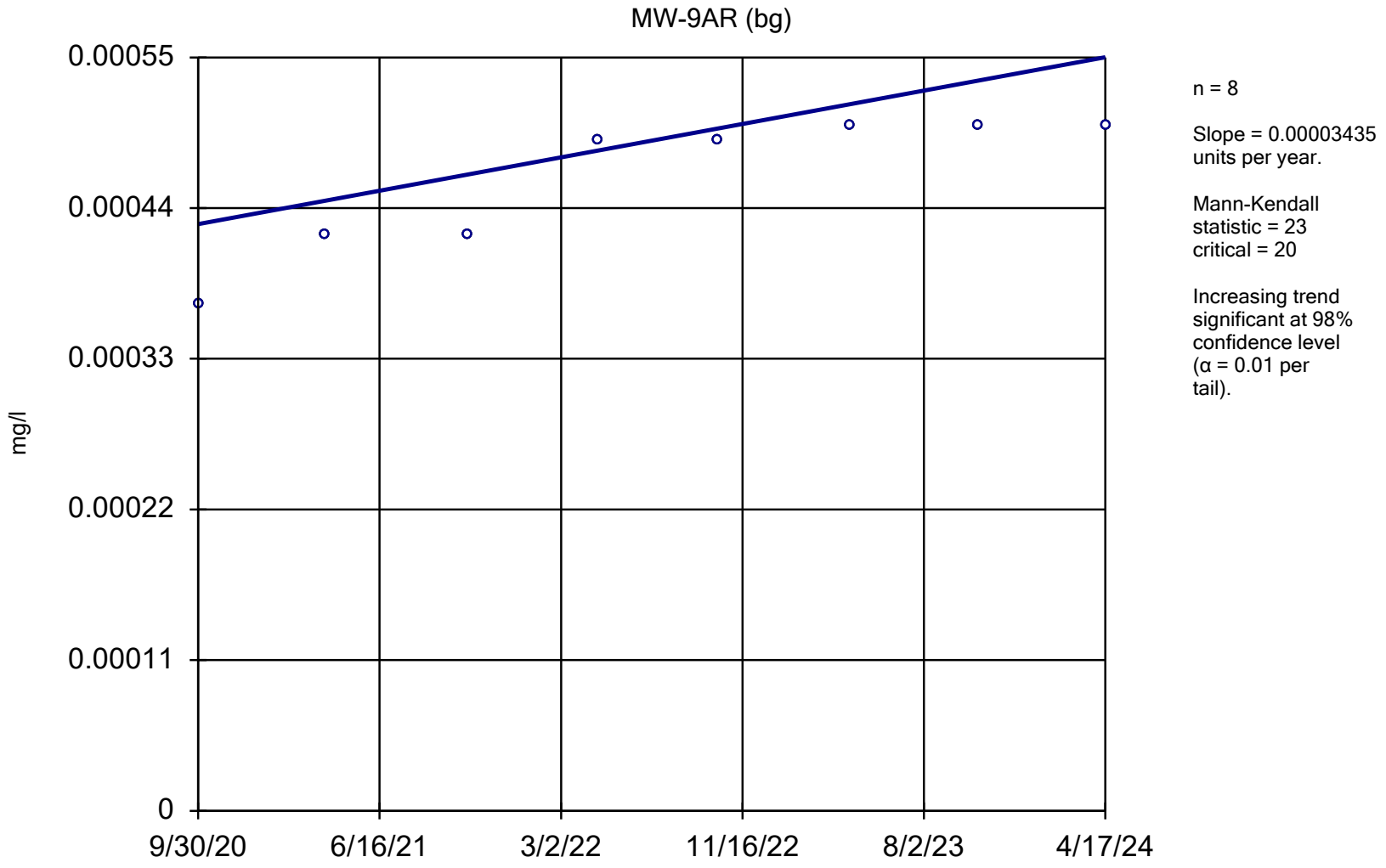
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Silver Analysis Run 7/12/2024 2:13 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



Constituent: Silver Analysis Run 7/12/2024 2:13 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Trend Test

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:14 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Vanadium (mg/l)	MW-201B...	0.0001649	7	20	No	8	37.5	0.02	NP
Vanadium (mg/l)	MW-22	0	7	20	No	8	100	0.02	NP
Vanadium (mg/l)	MW-24	0	7	20	No	8	87.5	0.02	NP
Vanadium (mg/l)	MW-26A	0.0000644	16	20	No	8	87.5	0.02	NP
Vanadium (mg/l)	MW-300	0	7	20	No	8	100	0.02	NP
Vanadium (mg/l)	MW-301	0	7	20	No	8	100	0.02	NP
Vanadium (mg/l)	MW-302R	0	5	20	No	8	87.5	0.02	NP
Vanadium (mg/l)	MW-303	0	0	20	No	8	100	0.02	NP
Vanadium (mg/l)	MW-304R	0	7	20	No	8	100	0.02	NP
Vanadium (mg/l)	MW-305	0	11	20	No	8	87.5	0.02	NP
Vanadium (mg/l)	MW-501	0.0002071	16	20	No	8	50	0.02	NP
Vanadium (mg/l)	MW-9AR ...	0	7	20	No	8	100	0.02	NP
Zinc (mg/l)	MW-15	0	-1	-20	No	8	87.5	0.02	NP
Zinc (mg/l)	MW-18	0	-4	-20	No	8	87.5	0.02	NP
Zinc (mg/l)	MW-19	0	-1	-20	No	8	87.5	0.02	NP
Zinc (mg/l)	MW-20	-0.0000...	-13	-20	No	8	100	0.02	NP
Zinc (mg/l)	MW-201B...	0	4	20	No	8	62.5	0.02	NP
Zinc (mg/l)	MW-22	0	-11	-20	No	8	100	0.02	NP
Zinc (mg/l)	MW-24	-0.0000...	-12	-20	No	8	87.5	0.02	NP
Zinc (mg/l)	MW-26A	0	-11	-20	No	8	100	0.02	NP
Zinc (mg/l)	MW-300	-0.0000...	-12	-20	No	8	87.5	0.02	NP
Zinc (mg/l)	MW-301	-0.0000...	-13	-20	No	8	100	0.02	NP
Zinc (mg/l)	MW-302R	-0.0000...	-12	-20	No	8	87.5	0.02	NP
Zinc (mg/l)	MW-303	-0.0001001	-13	-20	No	8	100	0.02	NP
Zinc (mg/l)	MW-304R	-0.0000...	-13	-20	No	8	100	0.02	NP
Zinc (mg/l)	MW-305	-0.0000...	-13	-20	No	8	100	0.02	NP
Zinc (mg/l)	MW-501	0	4	20	No	8	50	0.02	NP
Zinc (mg/l)	MW-9AR ...	-0.0000...	-13	-20	No	8	100	0.02	NP
Antimony (mg/l)	MW-15	0	3	20	No	8	100	0.02	NP
Antimony (mg/l)	MW-18	0.0001263	7	20	No	8	87.5	0.02	NP
Antimony (mg/l)	MW-19	0	3	20	No	8	100	0.02	NP
Antimony (mg/l)	MW-20	0	3	20	No	8	100	0.02	NP
Antimony (mg/l)	MW-201B...	-0.0000463	-14	-20	No	8	50	0.02	NP
Antimony (mg/l)	MW-22	0	3	20	No	8	100	0.02	NP
Antimony (mg/l)	MW-24	0	3	20	No	8	100	0.02	NP
Antimony (mg/l)	MW-26A	0.0001099	10	20	No	8	100	0.02	NP
Antimony (mg/l)	MW-300	-0.0000...	-12	-20	No	8	75	0.02	NP
Antimony (mg/l)	MW-301	0.0001263	7	20	No	8	87.5	0.02	NP
Antimony (mg/l)	MW-302R	0	3	20	No	8	100	0.02	NP
Antimony (mg/l)	MW-303	-0.0000...	-10	-20	No	8	100	0.02	NP
Antimony (mg/l)	MW-304R	0	3	20	No	8	100	0.02	NP
Antimony (mg/l)	MW-305	0	3	20	No	8	100	0.02	NP
Antimony (mg/l)	MW-501	0	-3	-20	No	8	87.5	0.02	NP
Antimony (mg/l)	MW-9AR ...	0	3	20	No	8	100	0.02	NP
Arsenic (mg/l)	MW-15	0.0001615	5	20	No	8	25	0.02	NP
Arsenic (mg/l)	MW-18	-0.0000...	-5	-20	No	8	62.5	0.02	NP
Arsenic (mg/l)	MW-19	-0.0003626	-6	-20	No	8	0	0.02	NP
Arsenic (mg/l)	MW-20	-0.0006139	-4	-20	No	8	0	0.02	NP
Arsenic (mg/l)	MW-201B...	0.0001786	10	20	No	8	12.5	0.02	NP
Arsenic (mg/l)	MW-22	-0.0000...	-4	-20	No	8	0	0.02	NP

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Arsenic (mg/l)	MW-24	-0.0000...	-16	-20	No	8	62.5	0.02	NP
Arsenic (mg/l)	MW-26A	0.002802	19	20	No	8	37.5	0.02	NP
Arsenic (mg/l)	MW-300	-0.0000...	-1	-20	No	8	37.5	0.02	NP
Arsenic (mg/l)	MW-301	-0.0007647	-8	-20	No	8	0	0.02	NP
Arsenic (mg/l)	MW-302R	-0.0000...	-5	-20	No	8	37.5	0.02	NP
Arsenic (mg/l)	MW-303	-0.0001734	-1	-20	No	8	37.5	0.02	NP
Arsenic (mg/l)	MW-304R	0.00004378	9	20	No	8	50	0.02	NP
Arsenic (mg/l)	MW-305	-0.0000...	-9	-20	No	8	87.5	0.02	NP
Arsenic (mg/l)	MW-501	0.001873	5	20	No	8	25	0.02	NP
Arsenic (mg/l)	MW-9AR ...	0.001364	20	20	No	8	12.5	0.02	NP
Barium (mg/l)	MW-15	0.003755	2	20	No	8	0	0.02	NP
Barium (mg/l)	MW-18	0.002753	8	20	No	8	0	0.02	NP
Barium (mg/l)	MW-19	-0.002097	-4	-20	No	8	0	0.02	NP
Barium (mg/l)	MW-20	-0.1489	-8	-20	No	8	0	0.02	NP
Barium (mg/l)	MW-201B...	-0.00361	-8	-20	No	8	0	0.02	NP
Barium (mg/l)	MW-22	0.003596	5	20	No	8	0	0.02	NP
Barium (mg/l)	MW-24	-0.01053	-20	-20	No	8	0	0.02	NP
Barium (mg/l)	MW-26A	0.02823	14	20	No	8	0	0.02	NP
Barium (mg/l)	MW-300	-0.005023	-2	-20	No	8	0	0.02	NP
Barium (mg/l)	MW-301	-0.0007391	-4	-20	No	8	0	0.02	NP
Barium (mg/l)	MW-302R	0.01896	4	20	No	8	0	0.02	NP
Barium (mg/l)	MW-303	-0.01745	-16	-20	No	8	0	0.02	NP
Barium (mg/l)	MW-304R	-0.002971	-10	-20	No	8	0	0.02	NP
Barium (mg/l)	MW-305	-0.008317	-18	-20	No	8	0	0.02	NP
Barium (mg/l)	MW-501	-0.00688	-10	-20	No	8	0	0.02	NP
Barium (mg/l)	MW-9AR ...	-0.04055	-20	-20	No	8	0	0.02	NP
Beryllium (mg/l)	MW-15	0.00001829	15	20	No	8	100	0.02	NP
Beryllium (mg/l)	MW-18	0.00001828	15	20	No	8	100	0.02	NP
Beryllium (mg/l)	MW-19	0.00001827	15	20	No	8	100	0.02	NP
Beryllium (mg/l)	MW-20	0.00001828	15	20	No	8	100	0.02	NP
Beryllium (mg/l)	MW-201B...	0.0000128	15	20	No	8	87.5	0.02	NP
Beryllium (mg/l)	MW-22	0.00001828	15	20	No	8	100	0.02	NP
Beryllium (mg/l)	MW-24	0.00001828	15	20	No	8	100	0.02	NP
Beryllium (mg/l)	MW-26A	0	12	20	No	8	100	0.02	NP
Beryllium (mg/l)	MW-300	0.00001585	15	20	No	8	100	0.02	NP
Beryllium (mg/l)	MW-301	0.00001828	15	20	No	8	100	0.02	NP
Beryllium (mg/l)	MW-302R	0.00001828	15	20	No	8	100	0.02	NP
Beryllium (mg/l)	MW-303	0.00001827	15	20	No	8	100	0.02	NP
Beryllium (mg/l)	MW-304R	0.00001828	15	20	No	8	100	0.02	NP
Beryllium (mg/l)	MW-305	0.00001828	15	20	No	8	100	0.02	NP
Beryllium (mg/l)	MW-501	0.00004971	18	20	No	8	62.5	0.02	NP
Beryllium (mg/l)	MW-9AR ...	0.00001829	15	20	No	8	100	0.02	NP
Cadmium (mg/l)	MW-15	0.00000...	5	20	No	8	37.5	0.02	NP
Cadmium (mg/l)	MW-18	0.00004726	18	20	No	8	0	0.02	NP
Cadmium (mg/l)	MW-19	0.00001945	18	20	No	8	75	0.02	NP
Cadmium (mg/l)	**MW-20**	**0.00001521**	**23**	**20**	**Yes**	**8**	**100**	**0.02**	**NP**
Cadmium (mg/l)	MW-201B...	0.00001589	15	20	No	8	75	0.02	NP
Cadmium (mg/l)	**MW-22**	**0.00001521**	**23**	**20**	**Yes**	**8**	**100**	**0.02**	**NP**
Cadmium (mg/l)	MW-24	0.00001942	4	20	No	8	37.5	0.02	NP
Cadmium (mg/l)	MW-26A	0.00001315	16	20	No	8	75	0.02	NP

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Cadmium (mg/l)	MW-300	0.00001068	5	20	No	8	50	0.02	NP
Cadmium (mg/l)	**MW-301**	**0.00000...**	**25**	**20**	**Yes**	**8**	**100**	**0.02**	**NP**
Cadmium (mg/l)	MW-302R	0.00001097	15	20	No	8	87.5	0.02	NP
Cadmium (mg/l)	MW-303	0.0001307	4	20	No	8	12.5	0.02	NP
Cadmium (mg/l)	MW-304R	0.00001289	15	20	No	8	50	0.02	NP
Cadmium (mg/l)	MW-305	0.00001521	18	20	No	8	87.5	0.02	NP
Cadmium (mg/l)	MW-501	0.0001138	14	20	No	8	37.5	0.02	NP
Cadmium (mg/l)	**MW-9AR ...**	**0.00001521**	**23**	**20**	**Yes**	**8**	**100**	**0.02**	**NP**
Chromium (mg/l)	MW-15	0	7	20	No	8	100	0.02	NP
Chromium (mg/l)	MW-18	0	7	20	No	8	100	0.02	NP
Chromium (mg/l)	MW-19	0	7	20	No	8	100	0.02	NP
Chromium (mg/l)	MW-20	-0.0001205	-6	-20	No	8	12.5	0.02	NP
Chromium (mg/l)	MW-201B...	0	2	20	No	8	62.5	0.02	NP
Chromium (mg/l)	MW-22	0	7	20	No	8	100	0.02	NP
Chromium (mg/l)	MW-24	0	7	20	No	8	100	0.02	NP
Chromium (mg/l)	MW-26A	0.00003049	14	20	No	8	87.5	0.02	NP
Chromium (mg/l)	MW-300	0	1	20	No	8	87.5	0.02	NP
Chromium (mg/l)	MW-301	0	7	20	No	8	100	0.02	NP
Chromium (mg/l)	MW-302R	0	7	20	No	8	100	0.02	NP
Chromium (mg/l)	MW-303	0	7	20	No	8	100	0.02	NP
Chromium (mg/l)	MW-304R	0	7	20	No	8	100	0.02	NP
Chromium (mg/l)	MW-305	0	7	20	No	8	100	0.02	NP
Chromium (mg/l)	MW-501	0	12	20	No	8	100	0.02	NP
Chromium (mg/l)	MW-9AR ...	0	7	20	No	8	100	0.02	NP
Cobalt (mg/l)	MW-15	-0.0003074	-6	-20	No	8	0	0.02	NP
Cobalt (mg/l)	MW-18	0.0002806	2	20	No	8	0	0.02	NP
Cobalt (mg/l)	MW-19	0.00007175	2	20	No	8	0	0.02	NP
Cobalt (mg/l)	MW-20	-0.0000...	-6	-20	No	8	0	0.02	NP
Cobalt (mg/l)	MW-201B...	0.00006277	7	20	No	8	37.5	0.02	NP
Cobalt (mg/l)	MW-22	-0.0000...	-6	-20	No	8	0	0.02	NP
Cobalt (mg/l)	MW-24	-0.003513	-12	-20	No	8	0	0.02	NP
Cobalt (mg/l)	**MW-26A**	**0.02625**	**26**	**20**	**Yes**	**8**	**0**	**0.02**	**NP**
Cobalt (mg/l)	MW-300	0.00000...	0	20	No	8	25	0.02	NP
Cobalt (mg/l)	MW-301	-0.0005479	-10	-20	No	8	0	0.02	NP
Cobalt (mg/l)	MW-302R	-0.0000...	-13	-20	No	8	37.5	0.02	NP
Cobalt (mg/l)	MW-303	0.0004427	0	20	No	8	0	0.02	NP
Cobalt (mg/l)	MW-304R	-0.000981	-10	-20	No	8	0	0.02	NP
Cobalt (mg/l)	MW-305	0.00001926	2	20	No	8	0	0.02	NP
Cobalt (mg/l)	MW-501	0.005147	18	20	No	8	0	0.02	NP
Cobalt (mg/l)	MW-9AR ...	0.00026	14	20	No	8	12.5	0.02	NP
Copper (mg/l)	MW-15	0	-1	-20	No	8	50	0.02	NP
Copper (mg/l)	MW-18	0.0001604	20	20	No	8	75	0.02	NP
Copper (mg/l)	MW-19	0.00009136	13	20	No	8	100	0.02	NP
Copper (mg/l)	MW-20	0.00009139	13	20	No	8	100	0.02	NP
Copper (mg/l)	MW-201B...	0.00006638	6	20	No	8	25	0.02	NP
Copper (mg/l)	MW-22	0	2	20	No	8	75	0.02	NP
Copper (mg/l)	MW-24	0.0005856	16	20	No	8	25	0.02	NP
Copper (mg/l)	MW-26A	-0.0000...	-3	-20	No	8	75	0.02	NP
Copper (mg/l)	MW-300	0	2	20	No	8	75	0.02	NP
Copper (mg/l)	MW-301	0.0001227	15	20	No	8	87.5	0.02	NP

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Copper (mg/l)	MW-302R	0	3	20	No	8	87.5	0.02	NP
Copper (mg/l)	MW-303	0.0001615	10	20	No	8	87.5	0.02	NP
Copper (mg/l)	MW-304R	0.00009139	13	20	No	8	100	0.02	NP
Copper (mg/l)	MW-305	0.00009139	13	20	No	8	100	0.02	NP
Copper (mg/l)	MW-501	0.0005296	16	20	No	8	62.5	0.02	NP
Copper (mg/l)	MW-9AR ...	0.00009143	13	20	No	8	100	0.02	NP
Lead (mg/l)	MW-15	0.00002219	7	20	No	8	50	0.02	NP
Lead (mg/l)	MW-18	0.00002849	17	20	No	8	62.5	0.02	NP
Lead (mg/l)	MW-19	0.0000139	12	20	No	8	87.5	0.02	NP
Lead (mg/l)	**MW-20**	**0.00001978**	**21**	**20**	**Yes**	**8**	**100**	**0.02**	**NP**
Lead (mg/l)	MW-201B...	0.00005172	2	20	No	8	0	0.02	NP
Lead (mg/l)	**MW-22**	**0.00001977**	**21**	**20**	**Yes**	**8**	**100**	**0.02**	**NP**
Lead (mg/l)	MW-24	0.00004242	18	20	No	8	75	0.02	NP
Lead (mg/l)	MW-26A	-0.0000...	-5	-20	No	8	87.5	0.02	NP
Lead (mg/l)	MW-300	0.00001093	8	20	No	8	100	0.02	NP
Lead (mg/l)	MW-301	0.0000155	10	20	No	8	100	0.02	NP
Lead (mg/l)	**MW-302R**	**0.00001979**	**21**	**20**	**Yes**	**8**	**100**	**0.02**	**NP**
Lead (mg/l)	MW-303	0.0000066	4	20	No	8	87.5	0.02	NP
Lead (mg/l)	**MW-304R**	**0.00001979**	**21**	**20**	**Yes**	**8**	**100**	**0.02**	**NP**
Lead (mg/l)	MW-305	0.0000141	10	20	No	8	87.5	0.02	NP
Lead (mg/l)	MW-501	0.00005954	11	20	No	8	50	0.02	NP
Lead (mg/l)	**MW-9AR ...**	**0.00001978**	**21**	**20**	**Yes**	**8**	**100**	**0.02**	**NP**
Mercury (mg/l)	MW-15	-4.1e-7	NaN	NaN	No	2	100	NaN	NP
Mercury (mg/l)	MW-18	-4.0e-7	NaN	NaN	No	2	100	NaN	NP
Mercury (mg/l)	MW-19	0.00000...	NaN	NaN	No	2	100	NaN	NP
Mercury (mg/l)	MW-20	0.00000...	NaN	NaN	No	2	100	NaN	NP
Mercury (mg/l)	MW-201B...	-0.0000...	-2	-8	No	4	100	0.02	NP
Mercury (mg/l)	MW-22	0.00000...	NaN	NaN	No	2	100	NaN	NP
Mercury (mg/l)	MW-24	-4.1e-7	NaN	NaN	No	2	100	NaN	NP
Mercury (mg/l)	MW-26A	-0.0000...	NaN	NaN	No	3	100	NaN	NP
Mercury (mg/l)	MW-300	0.00000...	NaN	NaN	No	2	100	NaN	NP
Mercury (mg/l)	MW-301	0	-1	-20	No	8	100	0.02	NP
Mercury (mg/l)	MW-302R	-4.1e-7	NaN	NaN	No	2	100	NaN	NP
Mercury (mg/l)	MW-304R	0.00000...	NaN	NaN	No	2	100	NaN	NP
Mercury (mg/l)	MW-305	-4.1e-7	NaN	NaN	No	2	100	NaN	NP
Mercury (mg/l)	MW-9AR ...	0	NaN	NaN	No	2	100	NaN	NP
Nickel (mg/l)	MW-15	-0.0001708	-2	-20	No	8	0	0.02	NP
Nickel (mg/l)	MW-18	0.004001	20	20	No	8	0	0.02	NP
Nickel (mg/l)	MW-19	0.00003281	0	20	No	8	0	0.02	NP
Nickel (mg/l)	MW-20	-0.002981	-12	-20	No	8	0	0.02	NP
Nickel (mg/l)	MW-201B...	0	2	20	No	8	50	0.02	NP
Nickel (mg/l)	MW-22	-0.0007496	-18	-20	No	8	0	0.02	NP
Nickel (mg/l)	**MW-24**	**-0.008439**	**-22**	**-20**	**Yes**	**8**	**0**	**0.02**	**NP**
Nickel (mg/l)	**MW-26A**	**0.007985**	**24**	**20**	**Yes**	**8**	**0**	**0.02**	**NP**
Nickel (mg/l)	MW-300	-0.0002691	-2	-20	No	8	25	0.02	NP
Nickel (mg/l)	MW-301	-0.00069	-8	-20	No	8	0	0.02	NP
Nickel (mg/l)	MW-302R	-0.0006333	-10	-20	No	8	62.5	0.02	NP
Nickel (mg/l)	MW-303	0.003101	2	20	No	8	0	0.02	NP
Nickel (mg/l)	MW-304R	-0.002392	-18	-20	No	8	12.5	0.02	NP
Nickel (mg/l)	MW-305	0.0002416	11	20	No	8	25	0.02	NP

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Nickel (mg/l)	MW-501	0.0125	18	20	No	8	0	0.02	NP
Nickel (mg/l)	MW-9AR ...	0	7	20	No	8	100	0.02	NP
Selenium (mg/l)	MW-15	0.0001935	13	20	No	8	87.5	0.02	NP
Selenium (mg/l)	MW-18	0	2	20	No	8	62.5	0.02	NP
Selenium (mg/l)	MW-19	0.0001202	10	20	No	8	87.5	0.02	NP
Selenium (mg/l)	MW-20	0.00004265	8	20	No	8	75	0.02	NP
Selenium (mg/l)	MW-201B...	0.0001217	11	20	No	8	100	0.02	NP
Selenium (mg/l)	MW-22	0.0001294	14	20	No	8	75	0.02	NP
Selenium (mg/l)	MW-24	0.0001219	10	20	No	8	75	0.02	NP
Selenium (mg/l)	MW-26A	0.00009409	11	20	No	8	87.5	0.02	NP
Selenium (mg/l)	MW-300	-0.0000...	-6	-20	No	8	62.5	0.02	NP
Selenium (mg/l)	MW-301	0	3	20	No	8	87.5	0.02	NP
Selenium (mg/l)	MW-302R	0.0001219	11	20	No	8	100	0.02	NP
Selenium (mg/l)	MW-303	0.0001468	15	20	No	8	100	0.02	NP
Selenium (mg/l)	MW-304R	0.0001219	11	20	No	8	100	0.02	NP
Selenium (mg/l)	MW-305	0.0001219	11	20	No	8	100	0.02	NP
Selenium (mg/l)	MW-501	0.0001852	16	20	No	8	100	0.02	NP
Selenium (mg/l)	MW-9AR ...	0.00007907	10	20	No	8	75	0.02	NP
Silver (mg/l)	**MW-15**	**0.00003433**	**23**	**20**	**Yes**	**8**	**100**	**0.02**	**NP**
Silver (mg/l)	**MW-18**	**0.00004079**	**24**	**20**	**Yes**	**8**	**100**	**0.02**	**NP**
Silver (mg/l)	**MW-19**	**0.0000343**	**23**	**20**	**Yes**	**8**	**100**	**0.02**	**NP**
Silver (mg/l)	**MW-20**	**0.00003432**	**23**	**20**	**Yes**	**8**	**100**	**0.02**	**NP**
Silver (mg/l)	**MW-201B...**	**0.00003434**	**23**	**20**	**Yes**	**8**	**100**	**0.02**	**NP**
Silver (mg/l)	**MW-22**	**0.0000343**	**23**	**20**	**Yes**	**8**	**100**	**0.02**	**NP**
Silver (mg/l)	**MW-24**	**0.00003432**	**23**	**20**	**Yes**	**8**	**100**	**0.02**	**NP**
Silver (mg/l)	**MW-26A**	**0.00003585**	**23**	**20**	**Yes**	**8**	**100**	**0.02**	**NP**
Silver (mg/l)	MW-300	0	2	20	No	8	75	0.02	NP
Silver (mg/l)	**MW-301**	**0.00004079**	**24**	**20**	**Yes**	**8**	**100**	**0.02**	**NP**
Silver (mg/l)	**MW-302R**	**0.00003432**	**23**	**20**	**Yes**	**8**	**100**	**0.02**	**NP**
Silver (mg/l)	MW-303	0.00002956	14	20	No	8	100	0.02	NP
Silver (mg/l)	**MW-304R**	**0.00003432**	**23**	**20**	**Yes**	**8**	**100**	**0.02**	**NP**
Silver (mg/l)	**MW-305**	**0.00003432**	**23**	**20**	**Yes**	**8**	**100**	**0.02**	**NP**
Silver (mg/l)	MW-501	0.00000...	19	20	No	8	100	0.02	NP
Silver (mg/l)	**MW-9AR ...**	**0.00003435**	**23**	**20**	**Yes**	**8**	**100**	**0.02**	**NP**
Sulfide (mg/l)	MW-15	0	NaN	NaN	No	2	100	NaN	NP
Sulfide (mg/l)	MW-18	-0.01255	NaN	NaN	No	2	50	NaN	NP
Sulfide (mg/l)	MW-19	0.01027	NaN	NaN	No	2	100	NaN	NP
Sulfide (mg/l)	MW-20	0.9783	8	20	No	8	25	0.02	NP
Sulfide (mg/l)	MW-201B...	0	-1	-20	No	8	87.5	0.02	NP
Sulfide (mg/l)	MW-22	0.01029	NaN	NaN	No	2	100	NaN	NP
Sulfide (mg/l)	MW-24	0	NaN	NaN	No	2	100	NaN	NP
Sulfide (mg/l)	MW-26A	0	NaN	NaN	No	3	100	NaN	NP
Sulfide (mg/l)	MW-300	0	8	20	No	8	100	0.02	NP
Sulfide (mg/l)	MW-301	-0.02698	NaN	NaN	No	2	100	NaN	NP
Sulfide (mg/l)	MW-302R	0	NaN	NaN	No	2	100	NaN	NP
Sulfide (mg/l)	MW-304R	0	NaN	NaN	No	2	100	NaN	NP
Sulfide (mg/l)	MW-305	0	NaN	NaN	No	2	100	NaN	NP
Sulfide (mg/l)	MW-9AR ...	0	-12	-20	No	8	100	0.02	NP
Thallium (mg/l)	MW-15	0	7	20	No	8	100	0.02	NP
Thallium (mg/l)	MW-18	0	7	20	No	8	87.5	0.02	NP

Trend Test

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:14 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Thallium (mg/l)	MW-19	0	7	20	No	8	100	0.02	NP
Thallium (mg/l)	MW-20	0	7	20	No	8	100	0.02	NP
Thallium (mg/l)	MW-201B...	0	11	20	No	8	87.5	0.02	NP
Thallium (mg/l)	MW-22	0	7	20	No	8	100	0.02	NP
Thallium (mg/l)	MW-24	0	7	20	No	8	100	0.02	NP
Thallium (mg/l)	MW-26A	0	-12	-20	No	8	100	0.02	NP
Thallium (mg/l)	MW-300	0	0	20	No	8	62.5	0.02	NP
Thallium (mg/l)	MW-301	0	7	20	No	8	100	0.02	NP
Thallium (mg/l)	MW-302R	0	7	20	No	8	100	0.02	NP
Thallium (mg/l)	MW-303	0	5	20	No	8	100	0.02	NP
Thallium (mg/l)	MW-304R	0	11	20	No	8	87.5	0.02	NP
Thallium (mg/l)	MW-305	0	-4	-20	No	8	75	0.02	NP
Thallium (mg/l)	MW-501	0	12	20	No	8	100	0.02	NP
Thallium (mg/l)	MW-9AR ...	0	7	20	No	8	100	0.02	NP
Tin (mg/l)	MW-15	0.0002852	NaN	NaN	No	2	100	NaN	NP
Tin (mg/l)	MW-18	0.0002748	NaN	NaN	No	2	100	NaN	NP
Tin (mg/l)	MW-19	0.0004367	NaN	NaN	No	2	100	NaN	NP
Tin (mg/l)	MW-20	0.000437	NaN	NaN	No	2	100	NaN	NP
Tin (mg/l)	MW-201B...	-0.0000...	NaN	NaN	No	3	100	NaN	NP
Tin (mg/l)	MW-22	0.0004374	NaN	NaN	No	2	100	NaN	NP
Tin (mg/l)	MW-24	0.0002852	NaN	NaN	No	2	100	NaN	NP
Tin (mg/l)	MW-26A	0.0002728	NaN	NaN	No	3	100	NaN	NP
Tin (mg/l)	MW-300	0.0004367	NaN	NaN	No	2	100	NaN	NP
Tin (mg/l)	MW-301	0.0003125	13	20	No	8	100	0.02	NP
Tin (mg/l)	MW-302R	0.0002852	NaN	NaN	No	2	100	NaN	NP
Tin (mg/l)	MW-304R	0.0002028	NaN	NaN	No	2	100	NaN	NP
Tin (mg/l)	MW-305	0.0002852	NaN	NaN	No	2	100	NaN	NP
Tin (mg/l)	MW-9AR ...	0.0006912	NaN	NaN	No	3	66.67	NaN	NP
Vanadium (mg/l)	MW-15	-0.0003463	-16	-20	No	8	0	0.02	NP
Vanadium (mg/l)	MW-18	0	7	20	No	8	100	0.02	NP
Vanadium (mg/l)	MW-19	0	7	20	No	8	100	0.02	NP
Vanadium (mg/l)	MW-20	-0.0000...	-1	-20	No	8	0	0.02	NP

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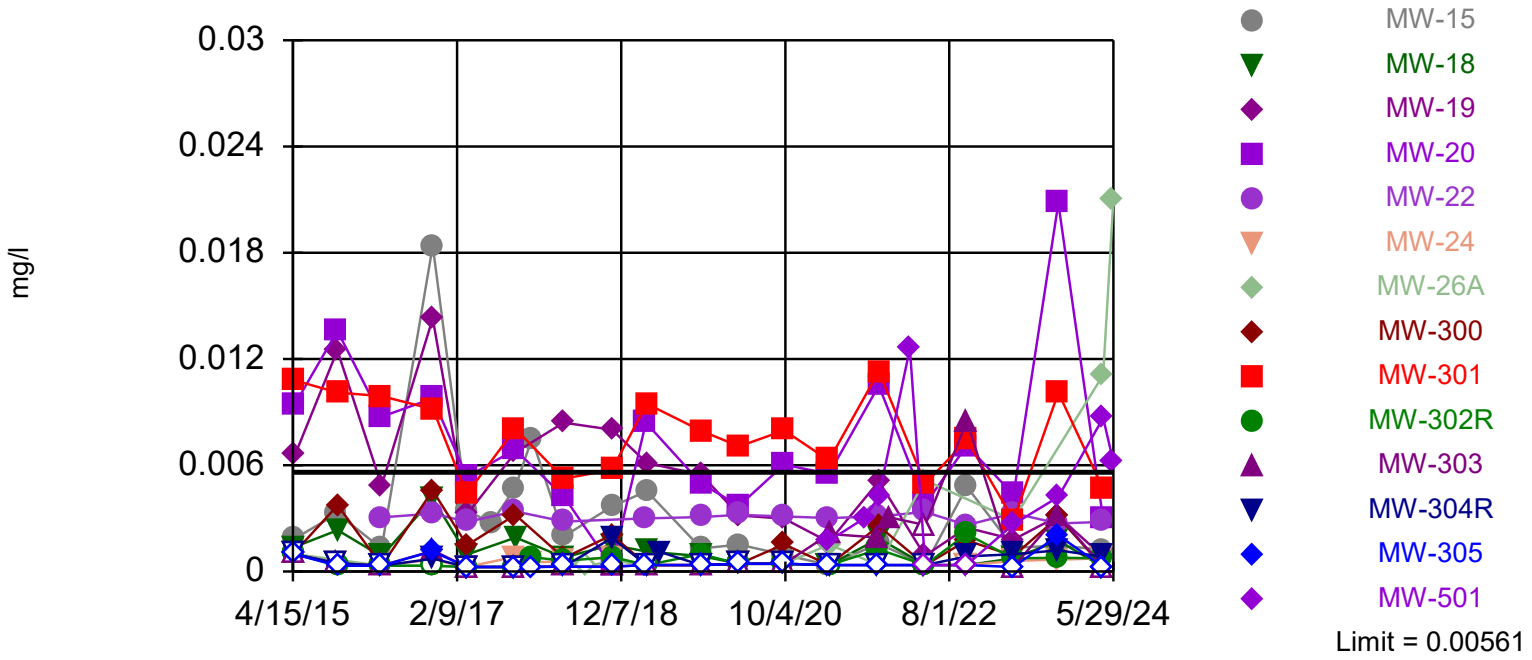
Monitoring Well Inorganic Interwell Prediction Limit Analysis – Spring 2024

Sanitas™ v.10.0.15 Software licensed to HDR. UG
Hollow symbols indicate censored values.

Exceeds Limit: MW-26A, MW-501

Prediction Limit

Interwell Parametric



Background Data Summary (based on square root transformation): Mean=0.03915, Std. Dev.=0.01493, n=34, 11.76% NDs. Normality test: Chi Squared @alpha = 0.05, calculated = 8.824, critical = 11.07. Kappa = 2.395 (c=15, w=14, 1 of 2, event alpha = 0.05132). Report alpha = 0.003506. Individual comparison alpha = 0.0002508. Comparing 14 points to limit.

Constituent: Arsenic Analysis Run 7/12/2024 2:17 PM View: App I_Metals

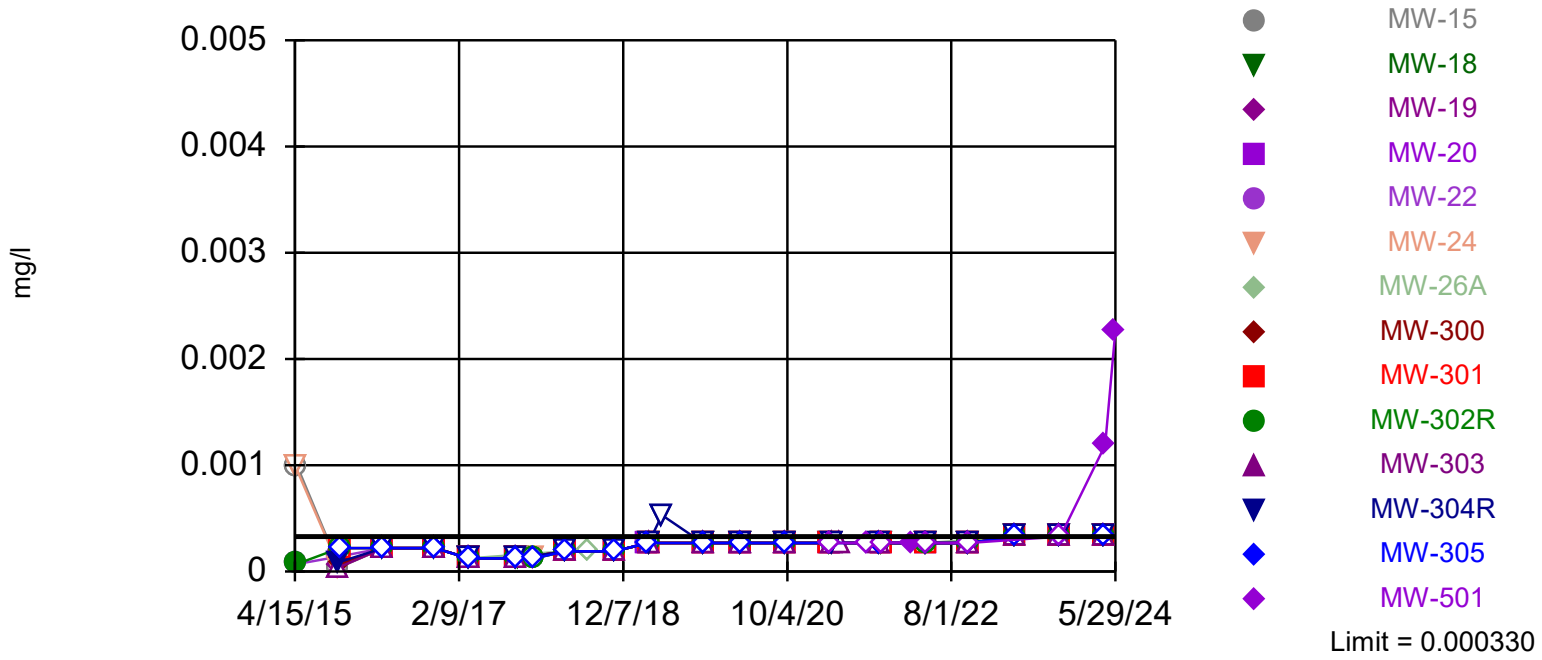
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Exceeds Limit: MW-501

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 33 background values. 93.94% NDs. Annual per-constituent alpha = 0.04267. Individual comparison alpha = 0.001556 (1 of 2). Comparing 14 points to limit.

Constituent: Beryllium Analysis Run 7/12/2024 2:17 PM View: App I_Metals

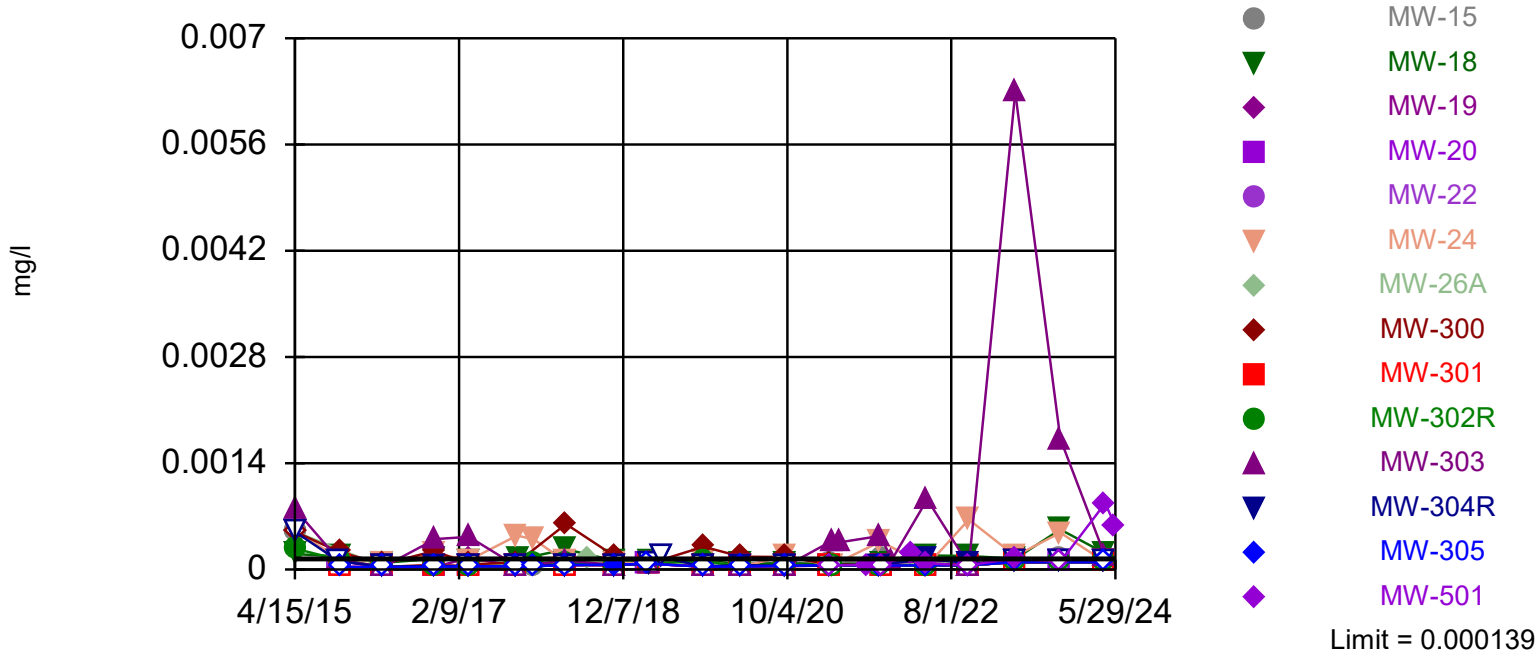
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Exceeds Limit: MW-18, MW-501

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 90.63% NDs. Annual per-constituent alpha = 0.04499. Individual comparison alpha = 0.001643 (1 of 2). Comparing 14 points to limit.

Constituent: Cadmium Analysis Run 7/12/2024 2:17 PM View: App I_Metals

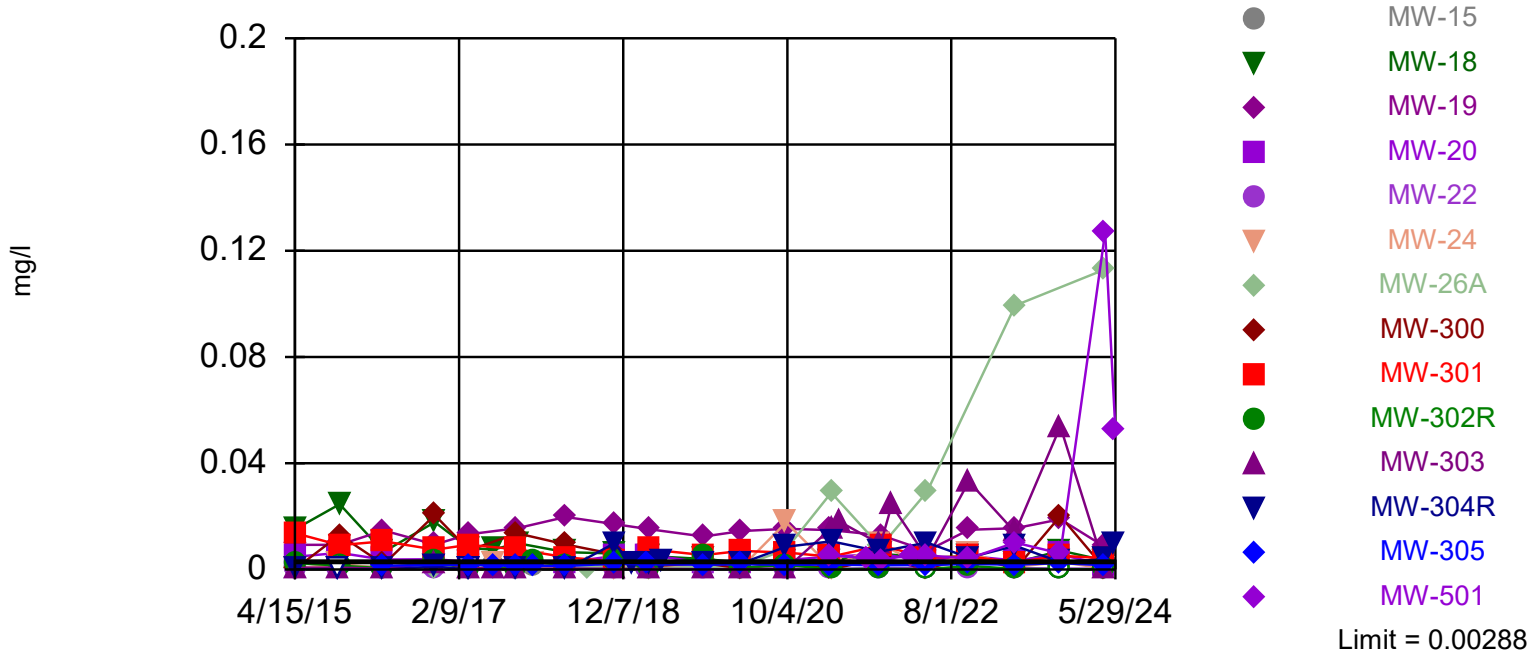
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Exceeds Limit: MW-18, MW-19, MW-26A, MW-301, MW-304R, MW-501

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 34 background values. 23.53% NDs. Annual per-constituent alpha = 0.04035. Individual comparison alpha = 0.00147 (1 of 2). Comparing 14 points to limit.

Constituent: Cobalt Analysis Run 7/12/2024 2:17 PM View: App I_Metals

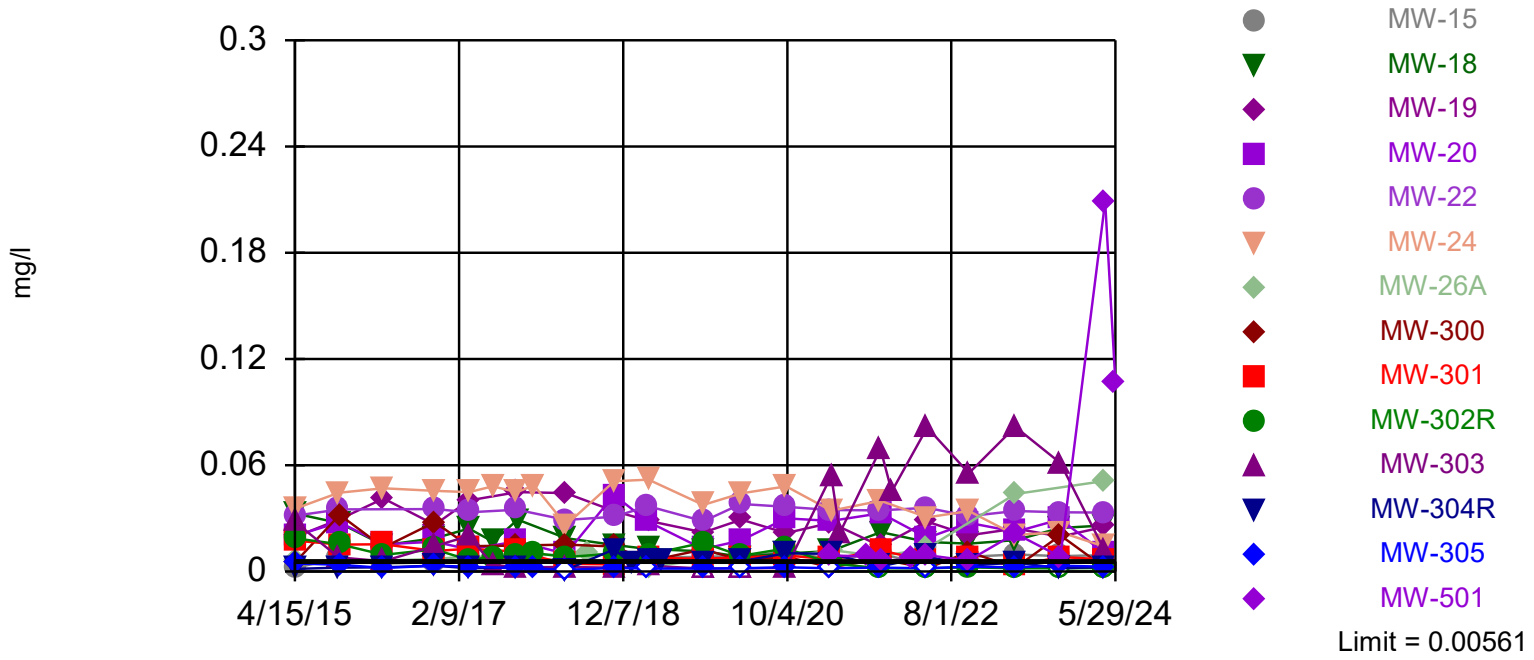
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Exceeds Limit: MW-15, MW-18, MW-19, MW-20, MW-22, MW-24, MW-26A, MW-301, MW-303, MW-501

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 71.88% NDs. Annual per-constituent alpha = 0.04499. Individual comparison alpha = 0.001643 (1 of 2). Comparing 14 points to limit.

Constituent: Nickel Analysis Run 7/12/2024 2:17 PM View: App I_Metals

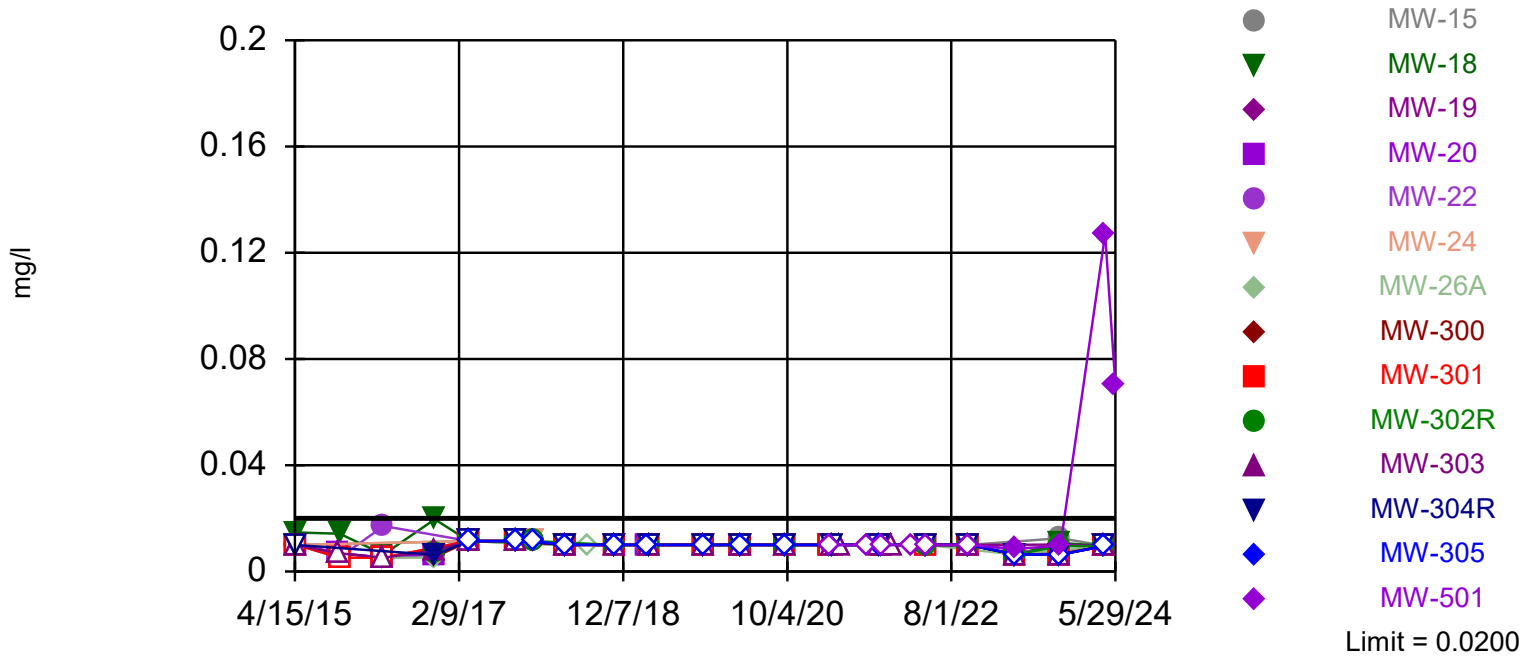
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Exceeds Limit: MW-501

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 83.33% NDs. Annual per-constituent alpha = 0.04962. Individual comparison alpha = 0.001816 (1 of 2). Comparing 14 points to limit.

Constituent: Zinc Analysis Run 7/12/2024 2:17 PM View: App I_Metals

Linn County Data: CRLCSWA_Groundwater Database

Prediction Limit

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:17 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Wells	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/l)	MW-15	0.00230	n/a	4/18/2024	0.001ND	No	34	MW-201B,MW-9AR	n/a	n/a	55.88	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Antimony (mg/l)	MW-18	0.00230	n/a	4/18/2024	0.001ND	No	34	MW-201B,MW-9AR	n/a	n/a	55.88	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Antimony (mg/l)	MW-19	0.00230	n/a	4/18/2024	0.001ND	No	34	MW-201B,MW-9AR	n/a	n/a	55.88	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Antimony (mg/l)	MW-20	0.00230	n/a	4/18/2024	0.001ND	No	34	MW-201B,MW-9AR	n/a	n/a	55.88	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Antimony (mg/l)	MW-22	0.00230	n/a	4/18/2024	0.001ND	No	34	MW-201B,MW-9AR	n/a	n/a	55.88	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Antimony (mg/l)	MW-24	0.00230	n/a	4/17/2024	0.001ND	No	34	MW-201B,MW-9AR	n/a	n/a	55.88	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Antimony (mg/l)	MW-26A	0.00230	n/a	4/17/2024	0.001ND	No	34	MW-201B,MW-9AR	n/a	n/a	55.88	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Antimony (mg/l)	MW-300	0.00230	n/a	4/18/2024	0.001ND	No	34	MW-201B,MW-9AR	n/a	n/a	55.88	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Antimony (mg/l)	MW-301	0.00230	n/a	4/18/2024	0.001ND	No	34	MW-201B,MW-9AR	n/a	n/a	55.88	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Antimony (mg/l)	MW-302R	0.00230	n/a	4/17/2024	0.001ND	No	34	MW-201B,MW-9AR	n/a	n/a	55.88	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Antimony (mg/l)	MW-303	0.00230	n/a	4/17/2024	0.001ND	No	34	MW-201B,MW-9AR	n/a	n/a	55.88	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Antimony (mg/l)	MW-304R	0.00230	n/a	4/17/2024	0.001ND	No	34	MW-201B,MW-9AR	n/a	n/a	55.88	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Antimony (mg/l)	MW-305	0.00230	n/a	4/17/2024	0.001ND	No	34	MW-201B,MW-9AR	n/a	n/a	55.88	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Antimony (mg/l)	MW-501	0.00230	n/a	5/29/2024	0.001ND	No	34	MW-201B,MW-9AR	n/a	n/a	55.88	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Arsenic (mg/l)	MW-15	0.00561	n/a	4/18/2024	0.00124J	No	34	MW-201B,MW-9AR	0.03915	0.01493	11.76	None	sqrt(x)	0.000...	Param Inter 1 of 2
Arsenic (mg/l)	MW-18	0.00561	n/a	4/18/2024	0.000265ND	No	34	MW-201B,MW-9AR	0.03915	0.01493	11.76	None	sqrt(x)	0.000...	Param Inter 1 of 2
Arsenic (mg/l)	MW-19	0.00561	n/a	4/18/2024	0.000845J	No	34	MW-201B,MW-9AR	0.03915	0.01493	11.76	None	sqrt(x)	0.000...	Param Inter 1 of 2
Arsenic (mg/l)	MW-20	0.00561	n/a	4/18/2024	0.00296	No	34	MW-201B,MW-9AR	0.03915	0.01493	11.76	None	sqrt(x)	0.000...	Param Inter 1 of 2
Arsenic (mg/l)	MW-22	0.00561	n/a	4/18/2024	0.00281	No	34	MW-201B,MW-9AR	0.03915	0.01493	11.76	None	sqrt(x)	0.000...	Param Inter 1 of 2
Arsenic (mg/l)	MW-24	0.00561	n/a	4/17/2024	0.000746J	No	34	MW-201B,MW-9AR	0.03915	0.01493	11.76	None	sqrt(x)	0.000...	Param Inter 1 of 2
Arsenic (mg/l)	**MW-26A**	**0.00561**	**n/a**	**5/29/2024**	**0.021**	**Yes**	**34**	**MW-201B,MW-9AR**	**0.03915**	**0.01493**	**11.76**	**None**	**sqrt(x)**	**0.000...**	**Param Inter 1 of 2**
Arsenic (mg/l)	MW-300	0.00561	n/a	4/18/2024	0.000265ND	No	34	MW-201B,MW-9AR	0.03915	0.01493	11.76	None	sqrt(x)	0.000...	Param Inter 1 of 2
Arsenic (mg/l)	MW-301	0.00561	n/a	4/18/2024	0.00467	No	34	MW-201B,MW-9AR	0.03915	0.01493	11.76	None	sqrt(x)	0.000...	Param Inter 1 of 2
Arsenic (mg/l)	MW-302R	0.00561	n/a	4/17/2024	0.000745J	No	34	MW-201B,MW-9AR	0.03915	0.01493	11.76	None	sqrt(x)	0.000...	Param Inter 1 of 2
Arsenic (mg/l)	MW-303	0.00561	n/a	4/17/2024	0.000265ND	No	34	MW-201B,MW-9AR	0.03915	0.01493	11.76	None	sqrt(x)	0.000...	Param Inter 1 of 2
Arsenic (mg/l)	MW-304R	0.00561	n/a	4/17/2024	0.000838J	No	34	MW-201B,MW-9AR	0.03915	0.01493	11.76	None	sqrt(x)	0.000...	Param Inter 1 of 2
Arsenic (mg/l)	MW-305	0.00561	n/a	4/17/2024	0.000265ND	No	34	MW-201B,MW-9AR	0.03915	0.01493	11.76	None	sqrt(x)	0.000...	Param Inter 1 of 2
Arsenic (mg/l)	**MW-501**	**0.00561**	**n/a**	**5/29/2024**	**0.00618**	**Yes**	**34**	**MW-201B,MW-9AR**	**0.03915**	**0.01493**	**11.76**	**None**	**sqrt(x)**	**0.000...**	**Param Inter 1 of 2**
Barium (mg/l)	MW-15	1.09	n/a	4/18/2024	0.0614	No	34	MW-201B,MW-9AR	0.6074	0.1759	0	None	x^(1/3)	0.000...	Param Inter 1 of 2
Barium (mg/l)	MW-18	1.09	n/a	4/18/2024	0.061	No	34	MW-201B,MW-9AR	0.6074	0.1759	0	None	x^(1/3)	0.000...	Param Inter 1 of 2
Barium (mg/l)	MW-19	1.09	n/a	4/18/2024	0.0444	No	34	MW-201B,MW-9AR	0.6074	0.1759	0	None	x^(1/3)	0.000...	Param Inter 1 of 2
Barium (mg/l)	MW-20	1.09	n/a	4/18/2024	0.719	No	34	MW-201B,MW-9AR	0.6074	0.1759	0	None	x^(1/3)	0.000...	Param Inter 1 of 2
Barium (mg/l)	MW-22	1.09	n/a	4/18/2024	1.06	No	34	MW-201B,MW-9AR	0.6074	0.1759	0	None	x^(1/3)	0.000...	Param Inter 1 of 2
Barium (mg/l)	MW-24	1.09	n/a	4/17/2024	0.0426	No	34	MW-201B,MW-9AR	0.6074	0.1759	0	None	x^(1/3)	0.000...	Param Inter 1 of 2
Barium (mg/l)	MW-26A	1.09	n/a	4/17/2024	0.249	No	34	MW-201B,MW-9AR	0.6074	0.1759	0	None	x^(1/3)	0.000...	Param Inter 1 of 2
Barium (mg/l)	MW-300	1.09	n/a	4/18/2024	0.0983	No	34	MW-201B,MW-9AR	0.6074	0.1759	0	None	x^(1/3)	0.000...	Param Inter 1 of 2
Barium (mg/l)	MW-301	1.09	n/a	4/18/2024	0.0672	No	34	MW-201B,MW-9AR	0.6074	0.1759	0	None	x^(1/3)	0.000...	Param Inter 1 of 2
Barium (mg/l)	MW-302R	1.09	n/a	4/17/2024	0.119	No	34	MW-201B,MW-9AR	0.6074	0.1759	0	None	x^(1/3)	0.000...	Param Inter 1 of 2
Barium (mg/l)	MW-303	1.09	n/a	4/17/2024	0.0157	No	34	MW-201B,MW-9AR	0.6074	0.1759	0	None	x^(1/3)	0.000...	Param Inter 1 of 2
Barium (mg/l)	MW-304R	1.09	n/a	4/17/2024	0.0523	No	34	MW-201B,MW-9AR	0.6074	0.1759	0	None	x^(1/3)	0.000...	Param Inter 1 of 2
Barium (mg/l)	MW-305	1.09	n/a	4/17/2024	0.0443	No	34	MW-201B,MW-9AR	0.6074	0.1759	0	None	x^(1/3)	0.000...	Param Inter 1 of 2
Barium (mg/l)	MW-501	1.09	n/a	5/29/2024	0.0232	No	34	MW-201B,MW-9AR	0.6074	0.1759	0	None	x^(1/3)	0.000...	Param Inter 1 of 2
Beryllium (mg/l)	MW-15	0.000330	n/a	4/18/2024	0.00033ND	No	33	MW-201B,MW-9AR	n/a	n/a	93.94	n/a	n/a	0.001556	NP Inter (NDs) 1 of 2
Beryllium (mg/l)	MW-18	0.000330	n/a	4/18/2024	0.00033ND	No	33	MW-201B,MW-9AR	n/a	n/a	93.94	n/a	n/a	0.001556	NP Inter (NDs) 1 of 2
Beryllium (mg/l)	MW-19	0.000330	n/a	4/18/2024	0.00033ND	No	33	MW-201B,MW-9AR	n/a	n/a	93.94	n/a	n/a	0.001556	NP Inter (NDs) 1 of 2
Beryllium (mg/l)	MW-20	0.000330	n/a	4/18/2024	0.00033ND	No	33	MW-201B,MW-9AR	n/a	n/a	93.94	n/a	n/a	0.001556	NP Inter (NDs) 1 of 2
Beryllium (mg/l)	MW-22	0.000330	n/a	4/18/2024	0.00033ND	No	33	MW-201B,MW-9AR	n/a	n/a	93.94	n/a	n/a	0.001556	NP Inter (NDs) 1 of 2
Beryllium (mg/l)	MW-24	0.000330	n/a	4/17/2024	0.00033ND	No	33	MW-201B,MW-9AR	n/a	n/a	93.94	n/a	n/a	0.001556	NP Inter (NDs) 1 of 2
Beryllium (mg/l)	MW-26A	0.000330	n/a	4/17/2024	0.00033ND	No	33	MW-201B,MW-9AR	n/a	n/a	93.94	n/a	n/a	0.001556	NP Inter (NDs) 1 of 2
Beryllium (mg/l)	MW-300	0.000330	n/a	4/18/2024	0.00033ND	No	33	MW-201B,MW-9AR	n/a	n/a	93.94	n/a	n/a	0.001556	NP Inter (NDs) 1 of 2

Prediction Limit

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:17 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Wells	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Beryllium (mg/l)	MW-301	0.000330	n/a	4/18/2024	0.00033ND	No	33	MW-201B,MW-9AR	n/a	n/a	93.94	n/a	n/a	0.001556	NP Inter (NDs) 1 of 2
Beryllium (mg/l)	MW-302R	0.000330	n/a	4/17/2024	0.00033ND	No	33	MW-201B,MW-9AR	n/a	n/a	93.94	n/a	n/a	0.001556	NP Inter (NDs) 1 of 2
Beryllium (mg/l)	MW-303	0.000330	n/a	4/17/2024	0.00033ND	No	33	MW-201B,MW-9AR	n/a	n/a	93.94	n/a	n/a	0.001556	NP Inter (NDs) 1 of 2
Beryllium (mg/l)	MW-304R	0.000330	n/a	4/17/2024	0.00033ND	No	33	MW-201B,MW-9AR	n/a	n/a	93.94	n/a	n/a	0.001556	NP Inter (NDs) 1 of 2
Beryllium (mg/l)	MW-305	0.000330	n/a	4/17/2024	0.00033ND	No	33	MW-201B,MW-9AR	n/a	n/a	93.94	n/a	n/a	0.001556	NP Inter (NDs) 1 of 2
Beryllium (mg/l)	**MW-501**	**0.000330**	**n/a**	**5/29/2024**	**0.00227**	**Yes**	**33**	**MW-201B,MW-9AR**	**n/a**	**n/a**	**93.94**	**n/a**	**n/a**	**0.001556**	**NP Inter (NDs) 1 of 2**
Cadmium (mg/l)	MW-15	0.000139	n/a	4/18/2024	0.0001ND	No	32	MW-201B,MW-9AR	n/a	n/a	90.63	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Cadmium (mg/l)	**MW-18**	**0.000139**	**n/a**	**4/18/2024**	**0.000211**	**Yes**	**32**	**MW-201B,MW-9AR**	**n/a**	**n/a**	**90.63**	**n/a**	**n/a**	**0.001643**	**NP Inter (NDs) 1 of 2**
Cadmium (mg/l)	MW-19	0.000139	n/a	4/18/2024	0.000119J	No	32	MW-201B,MW-9AR	n/a	n/a	90.63	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Cadmium (mg/l)	MW-20	0.000139	n/a	4/18/2024	0.0001ND	No	32	MW-201B,MW-9AR	n/a	n/a	90.63	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Cadmium (mg/l)	MW-22	0.000139	n/a	4/18/2024	0.0001ND	No	32	MW-201B,MW-9AR	n/a	n/a	90.63	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Cadmium (mg/l)	MW-24	0.000139	n/a	4/17/2024	0.0001ND	No	32	MW-201B,MW-9AR	n/a	n/a	90.63	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Cadmium (mg/l)	MW-26A	0.000139	n/a	4/17/2024	0.0001ND	No	32	MW-201B,MW-9AR	n/a	n/a	90.63	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Cadmium (mg/l)	MW-300	0.000139	n/a	4/18/2024	0.0001ND	No	32	MW-201B,MW-9AR	n/a	n/a	90.63	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Cadmium (mg/l)	MW-301	0.000139	n/a	4/18/2024	0.0001ND	No	32	MW-201B,MW-9AR	n/a	n/a	90.63	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Cadmium (mg/l)	MW-302R	0.000139	n/a	4/17/2024	0.0001ND	No	32	MW-201B,MW-9AR	n/a	n/a	90.63	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Cadmium (mg/l)	MW-303	0.000139	n/a	4/17/2024	0.000173J	No	32	MW-201B,MW-9AR	n/a	n/a	90.63	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Cadmium (mg/l)	MW-304R	0.000139	n/a	4/17/2024	0.0001ND	No	32	MW-201B,MW-9AR	n/a	n/a	90.63	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Cadmium (mg/l)	MW-305	0.000139	n/a	4/17/2024	0.0001ND	No	32	MW-201B,MW-9AR	n/a	n/a	90.63	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Cadmium (mg/l)	**MW-501**	**0.000139**	**n/a**	**5/29/2024**	**0.000576**	**Yes**	**32**	**MW-201B,MW-9AR**	**n/a**	**n/a**	**90.63**	**n/a**	**n/a**	**0.001643**	**NP Inter (NDs) 1 of 2**
Chromium (mg/l)	MW-15	0.0134	n/a	4/18/2024	0.0012ND	No	34	MW-201B,MW-9AR	n/a	n/a	82.35	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Chromium (mg/l)	MW-18	0.0134	n/a	4/18/2024	0.0012ND	No	34	MW-201B,MW-9AR	n/a	n/a	82.35	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Chromium (mg/l)	MW-19	0.0134	n/a	4/18/2024	0.0012ND	No	34	MW-201B,MW-9AR	n/a	n/a	82.35	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Chromium (mg/l)	MW-20	0.0134	n/a	4/18/2024	0.0012ND	No	34	MW-201B,MW-9AR	n/a	n/a	82.35	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Chromium (mg/l)	MW-22	0.0134	n/a	4/18/2024	0.0012ND	No	34	MW-201B,MW-9AR	n/a	n/a	82.35	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Chromium (mg/l)	MW-24	0.0134	n/a	4/17/2024	0.0012ND	No	34	MW-201B,MW-9AR	n/a	n/a	82.35	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Chromium (mg/l)	MW-26A	0.0134	n/a	4/17/2024	0.0012ND	No	34	MW-201B,MW-9AR	n/a	n/a	82.35	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Chromium (mg/l)	MW-300	0.0134	n/a	4/18/2024	0.0012ND	No	34	MW-201B,MW-9AR	n/a	n/a	82.35	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Chromium (mg/l)	MW-301	0.0134	n/a	4/18/2024	0.0012ND	No	34	MW-201B,MW-9AR	n/a	n/a	82.35	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Chromium (mg/l)	MW-302R	0.0134	n/a	4/17/2024	0.0012ND	No	34	MW-201B,MW-9AR	n/a	n/a	82.35	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Chromium (mg/l)	MW-303	0.0134	n/a	4/17/2024	0.0012ND	No	34	MW-201B,MW-9AR	n/a	n/a	82.35	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Chromium (mg/l)	MW-304R	0.0134	n/a	4/17/2024	0.0012ND	No	34	MW-201B,MW-9AR	n/a	n/a	82.35	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Chromium (mg/l)	MW-305	0.0134	n/a	4/17/2024	0.0012ND	No	34	MW-201B,MW-9AR	n/a	n/a	82.35	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Chromium (mg/l)	MW-501	0.0134	n/a	5/29/2024	0.0012ND	No	34	MW-201B,MW-9AR	n/a	n/a	82.35	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Cobalt (mg/l)	MW-15	0.00288	n/a	4/18/2024	0.00206	No	34	MW-9AR,MW-201B	n/a	n/a	23.53	n/a	n/a	0.00147	NP Inter (normality) ...
Cobalt (mg/l)	**MW-18**	**0.00288**	**n/a**	**4/18/2024**	**0.00346**	**Yes**	**34**	**MW-9AR,MW-201B**	**n/a**	**n/a**	**23.53**	**n/a**	**n/a**	**0.00147**	**NP Inter (normality) ...**
Cobalt (mg/l)	**MW-19**	**0.00288**	**n/a**	**4/18/2024**	**0.00852**	**Yes**	**34**	**MW-9AR,MW-201B**	**n/a**	**n/a**	**23.53**	**n/a**	**n/a**	**0.00147**	**NP Inter (normality) ...**
Cobalt (mg/l)	MW-20	0.00288	n/a	4/18/2024	0.0018	No	34	MW-9AR,MW-201B	n/a	n/a	23.53	n/a	n/a	0.00147	NP Inter (normality) ...
Cobalt (mg/l)	MW-22	0.00288	n/a	4/18/2024	0.000278J	No	34	MW-9AR,MW-201B	n/a	n/a	23.53	n/a	n/a	0.00147	NP Inter (normality) ...
Cobalt (mg/l)	MW-24	0.00288	n/a	4/17/2024	0.000376J	No	34	MW-9AR,MW-201B	n/a	n/a	23.53	n/a	n/a	0.00147	NP Inter (normality) ...
Cobalt (mg/l)	**MW-26A**	**0.00288**	**n/a**	**4/17/2024**	**0.113**	**Yes**	**34**	**MW-9AR,MW-201B**	**n/a**	**n/a**	**23.53**	**n/a**	**n/a**	**0.00147**	**NP Inter (normality) ...**
Cobalt (mg/l)	MW-300	0.00288	n/a	4/18/2024	0.00017ND	No	34	MW-9AR,MW-201B	n/a	n/a	23.53	n/a	n/a	0.00147	NP Inter (normality) ...
Cobalt (mg/l)	**MW-301**	**0.00288**	**n/a**	**4/18/2024**	**0.00424**	**Yes**	**34**	**MW-9AR,MW-201B**	**n/a**	**n/a**	**23.53**	**n/a**	**n/a**	**0.00147**	**NP Inter (normality) ...**
Cobalt (mg/l)	MW-302R	0.00288	n/a	4/17/2024	0.00017ND	No	34	MW-9AR,MW-201B	n/a	n/a	23.53	n/a	n/a	0.00147	NP Inter (normality) ...
Cobalt (mg/l)	MW-303	0.00288	n/a	4/17/2024	0.000204J	No	34	MW-9AR,MW-201B	n/a	n/a	23.53	n/a	n/a	0.00147	NP Inter (normality) ...
Cobalt (mg/l)	**MW-304R**	**0.00288**	**n/a**	**5/29/2024**	**0.00983**	**Yes**	**34**	**MW-9AR,MW-201B**	**n/a**	**n/a**	**23.53**	**n/a**	**n/a**	**0.00147**	**NP Inter (normality) ...**
Cobalt (mg/l)	MW-305	0.00288	n/a	4/17/2024	0.00162	No	34	MW-9AR,MW-201B	n/a	n/a	23.53	n/a	n/a	0.00147	NP Inter (normality) ...
Cobalt (mg/l)	**MW-501**	**0.00288**	**n/a**	**5/29/2024**	**0.0525**	**Yes**	**34**	**MW-9AR,MW-201B**	**n/a**	**n/a**	**23.53**	**n/a**	**n/a**	**0.00147**	**NP Inter (normality) ...**
Copper (mg/l)	MW-15	0.00792	n/a	4/18/2024	0.00248J	No	32	MW-201B,MW-9AR	n/a	n/a	68.75	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Copper (mg/l)	MW-18	0.00792	n/a	4/18/2024	0.00198J	No	32	MW-201B,MW-9AR	n/a	n/a	68.75	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2

Prediction Limit

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:17 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Wells	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Copper (mg/l)	MW-19	0.00792	n/a	4/18/2024	0.0018ND	No	32	MW-201B,MW-9AR	n/a	n/a	68.75	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Copper (mg/l)	MW-20	0.00792	n/a	4/18/2024	0.0018ND	No	32	MW-201B,MW-9AR	n/a	n/a	68.75	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Copper (mg/l)	MW-22	0.00792	n/a	4/18/2024	0.0018ND	No	32	MW-201B,MW-9AR	n/a	n/a	68.75	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Copper (mg/l)	MW-24	0.00792	n/a	4/17/2024	0.00415J	No	32	MW-201B,MW-9AR	n/a	n/a	68.75	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Copper (mg/l)	MW-26A	0.00792	n/a	4/17/2024	0.0018ND	No	32	MW-201B,MW-9AR	n/a	n/a	68.75	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Copper (mg/l)	MW-300	0.00792	n/a	4/18/2024	0.0018ND	No	32	MW-201B,MW-9AR	n/a	n/a	68.75	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Copper (mg/l)	MW-301	0.00792	n/a	4/18/2024	0.0018ND	No	32	MW-201B,MW-9AR	n/a	n/a	68.75	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Copper (mg/l)	MW-302R	0.00792	n/a	4/17/2024	0.0018ND	No	32	MW-201B,MW-9AR	n/a	n/a	68.75	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Copper (mg/l)	MW-303	0.00792	n/a	4/17/2024	0.0018ND	No	32	MW-201B,MW-9AR	n/a	n/a	68.75	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Copper (mg/l)	MW-304R	0.00792	n/a	4/17/2024	0.0018ND	No	32	MW-201B,MW-9AR	n/a	n/a	68.75	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Copper (mg/l)	MW-305	0.00792	n/a	4/17/2024	0.0018ND	No	32	MW-201B,MW-9AR	n/a	n/a	68.75	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Copper (mg/l)	MW-501	0.00792	n/a	5/29/2024	0.00289J	No	32	MW-201B,MW-9AR	n/a	n/a	68.75	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Lead (mg/l)	MW-15	0.00704	n/a	4/18/2024	0.00026ND	No	34	MW-9AR,MW-201B	n/a	n/a	55.88	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Lead (mg/l)	MW-18	0.00704	n/a	4/18/2024	0.00026ND	No	34	MW-9AR,MW-201B	n/a	n/a	55.88	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Lead (mg/l)	MW-19	0.00704	n/a	4/18/2024	0.00026ND	No	34	MW-9AR,MW-201B	n/a	n/a	55.88	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Lead (mg/l)	MW-20	0.00704	n/a	4/18/2024	0.00026ND	No	34	MW-9AR,MW-201B	n/a	n/a	55.88	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Lead (mg/l)	MW-22	0.00704	n/a	4/18/2024	0.00026ND	No	34	MW-9AR,MW-201B	n/a	n/a	55.88	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Lead (mg/l)	MW-24	0.00704	n/a	4/17/2024	0.00026ND	No	34	MW-9AR,MW-201B	n/a	n/a	55.88	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Lead (mg/l)	MW-26A	0.00704	n/a	4/17/2024	0.00026ND	No	34	MW-9AR,MW-201B	n/a	n/a	55.88	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Lead (mg/l)	MW-300	0.00704	n/a	4/18/2024	0.00026ND	No	34	MW-9AR,MW-201B	n/a	n/a	55.88	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Lead (mg/l)	MW-301	0.00704	n/a	4/18/2024	0.00026ND	No	34	MW-9AR,MW-201B	n/a	n/a	55.88	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Lead (mg/l)	MW-302R	0.00704	n/a	4/17/2024	0.00026ND	No	34	MW-9AR,MW-201B	n/a	n/a	55.88	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Lead (mg/l)	MW-303	0.00704	n/a	4/17/2024	0.00026ND	No	34	MW-9AR,MW-201B	n/a	n/a	55.88	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Lead (mg/l)	MW-304R	0.00704	n/a	4/17/2024	0.00026ND	No	34	MW-9AR,MW-201B	n/a	n/a	55.88	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Lead (mg/l)	MW-305	0.00704	n/a	4/17/2024	0.00026ND	No	34	MW-9AR,MW-201B	n/a	n/a	55.88	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Lead (mg/l)	MW-501	0.00704	n/a	5/29/2024	0.000365J	No	34	MW-9AR,MW-201B	n/a	n/a	55.88	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Mercury (mg/l)	MW-15	0.000150	n/a	10/12/2022	0.00011ND	No	6	MW-201B,MW-9AR	n/a	n/a	100	n/a	n/a	0.01735	NP Inter (NDs) 1 of 2
Mercury (mg/l)	MW-18	0.000150	n/a	10/12/2022	0.00011ND	No	6	MW-201B,MW-9AR	n/a	n/a	100	n/a	n/a	0.01735	NP Inter (NDs) 1 of 2
Mercury (mg/l)	MW-19	0.000150	n/a	10/19/2021	0.00015ND	No	6	MW-201B,MW-9AR	n/a	n/a	100	n/a	n/a	0.01735	NP Inter (NDs) 1 of 2
Mercury (mg/l)	MW-20	0.000150	n/a	10/19/2021	0.00015ND	No	6	MW-201B,MW-9AR	n/a	n/a	100	n/a	n/a	0.01735	NP Inter (NDs) 1 of 2
Mercury (mg/l)	MW-22	0.000150	n/a	10/18/2021	0.00015ND	No	6	MW-201B,MW-9AR	n/a	n/a	100	n/a	n/a	0.01735	NP Inter (NDs) 1 of 2
Mercury (mg/l)	MW-24	0.000150	n/a	10/12/2022	0.00011ND	No	6	MW-201B,MW-9AR	n/a	n/a	100	n/a	n/a	0.01735	NP Inter (NDs) 1 of 2
Mercury (mg/l)	MW-26A	0.000150	n/a	4/17/2024	0.00011ND	No	6	MW-201B,MW-9AR	n/a	n/a	100	n/a	n/a	0.01735	NP Inter (NDs) 1 of 2
Mercury (mg/l)	MW-300	0.000150	n/a	10/19/2021	0.00015ND	No	6	MW-201B,MW-9AR	n/a	n/a	100	n/a	n/a	0.01735	NP Inter (NDs) 1 of 2
Mercury (mg/l)	MW-301	0.000150	n/a	10/19/2021	0.00015ND	No	6	MW-201B,MW-9AR	n/a	n/a	100	n/a	n/a	0.01735	NP Inter (NDs) 1 of 2
Mercury (mg/l)	MW-302R	0.000150	n/a	10/12/2022	0.00011ND	No	6	MW-201B,MW-9AR	n/a	n/a	100	n/a	n/a	0.01735	NP Inter (NDs) 1 of 2
Mercury (mg/l)	MW-303	0.000150	n/a	12/2/2021	0.00015ND	No	6	MW-201B,MW-9AR	n/a	n/a	100	n/a	n/a	0.01735	NP Inter (NDs) 1 of 2
Mercury (mg/l)	MW-304R	0.000150	n/a	4/17/2024	0.00011ND	No	6	MW-201B,MW-9AR	n/a	n/a	100	n/a	n/a	0.01735	NP Inter (NDs) 1 of 2
Mercury (mg/l)	MW-305	0.000150	n/a	10/12/2022	0.00011ND	No	6	MW-201B,MW-9AR	n/a	n/a	100	n/a	n/a	0.01735	NP Inter (NDs) 1 of 2
Nickel (mg/l)	**MW-15**	**0.00561**	**n/a**	**4/18/2024**	**0.00928**	**Yes**	**32**	**MW-201B,MW-9AR**	**n/a**	**n/a**	**71.88**	**n/a**	**n/a**	**0.001643**	**NP Inter (NDs) 1 of 2**
Nickel (mg/l)	**MW-18**	**0.00561**	**n/a**	**4/18/2024**	**0.0261**	**Yes**	**32**	**MW-201B,MW-9AR**	**n/a**	**n/a**	**71.88**	**n/a**	**n/a**	**0.001643**	**NP Inter (NDs) 1 of 2**
Nickel (mg/l)	**MW-19**	**0.00561**	**n/a**	**4/18/2024**	**0.0253**	**Yes**	**32**	**MW-201B,MW-9AR**	**n/a**	**n/a**	**71.88**	**n/a**	**n/a**	**0.001643**	**NP Inter (NDs) 1 of 2**
Nickel (mg/l)	**MW-20**	**0.00561**	**n/a**	**4/18/2024**	**0.0101**	**Yes**	**32**	**MW-201B,MW-9AR**	**n/a**	**n/a**	**71.88**	**n/a**	**n/a**	**0.001643**	**NP Inter (NDs) 1 of 2**
Nickel (mg/l)	**MW-22**	**0.00561**	**n/a**	**4/18/2024**	**0.0333**	**Yes**	**32**	**MW-201B,MW-9AR**	**n/a**	**n/a**	**71.88**	**n/a**	**n/a**	**0.001643**	**NP Inter (NDs) 1 of 2**
Nickel (mg/l)	**MW-24**	**0.00561**	**n/a**	**4/17/2024**	**0.014**	**Yes**	**32**	**MW-201B,MW-9AR**	**n/a**	**n/a**	**71.88**	**n/a**	**n/a**	**0.001643**	**NP Inter (NDs) 1 of 2**
Nickel (mg/l)	**MW-26A**	**0.00561**	**n/a**	**4/17/2024**	**0.0512**	**Yes**	**32**	**MW-201B,MW-9AR**	**n/a**	**n/a**	**71.88**	**n/a**	**n/a**	**0.001643**	**NP Inter (NDs) 1 of 2**
Nickel (mg/l)	MW-300	0.00561	n/a	4/18/2024	0.0021ND	No	32	MW-201B,MW-9AR	n/a	n/a	71.88	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Nickel (mg/l)	**MW-301**	**0.00561**	**n/a**	**4/18/2024**	**0.00692**	**Yes**	**32**	**MW-201B,MW-9AR**	**n/a**	**n/a**	**71.88**	**n/a**	**n/a**	**0.001643**	**NP Inter (NDs) 1 of 2**
Nickel (mg/l)	MW-302R	0.00561	n/a	4/17/2024	0.0021ND	No	32	MW-201B,MW-9AR	n/a	n/a	71.88	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Nickel (mg/l)	**MW-303**	**0.00561**	**n/a**	**4/17/2024**	**0.0113**	**Yes**	**32**	**MW-201B,MW-9AR**	**n/a**	**n/a**	**71.88**	**n/a**	**n/a**	**0.001643**	**NP Inter (NDs) 1 of 2**

Prediction Limit

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:17 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Wells	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Nickel (mg/l)	MW-304R	0.00561	n/a	4/17/2024	0.00255J	No	32	MW-201B,MW-9AR	n/a	n/a	71.88	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Nickel (mg/l)	MW-305	0.00561	n/a	4/17/2024	0.00277J	No	32	MW-201B,MW-9AR	n/a	n/a	71.88	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Nickel (mg/l)	**MW-501**	**0.00561**	**n/a**	**5/29/2024**	**0.107**	**Yes**	**32**	**MW-201B,MW-9AR**	**n/a**	**n/a**	**71.88**	**n/a**	**n/a**	**0.001643**	**NP Inter (NDs) 1 of 2**
Selenium (mg/l)	MW-15	0.00149	n/a	4/18/2024	0.00349J	No	30	MW-201B,MW-9AR	n/a	n/a	90	n/a	n/a	0.001816	NP Inter (NDs) 1 of 2
Selenium (mg/l)	MW-18	0.00149	n/a	4/18/2024	0.0014ND	No	30	MW-201B,MW-9AR	n/a	n/a	90	n/a	n/a	0.001816	NP Inter (NDs) 1 of 2
Selenium (mg/l)	MW-19	0.00149	n/a	4/18/2024	0.0014ND	No	30	MW-201B,MW-9AR	n/a	n/a	90	n/a	n/a	0.001816	NP Inter (NDs) 1 of 2
Selenium (mg/l)	MW-20	0.00149	n/a	4/18/2024	0.0014ND	No	30	MW-201B,MW-9AR	n/a	n/a	90	n/a	n/a	0.001816	NP Inter (NDs) 1 of 2
Selenium (mg/l)	MW-22	0.00149	n/a	4/18/2024	0.0014ND	No	30	MW-201B,MW-9AR	n/a	n/a	90	n/a	n/a	0.001816	NP Inter (NDs) 1 of 2
Selenium (mg/l)	MW-24	0.00149	n/a	4/17/2024	0.0014ND	No	30	MW-201B,MW-9AR	n/a	n/a	90	n/a	n/a	0.001816	NP Inter (NDs) 1 of 2
Selenium (mg/l)	MW-26A	0.00149	n/a	4/17/2024	0.0014ND	No	30	MW-201B,MW-9AR	n/a	n/a	90	n/a	n/a	0.001816	NP Inter (NDs) 1 of 2
Selenium (mg/l)	MW-300	0.00149	n/a	4/18/2024	0.0014ND	No	30	MW-201B,MW-9AR	n/a	n/a	90	n/a	n/a	0.001816	NP Inter (NDs) 1 of 2
Selenium (mg/l)	MW-301	0.00149	n/a	4/18/2024	0.0014ND	No	30	MW-201B,MW-9AR	n/a	n/a	90	n/a	n/a	0.001816	NP Inter (NDs) 1 of 2
Selenium (mg/l)	MW-302R	0.00149	n/a	4/17/2024	0.0014ND	No	30	MW-201B,MW-9AR	n/a	n/a	90	n/a	n/a	0.001816	NP Inter (NDs) 1 of 2
Selenium (mg/l)	MW-303	0.00149	n/a	4/17/2024	0.0014ND	No	30	MW-201B,MW-9AR	n/a	n/a	90	n/a	n/a	0.001816	NP Inter (NDs) 1 of 2
Selenium (mg/l)	MW-304R	0.00149	n/a	4/17/2024	0.0014ND	No	30	MW-201B,MW-9AR	n/a	n/a	90	n/a	n/a	0.001816	NP Inter (NDs) 1 of 2
Selenium (mg/l)	MW-305	0.00149	n/a	4/17/2024	0.0014ND	No	30	MW-201B,MW-9AR	n/a	n/a	90	n/a	n/a	0.001816	NP Inter (NDs) 1 of 2
Selenium (mg/l)	MW-501	0.00149	n/a	5/29/2024	0.0014ND	No	30	MW-201B,MW-9AR	n/a	n/a	90	n/a	n/a	0.001816	NP Inter (NDs) 1 of 2
Silver (mg/l)	MW-15	0.000500	n/a	4/18/2024	0.0005ND	No	34	MW-201B,MW-9AR	n/a	n/a	100	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Silver (mg/l)	MW-18	0.000500	n/a	4/18/2024	0.0005ND	No	34	MW-201B,MW-9AR	n/a	n/a	100	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Silver (mg/l)	MW-19	0.000500	n/a	4/18/2024	0.0005ND	No	34	MW-201B,MW-9AR	n/a	n/a	100	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Silver (mg/l)	MW-20	0.000500	n/a	4/18/2024	0.0005ND	No	34	MW-201B,MW-9AR	n/a	n/a	100	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Silver (mg/l)	MW-22	0.000500	n/a	4/18/2024	0.0005ND	No	34	MW-201B,MW-9AR	n/a	n/a	100	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Silver (mg/l)	MW-24	0.000500	n/a	4/17/2024	0.0005ND	No	34	MW-201B,MW-9AR	n/a	n/a	100	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Silver (mg/l)	MW-26A	0.000500	n/a	4/17/2024	0.0005ND	No	34	MW-201B,MW-9AR	n/a	n/a	100	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Silver (mg/l)	MW-300	0.000500	n/a	4/18/2024	0.0005ND	No	34	MW-201B,MW-9AR	n/a	n/a	100	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Silver (mg/l)	MW-301	0.000500	n/a	4/18/2024	0.0005ND	No	34	MW-201B,MW-9AR	n/a	n/a	100	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Silver (mg/l)	MW-302R	0.000500	n/a	4/17/2024	0.0005ND	No	34	MW-201B,MW-9AR	n/a	n/a	100	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Silver (mg/l)	MW-303	0.000500	n/a	4/17/2024	0.0005ND	No	34	MW-201B,MW-9AR	n/a	n/a	100	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Silver (mg/l)	MW-304R	0.000500	n/a	4/17/2024	0.0005ND	No	34	MW-201B,MW-9AR	n/a	n/a	100	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Silver (mg/l)	MW-305	0.000500	n/a	4/17/2024	0.0005ND	No	34	MW-201B,MW-9AR	n/a	n/a	100	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Silver (mg/l)	MW-501	0.000500	n/a	5/29/2024	0.0005ND	No	34	MW-201B,MW-9AR	n/a	n/a	100	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Sulfide (mg/l)	MW-15	10.0	n/a	10/12/2022	0.231ND	No	29	MW-201B,MW-9AR	n/a	n/a	96.55	n/a	n/a	0.001948	NP Inter (NDs) 1 of 2
Sulfide (mg/l)	MW-18	10.0	n/a	10/12/2022	0.231ND	No	29	MW-201B,MW-9AR	n/a	n/a	96.55	n/a	n/a	0.001948	NP Inter (NDs) 1 of 2
Sulfide (mg/l)	MW-19	10.0	n/a	10/19/2021	0.231ND	No	29	MW-201B,MW-9AR	n/a	n/a	96.55	n/a	n/a	0.001948	NP Inter (NDs) 1 of 2
Sulfide (mg/l)	MW-20	10.0	n/a	10/19/2021	0.231ND	No	29	MW-201B,MW-9AR	n/a	n/a	96.55	n/a	n/a	0.001948	NP Inter (NDs) 1 of 2
Sulfide (mg/l)	MW-22	10.0	n/a	10/18/2021	0.231ND	No	29	MW-201B,MW-9AR	n/a	n/a	96.55	n/a	n/a	0.001948	NP Inter (NDs) 1 of 2
Sulfide (mg/l)	MW-24	10.0	n/a	10/12/2022	0.231ND	No	29	MW-201B,MW-9AR	n/a	n/a	96.55	n/a	n/a	0.001948	NP Inter (NDs) 1 of 2
Sulfide (mg/l)	MW-26A	10.0	n/a	4/17/2024	0.231ND	No	29	MW-201B,MW-9AR	n/a	n/a	96.55	n/a	n/a	0.001948	NP Inter (NDs) 1 of 2
Sulfide (mg/l)	MW-300	10.0	n/a	10/19/2021	0.231ND	No	29	MW-201B,MW-9AR	n/a	n/a	96.55	n/a	n/a	0.001948	NP Inter (NDs) 1 of 2
Sulfide (mg/l)	MW-301	10.0	n/a	10/19/2021	0.0462ND	No	29	MW-201B,MW-9AR	n/a	n/a	96.55	n/a	n/a	0.001948	NP Inter (NDs) 1 of 2
Sulfide (mg/l)	MW-302R	10.0	n/a	10/12/2022	0.231ND	No	29	MW-201B,MW-9AR	n/a	n/a	96.55	n/a	n/a	0.001948	NP Inter (NDs) 1 of 2
Sulfide (mg/l)	MW-303	10.0	n/a	12/2/2021	0.231ND	No	29	MW-201B,MW-9AR	n/a	n/a	96.55	n/a	n/a	0.001948	NP Inter (NDs) 1 of 2
Sulfide (mg/l)	MW-304R	10.0	n/a	4/17/2024	0.231ND	No	29	MW-201B,MW-9AR	n/a	n/a	96.55	n/a	n/a	0.001948	NP Inter (NDs) 1 of 2
Sulfide (mg/l)	MW-305	10.0	n/a	10/12/2022	0.231ND	No	29	MW-201B,MW-9AR	n/a	n/a	96.55	n/a	n/a	0.001948	NP Inter (NDs) 1 of 2
Thallium (mg/l)	MW-15	0.000899	n/a	4/18/2024	0.00057ND	No	32	MW-201B,MW-9AR	n/a	n/a	87.5	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Thallium (mg/l)	MW-18	0.000899	n/a	4/18/2024	0.00057ND	No	32	MW-201B,MW-9AR	n/a	n/a	87.5	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Thallium (mg/l)	MW-19	0.000899	n/a	4/18/2024	0.00057ND	No	32	MW-201B,MW-9AR	n/a	n/a	87.5	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Thallium (mg/l)	MW-20	0.000899	n/a	4/18/2024	0.00057ND	No	32	MW-201B,MW-9AR	n/a	n/a	87.5	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Thallium (mg/l)	MW-22	0.000899	n/a	4/18/2024	0.00057ND	No	32	MW-201B,MW-9AR	n/a	n/a	87.5	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Thallium (mg/l)	MW-24	0.000899	n/a	4/17/2024	0.00057ND	No	32	MW-201B,MW-9AR	n/a	n/a	87.5	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2

Prediction Limit

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:17 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Wells	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Thallium (mg/l)	MW-26A	0.000899	n/a	4/18/2023	0.00026ND	No	32	MW-201B,MW-9AR	n/a	n/a	87.5	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Thallium (mg/l)	MW-300	0.000899	n/a	4/18/2024	0.00057ND	No	32	MW-201B,MW-9AR	n/a	n/a	87.5	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Thallium (mg/l)	MW-301	0.000899	n/a	4/18/2024	0.00057ND	No	32	MW-201B,MW-9AR	n/a	n/a	87.5	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Thallium (mg/l)	MW-302R	0.000899	n/a	4/17/2024	0.00057ND	No	32	MW-201B,MW-9AR	n/a	n/a	87.5	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Thallium (mg/l)	MW-303	0.000899	n/a	4/17/2024	0.00057ND	No	32	MW-201B,MW-9AR	n/a	n/a	87.5	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Thallium (mg/l)	MW-304R	0.000899	n/a	4/17/2024	0.00057ND	No	32	MW-201B,MW-9AR	n/a	n/a	87.5	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Thallium (mg/l)	MW-305	0.000899	n/a	4/17/2024	0.00057ND	No	32	MW-201B,MW-9AR	n/a	n/a	87.5	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Thallium (mg/l)	MW-501	0.000899	n/a	5/29/2024	0.00057ND	No	32	MW-201B,MW-9AR	n/a	n/a	87.5	n/a	n/a	0.001643	NP Inter (NDs) 1 of 2
Tin (mg/l)	MW-15	0.00180	n/a	10/12/2022	0.003ND	No	6	MW-9AR,MW-201B	n/a	n/a	83.33	n/a	n/a	0.01735	NP Inter (NDs) 1 of 2
Tin (mg/l)	MW-18	0.00180	n/a	10/12/2022	0.003ND	No	6	MW-9AR,MW-201B	n/a	n/a	83.33	n/a	n/a	0.01735	NP Inter (NDs) 1 of 2
Tin (mg/l)	MW-19	0.00180	n/a	10/19/2021	0.003ND	No	6	MW-9AR,MW-201B	n/a	n/a	83.33	n/a	n/a	0.01735	NP Inter (NDs) 1 of 2
Tin (mg/l)	MW-20	0.00180	n/a	10/19/2021	0.003ND	No	6	MW-9AR,MW-201B	n/a	n/a	83.33	n/a	n/a	0.01735	NP Inter (NDs) 1 of 2
Tin (mg/l)	MW-22	0.00180	n/a	10/18/2021	0.003ND	No	6	MW-9AR,MW-201B	n/a	n/a	83.33	n/a	n/a	0.01735	NP Inter (NDs) 1 of 2
Tin (mg/l)	MW-24	0.00180	n/a	10/12/2022	0.003ND	No	6	MW-9AR,MW-201B	n/a	n/a	83.33	n/a	n/a	0.01735	NP Inter (NDs) 1 of 2
Tin (mg/l)	MW-26A	0.00180	n/a	4/17/2024	0.0023ND	No	6	MW-9AR,MW-201B	n/a	n/a	83.33	n/a	n/a	0.01735	NP Inter (NDs) 1 of 2
Tin (mg/l)	MW-300	0.00180	n/a	10/19/2021	0.003ND	No	6	MW-9AR,MW-201B	n/a	n/a	83.33	n/a	n/a	0.01735	NP Inter (NDs) 1 of 2
Tin (mg/l)	MW-301	0.00180	n/a	10/19/2021	0.003ND	No	6	MW-9AR,MW-201B	n/a	n/a	83.33	n/a	n/a	0.01735	NP Inter (NDs) 1 of 2
Tin (mg/l)	MW-302R	0.00180	n/a	10/12/2022	0.003ND	No	6	MW-9AR,MW-201B	n/a	n/a	83.33	n/a	n/a	0.01735	NP Inter (NDs) 1 of 2
Tin (mg/l)	MW-303	0.00180	n/a	12/2/2021	0.003ND	No	6	MW-9AR,MW-201B	n/a	n/a	83.33	n/a	n/a	0.01735	NP Inter (NDs) 1 of 2
Tin (mg/l)	MW-304R	0.00180	n/a	4/17/2024	0.0023ND	No	6	MW-9AR,MW-201B	n/a	n/a	83.33	n/a	n/a	0.01735	NP Inter (NDs) 1 of 2
Tin (mg/l)	MW-305	0.00180	n/a	10/12/2022	0.003ND	No	6	MW-9AR,MW-201B	n/a	n/a	83.33	n/a	n/a	0.01735	NP Inter (NDs) 1 of 2
Vanadium (mg/l)	MW-15	0.00796	n/a	4/18/2024	0.00123J	No	34	MW-201B,MW-9AR	n/a	n/a	76.47	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Vanadium (mg/l)	MW-18	0.00796	n/a	4/18/2024	0.0011ND	No	34	MW-201B,MW-9AR	n/a	n/a	76.47	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Vanadium (mg/l)	MW-19	0.00796	n/a	4/18/2024	0.0011ND	No	34	MW-201B,MW-9AR	n/a	n/a	76.47	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Vanadium (mg/l)	MW-20	0.00796	n/a	4/18/2024	0.00208J	No	34	MW-201B,MW-9AR	n/a	n/a	76.47	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Vanadium (mg/l)	MW-22	0.00796	n/a	4/18/2024	0.0011ND	No	34	MW-201B,MW-9AR	n/a	n/a	76.47	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Vanadium (mg/l)	MW-24	0.00796	n/a	4/17/2024	0.0011ND	No	34	MW-201B,MW-9AR	n/a	n/a	76.47	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Vanadium (mg/l)	MW-26A	0.00796	n/a	4/17/2024	0.0011ND	No	34	MW-201B,MW-9AR	n/a	n/a	76.47	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Vanadium (mg/l)	MW-300	0.00796	n/a	4/18/2024	0.0011ND	No	34	MW-201B,MW-9AR	n/a	n/a	76.47	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Vanadium (mg/l)	MW-301	0.00796	n/a	4/18/2024	0.0011ND	No	34	MW-201B,MW-9AR	n/a	n/a	76.47	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Vanadium (mg/l)	MW-302R	0.00796	n/a	4/17/2024	0.0011ND	No	34	MW-201B,MW-9AR	n/a	n/a	76.47	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Vanadium (mg/l)	MW-303	0.00796	n/a	4/17/2024	0.0011ND	No	34	MW-201B,MW-9AR	n/a	n/a	76.47	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Vanadium (mg/l)	MW-304R	0.00796	n/a	4/17/2024	0.0011ND	No	34	MW-201B,MW-9AR	n/a	n/a	76.47	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Vanadium (mg/l)	MW-305	0.00796	n/a	4/17/2024	0.0011ND	No	34	MW-201B,MW-9AR	n/a	n/a	76.47	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Vanadium (mg/l)	MW-501	0.00796	n/a	5/29/2024	0.0021J	No	34	MW-201B,MW-9AR	n/a	n/a	76.47	n/a	n/a	0.00147	NP Inter (NDs) 1 of 2
Zinc (mg/l)	MW-15	0.0200	n/a	4/18/2024	0.0097ND	No	30	MW-9AR,MW-201B	n/a	n/a	83.33	n/a	n/a	0.001816	NP Inter (NDs) 1 of 2
Zinc (mg/l)	MW-18	0.0200	n/a	4/18/2024	0.0097ND	No	30	MW-9AR,MW-201B	n/a	n/a	83.33	n/a	n/a	0.001816	NP Inter (NDs) 1 of 2
Zinc (mg/l)	MW-19	0.0200	n/a	4/18/2024	0.0097ND	No	30	MW-9AR,MW-201B	n/a	n/a	83.33	n/a	n/a	0.001816	NP Inter (NDs) 1 of 2
Zinc (mg/l)	MW-20	0.0200	n/a	4/18/2024	0.0097ND	No	30	MW-9AR,MW-201B	n/a	n/a	83.33	n/a	n/a	0.001816	NP Inter (NDs) 1 of 2
Zinc (mg/l)	MW-22	0.0200	n/a	4/18/2024	0.0097ND	No	30	MW-9AR,MW-201B	n/a	n/a	83.33	n/a	n/a	0.001816	NP Inter (NDs) 1 of 2
Zinc (mg/l)	MW-24	0.0200	n/a	4/17/2024	0.0097ND	No	30	MW-9AR,MW-201B	n/a	n/a	83.33	n/a	n/a	0.001816	NP Inter (NDs) 1 of 2
Zinc (mg/l)	MW-26A	0.0200	n/a	4/17/2024	0.0097ND	No	30	MW-9AR,MW-201B	n/a	n/a	83.33	n/a	n/a	0.001816	NP Inter (NDs) 1 of 2
Zinc (mg/l)	MW-300	0.0200	n/a	4/18/2024	0.0097ND	No	30	MW-9AR,MW-201B	n/a	n/a	83.33	n/a	n/a	0.001816	NP Inter (NDs) 1 of 2
Zinc (mg/l)	MW-301	0.0200	n/a	4/18/2024	0.0097ND	No	30	MW-9AR,MW-201B	n/a	n/a	83.33	n/a	n/a	0.001816	NP Inter (NDs) 1 of 2
Zinc (mg/l)	MW-302R	0.0200	n/a	4/17/2024	0.0097ND	No	30	MW-9AR,MW-201B	n/a	n/a	83.33	n/a	n/a	0.001816	NP Inter (NDs) 1 of 2
Zinc (mg/l)	MW-303	0.0200	n/a	4/17/2024	0.0097ND	No	30	MW-9AR,MW-201B	n/a	n/a	83.33	n/a	n/a	0.001816	NP Inter (NDs) 1 of 2
Zinc (mg/l)	MW-304R	0.0200	n/a	4/17/2024	0.0097ND	No	30	MW-9AR,MW-201B	n/a	n/a	83.33	n/a	n/a	0.001816	NP Inter (NDs) 1 of 2
Zinc (mg/l)	MW-305	0.0200	n/a	4/17/2024	0.0097ND	No	30	MW-9AR,MW-201B	n/a	n/a	83.33	n/a	n/a	0.001816	NP Inter (NDs) 1 of 2
Zinc (mg/l)	**MW-501**	**0.0200**	**n/a**	**5/29/2024**	**0.0702**	**Yes**	**30**	**MW-9AR,MW-201B**	**n/a**	**n/a**	**83.33**	**n/a**	**n/a**	**0.001816**	**NP Inter (NDs) 1 of 2**

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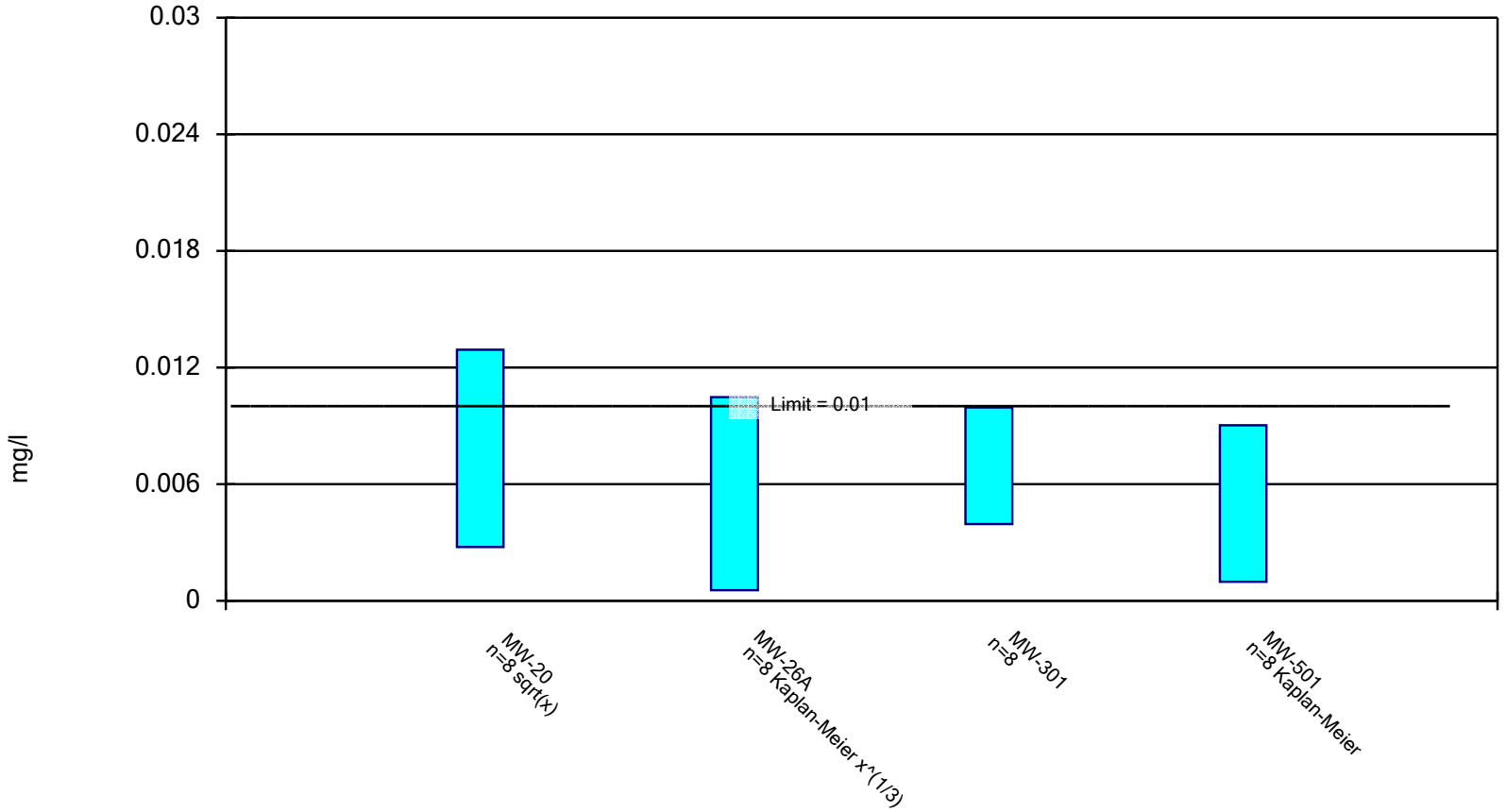
Monitoring Well Inorganic Confidence Interval Analysis – Spring 2024

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

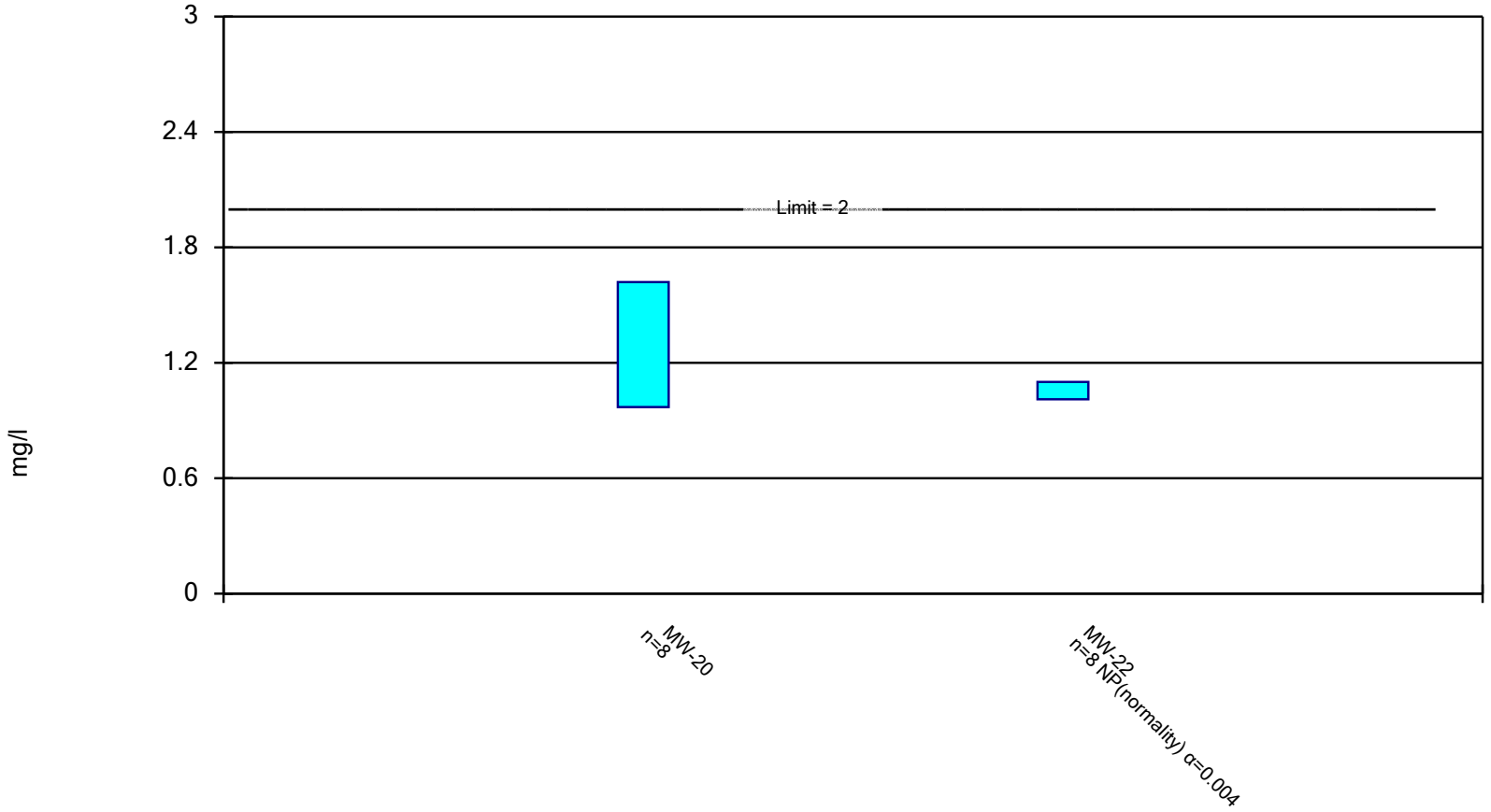


Constituent: Arsenic Analysis Run 7/17/2024 5:49 PM View: App I_Metals_CIs

Linn County Client: Linn County SWA Data: CRLCSWA_Groundwater Database

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

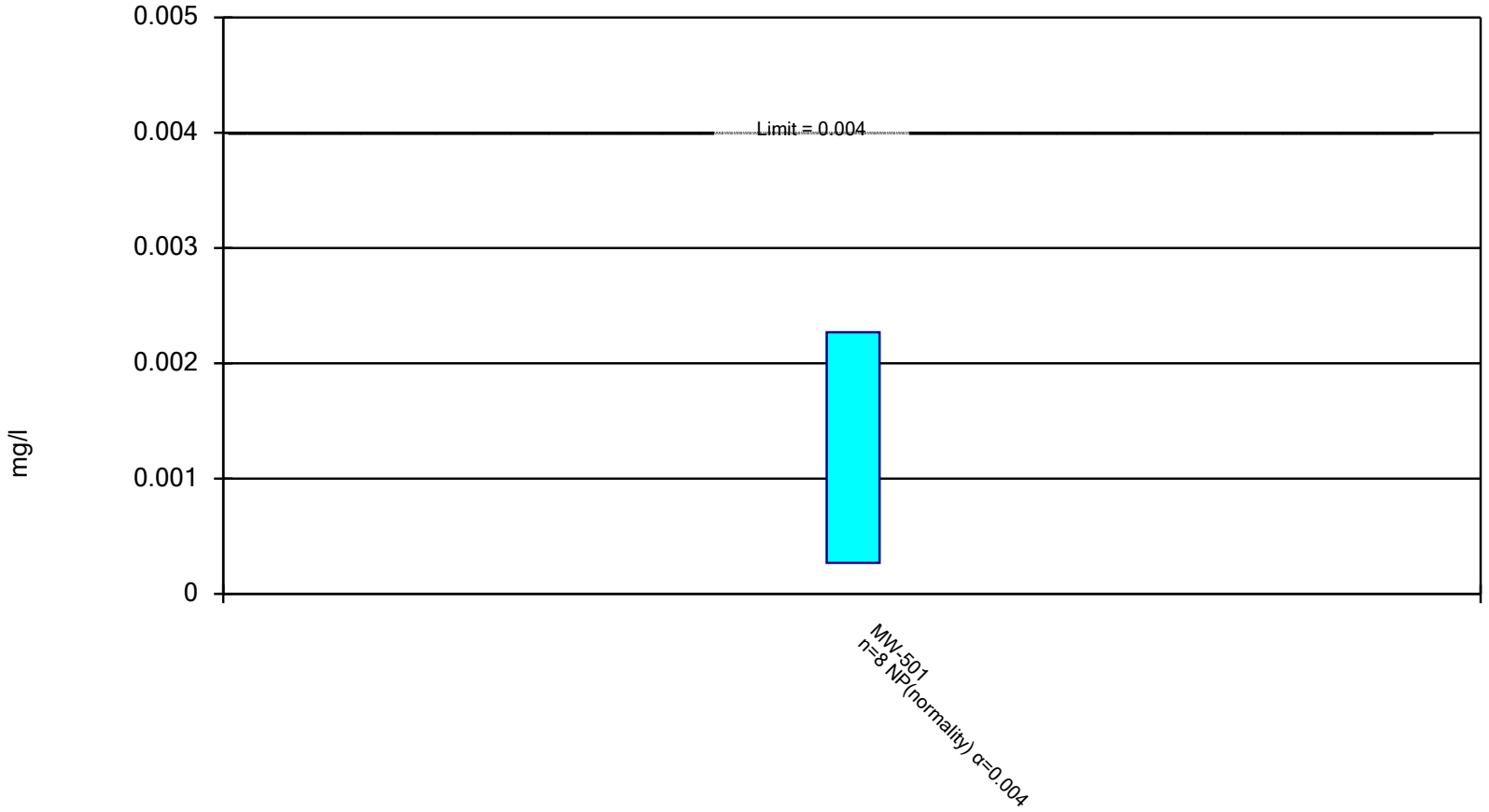


Constituent: Barium Analysis Run 7/17/2024 5:49 PM View: App I_Metals_CIs

Linn County Client: Linn County SWA Data: CRLCSWA_Groundwater Database

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

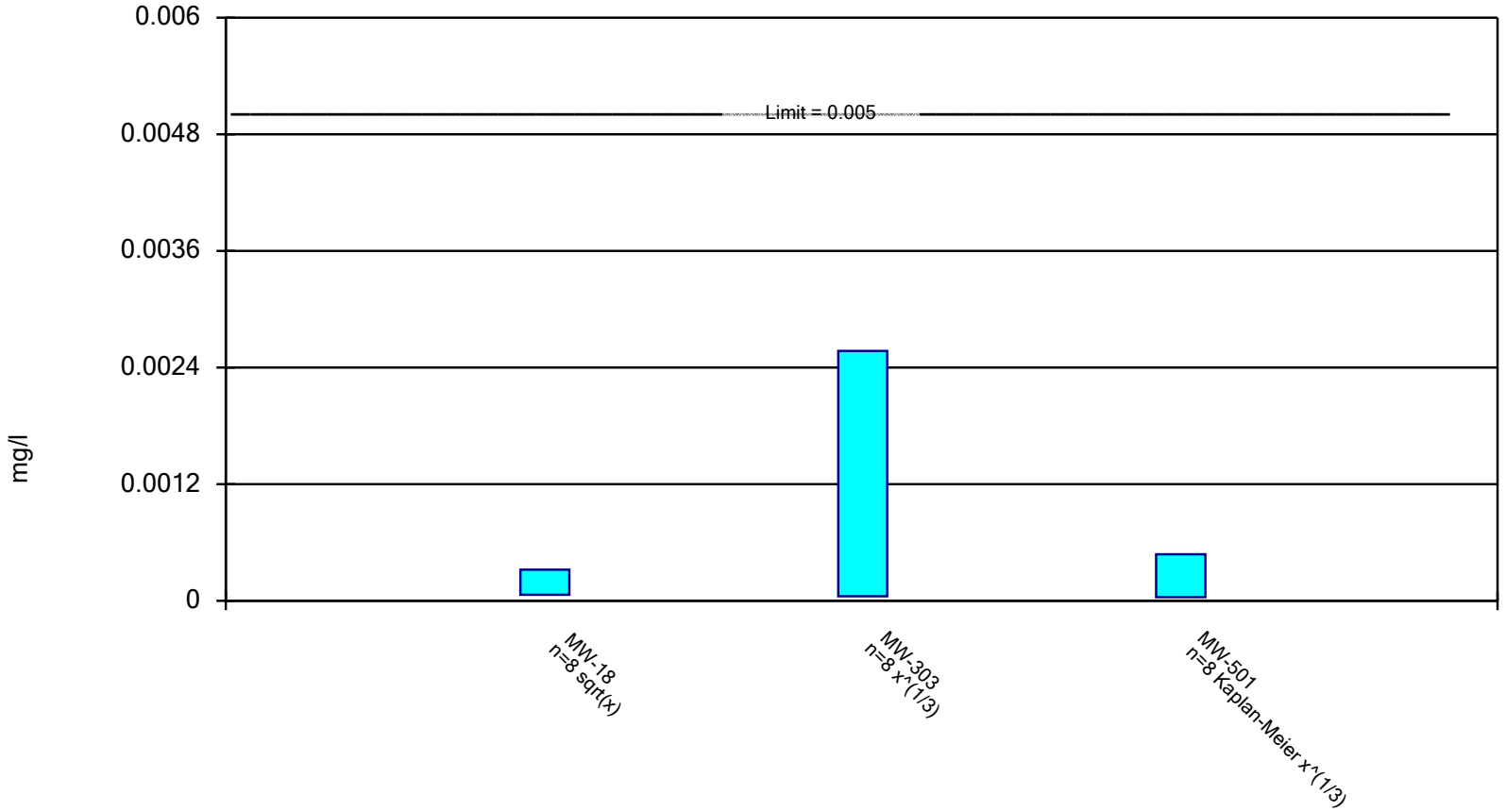


Constituent: Beryllium Analysis Run 7/17/2024 5:49 PM View: App I_Metals_CIs

Linn County Client: Linn County SWA Data: CRLCSWA_Groundwater Database

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

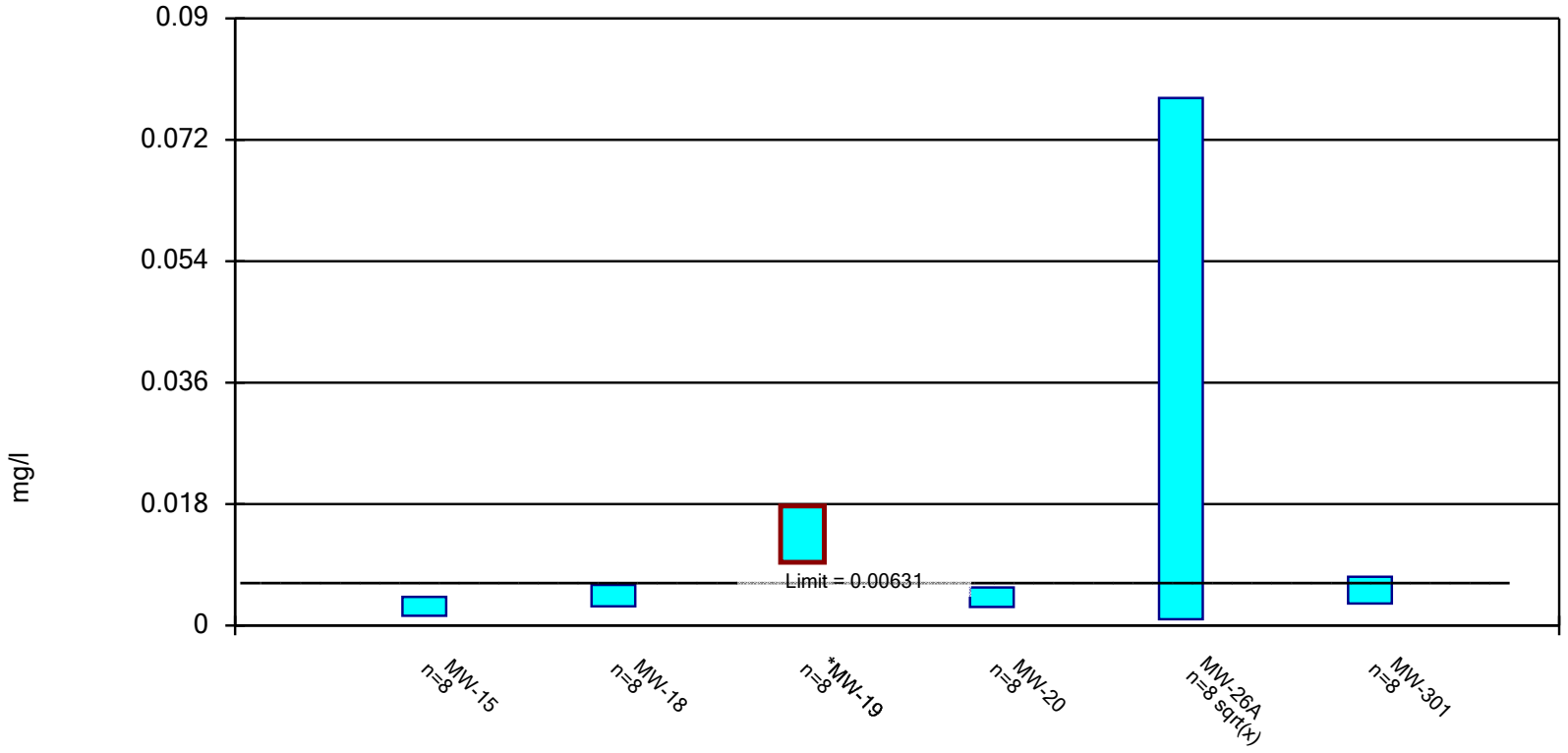


Constituent: Cadmium Analysis Run 7/17/2024 5:49 PM View: App I_Metals_CIs

Linn County Client: Linn County SWA Data: CRLCSWA_Groundwater Database

Parametric Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

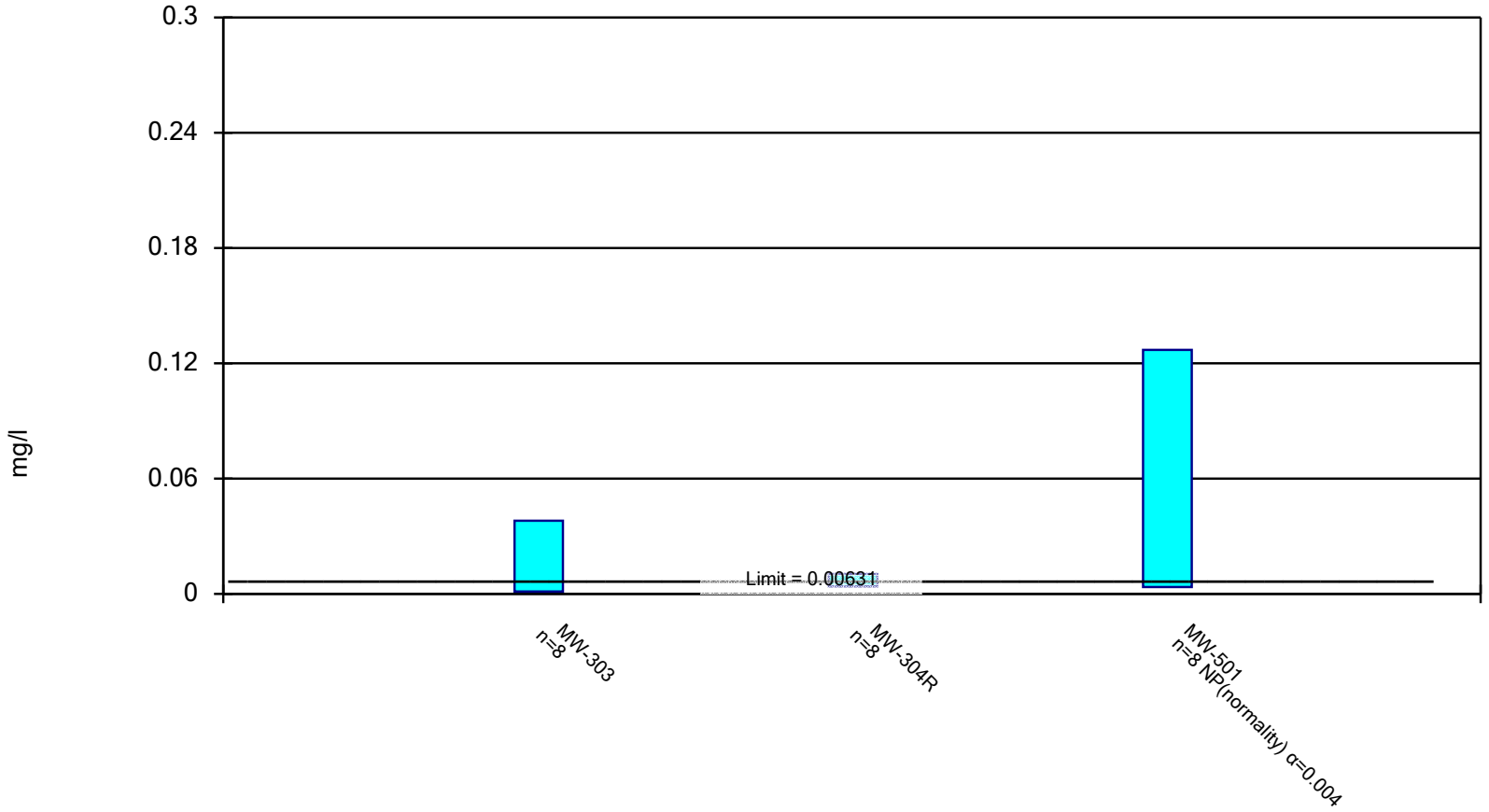


Constituent: Cobalt Analysis Run 7/17/2024 5:49 PM View: App I_Metals_CIs

Linn County Client: Linn County SWA Data: CRLCSWA_Groundwater Database

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

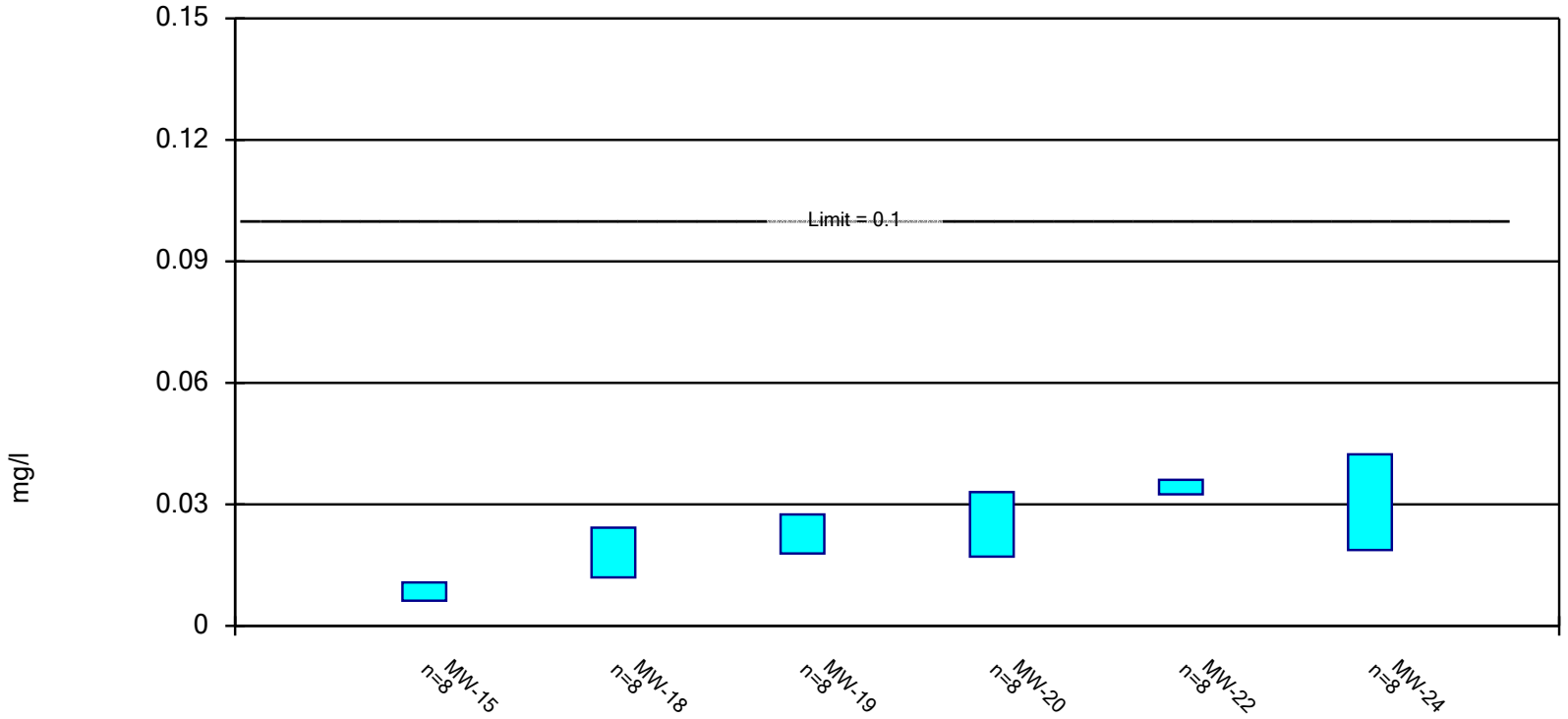


Constituent: Cobalt Analysis Run 7/17/2024 5:49 PM View: App I_Metals_CIs

Linn County Client: Linn County SWA Data: CRLCSWA_Groundwater Database

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

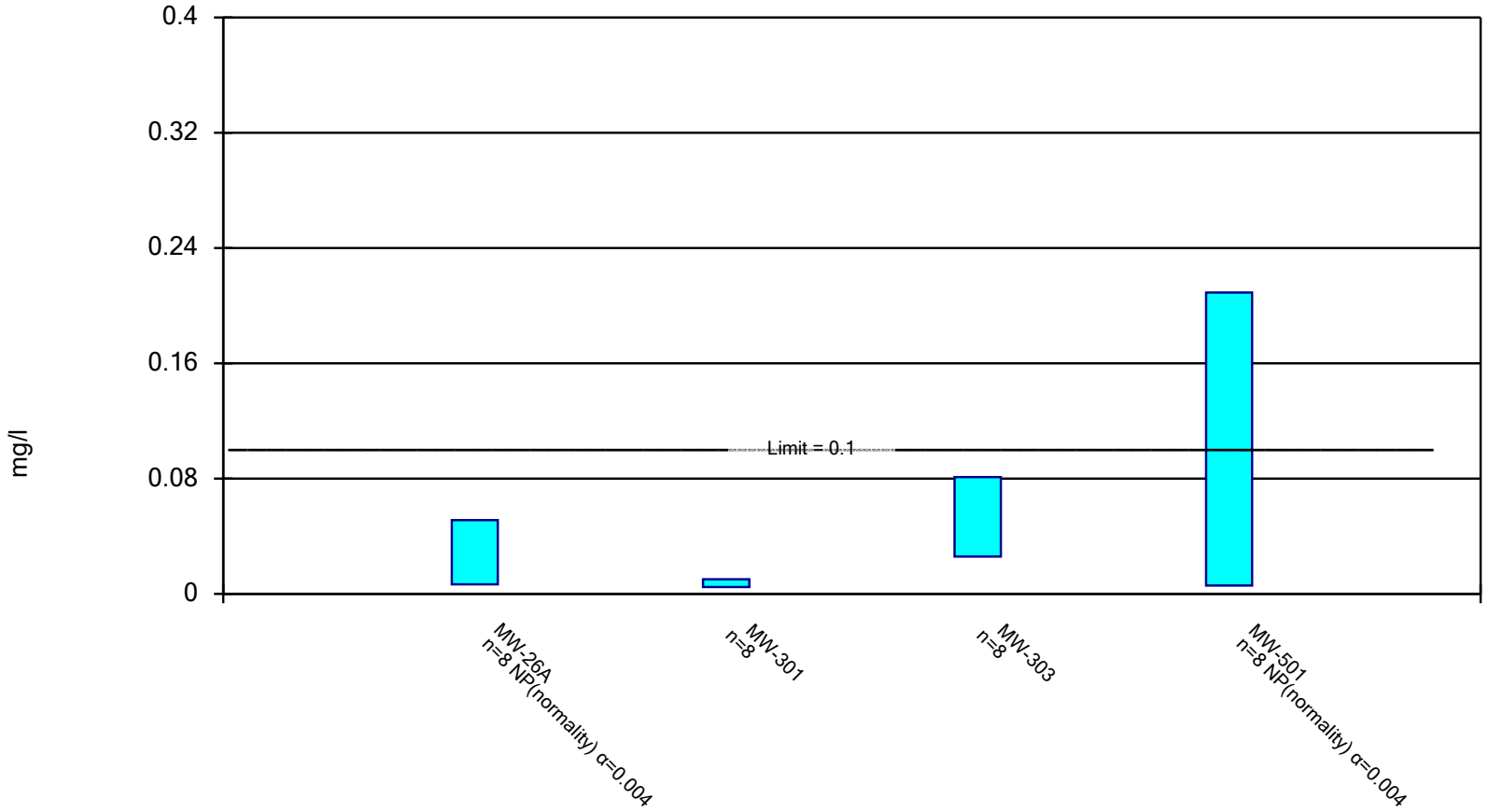


Constituent: Nickel Analysis Run 7/17/2024 5:49 PM View: App I_Metals_CIs

Linn County Client: Linn County SWA Data: CRLCSWA_Groundwater Database

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

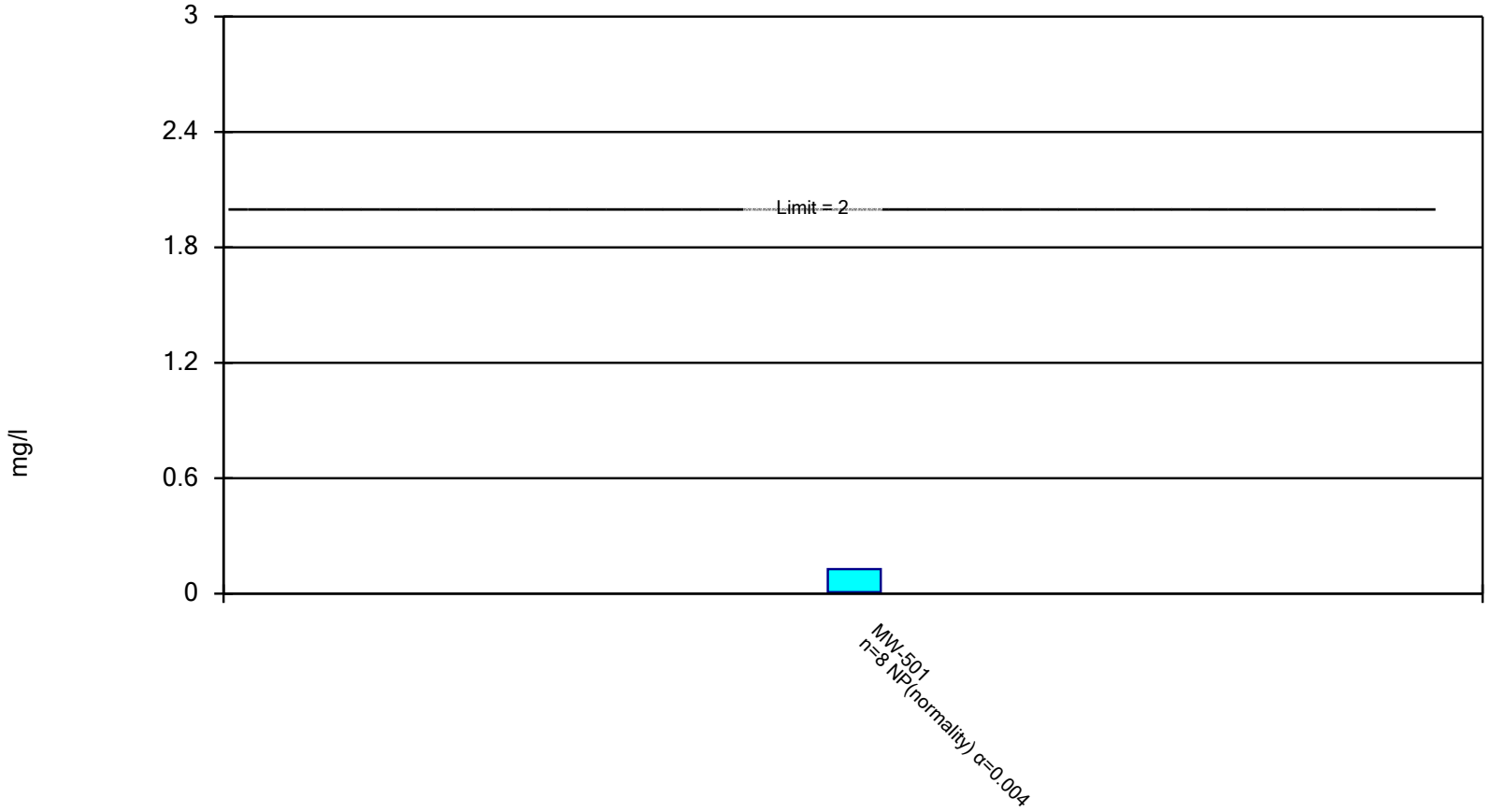


Constituent: Nickel Analysis Run 7/17/2024 5:49 PM View: App I_Metals_CIs

Linn County Client: Linn County SWA Data: CRLCSWA_Groundwater Database

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Zinc Analysis Run 7/17/2024 5:49 PM View: App I_Metals_CIs

Linn County Client: Linn County SWA Data: CRLCSWA_Groundwater Database

Confidence Interval

Linn County Client: Linn County SWA Data: CRLCSWA_Groundwater Database Printed 7/17/2024, 5:49 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/l)	MW-20	0.01291	0.002772	0.01	No	8	0.007636	0.005807	0	None	sqrt(x)	0.01	Param.
Arsenic (mg/l)	MW-26A	0.01048	0.0005456	0.01	No	8	0.005526	0.007166	37.5	Kaplan-Meier	x^(1/3)	0.01	Param.
Arsenic (mg/l)	MW-301	0.009951	0.003951	0.01	No	8	0.006951	0.002831	0	None	No	0.01	Param.
Arsenic (mg/l)	MW-501	0.009036	0.0009819	0.01	No	8	0.005009	0.004061	25	Kaplan-Meier	No	0.01	Param.
Barium (mg/l)	MW-20	1.62	0.9696	2	No	8	1.295	0.3069	0	None	No	0.01	Param.
Barium (mg/l)	MW-22	1.1	1.01	2	No	8	1.065	0.03586	0	None	No	0.004	NP (normality)
Beryllium (mg/l)	MW-501	0.00227	0.00027	0.004	No	8	0.000643	0.0007307	62.5	None	No	0.004	NP (normality)
Cadmium (mg/l)	MW-18	0.0003211	0.0000638	0.005	No	8	0.000187	0.0001482	0	None	sqrt(x)	0.01	Param.
Cadmium (mg/l)	MW-303	0.002572	0.00004804	0.005	No	8	0.001262	0.002105	12.5	None	x^(1/3)	0.01	Param.
Cadmium (mg/l)	MW-501	0.0004783	0.00003884	0.005	No	8	0.0002625	0.0003014	37.5	Kaplan-Meier	x^(1/3)	0.01	Param.
Cobalt (mg/l)	MW-15	0.00427	0.001453	0.00631	No	8	0.002861	0.001329	0	None	No	0.01	Param.
Cobalt (mg/l)	MW-18	0.006024	0.002836	0.00631	No	8	0.00443	0.001504	0	None	No	0.01	Param.
Cobalt (mg/l)	**MW-19**	**0.01773**	**0.009367**	**0.00631**	**Yes**	**8**	**0.01355**	**0.003945**	**0**	**None**	**No**	**0.01**	**Param.**
Cobalt (mg/l)	MW-20	0.00564	0.00274	0.00631	No	8	0.00419	0.001368	0	None	No	0.01	Param.
Cobalt (mg/l)	MW-26A	0.0782	0.00093	0.00631	No	8	0.03614	0.04476	0	None	sqrt(x)	0.01	Param.
Cobalt (mg/l)	MW-301	0.007217	0.003263	0.00631	No	8	0.00524	0.001865	0	None	No	0.01	Param.
Cobalt (mg/l)	MW-303	0.03817	0.001203	0.00631	No	8	0.01969	0.01744	0	None	No	0.01	Param.
Cobalt (mg/l)	MW-304R	0.01048	0.003917	0.00631	No	8	0.007199	0.003096	0	None	No	0.01	Param.
Cobalt (mg/l)	MW-501	0.127	0.00363	0.00631	No	8	0.02678	0.04371	0	None	No	0.004	NP (normality)
Nickel (mg/l)	MW-15	0.01075	0.006241	0.1	No	8	0.008496	0.002128	0	None	No	0.01	Param.
Nickel (mg/l)	MW-18	0.02425	0.01195	0.1	No	8	0.0181	0.005801	0	None	No	0.01	Param.
Nickel (mg/l)	MW-19	0.02753	0.01787	0.1	No	8	0.0227	0.004558	0	None	No	0.01	Param.
Nickel (mg/l)	MW-20	0.03302	0.0171	0.1	No	8	0.02506	0.00751	0	None	No	0.01	Param.
Nickel (mg/l)	MW-22	0.03604	0.03251	0.1	No	8	0.03428	0.001662	0	None	No	0.01	Param.
Nickel (mg/l)	MW-24	0.04237	0.01875	0.1	No	8	0.03056	0.01114	0	None	No	0.01	Param.
Nickel (mg/l)	MW-26A	0.0512	0.00672	0.1	No	8	0.01888	0.01788	0	None	No	0.004	NP (normality)
Nickel (mg/l)	MW-301	0.01013	0.004842	0.1	No	8	0.007485	0.002494	0	None	No	0.01	Param.
Nickel (mg/l)	MW-303	0.08102	0.02588	0.1	No	8	0.05345	0.02601	0	None	No	0.01	Param.
Nickel (mg/l)	MW-501	0.209	0.00576	0.1	No	8	0.04682	0.07401	0	None	No	0.004	NP (normality)
Zinc (mg/l)	MW-501	0.127	0.00864	2	No	8	0.03193	0.04386	50	None	No	0.004	NP (normality)

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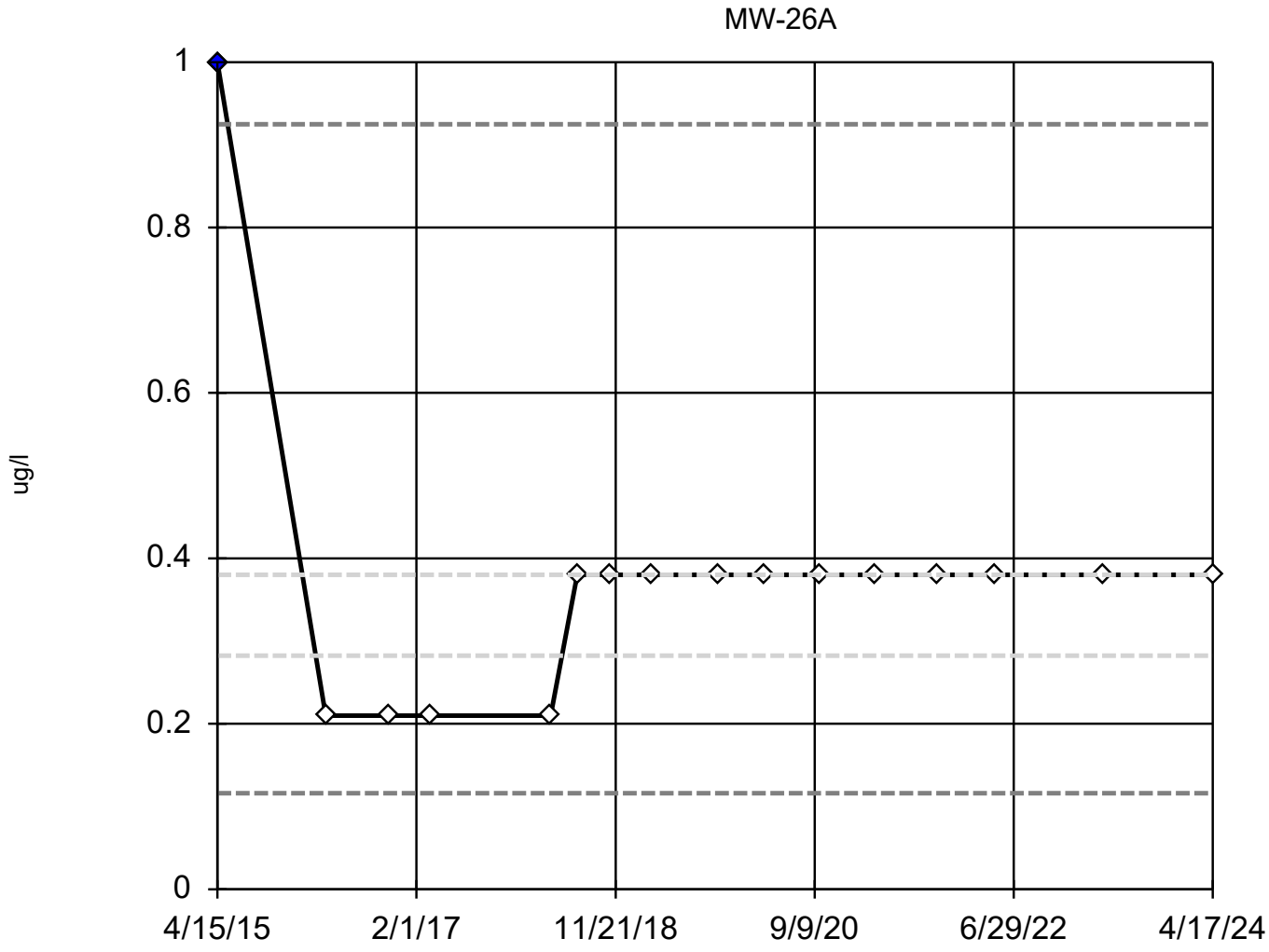
Monitoring Well VOC Outliers Analysis – Spring 2024

Tukey's Outlier Screening



n = 16

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

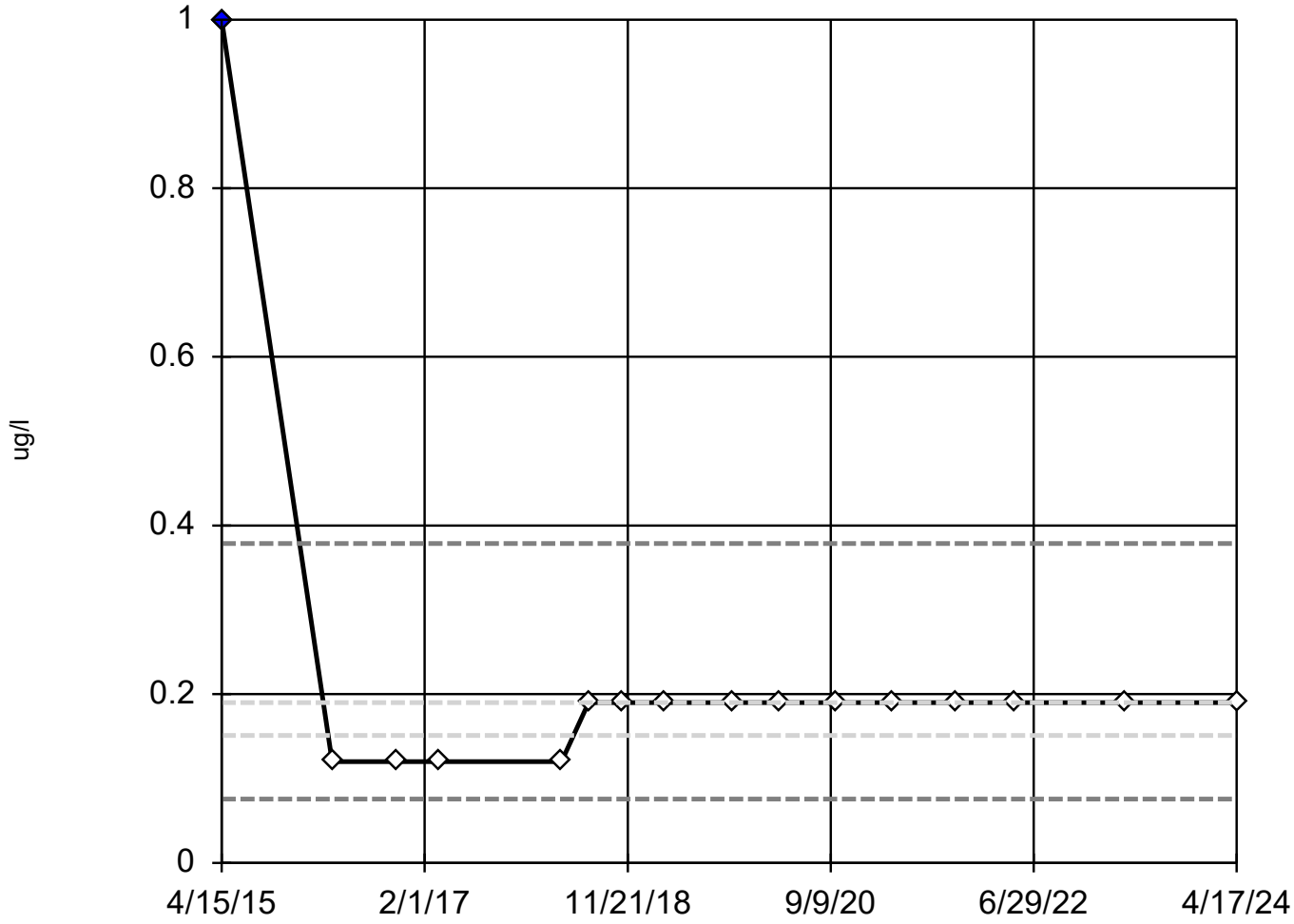
High cutoff = 0.925, low cutoff = 0.1161, based on IQR multiplier of 3.

Constituent: 1,1,1,2-Tetrachloroethane Analysis Run 7/12/2024 2:32 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-26A



n = 16

Outlier is drawn as solid. Tukey's method selected by user.

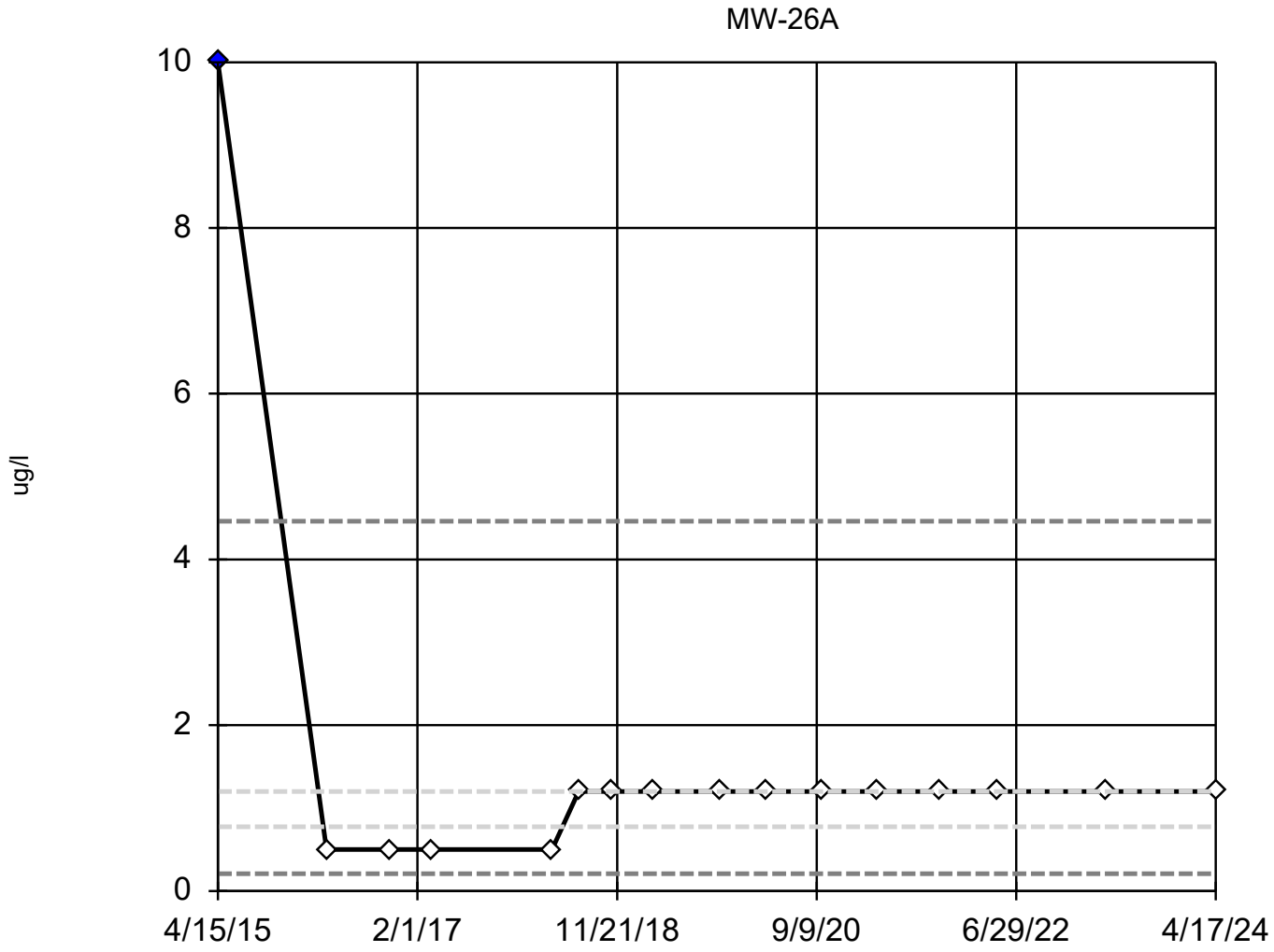
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.3785, low cutoff = 0.07579, based on IQR multiplier of 3.

Constituent: 1,1,1-Trichloroethane Analysis Run 7/12/2024 2:32 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 16

Outlier is drawn as solid. Tukey's method selected by user.

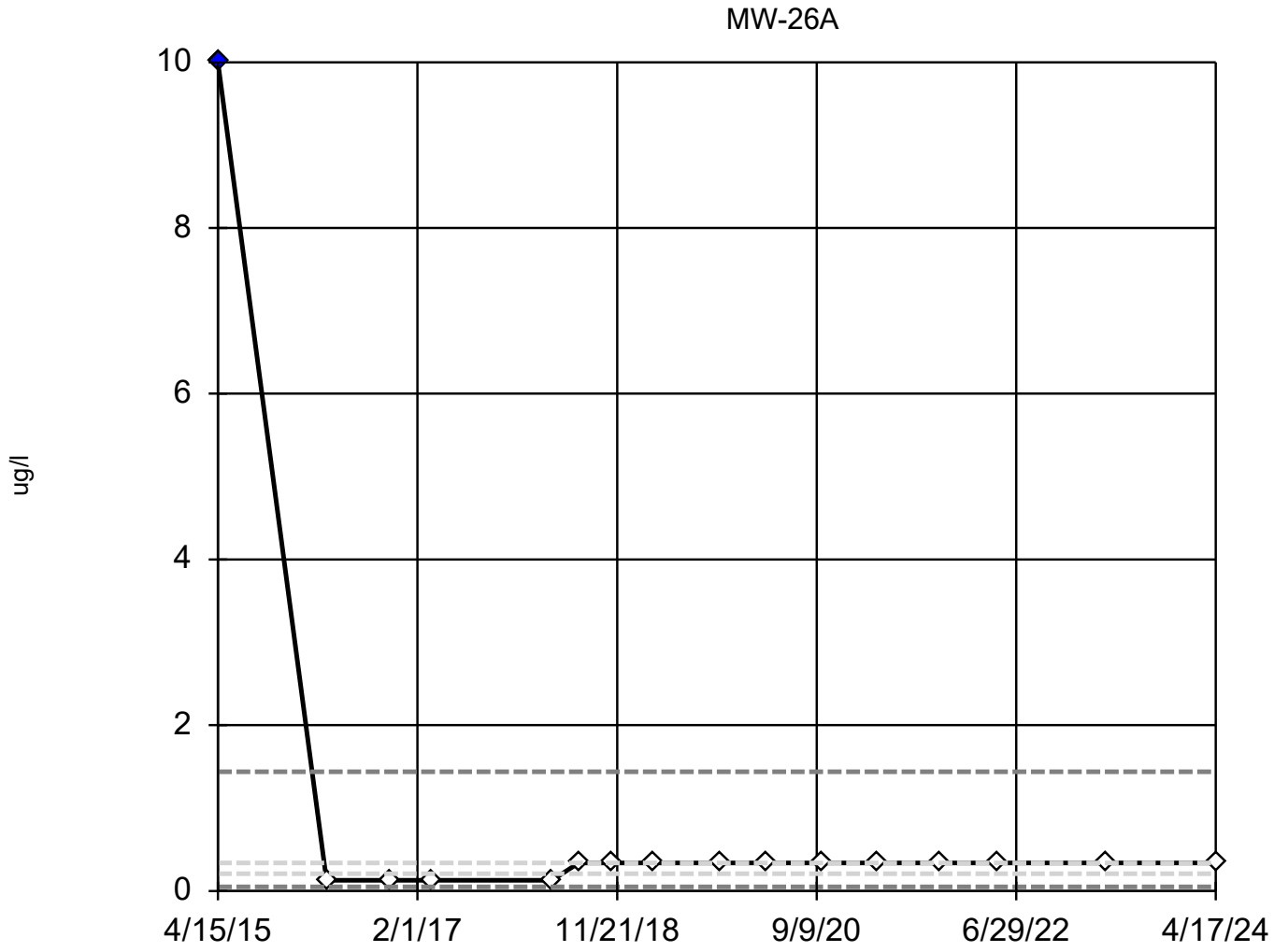
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 4.462, low cutoff = 0.2083, based on IQR multiplier of 3.

Constituent: 1,2-Dibromo-3-chloropropane Analysis Run 7/12/2024 2:34 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 16

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

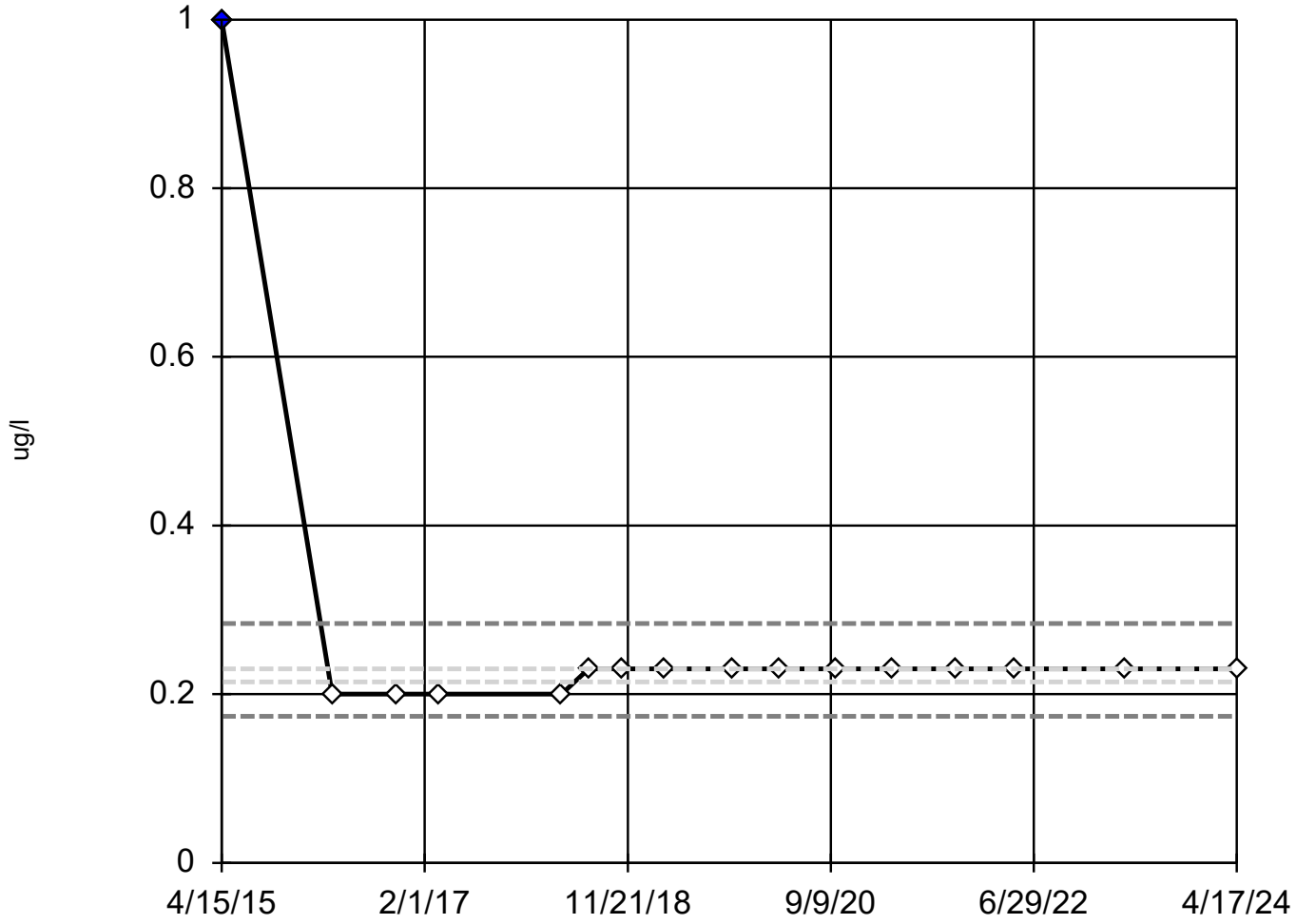
High cutoff = 1.438, low cutoff = 0.04971, based on IQR multiplier of 3.

Constituent: 1,2-Dibromoethane [EDB] Analysis Run 7/12/2024 2:34 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-26A



n = 16

Outlier is drawn as solid. Tukey's method selected by user.

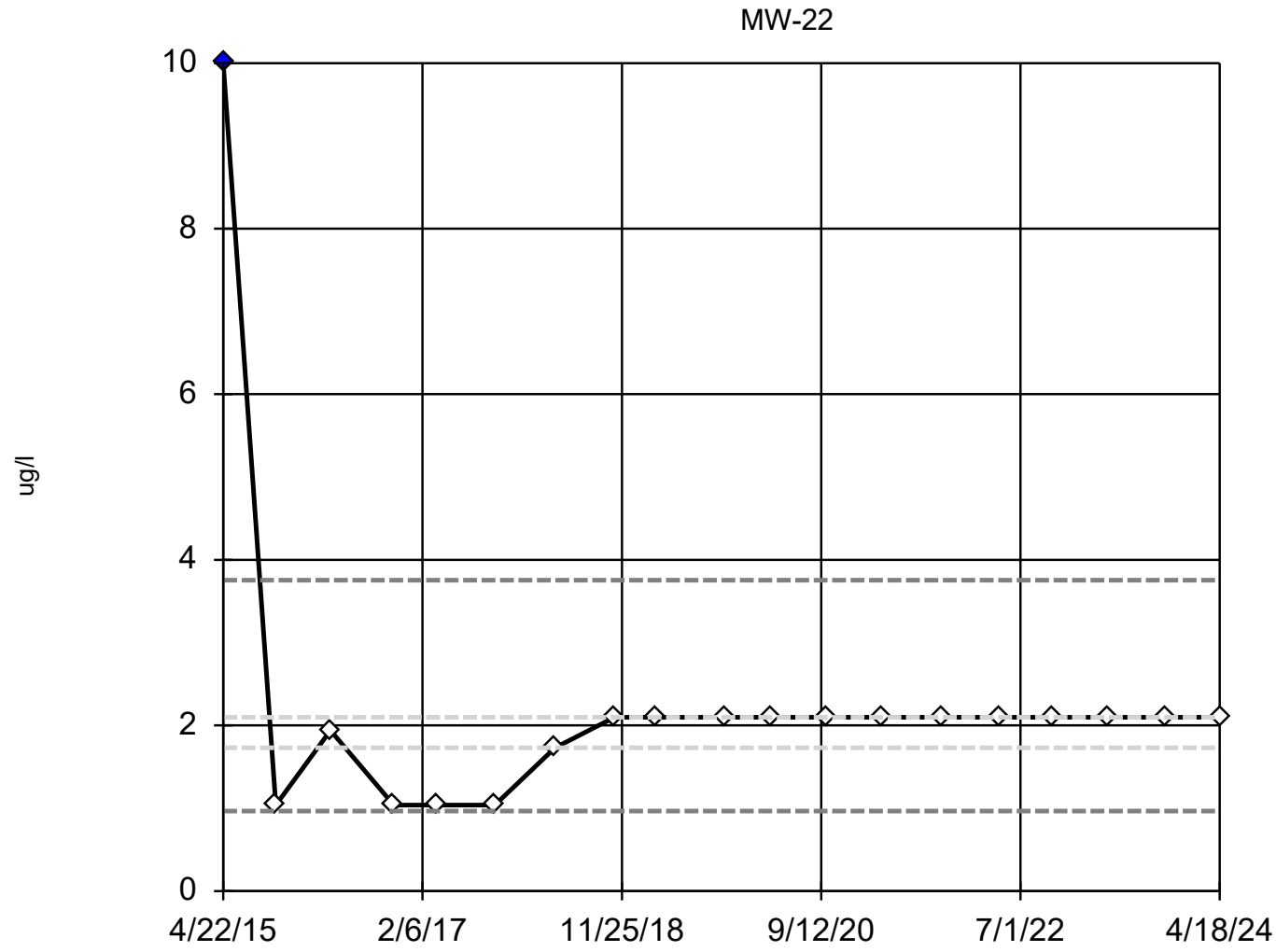
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.2836, low cutoff = 0.1739, based on IQR multiplier of 3.

Constituent: 1,4-Dichlorobenzene Analysis Run 7/12/2024 2:35 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 19

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

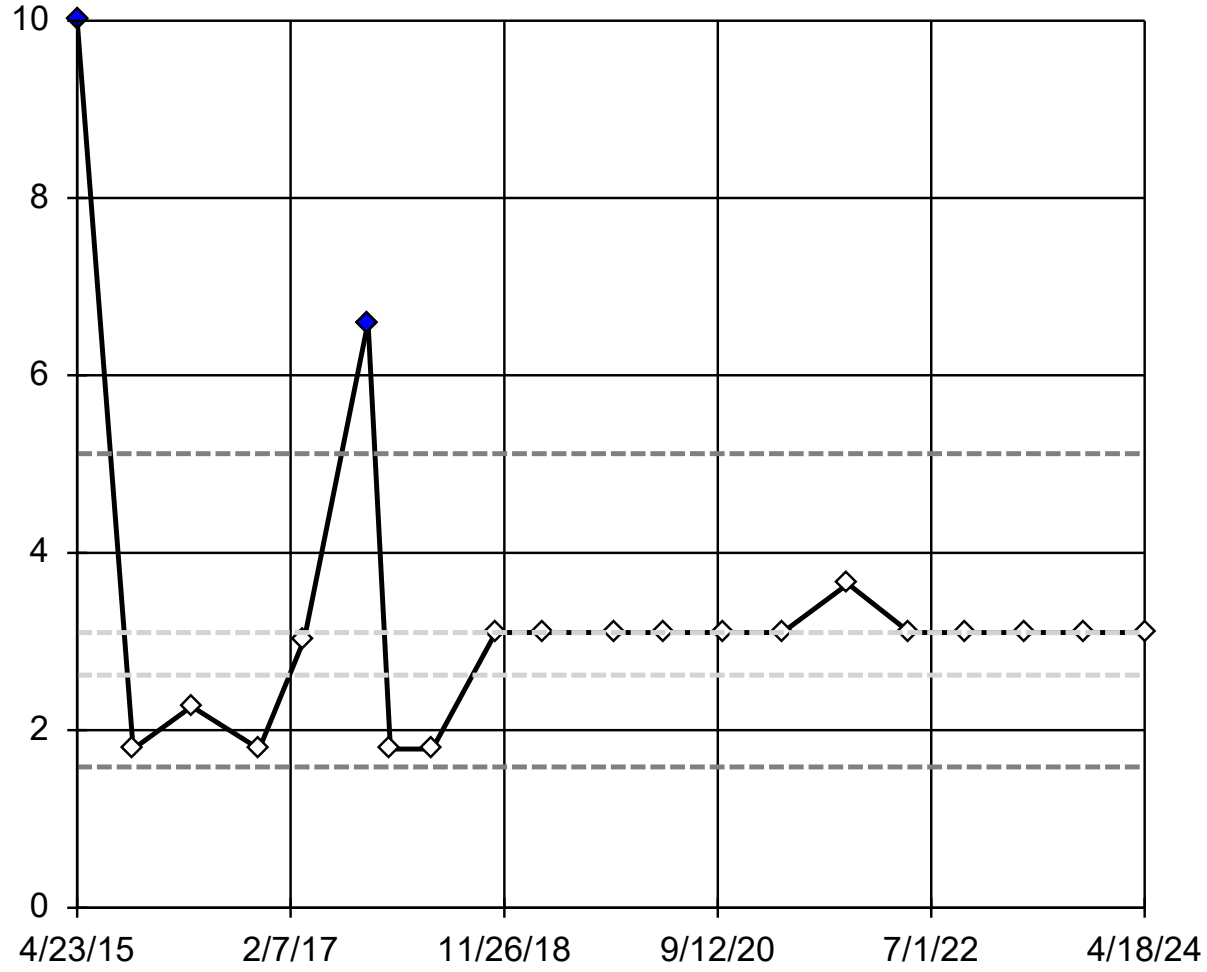
High cutoff = 3.756, low cutoff = 0.9672, based on IQR multiplier of 3.

Constituent: 2-Butanone [MEK] Analysis Run 7/12/2024 2:35 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-15



n = 20

Outliers are drawn as solid.
Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

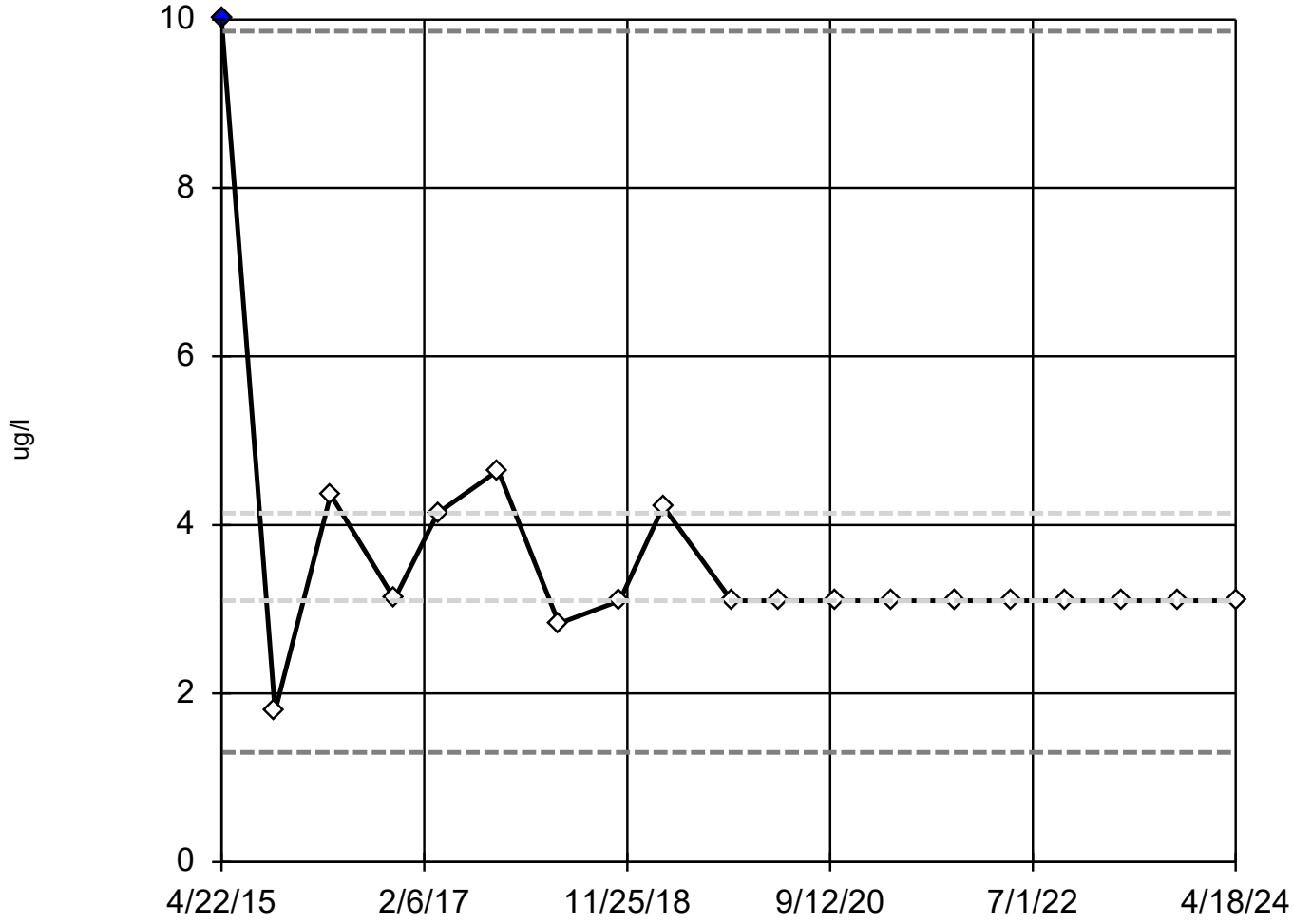
High cutoff = 5.12, low cutoff = 1.588, based on IQR multiplier of 3.

Constituent: Acetone Analysis Run 7/12/2024 2:36 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-19



n = 19

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

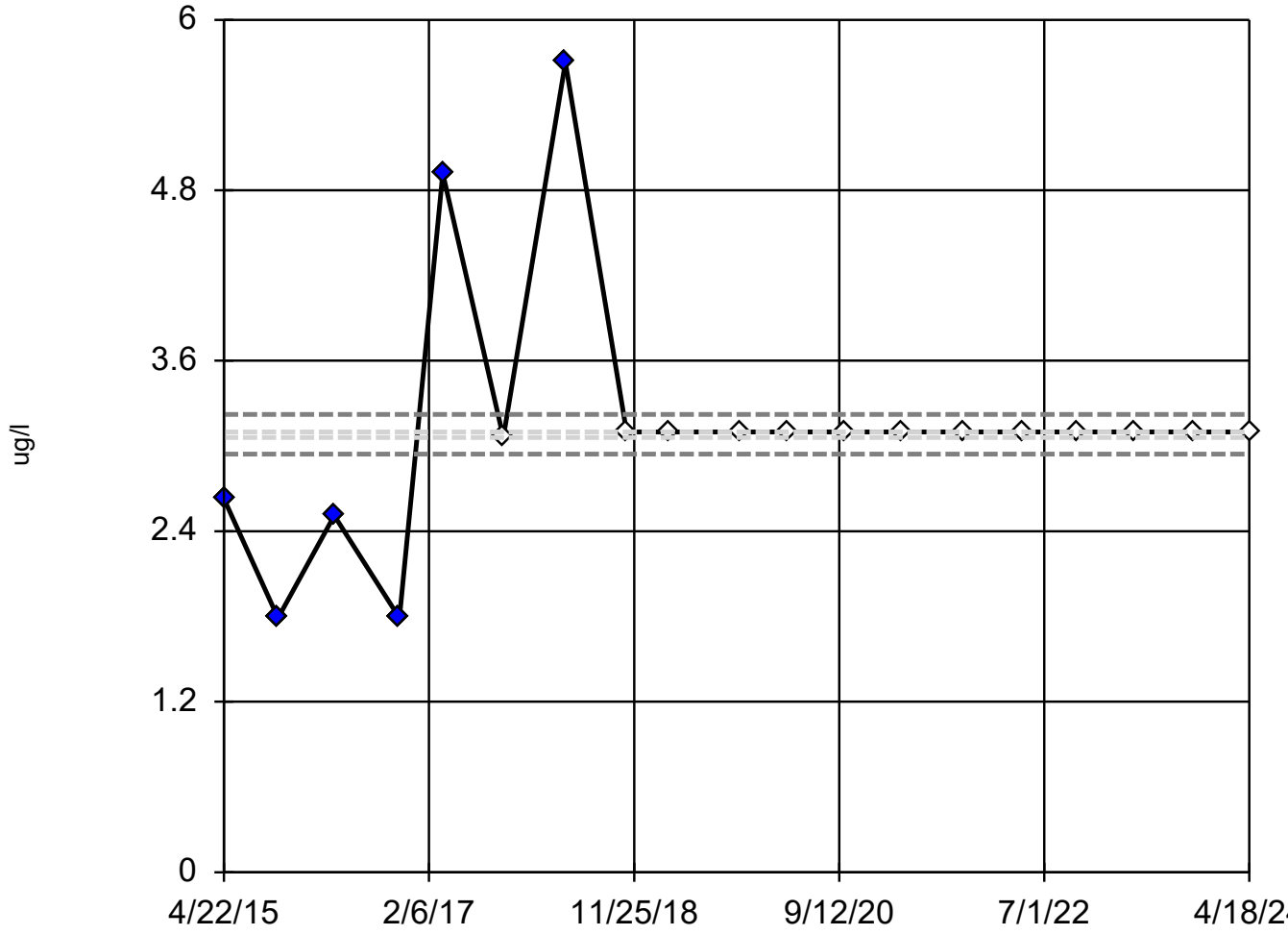
High cutoff = 9.861, low cutoff = 1.302, based on IQR multiplier of 3.

Constituent: Acetone Analysis Run 7/12/2024 2:36 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-22



n = 19

Outliers are drawn as solid.
Tukey's method selected by user.

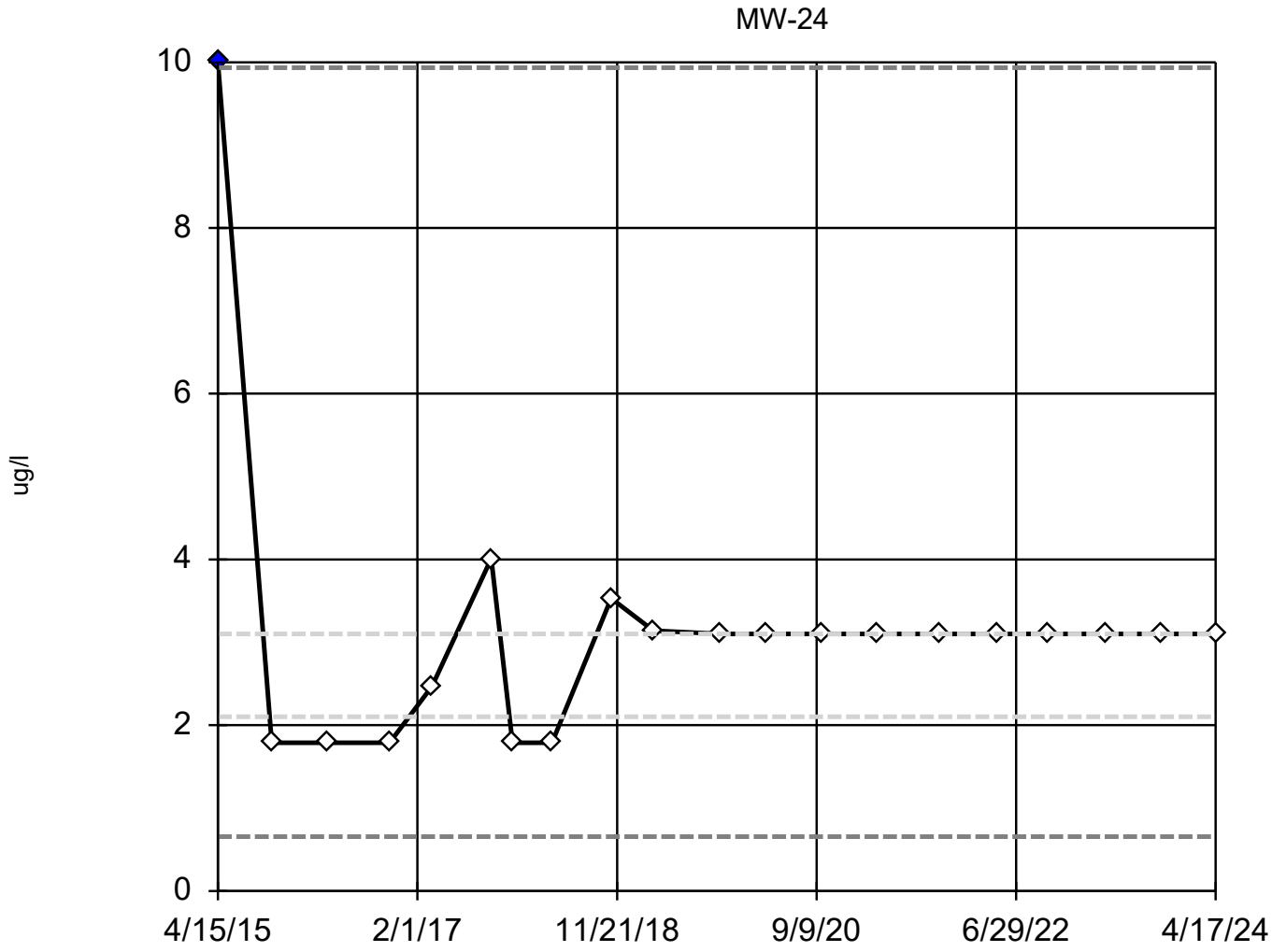
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 3.223, low cutoff = 2.943, based on IQR multiplier of 3.

Constituent: Acetone Analysis Run 7/12/2024 2:36 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 20

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

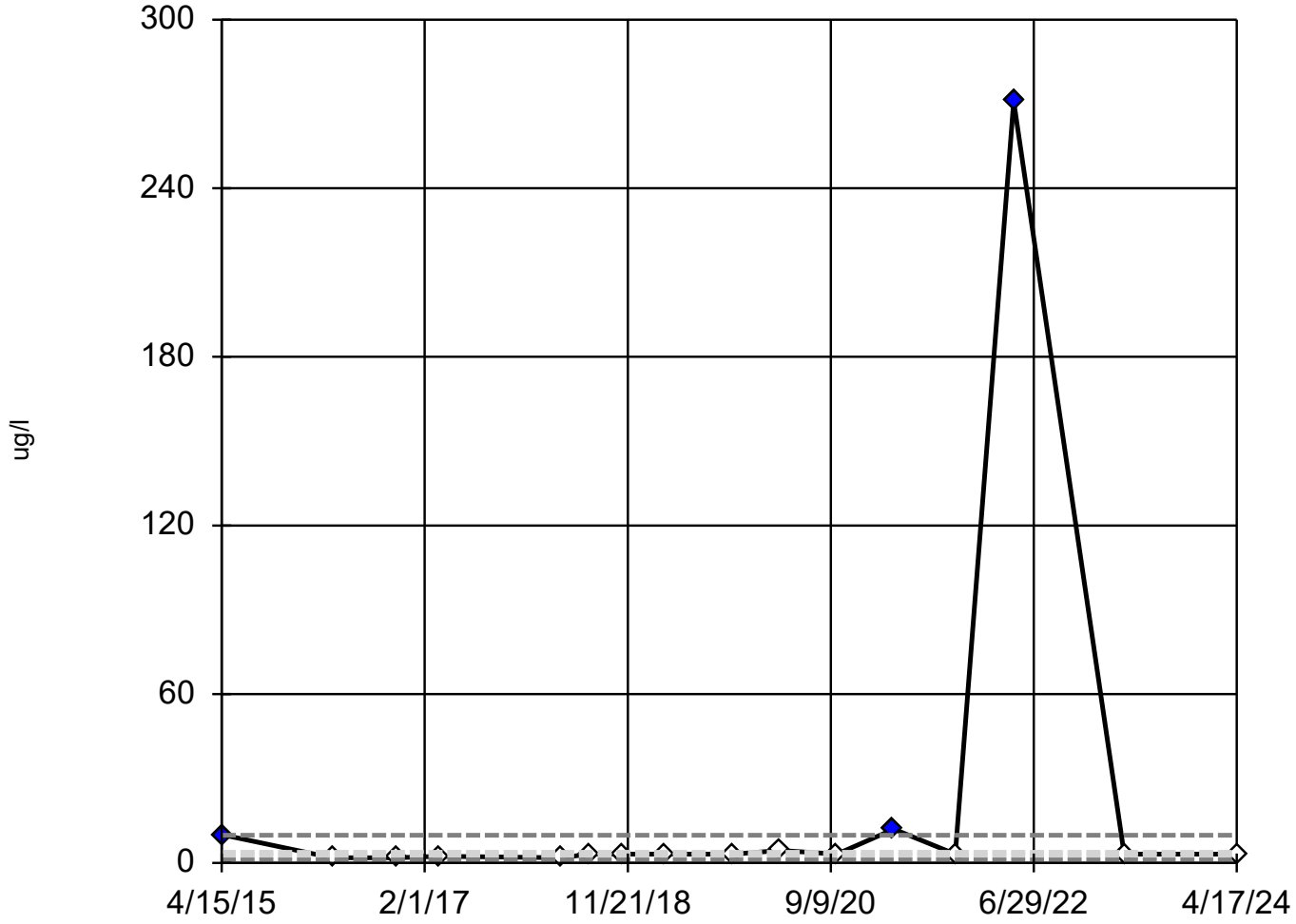
High cutoff = 9.934, low cutoff = 0.6562, based on IQR multiplier of 3.

Constituent: Acetone Analysis Run 7/12/2024 2:36 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-26A



n = 16

Outliers are drawn as solid.
Tukey's method selected by user.

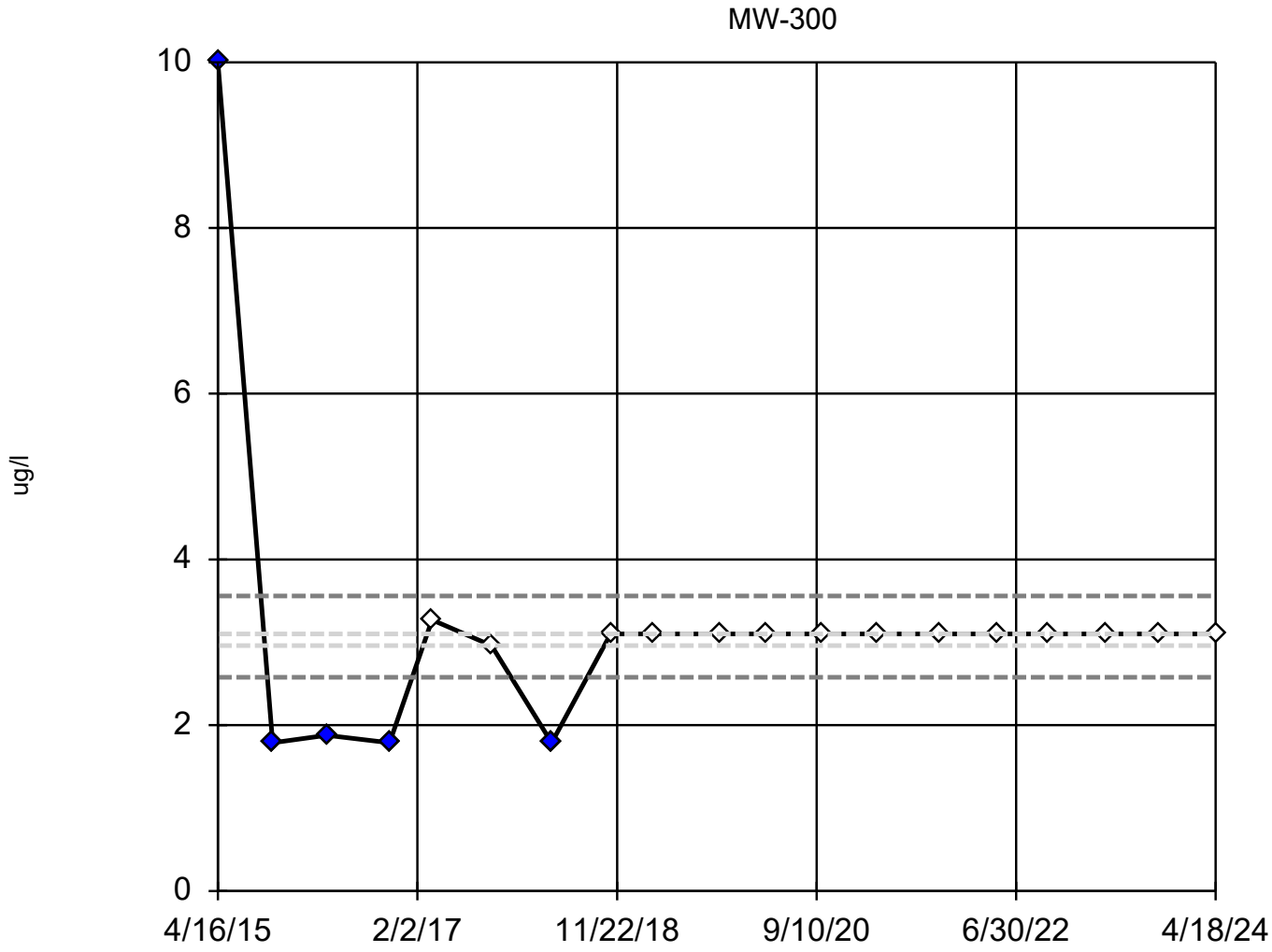
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 9.847, low cutoff = 1.015, based on IQR multiplier of 3.

Constituent: Acetone Analysis Run 7/12/2024 2:36 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 19

Outliers are drawn as solid.
Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

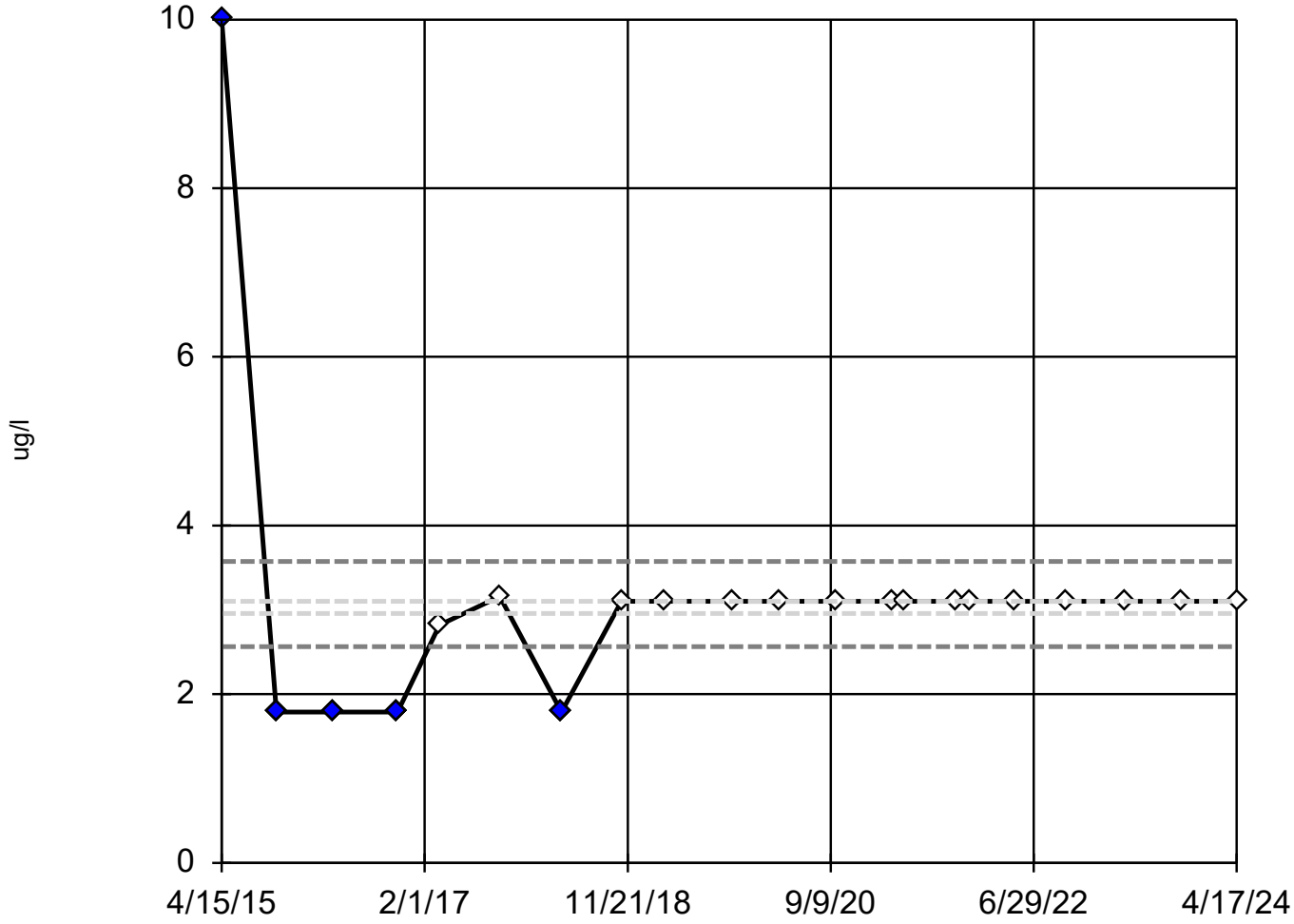
High cutoff = 3.561, low cutoff = 2.577, based on IQR multiplier of 3.

Constituent: Acetone Analysis Run 7/12/2024 2:36 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-303



n = 21

Outliers are drawn as solid.
Tukey's method selected by user.

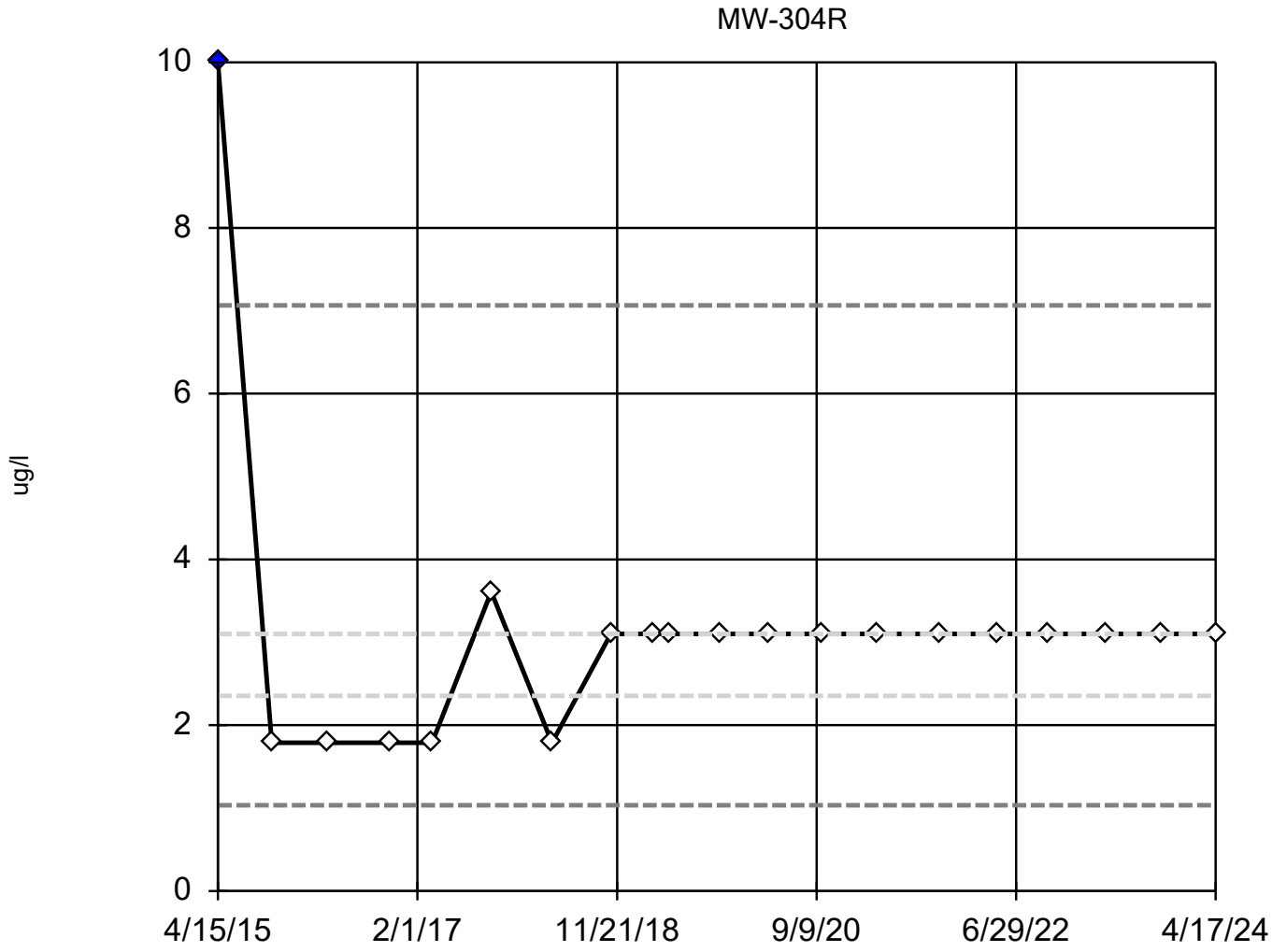
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 3.573, low cutoff = 2.565, based on IQR multiplier of 3.

Constituent: Acetone Analysis Run 7/12/2024 2:36 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 20

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

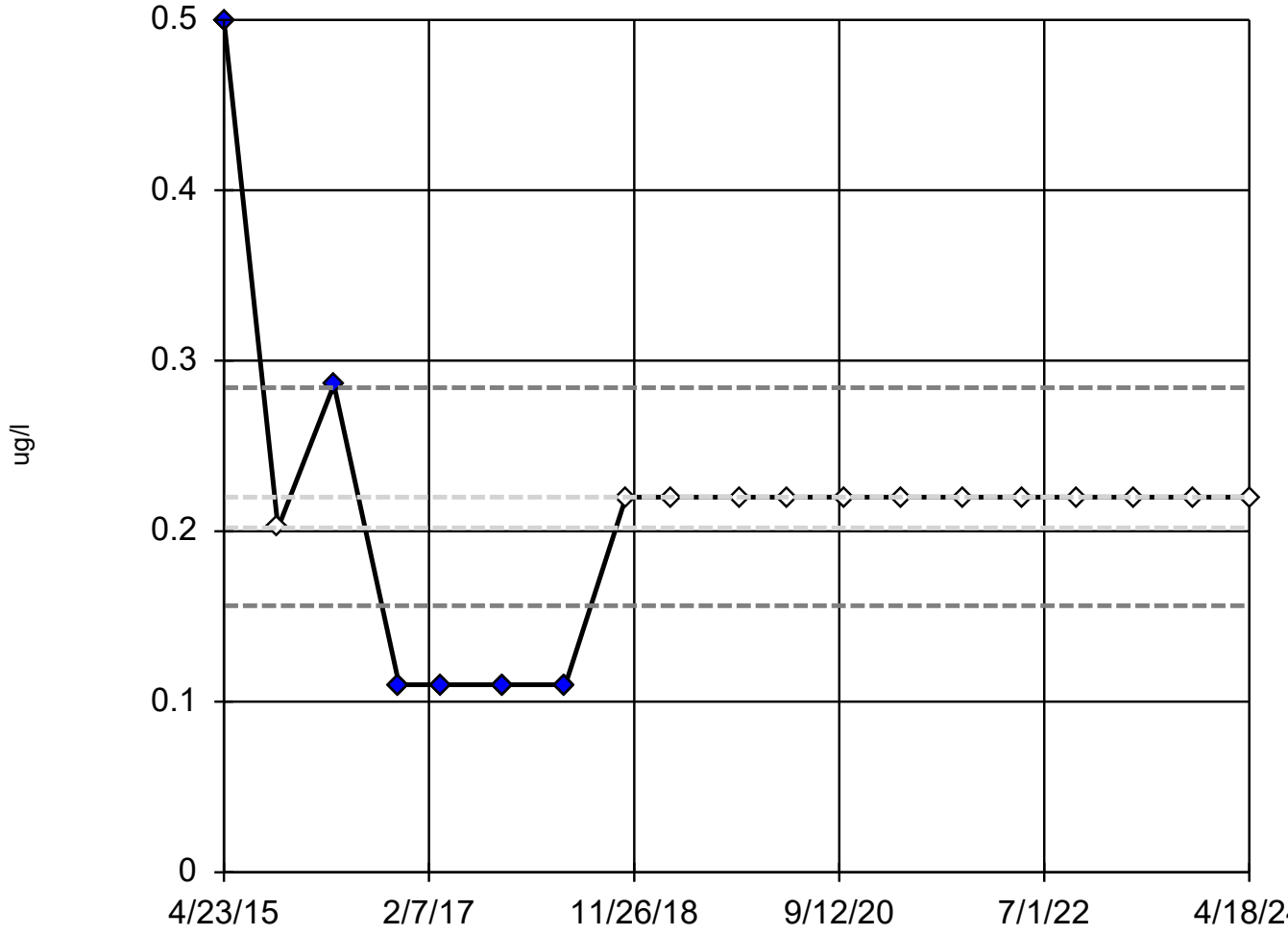
High cutoff = 7.065, low cutoff = 1.034, based on IQR multiplier of 3.

Constituent: Acetone Analysis Run 7/12/2024 2:36 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-301



n = 19

Outliers are drawn as solid.
Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

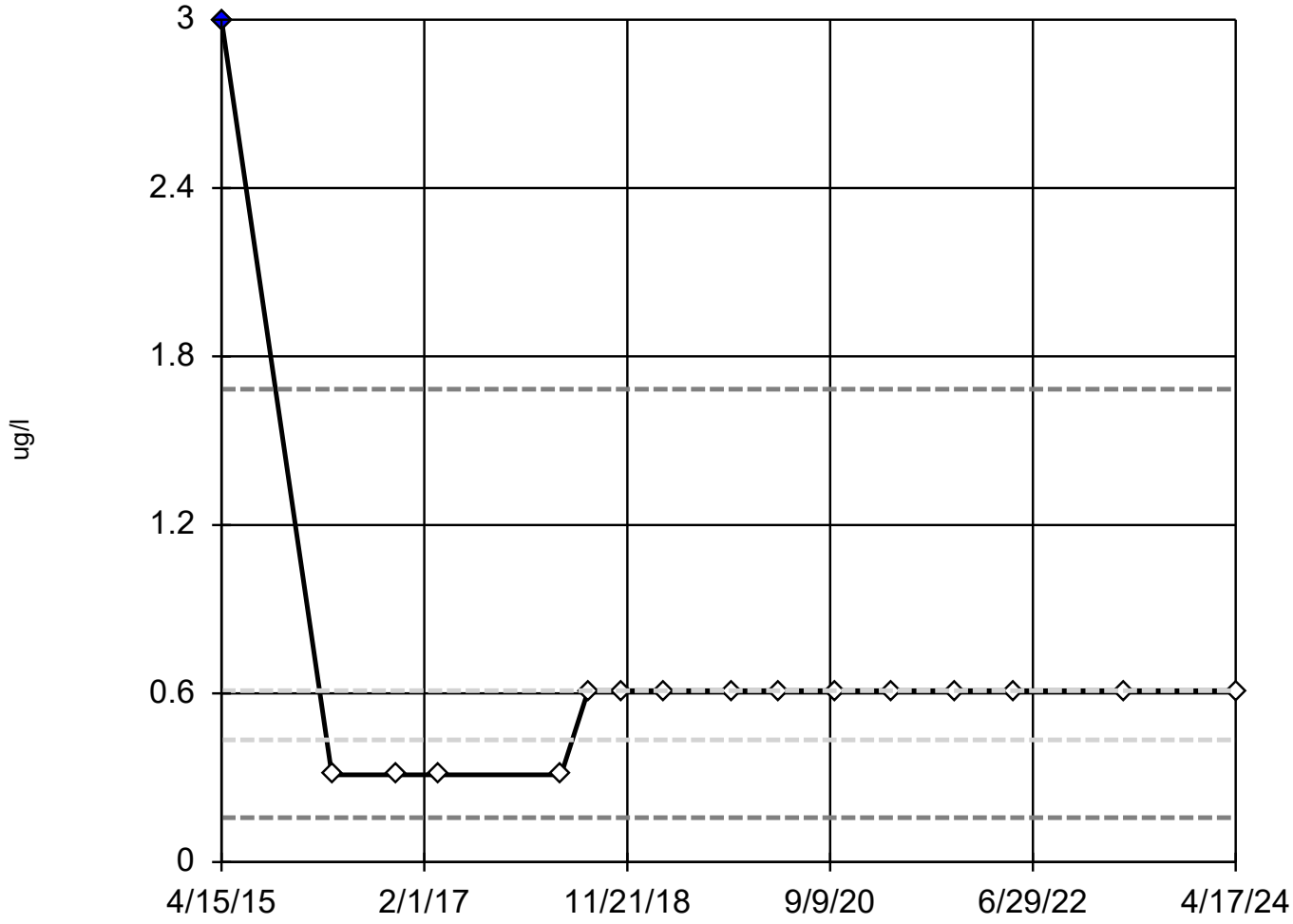
High cutoff = 0.2842, low cutoff = 0.1564, based on IQR multiplier of 3.

Constituent: Benzene Analysis Run 7/12/2024 2:36 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-26A



n = 16

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

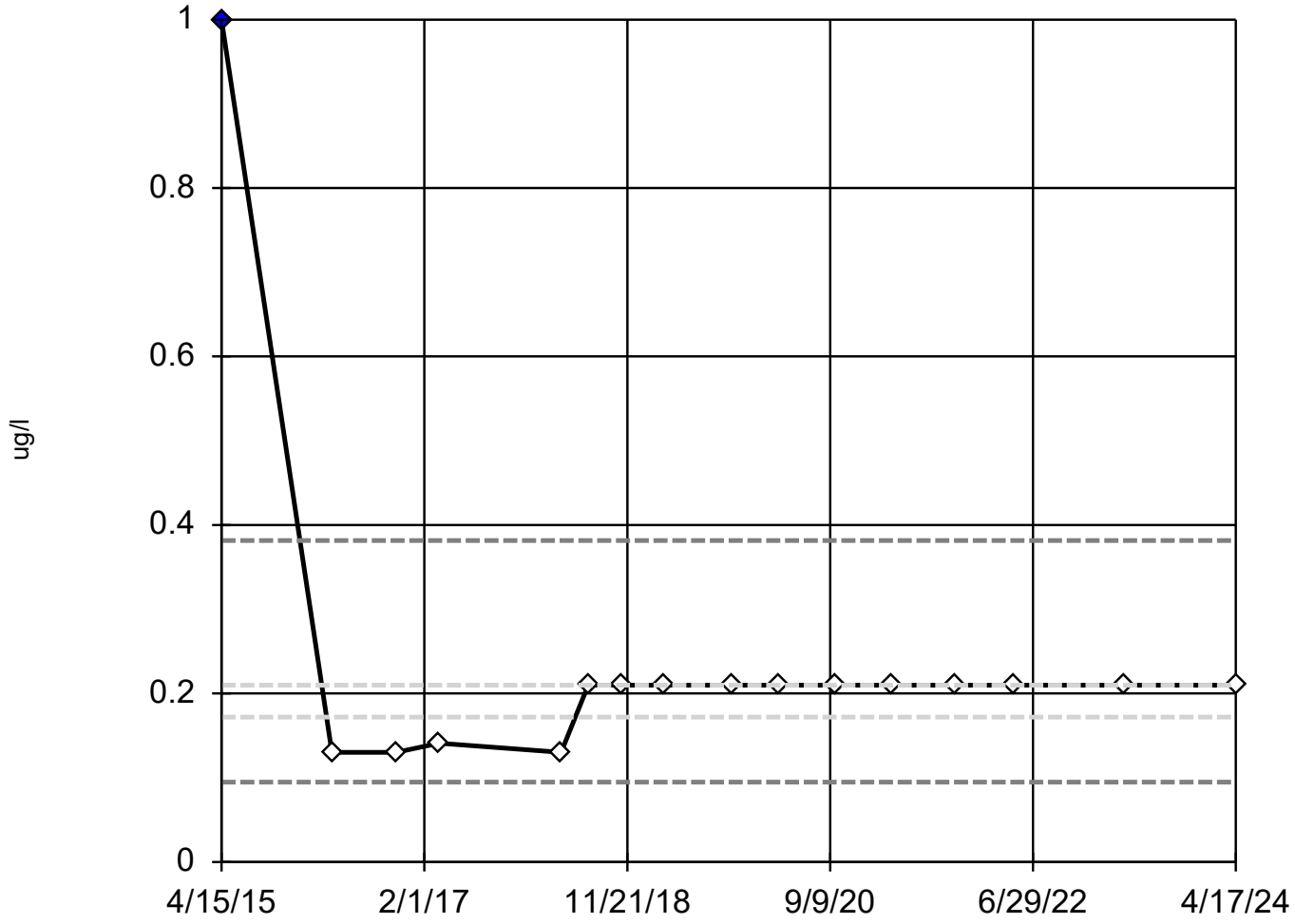
High cutoff = 1.684, low cutoff = 0.1575, based on IQR multiplier of 3.

Constituent: Chloromethane Analysis Run 7/12/2024 2:38 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-26A



n = 16

Outlier is drawn as solid. Tukey's method selected by user.

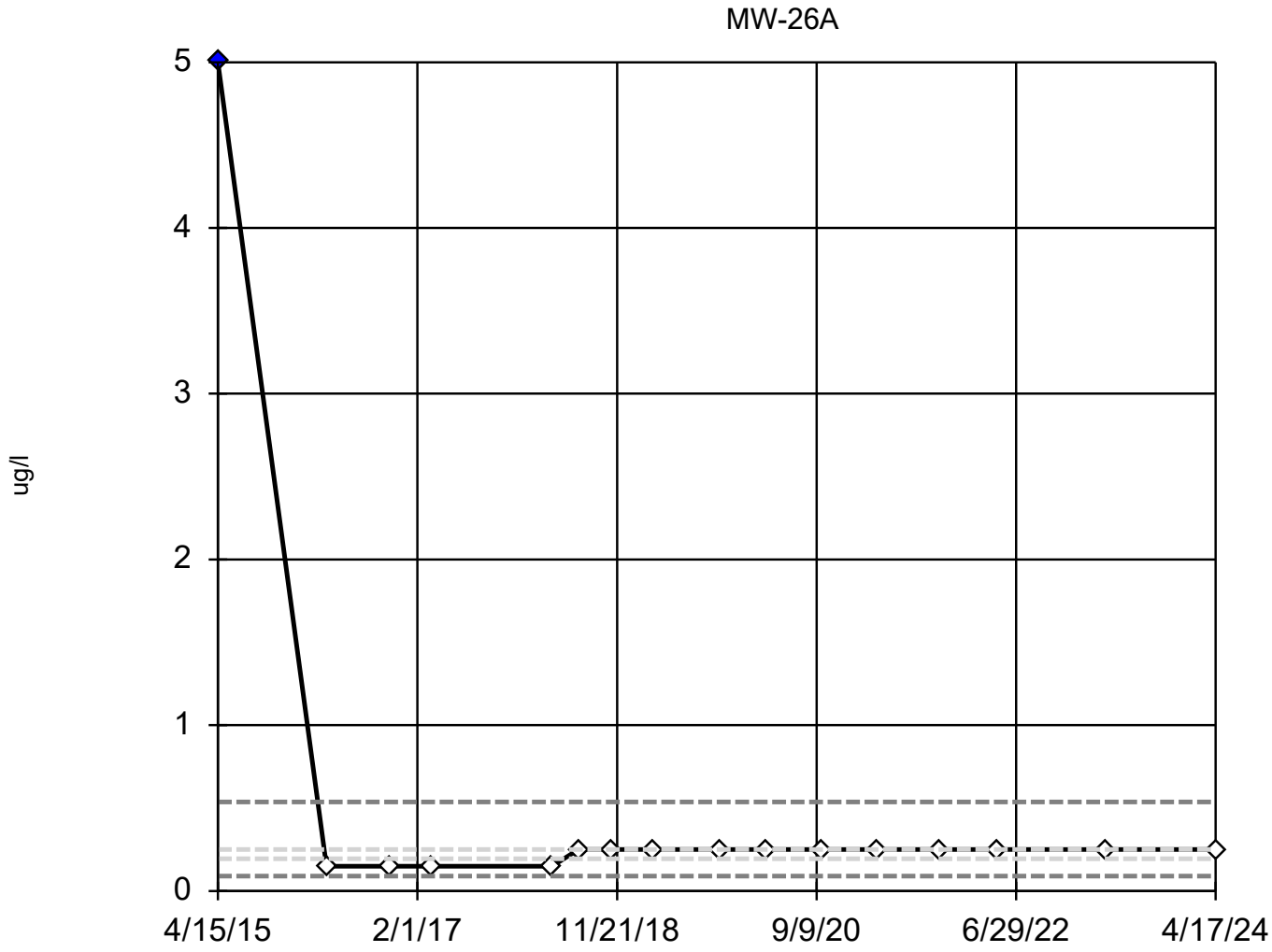
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.3817, low cutoff = 0.09467, based on IQR multiplier of 3.

Constituent: cis-1,2-Dichloroethene Analysis Run 7/12/2024 2:39 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 16

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

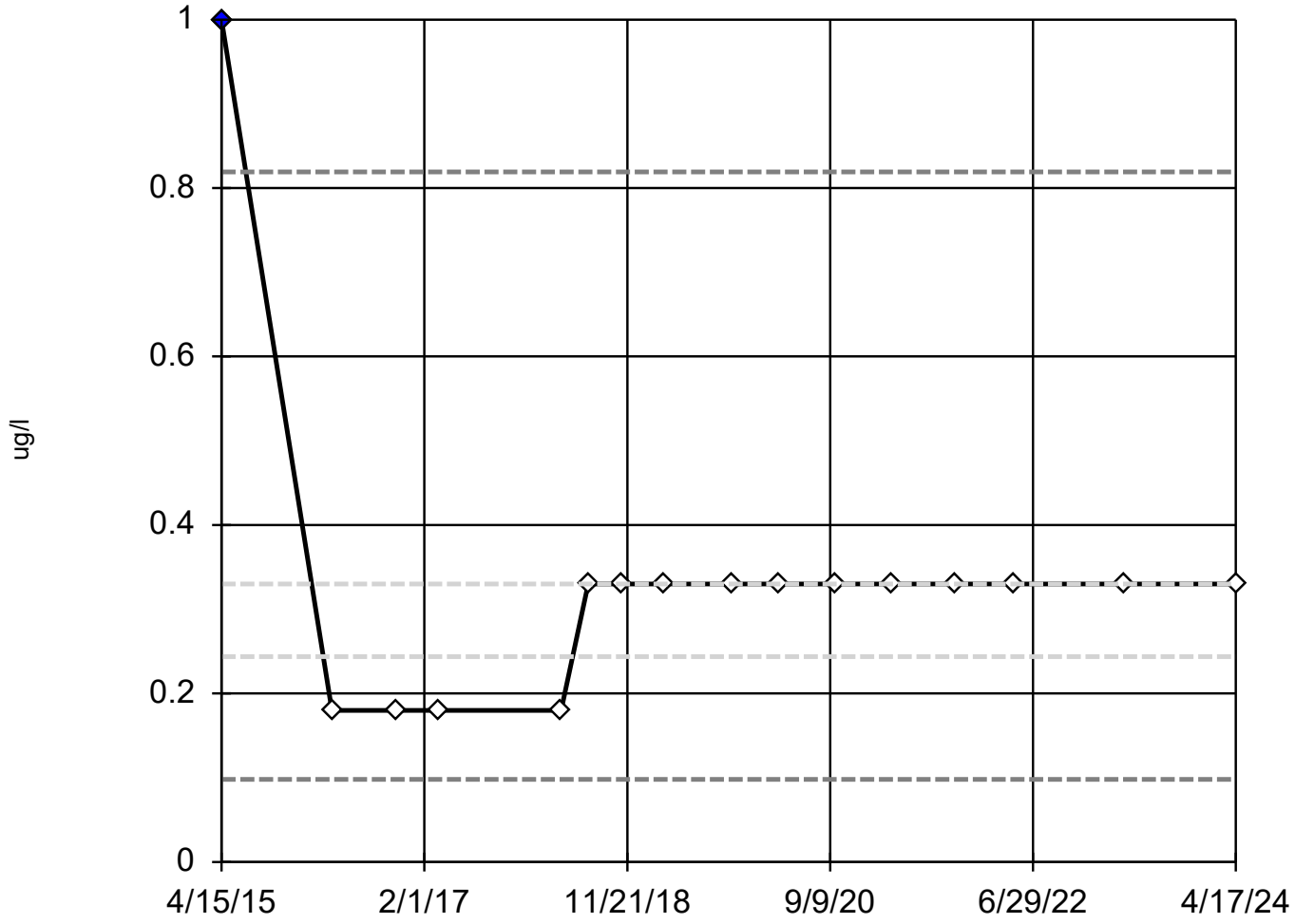
High cutoff = 0.5379, low cutoff = 0.09, based on IQR multiplier of 3.

Constituent: cis-1,3-Dichloropropene Analysis Run 7/12/2024 2:39 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-26A



n = 16

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

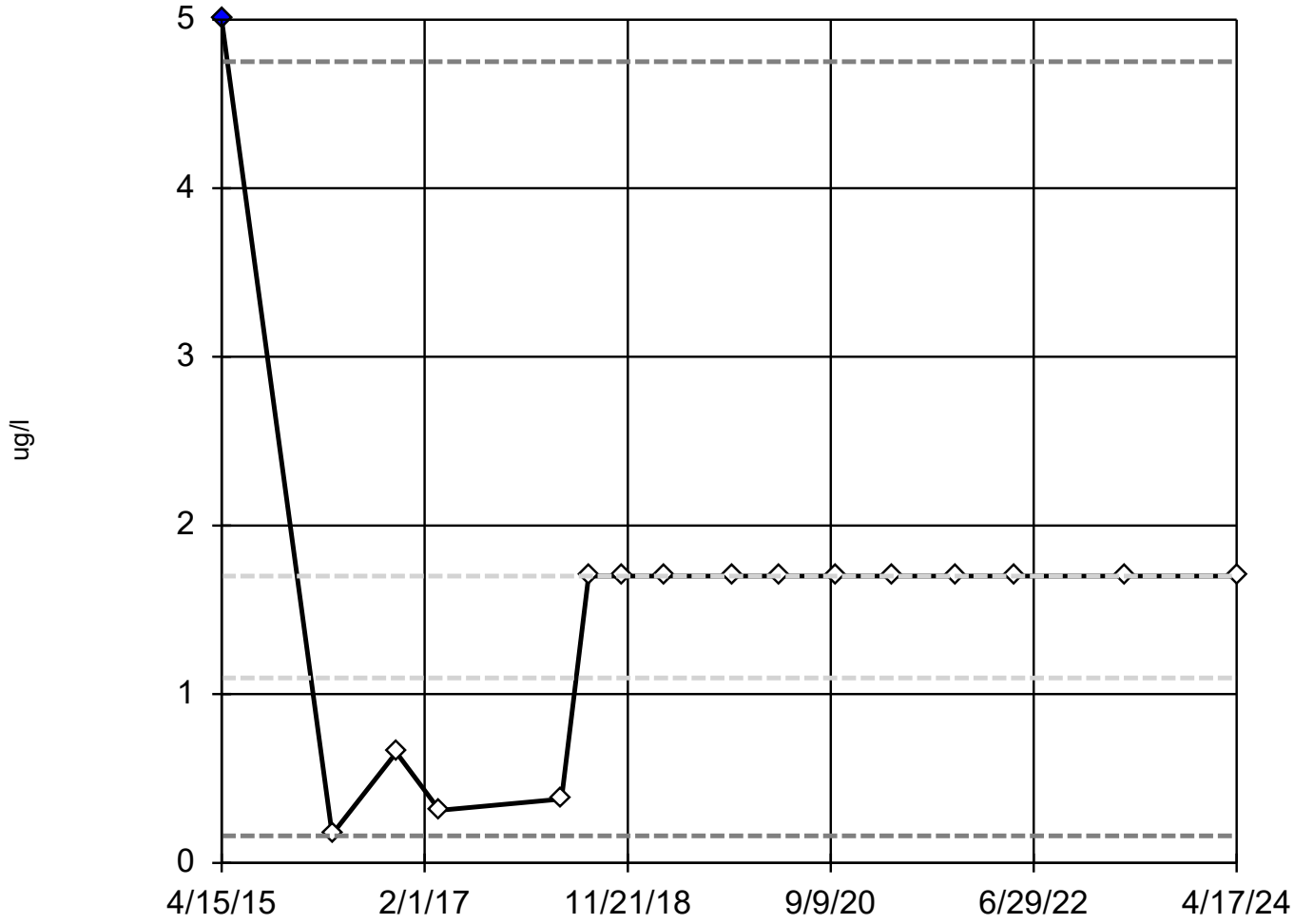
High cutoff = 0.8192, low cutoff = 0.09818, based on IQR multiplier of 3.

Constituent: Dibromomethane Analysis Run 7/12/2024 2:39 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-26A



n = 16

Outlier is drawn as solid. Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

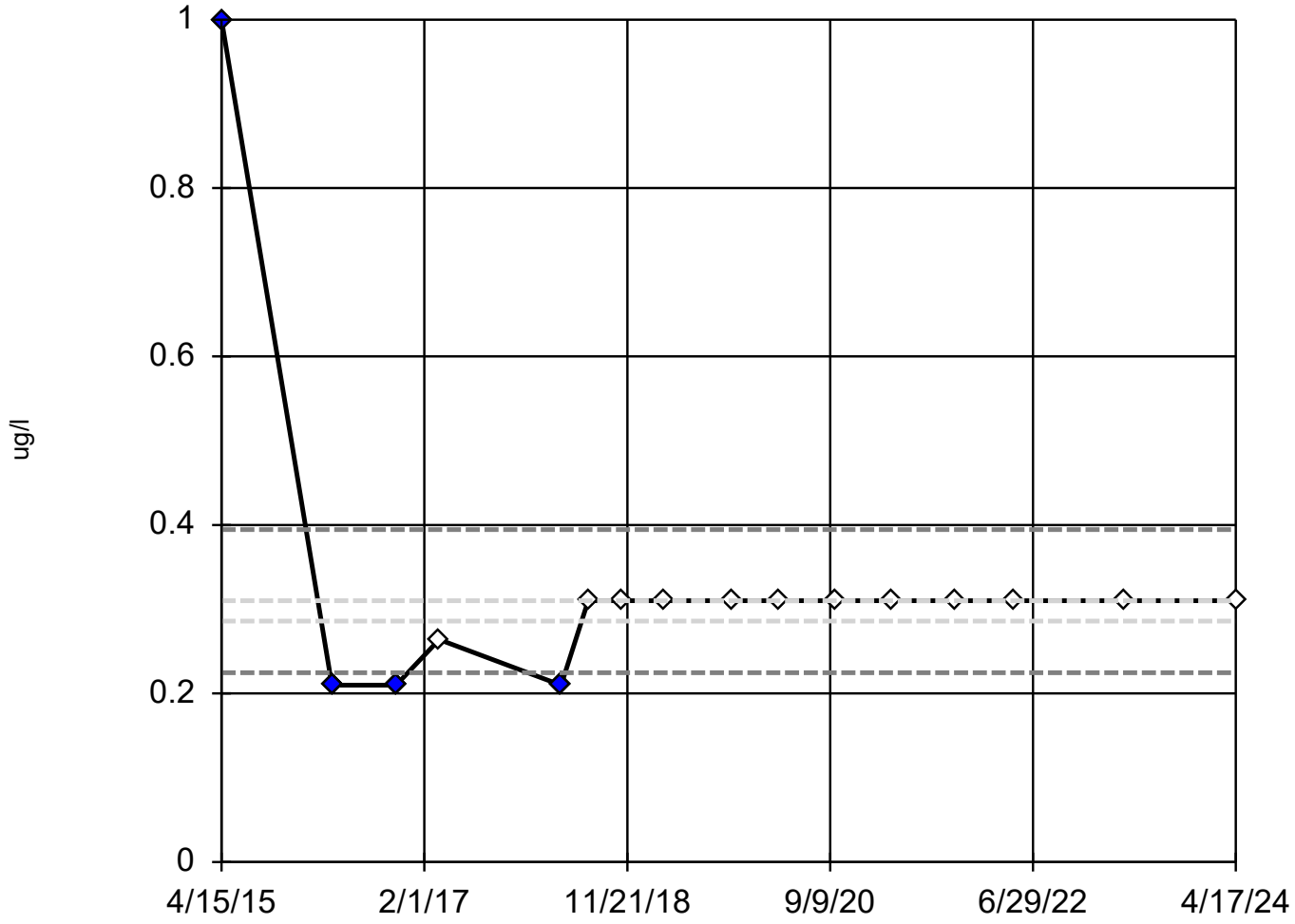
High cutoff = 4.75, low cutoff = 0.1605, based on IQR multiplier of 3.

Constituent: Dichloromethane Analysis Run 7/12/2024 2:39 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-26A



n = 16

Outliers are drawn as solid.
Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

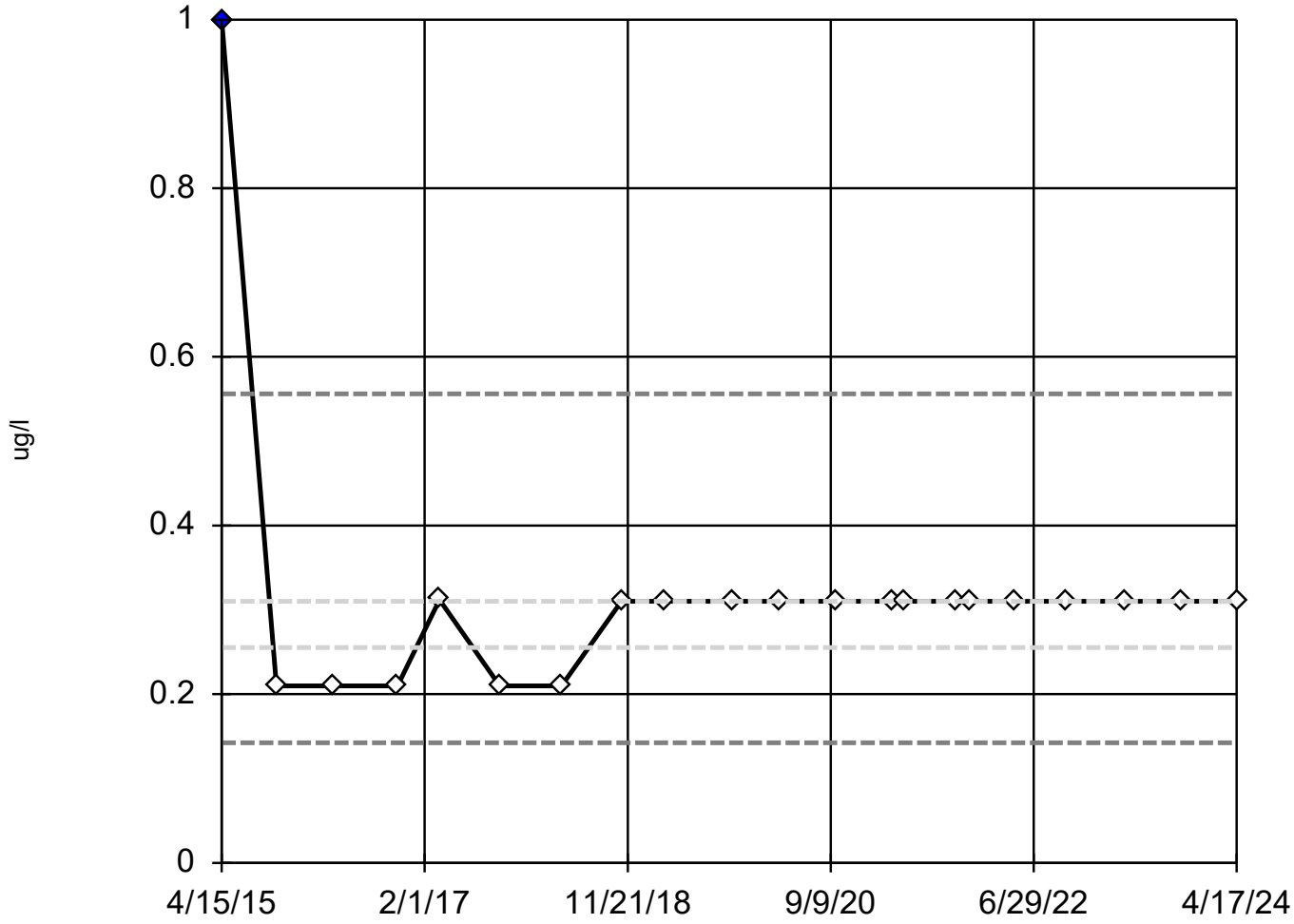
High cutoff = 0.3945, low cutoff = 0.2248, based on IQR multiplier of 3.

Constituent: Ethylbenzene Analysis Run 7/12/2024 2:39 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-303



n = 21

Outlier is drawn as solid. Tukey's method selected by user.

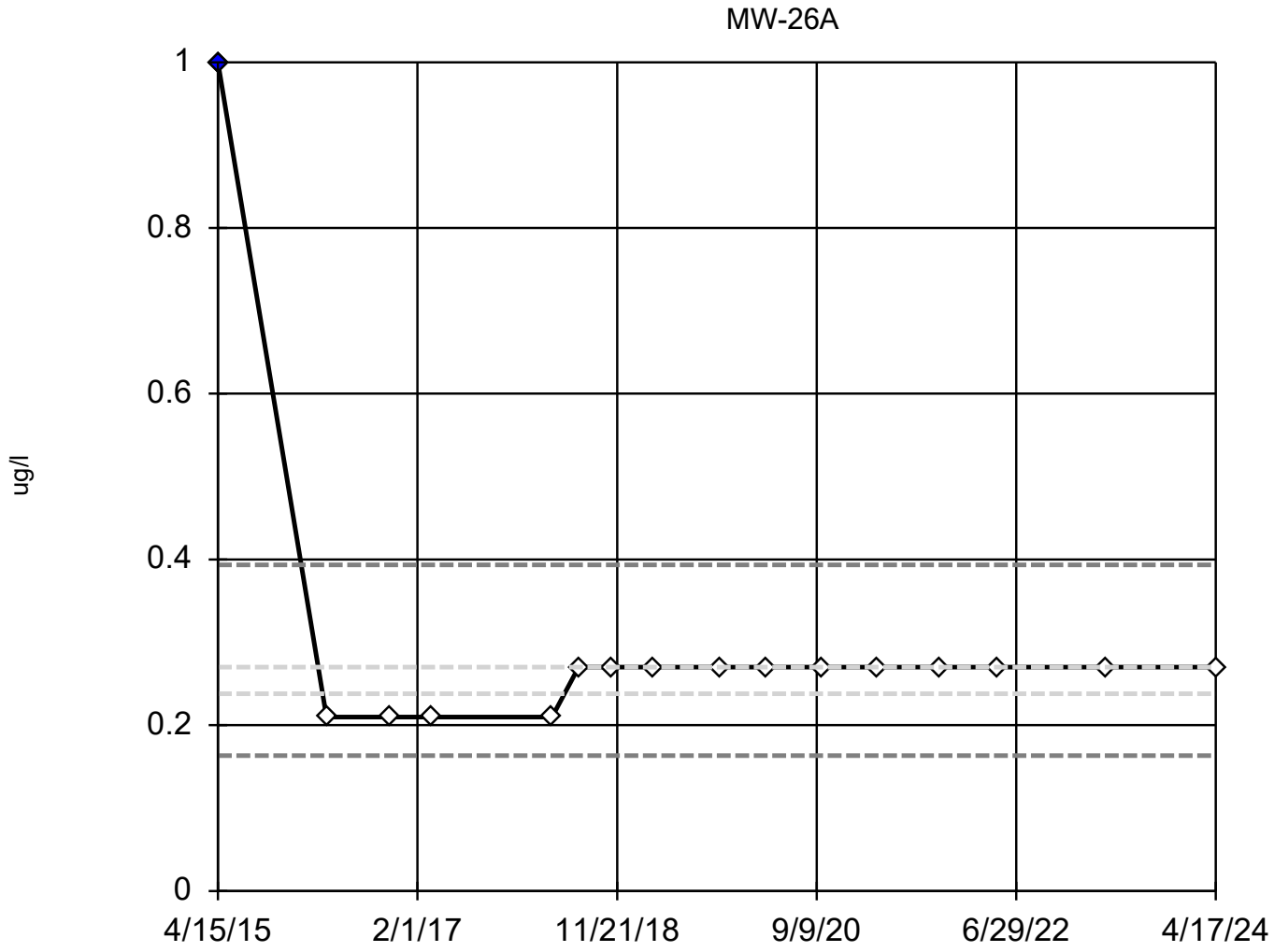
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.556, low cutoff = 0.1423, based on IQR multiplier of 3.

Constituent: Ethylbenzene Analysis Run 7/12/2024 2:39 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 16

Outlier is drawn as solid. Tukey's method selected by user.

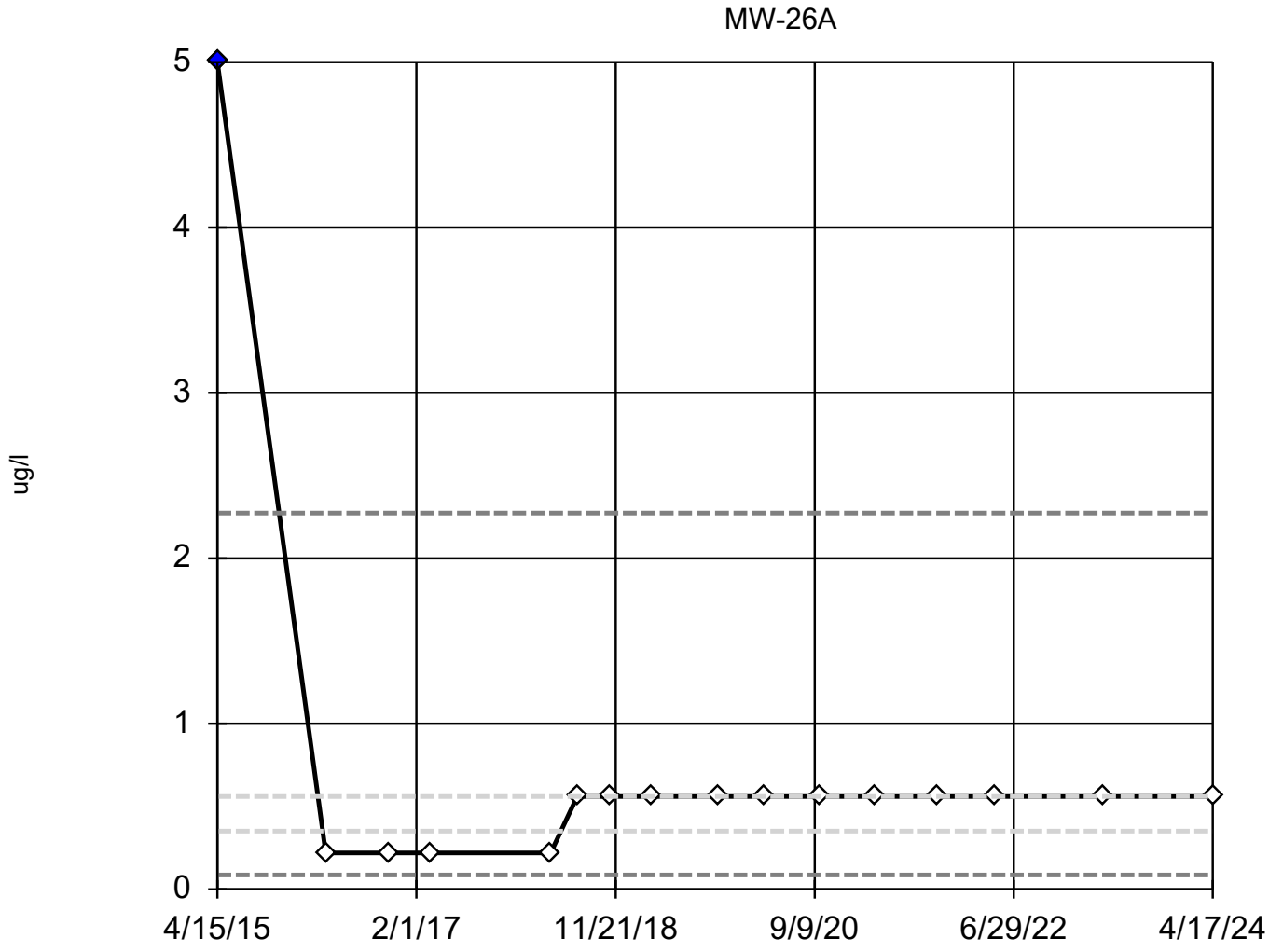
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.3936, low cutoff = 0.1633, based on IQR multiplier of 3.

Constituent: trans-1,2-Dichloroethene Analysis Run 7/12/2024 2:41 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 16

Outlier is drawn as solid. Tukey's method selected by user.

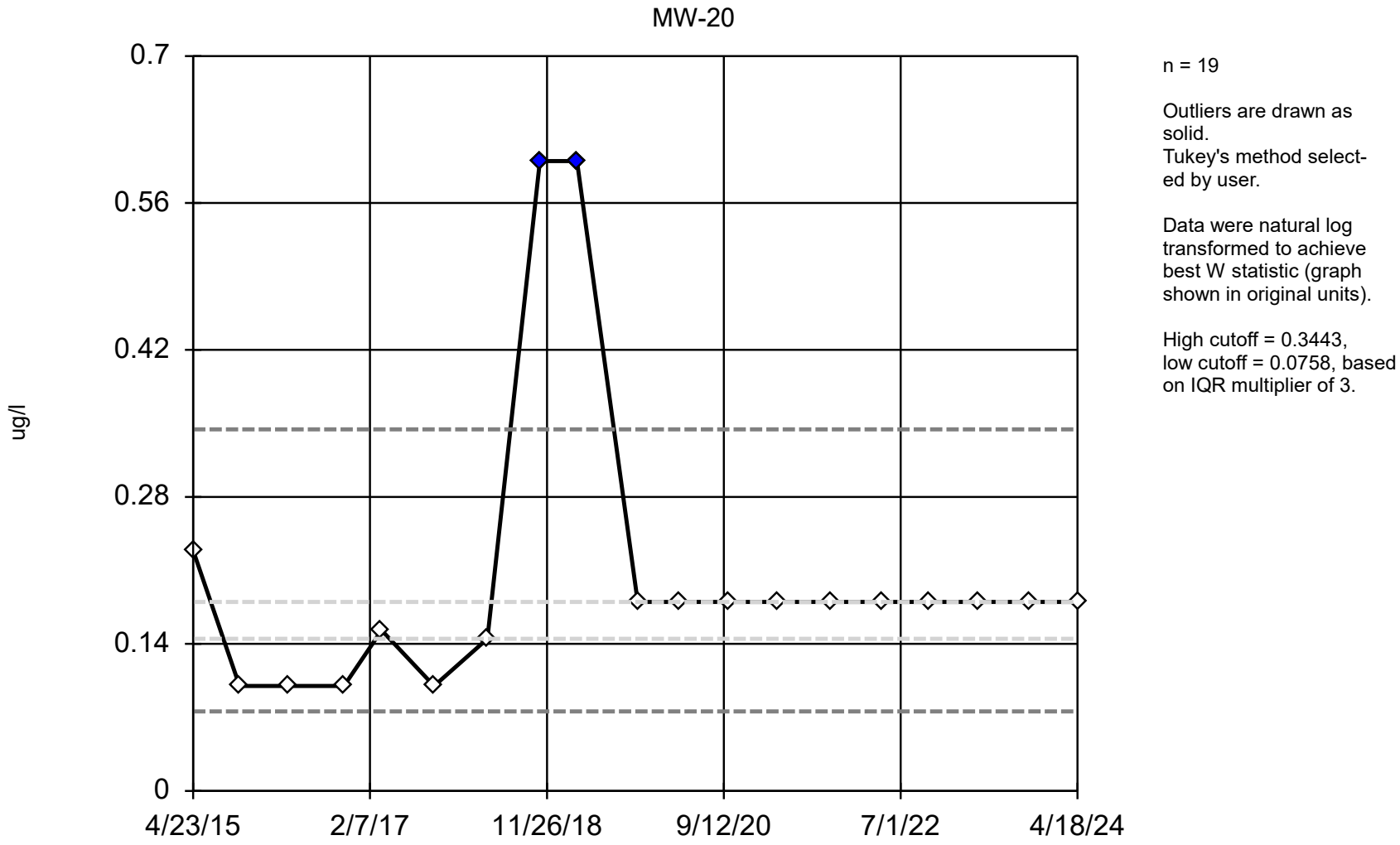
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 2.274, low cutoff = 0.08643, based on IQR multiplier of 3.

Constituent: trans-1,3-Dichloropropene Analysis Run 7/12/2024 2:41 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 19

Outliers are drawn as solid.
Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

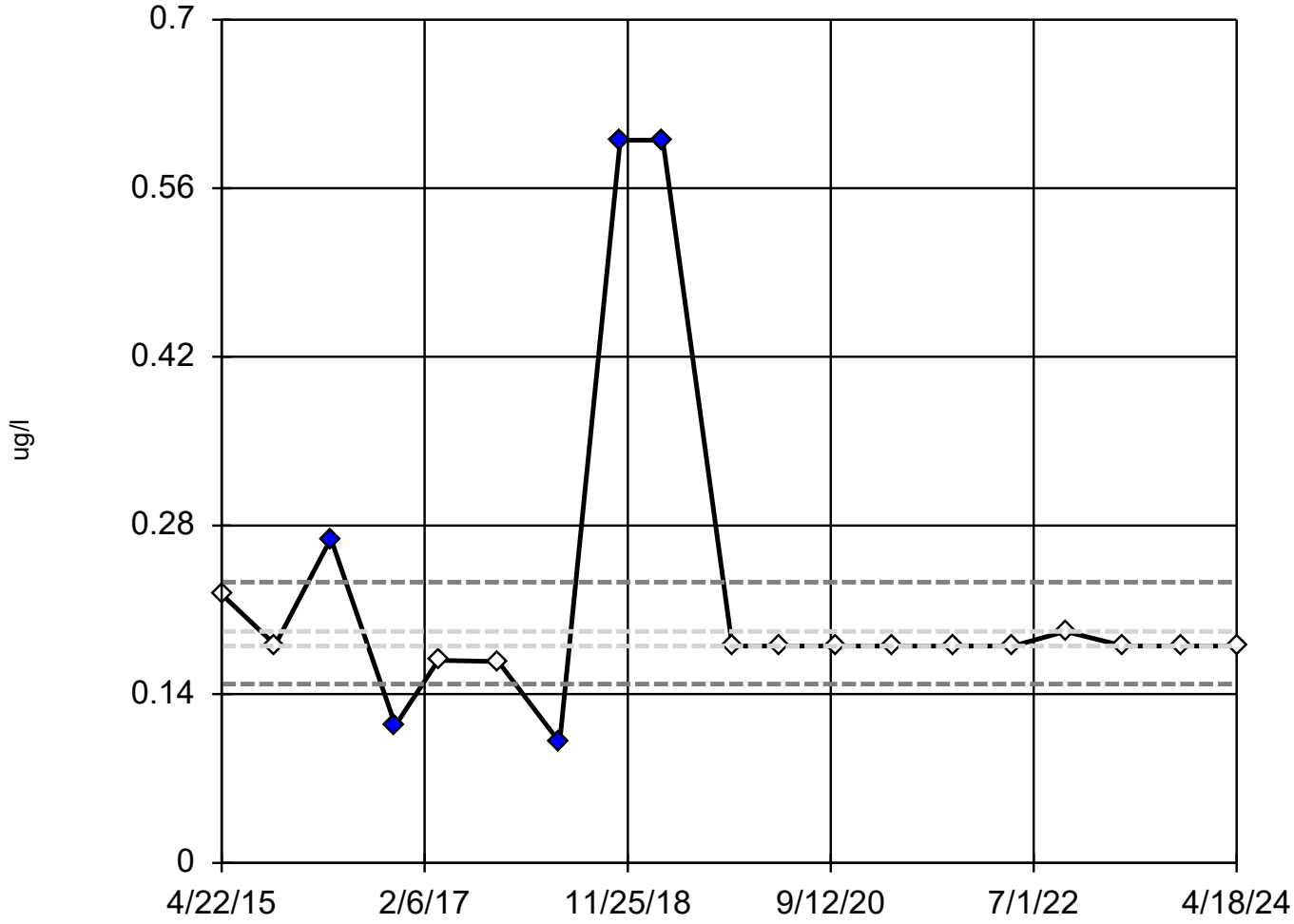
High cutoff = 0.3443, low cutoff = 0.0758, based on IQR multiplier of 3.

Constituent: Vinyl Chloride Analysis Run 7/12/2024 2:42 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-22



n = 19

Outliers are drawn as solid.
Tukey's method selected by user.

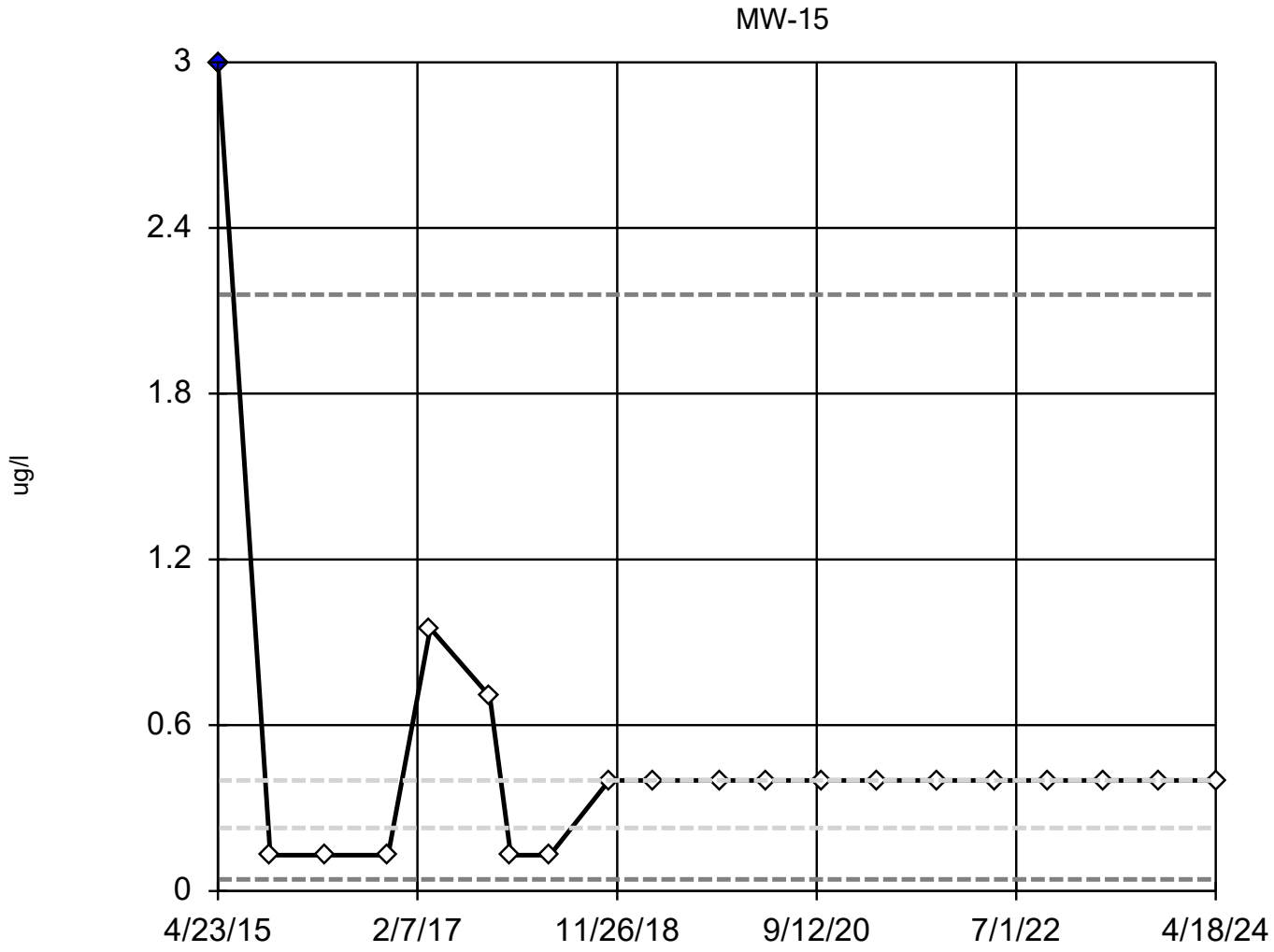
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.233, low cutoff = 0.1483, based on IQR multiplier of 3.

Constituent: Vinyl Chloride Analysis Run 7/12/2024 2:42 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 20

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

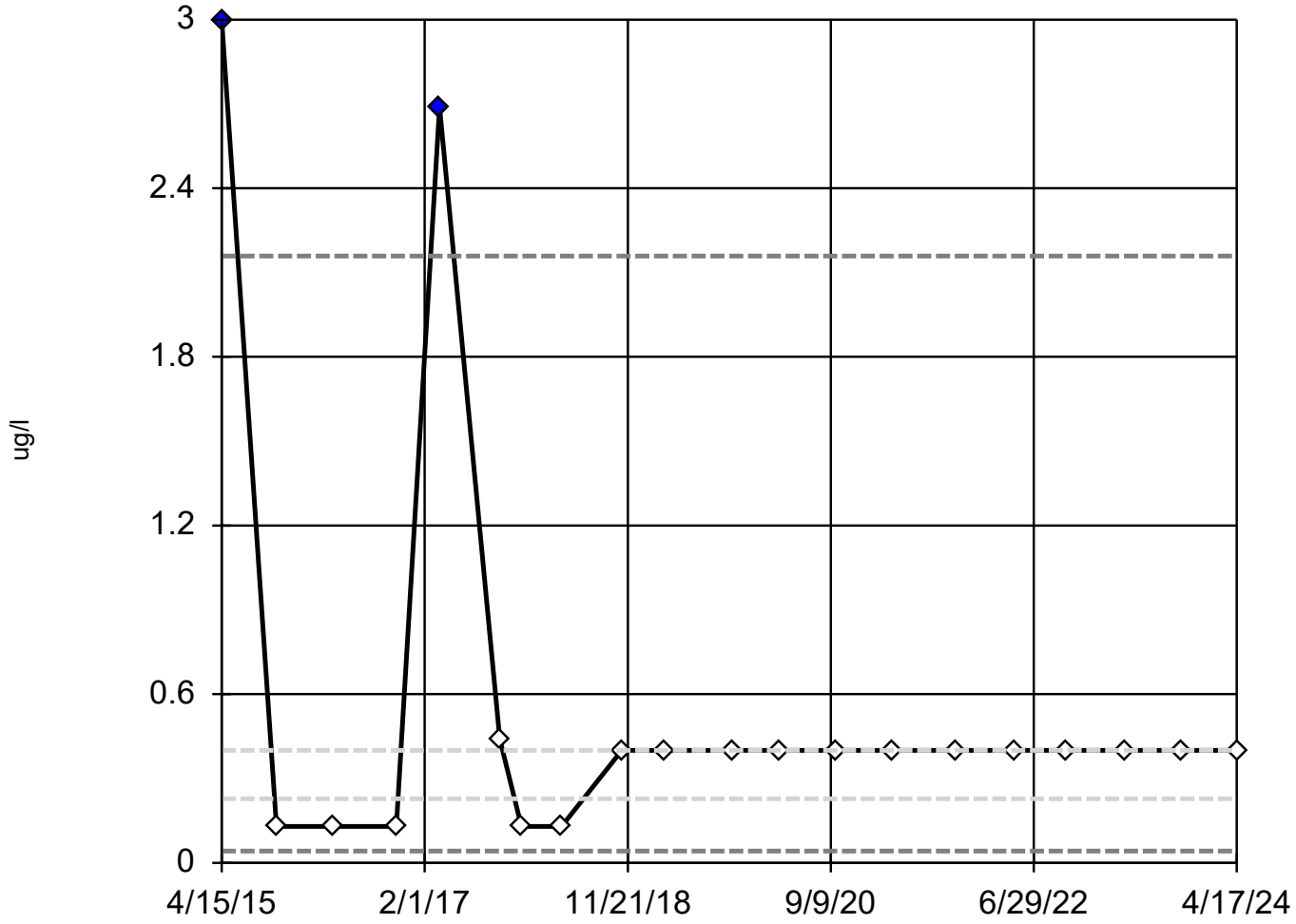
High cutoff = 2.159, low cutoff = 0.04225, based on IQR multiplier of 3.

Constituent: Xylenes, Total Analysis Run 7/12/2024 2:42 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-24



n = 20

Outliers are drawn as solid.
Tukey's method selected by user.

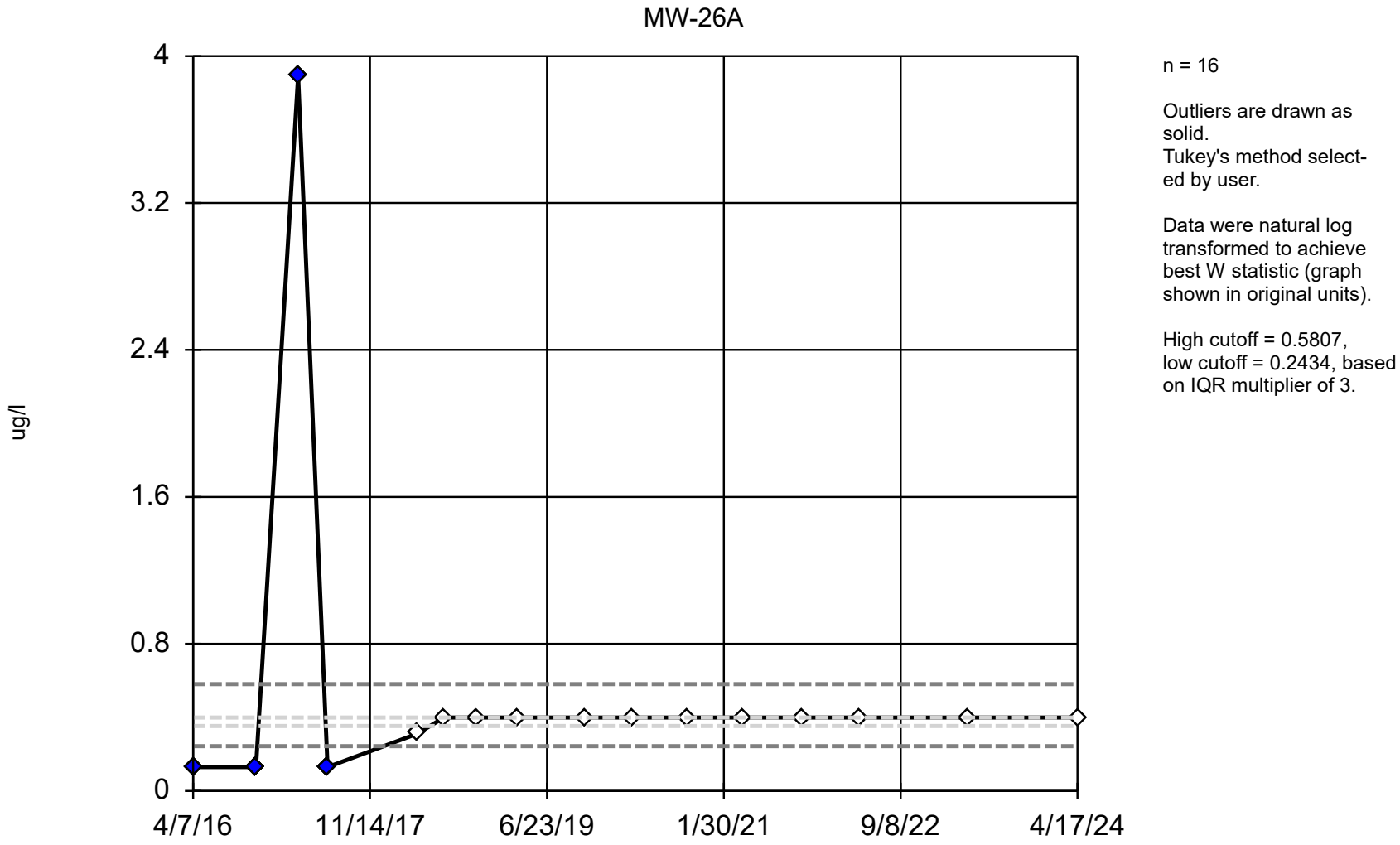
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 2.159, low cutoff = 0.04225, based on IQR multiplier of 3.

Constituent: Xylenes, Total Analysis Run 7/12/2024 2:42 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 16

Outliers are drawn as solid.
Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

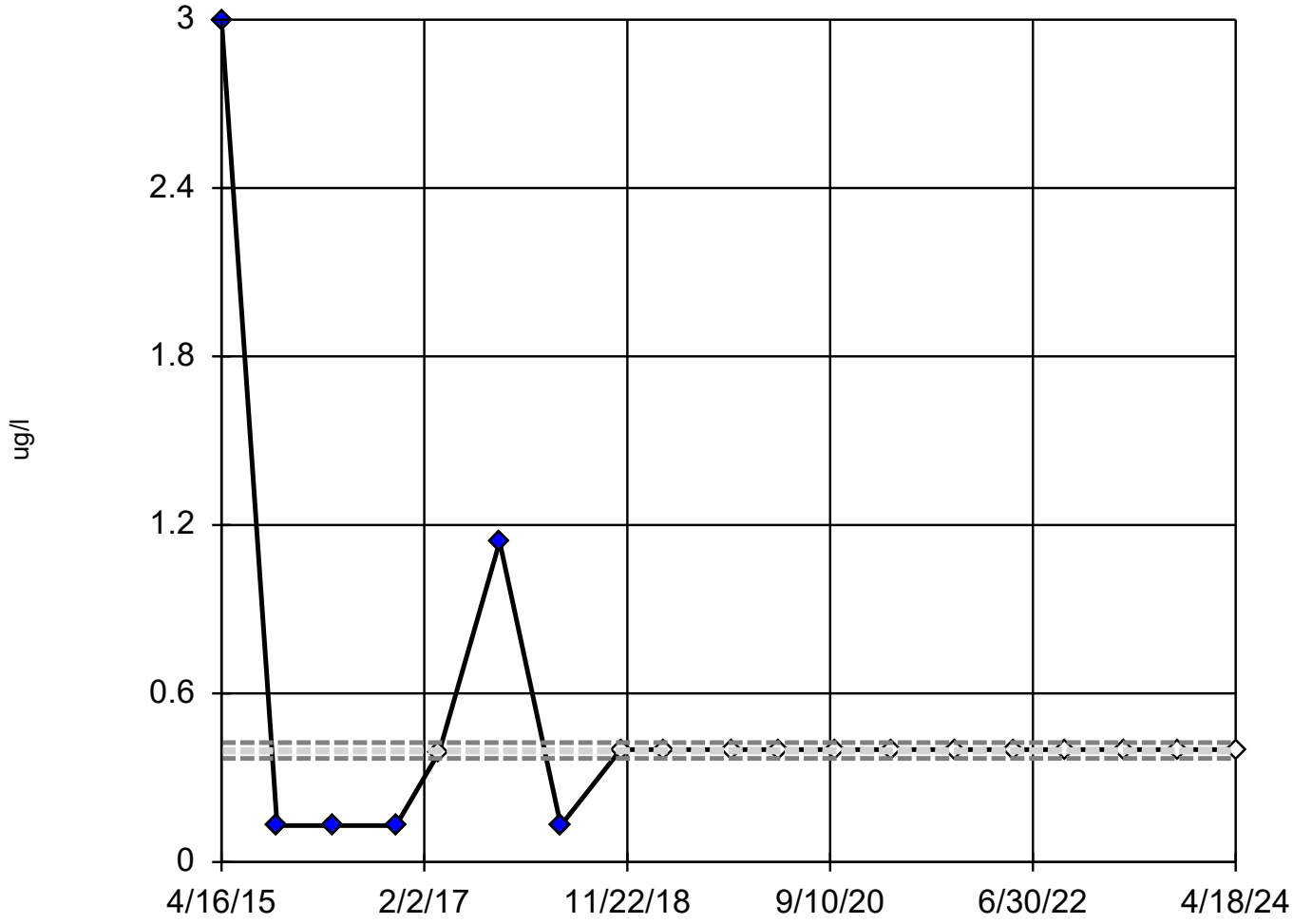
High cutoff = 0.5807, low cutoff = 0.2434, based on IQR multiplier of 3.

Constituent: Xylenes, Total Analysis Run 7/12/2024 2:42 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-300



n = 19

Outliers are drawn as solid.
Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

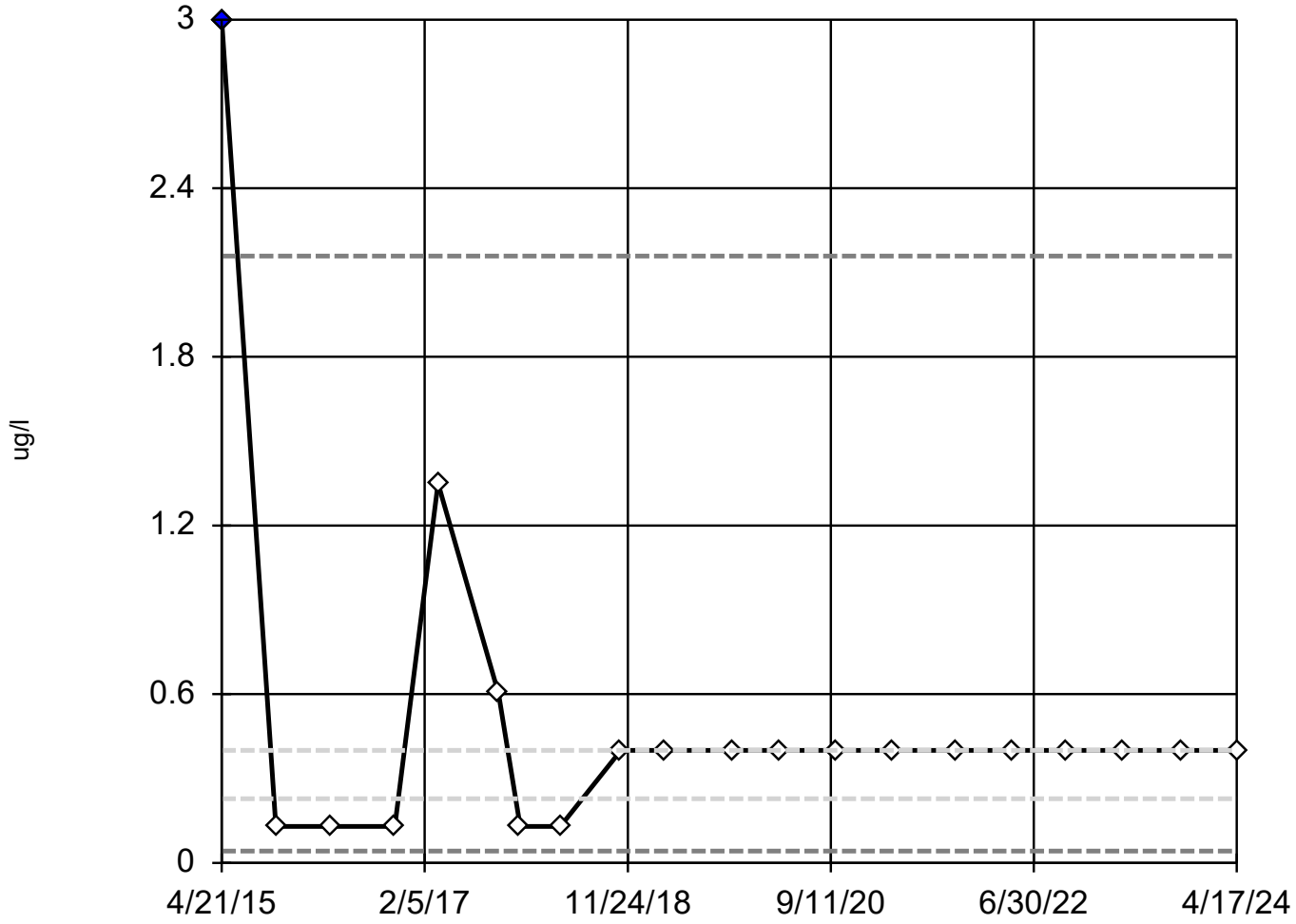
High cutoff = 0.425, low cutoff = 0.3689, based on IQR multiplier of 3.

Constituent: Xylenes, Total Analysis Run 7/12/2024 2:42 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-302R



n = 20

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

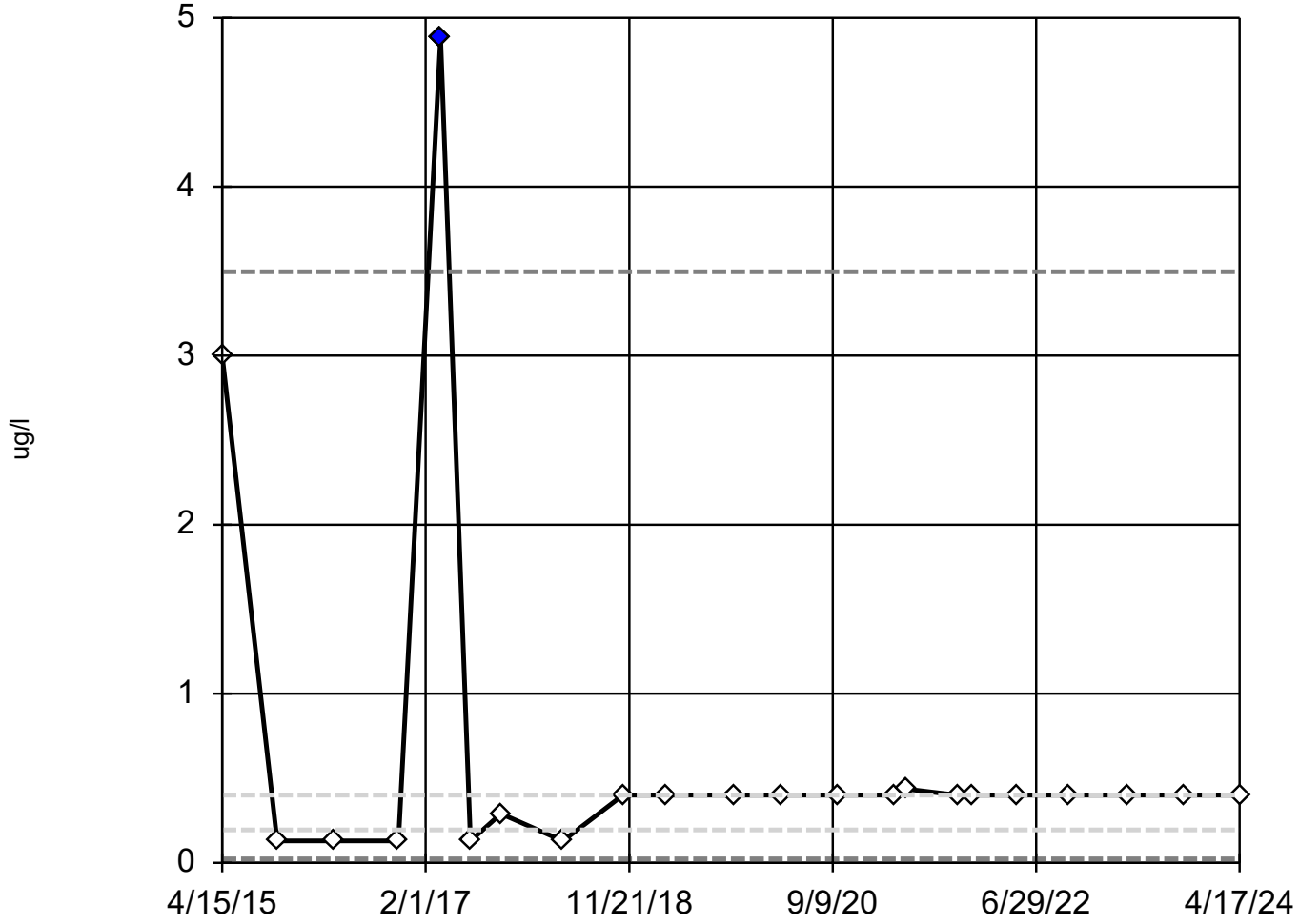
High cutoff = 2.159, low cutoff = 0.04225, based on IQR multiplier of 3.

Constituent: Xylenes, Total Analysis Run 7/12/2024 2:42 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

MW-303



n = 22

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 3.497, low cutoff = 0.02221, based on IQR multiplier of 3.

Constituent: Xylenes, Total Analysis Run 7/12/2024 2:42 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Outlier Analysis

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:43 PM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
1,1,1,2-Tetrachloroethane (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.3515	0.1733	unknown	ShapiroWilk
1,1,1,2-Tetrachloroethane (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.3589	0.1747	unknown	ShapiroWilk
1,1,1,2-Tetrachloroethane (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.3589	0.1747	unknown	ShapiroWilk
1,1,1,2-Tetrachloroethane (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.3589	0.1747	unknown	ShapiroWilk
1,1,1,2-Tetrachloroethane (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.3589	0.1747	unknown	ShapiroWilk
1,1,1,2-Tetrachloroethane (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.3589	0.1747	unknown	ShapiroWilk
1,1,1,2-Tetrachloroethane (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.3515	0.1733	unknown	ShapiroWilk
1,1,1,2-Tetrachloroethane (ug/l)	**MW-26A**	**Yes**	**1**	**4/15/2015**	**NP**	**NaN**	**16**	**0.3762**	**0.1825**	**ln(x)**	**ShapiroWilk**
1,1,1,2-Tetrachloroethane (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.3589	0.1747	unknown	ShapiroWilk
1,1,1,2-Tetrachloroethane (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.3589	0.1747	unknown	ShapiroWilk
1,1,1,2-Tetrachloroethane (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.3515	0.1733	unknown	ShapiroWilk
1,1,1,2-Tetrachloroethane (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.361	0.1659	unknown	ShapiroWilk
1,1,1,2-Tetrachloroethane (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.36	0.1701	unknown	ShapiroWilk
1,1,1,2-Tetrachloroethane (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.3515	0.1733	unknown	ShapiroWilk
1,1,1,2-Tetrachloroethane (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.38	0	unknown	ShapiroWilk
1,1,1,2-Tetrachloroethane (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.38	0	unknown	ShapiroWilk
1,1,1-Trichloroethane (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.206	0.1899	unknown	ShapiroWilk
1,1,1-Trichloroethane (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.2105	0.194	unknown	ShapiroWilk
1,1,1-Trichloroethane (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.2105	0.194	unknown	ShapiroWilk
1,1,1-Trichloroethane (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.2105	0.194	unknown	ShapiroWilk
1,1,1-Trichloroethane (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.2105	0.194	unknown	ShapiroWilk
1,1,1-Trichloroethane (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.2105	0.194	unknown	ShapiroWilk
1,1,1-Trichloroethane (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.206	0.1899	unknown	ShapiroWilk
1,1,1-Trichloroethane (ug/l)	**MW-26A**	**Yes**	**1**	**4/15/2015**	**NP**	**NaN**	**16**	**0.2231**	**0.2095**	**ln(x)**	**ShapiroWilk**
1,1,1-Trichloroethane (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.2105	0.194	unknown	ShapiroWilk
1,1,1-Trichloroethane (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.2105	0.194	unknown	ShapiroWilk
1,1,1-Trichloroethane (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.206	0.1899	unknown	ShapiroWilk
1,1,1-Trichloroethane (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.2086	0.1842	unknown	ShapiroWilk
1,1,1-Trichloroethane (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.2095	0.1889	unknown	ShapiroWilk
1,1,1-Trichloroethane (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.206	0.1899	unknown	ShapiroWilk
1,1,1-Trichloroethane (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.19	0	unknown	ShapiroWilk
1,1,1-Trichloroethane (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.19	0	unknown	ShapiroWilk
1,1,2,2-Tetrachloroethane (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.367	0.2325	unknown	ShapiroWilk
1,1,2,2-Tetrachloroethane (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.3811	0.23	unknown	ShapiroWilk
1,1,2,2-Tetrachloroethane (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.3811	0.23	unknown	ShapiroWilk
1,1,2,2-Tetrachloroethane (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.3811	0.23	unknown	ShapiroWilk
1,1,2,2-Tetrachloroethane (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.3811	0.23	unknown	ShapiroWilk
1,1,2,2-Tetrachloroethane (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.3811	0.23	unknown	ShapiroWilk
1,1,2,2-Tetrachloroethane (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.367	0.2325	unknown	ShapiroWilk
1,1,2,2-Tetrachloroethane (ug/l)	MW-26A	No	n/a	n/a	NP	NaN	16	0.4106	0.2269	sqrt(x)	ShapiroWilk
1,1,2,2-Tetrachloroethane (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.3811	0.23	unknown	ShapiroWilk
1,1,2,2-Tetrachloroethane (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.3811	0.23	unknown	ShapiroWilk
1,1,2,2-Tetrachloroethane (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.367	0.2325	unknown	ShapiroWilk
1,1,2,2-Tetrachloroethane (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.3895	0.2198	unknown	ShapiroWilk
1,1,2,2-Tetrachloroethane (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.3855	0.2247	unknown	ShapiroWilk
1,1,2,2-Tetrachloroethane (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.367	0.2325	unknown	ShapiroWilk
1,1,2,2-Tetrachloroethane (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.47	0	unknown	ShapiroWilk
1,1,2,2-Tetrachloroethane (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.47	0	unknown	ShapiroWilk
1,1,2-Trichloroethane (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.362	0.2188	unknown	ShapiroWilk
1,1,2-Trichloroethane (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.3747	0.2171	unknown	ShapiroWilk

Outlier Analysis

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:43 PM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
1,1,2-Trichloroethane (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.3747	0.2171	unknown	ShapiroWilk
1,1,2-Trichloroethane (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.3747	0.2171	unknown	ShapiroWilk
1,1,2-Trichloroethane (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.3747	0.2171	unknown	ShapiroWilk
1,1,2-Trichloroethane (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.3747	0.2171	unknown	ShapiroWilk
1,1,2-Trichloroethane (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.362	0.2188	unknown	ShapiroWilk
1,1,2-Trichloroethane (ug/l)	MW-26A	No	n/a	n/a	NP	NaN	16	0.4019	0.2162	sqrt(x)	ShapiroWilk
1,1,2-Trichloroethane (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.3747	0.2171	unknown	ShapiroWilk
1,1,2-Trichloroethane (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.3747	0.2171	unknown	ShapiroWilk
1,1,2-Trichloroethane (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.362	0.2188	unknown	ShapiroWilk
1,1,2-Trichloroethane (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.3819	0.2072	unknown	ShapiroWilk
1,1,2-Trichloroethane (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.3785	0.212	unknown	ShapiroWilk
1,1,2-Trichloroethane (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.362	0.2188	unknown	ShapiroWilk
1,1,2-Trichloroethane (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.45	0	unknown	ShapiroWilk
1,1,2-Trichloroethane (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.45	0	unknown	ShapiroWilk
1,1-Dichloroethane (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.2555	0.1753	unknown	ShapiroWilk
1,1-Dichloroethane (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.2579	0.1798	unknown	ShapiroWilk
1,1-Dichloroethane (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.2859	0.2026	unknown	ShapiroWilk
1,1-Dichloroethane (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.2579	0.1798	unknown	ShapiroWilk
1,1-Dichloroethane (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.2579	0.1798	unknown	ShapiroWilk
1,1-Dichloroethane (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.2579	0.1798	unknown	ShapiroWilk
1,1-Dichloroethane (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.2555	0.1753	unknown	ShapiroWilk
1,1-Dichloroethane (ug/l)	MW-26A	n/a	n/a	n/a	NP	NaN	16	0.2492	0.07433	unknown	ShapiroWilk
1,1-Dichloroethane (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.2579	0.1798	unknown	ShapiroWilk
1,1-Dichloroethane (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.2579	0.1798	unknown	ShapiroWilk
1,1-Dichloroethane (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.2555	0.1753	unknown	ShapiroWilk
1,1-Dichloroethane (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.2543	0.1709	unknown	ShapiroWilk
1,1-Dichloroethane (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.256	0.1752	unknown	ShapiroWilk
1,1-Dichloroethane (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.2555	0.1753	unknown	ShapiroWilk
1,1-Dichloroethane (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.22	0	unknown	ShapiroWilk
1,1-Dichloroethane (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.22	0	unknown	ShapiroWilk
1,1-Dichloroethene (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.4885	0.407	unknown	ShapiroWilk
1,1-Dichloroethene (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.5063	0.4101	unknown	ShapiroWilk
1,1-Dichloroethene (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.5063	0.4101	unknown	ShapiroWilk
1,1-Dichloroethene (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.5063	0.4101	unknown	ShapiroWilk
1,1-Dichloroethene (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.5063	0.4101	unknown	ShapiroWilk
1,1-Dichloroethene (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.5063	0.4101	unknown	ShapiroWilk
1,1-Dichloroethene (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.4885	0.407	unknown	ShapiroWilk
1,1-Dichloroethene (ug/l)	MW-26A	No	n/a	n/a	NP	NaN	16	0.5475	0.4277	ln(x)	ShapiroWilk
1,1-Dichloroethene (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.5063	0.4101	unknown	ShapiroWilk
1,1-Dichloroethene (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.5063	0.4101	unknown	ShapiroWilk
1,1-Dichloroethene (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.4885	0.407	unknown	ShapiroWilk
1,1-Dichloroethene (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.5114	0.3894	unknown	ShapiroWilk
1,1-Dichloroethene (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.509	0.3994	unknown	ShapiroWilk
1,1-Dichloroethene (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.4885	0.407	unknown	ShapiroWilk
1,1-Dichloroethene (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.56	0	unknown	ShapiroWilk
1,1-Dichloroethene (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.56	0	unknown	ShapiroWilk
1,2,3-Trichloropropane (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.4705	0.2297	unknown	ShapiroWilk
1,2,3-Trichloropropane (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.4853	0.226	unknown	ShapiroWilk
1,2,3-Trichloropropane (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.4853	0.226	unknown	ShapiroWilk
1,2,3-Trichloropropane (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.4853	0.226	unknown	ShapiroWilk

Outlier Analysis

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:43 PM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
1,2,3-Trichloropropane (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.4853	0.226	unknown	ShapiroWilk
1,2,3-Trichloropropane (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.4853	0.226	unknown	ShapiroWilk
1,2,3-Trichloropropane (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.4705	0.2297	unknown	ShapiroWilk
1,2,3-Trichloropropane (ug/l)	MW-26A	No	n/a	n/a	NP	NaN	16	0.5156	0.219	normal	ShapiroWilk
1,2,3-Trichloropropane (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.4853	0.226	unknown	ShapiroWilk
1,2,3-Trichloropropane (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.4987	0.2398	unknown	ShapiroWilk
1,2,3-Trichloropropane (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.4705	0.2297	unknown	ShapiroWilk
1,2,3-Trichloropropane (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.4952	0.2167	unknown	ShapiroWilk
1,2,3-Trichloropropane (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.4905	0.2213	unknown	ShapiroWilk
1,2,3-Trichloropropane (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.4705	0.2297	unknown	ShapiroWilk
1,2,3-Trichloropropane (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.59	0	unknown	ShapiroWilk
1,2,3-Trichloropropane (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.59	0	unknown	ShapiroWilk
1,2-Dibromo-3-chloropropane (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	1.395	2.053	unknown	ShapiroWilk
1,2-Dibromo-3-chloropropane (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	1.442	2.098	unknown	ShapiroWilk
1,2-Dibromo-3-chloropropane (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	1.442	2.098	unknown	ShapiroWilk
1,2-Dibromo-3-chloropropane (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	1.442	2.098	unknown	ShapiroWilk
1,2-Dibromo-3-chloropropane (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	1.442	2.098	unknown	ShapiroWilk
1,2-Dibromo-3-chloropropane (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	1.442	2.098	unknown	ShapiroWilk
1,2-Dibromo-3-chloropropane (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	1.395	2.053	unknown	ShapiroWilk
1,2-Dibromo-3-chloropropane (ug/l)	**MW-26A**	**Yes**	**10**	**4/15/2015**	**NP**	**NaN**	**16**	**1.575**	**2.268**	**ln(x)**	**ShapiroWilk**
1,2-Dibromo-3-chloropropane (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	1.442	2.098	unknown	ShapiroWilk
1,2-Dibromo-3-chloropropane (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	1.442	2.098	unknown	ShapiroWilk
1,2-Dibromo-3-chloropropane (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	1.395	2.053	unknown	ShapiroWilk
1,2-Dibromo-3-chloropropane (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	1.419	1.992	unknown	ShapiroWilk
1,2-Dibromo-3-chloropropane (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	1.43	2.043	unknown	ShapiroWilk
1,2-Dibromo-3-chloropropane (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	1.395	2.053	unknown	ShapiroWilk
1,2-Dibromo-3-chloropropane (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	1.2	0	unknown	ShapiroWilk
1,2-Dibromo-3-chloropropane (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	1.2	0	unknown	ShapiroWilk
1,2-Dibromoethane [EDB] (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.7495	2.18	unknown	ShapiroWilk
1,2-Dibromoethane [EDB] (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.7821	2.234	unknown	ShapiroWilk
1,2-Dibromoethane [EDB] (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.7821	2.234	unknown	ShapiroWilk
1,2-Dibromoethane [EDB] (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.7821	2.234	unknown	ShapiroWilk
1,2-Dibromoethane [EDB] (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.7821	2.234	unknown	ShapiroWilk
1,2-Dibromoethane [EDB] (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.7821	2.234	unknown	ShapiroWilk
1,2-Dibromoethane [EDB] (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.7495	2.18	unknown	ShapiroWilk
1,2-Dibromoethane [EDB] (ug/l)	**MW-26A**	**Yes**	**10**	**4/15/2015**	**NP**	**NaN**	**16**	**0.8913**	**2.431**	**ln(x)**	**ShapiroWilk**
1,2-Dibromoethane [EDB] (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.7821	2.234	unknown	ShapiroWilk
1,2-Dibromoethane [EDB] (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.7821	2.234	unknown	ShapiroWilk
1,2-Dibromoethane [EDB] (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.7495	2.18	unknown	ShapiroWilk
1,2-Dibromoethane [EDB] (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.74	2.124	unknown	ShapiroWilk
1,2-Dibromoethane [EDB] (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.76	2.177	unknown	ShapiroWilk
1,2-Dibromoethane [EDB] (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.7495	2.18	unknown	ShapiroWilk
1,2-Dibromoethane [EDB] (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.34	0	unknown	ShapiroWilk
1,2-Dibromoethane [EDB] (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.34	0	unknown	ShapiroWilk
1,2-Dichlorobenzene (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.321	0.1946	unknown	ShapiroWilk
1,2-Dichlorobenzene (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.3305	0.195	unknown	ShapiroWilk
1,2-Dichlorobenzene (ug/l)	MW-19	No	n/a	n/a	NP	NaN	19	0.3233	0.08761	x^2	ShapiroWilk
1,2-Dichlorobenzene (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.3305	0.195	unknown	ShapiroWilk
1,2-Dichlorobenzene (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.3305	0.195	unknown	ShapiroWilk
1,2-Dichlorobenzene (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.3305	0.195	unknown	ShapiroWilk

Outlier Analysis

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:43 PM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
1,2-Dichlorobenzene (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.321	0.1946	unknown	ShapiroWilk
1,2-Dichlorobenzene (ug/l)	MW-26A	No	n/a	n/a	NP	NaN	16	0.3519	0.2005	ln(x)	ShapiroWilk
1,2-Dichlorobenzene (ug/l)	MW-300	No	n/a	n/a	NP	NaN	19	0.3446	0.1854	ln(x)	ShapiroWilk
1,2-Dichlorobenzene (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.3305	0.195	unknown	ShapiroWilk
1,2-Dichlorobenzene (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.321	0.1946	unknown	ShapiroWilk
1,2-Dichlorobenzene (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.3343	0.1854	unknown	ShapiroWilk
1,2-Dichlorobenzene (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.3325	0.19	unknown	ShapiroWilk
1,2-Dichlorobenzene (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.321	0.1946	unknown	ShapiroWilk
1,2-Dichlorobenzene (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.37	0	unknown	ShapiroWilk
1,2-Dichlorobenzene (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.37	0	unknown	ShapiroWilk
1,2-Dichloroethane (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.347	0.1841	unknown	ShapiroWilk
1,2-Dichloroethane (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.3558	0.1848	unknown	ShapiroWilk
1,2-Dichloroethane (ug/l)	MW-19	No	n/a	n/a	NP	NaN	19	0.3635	0.1782	ln(x)	ShapiroWilk
1,2-Dichloroethane (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.3559	0.1846	unknown	ShapiroWilk
1,2-Dichloroethane (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.3558	0.1848	unknown	ShapiroWilk
1,2-Dichloroethane (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.3568	0.1838	unknown	ShapiroWilk
1,2-Dichloroethane (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.347	0.1841	unknown	ShapiroWilk
1,2-Dichloroethane (ug/l)	MW-26A	No	n/a	n/a	NP	NaN	16	0.3756	0.1906	ln(x)	ShapiroWilk
1,2-Dichloroethane (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.3575	0.1832	unknown	ShapiroWilk
1,2-Dichloroethane (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.3558	0.1848	unknown	ShapiroWilk
1,2-Dichloroethane (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.347	0.1841	unknown	ShapiroWilk
1,2-Dichloroethane (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.359	0.1756	unknown	ShapiroWilk
1,2-Dichloroethane (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.3629	0.1826	unknown	ShapiroWilk
1,2-Dichloroethane (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.347	0.1841	unknown	ShapiroWilk
1,2-Dichloroethane (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.39	0	unknown	ShapiroWilk
1,2-Dichloroethane (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.39	0	unknown	ShapiroWilk
1,2-Dichloropropane (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.5165	0.311	unknown	ShapiroWilk
1,2-Dichloropropane (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.4979	0.3079	unknown	ShapiroWilk
1,2-Dichloropropane (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.4979	0.3079	unknown	ShapiroWilk
1,2-Dichloropropane (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.4979	0.3079	unknown	ShapiroWilk
1,2-Dichloropropane (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.4979	0.3079	unknown	ShapiroWilk
1,2-Dichloropropane (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.4979	0.3079	unknown	ShapiroWilk
1,2-Dichloropropane (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.5165	0.311	unknown	ShapiroWilk
1,2-Dichloropropane (ug/l)	MW-26A	n/a	n/a	n/a	NP	NaN	16	0.4656	0.3012	unknown	ShapiroWilk
1,2-Dichloropropane (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.4979	0.3079	unknown	ShapiroWilk
1,2-Dichloropropane (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.4979	0.3079	unknown	ShapiroWilk
1,2-Dichloropropane (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.5165	0.311	unknown	ShapiroWilk
1,2-Dichloropropane (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.4762	0.3	unknown	ShapiroWilk
1,2-Dichloropropane (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.4865	0.304	unknown	ShapiroWilk
1,2-Dichloropropane (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.5165	0.311	unknown	ShapiroWilk
1,2-Dichloropropane (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.27	0	unknown	ShapiroWilk
1,2-Dichloropropane (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.27	0	unknown	ShapiroWilk
1,4-Dichlorobenzene (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.258	0.1752	unknown	ShapiroWilk
1,4-Dichlorobenzene (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.2611	0.1795	unknown	ShapiroWilk
1,4-Dichlorobenzene (ug/l)	MW-19	No	n/a	n/a	NP	NaN	19	3.118	2.002	normal	ShapiroWilk
1,4-Dichlorobenzene (ug/l)	MW-20	No	n/a	n/a	NP	NaN	19	0.4344	0.2551	x^(1/3)	ShapiroWilk
1,4-Dichlorobenzene (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.2611	0.1795	unknown	ShapiroWilk
1,4-Dichlorobenzene (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.2611	0.1795	unknown	ShapiroWilk
1,4-Dichlorobenzene (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.258	0.1752	unknown	ShapiroWilk
1,4-Dichlorobenzene (ug/l)	**MW-26A**	**Yes**	**1**	**4/15/2015**	**NP**	**NaN**	**16**	**0.2706**	**0.195**	**ln(x)**	**ShapiroWilk**

Outlier Analysis

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:43 PM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
1,4-Dichlorobenzene (ug/l)	MW-300	No	n/a	n/a	NP	NaN	19	0.8042	1.077	ln(x)	ShapiroWilk
1,4-Dichlorobenzene (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.2658	0.179	unknown	ShapiroWilk
1,4-Dichlorobenzene (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.258	0.1752	unknown	ShapiroWilk
1,4-Dichlorobenzene (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.2581	0.1705	unknown	ShapiroWilk
1,4-Dichlorobenzene (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.2595	0.1749	unknown	ShapiroWilk
1,4-Dichlorobenzene (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.258	0.1752	unknown	ShapiroWilk
1,4-Dichlorobenzene (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.23	0	unknown	ShapiroWilk
1,4-Dichlorobenzene (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.23	0	unknown	ShapiroWilk
2-Butanone [MEK] (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	2.067	1.964	unknown	ShapiroWilk
2-Butanone [MEK] (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	2.121	2.003	unknown	ShapiroWilk
2-Butanone [MEK] (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	2.126	2	unknown	ShapiroWilk
2-Butanone [MEK] (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	2.242	1.967	unknown	ShapiroWilk
2-Butanone [MEK] (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	2.151	1.981	unknown	ShapiroWilk
2-Butanone [MEK] (ug/l)	**MW-22**	**Yes**	**10**	**4/22/2015**	**NP**	**NaN**	**19**	**2.265**	**1.923**	**ln(x)**	**ShapiroWilk**
2-Butanone [MEK] (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	2.095	1.944	unknown	ShapiroWilk
2-Butanone [MEK] (ug/l)	MW-26A	n/a	n/a	n/a	NP	NaN	16	1.807	0.8313	unknown	ShapiroWilk
2-Butanone [MEK] (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	2.151	1.981	unknown	ShapiroWilk
2-Butanone [MEK] (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	2.151	1.981	unknown	ShapiroWilk
2-Butanone [MEK] (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	2.215	2.463	unknown	ShapiroWilk
2-Butanone [MEK] (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	2.119	1.9	unknown	ShapiroWilk
2-Butanone [MEK] (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	2.148	1.928	unknown	ShapiroWilk
2-Butanone [MEK] (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	2.095	1.944	unknown	ShapiroWilk
2-Butanone [MEK] (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	2.1	0	unknown	ShapiroWilk
2-Butanone [MEK] (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	2.267	0.6481	unknown	ShapiroWilk
2-Hexanone (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	1.77	2.123	unknown	ShapiroWilk
2-Hexanone (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	1.853	2.148	unknown	ShapiroWilk
2-Hexanone (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	1.853	2.148	unknown	ShapiroWilk
2-Hexanone (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	1.853	2.148	unknown	ShapiroWilk
2-Hexanone (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	1.853	2.148	unknown	ShapiroWilk
2-Hexanone (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	1.853	2.148	unknown	ShapiroWilk
2-Hexanone (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	1.77	2.123	unknown	ShapiroWilk
2-Hexanone (ug/l)	MW-26A	No	n/a	n/a	NP	NaN	16	2.05	2.265	x^(1/3)	ShapiroWilk
2-Hexanone (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	1.853	2.148	unknown	ShapiroWilk
2-Hexanone (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	1.853	2.148	unknown	ShapiroWilk
2-Hexanone (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	1.371	0.8816	unknown	ShapiroWilk
2-Hexanone (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	1.867	2.038	unknown	ShapiroWilk
2-Hexanone (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	1.86	2.091	unknown	ShapiroWilk
2-Hexanone (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	1.77	2.123	unknown	ShapiroWilk
2-Hexanone (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	2	0	unknown	ShapiroWilk
2-Hexanone (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	2	0	unknown	ShapiroWilk
4-Methyl-2-pentanone (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	1.837	2.125	unknown	ShapiroWilk
4-Methyl-2-pentanone (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	1.922	2.148	unknown	ShapiroWilk
4-Methyl-2-pentanone (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	1.922	2.148	unknown	ShapiroWilk
4-Methyl-2-pentanone (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	1.922	2.148	unknown	ShapiroWilk
4-Methyl-2-pentanone (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	1.922	2.148	unknown	ShapiroWilk
4-Methyl-2-pentanone (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	1.922	2.148	unknown	ShapiroWilk
4-Methyl-2-pentanone (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	1.837	2.125	unknown	ShapiroWilk
4-Methyl-2-pentanone (ug/l)	MW-26A	No	n/a	n/a	NP	NaN	16	2.124	2.259	x^(1/3)	ShapiroWilk
4-Methyl-2-pentanone (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	1.922	2.148	unknown	ShapiroWilk
4-Methyl-2-pentanone (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	1.922	2.148	unknown	ShapiroWilk

Outlier Analysis

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:43 PM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
4-Methyl-2-pentanone (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	1.837	2.125	unknown	ShapiroWilk
4-Methyl-2-pentanone (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	1.939	2.038	unknown	ShapiroWilk
4-Methyl-2-pentanone (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	1.454	0.9049	unknown	ShapiroWilk
4-Methyl-2-pentanone (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	1.837	2.125	unknown	ShapiroWilk
4-Methyl-2-pentanone (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	2.1	0	unknown	ShapiroWilk
4-Methyl-2-pentanone (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	2.1	0	unknown	ShapiroWilk
Acetone (ug/l)	**MW-15**	**Yes**	**10,6.6**	**4/23/2015,10/3/2017**	**NP**	**NaN**	**20**	**3.34**	**1.872**	**ln(x)**	**ShapiroWilk**
Acetone (ug/l)	MW-18	No	n/a	n/a	NP	NaN	19	3.143	1.76	ln(x)	ShapiroWilk
Acetone (ug/l)	**MW-19**	**Yes**	**10**	**4/22/2015**	**NP**	**NaN**	**19**	**3.643**	**1.669**	**ln(x)**	**ShapiroWilk**
Acetone (ug/l)	MW-20	No	n/a	n/a	NP	NaN	19	4.579	2.099	ln(x)	ShapiroWilk
Acetone (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	3.17	1.78	unknown	ShapiroWilk
Acetone (ug/l)	**MW-22**	**Yes**	**2.63,1....**	**4/22/2015,10/12/2...**	**NP**	**NaN**	**19**	**3.137**	**0.8835**	**ln(x)**	**ShapiroWilk**
Acetone (ug/l)	**MW-24**	**Yes**	**10**	**4/15/2015**	**NP**	**NaN**	**20**	**3.155**	**1.74**	**ln(x)**	**ShapiroWilk**
Acetone (ug/l)	**MW-26A**	**Yes**	**10,12,271**	**4/15/2015,4/1/202...**	**NP**	**NaN**	**16**	**20.62**	**66.83**	**ln(x)**	**ShapiroWilk**
Acetone (ug/l)	**MW-300**	**Yes**	**10,1.79...**	**4/16/2015,10/13/2...**	**NP**	**NaN**	**19**	**3.194**	**1.734**	**ln(x)**	**ShapiroWilk**
Acetone (ug/l)	MW-301	No	n/a	n/a	NP	NaN	19	2.934	0.7487	x^(1/3)	ShapiroWilk
Acetone (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	3.031	1.888	unknown	ShapiroWilk
Acetone (ug/l)	**MW-303**	**Yes**	**10,1.79...**	**4/15/2015,10/9/20...**	**NP**	**NaN**	**21**	**3.169**	**1.65**	**ln(x)**	**ShapiroWilk**
Acetone (ug/l)	**MW-304R**	**Yes**	**10**	**4/15/2015**	**NP**	**NaN**	**20**	**3.143**	**1.723**	**ln(x)**	**ShapiroWilk**
Acetone (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	3.093	1.756	unknown	ShapiroWilk
Acetone (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	3.1	0	unknown	ShapiroWilk
Acetone (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	4.887	6.92	unknown	ShapiroWilk
Acrylonitrile (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	2.006	2.047	unknown	ShapiroWilk
Acrylonitrile (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	2.083	2.072	unknown	ShapiroWilk
Acrylonitrile (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	2.083	2.072	unknown	ShapiroWilk
Acrylonitrile (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	2.083	2.072	unknown	ShapiroWilk
Acrylonitrile (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	2.083	2.072	unknown	ShapiroWilk
Acrylonitrile (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	2.083	2.072	unknown	ShapiroWilk
Acrylonitrile (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	2.006	2.047	unknown	ShapiroWilk
Acrylonitrile (ug/l)	MW-26A	No	n/a	n/a	NP	NaN	16	2.27	2.19	ln(x)	ShapiroWilk
Acrylonitrile (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	2.083	2.072	unknown	ShapiroWilk
Acrylonitrile (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	2.083	2.072	unknown	ShapiroWilk
Acrylonitrile (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	2.006	2.047	unknown	ShapiroWilk
Acrylonitrile (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	2.094	1.966	unknown	ShapiroWilk
Acrylonitrile (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	2.089	2.017	unknown	ShapiroWilk
Acrylonitrile (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	2.006	2.047	unknown	ShapiroWilk
Acrylonitrile (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	2.2	0	unknown	ShapiroWilk
Acrylonitrile (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	2.2	0	unknown	ShapiroWilk
Benzene (ug/l)	MW-15	No	n/a	n/a	NP	NaN	20	0.2493	0.1476	ln(x)	ShapiroWilk
Benzene (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.2001	0.08915	unknown	ShapiroWilk
Benzene (ug/l)	MW-19	No	n/a	n/a	NP	NaN	19	0.9162	0.7772	x^(1/3)	ShapiroWilk
Benzene (ug/l)	MW-20	No	n/a	n/a	NP	NaN	19	5.175	1.209	x^3	ShapiroWilk
Benzene (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.2	0.08926	unknown	ShapiroWilk
Benzene (ug/l)	MW-22	No	n/a	n/a	NP	NaN	19	1.274	0.2122	ln(x)	ShapiroWilk
Benzene (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.2189	0.1207	unknown	ShapiroWilk
Benzene (ug/l)	MW-26A	No	n/a	n/a	NP	NaN	16	0.21	0.09136	ln(x)	ShapiroWilk
Benzene (ug/l)	MW-300	No	n/a	n/a	NP	NaN	19	0.6555	0.5115	ln(x)	ShapiroWilk
Benzene (ug/l)	**MW-301**	**Yes**	**0.5,0.2...**	**4/23/2015,4/9/201...**	**NP**	**NaN**	**19**	**0.2141**	**0.08525**	**ln(x)**	**ShapiroWilk**
Benzene (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.1955	0.08918	unknown	ShapiroWilk
Benzene (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.206	0.08777	unknown	ShapiroWilk

Outlier Analysis

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:43 PM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Benzene (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.201	0.08699	unknown	ShapiroWilk
Benzene (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.1955	0.08918	unknown	ShapiroWilk
Benzene (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.22	0	unknown	ShapiroWilk
Benzene (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.22	0	unknown	ShapiroWilk
Bromochloromethane (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.616	1.052	unknown	ShapiroWilk
Bromochloromethane (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.6421	1.074	unknown	ShapiroWilk
Bromochloromethane (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.6421	1.074	unknown	ShapiroWilk
Bromochloromethane (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.6421	1.074	unknown	ShapiroWilk
Bromochloromethane (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.6421	1.074	unknown	ShapiroWilk
Bromochloromethane (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.6421	1.074	unknown	ShapiroWilk
Bromochloromethane (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.616	1.052	unknown	ShapiroWilk
Bromochloromethane (ug/l)	MW-26A	No	n/a	n/a	NP	NaN	16	0.7138	1.158	ln(x)	ShapiroWilk
Bromochloromethane (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.6421	1.074	unknown	ShapiroWilk
Bromochloromethane (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.6421	1.074	unknown	ShapiroWilk
Bromochloromethane (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.616	1.052	unknown	ShapiroWilk
Bromochloromethane (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.6324	1.019	unknown	ShapiroWilk
Bromochloromethane (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.637	1.045	unknown	ShapiroWilk
Bromochloromethane (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.616	1.052	unknown	ShapiroWilk
Bromochloromethane (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.54	0	unknown	ShapiroWilk
Bromochloromethane (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.54	0	unknown	ShapiroWilk
Bromodichloromethane (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.326	0.2053	unknown	ShapiroWilk
Bromodichloromethane (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.3368	0.2049	unknown	ShapiroWilk
Bromodichloromethane (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.3368	0.2049	unknown	ShapiroWilk
Bromodichloromethane (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.3368	0.2049	unknown	ShapiroWilk
Bromodichloromethane (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.3368	0.2049	unknown	ShapiroWilk
Bromodichloromethane (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.3368	0.2049	unknown	ShapiroWilk
Bromodichloromethane (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.326	0.2053	unknown	ShapiroWilk
Bromodichloromethane (ug/l)	MW-26A	No	n/a	n/a	NP	NaN	16	0.3606	0.2081	x^(1/3)	ShapiroWilk
Bromodichloromethane (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.3368	0.2049	unknown	ShapiroWilk
Bromodichloromethane (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.3368	0.2049	unknown	ShapiroWilk
Bromodichloromethane (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.326	0.2053	unknown	ShapiroWilk
Bromodichloromethane (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.3419	0.1951	unknown	ShapiroWilk
Bromodichloromethane (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.3395	0.1998	unknown	ShapiroWilk
Bromodichloromethane (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.326	0.2053	unknown	ShapiroWilk
Bromodichloromethane (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.39	0	unknown	ShapiroWilk
Bromodichloromethane (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.39	0	unknown	ShapiroWilk
Bromoform (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.767	1.043	unknown	ShapiroWilk
Bromoform (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.8	1.061	unknown	ShapiroWilk
Bromoform (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.8	1.061	unknown	ShapiroWilk
Bromoform (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.8	1.061	unknown	ShapiroWilk
Bromoform (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.8	1.061	unknown	ShapiroWilk
Bromoform (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.8	1.061	unknown	ShapiroWilk
Bromoform (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.767	1.043	unknown	ShapiroWilk
Bromoform (ug/l)	MW-26A	No	n/a	n/a	NP	NaN	16	0.8837	1.134	ln(x)	ShapiroWilk
Bromoform (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.8	1.061	unknown	ShapiroWilk
Bromoform (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.8	1.061	unknown	ShapiroWilk
Bromoform (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.767	1.043	unknown	ShapiroWilk
Bromoform (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.7981	1.006	unknown	ShapiroWilk
Bromoform (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.799	1.033	unknown	ShapiroWilk
Bromoform (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.767	1.043	unknown	ShapiroWilk

Outlier Analysis

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:43 PM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Bromoform (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.78	0	unknown	ShapiroWilk
Bromoform (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.78	0	unknown	ShapiroWilk
Bromomethane (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.937	0.8366	unknown	ShapiroWilk
Bromomethane (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.9747	0.8419	unknown	ShapiroWilk
Bromomethane (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.9747	0.8419	unknown	ShapiroWilk
Bromomethane (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.7881	0.4209	unknown	ShapiroWilk
Bromomethane (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.9782	0.8387	unknown	ShapiroWilk
Bromomethane (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.9747	0.8419	unknown	ShapiroWilk
Bromomethane (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.937	0.8366	unknown	ShapiroWilk
Bromomethane (ug/l)	MW-26A	No	n/a	n/a	NP	NaN	16	1.061	0.875	x^(1/3)	ShapiroWilk
Bromomethane (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.9748	0.8418	unknown	ShapiroWilk
Bromomethane (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.9747	0.8419	unknown	ShapiroWilk
Bromomethane (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.937	0.8366	unknown	ShapiroWilk
Bromomethane (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.9867	0.7996	unknown	ShapiroWilk
Bromomethane (ug/l)	MW-304R	No	n/a	n/a	NP	NaN	20	0.9843	0.8168	x^(1/3)	ShapiroWilk
Bromomethane (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.9411	0.8332	unknown	ShapiroWilk
Bromomethane (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	1.1	0	unknown	ShapiroWilk
Bromomethane (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	1.1	0	unknown	ShapiroWilk
Carbon Disulfide (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.4146	0.242	unknown	ShapiroWilk
Carbon Disulfide (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.3842	0.2055	unknown	ShapiroWilk
Carbon Disulfide (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.3842	0.2055	unknown	ShapiroWilk
Carbon Disulfide (ug/l)	MW-20	No	n/a	n/a	NP	NaN	19	0.3971	0.1968	sqrt(x)	ShapiroWilk
Carbon Disulfide (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.3858	0.2037	unknown	ShapiroWilk
Carbon Disulfide (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.3885	0.2012	unknown	ShapiroWilk
Carbon Disulfide (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.3725	0.2068	unknown	ShapiroWilk
Carbon Disulfide (ug/l)	MW-26A	No	n/a	n/a	NP	NaN	16	0.4094	0.2059	sqrt(x)	ShapiroWilk
Carbon Disulfide (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.3842	0.2055	unknown	ShapiroWilk
Carbon Disulfide (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.3842	0.2055	unknown	ShapiroWilk
Carbon Disulfide (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.394	0.2048	unknown	ShapiroWilk
Carbon Disulfide (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.3905	0.196	unknown	ShapiroWilk
Carbon Disulfide (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.3875	0.2006	unknown	ShapiroWilk
Carbon Disulfide (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.3812	0.2005	unknown	ShapiroWilk
Carbon Disulfide (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.45	0	unknown	ShapiroWilk
Carbon Disulfide (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.4653	0.05913	unknown	ShapiroWilk
Carbon Tetrachloride (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.574	0.3896	unknown	ShapiroWilk
Carbon Tetrachloride (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.5916	0.392	unknown	ShapiroWilk
Carbon Tetrachloride (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.5916	0.392	unknown	ShapiroWilk
Carbon Tetrachloride (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.5916	0.392	unknown	ShapiroWilk
Carbon Tetrachloride (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.5916	0.392	unknown	ShapiroWilk
Carbon Tetrachloride (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.5916	0.392	unknown	ShapiroWilk
Carbon Tetrachloride (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.574	0.3896	unknown	ShapiroWilk
Carbon Tetrachloride (ug/l)	MW-26A	No	n/a	n/a	NP	NaN	16	0.6319	0.4074	ln(x)	ShapiroWilk
Carbon Tetrachloride (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.5916	0.392	unknown	ShapiroWilk
Carbon Tetrachloride (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.5916	0.392	unknown	ShapiroWilk
Carbon Tetrachloride (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.574	0.3896	unknown	ShapiroWilk
Carbon Tetrachloride (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.5971	0.3723	unknown	ShapiroWilk
Carbon Tetrachloride (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.5945	0.3818	unknown	ShapiroWilk
Carbon Tetrachloride (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.574	0.3896	unknown	ShapiroWilk
Carbon Tetrachloride (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.65	0	unknown	ShapiroWilk
Carbon Tetrachloride (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.65	0	unknown	ShapiroWilk

Outlier Analysis

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:43 PM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Chlorobenzene (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.3565	0.1822	unknown	ShapiroWilk
Chlorobenzene (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.3653	0.1828	unknown	ShapiroWilk
Chlorobenzene (ug/l)	MW-19	No	n/a	n/a	NP	NaN	19	4.182	2.383	normal	ShapiroWilk
Chlorobenzene (ug/l)	MW-20	No	n/a	n/a	NP	NaN	19	7.025	1.947	x^(1/3)	ShapiroWilk
Chlorobenzene (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.3653	0.1828	unknown	ShapiroWilk
Chlorobenzene (ug/l)	MW-22	No	n/a	n/a	NP	NaN	19	0.6137	0.2137	x^2	ShapiroWilk
Chlorobenzene (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.3565	0.1822	unknown	ShapiroWilk
Chlorobenzene (ug/l)	MW-26A	No	n/a	n/a	NP	NaN	16	0.385	0.1885	ln(x)	ShapiroWilk
Chlorobenzene (ug/l)	MW-300	No	n/a	n/a	NP	NaN	19	1.234	1.232	ln(x)	ShapiroWilk
Chlorobenzene (ug/l)	MW-301	No	n/a	n/a	NP	NaN	19	0.588	0.294	ln(x)	ShapiroWilk
Chlorobenzene (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.3565	0.1822	unknown	ShapiroWilk
Chlorobenzene (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.3686	0.1738	unknown	ShapiroWilk
Chlorobenzene (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.367	0.1781	unknown	ShapiroWilk
Chlorobenzene (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.3565	0.1822	unknown	ShapiroWilk
Chlorobenzene (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.4	0	unknown	ShapiroWilk
Chlorobenzene (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.4	0	unknown	ShapiroWilk
Chloroethane (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.7265	0.83	unknown	ShapiroWilk
Chloroethane (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.7568	0.8413	unknown	ShapiroWilk
Chloroethane (ug/l)	MW-19	No	n/a	n/a	NP	NaN	19	1.277	0.9198	ln(x)	ShapiroWilk
Chloroethane (ug/l)	MW-20	No	n/a	n/a	NP	NaN	19	0.9719	0.4332	sqrt(x)	ShapiroWilk
Chloroethane (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.7568	0.8413	unknown	ShapiroWilk
Chloroethane (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.7568	0.8413	unknown	ShapiroWilk
Chloroethane (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.7265	0.83	unknown	ShapiroWilk
Chloroethane (ug/l)	MW-26A	No	n/a	n/a	NP	NaN	16	0.8306	0.8913	ln(x)	ShapiroWilk
Chloroethane (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.7568	0.8413	unknown	ShapiroWilk
Chloroethane (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.7568	0.8413	unknown	ShapiroWilk
Chloroethane (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.7265	0.83	unknown	ShapiroWilk
Chloroethane (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.76	0.7982	unknown	ShapiroWilk
Chloroethane (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.7585	0.8189	unknown	ShapiroWilk
Chloroethane (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.7265	0.83	unknown	ShapiroWilk
Chloroethane (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.79	0	unknown	ShapiroWilk
Chloroethane (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.79	0	unknown	ShapiroWilk
Chloroform (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.928	0.4923	unknown	ShapiroWilk
Chloroform (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.9621	0.4809	unknown	ShapiroWilk
Chloroform (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.9621	0.4809	unknown	ShapiroWilk
Chloroform (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.9621	0.4809	unknown	ShapiroWilk
Chloroform (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.9628	0.4799	unknown	ShapiroWilk
Chloroform (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.9621	0.4809	unknown	ShapiroWilk
Chloroform (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.928	0.4923	unknown	ShapiroWilk
Chloroform (ug/l)	MW-26A	No	n/a	n/a	NP	NaN	16	1.026	0.4511	x^4	ShapiroWilk
Chloroform (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.9621	0.4809	unknown	ShapiroWilk
Chloroform (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.9621	0.4809	unknown	ShapiroWilk
Chloroform (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.928	0.4923	unknown	ShapiroWilk
Chloroform (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.9943	0.4674	unknown	ShapiroWilk
Chloroform (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.991	0.4777	unknown	ShapiroWilk
Chloroform (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.928	0.4923	unknown	ShapiroWilk
Chloroform (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	1.3	0	unknown	ShapiroWilk
Chloroform (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	1.3	0	unknown	ShapiroWilk
Chloromethane (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.625	0.5773	unknown	ShapiroWilk
Chloromethane (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.6411	0.5885	unknown	ShapiroWilk

Outlier Analysis

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:43 PM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Chloromethane (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.6411	0.5885	unknown	ShapiroWilk
Chloromethane (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.6411	0.5885	unknown	ShapiroWilk
Chloromethane (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.6411	0.5885	unknown	ShapiroWilk
Chloromethane (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.6411	0.5885	unknown	ShapiroWilk
Chloromethane (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.6245	0.5776	unknown	ShapiroWilk
Chloromethane (ug/l)	**MW-26A**	**Yes**	**3**	**4/15/2015**	**NP**	**NaN**	**16**	**0.6844**	**0.6316**	**ln(x)**	**ShapiroWilk**
Chloromethane (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.6411	0.5885	unknown	ShapiroWilk
Chloromethane (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.6411	0.5885	unknown	ShapiroWilk
Chloromethane (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.6245	0.5776	unknown	ShapiroWilk
Chloromethane (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.6381	0.5584	unknown	ShapiroWilk
Chloromethane (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.5168	0.1396	unknown	ShapiroWilk
Chloromethane (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.4939	0.1468	unknown	ShapiroWilk
Chloromethane (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.6242	0.04267	unknown	ShapiroWilk
Chloromethane (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.61	0	unknown	ShapiroWilk
cis-1,2-Dichloroethene (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.2215	0.1873	unknown	ShapiroWilk
cis-1,2-Dichloroethene (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.2263	0.1911	unknown	ShapiroWilk
cis-1,2-Dichloroethene (ug/l)	MW-19	No	n/a	n/a	NP	NaN	19	0.6373	0.4563	ln(x)	ShapiroWilk
cis-1,2-Dichloroethene (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.2263	0.1911	unknown	ShapiroWilk
cis-1,2-Dichloroethene (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.2263	0.1911	unknown	ShapiroWilk
cis-1,2-Dichloroethene (ug/l)	MW-22	No	n/a	n/a	NP	NaN	19	0.2949	0.06626	x^(1/3)	ShapiroWilk
cis-1,2-Dichloroethene (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.2215	0.1873	unknown	ShapiroWilk
cis-1,2-Dichloroethene (ug/l)	**MW-26A**	**Yes**	**1**	**4/15/2015**	**NP**	**NaN**	**16**	**0.2401**	**0.2055**	**ln(x)**	**ShapiroWilk**
cis-1,2-Dichloroethene (ug/l)	MW-300	No	n/a	n/a	NP	NaN	19	0.2504	0.1928	ln(x)	ShapiroWilk
cis-1,2-Dichloroethene (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.2263	0.1911	unknown	ShapiroWilk
cis-1,2-Dichloroethene (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.2215	0.1873	unknown	ShapiroWilk
cis-1,2-Dichloroethene (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.2327	0.1836	unknown	ShapiroWilk
cis-1,2-Dichloroethene (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.2255	0.1861	unknown	ShapiroWilk
cis-1,2-Dichloroethene (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.2215	0.1873	unknown	ShapiroWilk
cis-1,2-Dichloroethene (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.21	0	unknown	ShapiroWilk
cis-1,2-Dichloroethene (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.21	0	unknown	ShapiroWilk
cis-1,3-Dichloropropene (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.4525	1.071	unknown	ShapiroWilk
cis-1,3-Dichloropropene (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.4684	1.098	unknown	ShapiroWilk
cis-1,3-Dichloropropene (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.4684	1.098	unknown	ShapiroWilk
cis-1,3-Dichloropropene (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.4684	1.098	unknown	ShapiroWilk
cis-1,3-Dichloropropene (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.4684	1.098	unknown	ShapiroWilk
cis-1,3-Dichloropropene (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.4684	1.098	unknown	ShapiroWilk
cis-1,3-Dichloropropene (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.4525	1.071	unknown	ShapiroWilk
cis-1,3-Dichloropropene (ug/l)	**MW-26A**	**Yes**	**5**	**4/15/2015**	**NP**	**NaN**	**16**	**0.5219**	**1.195**	**ln(x)**	**ShapiroWilk**
cis-1,3-Dichloropropene (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.4684	1.098	unknown	ShapiroWilk
cis-1,3-Dichloropropene (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.4684	1.098	unknown	ShapiroWilk
cis-1,3-Dichloropropene (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.4525	1.071	unknown	ShapiroWilk
cis-1,3-Dichloropropene (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.4476	1.044	unknown	ShapiroWilk
cis-1,3-Dichloropropene (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.4575	1.07	unknown	ShapiroWilk
cis-1,3-Dichloropropene (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.4525	1.071	unknown	ShapiroWilk
cis-1,3-Dichloropropene (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.25	0	unknown	ShapiroWilk
cis-1,3-Dichloropropene (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.25	0	unknown	ShapiroWilk
Dibromomethane (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.311	0.1776	unknown	ShapiroWilk
Dibromomethane (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.3179	0.1797	unknown	ShapiroWilk
Dibromomethane (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.3179	0.1797	unknown	ShapiroWilk
Dibromomethane (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.3179	0.1797	unknown	ShapiroWilk

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Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Dibromomethane (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.3179	0.1797	unknown	ShapiroWilk
Dibromomethane (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.3179	0.1797	unknown	ShapiroWilk
Dibromomethane (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.311	0.1776	unknown	ShapiroWilk
Dibromomethane (ug/l)	**MW-26A**	**Yes**	**1**	**4/15/2015**	**NP**	**NaN**	**16**	**0.3344**	**0.1895**	**ln(x)**	**ShapiroWilk**
Dibromomethane (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.3179	0.1797	unknown	ShapiroWilk
Dibromomethane (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.3179	0.1797	unknown	ShapiroWilk
Dibromomethane (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.311	0.1776	unknown	ShapiroWilk
Dibromomethane (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.319	0.1705	unknown	ShapiroWilk
Dibromomethane (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.3185	0.1749	unknown	ShapiroWilk
Dibromomethane (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.311	0.1776	unknown	ShapiroWilk
Dibromomethane (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.33	0	unknown	ShapiroWilk
Dibromomethane (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.33	0	unknown	ShapiroWilk
Dichloromethane (ug/l)	MW-15	No	n/a	n/a	NP	NaN	20	1.381	1.086	x^(1/3)	ShapiroWilk
Dichloromethane (ug/l)	MW-18	No	n/a	n/a	NP	NaN	19	1.422	1.1	x^(1/3)	ShapiroWilk
Dichloromethane (ug/l)	MW-19	No	n/a	n/a	NP	NaN	19	1.409	1.113	x^(1/3)	ShapiroWilk
Dichloromethane (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	1.402	1.121	unknown	ShapiroWilk
Dichloromethane (ug/l)	MW-201B (bg)	No	n/a	n/a	NP	NaN	19	1.401	1.122	sqrt(x)	ShapiroWilk
Dichloromethane (ug/l)	MW-22	No	n/a	n/a	NP	NaN	19	1.46	1.062	x^(1/3)	ShapiroWilk
Dichloromethane (ug/l)	MW-24	No	n/a	n/a	NP	NaN	20	1.365	1.102	x^(1/3)	ShapiroWilk
Dichloromethane (ug/l)	**MW-26A**	**Yes**	**5**	**4/15/2015**	**NP**	**NaN**	**16**	**1.576**	**1.088**	**x^(1/3)**	**ShapiroWilk**
Dichloromethane (ug/l)	MW-300	No	n/a	n/a	NP	NaN	19	1.429	1.094	x^(1/3)	ShapiroWilk
Dichloromethane (ug/l)	MW-301	No	n/a	n/a	NP	NaN	19	1.411	1.112	sqrt(x)	ShapiroWilk
Dichloromethane (ug/l)	MW-302R	No	n/a	n/a	NP	NaN	20	1.361	1.105	x^(1/3)	ShapiroWilk
Dichloromethane (ug/l)	MW-303	No	n/a	n/a	NP	NaN	21	1.447	1.049	sqrt(x)	ShapiroWilk
Dichloromethane (ug/l)	MW-304R	No	n/a	n/a	NP	NaN	20	1.425	1.084	sqrt(x)	ShapiroWilk
Dichloromethane (ug/l)	MW-305	No	n/a	n/a	NP	NaN	20	1.337	1.128	sqrt(x)	ShapiroWilk
Dichloromethane (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	1.7	0	unknown	ShapiroWilk
Dichloromethane (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	1.7	0	unknown	ShapiroWilk
Ethylbenzene (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.3095	0.1695	unknown	ShapiroWilk
Ethylbenzene (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.3147	0.1725	unknown	ShapiroWilk
Ethylbenzene (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.3147	0.1725	unknown	ShapiroWilk
Ethylbenzene (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.3147	0.1725	unknown	ShapiroWilk
Ethylbenzene (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.3147	0.1725	unknown	ShapiroWilk
Ethylbenzene (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.3147	0.1725	unknown	ShapiroWilk
Ethylbenzene (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.3095	0.1695	unknown	ShapiroWilk
Ethylbenzene (ug/l)	**MW-26A**	**Yes**	**1,0.21,...**	**4/15/2015,4/7/201...**	**NP**	**NaN**	**16**	**0.3315**	**0.1827**	**ln(x)**	**ShapiroWilk**
Ethylbenzene (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.3147	0.1725	unknown	ShapiroWilk
Ethylbenzene (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.3147	0.1725	unknown	ShapiroWilk
Ethylbenzene (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.3095	0.1695	unknown	ShapiroWilk
Ethylbenzene (ug/l)	**MW-303**	**Yes**	**1**	**4/15/2015**	**NP**	**NaN**	**21**	**0.3191**	**0.1619**	**ln(x)**	**ShapiroWilk**
Ethylbenzene (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.3145	0.1679	unknown	ShapiroWilk
Ethylbenzene (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.3095	0.1695	unknown	ShapiroWilk
Ethylbenzene (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.31	0	unknown	ShapiroWilk
Ethylbenzene (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.31	0	unknown	ShapiroWilk
Iodomethane (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	4.98	3.216	unknown	ShapiroWilk
Iodomethane (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	5.2	3.145	unknown	ShapiroWilk
Iodomethane (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	5.2	3.145	unknown	ShapiroWilk
Iodomethane (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	5.2	3.145	unknown	ShapiroWilk
Iodomethane (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	5.2	3.145	unknown	ShapiroWilk
Iodomethane (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	5.651	3.093	unknown	ShapiroWilk

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Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Iodomethane (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	4.98	3.216	unknown	ShapiroWilk
Iodomethane (ug/l)	MW-26A	No	n/a	n/a	NP	NaN	16	5.577	2.892	x^3	ShapiroWilk
Iodomethane (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	5.657	3.101	unknown	ShapiroWilk
Iodomethane (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	5.658	3.102	unknown	ShapiroWilk
Iodomethane (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	4.98	3.216	unknown	ShapiroWilk
Iodomethane (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	5.371	3.033	unknown	ShapiroWilk
Iodomethane (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	5.29	3.088	unknown	ShapiroWilk
Iodomethane (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	4.98	3.216	unknown	ShapiroWilk
Iodomethane (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	7	0	unknown	ShapiroWilk
Iodomethane (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	7	0	unknown	ShapiroWilk
Silvex [2,4,5-TP] (ug/l)	MW-20	No	n/a	n/a	NP	NaN	9	1.422	1.257	x^(1/3)	ShapiroWilk
Silvex [2,4,5-TP] (ug/l)	MW-201B (bg)	No	n/a	n/a	NP	NaN	4	0.5105	0.4	ln(x)	ShapiroWilk
Silvex [2,4,5-TP] (ug/l)	MW-22	No	n/a	n/a	NP	NaN	18	0.6497	0.7284	ln(x)	ShapiroWilk
Silvex [2,4,5-TP] (ug/l)	MW-26A	No	n/a	n/a	NP	NaN	4	0.1731	0.1463	ln(x)	ShapiroWilk
Styrene (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.307	0.2087	unknown	ShapiroWilk
Styrene (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.3179	0.2085	unknown	ShapiroWilk
Styrene (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.3179	0.2085	unknown	ShapiroWilk
Styrene (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.3179	0.2085	unknown	ShapiroWilk
Styrene (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.3179	0.2085	unknown	ShapiroWilk
Styrene (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.3179	0.2085	unknown	ShapiroWilk
Styrene (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.307	0.2087	unknown	ShapiroWilk
Styrene (ug/l)	MW-26A	No	n/a	n/a	NP	NaN	16	0.3419	0.2123	x^(1/3)	ShapiroWilk
Styrene (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.3179	0.2085	unknown	ShapiroWilk
Styrene (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.3179	0.2085	unknown	ShapiroWilk
Styrene (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.307	0.2087	unknown	ShapiroWilk
Styrene (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.3229	0.1984	unknown	ShapiroWilk
Styrene (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.3205	0.2033	unknown	ShapiroWilk
Styrene (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.307	0.2087	unknown	ShapiroWilk
Styrene (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.37	0	unknown	ShapiroWilk
Styrene (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.37	0	unknown	ShapiroWilk
Tetrachloroethene (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.401	0.202	unknown	ShapiroWilk
Tetrachloroethene (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.4126	0.2006	unknown	ShapiroWilk
Tetrachloroethene (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.4126	0.2006	unknown	ShapiroWilk
Tetrachloroethene (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.4126	0.2006	unknown	ShapiroWilk
Tetrachloroethene (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.4126	0.2006	unknown	ShapiroWilk
Tetrachloroethene (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.4126	0.2006	unknown	ShapiroWilk
Tetrachloroethene (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.401	0.202	unknown	ShapiroWilk
Tetrachloroethene (ug/l)	MW-26A	No	n/a	n/a	NP	NaN	16	0.4375	0.2002	sqrt(x)	ShapiroWilk
Tetrachloroethene (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.4126	0.2006	unknown	ShapiroWilk
Tetrachloroethene (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.4126	0.2006	unknown	ShapiroWilk
Tetrachloroethene (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.401	0.202	unknown	ShapiroWilk
Tetrachloroethene (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.419	0.1914	unknown	ShapiroWilk
Tetrachloroethene (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.416	0.1958	unknown	ShapiroWilk
Tetrachloroethene (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.401	0.202	unknown	ShapiroWilk
Tetrachloroethene (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.48	0	unknown	ShapiroWilk
Tetrachloroethene (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.48	0	unknown	ShapiroWilk
Toluene (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.3605	0.2022	unknown	ShapiroWilk
Toluene (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.374	0.1989	unknown	ShapiroWilk
Toluene (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.3724	0.2017	unknown	ShapiroWilk
Toluene (ug/l)	MW-20	No	n/a	n/a	NP	NaN	19	0.3495	0.1143	x^(1/3)	ShapiroWilk

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Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Toluene (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.3716	0.2014	unknown	ShapiroWilk
Toluene (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.3716	0.2014	unknown	ShapiroWilk
Toluene (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.3605	0.2022	unknown	ShapiroWilk
Toluene (ug/l)	MW-26A	No	n/a	n/a	NP	NaN	16	0.3956	0.2032	x^(1/3)	ShapiroWilk
Toluene (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.3716	0.2014	unknown	ShapiroWilk
Toluene (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.3716	0.2014	unknown	ShapiroWilk
Toluene (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.3605	0.2022	unknown	ShapiroWilk
Toluene (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.3771	0.1919	unknown	ShapiroWilk
Toluene (ug/l)	MW-304R	No	n/a	n/a	NP	NaN	20	0.3754	0.1955	x^(1/3)	ShapiroWilk
Toluene (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.3605	0.2022	unknown	ShapiroWilk
Toluene (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.43	0	unknown	ShapiroWilk
Toluene (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.43	0	unknown	ShapiroWilk
trans-1,2-Dichloroethene (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.2855	0.1706	unknown	ShapiroWilk
trans-1,2-Dichloroethene (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.2895	0.1744	unknown	ShapiroWilk
trans-1,2-Dichloroethene (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.29	0.1741	unknown	ShapiroWilk
trans-1,2-Dichloroethene (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.2895	0.1744	unknown	ShapiroWilk
trans-1,2-Dichloroethene (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.2895	0.1744	unknown	ShapiroWilk
trans-1,2-Dichloroethene (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.2895	0.1744	unknown	ShapiroWilk
trans-1,2-Dichloroethene (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.2855	0.1706	unknown	ShapiroWilk
trans-1,2-Dichloroethene (ug/l)	**MW-26A**	**Yes**	**1**	**4/15/2015**	**NP**	**NaN**	**16**	**0.3006**	**0.1884**	**ln(x)**	**ShapiroWilk**
trans-1,2-Dichloroethene (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.2895	0.1744	unknown	ShapiroWilk
trans-1,2-Dichloroethene (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.2895	0.1744	unknown	ShapiroWilk
trans-1,2-Dichloroethene (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.2855	0.1706	unknown	ShapiroWilk
trans-1,2-Dichloroethene (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.2876	0.1655	unknown	ShapiroWilk
trans-1,2-Dichloroethene (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.2885	0.1698	unknown	ShapiroWilk
trans-1,2-Dichloroethene (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.2855	0.1706	unknown	ShapiroWilk
trans-1,2-Dichloroethene (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.27	0	unknown	ShapiroWilk
trans-1,2-Dichloroethene (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.27	0	unknown	ShapiroWilk
trans-1,3-Dichloropropene (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.663	1.034	unknown	ShapiroWilk
trans-1,3-Dichloropropene (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.6863	1.057	unknown	ShapiroWilk
trans-1,3-Dichloropropene (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.6863	1.057	unknown	ShapiroWilk
trans-1,3-Dichloropropene (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.6863	1.057	unknown	ShapiroWilk
trans-1,3-Dichloropropene (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.6863	1.057	unknown	ShapiroWilk
trans-1,3-Dichloropropene (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.6863	1.057	unknown	ShapiroWilk
trans-1,3-Dichloropropene (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.663	1.034	unknown	ShapiroWilk
trans-1,3-Dichloropropene (ug/l)	**MW-26A**	**Yes**	**5**	**4/15/2015**	**NP**	**NaN**	**16**	**0.7525**	**1.143**	**ln(x)**	**ShapiroWilk**
trans-1,3-Dichloropropene (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.6863	1.057	unknown	ShapiroWilk
trans-1,3-Dichloropropene (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.6863	1.057	unknown	ShapiroWilk
trans-1,3-Dichloropropene (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.663	1.034	unknown	ShapiroWilk
trans-1,3-Dichloropropene (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.6743	1.003	unknown	ShapiroWilk
trans-1,3-Dichloropropene (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.68	1.029	unknown	ShapiroWilk
trans-1,3-Dichloropropene (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.663	1.034	unknown	ShapiroWilk
trans-1,3-Dichloropropene (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.56	0	unknown	ShapiroWilk
trans-1,3-Dichloropropene (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.56	0	unknown	ShapiroWilk
trans-1,4-Dichloro-2-butene (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	1.206	2.122	unknown	ShapiroWilk
trans-1,4-Dichloro-2-butene (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	1.262	2.165	unknown	ShapiroWilk
trans-1,4-Dichloro-2-butene (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	1.262	2.165	unknown	ShapiroWilk
trans-1,4-Dichloro-2-butene (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	1.262	2.165	unknown	ShapiroWilk
trans-1,4-Dichloro-2-butene (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	1.262	2.165	unknown	ShapiroWilk
trans-1,4-Dichloro-2-butene (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	1.262	2.165	unknown	ShapiroWilk

Outlier Analysis

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:43 PM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
trans-1,4-Dichloro-2-butene (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	1.206	2.122	unknown	ShapiroWilk
trans-1,4-Dichloro-2-butene (ug/l)	MW-26A	No	n/a	n/a	NP	NaN	16	1.414	2.33	ln(x)	ShapiroWilk
trans-1,4-Dichloro-2-butene (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	1.262	2.165	unknown	ShapiroWilk
trans-1,4-Dichloro-2-butene (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	1.262	2.165	unknown	ShapiroWilk
trans-1,4-Dichloro-2-butene (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	1.206	2.122	unknown	ShapiroWilk
trans-1,4-Dichloro-2-butene (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	1.247	2.054	unknown	ShapiroWilk
trans-1,4-Dichloro-2-butene (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	1.254	2.107	unknown	ShapiroWilk
trans-1,4-Dichloro-2-butene (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	1.206	2.122	unknown	ShapiroWilk
trans-1,4-Dichloro-2-butene (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	1.1	0	unknown	ShapiroWilk
trans-1,4-Dichloro-2-butene (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	1.1	0	unknown	ShapiroWilk
Trichloroethene (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.3745	0.1873	unknown	ShapiroWilk
Trichloroethene (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.3842	0.1872	unknown	ShapiroWilk
Trichloroethene (ug/l)	MW-19	No	n/a	n/a	NP	NaN	19	0.5318	0.2895	ln(x)	ShapiroWilk
Trichloroethene (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.3842	0.1872	unknown	ShapiroWilk
Trichloroethene (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.3842	0.1872	unknown	ShapiroWilk
Trichloroethene (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.3842	0.1872	unknown	ShapiroWilk
Trichloroethene (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.3745	0.1873	unknown	ShapiroWilk
Trichloroethene (ug/l)	MW-26A	No	n/a	n/a	NP	NaN	16	0.3739	0.1108	x^5	ShapiroWilk
Trichloroethene (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.3842	0.1872	unknown	ShapiroWilk
Trichloroethene (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.3842	0.1872	unknown	ShapiroWilk
Trichloroethene (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.3745	0.1873	unknown	ShapiroWilk
Trichloroethene (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	0.3886	0.1781	unknown	ShapiroWilk
Trichloroethene (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.3865	0.1825	unknown	ShapiroWilk
Trichloroethene (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.3745	0.1873	unknown	ShapiroWilk
Trichloroethene (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.43	0	unknown	ShapiroWilk
Trichloroethene (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.43	0	unknown	ShapiroWilk
Trichlorofluoromethane (ug/L)	MW-15	n/a	n/a	n/a	NP	NaN	19	0.3026	0.1041	unknown	ShapiroWilk
Trichlorofluoromethane (ug/L)	MW-18	n/a	n/a	n/a	NP	NaN	18	0.31	0.1019	unknown	ShapiroWilk
Trichlorofluoromethane (ug/L)	MW-19	n/a	n/a	n/a	NP	NaN	18	0.31	0.1019	unknown	ShapiroWilk
Trichlorofluoromethane (ug/L)	MW-20	n/a	n/a	n/a	NP	NaN	18	0.31	0.1019	unknown	ShapiroWilk
Trichlorofluoromethane (ug/L)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	18	0.31	0.1019	unknown	ShapiroWilk
Trichlorofluoromethane (ug/L)	MW-22	n/a	n/a	n/a	NP	NaN	18	0.31	0.1019	unknown	ShapiroWilk
Trichlorofluoromethane (ug/L)	MW-24	n/a	n/a	n/a	NP	NaN	19	0.3026	0.1041	unknown	ShapiroWilk
Trichlorofluoromethane (ug/L)	MW-26A	n/a	n/a	n/a	NP	NaN	15	0.324	0.09612	unknown	ShapiroWilk
Trichlorofluoromethane (ug/L)	MW-300	n/a	n/a	n/a	NP	NaN	18	0.31	0.1019	unknown	ShapiroWilk
Trichlorofluoromethane (ug/L)	MW-301	n/a	n/a	n/a	NP	NaN	18	0.31	0.1019	unknown	ShapiroWilk
Trichlorofluoromethane (ug/L)	MW-302R	n/a	n/a	n/a	NP	NaN	19	0.3026	0.1041	unknown	ShapiroWilk
Trichlorofluoromethane (ug/L)	MW-303	n/a	n/a	n/a	NP	NaN	20	0.317	0.09873	unknown	ShapiroWilk
Trichlorofluoromethane (ug/L)	MW-304R	n/a	n/a	n/a	NP	NaN	19	0.3137	0.1003	unknown	ShapiroWilk
Trichlorofluoromethane (ug/L)	MW-305	n/a	n/a	n/a	NP	NaN	19	0.3026	0.1041	unknown	ShapiroWilk
Trichlorofluoromethane (ug/L)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.38	0	unknown	ShapiroWilk
Trichlorofluoromethane (ug/L)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.38	0	unknown	ShapiroWilk
Vinyl Acetate (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	2.259	2.01	unknown	ShapiroWilk
Vinyl Acetate (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	2.339	2.032	unknown	ShapiroWilk
Vinyl Acetate (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	2.339	2.032	unknown	ShapiroWilk
Vinyl Acetate (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	2.339	2.032	unknown	ShapiroWilk
Vinyl Acetate (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	2.339	2.032	unknown	ShapiroWilk
Vinyl Acetate (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	2.339	2.032	unknown	ShapiroWilk
Vinyl Acetate (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	2.259	2.01	unknown	ShapiroWilk
Vinyl Acetate (ug/l)	MW-26A	n/a	n/a	n/a	NP	NaN	15	2.031	0.8056	unknown	ShapiroWilk

Outlier Analysis

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:43 PM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Vinyl Acetate (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	2.339	2.032	unknown	ShapiroWilk
Vinyl Acetate (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	2.339	2.032	unknown	ShapiroWilk
Vinyl Acetate (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	2.259	2.01	unknown	ShapiroWilk
Vinyl Acetate (ug/l)	MW-303	n/a	n/a	n/a	NP	NaN	21	2.354	1.929	unknown	ShapiroWilk
Vinyl Acetate (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	2.347	1.978	unknown	ShapiroWilk
Vinyl Acetate (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	2.259	2.01	unknown	ShapiroWilk
Vinyl Acetate (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	2.5	0	unknown	ShapiroWilk
Vinyl Acetate (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	2.5	0	unknown	ShapiroWilk
Vinyl Chloride (ug/l)	MW-15	n/a	n/a	n/a	NP	NaN	20	0.235	0.2305	unknown	ShapiroWilk
Vinyl Chloride (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.2421	0.2346	unknown	ShapiroWilk
Vinyl Chloride (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.2421	0.2346	unknown	ShapiroWilk
Vinyl Chloride (ug/l)	**MW-20**	**Yes**	**0.6,0.6**	**10/31/2018,3/18/2019**	**NP**	**NaN**	**19**	**0.2067**	**0.1432**	**ln(x)**	**ShapiroWilk**
Vinyl Chloride (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.2421	0.2346	unknown	ShapiroWilk
Vinyl Chloride (ug/l)	**MW-22**	**Yes**	**0.269,0...**	**4/9/2016,11/4/201...**	**NP**	**NaN**	**19**	**0.2228**	**0.1372**	**ln(x)**	**ShapiroWilk**
Vinyl Chloride (ug/l)	MW-24	n/a	n/a	n/a	NP	NaN	20	0.235	0.2305	unknown	ShapiroWilk
Vinyl Chloride (ug/l)	MW-26A	n/a	n/a	n/a	NP	NaN	15	0.2427	0.1882	unknown	ShapiroWilk
Vinyl Chloride (ug/l)	MW-300	n/a	n/a	n/a	NP	NaN	19	0.2421	0.2346	unknown	ShapiroWilk
Vinyl Chloride (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.2421	0.2346	unknown	ShapiroWilk
Vinyl Chloride (ug/l)	MW-302R	n/a	n/a	n/a	NP	NaN	20	0.235	0.2305	unknown	ShapiroWilk
Vinyl Chloride (ug/l)	MW-303	No	n/a	n/a	NP	NaN	21	0.2482	0.2252	ln(x)	ShapiroWilk
Vinyl Chloride (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	20	0.239	0.2287	unknown	ShapiroWilk
Vinyl Chloride (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.235	0.2305	unknown	ShapiroWilk
Vinyl Chloride (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.18	0	unknown	ShapiroWilk
Vinyl Chloride (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.292	0.1922	unknown	ShapiroWilk
Xylenes, Total (ug/l)	**MW-15**	**Yes**	**3**	**4/23/2015**	**NP**	**NaN**	**20**	**0.5053**	**0.6198**	**ln(x)**	**ShapiroWilk**
Xylenes, Total (ug/l)	MW-18	n/a	n/a	n/a	NP	NaN	19	0.5739	0.664	unknown	ShapiroWilk
Xylenes, Total (ug/l)	MW-19	n/a	n/a	n/a	NP	NaN	19	0.4704	0.6253	unknown	ShapiroWilk
Xylenes, Total (ug/l)	MW-20	n/a	n/a	n/a	NP	NaN	19	0.3808	0.1545	unknown	ShapiroWilk
Xylenes, Total (ug/l)	MW-201B (bg)	n/a	n/a	n/a	NP	NaN	19	0.4873	0.6201	unknown	ShapiroWilk
Xylenes, Total (ug/l)	MW-22	n/a	n/a	n/a	NP	NaN	19	0.4778	0.6263	unknown	ShapiroWilk
Xylenes, Total (ug/l)	**MW-24**	**Yes**	**3,2.69**	**4/15/2015,3/21/2017**	**NP**	**NaN**	**20**	**0.579**	**0.7857**	**ln(x)**	**ShapiroWilk**
Xylenes, Total (ug/l)	**MW-26A**	**Yes**	**0.13,0....**	**4/7/2016,11/1/201...**	**NP**	**NaN**	**16**	**0.562**	**0.8939**	**ln(x)**	**ShapiroWilk**
Xylenes, Total (ug/l)	**MW-300**	**Yes**	**3,0.13,...**	**4/16/2015,10/13/2...**	**NP**	**NaN**	**19**	**0.5185**	**0.6382**	**ln(x)**	**ShapiroWilk**
Xylenes, Total (ug/l)	MW-301	n/a	n/a	n/a	NP	NaN	19	0.5622	0.6427	unknown	ShapiroWilk
Xylenes, Total (ug/l)	**MW-302R**	**Yes**	**3**	**4/21/2015**	**NP**	**NaN**	**20**	**0.5201**	**0.6399**	**ln(x)**	**ShapiroWilk**
Xylenes, Total (ug/l)	**MW-303**	**Yes**	**4.88**	**3/21/2017**	**NP**	**NaN**	**22**	**0.6571**	**1.107**	**ln(x)**	**ShapiroWilk**
Xylenes, Total (ug/l)	MW-304R	n/a	n/a	n/a	NP	NaN	19	0.6078	0.7445	unknown	ShapiroWilk
Xylenes, Total (ug/l)	MW-305	n/a	n/a	n/a	NP	NaN	20	0.4815	0.6277	unknown	ShapiroWilk
Xylenes, Total (ug/l)	MW-501	n/a	n/a	n/a	NP	NaN	9	0.4	0	unknown	ShapiroWilk
Xylenes, Total (ug/l)	MW-9AR (bg)	n/a	n/a	n/a	NP	NaN	15	0.4	0	unknown	ShapiroWilk

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Monitoring Well VOC Flagged Outliers – Spring 2024

Flagged_Outliers

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:49 PM

	MW-19 1,1-Dichloroethane (ug/l)	MW-26A 1,1-Dichloroethane (ug/l)	MW-301 1,2,3-Trichloropropane (ug/l)	MW-19 1,2-Dichloroethane (ug/l)	MW-304R 1,2-Dichloroethane (ug/l)	MW-22 2-Butanone [MEK] (ug/l)	MW-26A 2-Butanone [MEK] (ug/l)	MW-9AR 2-Butanone [MEK] (ug/l)	MW-15 Acetone (ug/l)	MW-18 Acetone (ug/l)
4/15/2015		0.489 (Jo)								
4/16/2015										<10 (o)
4/22/2015	<1 (o)			<1 (o)		<10 (o)				
4/23/2015									<10 (o)	
10/9/2015										
10/12/2015				<0.18 (o)						
10/13/2015										
4/7/2016										
4/9/2016				<0.18 (o)						
11/2/2016				<0.18 (o)						
11/3/2016										
11/4/2016										
11/5/2016										
3/20/2017										
3/21/2017										
3/22/2017										3.38 (Jo)
3/23/2017										
10/2/2017										
10/3/2017									6.6 (Jo)	
10/4/2017	0.679 (Jo)			0.255 (Jo)						
10/5/2017										1.98 (Jo)
12/11/2017										
4/18/2018	0.23 (Jo)			0.243 (Jo)						
4/19/2018										
4/20/2018										
7/17/2018								4.61 (Jo)		
10/31/2018										
11/1/2018										
3/18/2019										
3/19/2019										
5/14/2019					0.498 (JBo)					
3/30/2021										
10/19/2021			0.846 (Jo)							
12/2/2021										
4/25/2022						3.85 (Jo)				
4/26/2022										
4/19/2023	0.263 (Jo)									
4/17/2024										

Flagged_Outliers

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:49 PM

	MW-22 Acetone (ug/l)	MW-26A Acetone (ug/l)	MW-300 Acetone (ug/l)	MW-301 Acetone (ug/l)	MW-303 Acetone (ug/l)	MW-9AR Acetone (ug/l)	MW-15 Carbon Disulfide (ug/l)	MW-302R Carbon Disulfide (ug/l)	MW-305 Carbon Disulfide (ug/l)	MW-9AR Carbon Disulfide (ug/l)
4/15/2015					<10 (o)					
4/16/2015			<10 (o)							
4/22/2015										
4/23/2015				3.58 (Jo)			<1 (o)			
10/9/2015					<1.79 (o)					
10/12/2015										
10/13/2015			<1.79 (o)							
4/7/2016					<1.79 (o)					
4/9/2016										
11/2/2016			<1.79 (o)							
11/3/2016										
11/4/2016										
11/5/2016					<1.79 (o)					
3/20/2017										
3/21/2017										
3/22/2017			3.27 (Jo)							
3/23/2017	4.92 (Jo)									
10/2/2017										
10/3/2017										
10/4/2017			2.96 (Jo)	5.06 (Jo)						
10/5/2017										
12/11/2017							0.993 (Jo)	0.581 (Jo)	0.324 (Jo)	
4/18/2018										
4/19/2018	5.7 (Jo)									
4/20/2018			<1.79 (o)		<1.79 (o)					
7/17/2018						29.9 (o)				
10/31/2018										
11/1/2018										
3/18/2019										
3/19/2019										
5/14/2019										
3/30/2021										0.679 (JBo)
10/19/2021										
12/2/2021										
4/25/2022		271 (o)								
4/26/2022										
4/19/2023										
4/17/2024										

Flagged_Outliers

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:49 PM

	MW-26A cis-1,2-Dichloroethene (ug/l)	MW-26A Ethylbenzene (ug/l)	MW-303 Ethylbenzene (ug/l)	MW-22 Iodomethane (ug/l)	MW-26A Iodomethane (ug/l)	MW-300 Iodomethane (ug/l)	MW-301 Iodomethane (ug/l)	MW-26A Silvex [2,4,5-TP] (ug/l)	MW-20 Toluene (ug/l)	MW-19 Trichloroethene (ug/l)
4/15/2015	<1 (o)	<1 (o)	<1 (o)		9.03 (Jo)					
4/16/2015										
4/22/2015										
4/23/2015										
10/9/2015										
10/12/2015									<0.15 (o)	
10/13/2015										
4/7/2016									0.2555 (Jo)	
4/9/2016				9.37 (Jo)		9.48 (Jo)	9.5 (Jo)			
11/2/2016										
11/3/2016									0.322 (Jo)	
11/4/2016										
11/5/2016										
3/20/2017										
3/21/2017										
3/22/2017									<0.15 (o)	
3/23/2017										
10/2/2017										
10/3/2017									0.167 (Jo)	
10/4/2017										1.39 (o)
10/5/2017										
12/11/2017										
4/18/2018										
4/19/2018										
4/20/2018										
7/17/2018										
10/31/2018										
11/1/2018										
3/18/2019										
3/19/2019										
5/14/2019										
3/30/2021										
10/19/2021										
12/2/2021										
4/25/2022										
4/26/2022										
4/19/2023										
4/17/2024								0.0724 (o)		

Flagged_Outliers

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:49 PM

	MW-20 Vinyl Chloride (ug/l)	MW-22 Vinyl Chloride (ug/l)	MW-303 Vinyl Chloride (ug/l)	MW-18 Xylenes, Total (ug/l)	MW-20 Xylenes, Total (ug/l)	MW-201B Xylenes, Total (ug/l)	MW-22 Xylenes, Total (ug/l)	MW-24 Xylenes, Total (ug/l)	MW-26A Xylenes, Total (ug/l)	MW-300 Xylenes, Total (ug/l)
4/15/2015										
4/16/2015				<3 (o)						<3 (o)
4/22/2015		0.223 (Jo)				<3 (o)	<3 (o)			
4/23/2015					0.415 (Jo)					
10/9/2015										
10/12/2015					<0.13 (o)					
10/13/2015				<0.13 (o)						
4/7/2016					0.144 (Jo)					
4/9/2016		0.269 (Jo)		<0.13 (o)						
11/2/2016				<0.13 (o)						
11/3/2016					<0.13 (o)					
11/4/2016										
11/5/2016										
3/20/2017										
3/21/2017								2.69 (Jo)	3.89 (o)	
3/22/2017					0.687 (Jo)					
3/23/2017										
10/2/2017								0.44 (Jo)		
10/3/2017					0.724 (Jo)					
10/4/2017										1.14 (Jo)
10/5/2017				1.62 (Jo)						
12/11/2017										
4/18/2018										
4/19/2018		<0.1 (o)								
4/20/2018										
7/17/2018										
10/31/2018	<0.6 (o)									
11/1/2018		<0.6 (o)								
3/18/2019	<0.6 (o)									
3/19/2019		<0.6 (o)								
5/14/2019										
3/30/2021										
10/19/2021										
12/2/2021			0.214 (Jo)							
4/25/2022										
4/26/2022			0.398 (Jo)							
4/19/2023										
4/17/2024										

Flagged_Outliers

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 2:49 PM

	MW-301 Xylenes, Total (ug/l)	MW-302R Xylenes, Total (ug/l)	MW-303 Xylenes, Total (ug/l)	MW-304R Xylenes, Total (ug/l)	MW-305 Xylenes, Total (ug/l)
4/15/2015			<3 (o)		
4/16/2015					
4/22/2015					
4/23/2015	<3 (o)				
10/9/2015					
10/12/2015					
10/13/2015	<0.13 (o)				
4/7/2016					
4/9/2016	<0.13 (o)				
11/2/2016					
11/3/2016					
11/4/2016	<0.13 (o)				
11/5/2016					
3/20/2017	0.806 (Jo)				1.05 (Jo)
3/21/2017		1.35 (Jo)	4.88 (o)	2.37 (Jo)	
3/22/2017					
3/23/2017					
10/2/2017					
10/3/2017		0.602 (Jo)			
10/4/2017	1.29 (Jo)				
10/5/2017					
12/11/2017					
4/18/2018					
4/19/2018					
4/20/2018					
7/17/2018					
10/31/2018					
11/1/2018					
3/18/2019					
3/19/2019					
5/14/2019					
3/30/2021					
10/19/2021					
12/2/2021					
4/25/2022					
4/26/2022					
4/19/2023					
4/17/2024					

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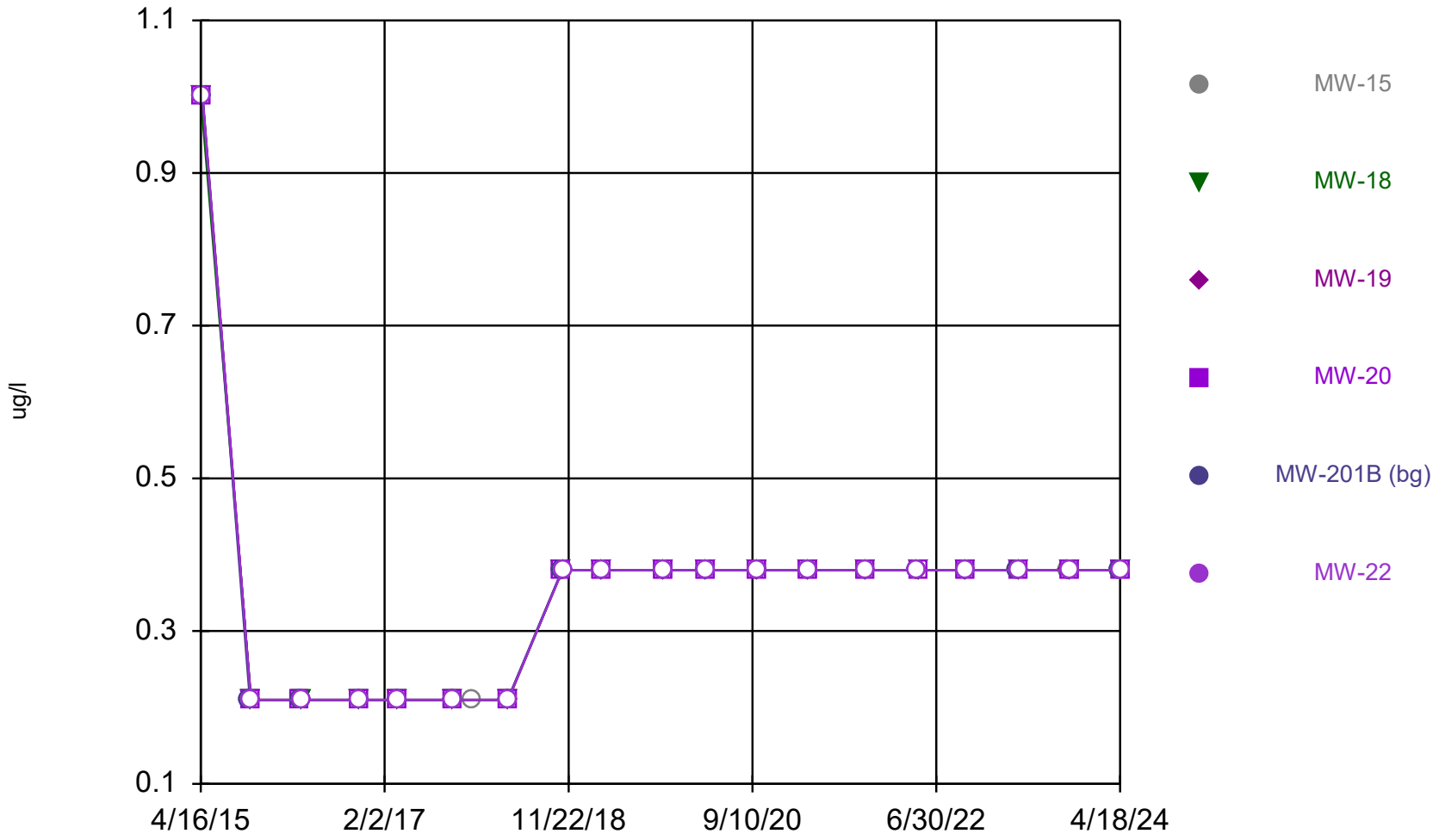
Monitoring Well VOC Time-Series – Spring 2024

Hollow symbols indicate censored values.

Time Series

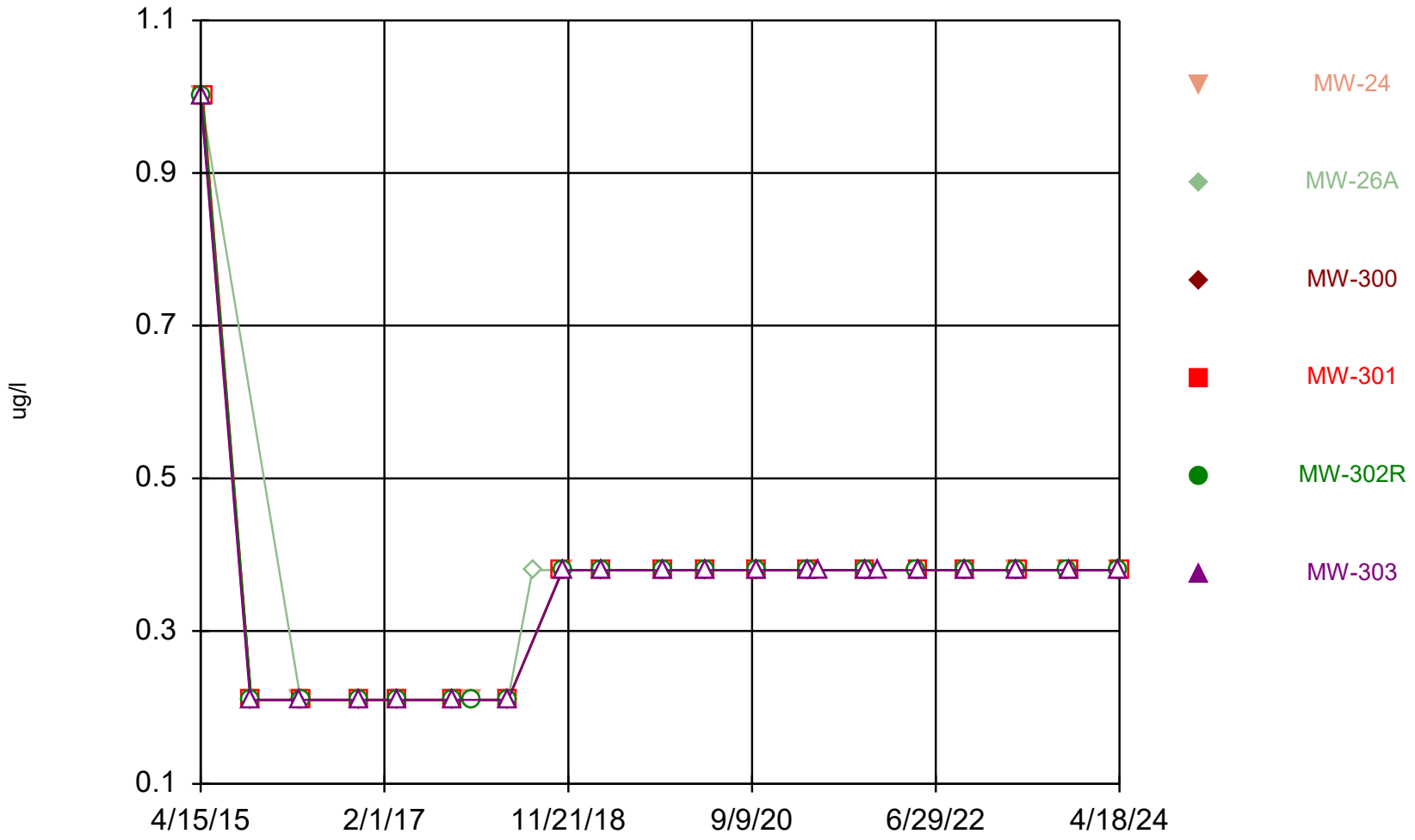


Constituent: 1,1,1,2-Tetrachloroethane Analysis Run 7/12/2024 2:50 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



Constituent: 1,1,1,2-Tetrachloroethane Analysis Run 7/12/2024 2:50 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

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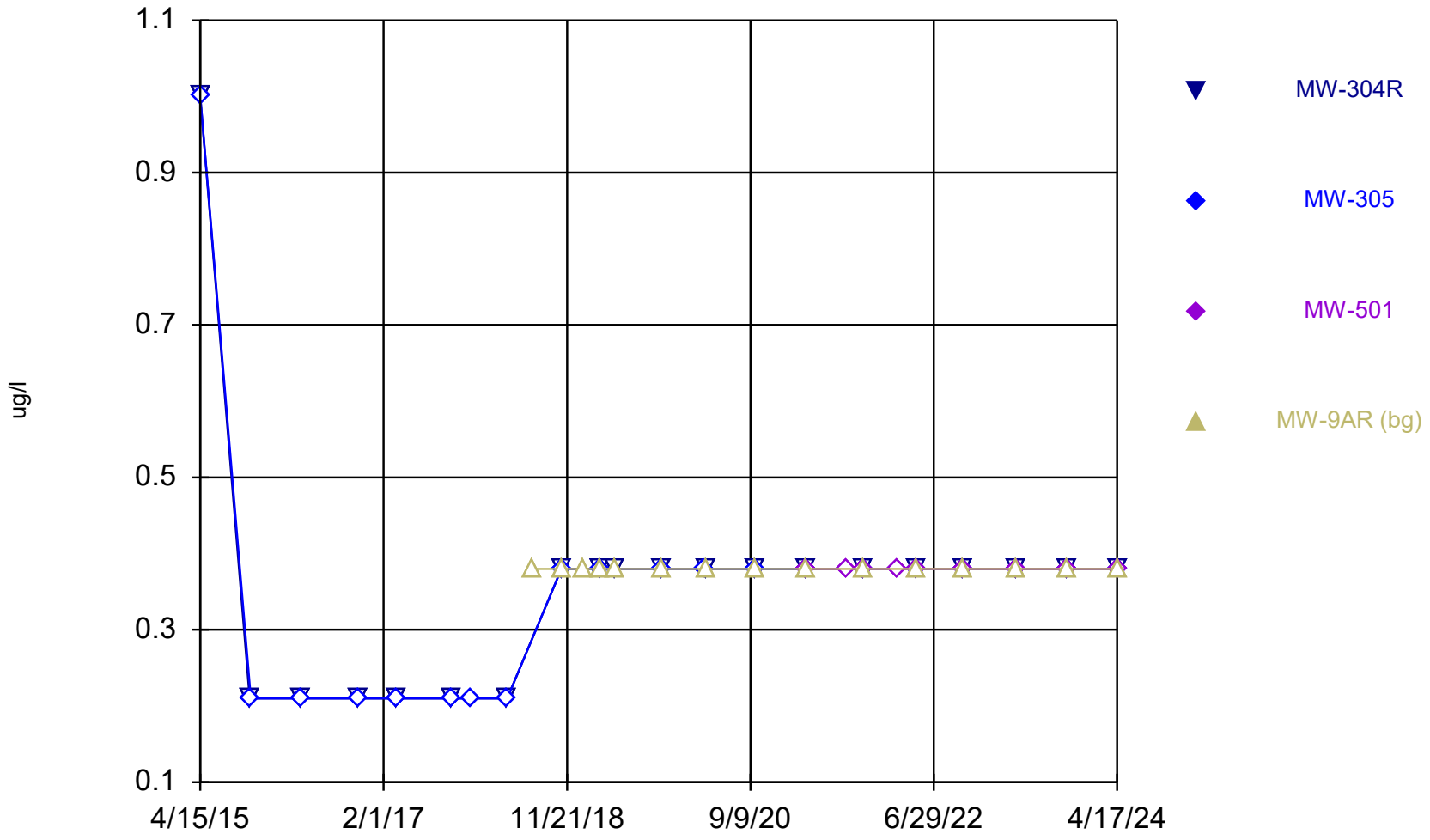
Time Series



Constituent: 1,1,1,2-Tetrachloroethane Analysis Run 7/12/2024 2:50 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

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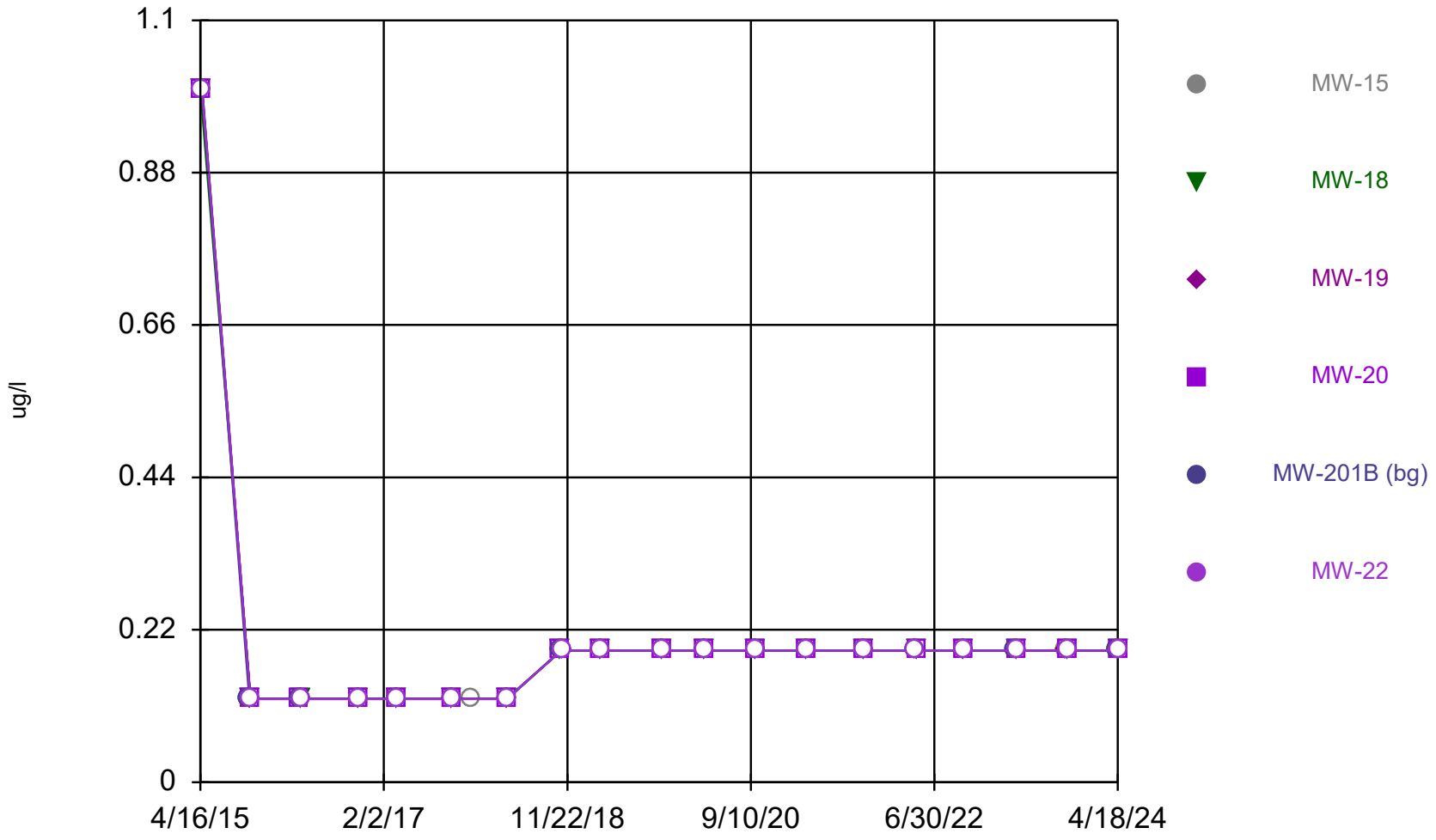

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Linn County Data: CRLCSWA_Groundwater Database

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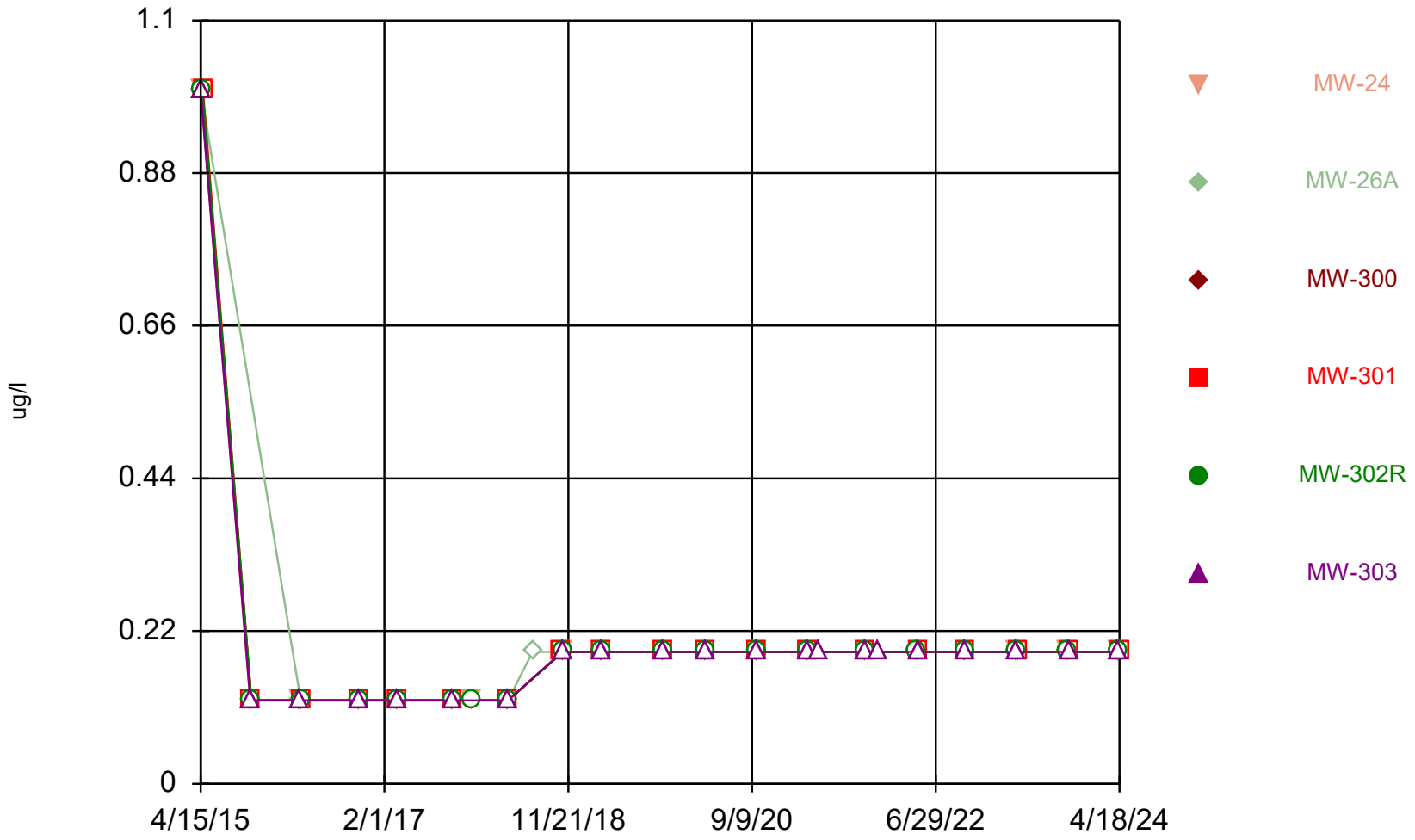

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Linn County Data: CRLCSWA_Groundwater Database

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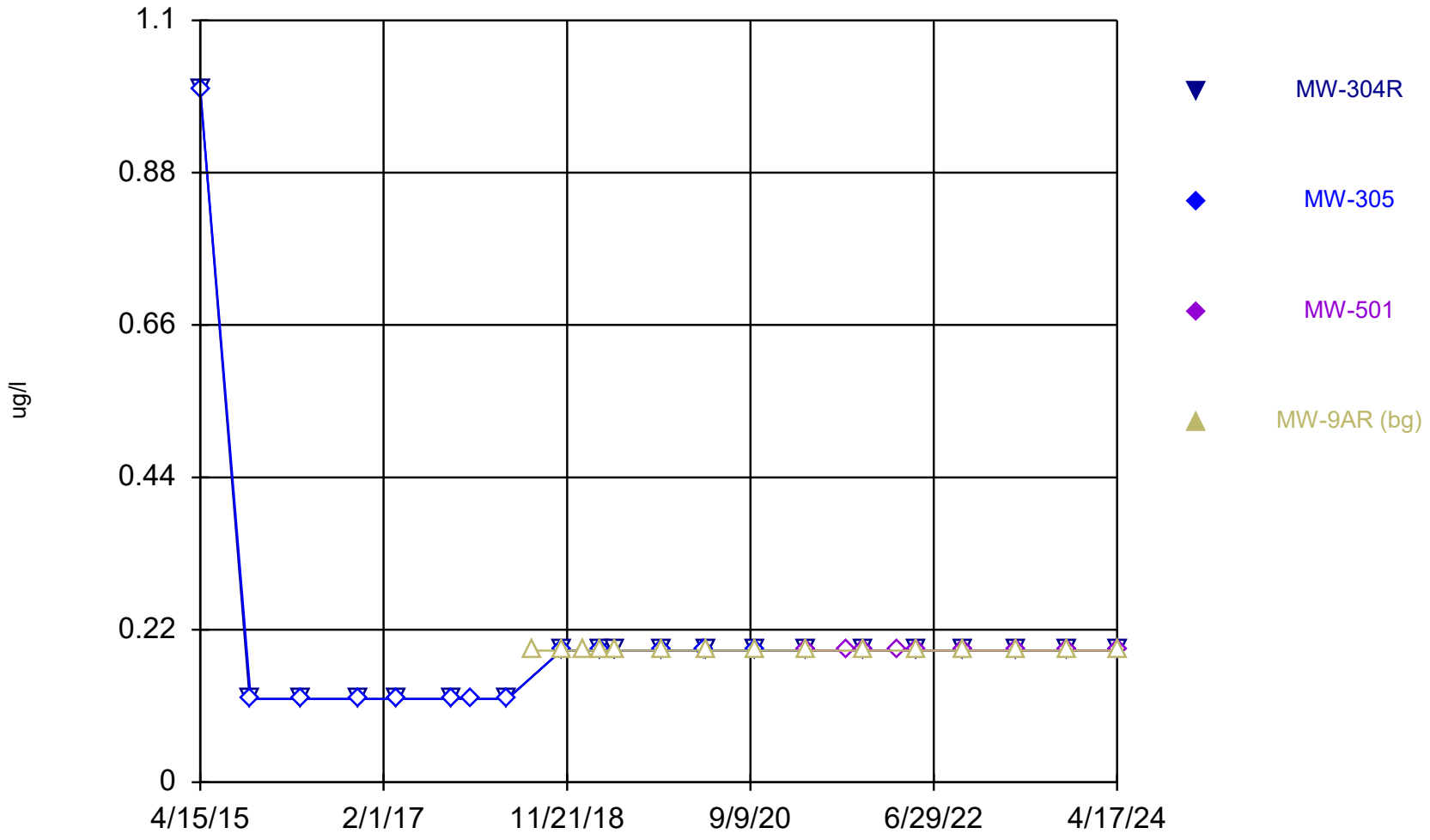
Time Series



Constituent: 1,1,1-Trichloroethane Analysis Run 7/12/2024 2:50 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

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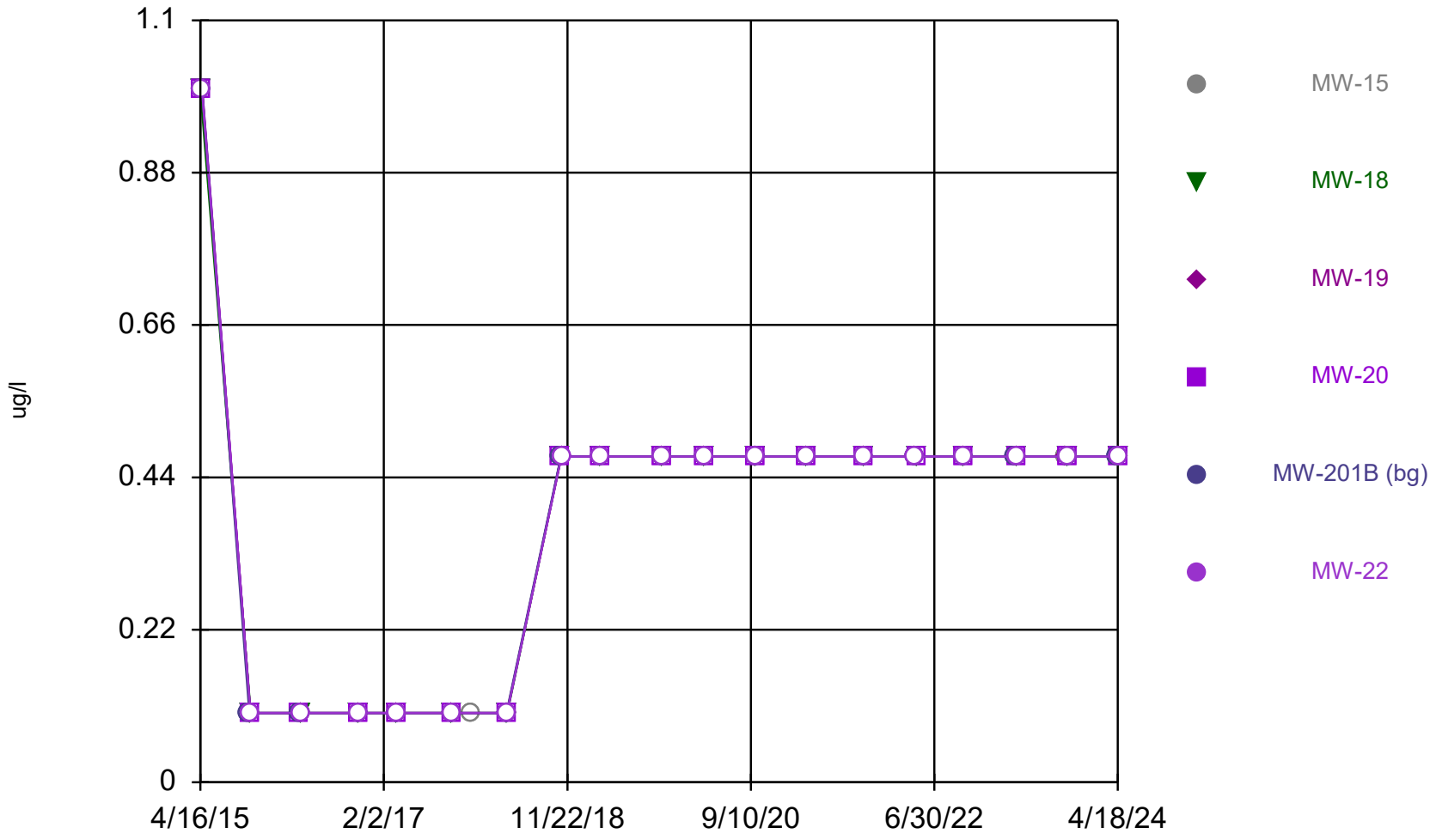

Constituent: 1,1,2,2-Tetrachloroethane Analysis Run 7/12/2024 2:50 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

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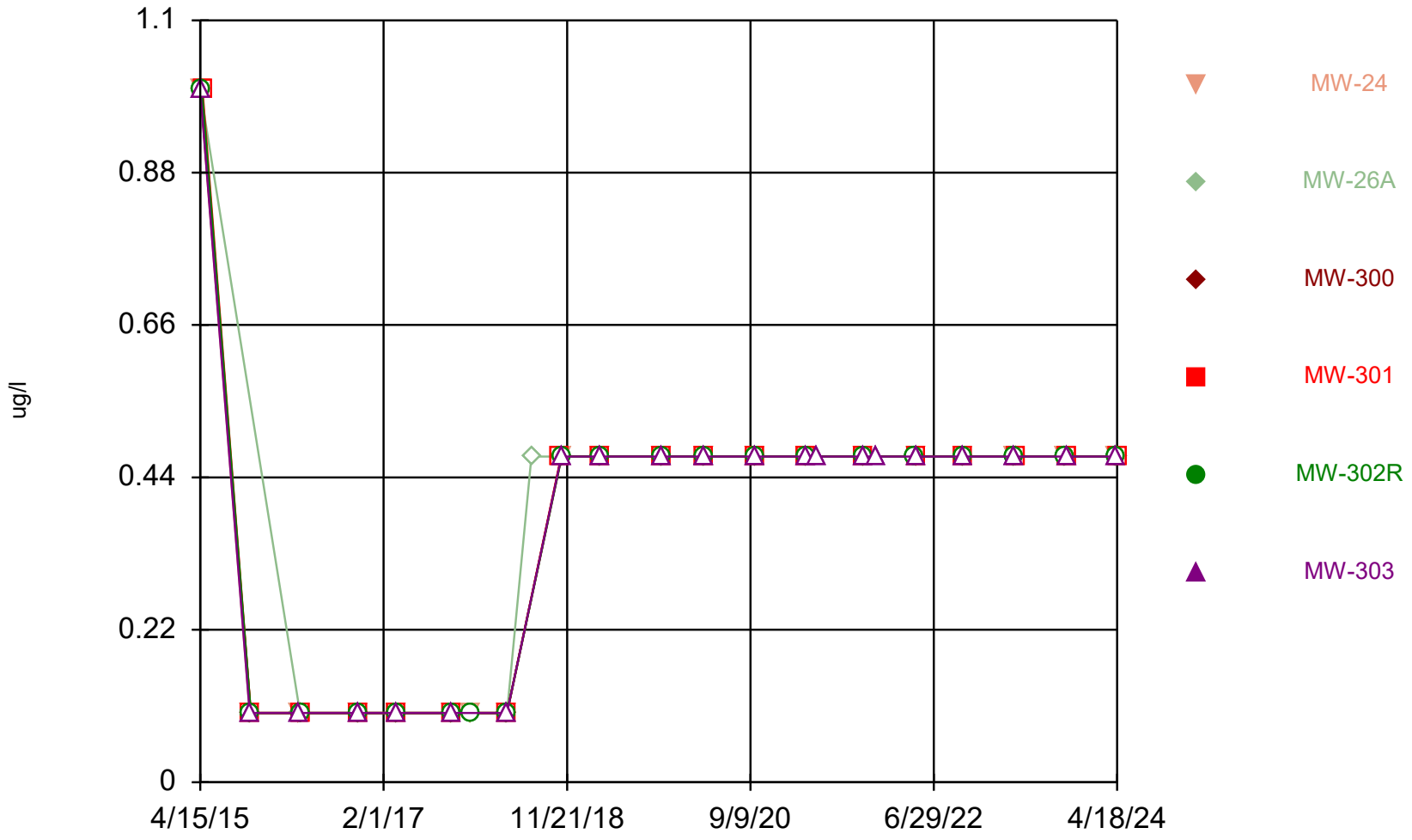
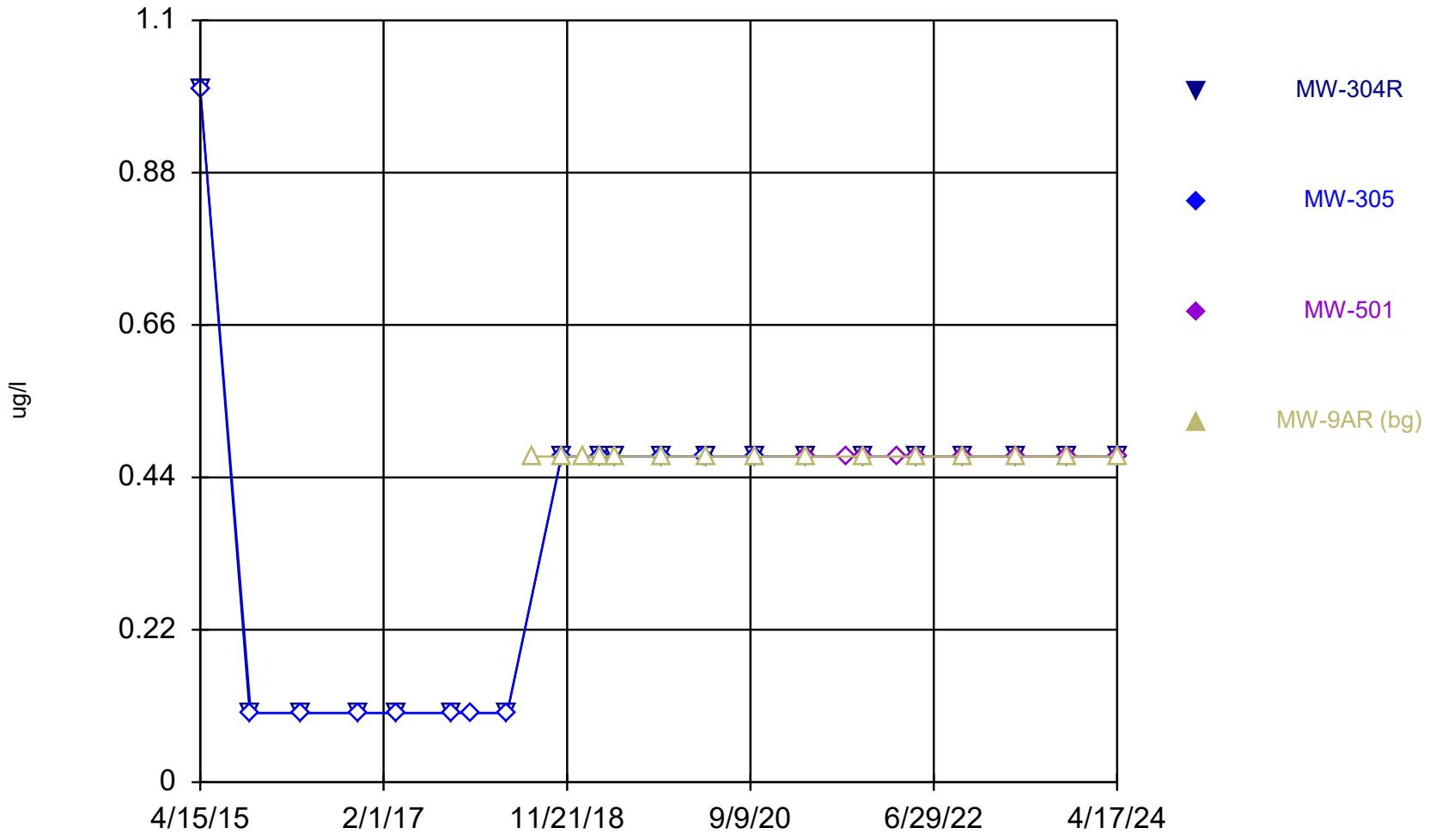


Constituent: 1,1,2,2-Tetrachloroethane Analysis Run 7/12/2024 2:50 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

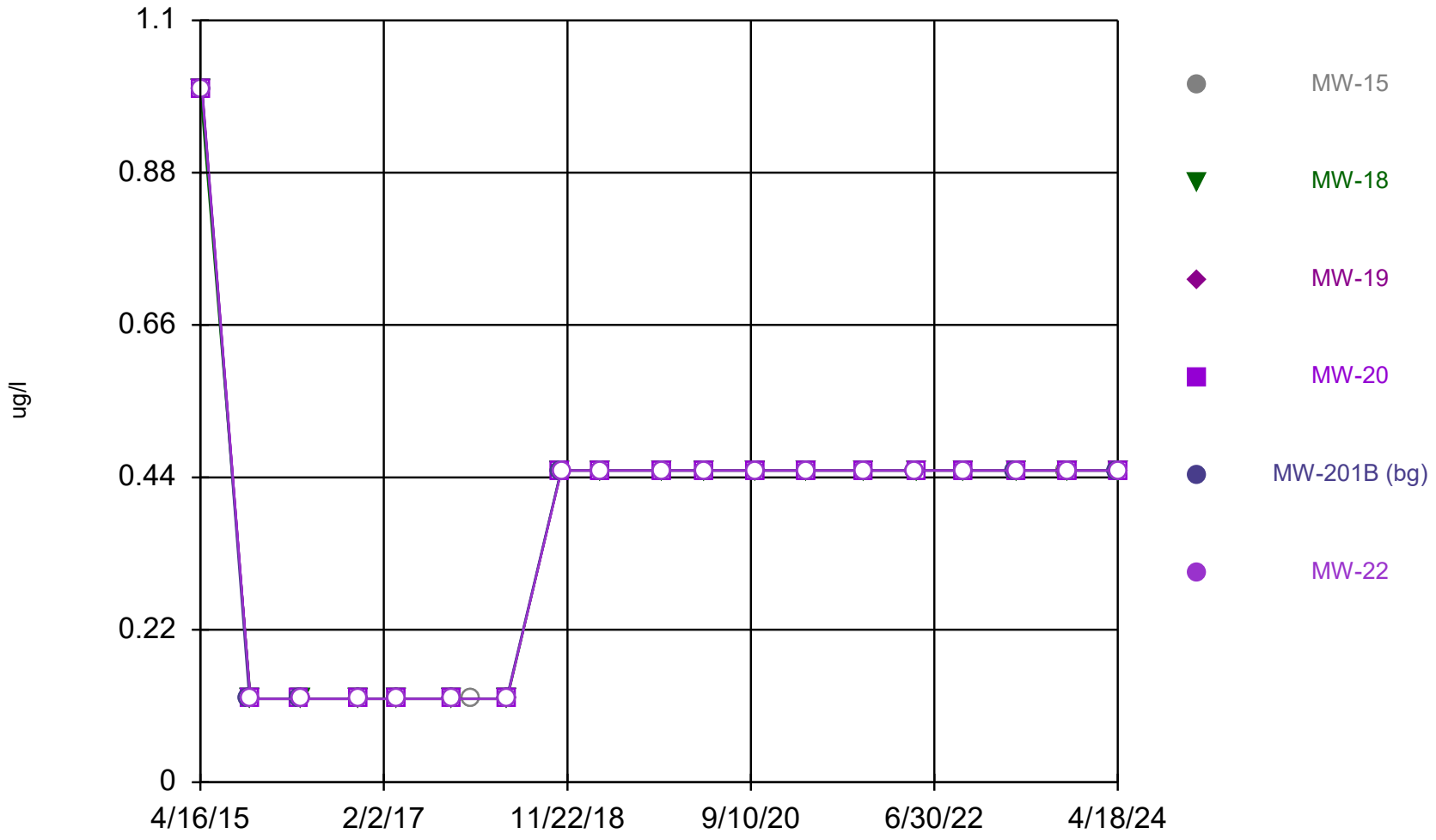


Constituent: 1,1,2,2-Tetrachloroethane Analysis Run 7/12/2024 2:50 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



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Linn County Data: CRLCSWA_Groundwater Database

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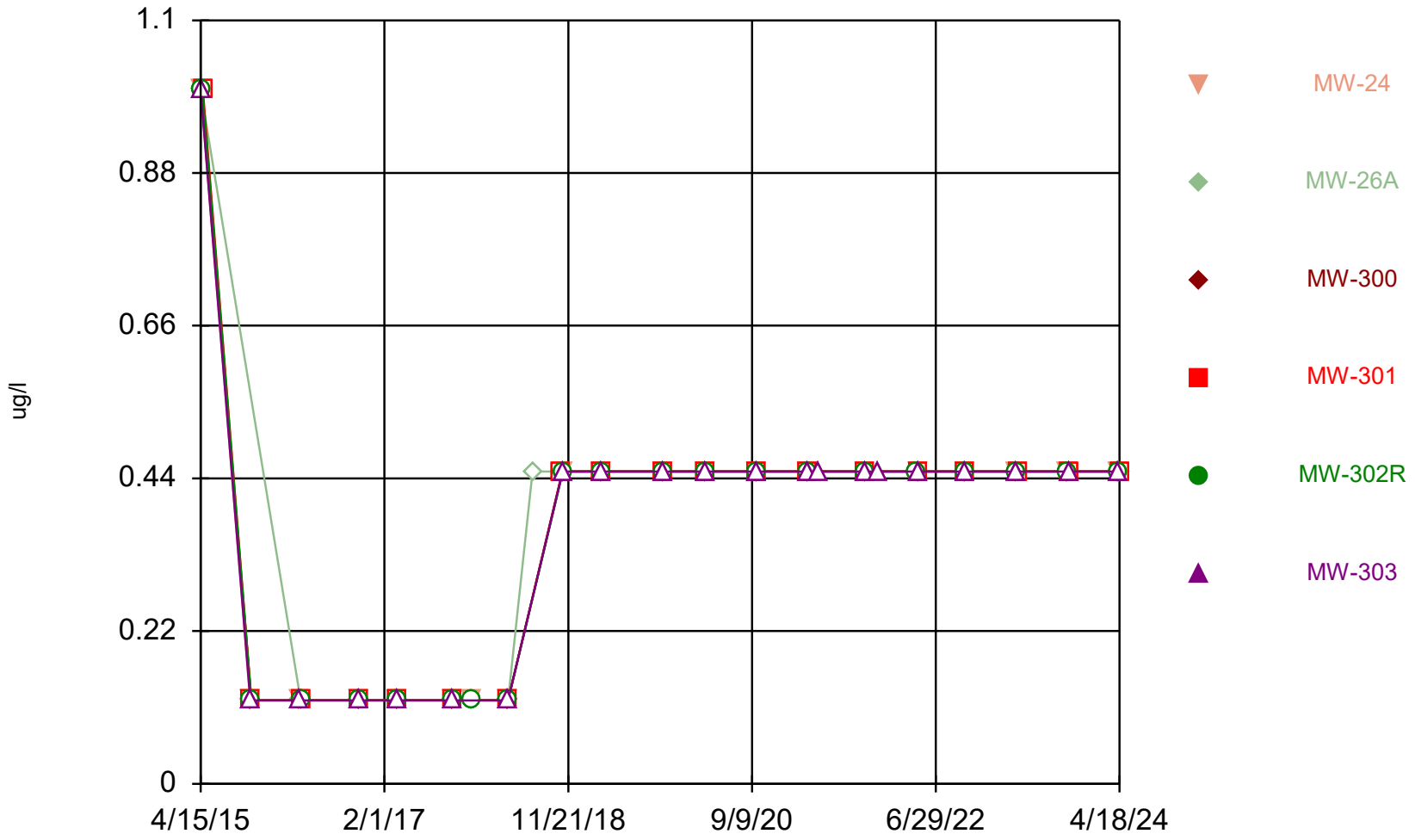
Time Series



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Linn County Data: CRLCSWA_Groundwater Database

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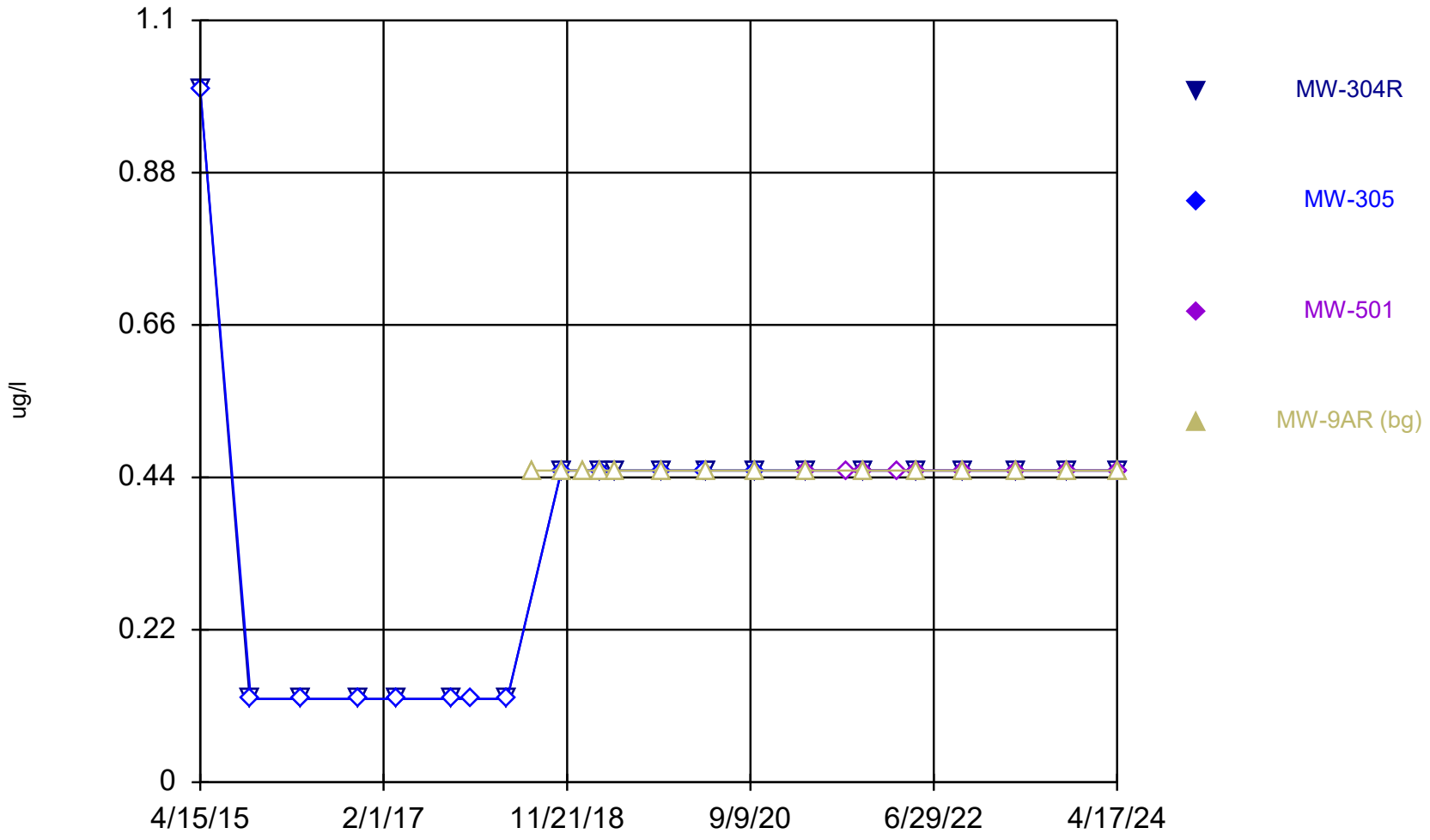
Time Series



Constituent: 1,1,2-Trichloroethane Analysis Run 7/12/2024 2:50 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

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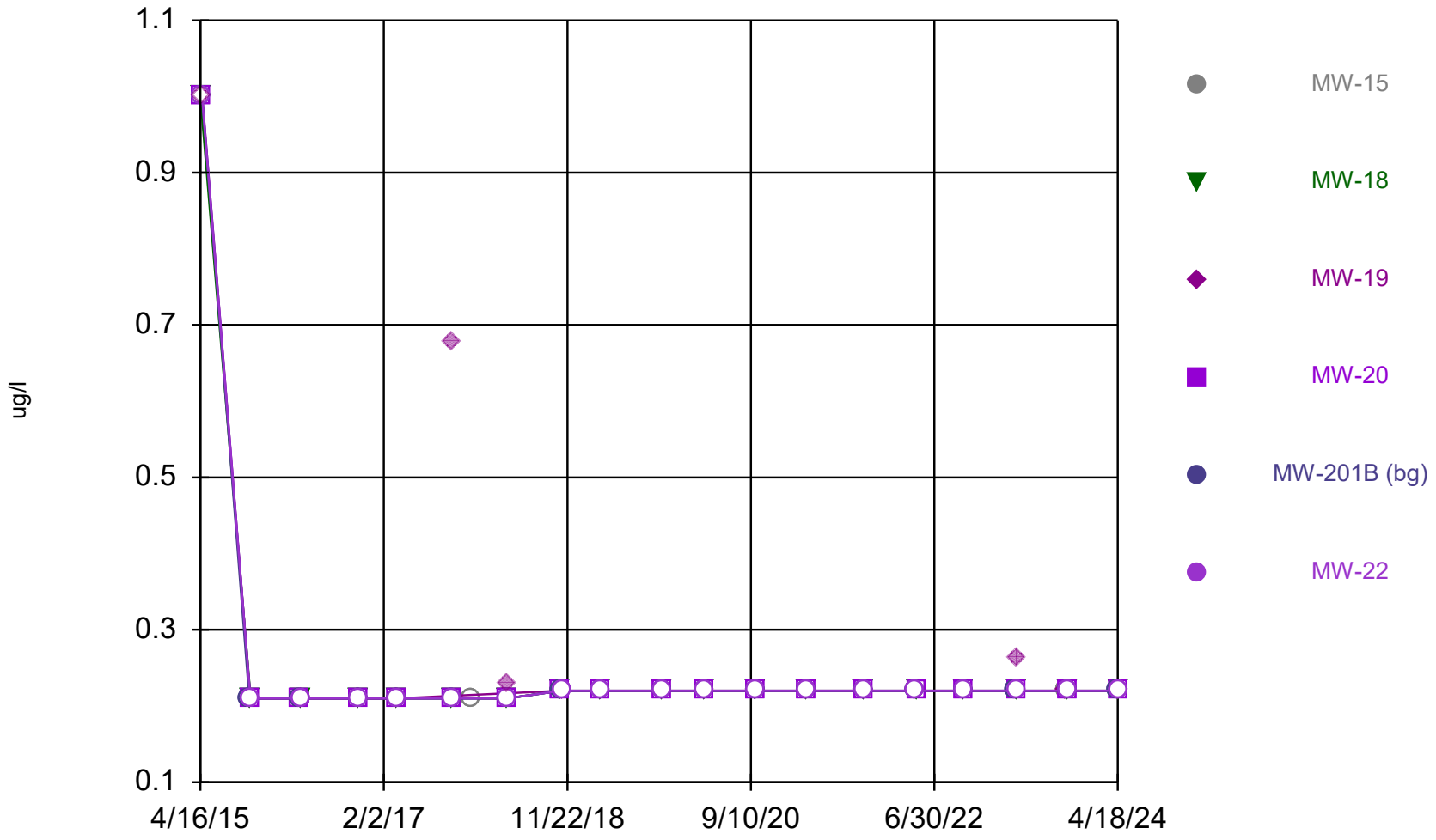
Time Series



Constituent: 1,1-Dichloroethane Analysis Run 7/12/2024 2:50 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

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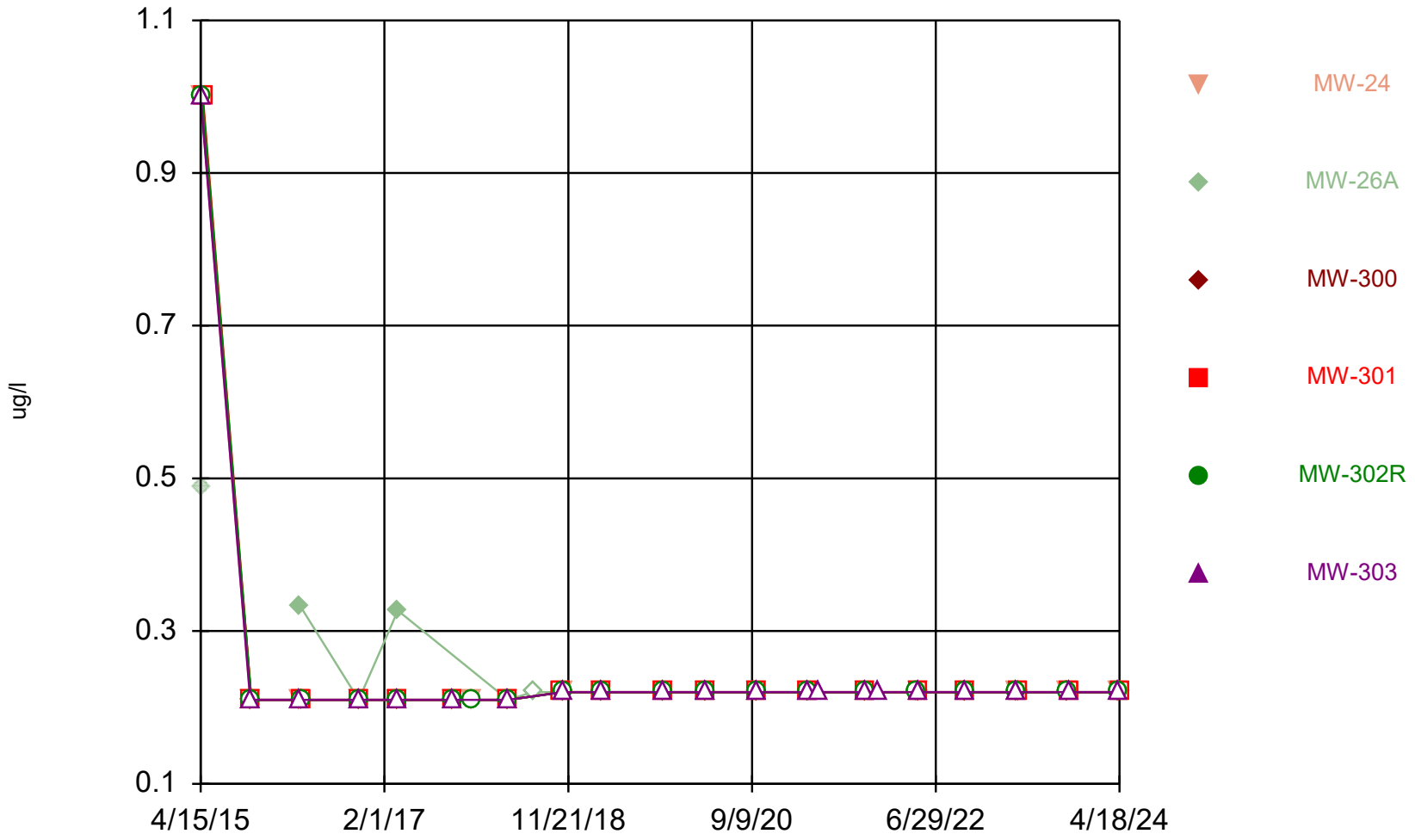
Time Series



Constituent: 1,1-Dichloroethane Analysis Run 7/12/2024 2:50 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

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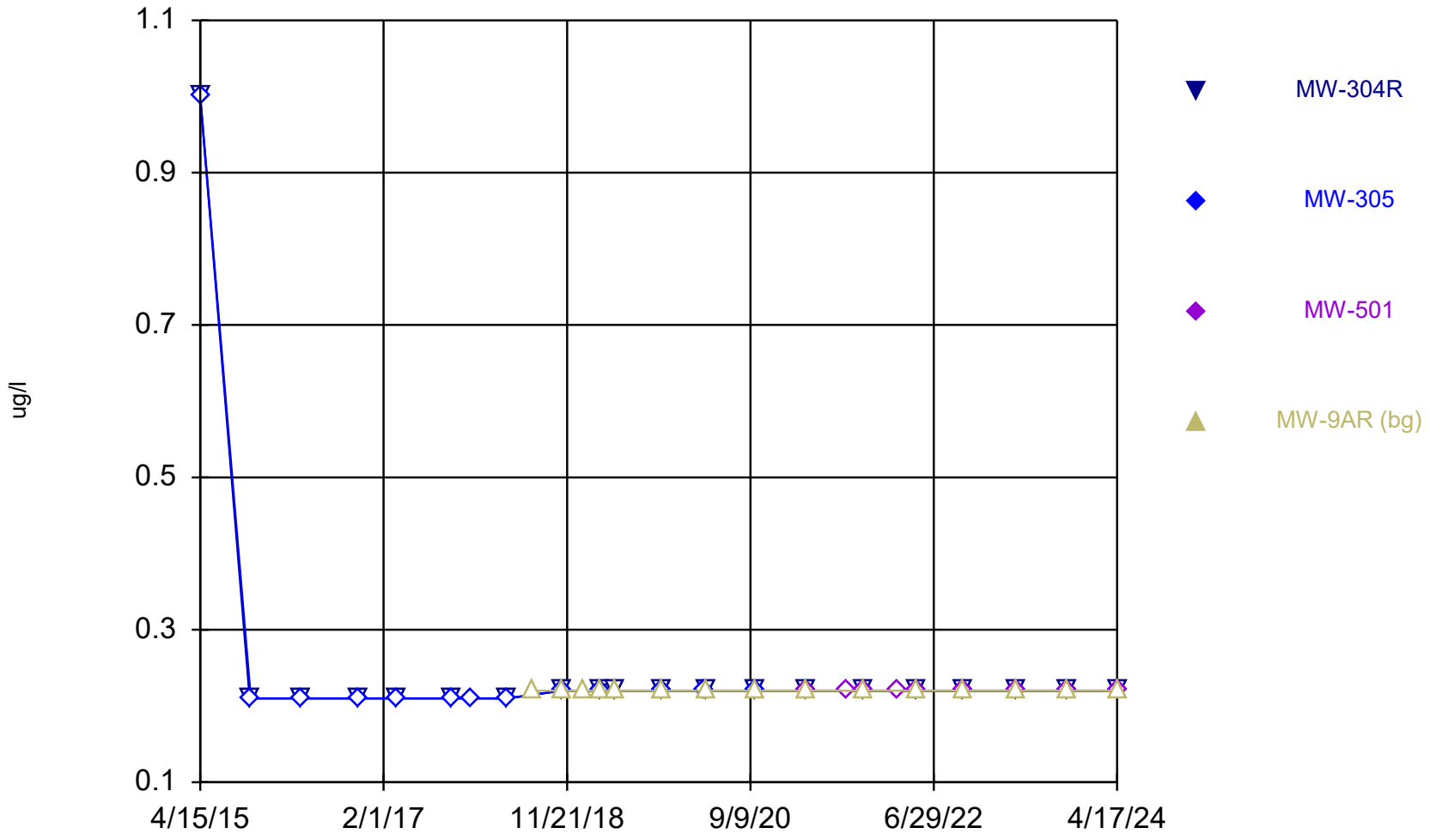
Time Series



Constituent: 1,1-Dichloroethane Analysis Run 7/12/2024 2:50 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

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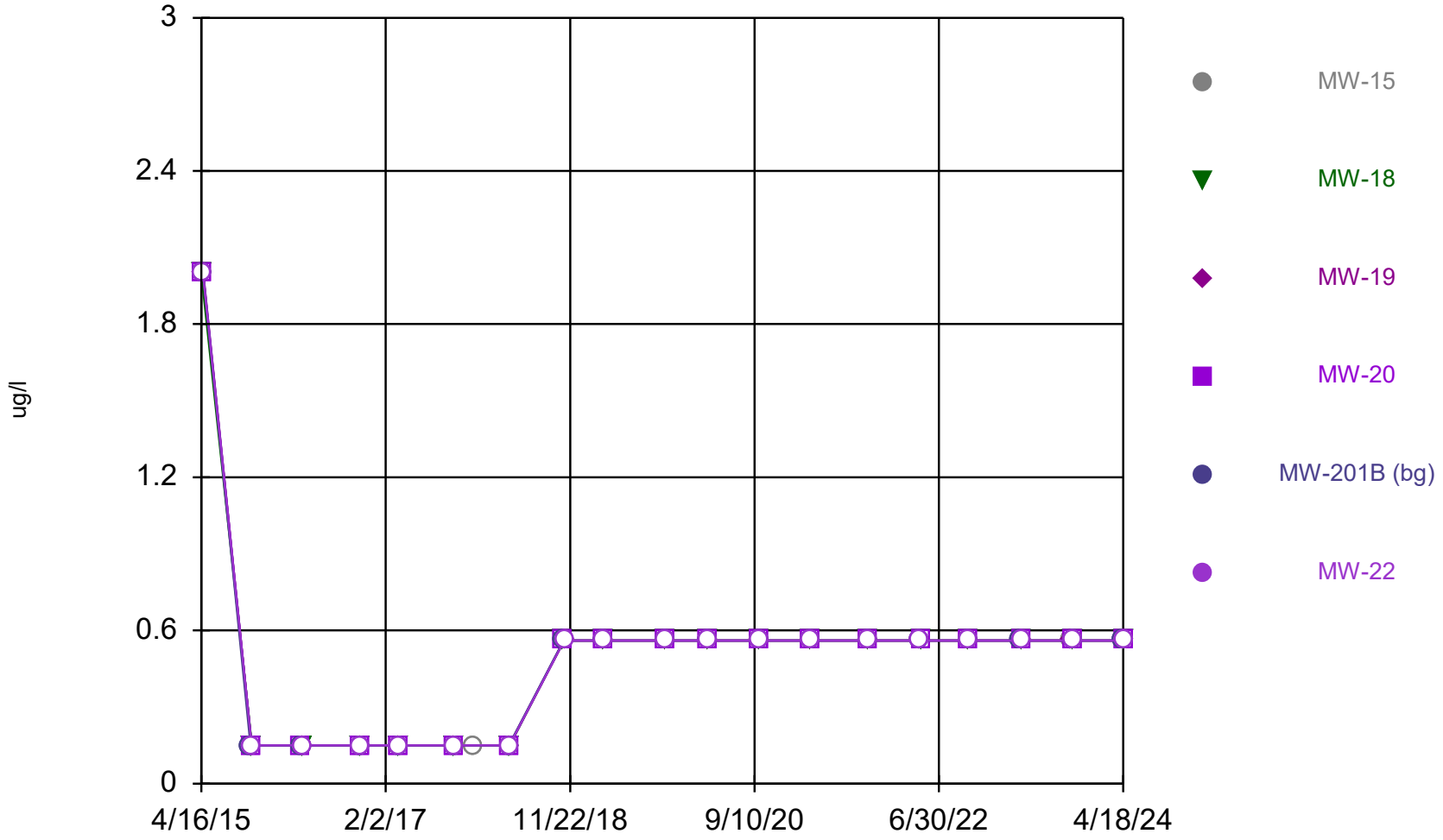
Time Series

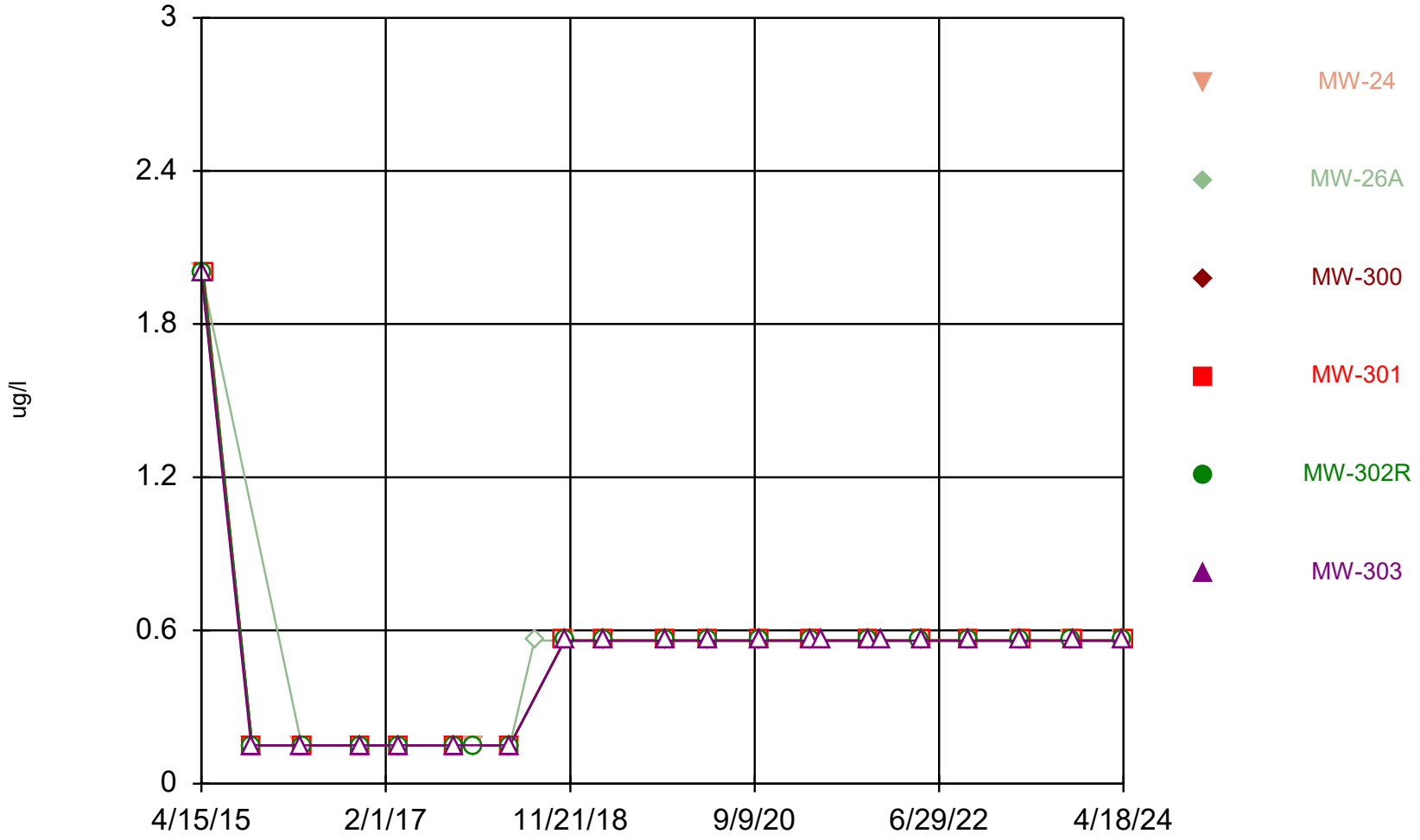


Constituent: 1,1-Dichloroethene Analysis Run 7/12/2024 2:50 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



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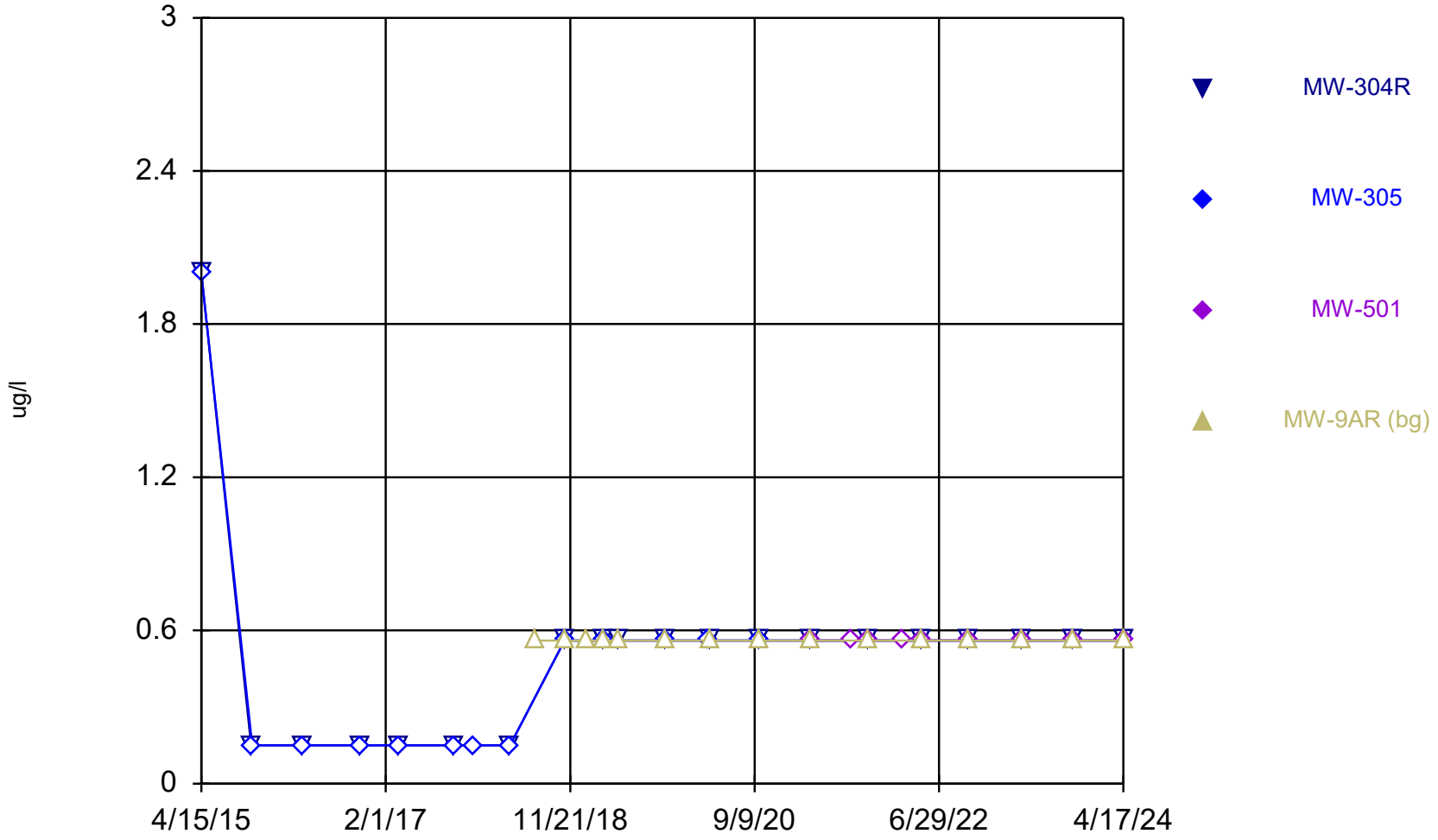
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



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Linn County Data: CRLCSWA_Groundwater Database

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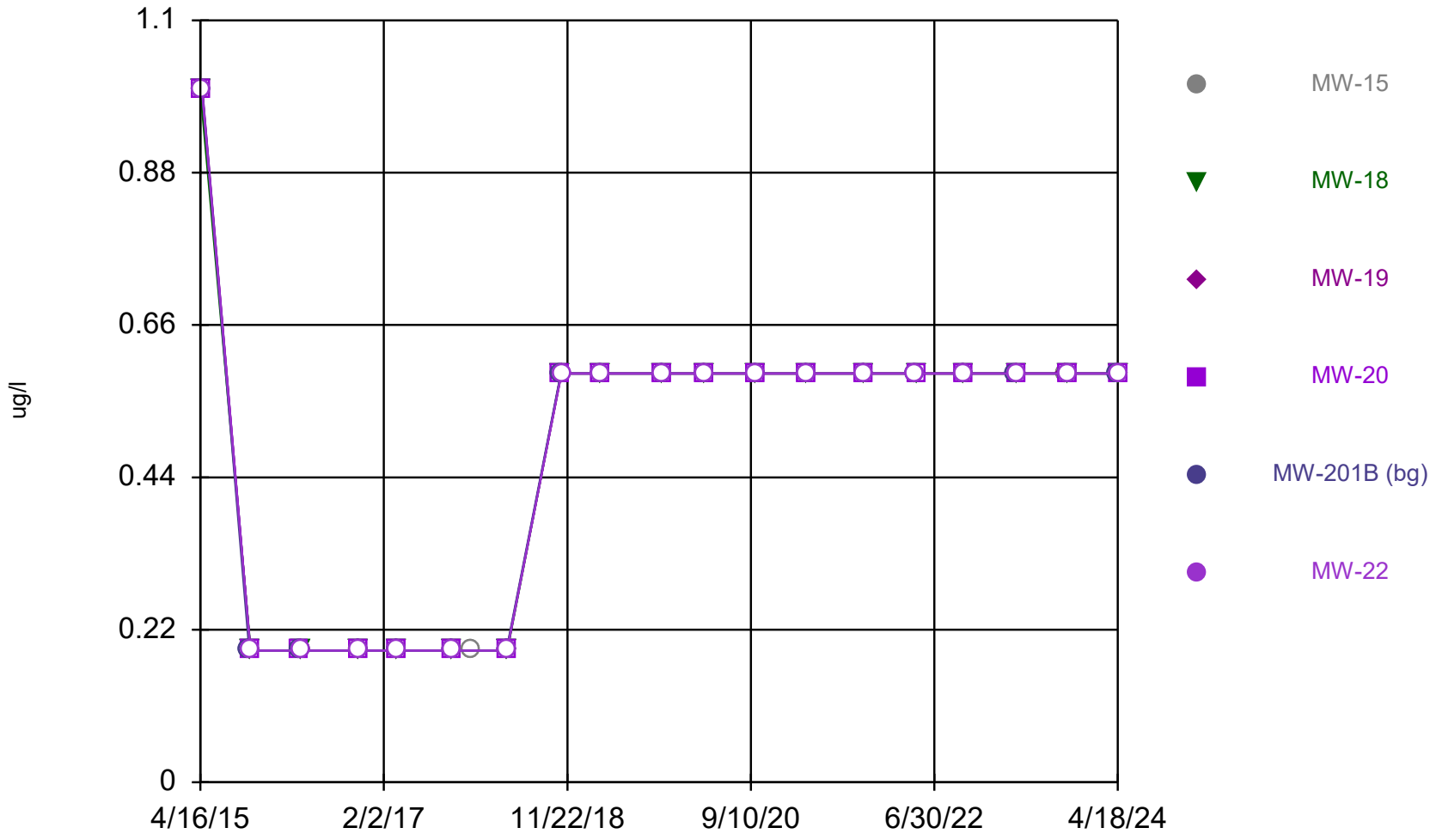

Constituent: 1,2,3-Trichloropropane Analysis Run 7/12/2024 2:50 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

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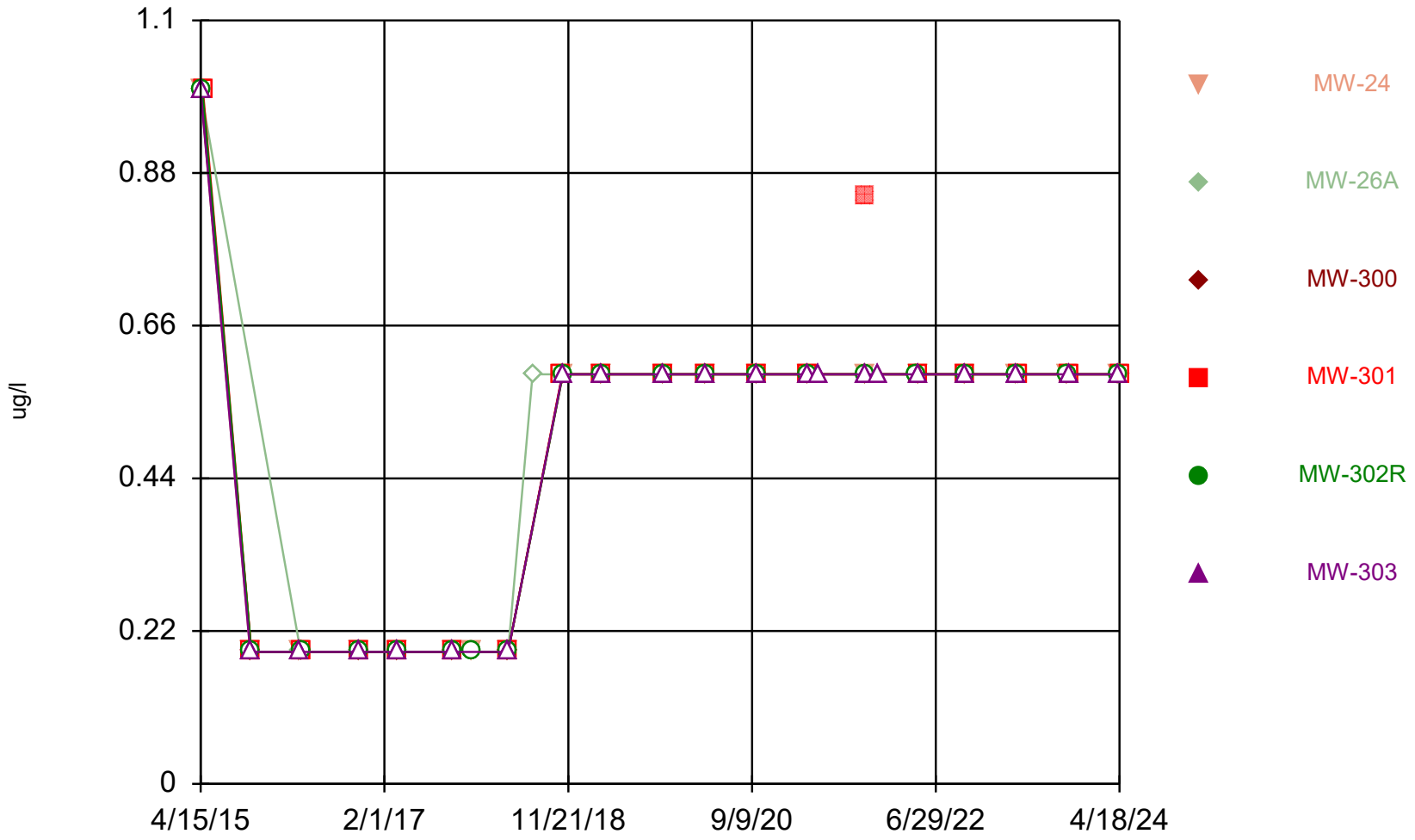
Time Series



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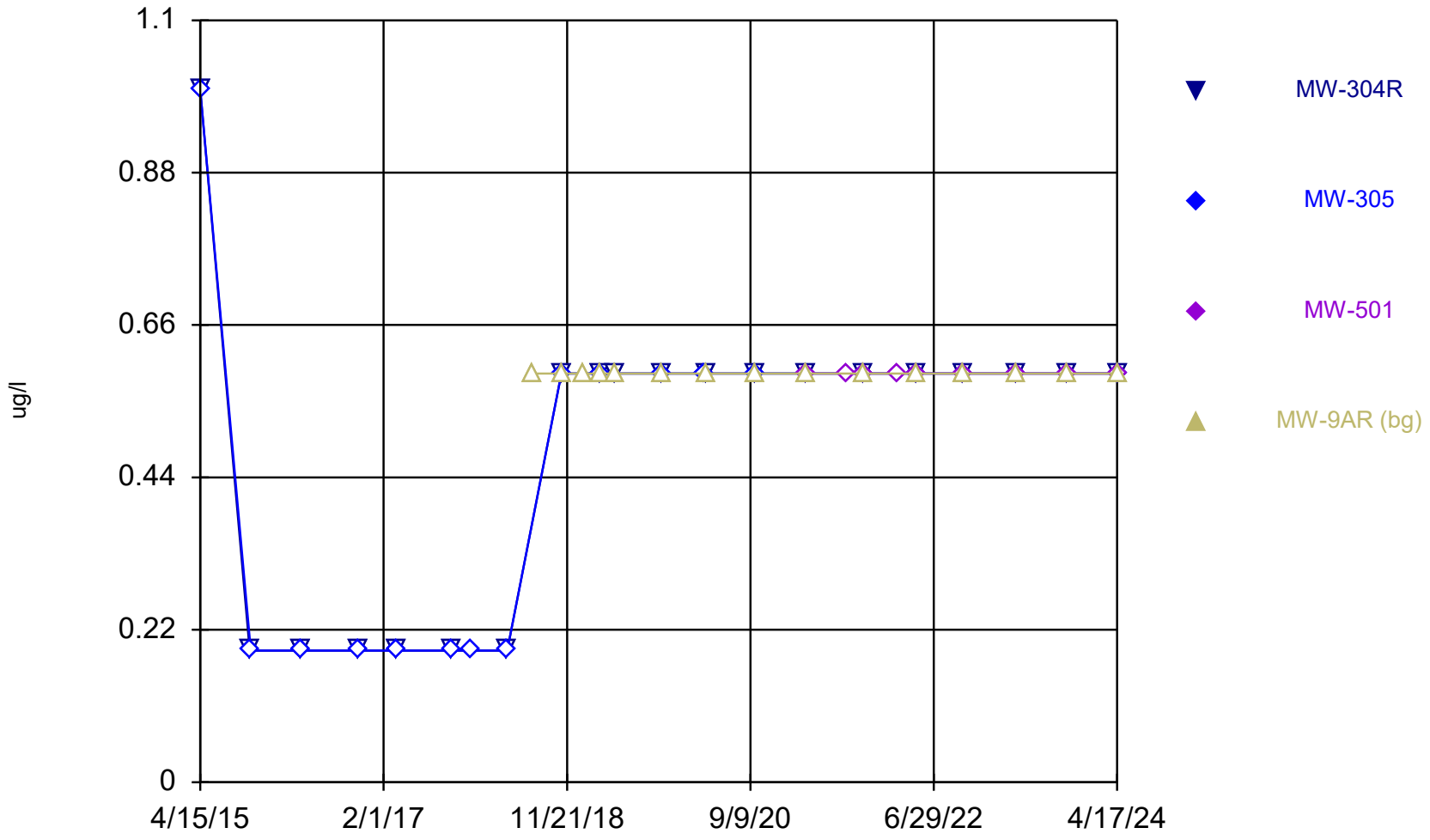
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

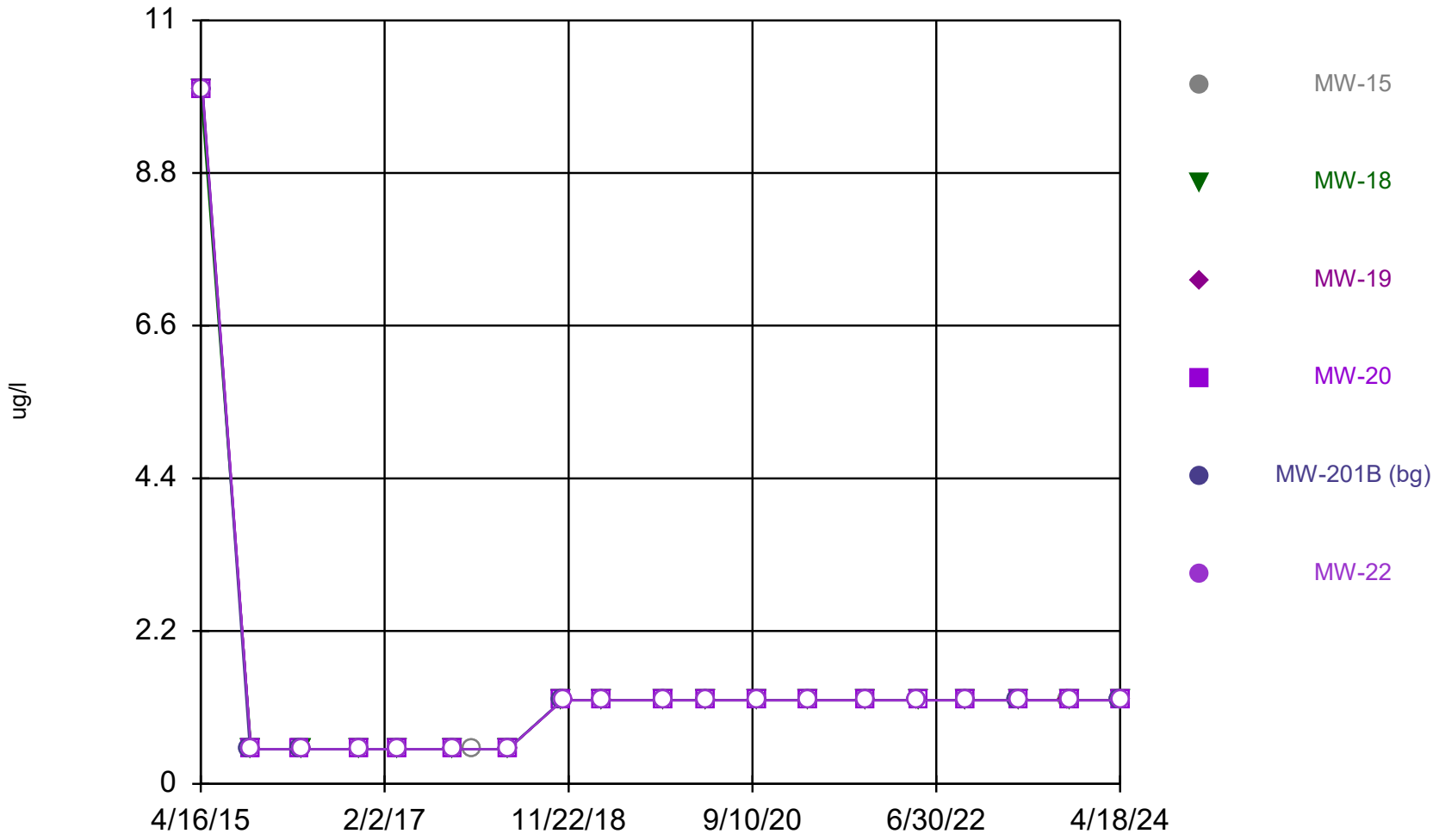


Constituent: 1,2,3-Trichloropropane Analysis Run 7/12/2024 2:50 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

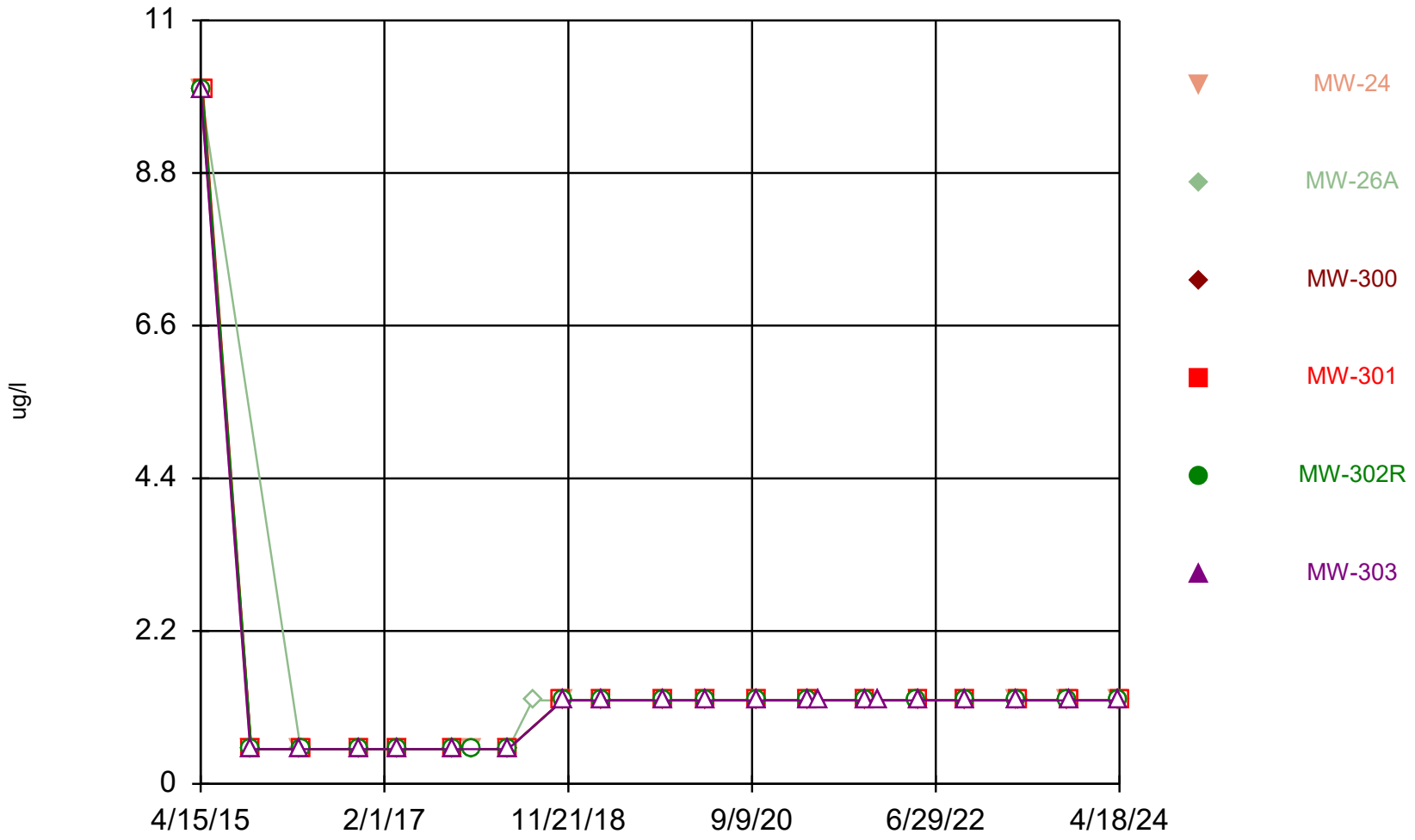


Constituent: 1,2-Dibromo-3-chloropropane Analysis Run 7/12/2024 2:50 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

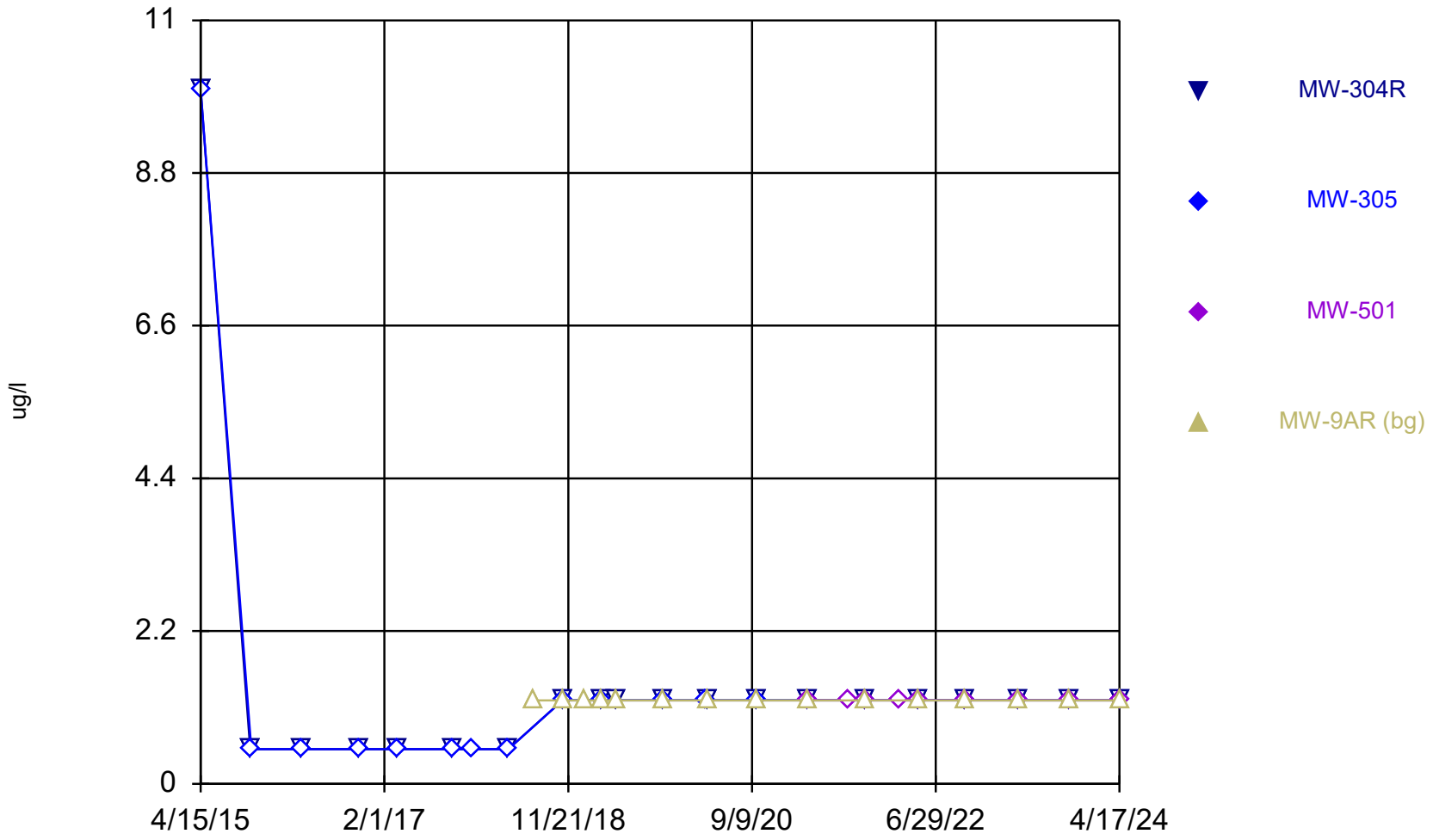


Constituent: 1,2-Dibromo-3-chloropropane Analysis Run 7/12/2024 2:50 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

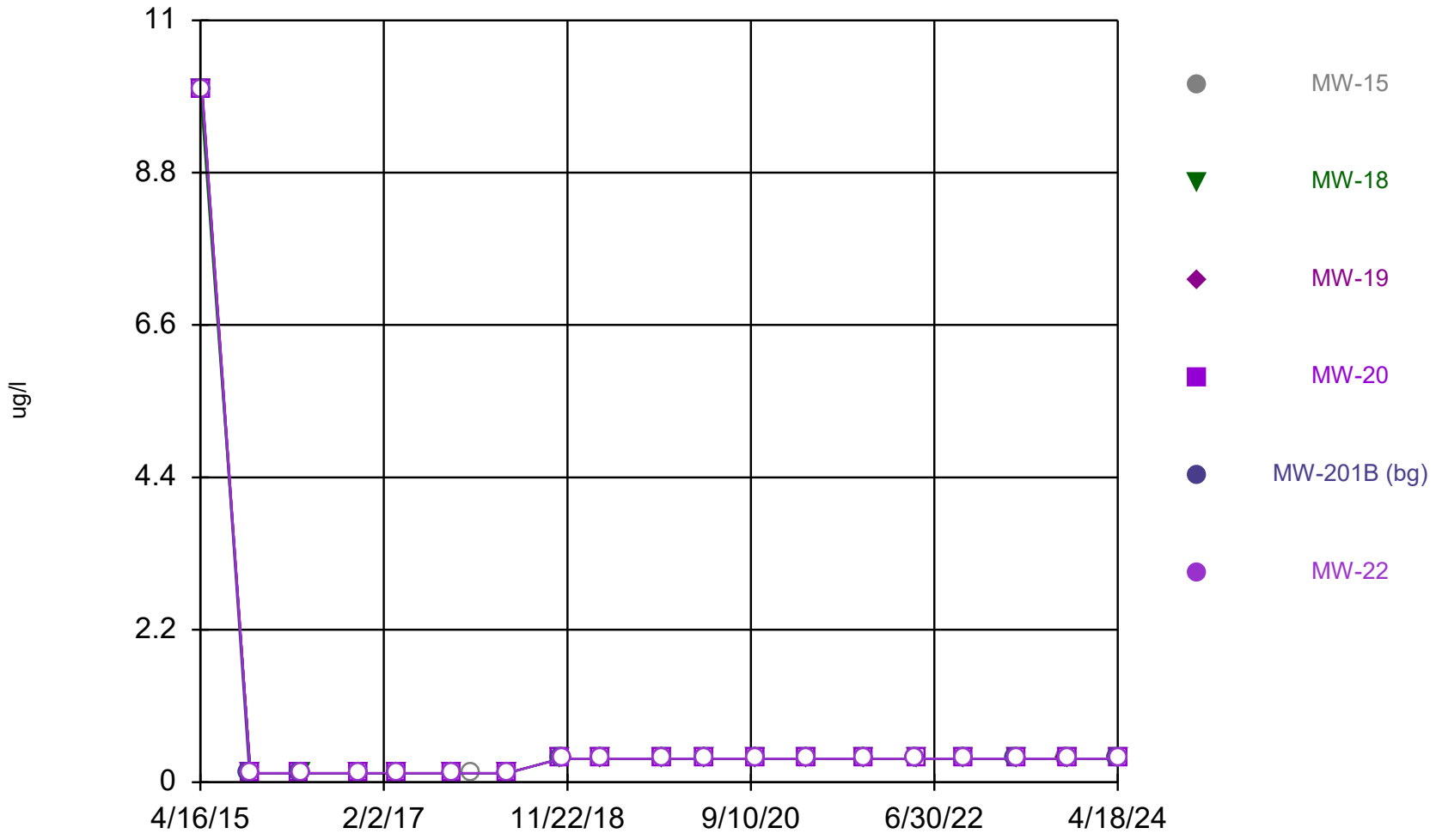


Constituent: 1,2-Dibromo-3-chloropropane Analysis Run 7/12/2024 2:50 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

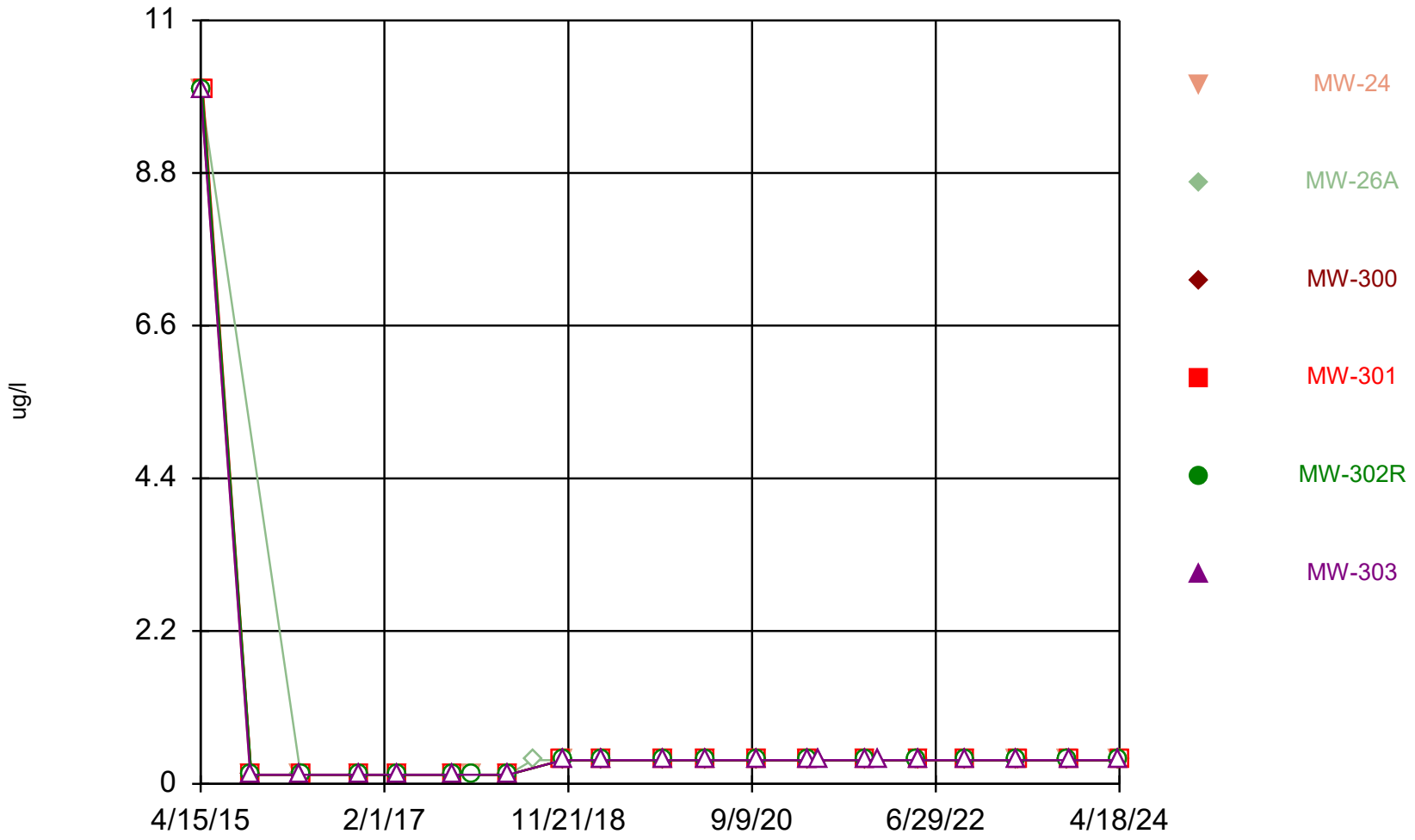


Constituent: 1,2-Dibromoethane [EDB] Analysis Run 7/12/2024 2:50 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

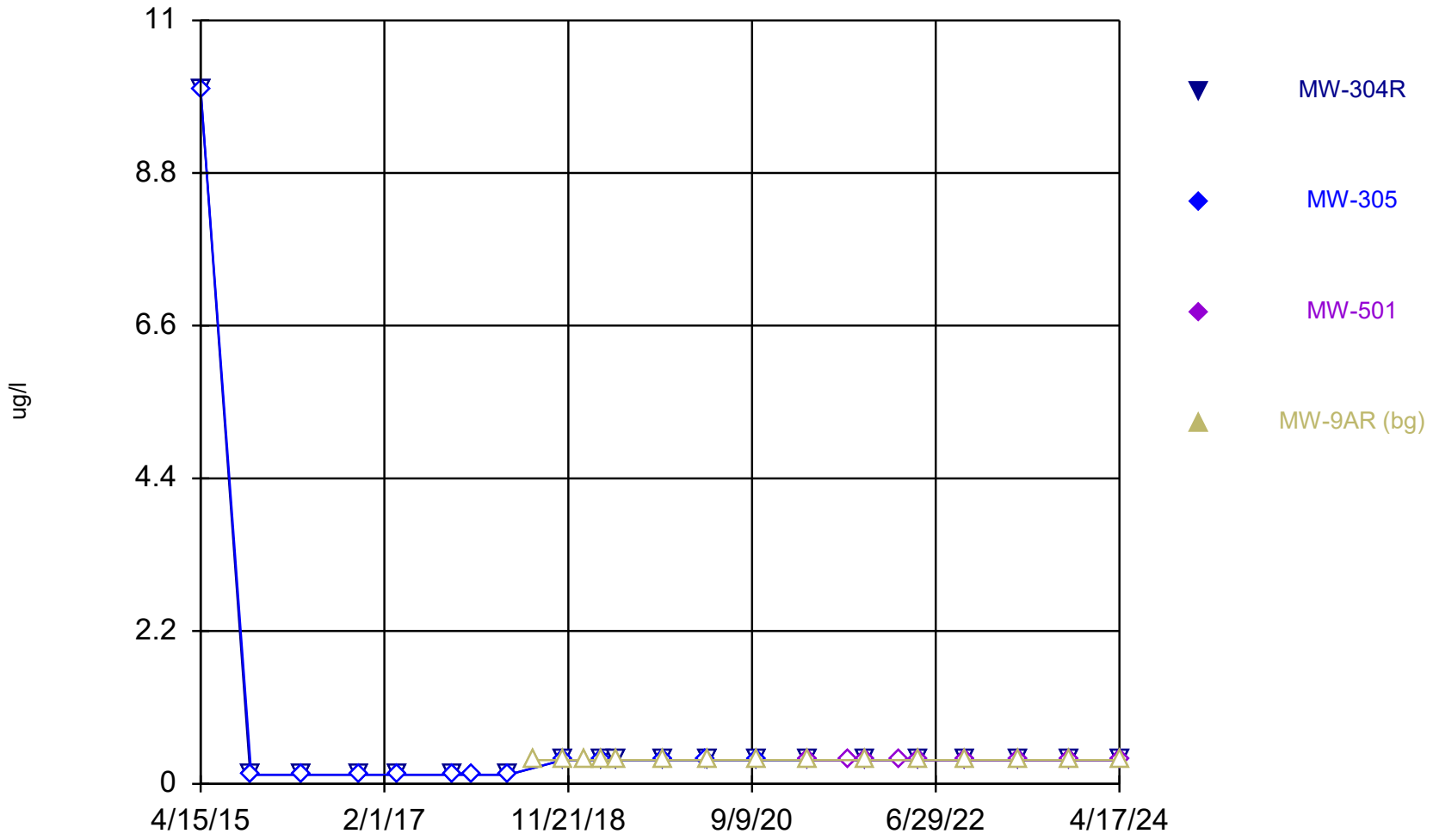


Constituent: 1,2-Dibromoethane [EDB] Analysis Run 7/12/2024 2:50 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



Constituent: 1,2-Dibromoethane [EDB] Analysis Run 7/12/2024 2:50 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

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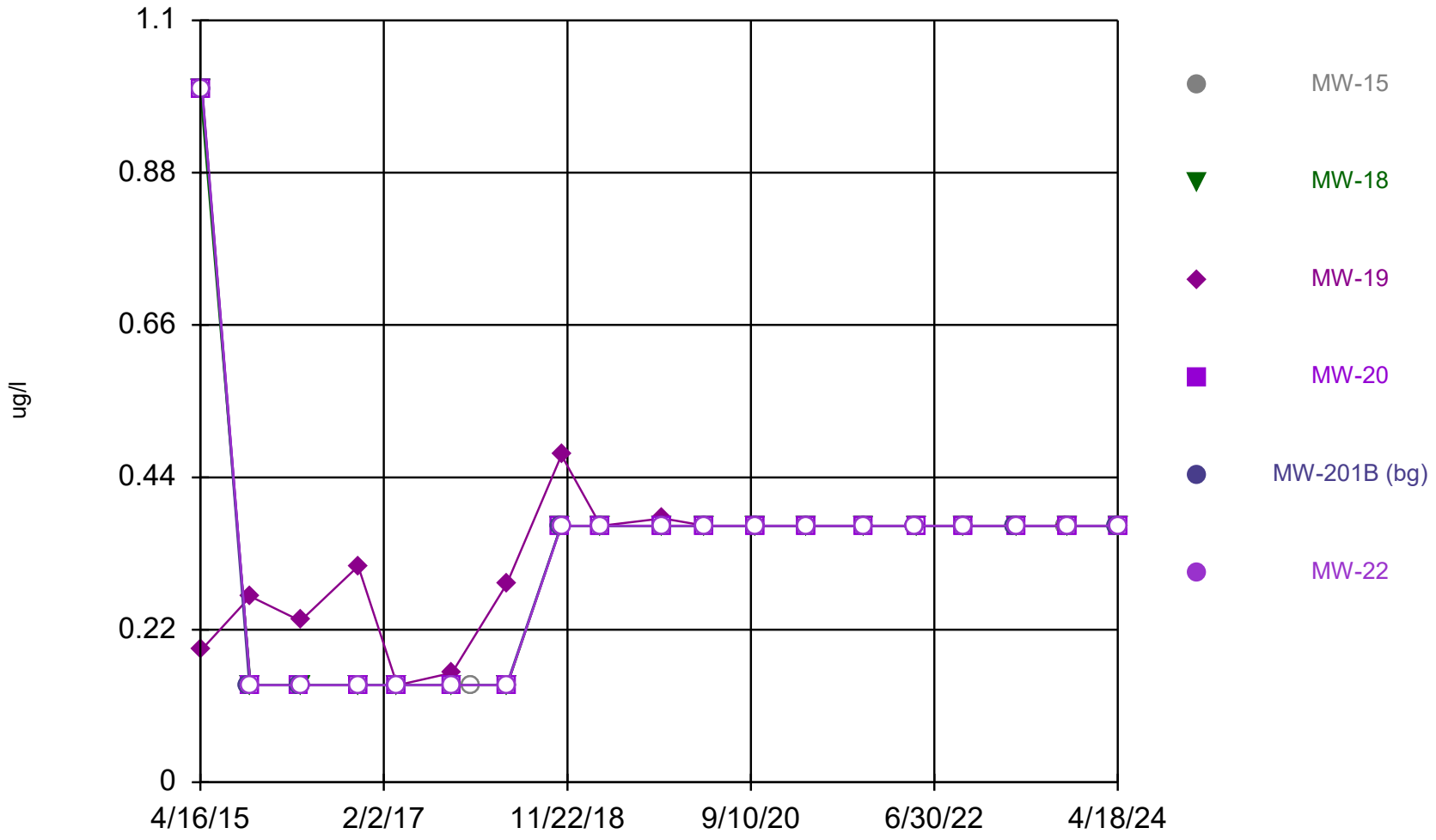
Hollow symbols indicate censored values.

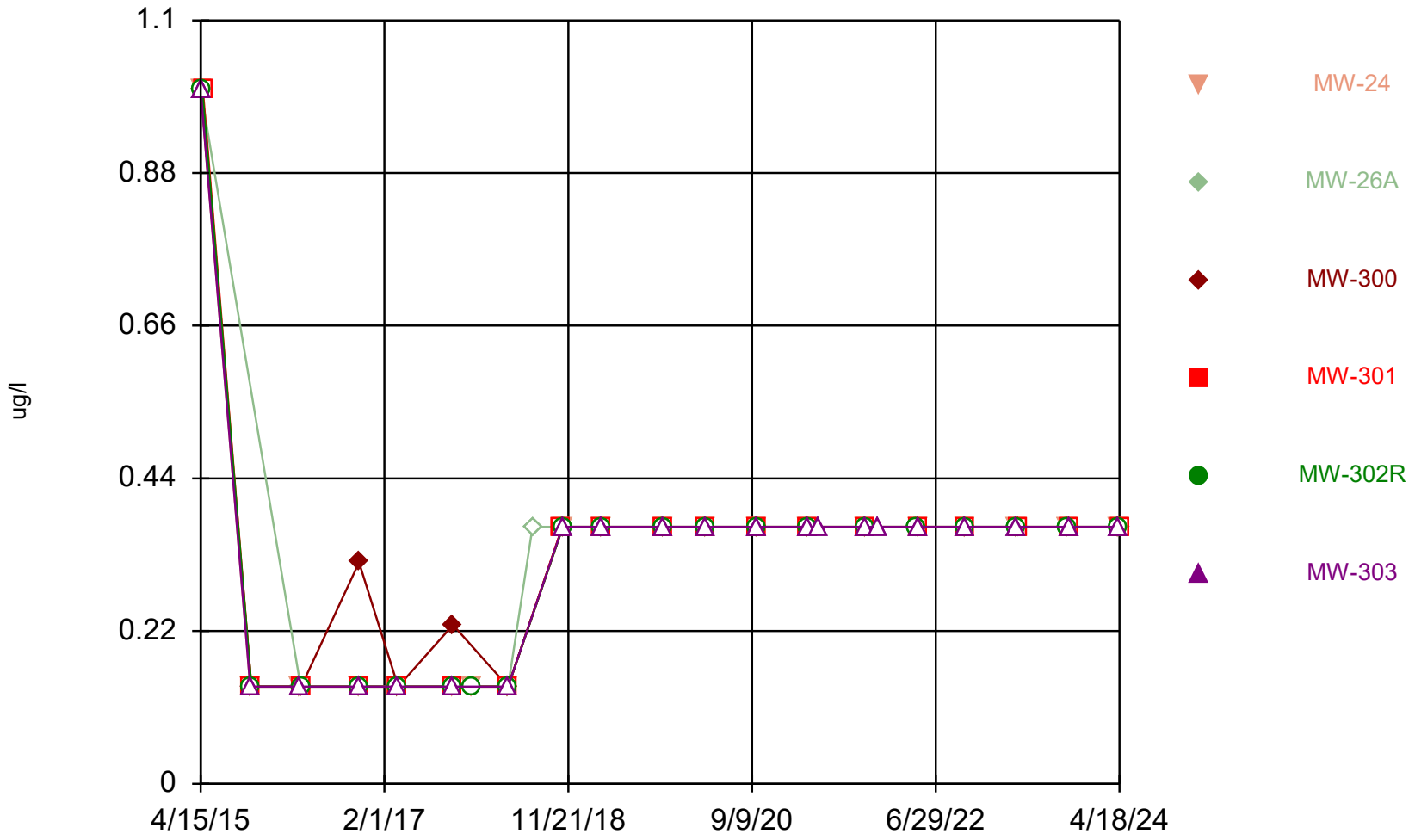
Time Series



Constituent: 1,2-Dichlorobenzene Analysis Run 7/12/2024 2:50 PM View: App I_VOCs
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



Constituent: 1,2-Dichlorobenzene Analysis Run 7/12/2024 2:50 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

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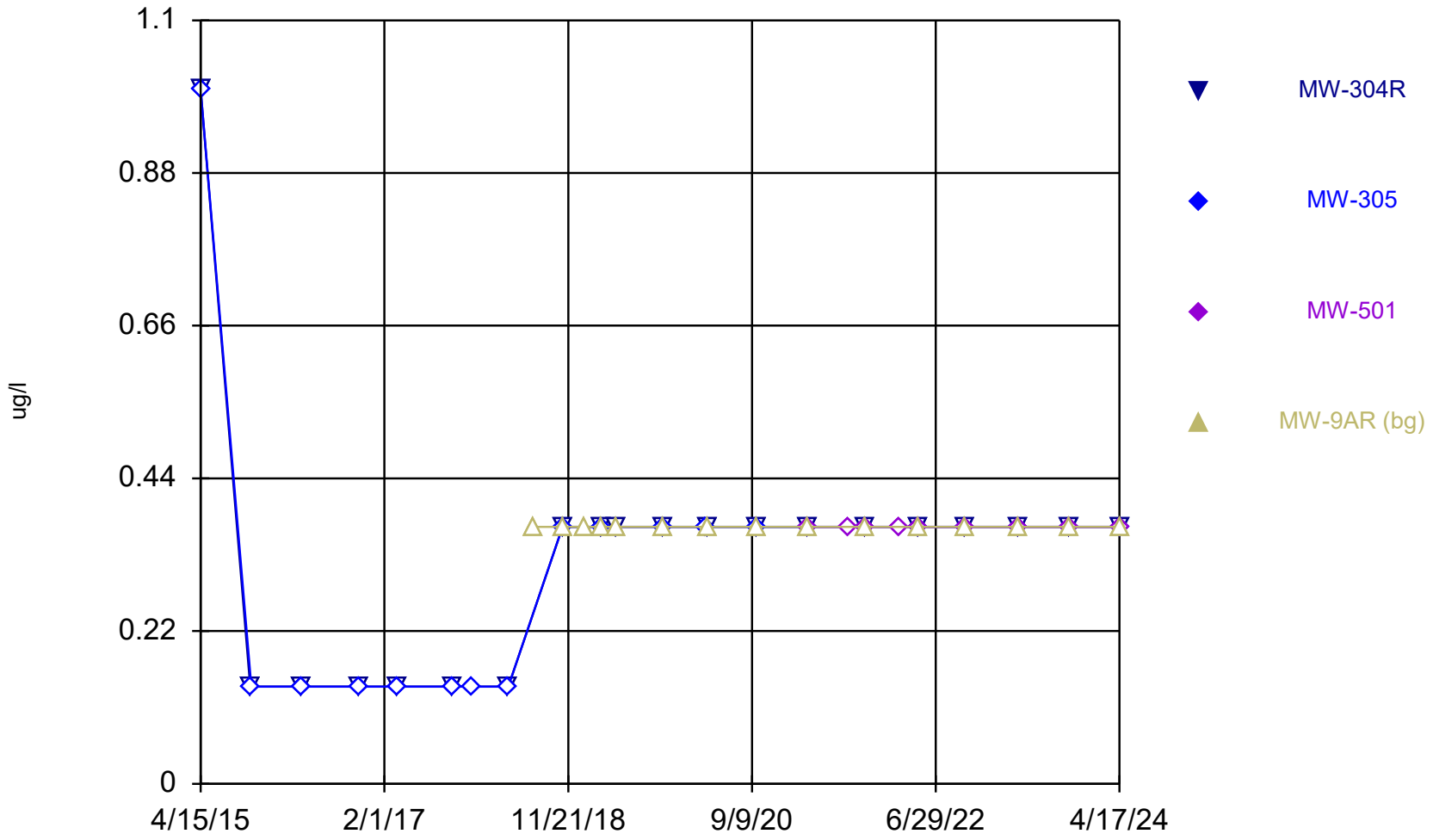
Time Series



Constituent: 1,2-Dichlorobenzene Analysis Run 7/12/2024 2:50 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

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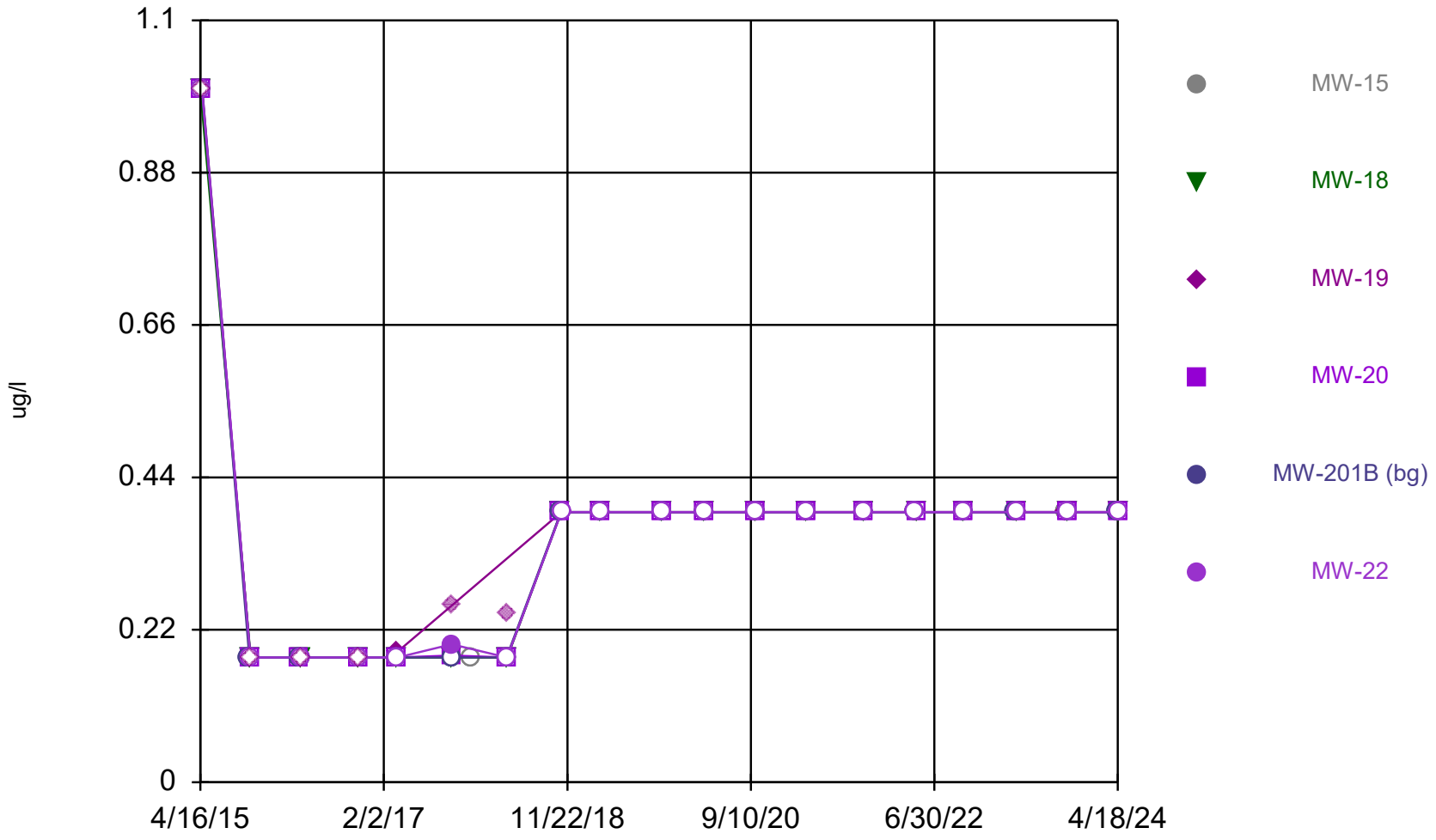
Hollow symbols indicate censored values.

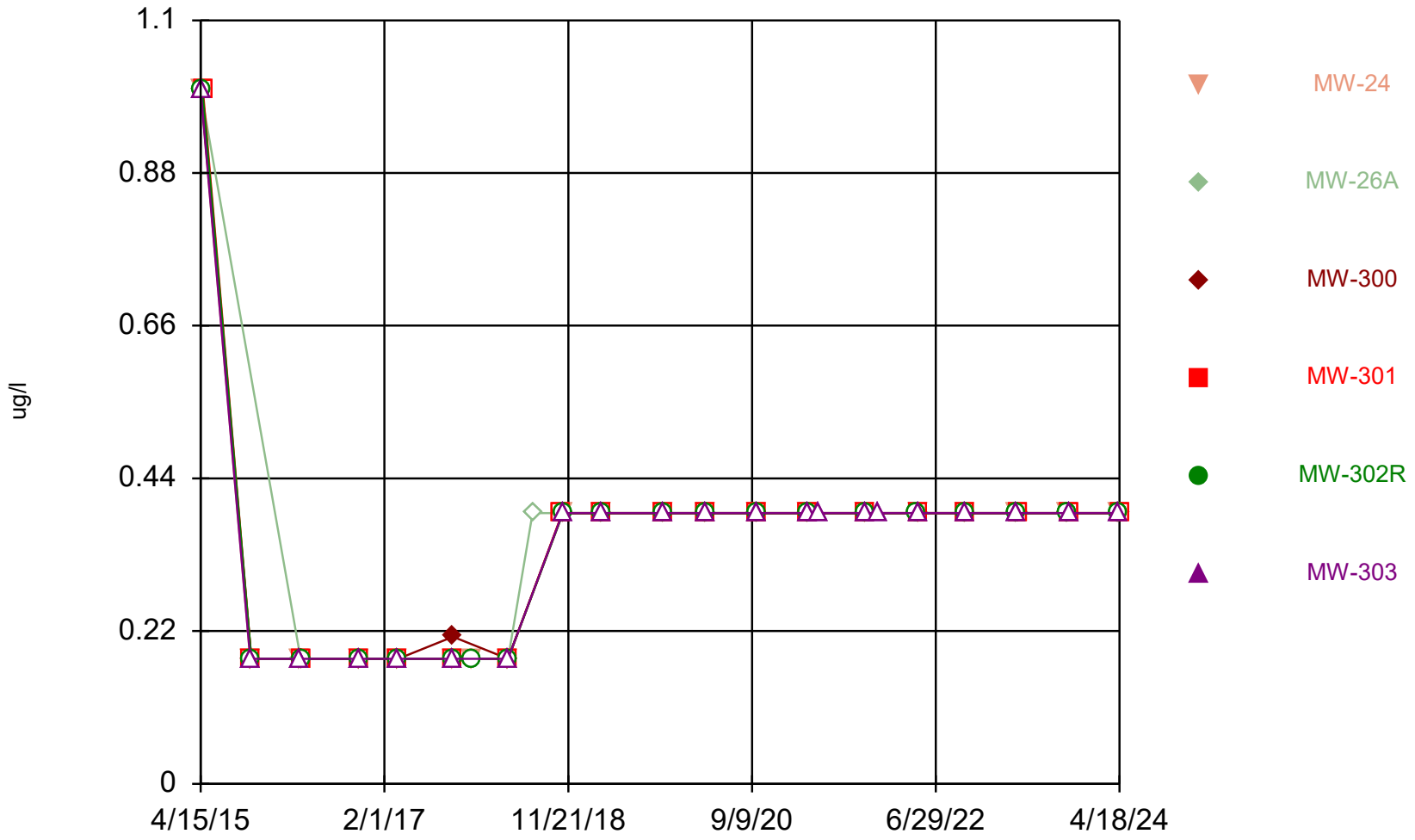
Time Series



Constituent: 1,2-Dichloroethane Analysis Run 7/12/2024 2:50 PM View: App I_VOCs
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

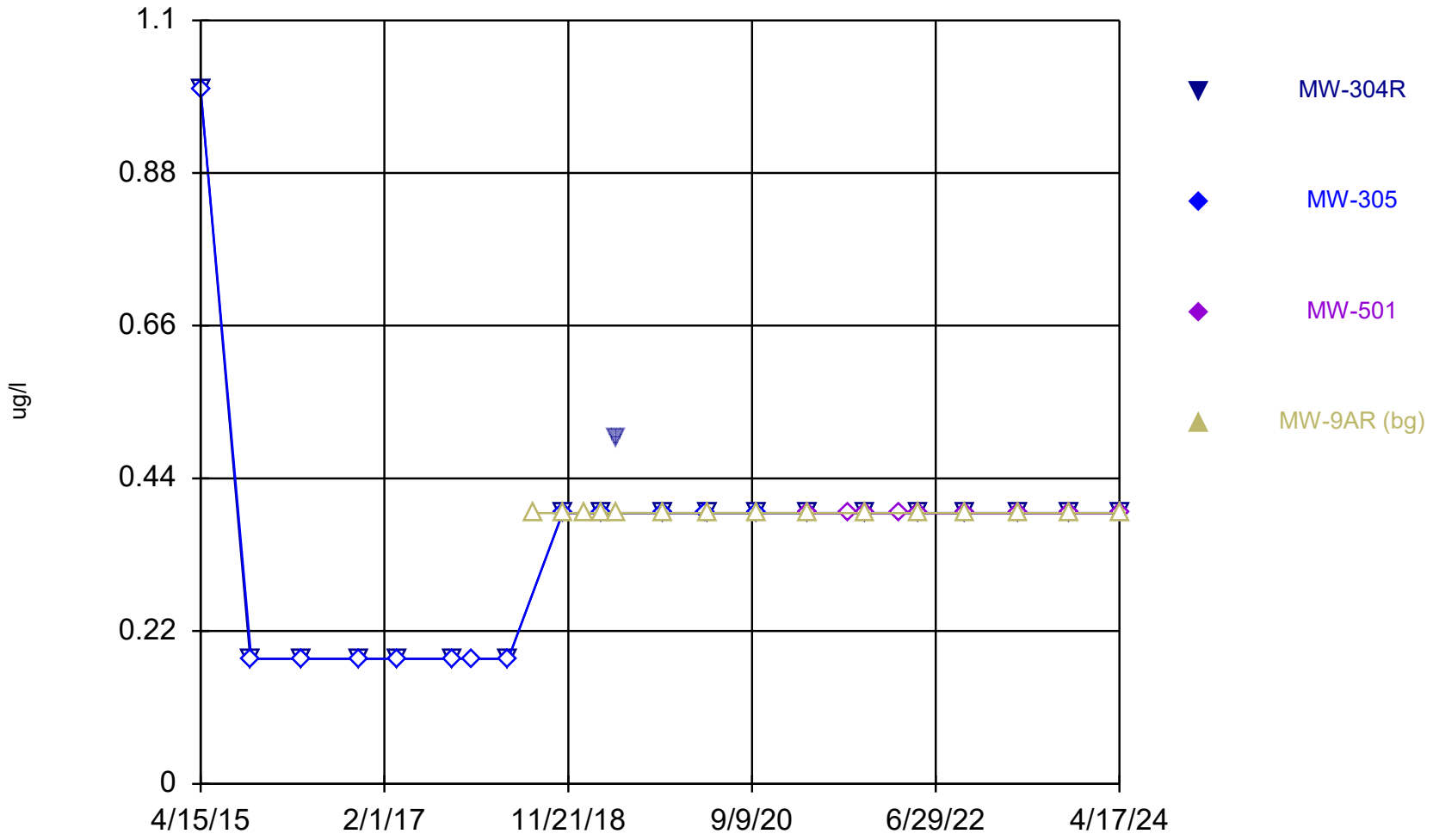


Constituent: 1,2-Dichloroethane Analysis Run 7/12/2024 2:50 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

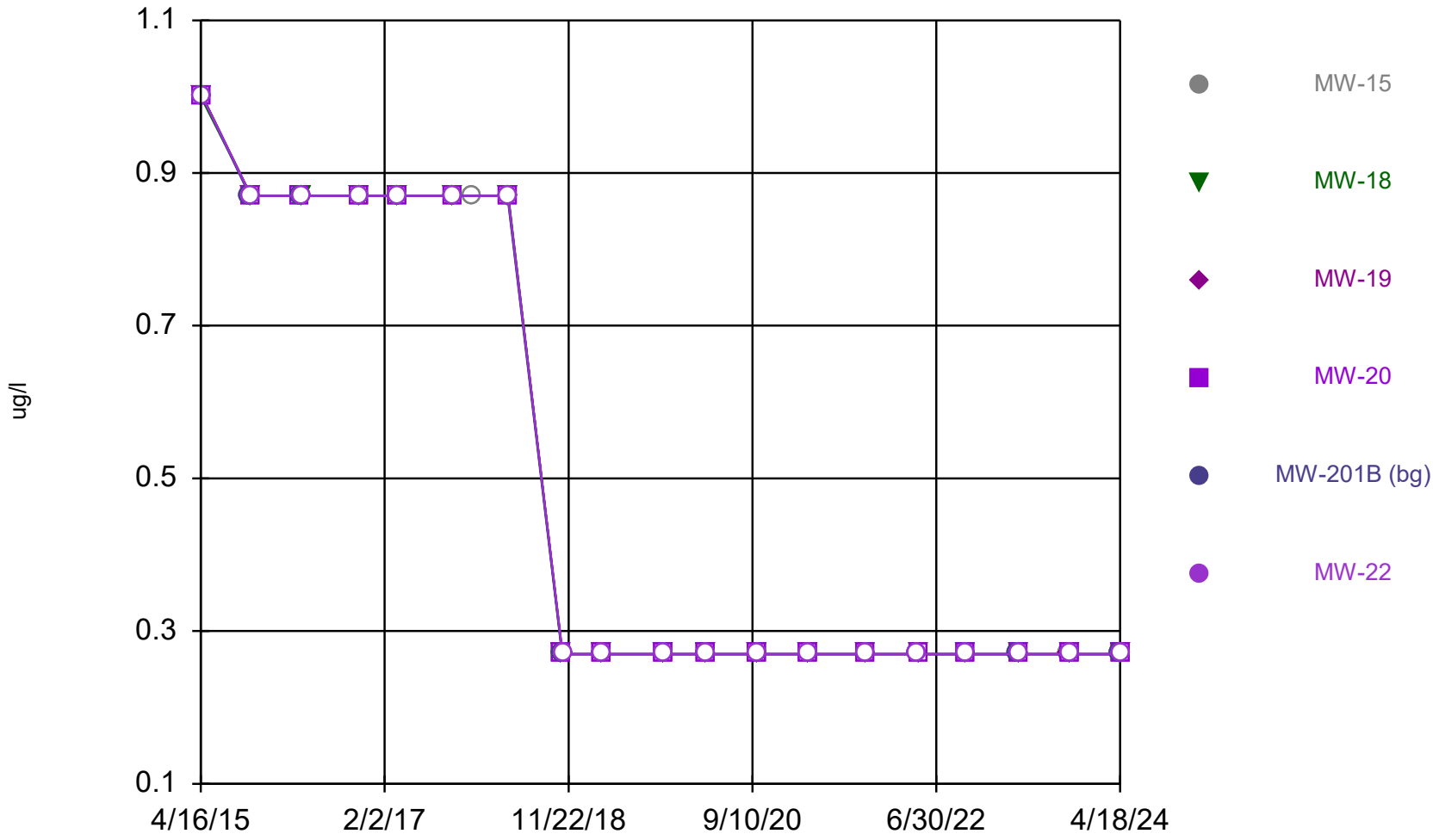


Constituent: 1,2-Dichloroethane Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

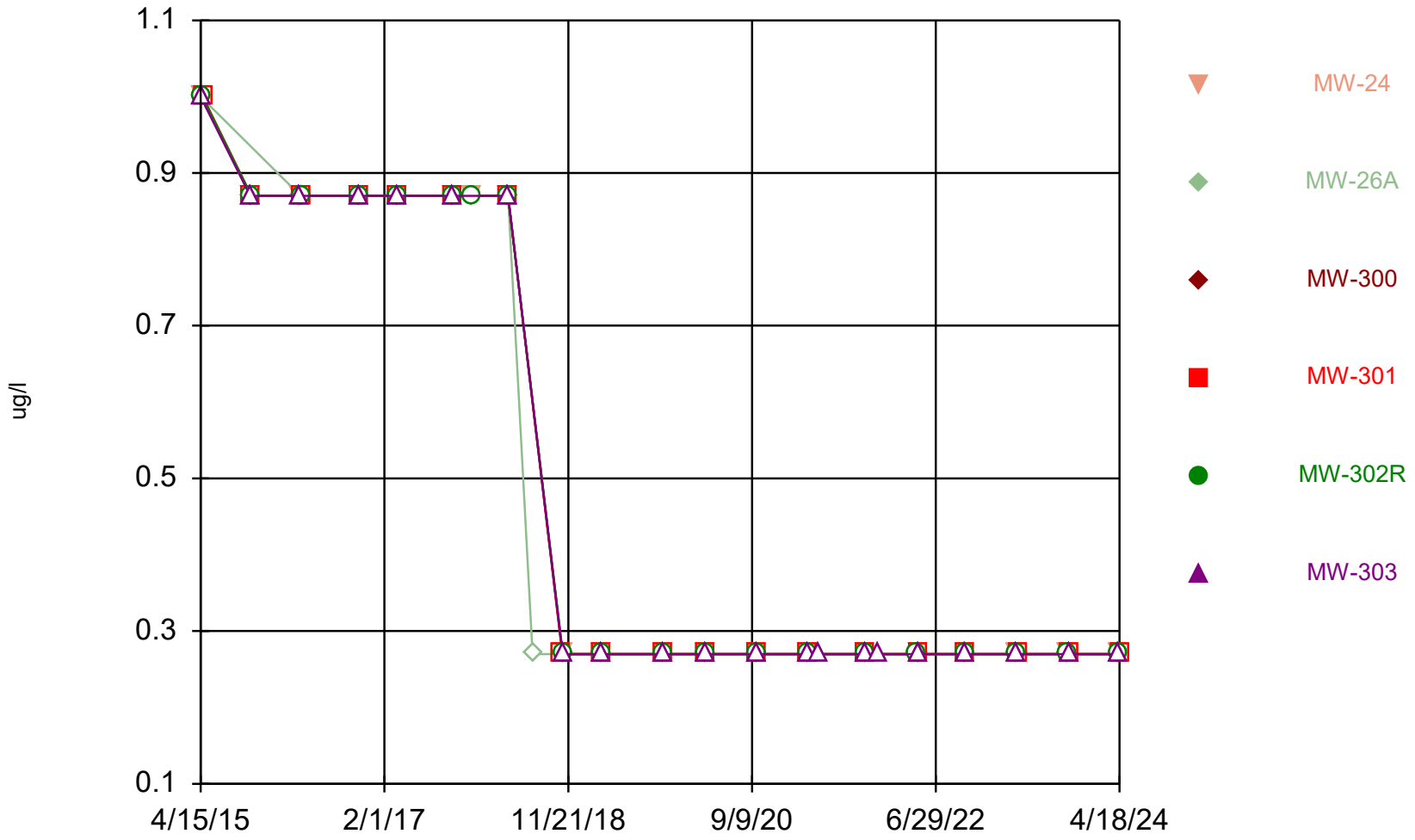


Constituent: 1,2-Dichloropropane Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

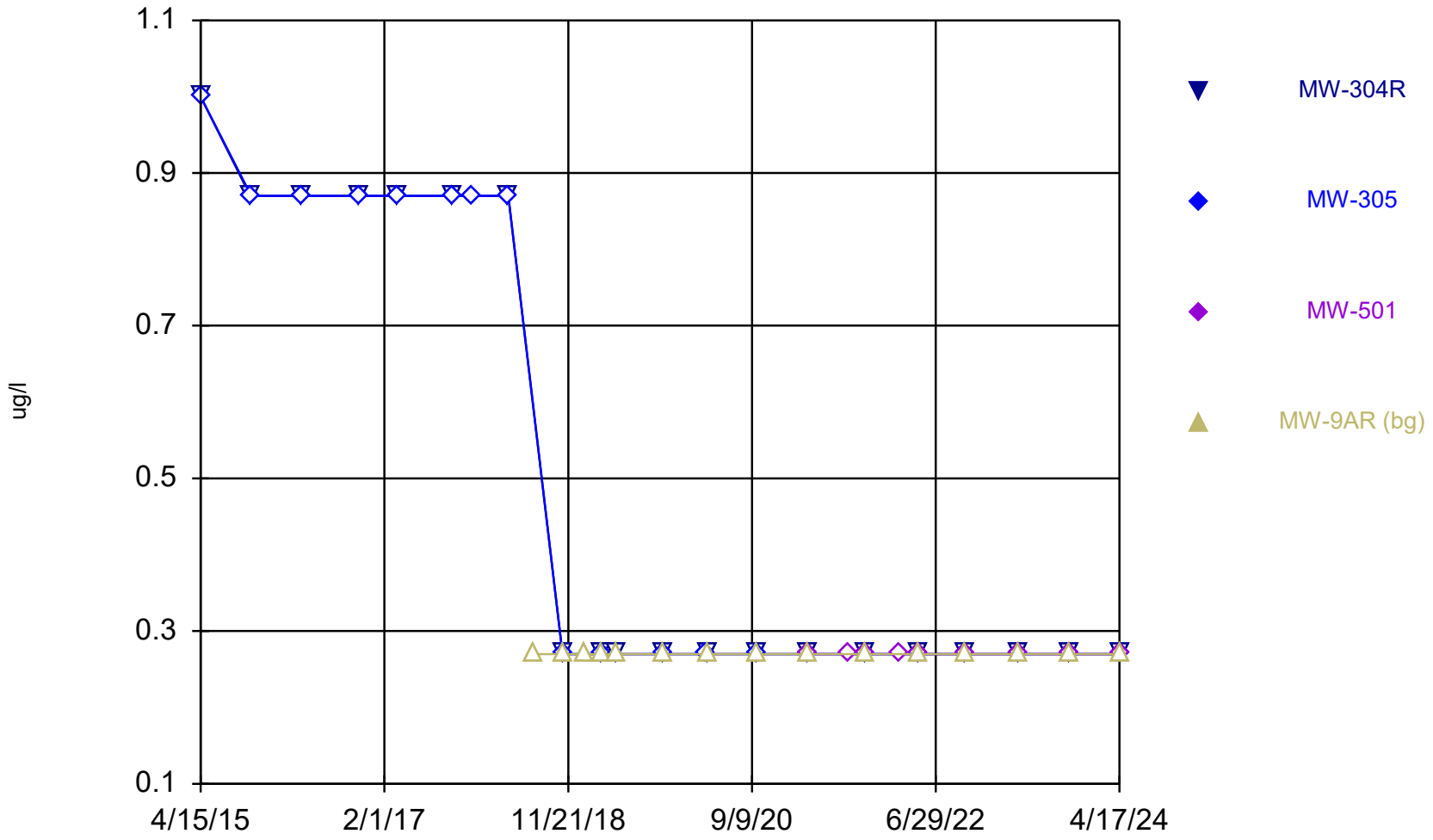


Constituent: 1,2-Dichloropropane Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



Constituent: 1,2-Dichloropropane Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

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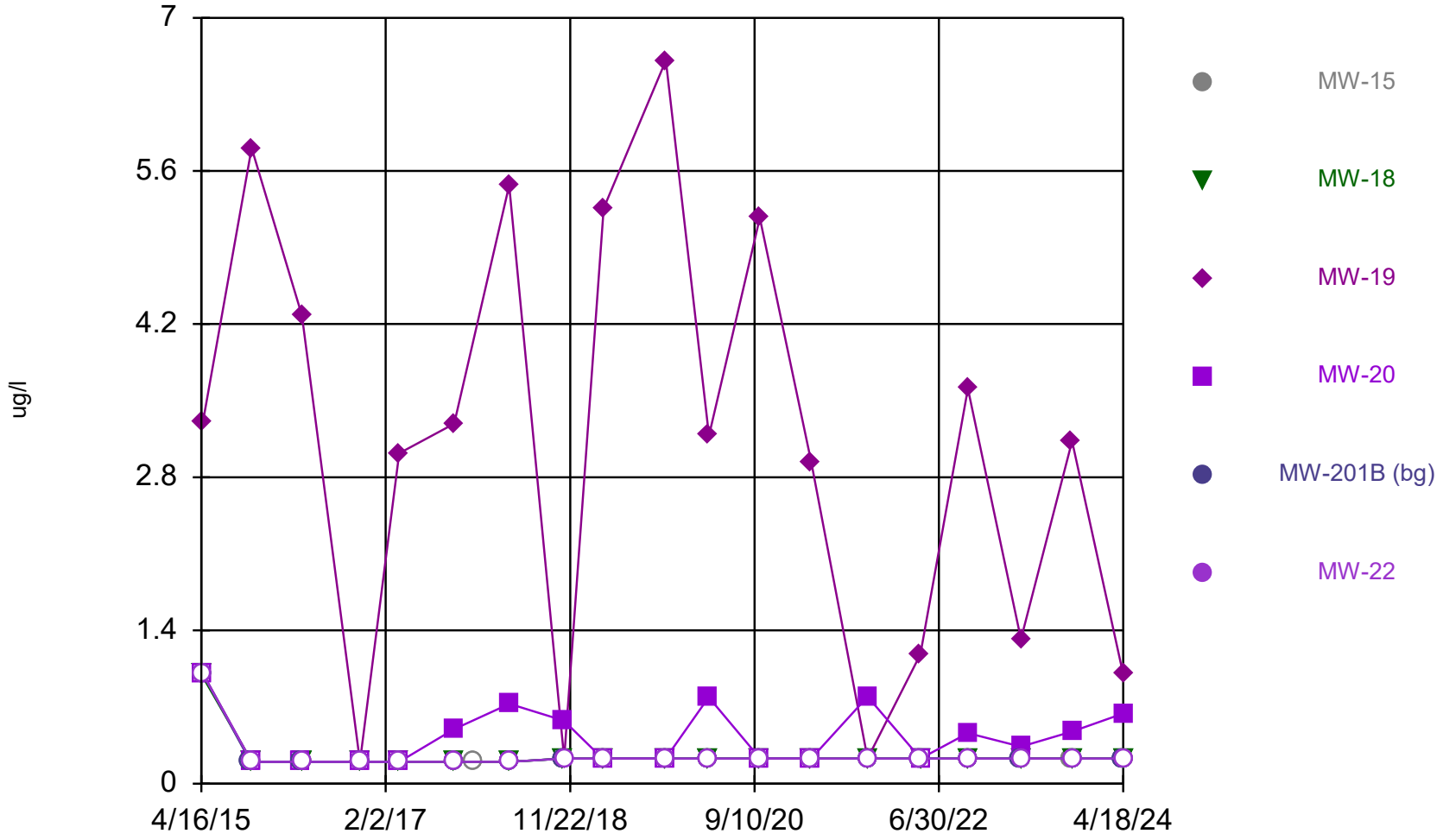
Hollow symbols indicate censored values.

Time Series

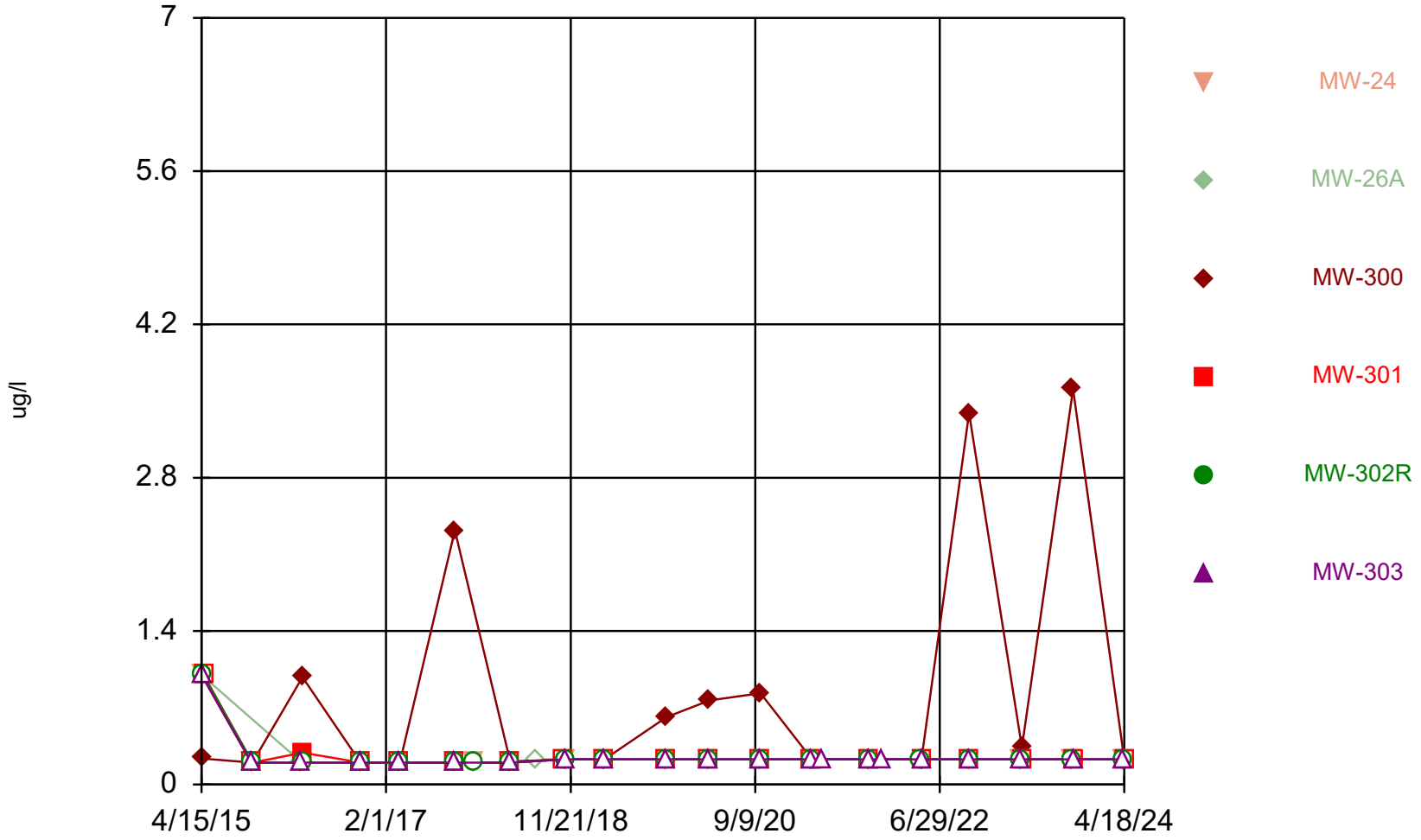


Constituent: 1,4-Dichlorobenzene Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

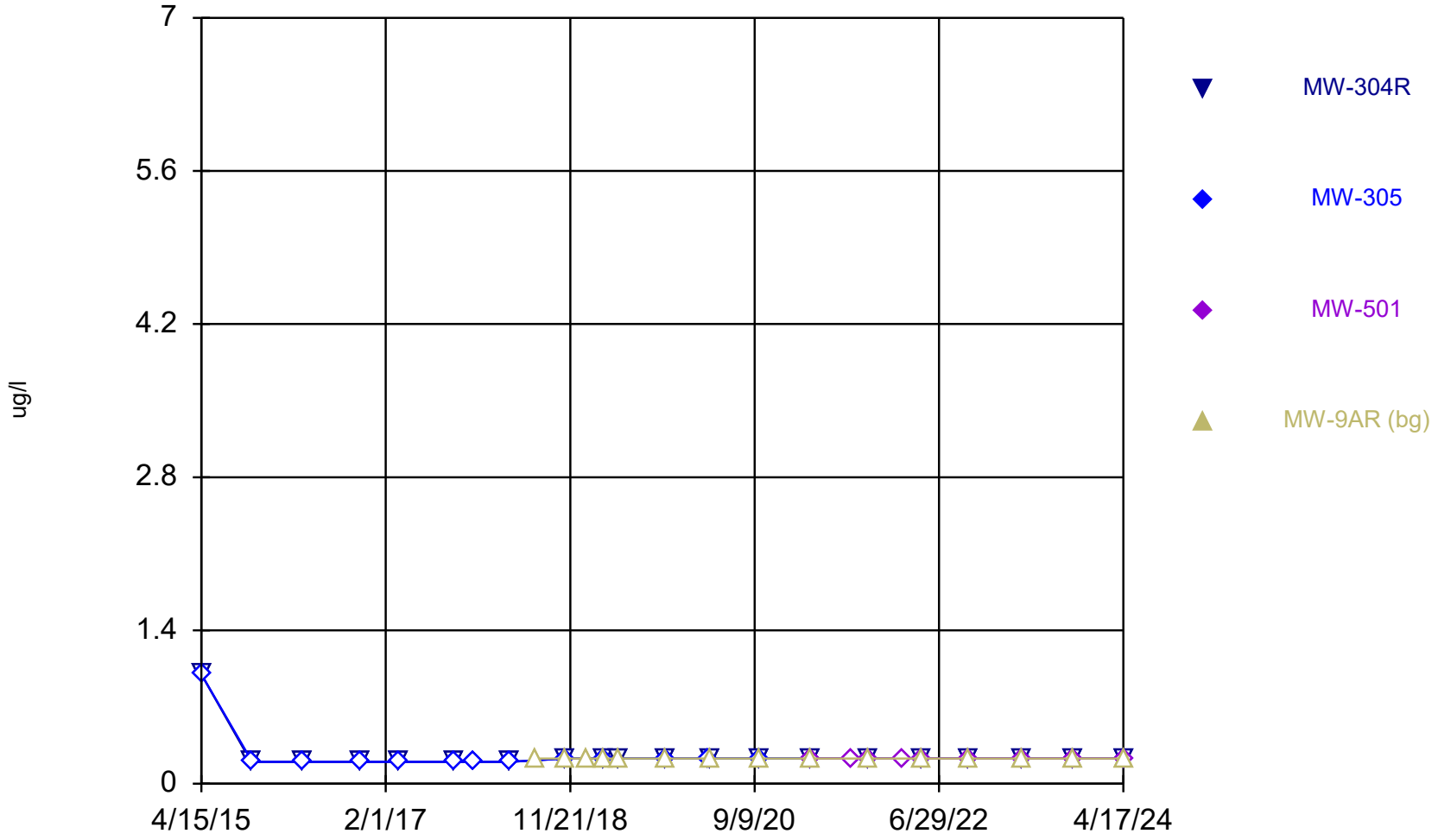


Constituent: 1,4-Dichlorobenzene Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

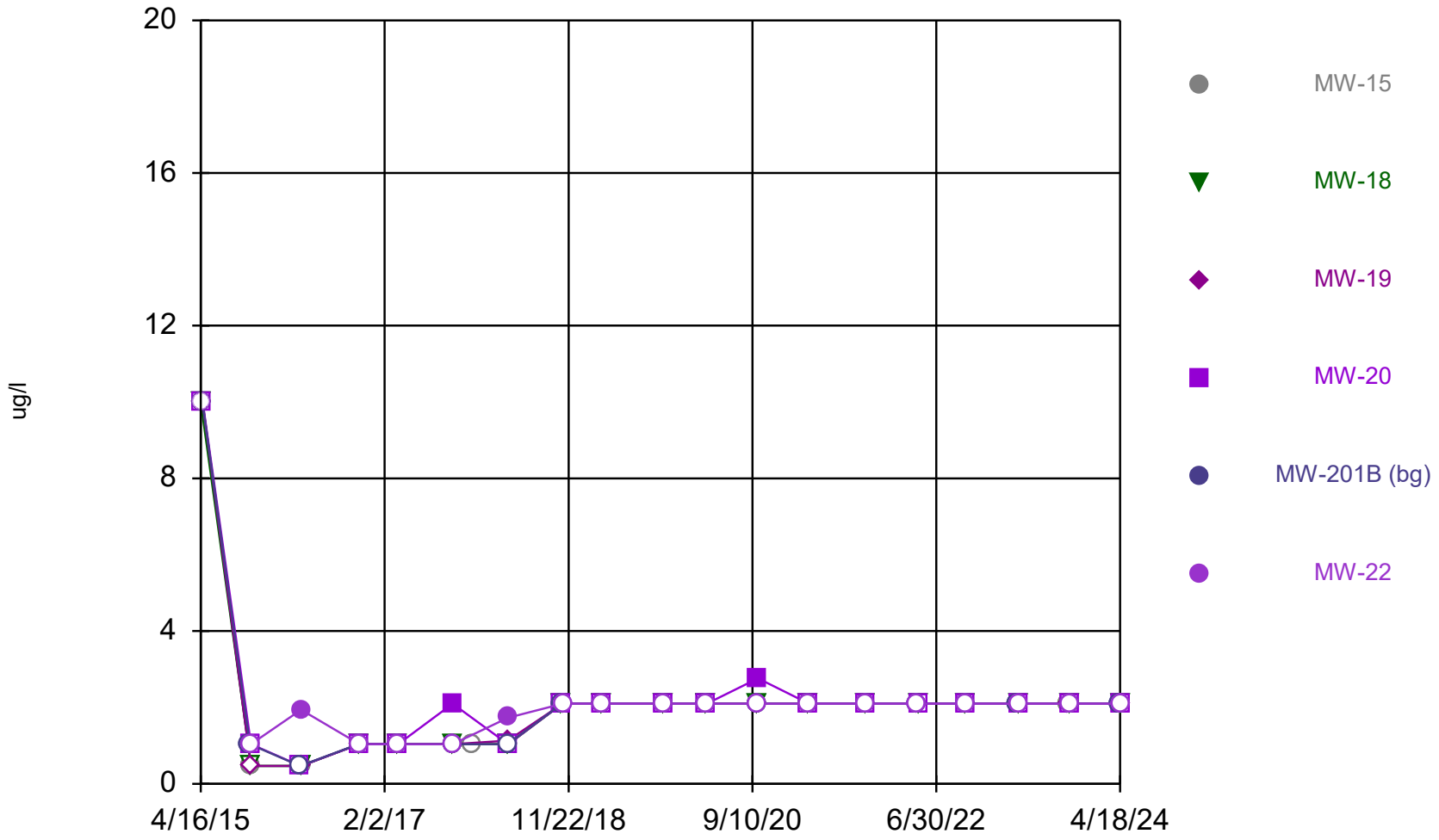


Constituent: 1,4-Dichlorobenzene Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

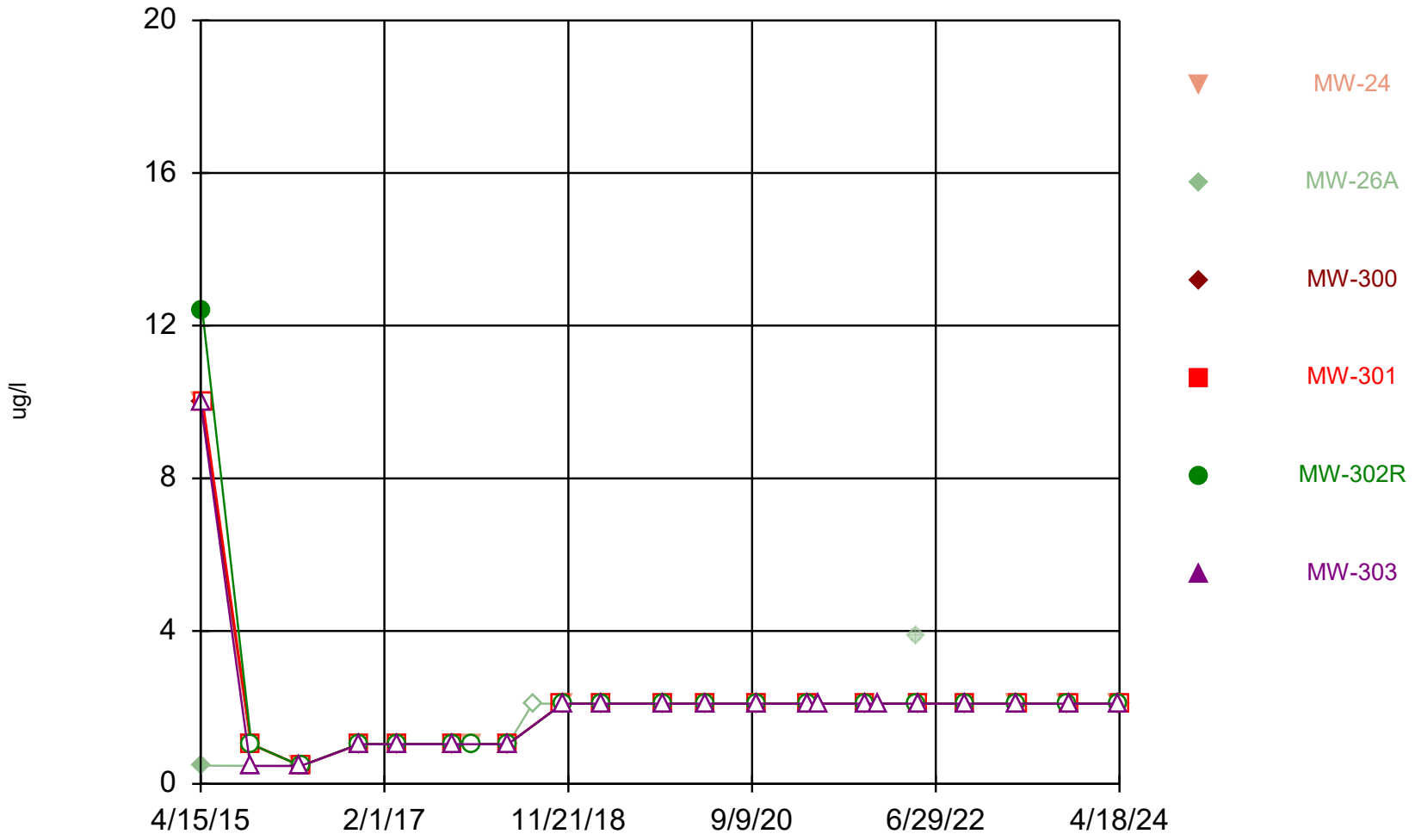


Constituent: 2-Butanone [MEK] Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Sanitas™ v.10.0.15 Software licensed to HDR. UG
Hollow symbols indicate censored values.

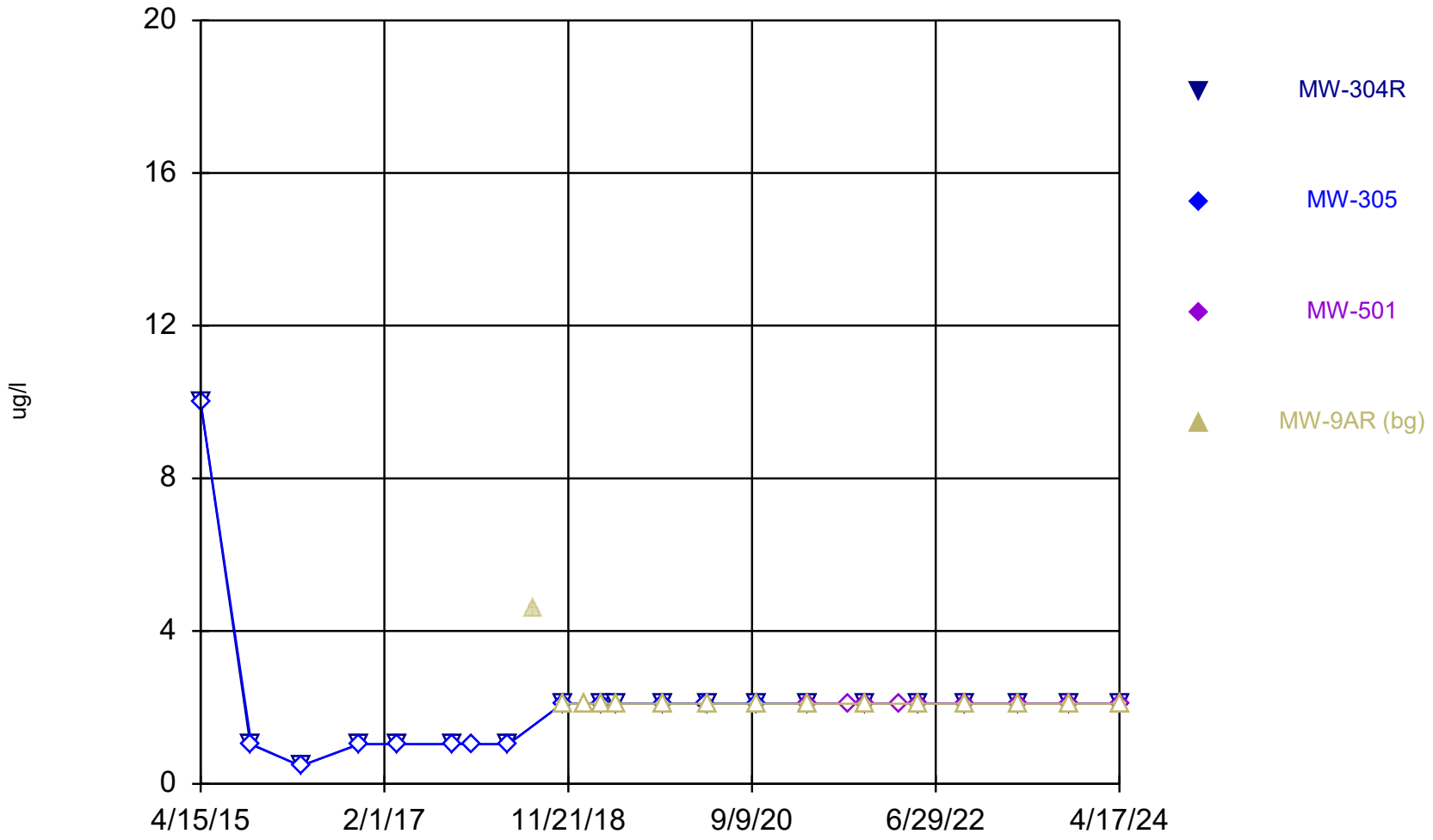
Time Series



Constituent: 2-Butanone [MEK] Analysis Run 7/12/2024 2:51 PM View: App I_VOCs
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

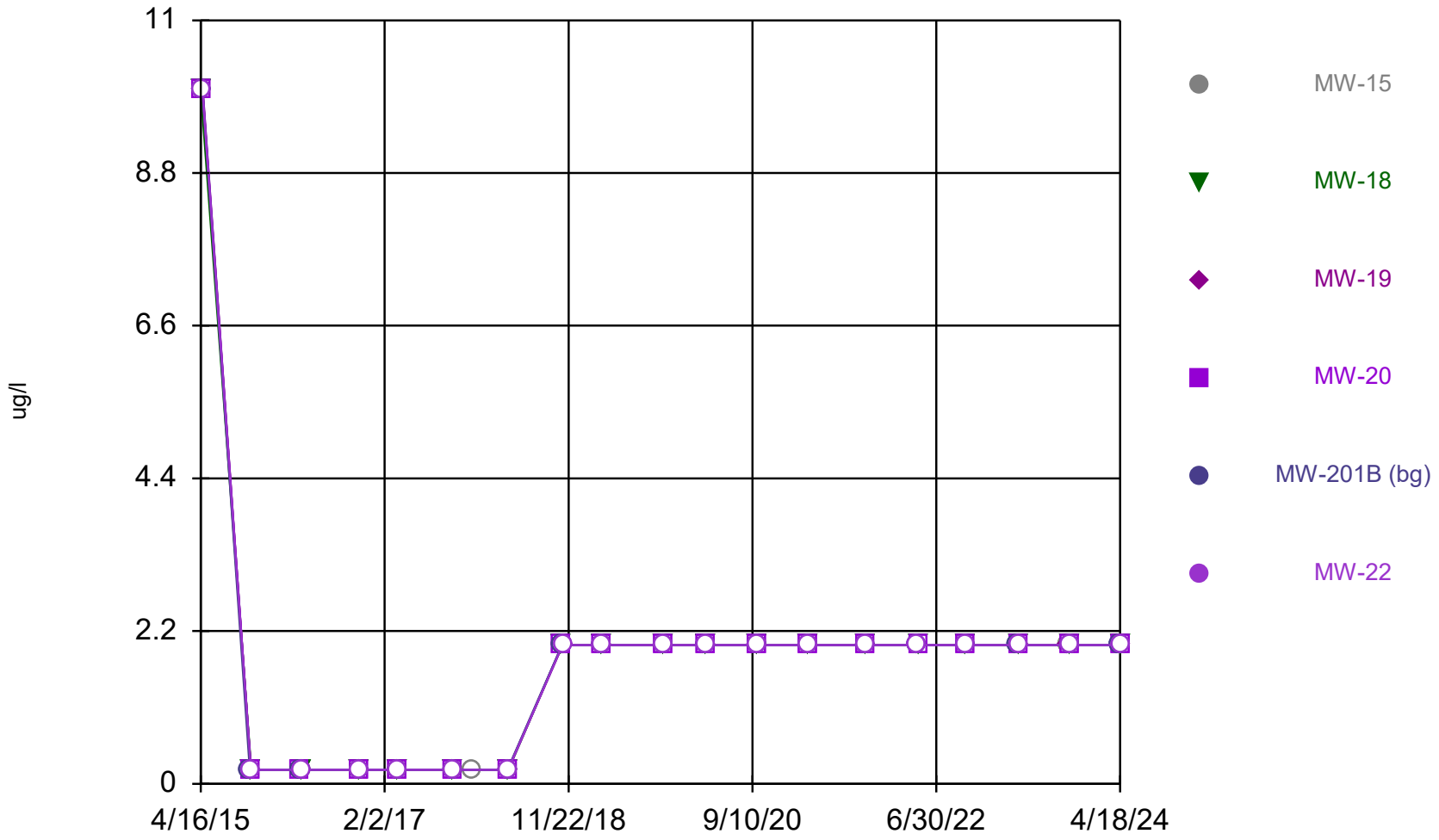


Constituent: 2-Butanone [MEK] Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

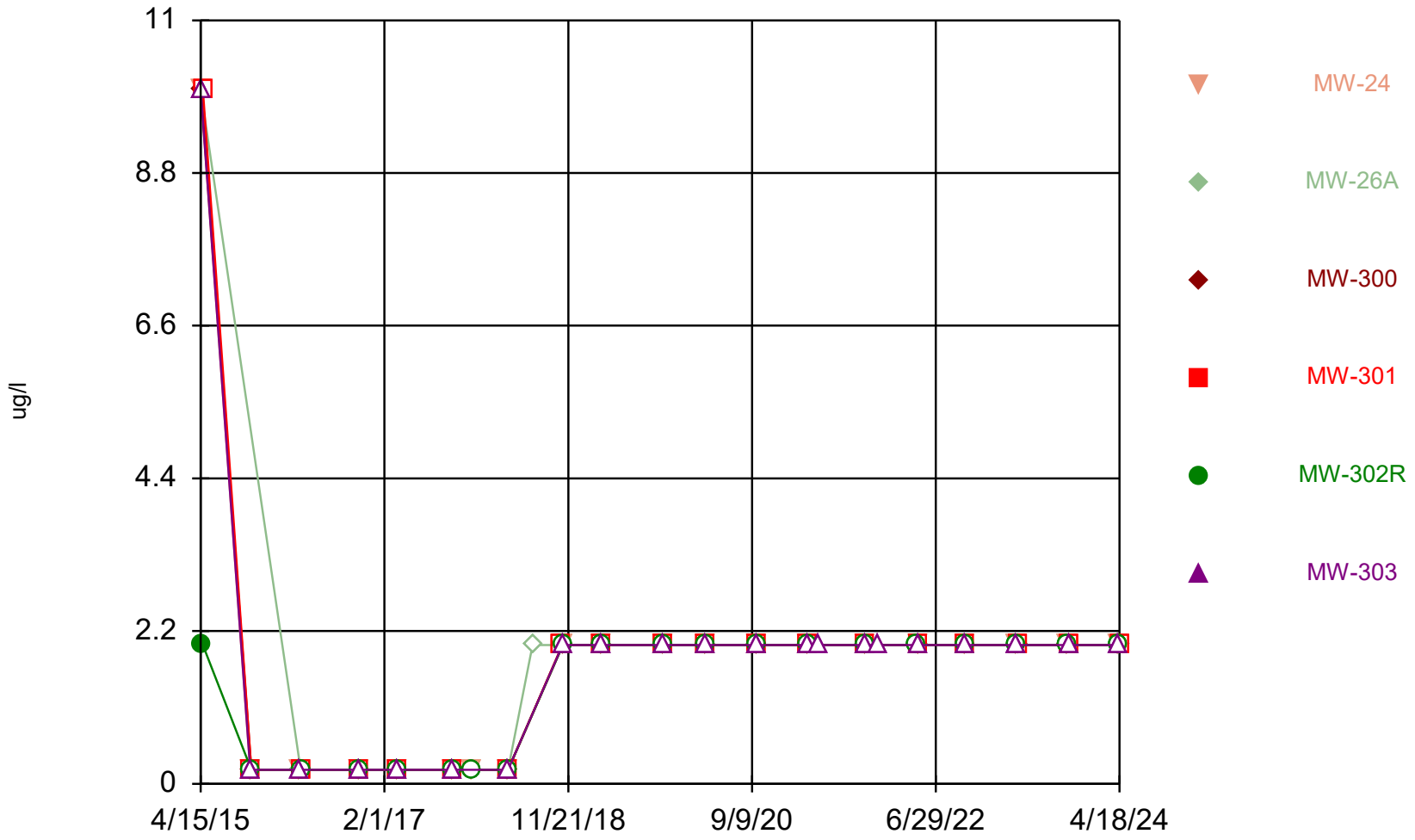


Constituent: 2-Hexanone Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

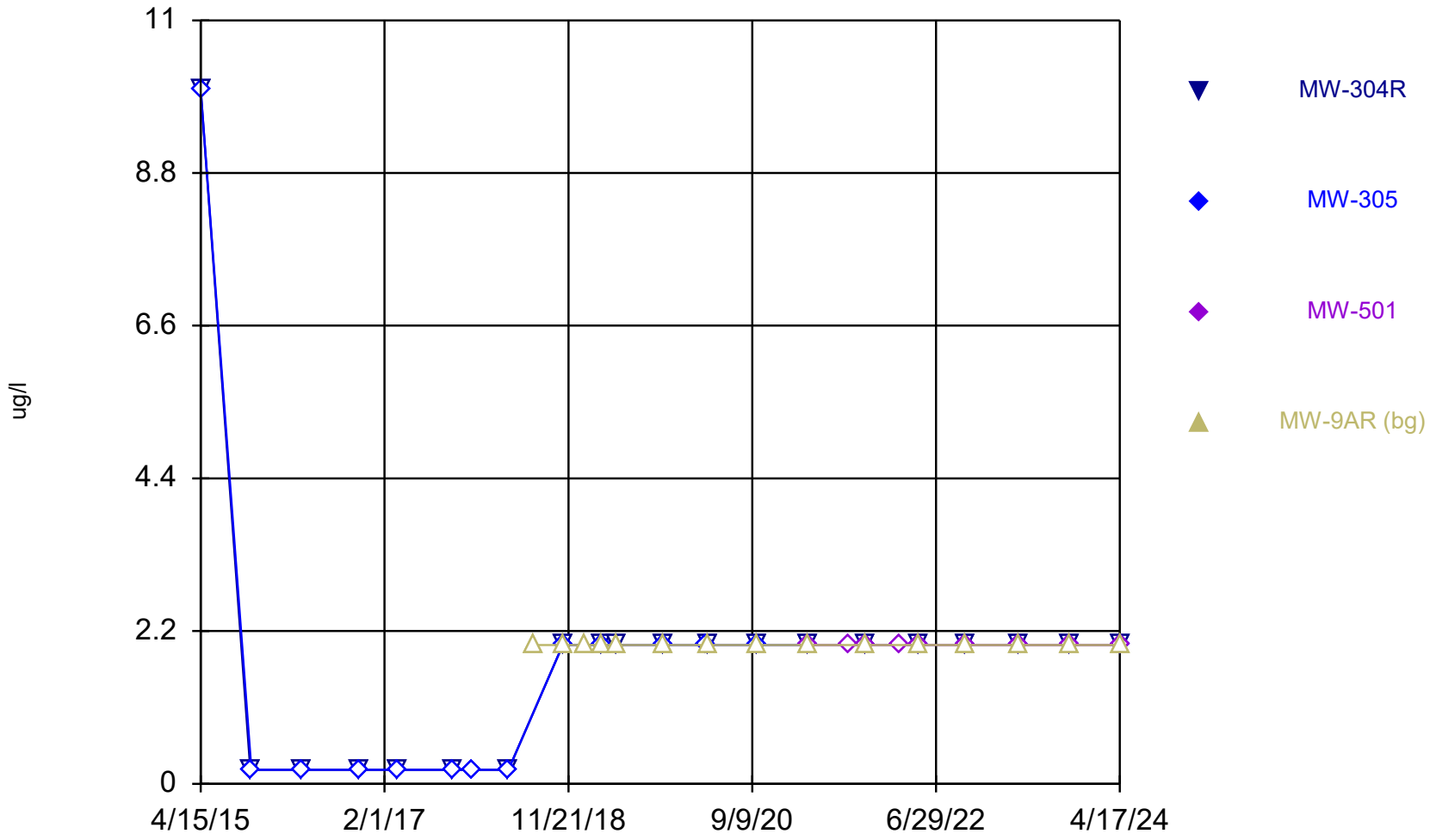


Constituent: 2-Hexanone Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

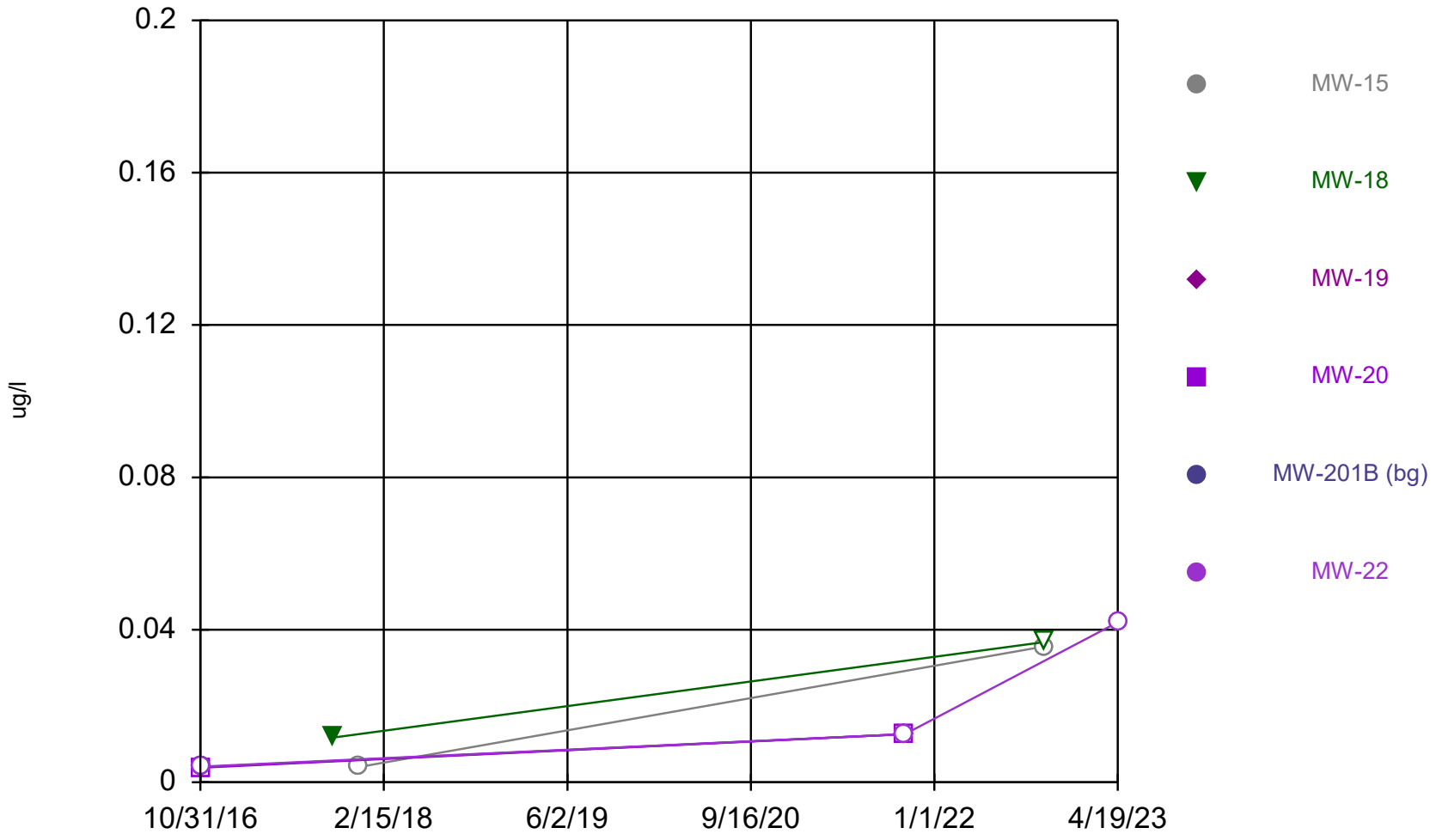


Constituent: 2-Hexanone Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

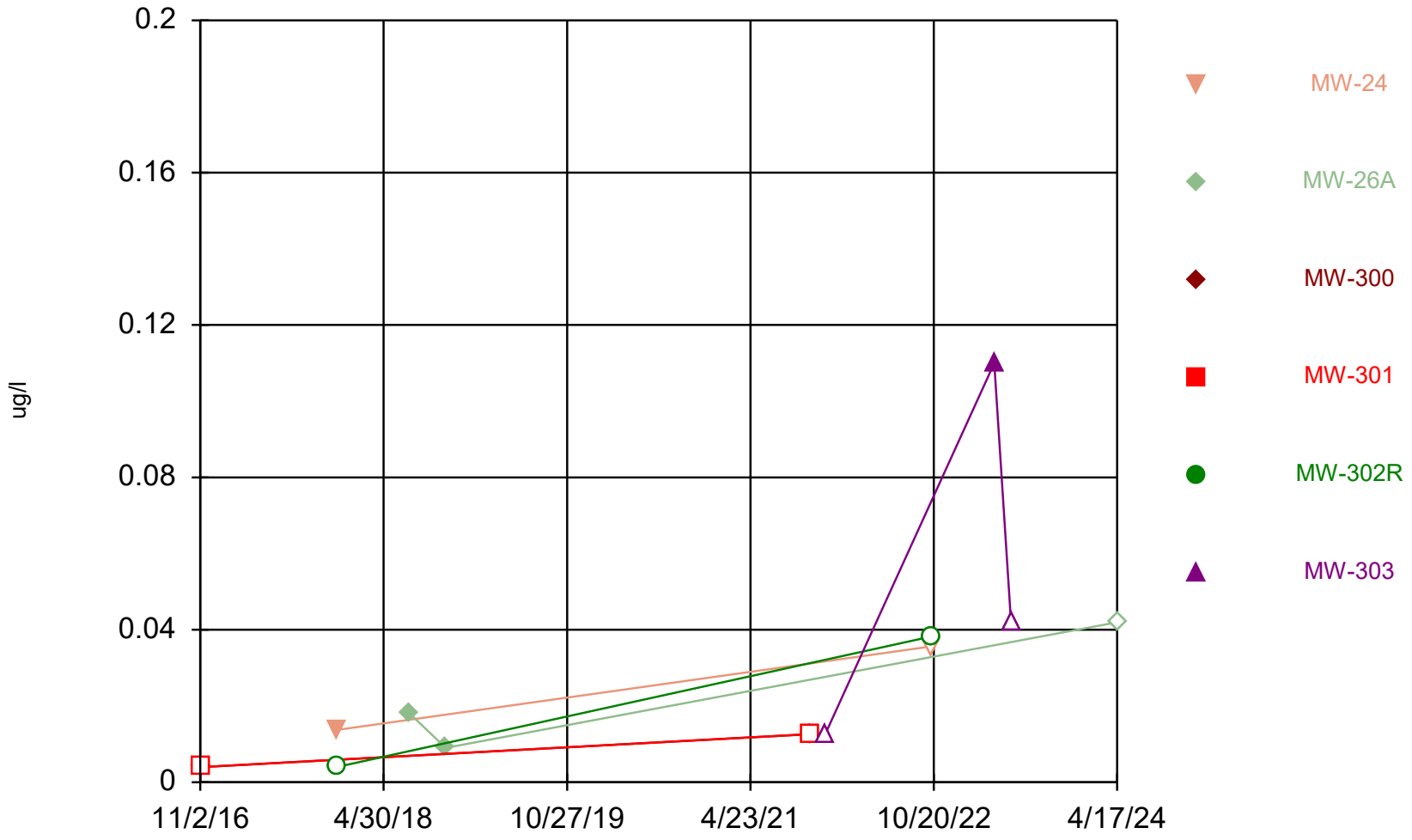


Constituent: 4,4`-DDT Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

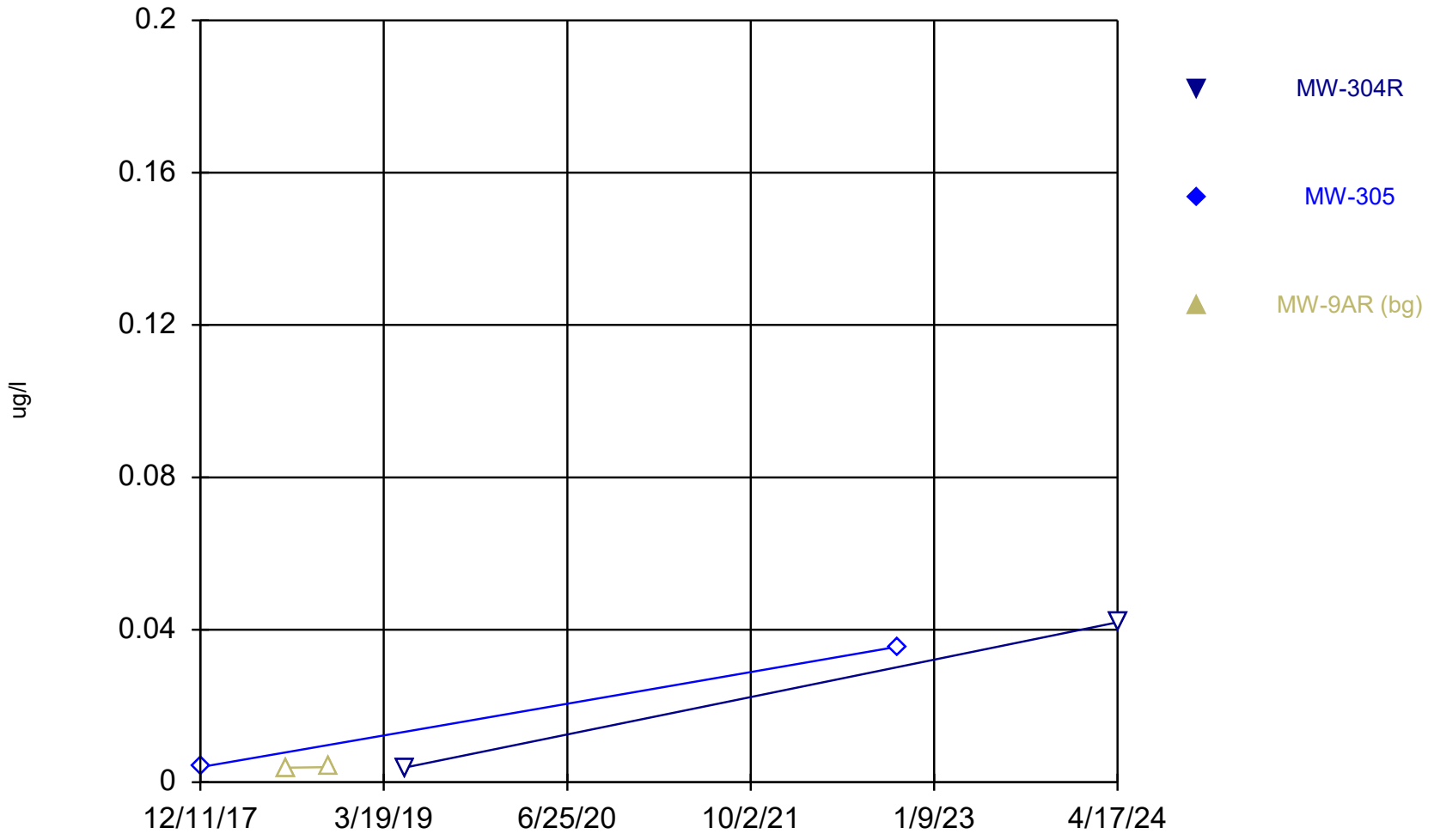


Constituent: 4,4`-DDT Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

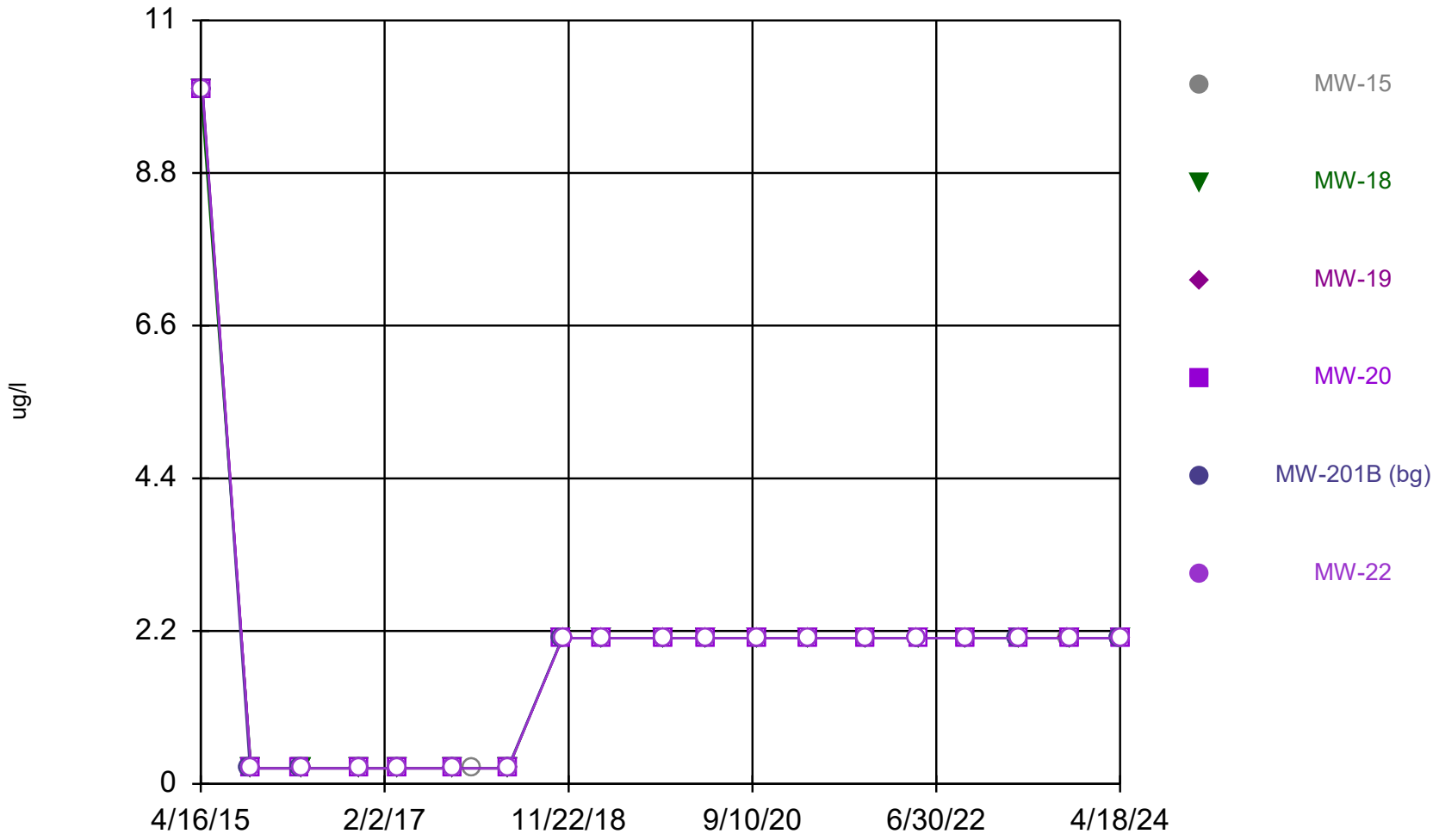


Constituent: 4,4`-DDT Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

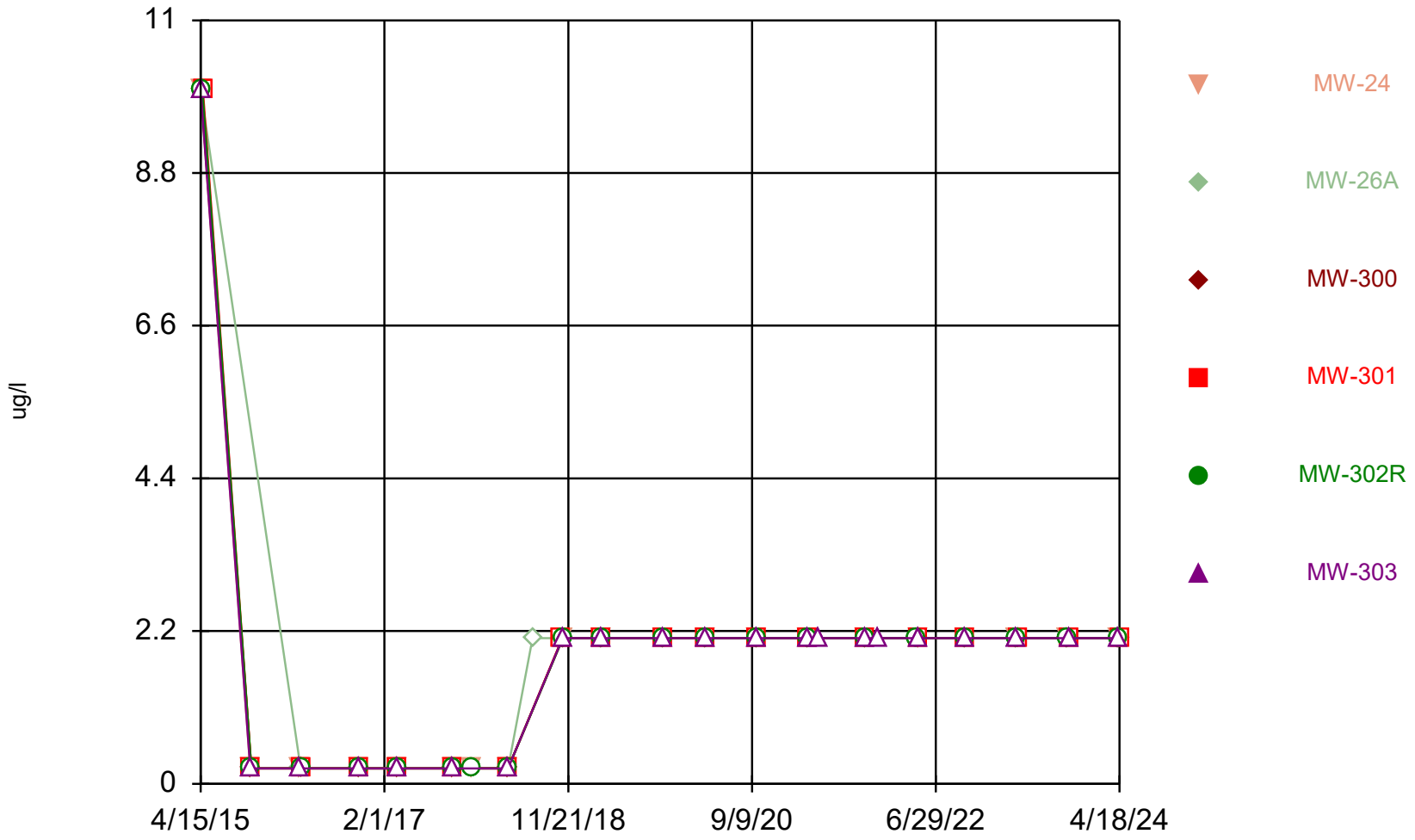


Constituent: 4-Methyl-2-pentanone Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

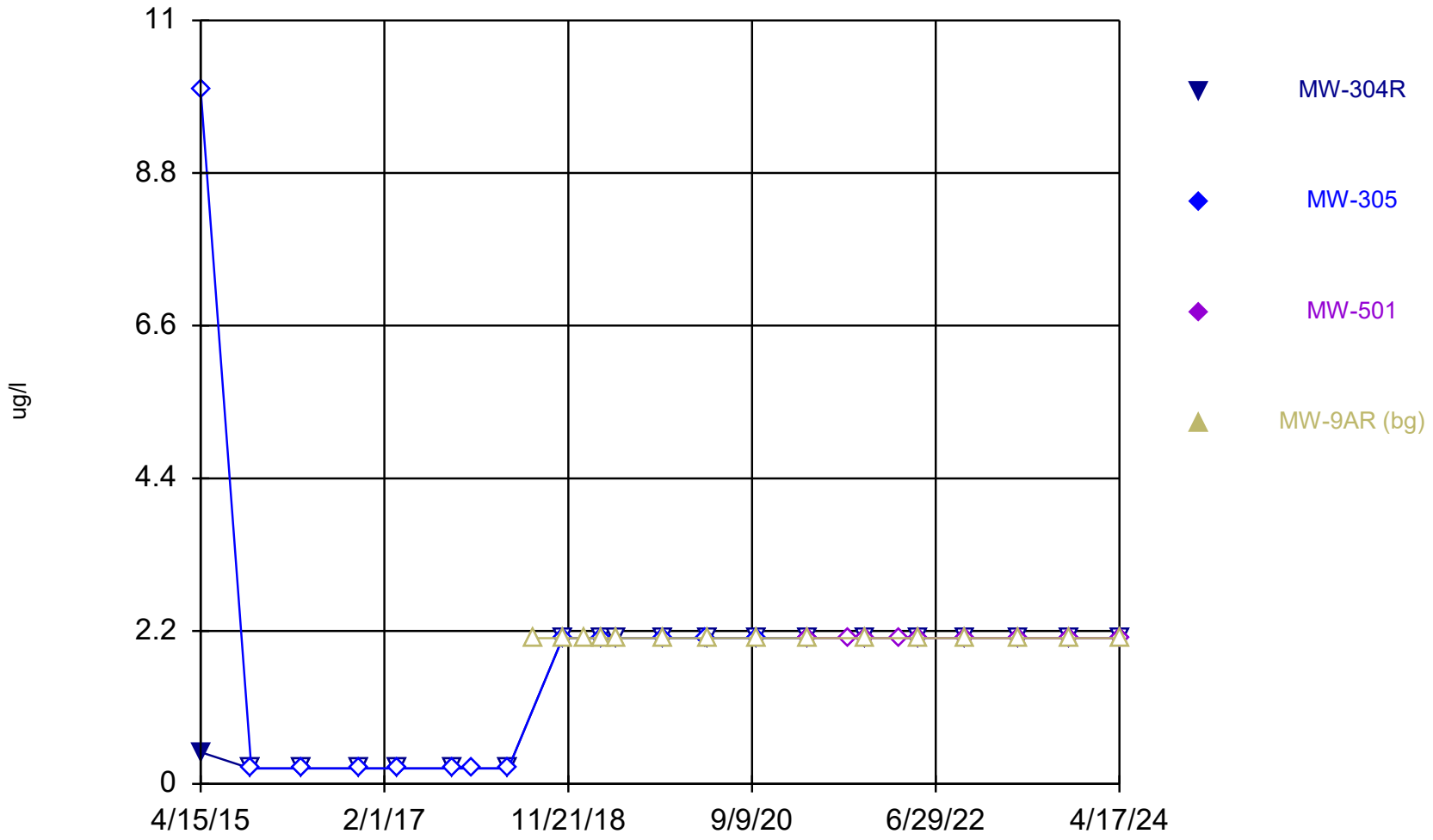


Constituent: 4-Methyl-2-pentanone Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

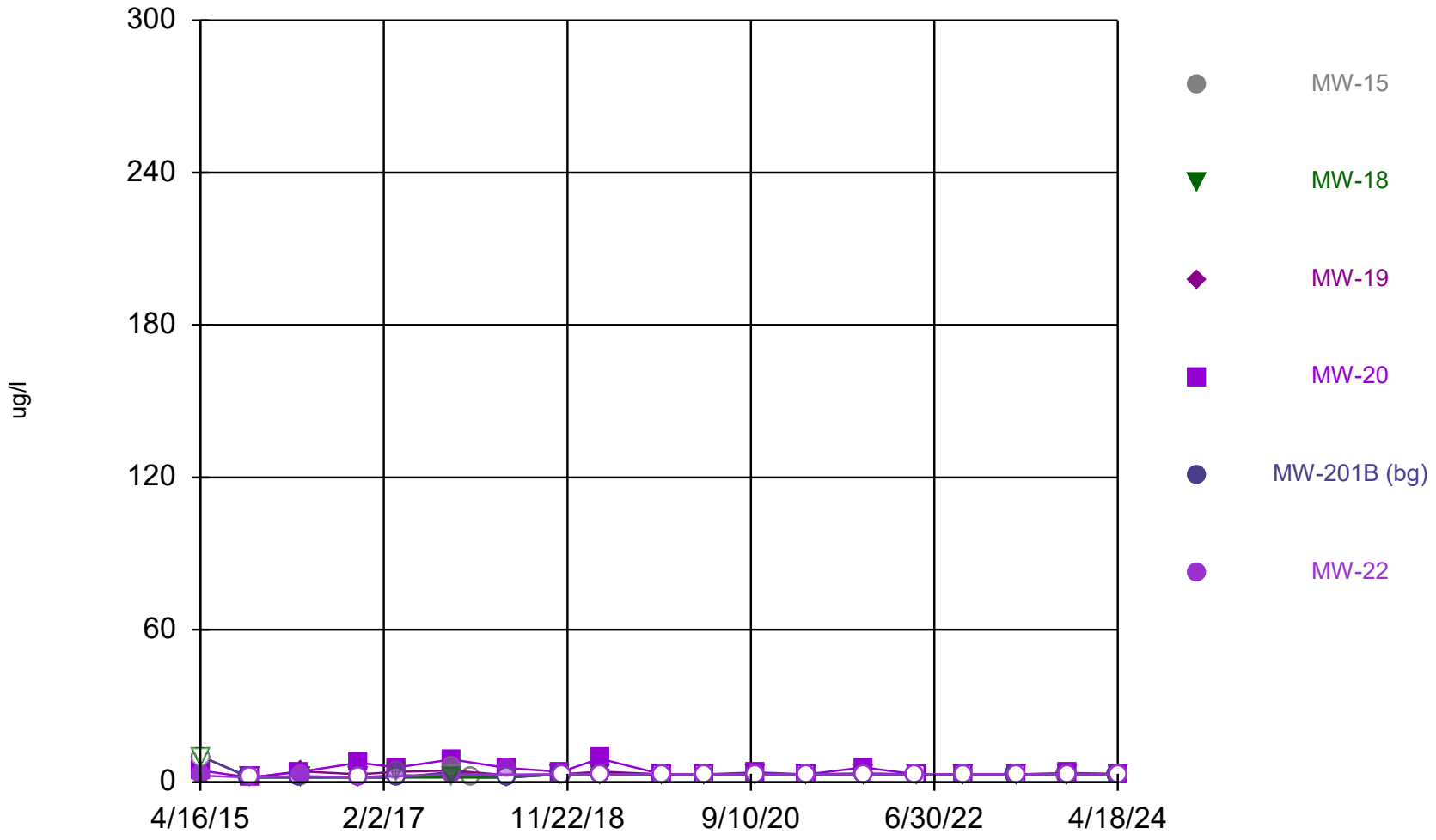


Constituent: 4-Methyl-2-pentanone Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

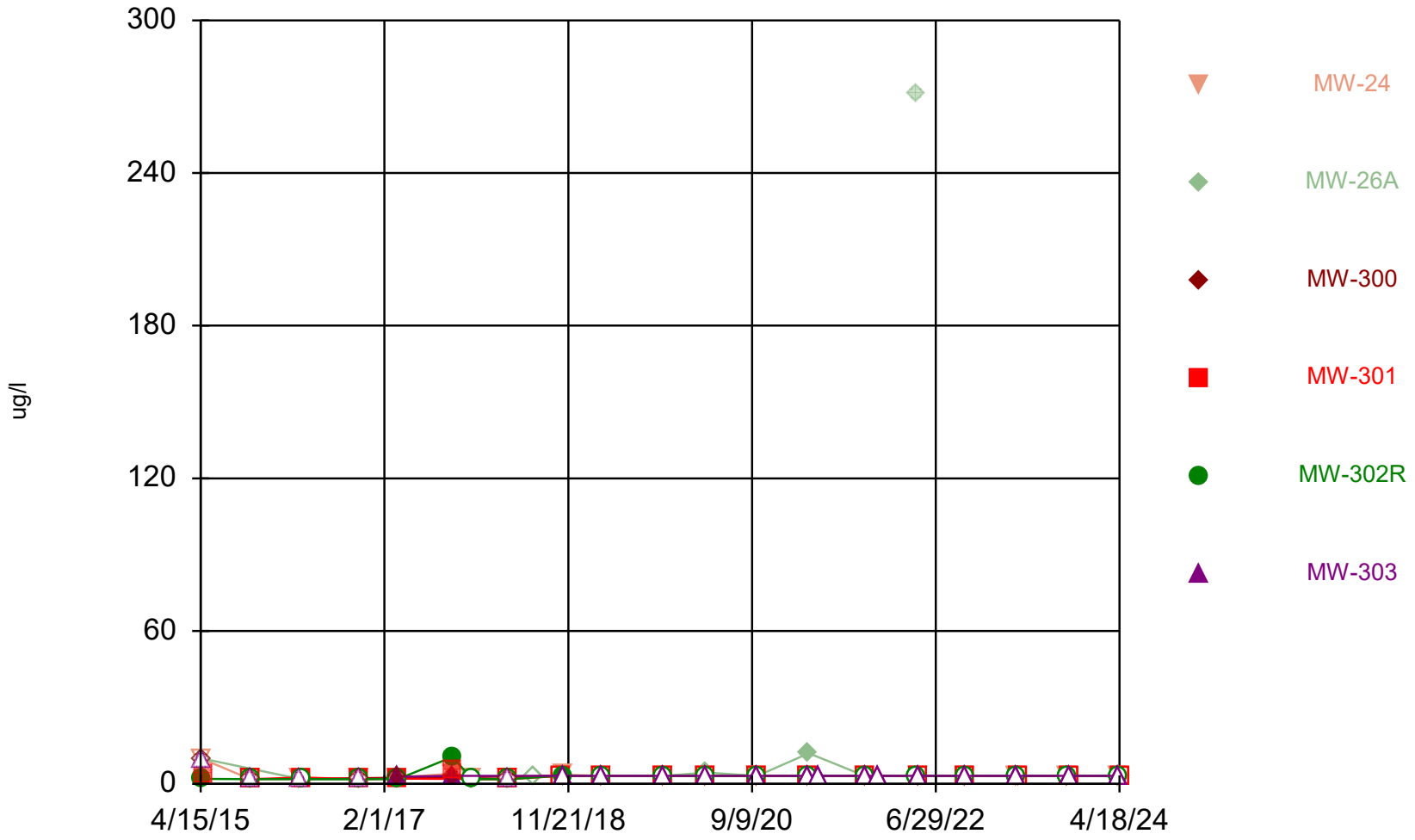


Constituent: Acetone Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

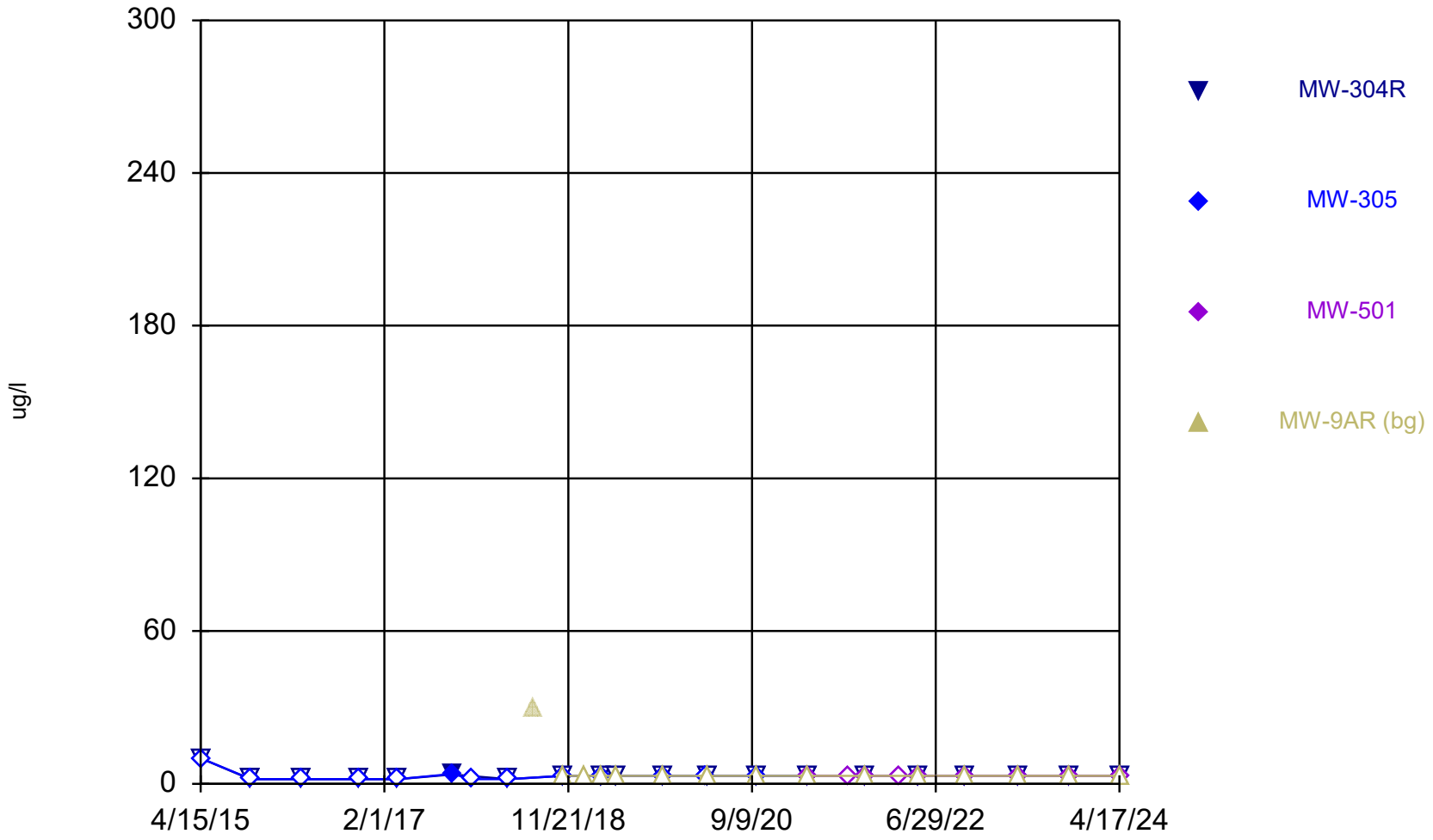


Constituent: Acetone Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

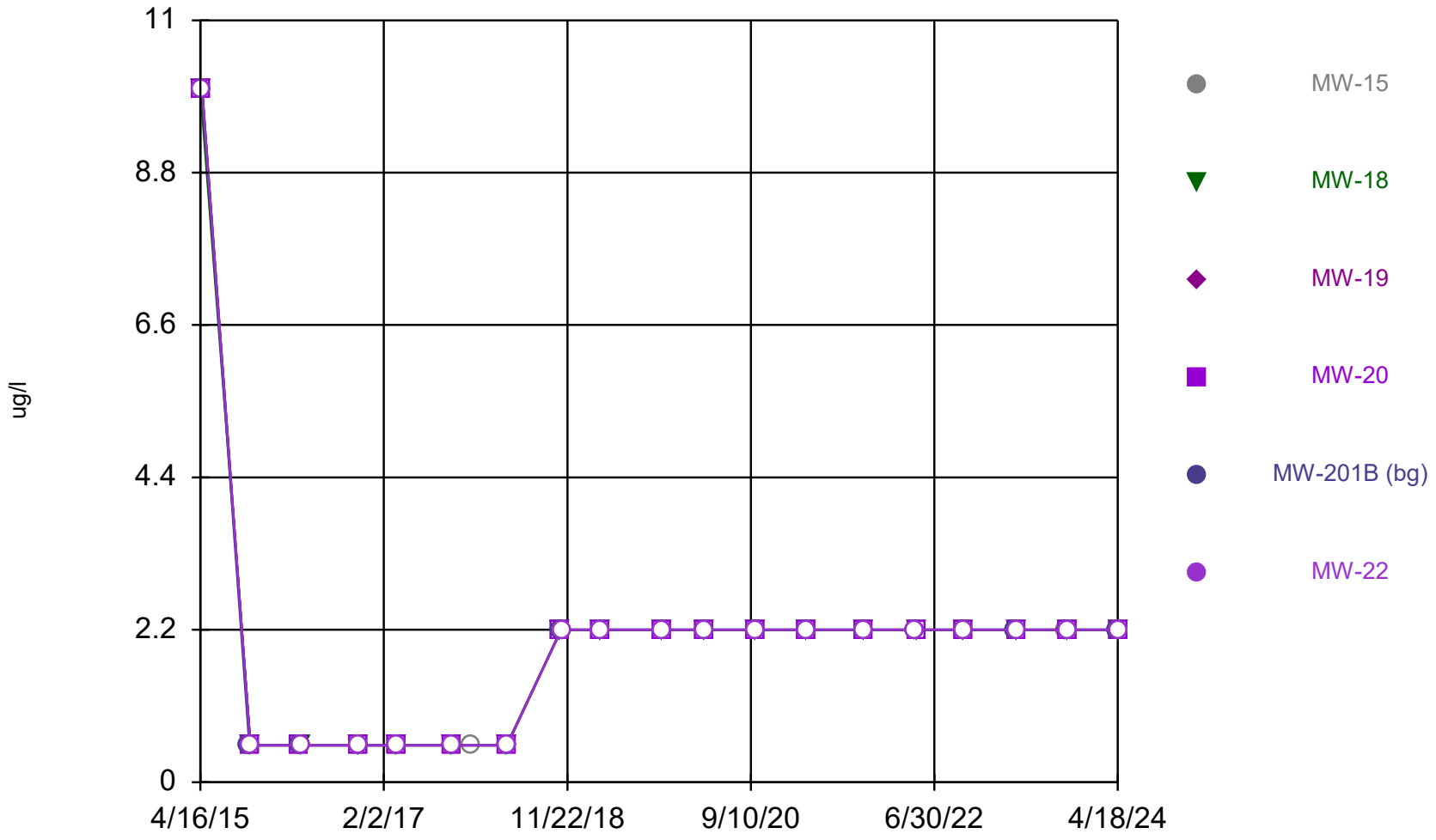


Constituent: Acetone Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

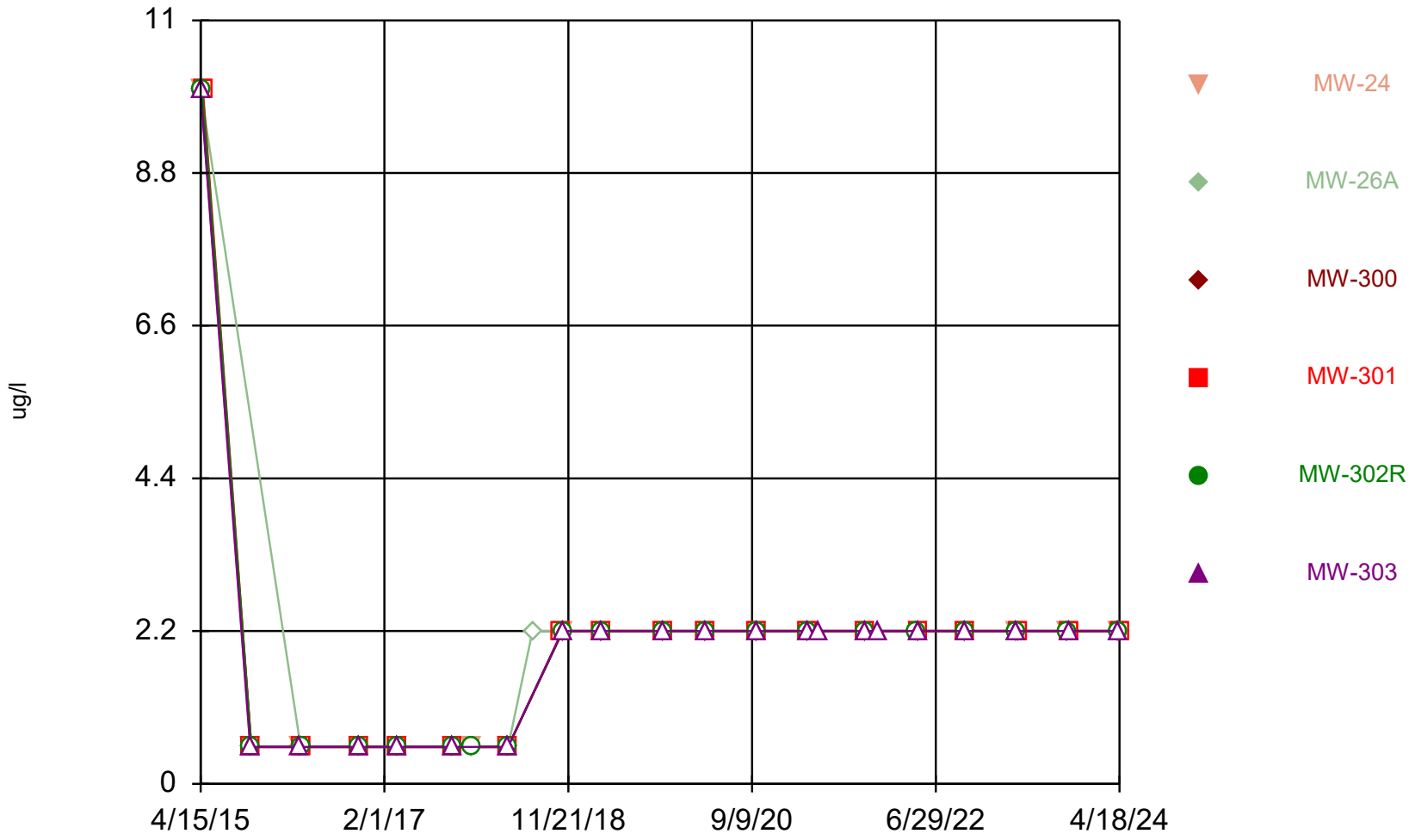


Constituent: Acrylonitrile Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

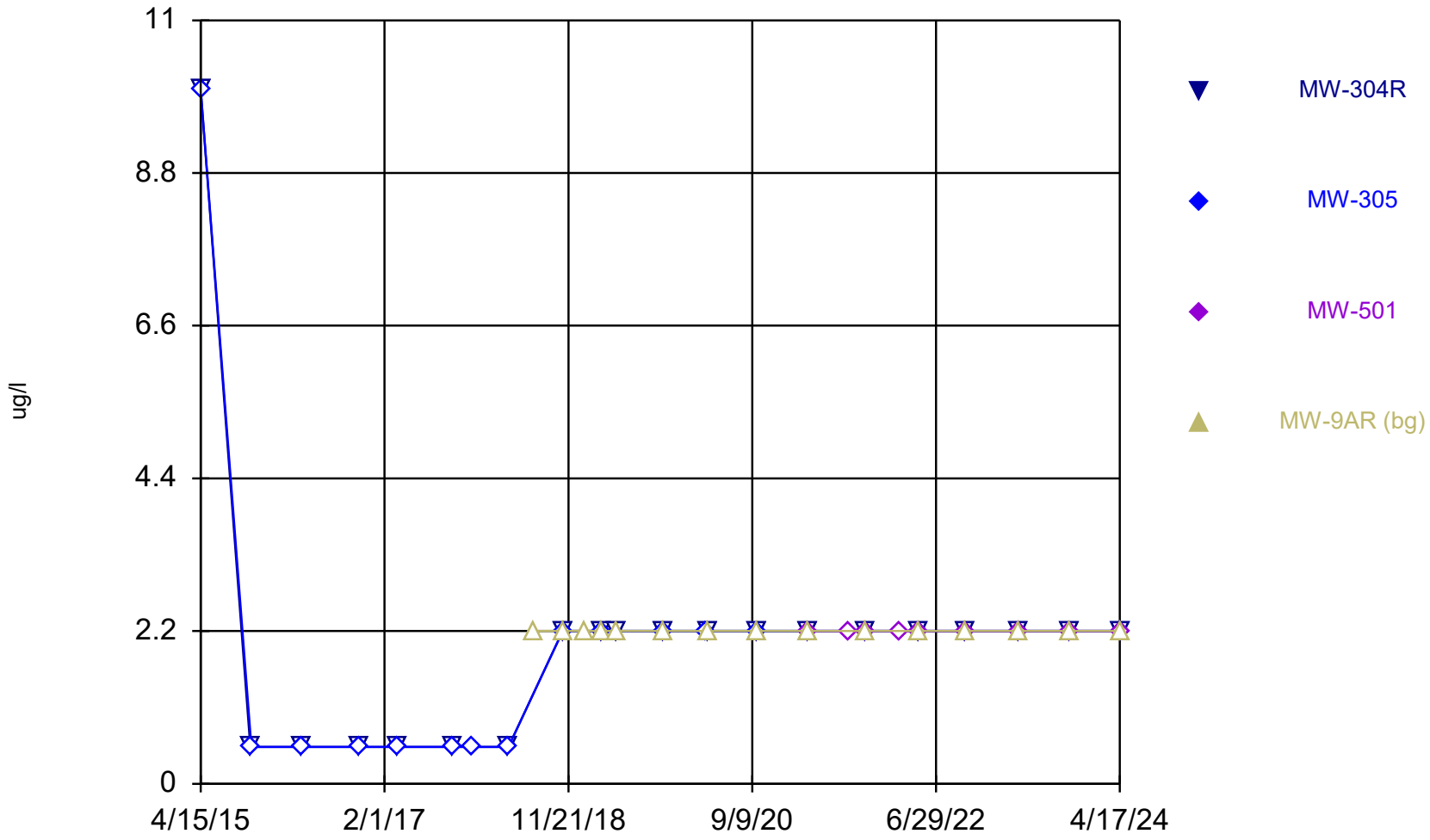


Constituent: Acrylonitrile Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

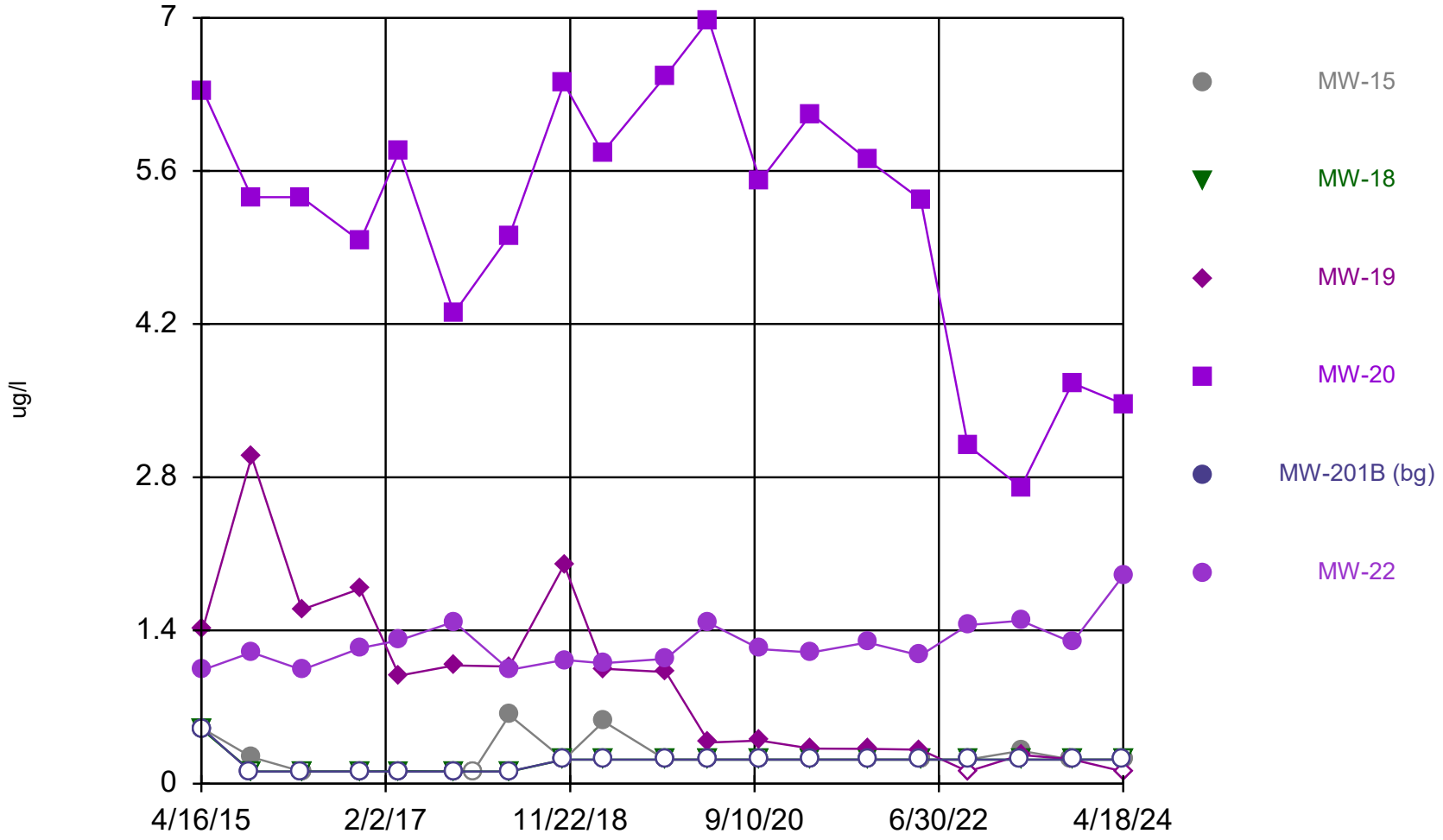


Constituent: Acrylonitrile Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

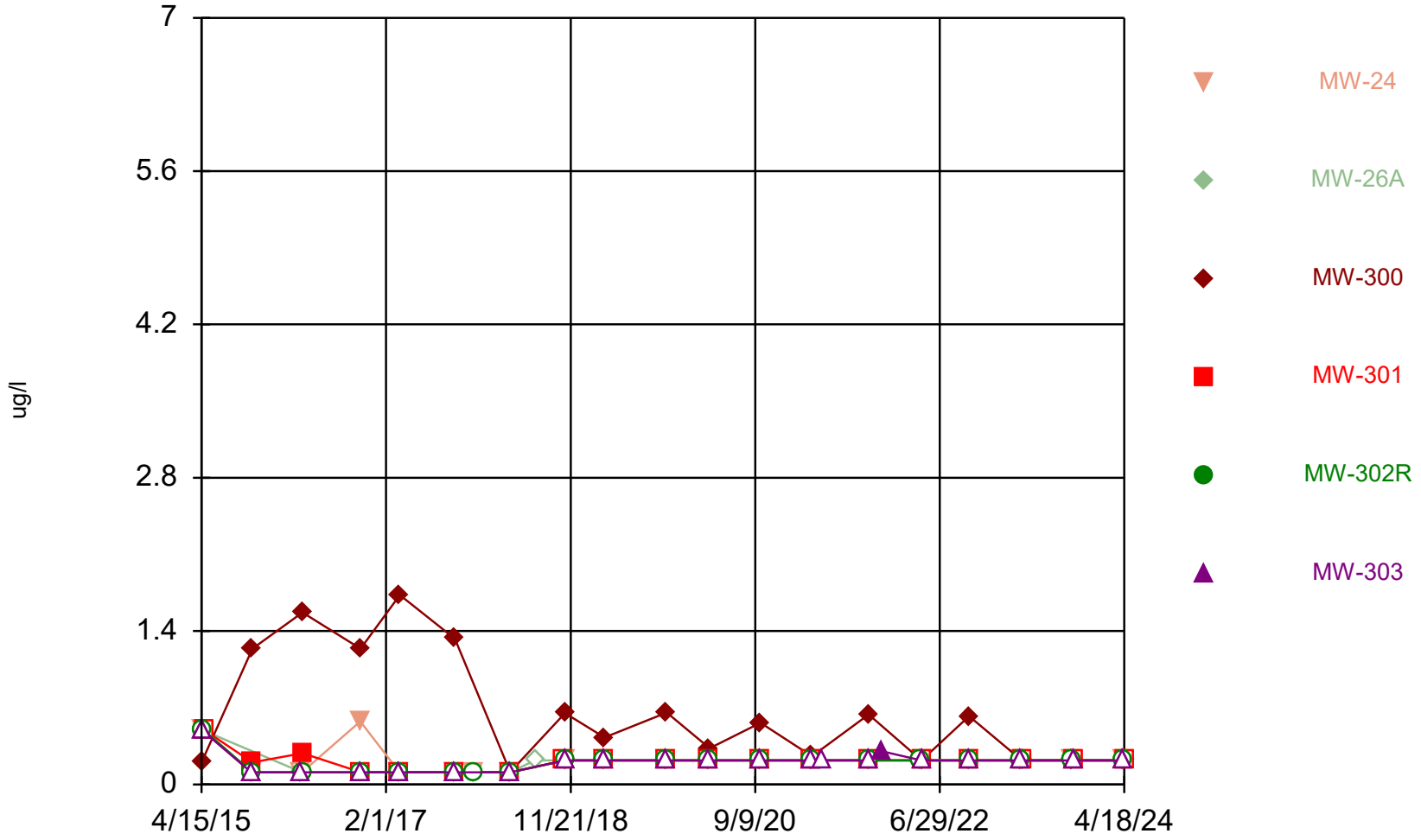


Constituent: Benzene Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

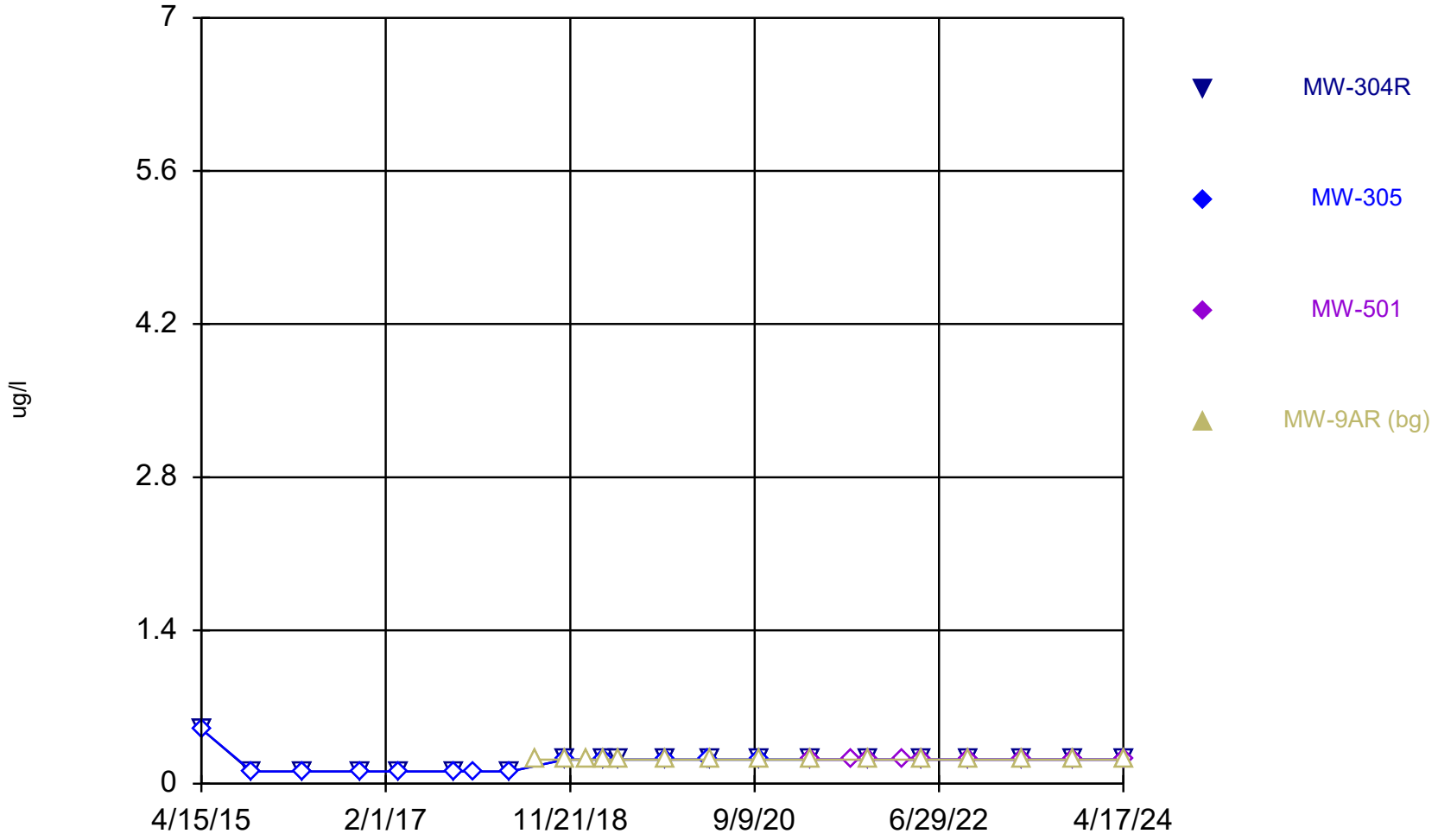


Constituent: Benzene Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

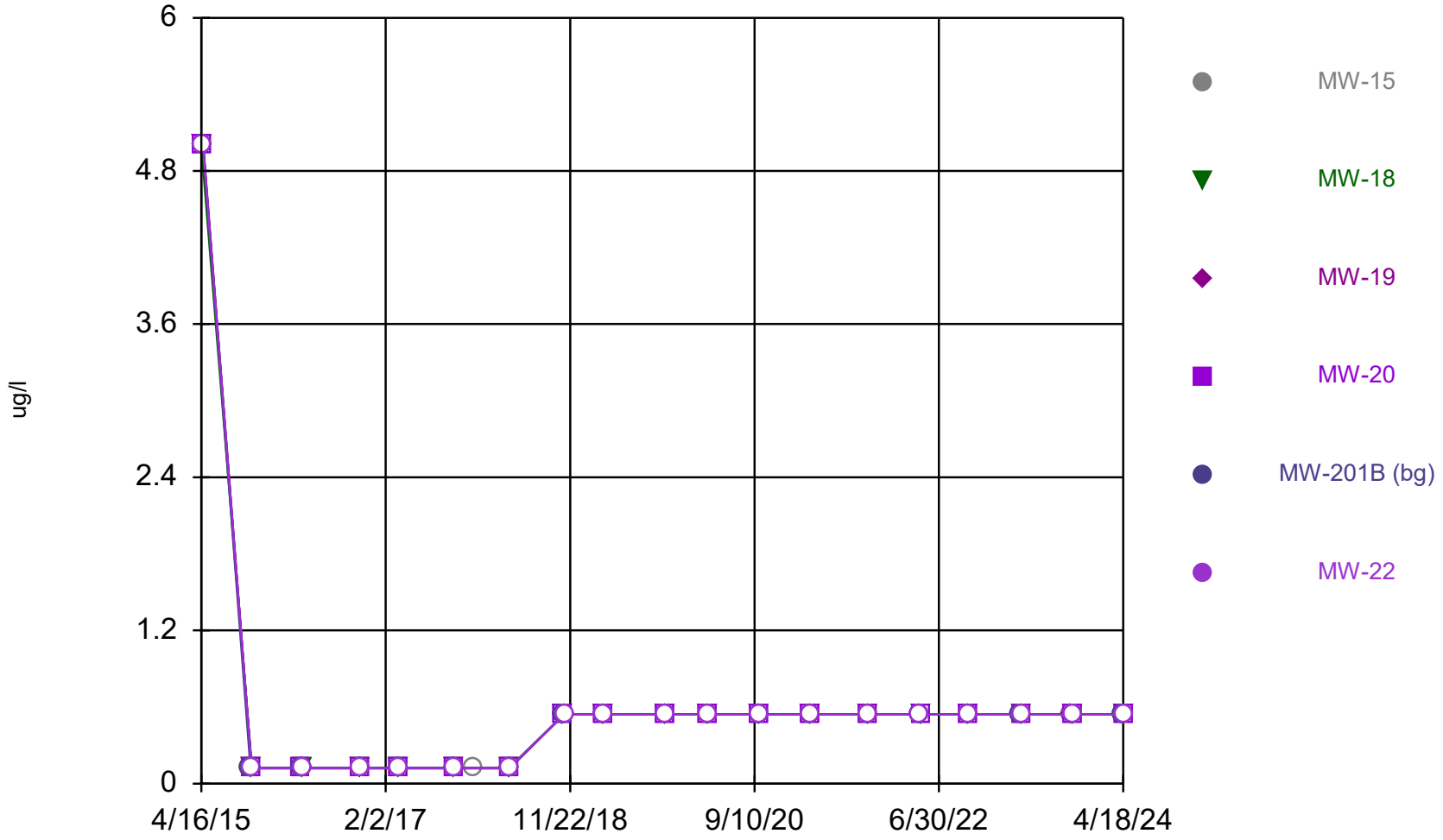


Constituent: Benzene Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

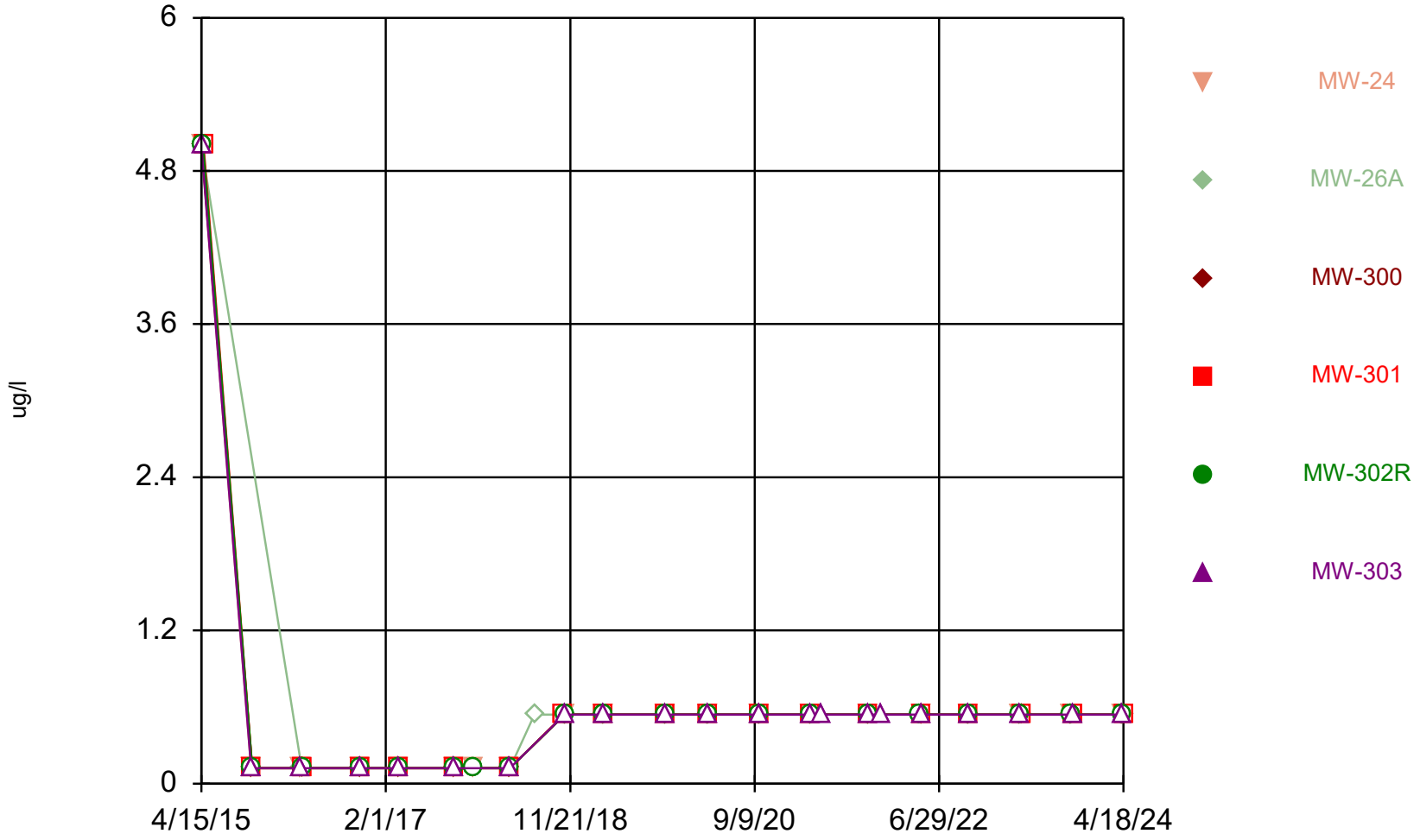


Constituent: Bromochloromethane Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

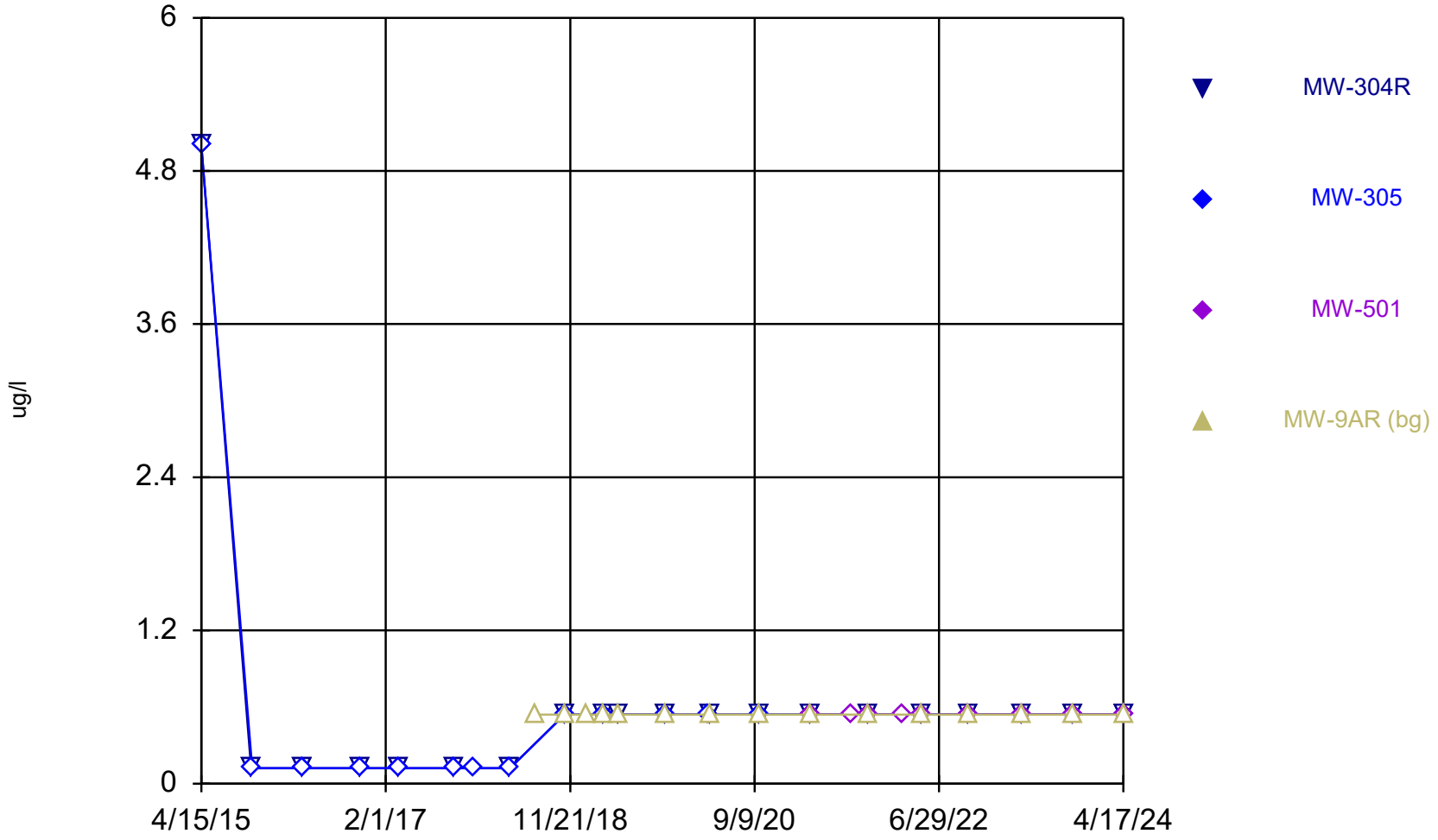


Constituent: Bromochloromethane Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

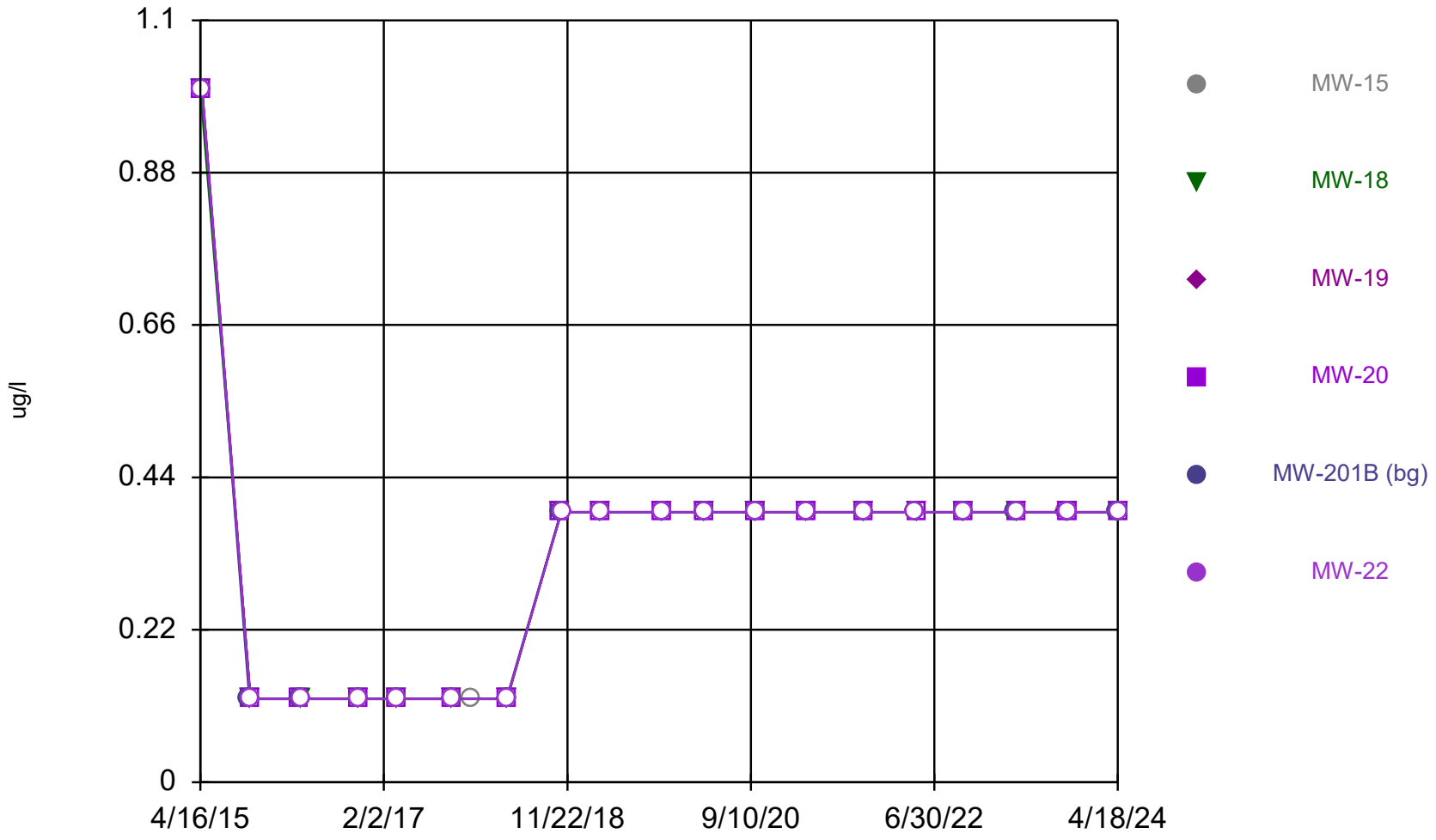


Constituent: Bromochloromethane Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

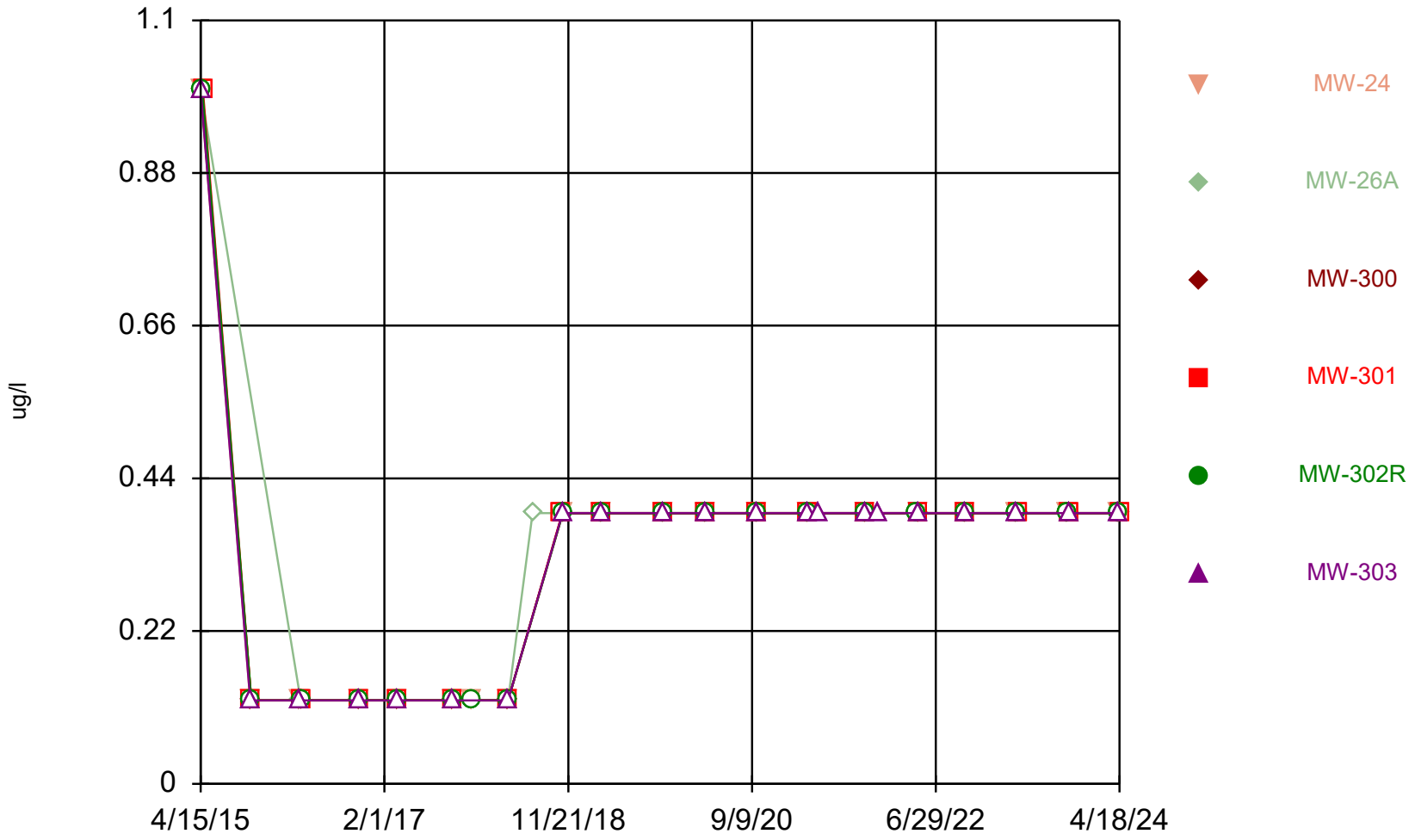


Constituent: Bromodichloromethane Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

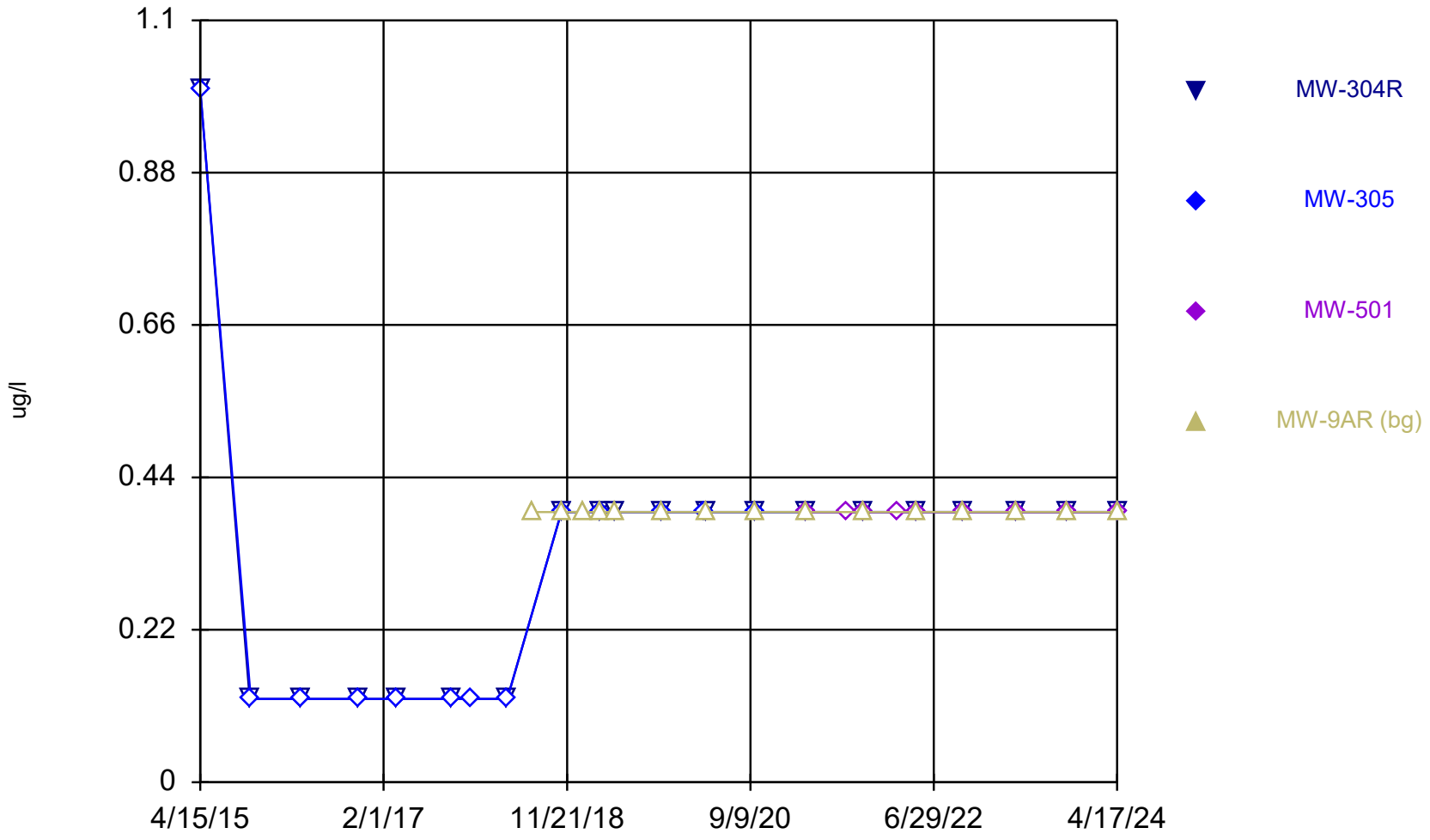


Constituent: Bromodichloromethane Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

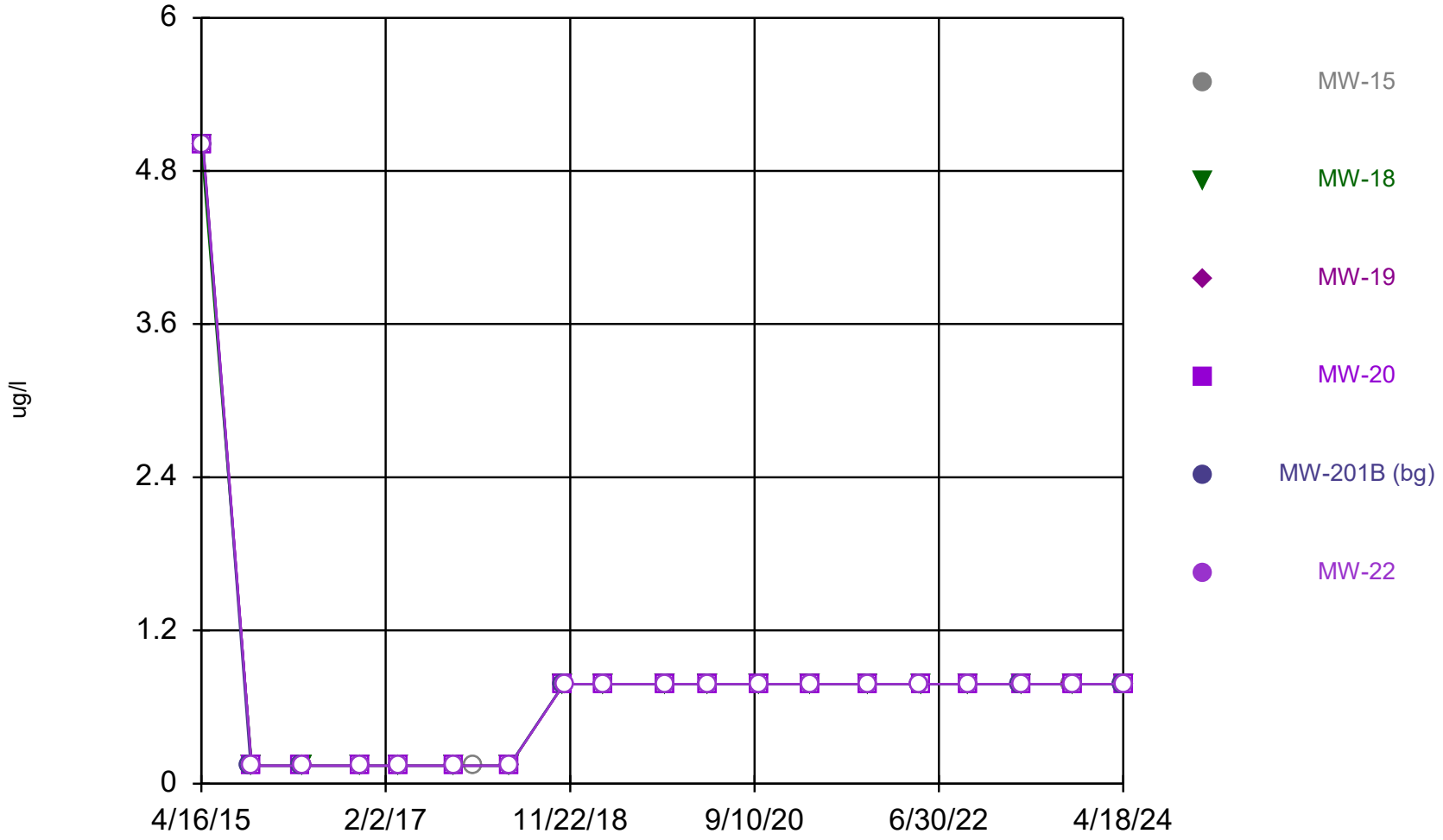


Constituent: Bromodichloromethane Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



Constituent: Bromoform Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

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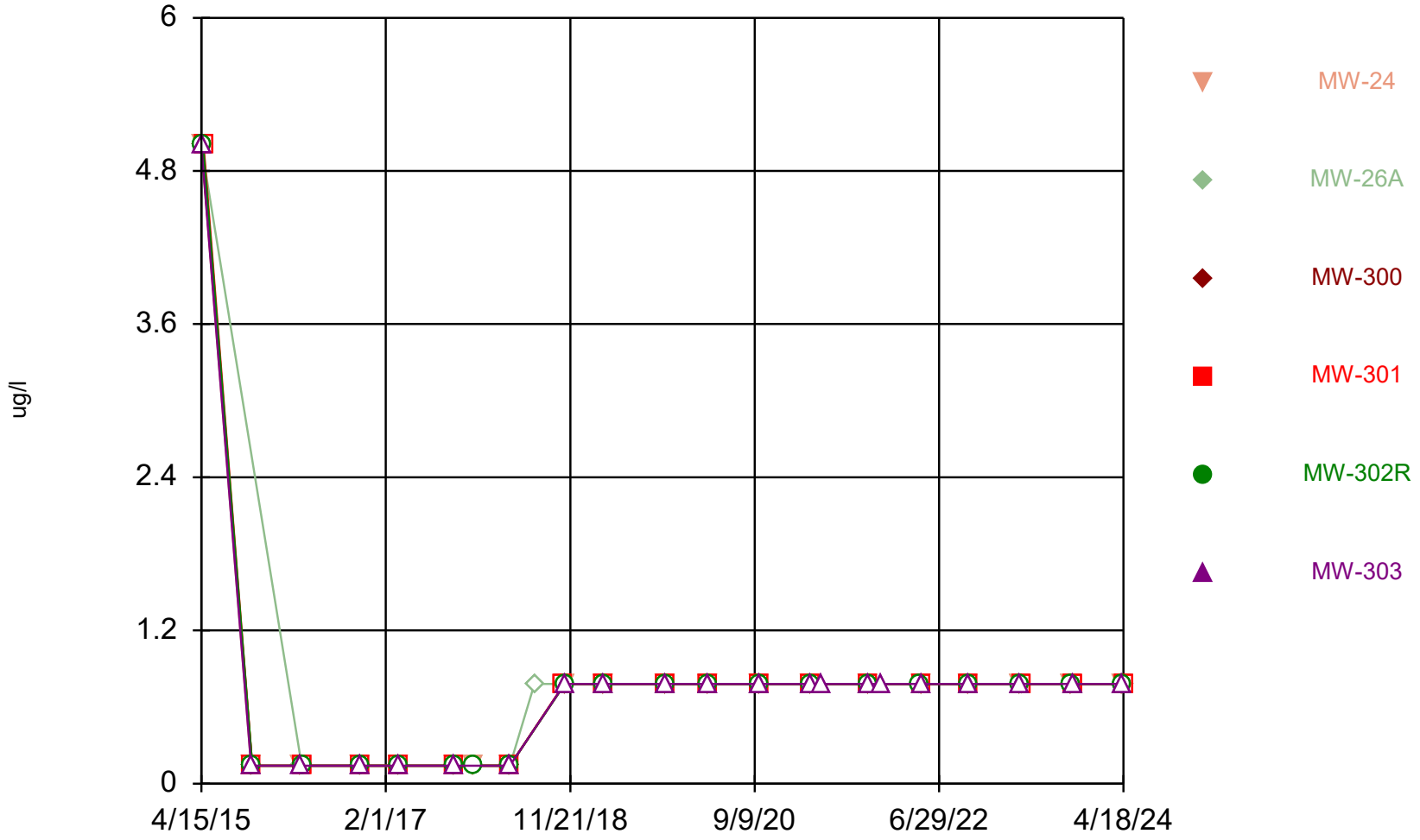
Hollow symbols indicate censored values.

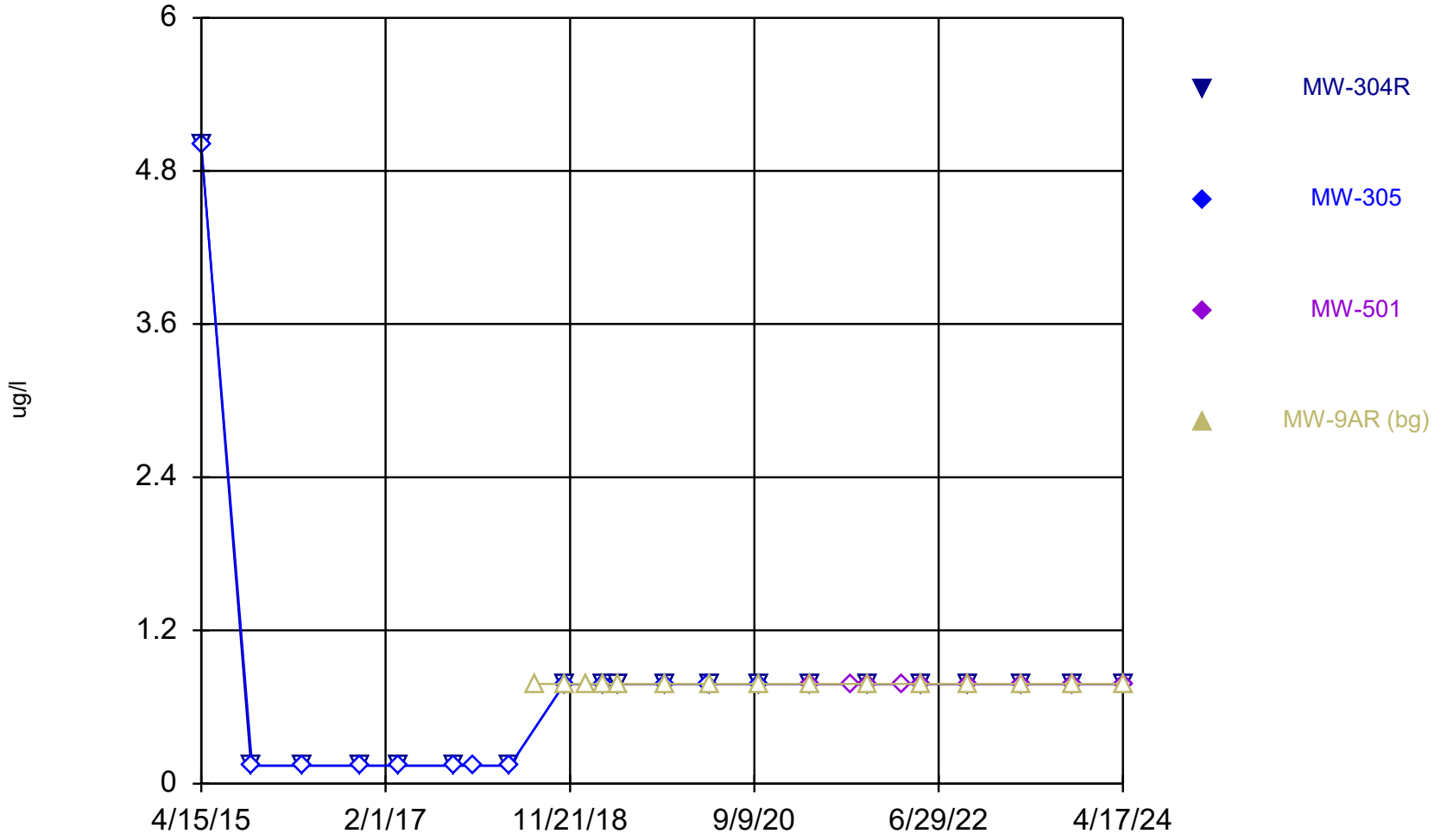
Time Series



Constituent: Bromoform Analysis Run 7/12/2024 2:51 PM View: App I_VOCs
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

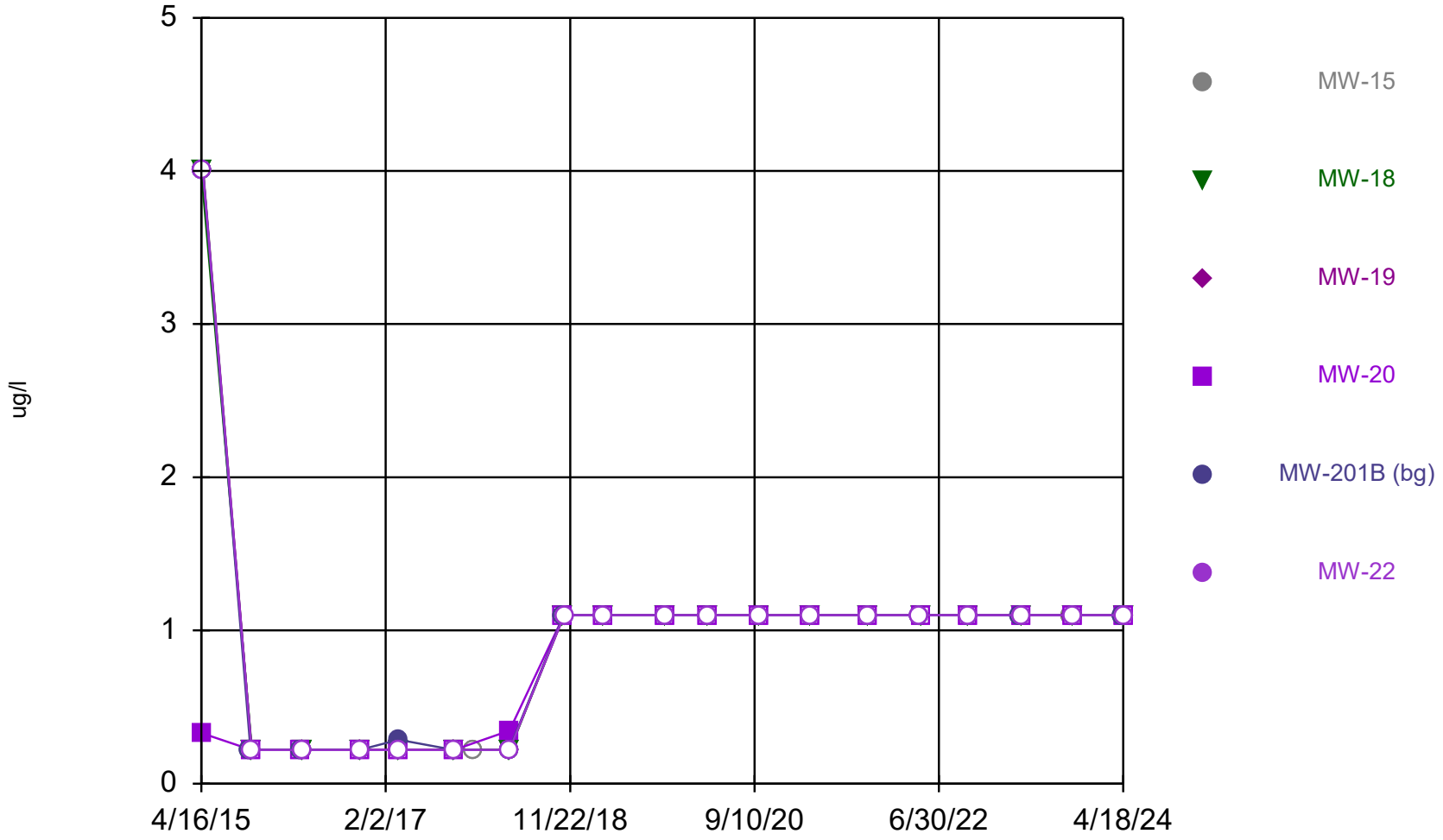


Constituent: Bromoform Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

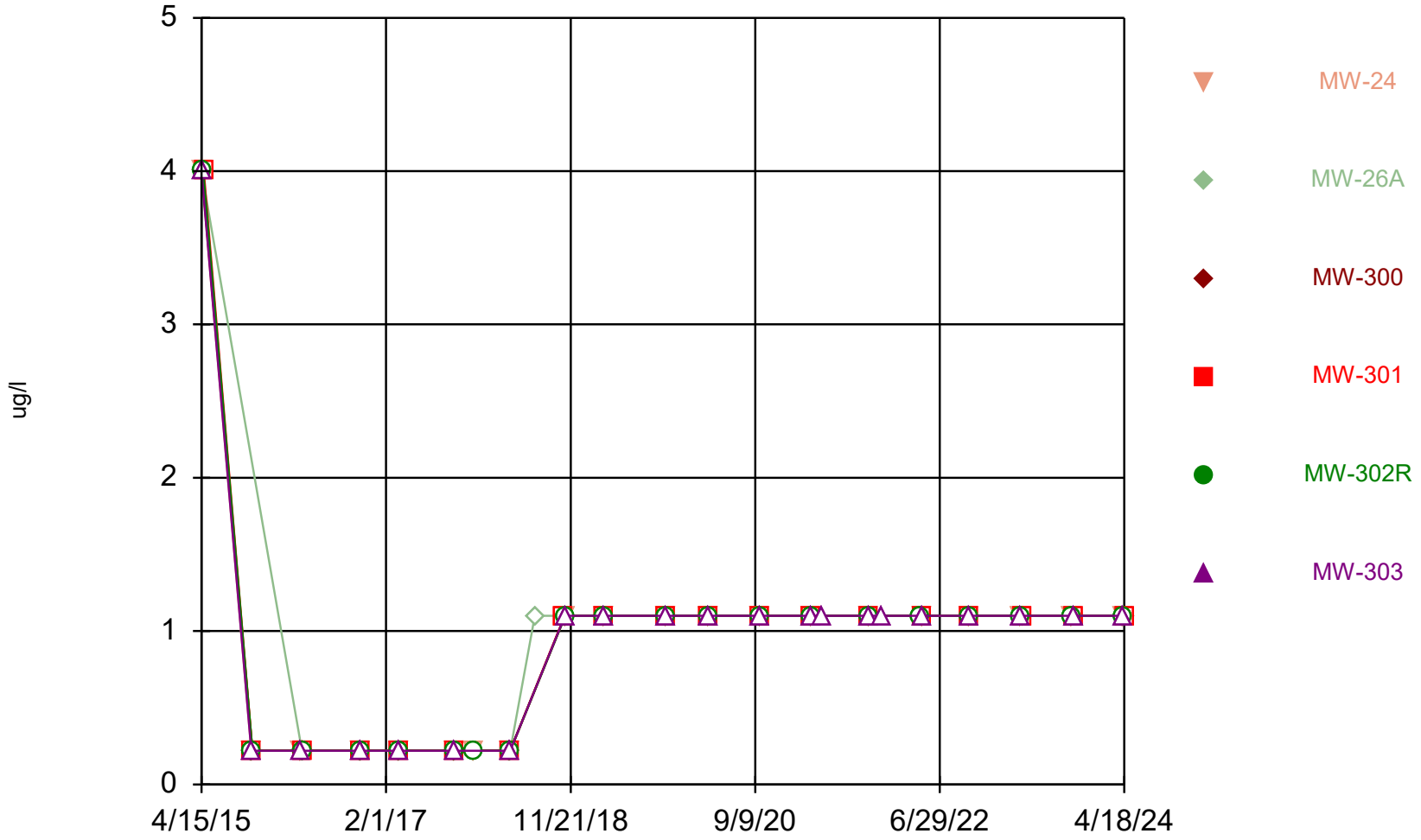


Constituent: Bromomethane Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

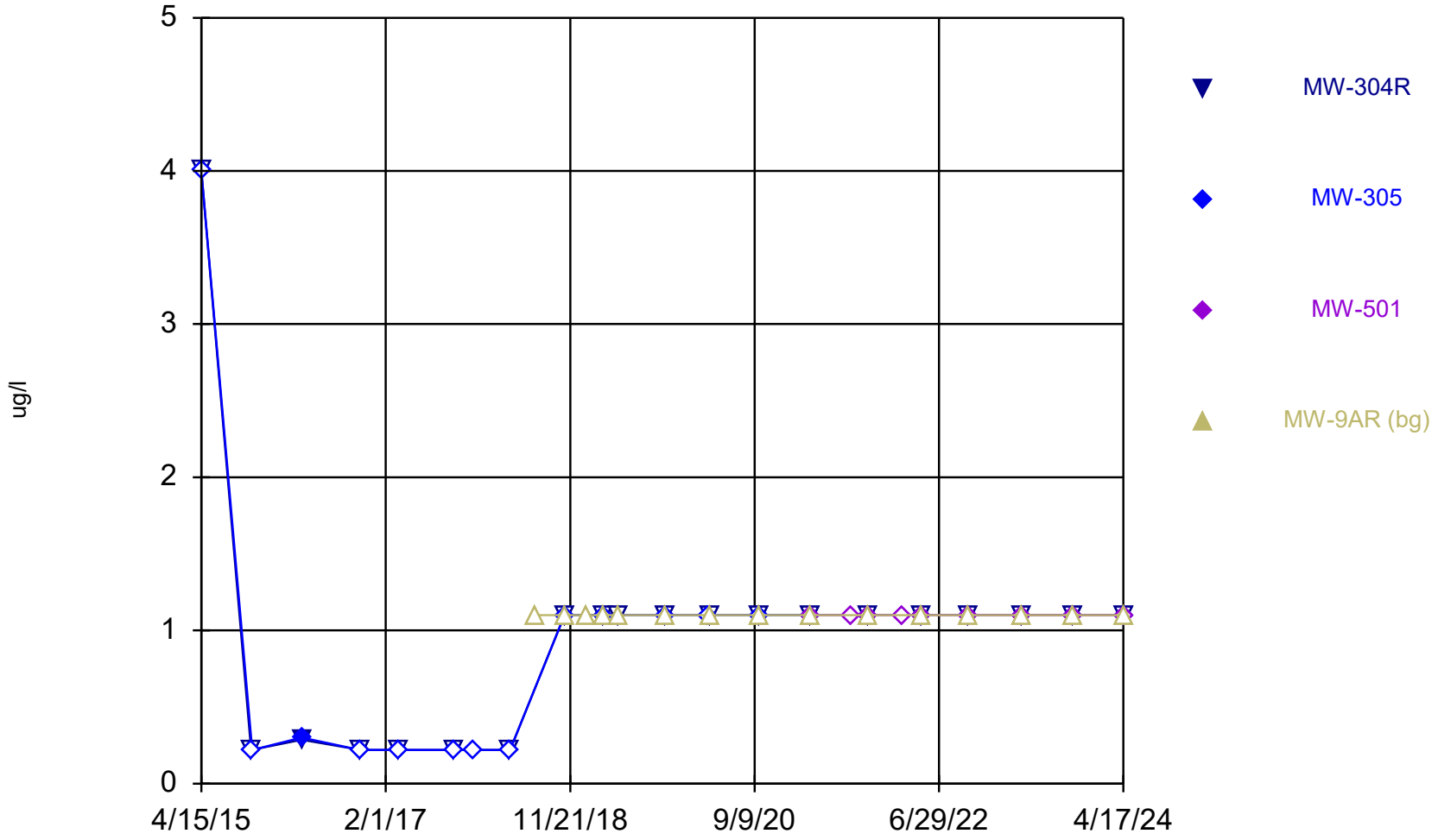


Constituent: Bromomethane Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

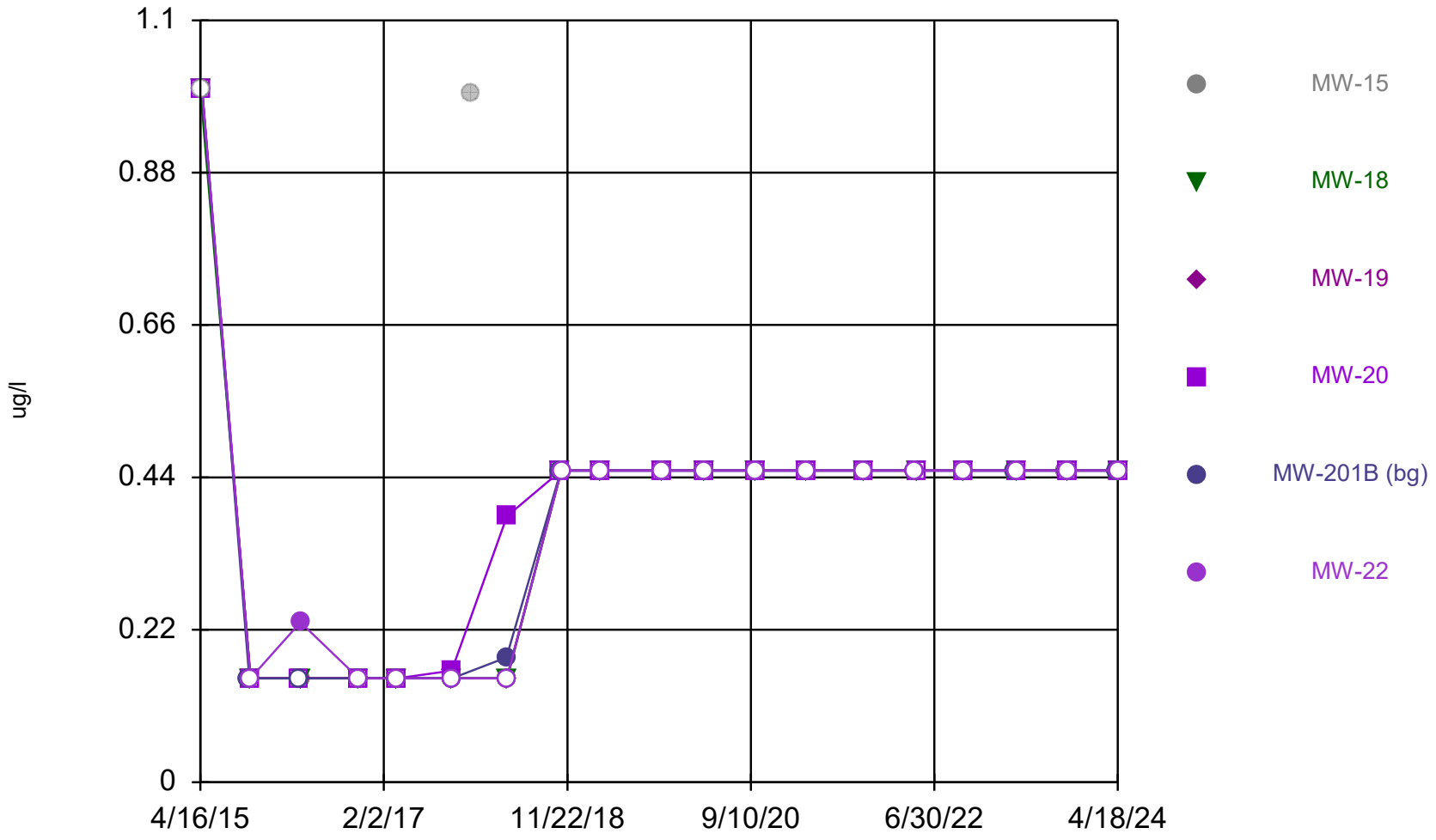


Constituent: Bromomethane Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

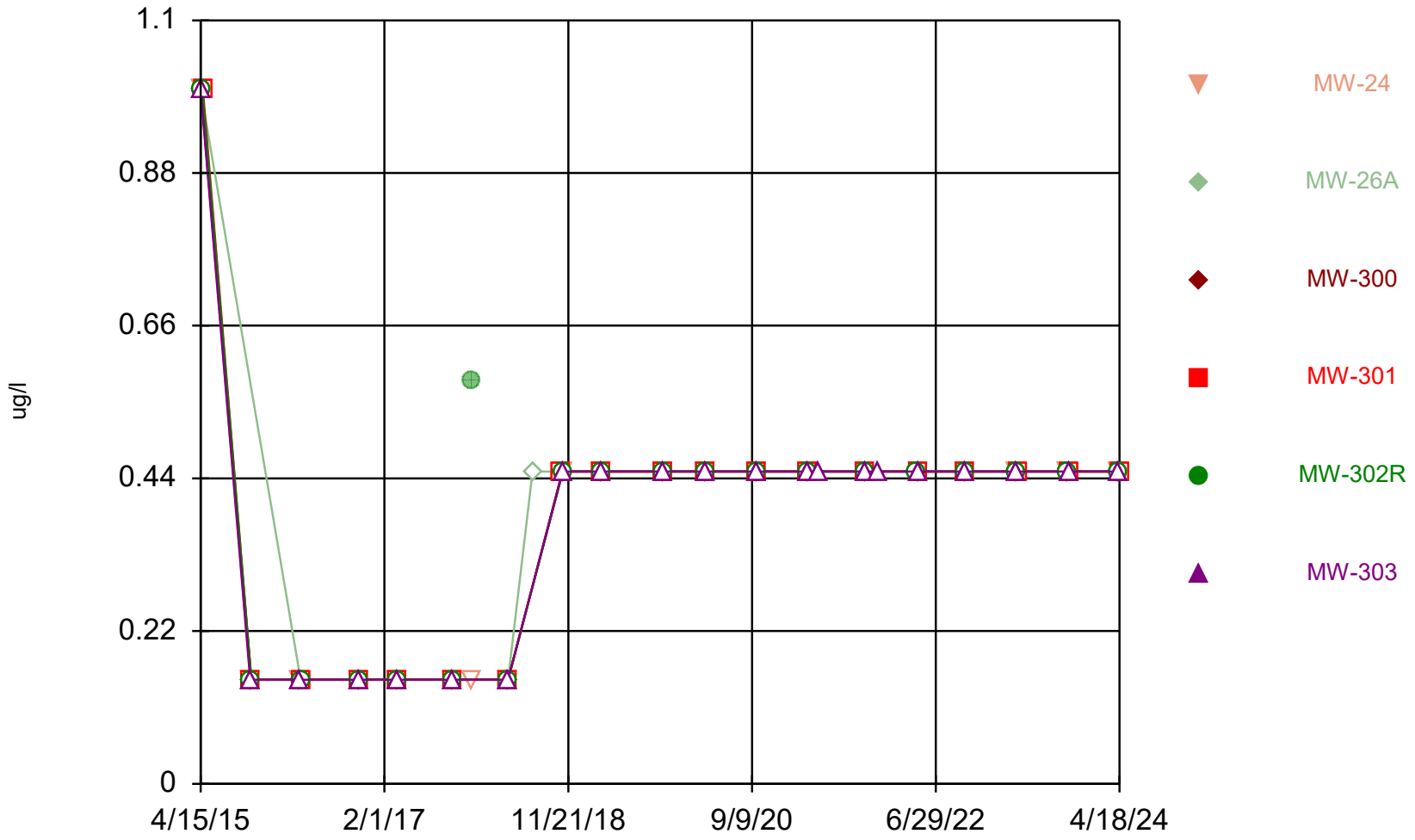


Constituent: Carbon Disulfide Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

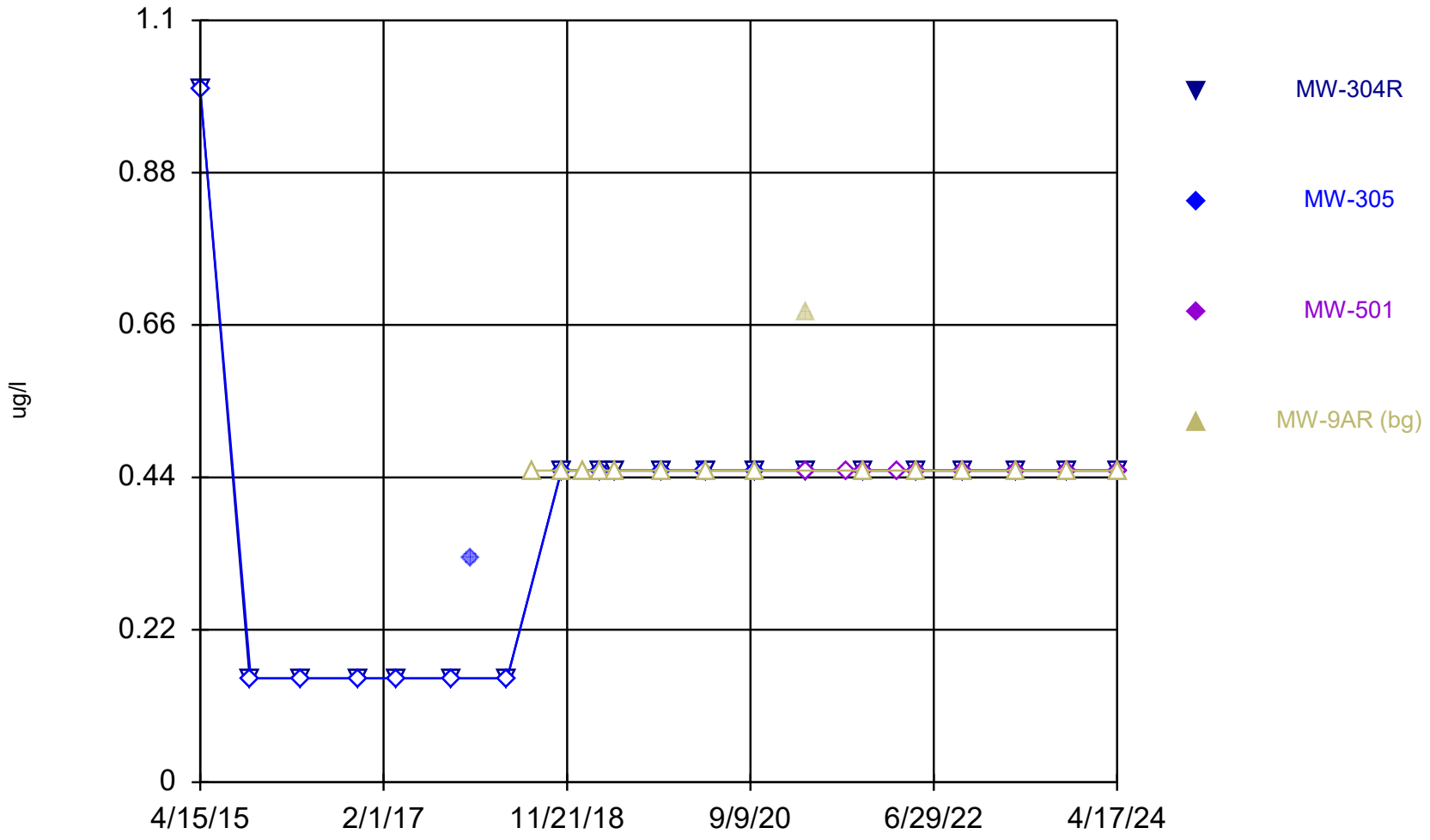


Constituent: Carbon Disulfide Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

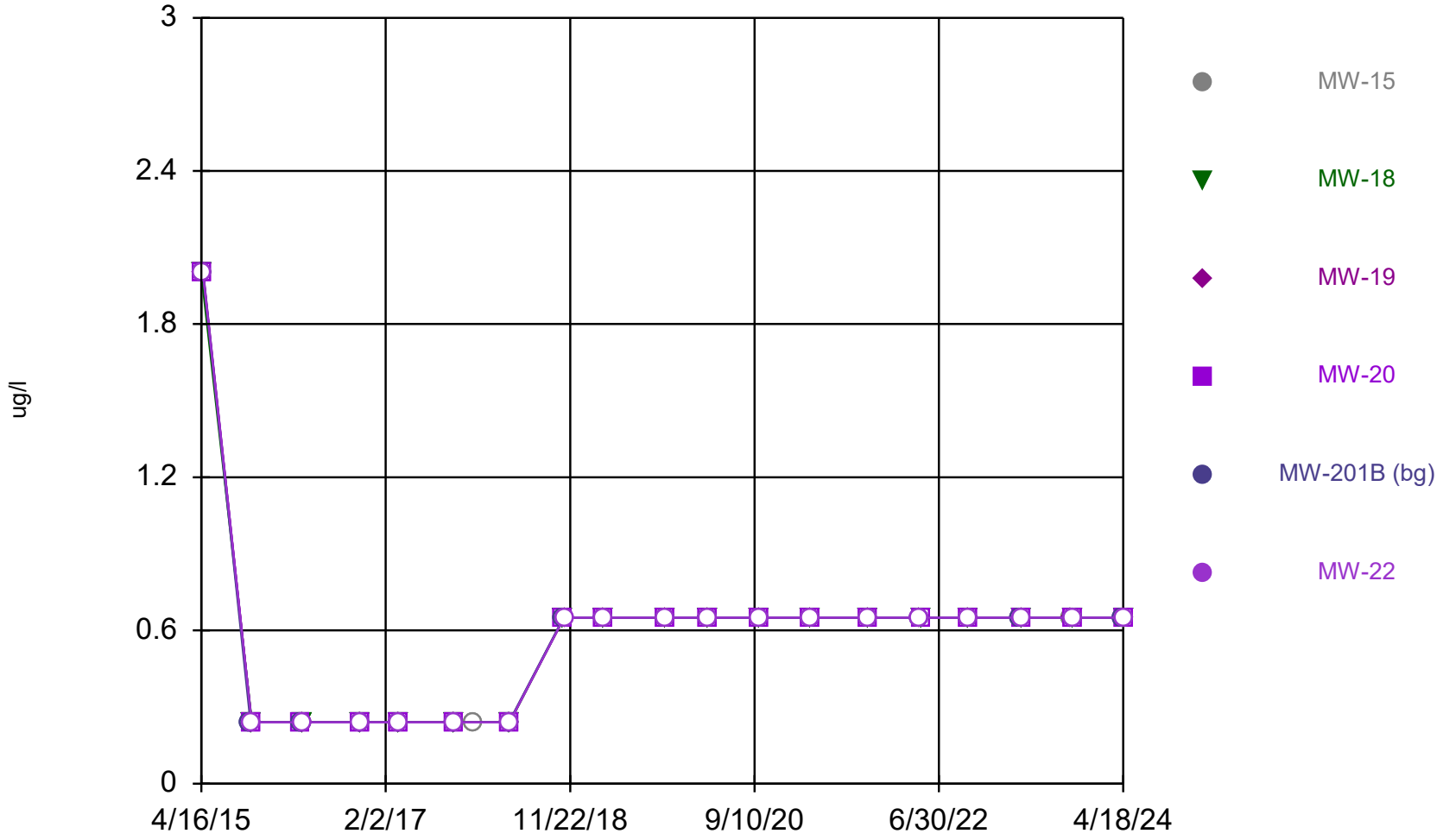


Constituent: Carbon Disulfide Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

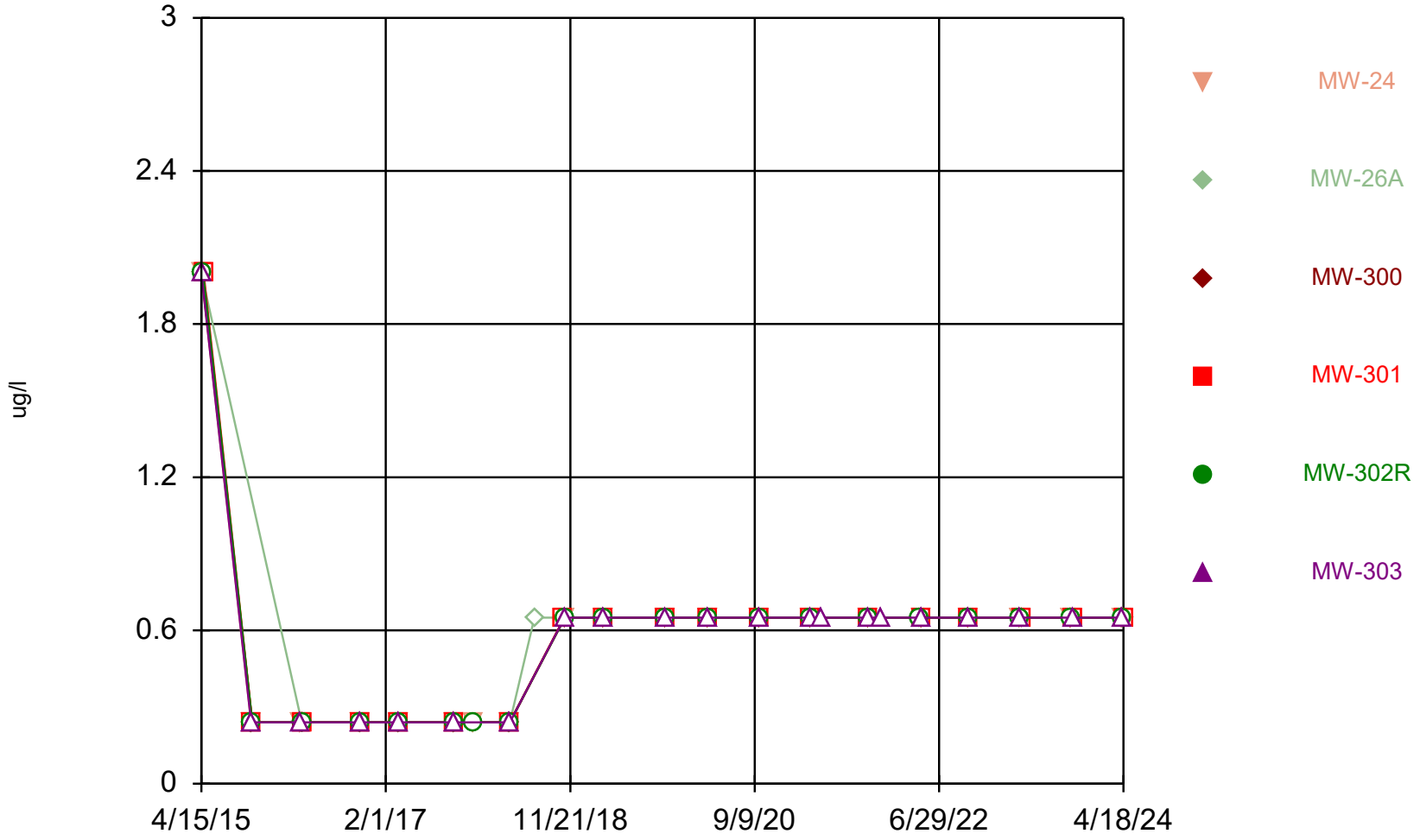


Constituent: Carbon Tetrachloride Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

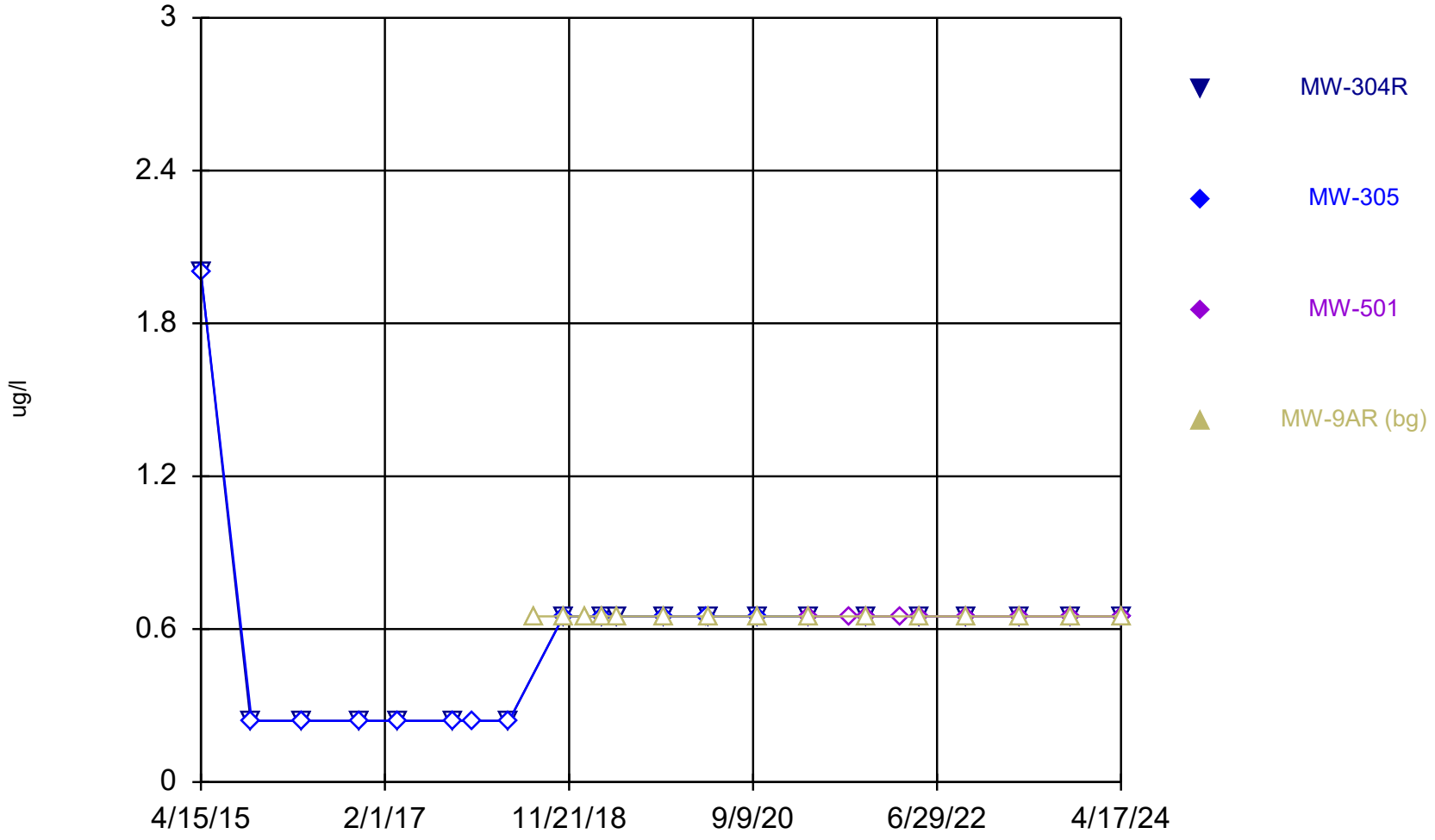


Constituent: Carbon Tetrachloride Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

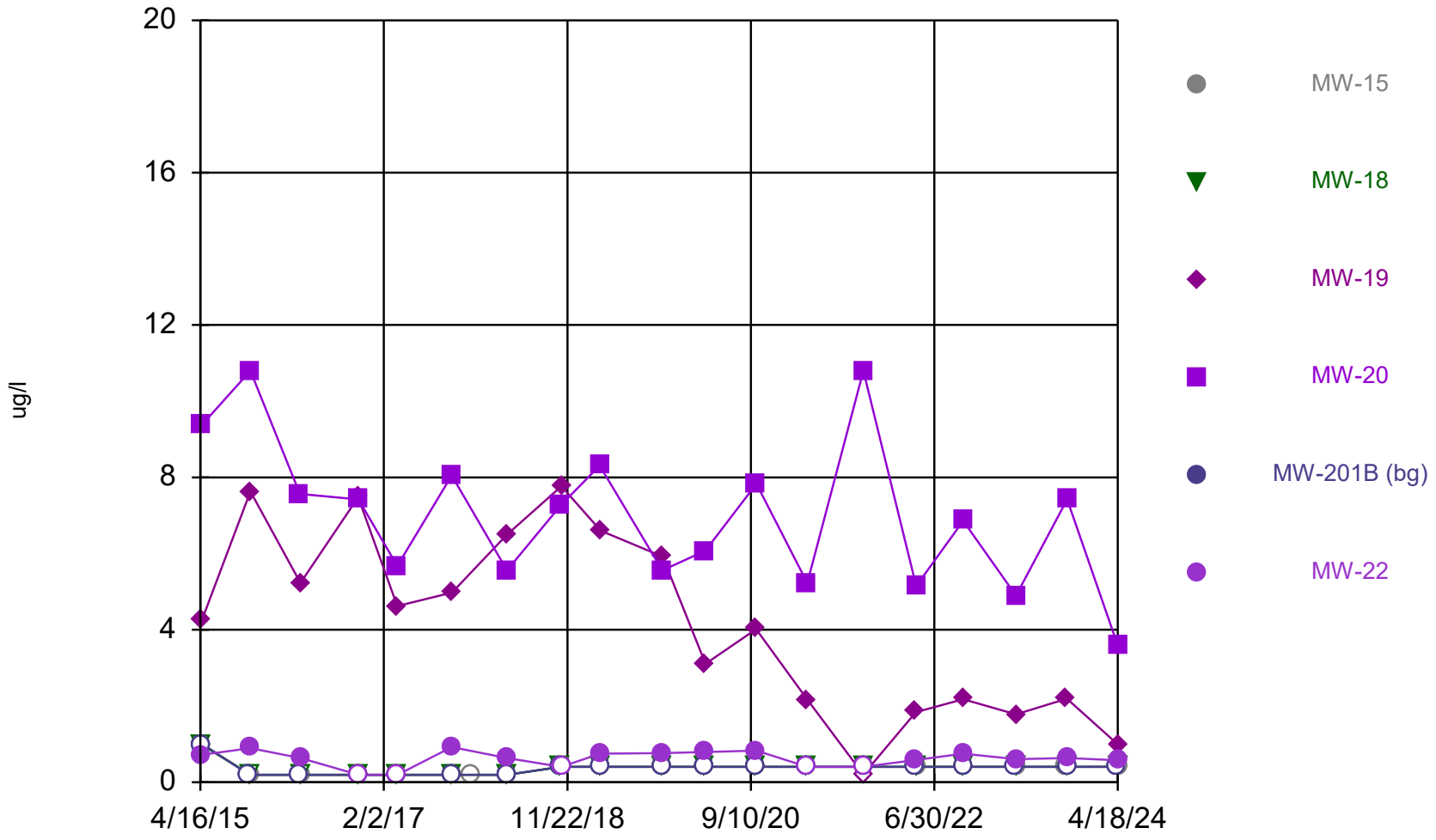


Constituent: Carbon Tetrachloride Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

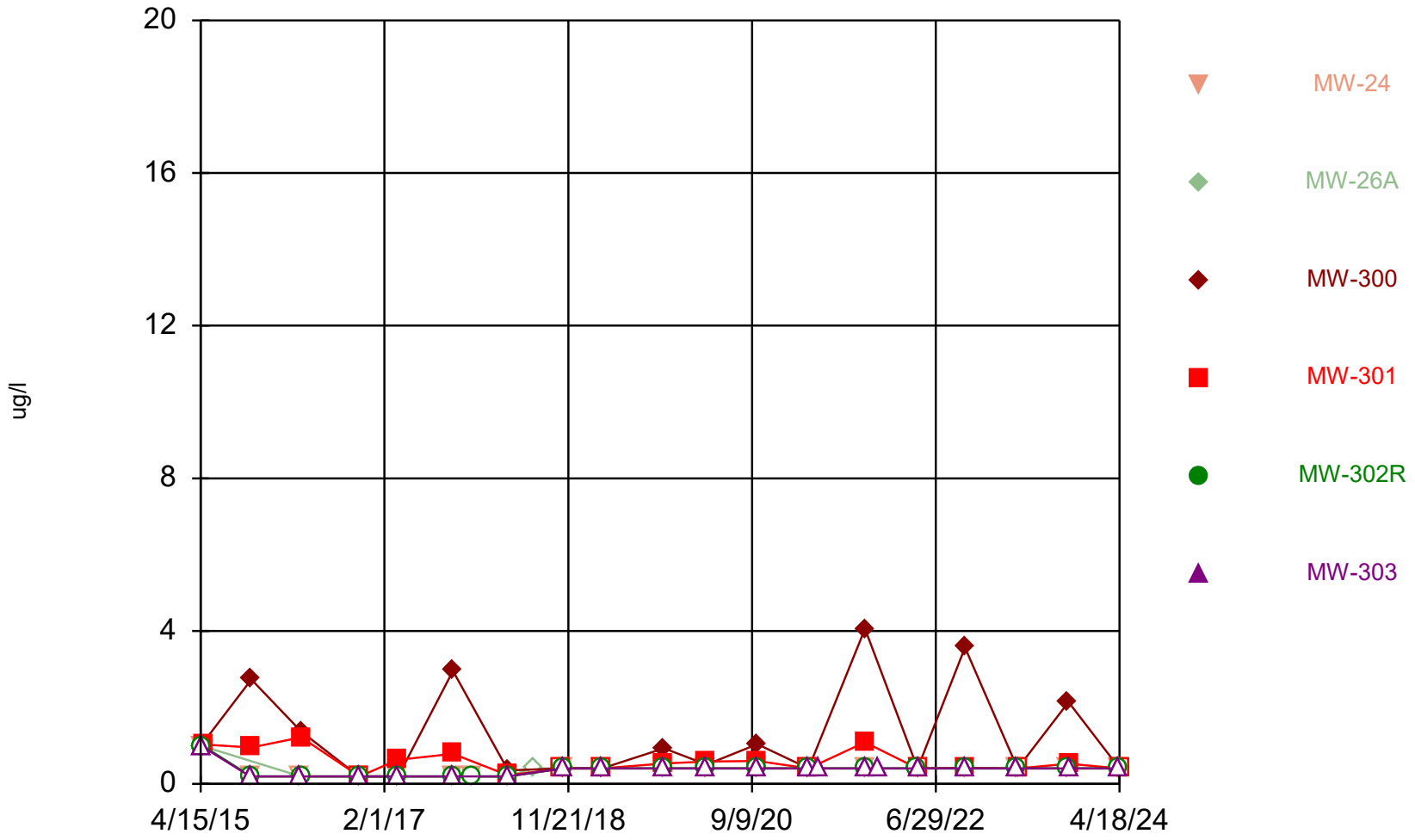


Constituent: Chlorobenzene Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

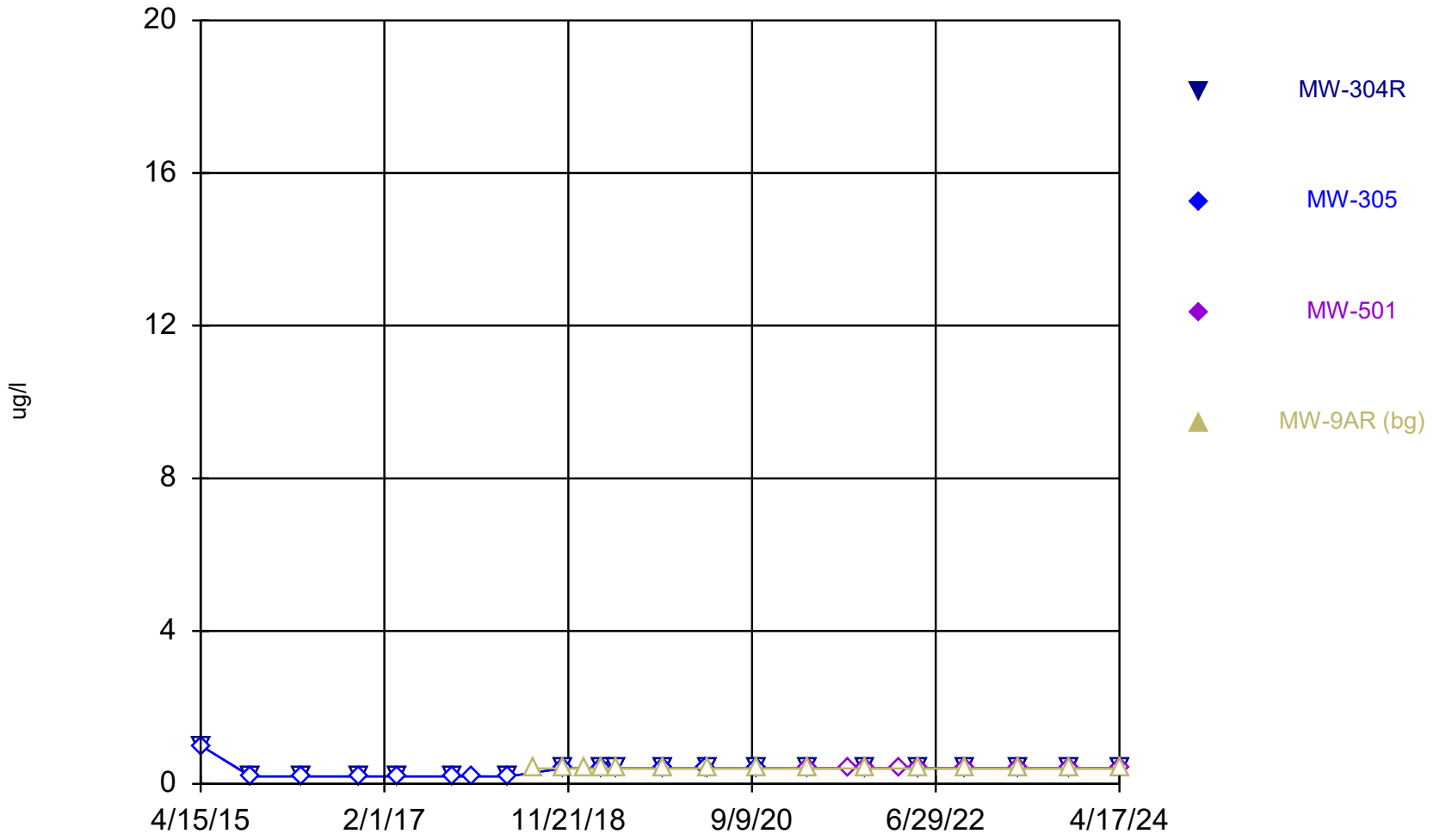


Constituent: Chlorobenzene Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



Constituent: Chlorobenzene Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

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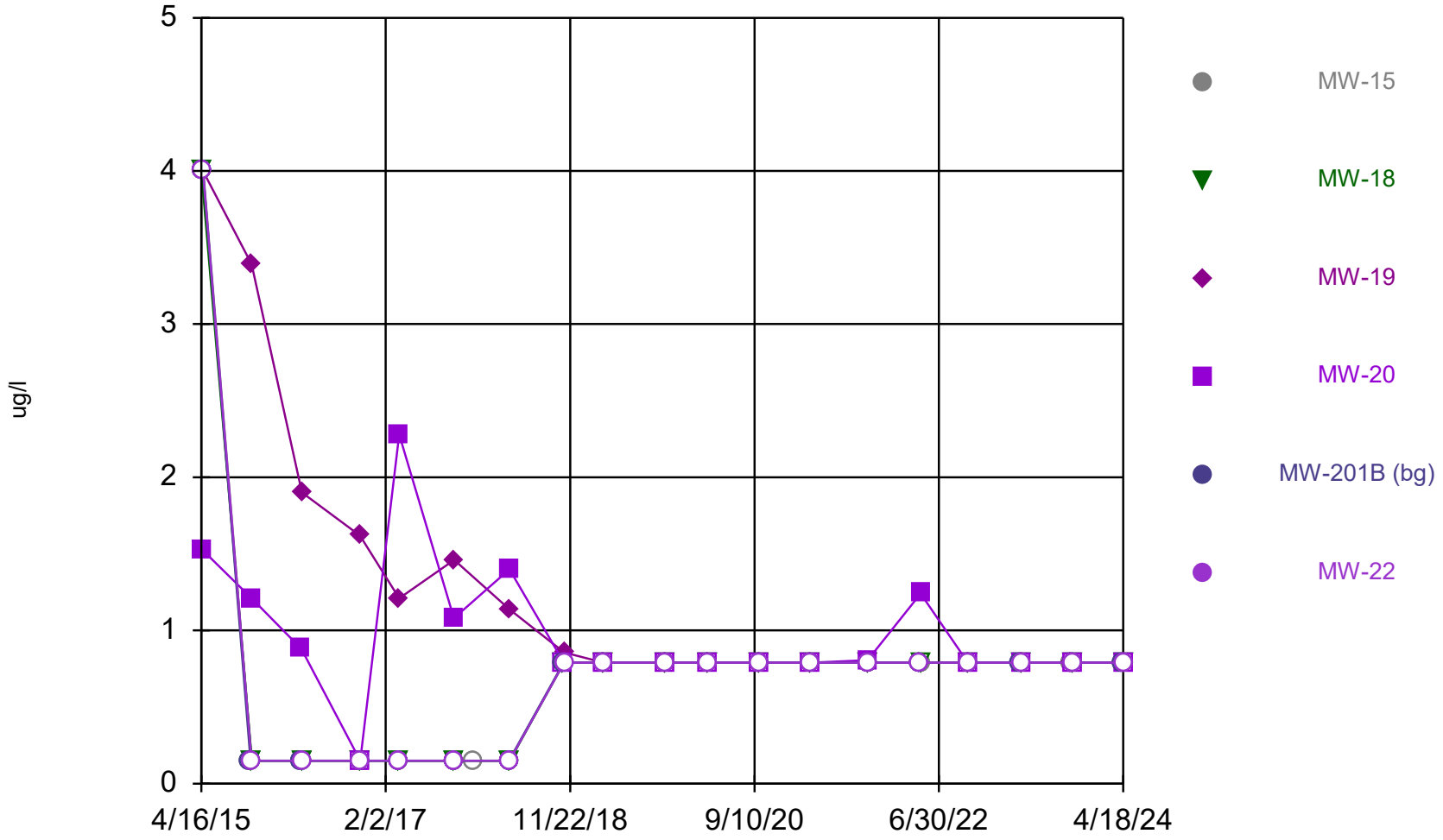
Hollow symbols indicate censored values.

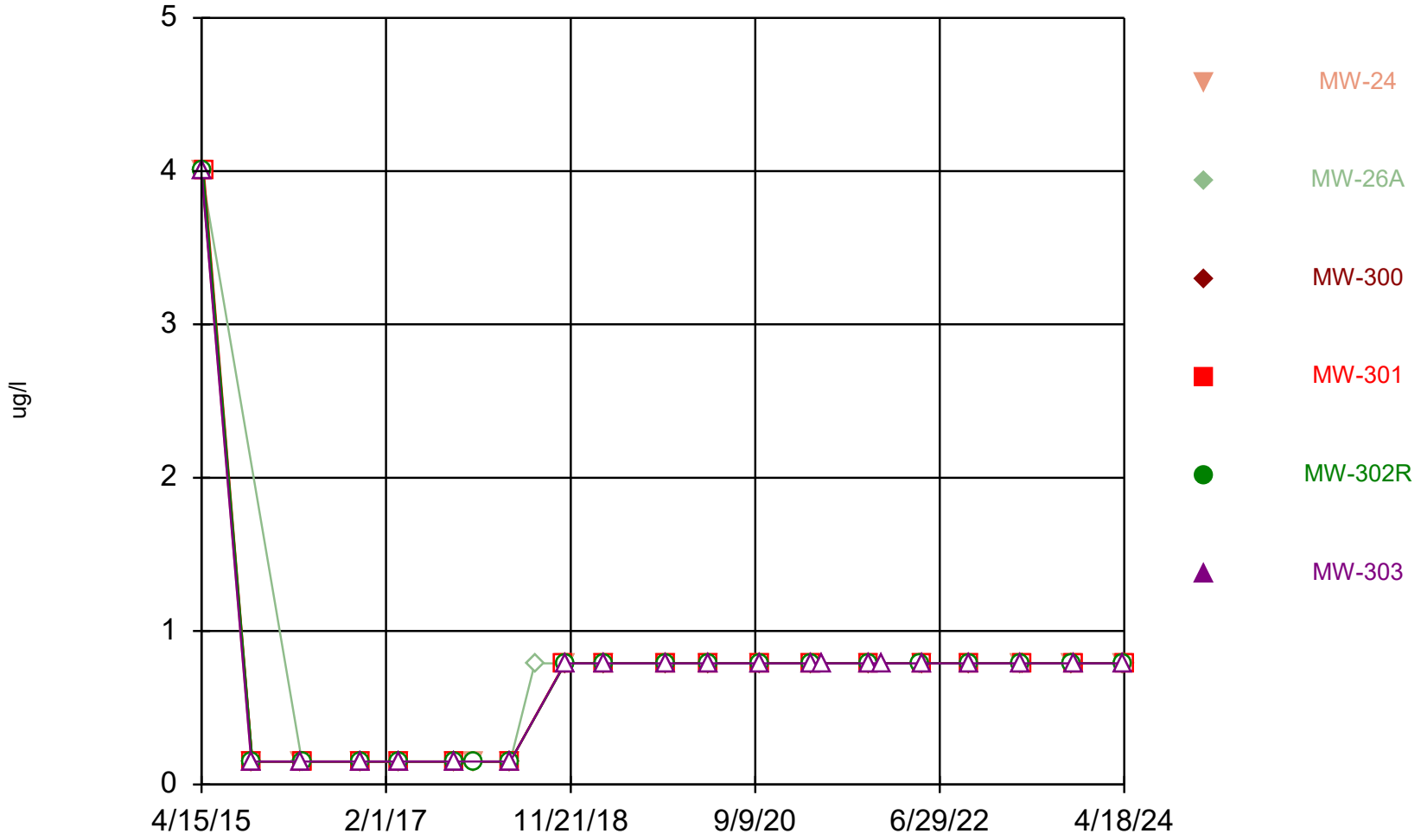
Time Series



Constituent: Chloroethane Analysis Run 7/12/2024 2:51 PM View: App I_VOCs
Linn County Data: CRLCSWA_Groundwater Database

Sanitas™ v.10.0.15 Software licensed to HDR. UG
Hollow symbols indicate censored values.

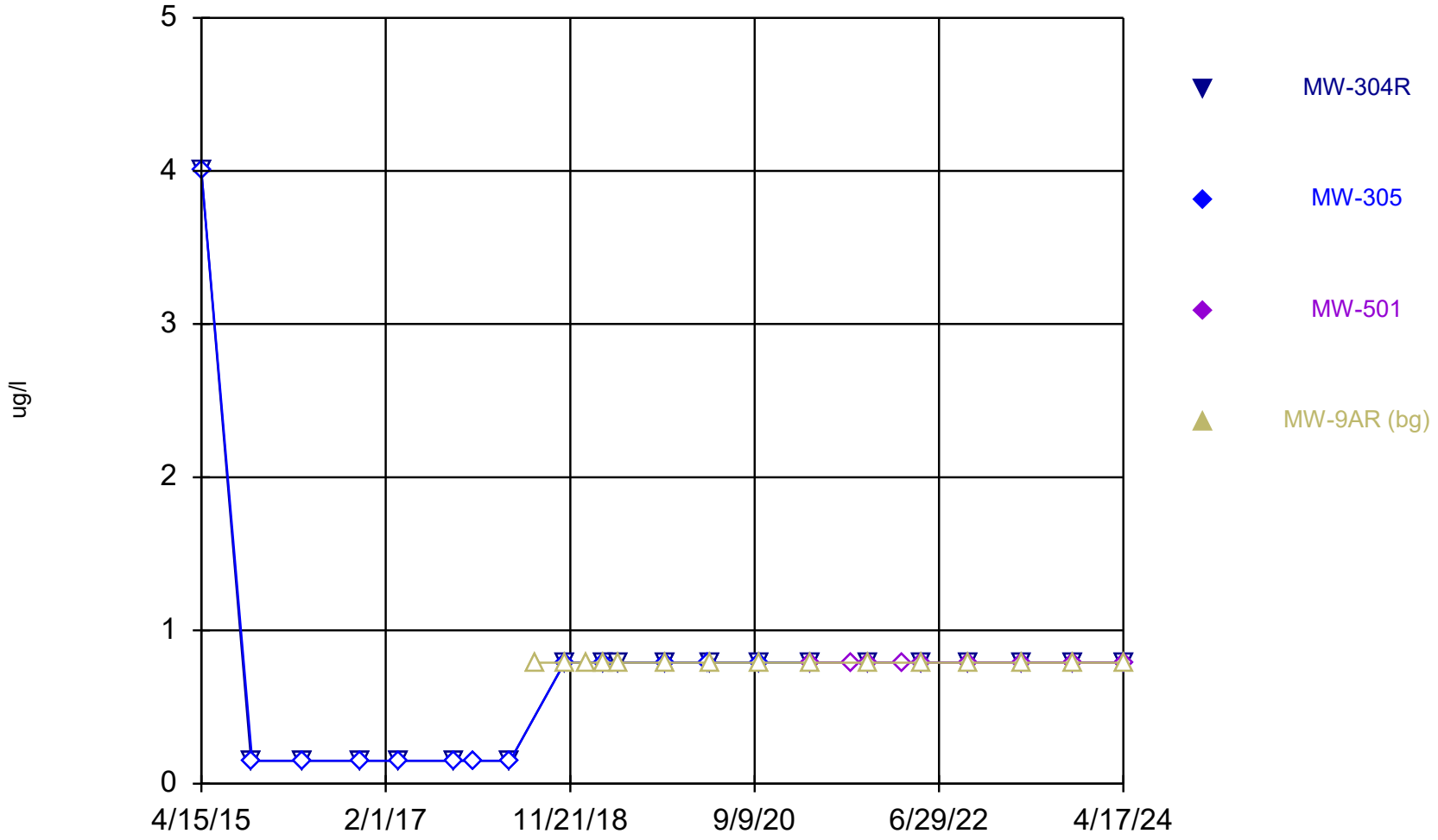
Time Series



Constituent: Chloroethane Analysis Run 7/12/2024 2:51 PM View: App I_VOCs
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

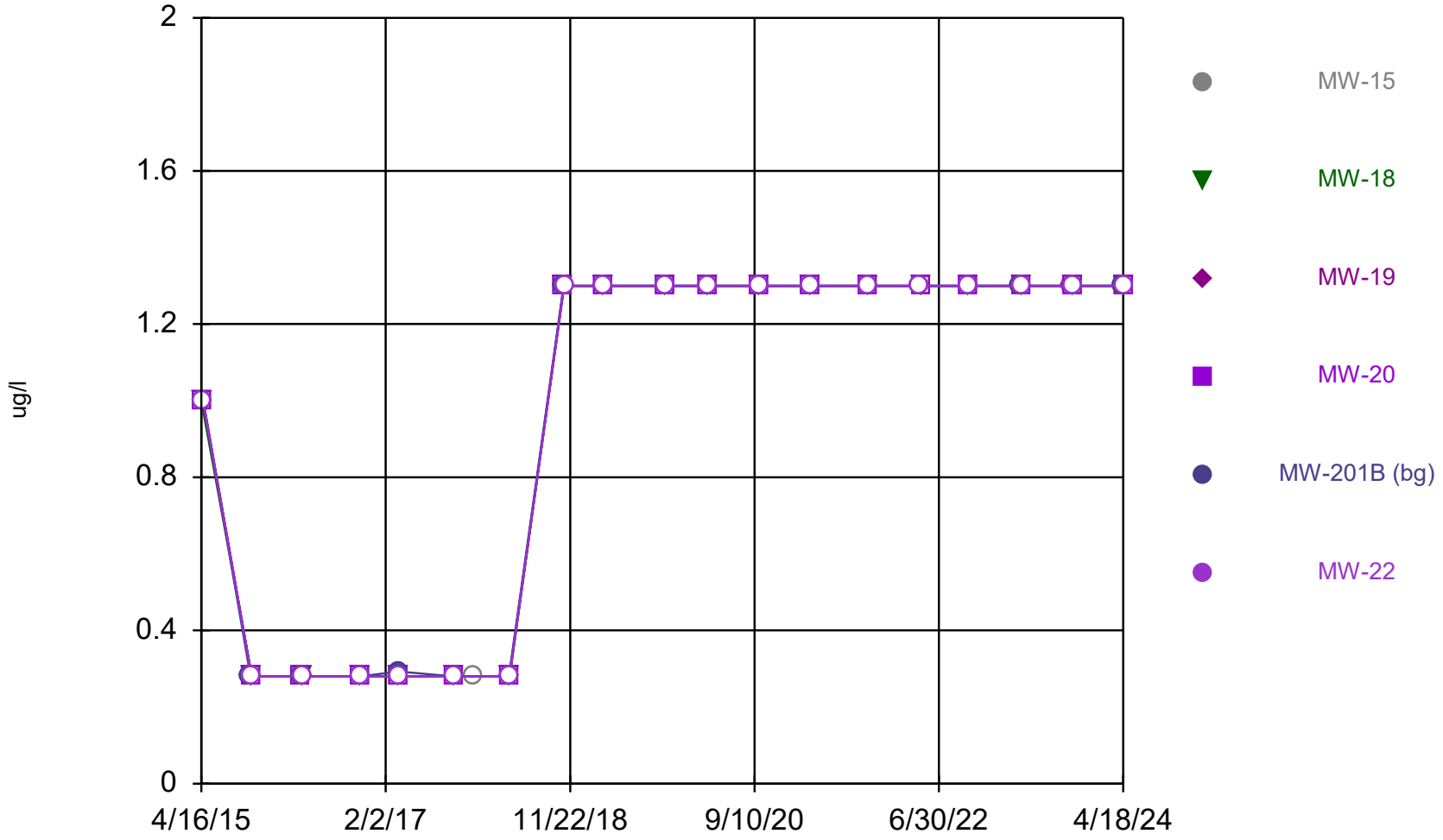


Constituent: Chloroethane Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

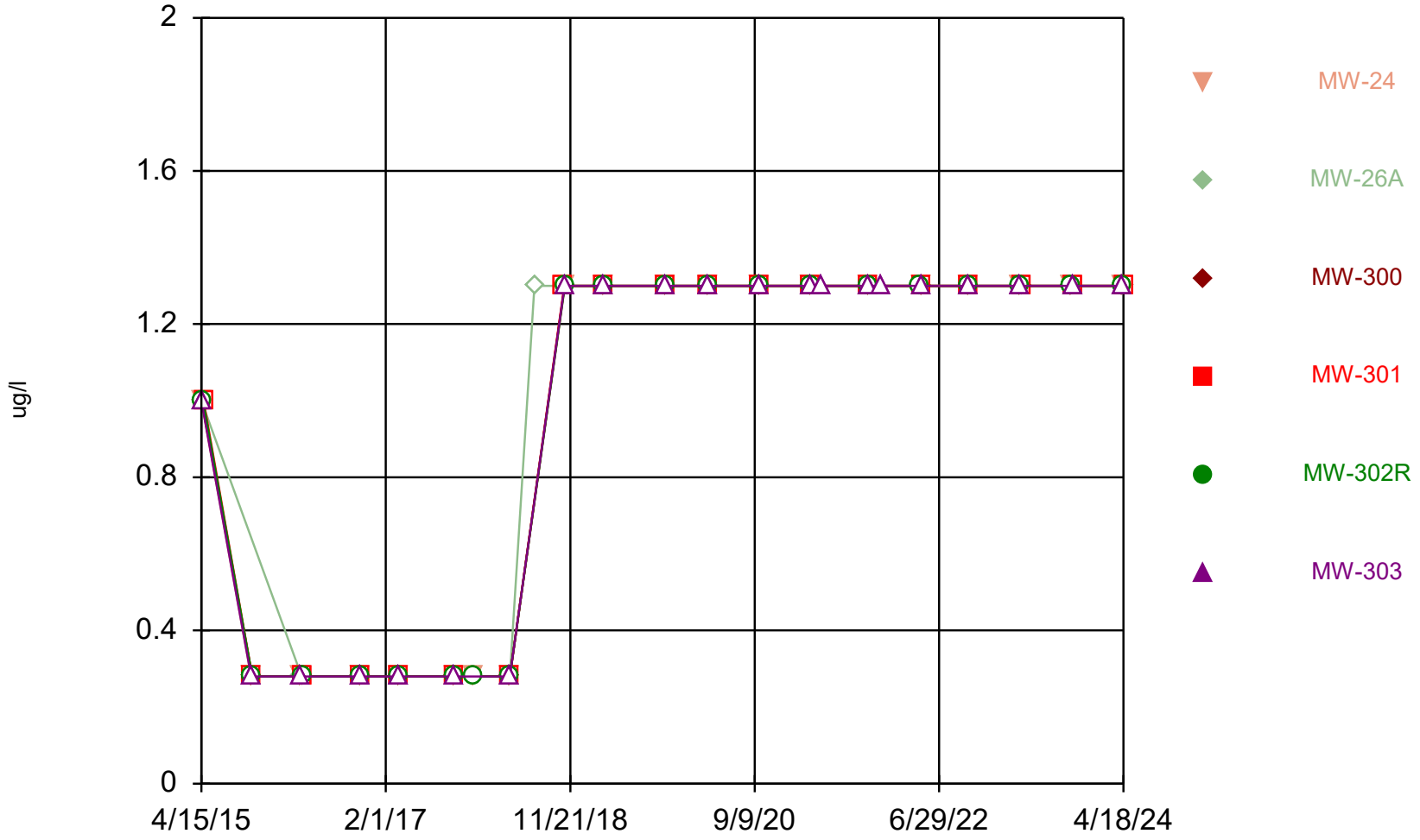


Constituent: Chloroform Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

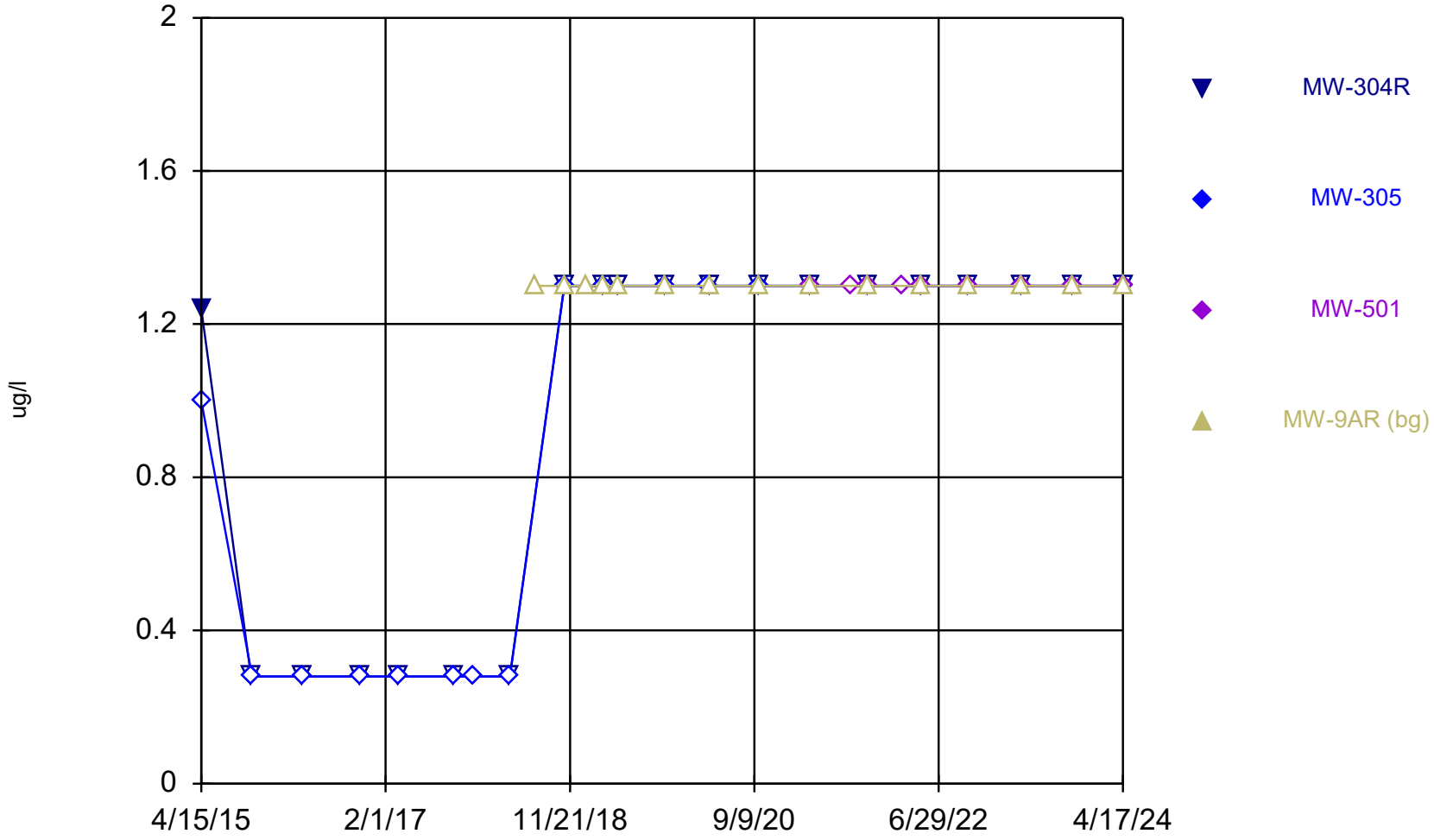


Constituent: Chloroform Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

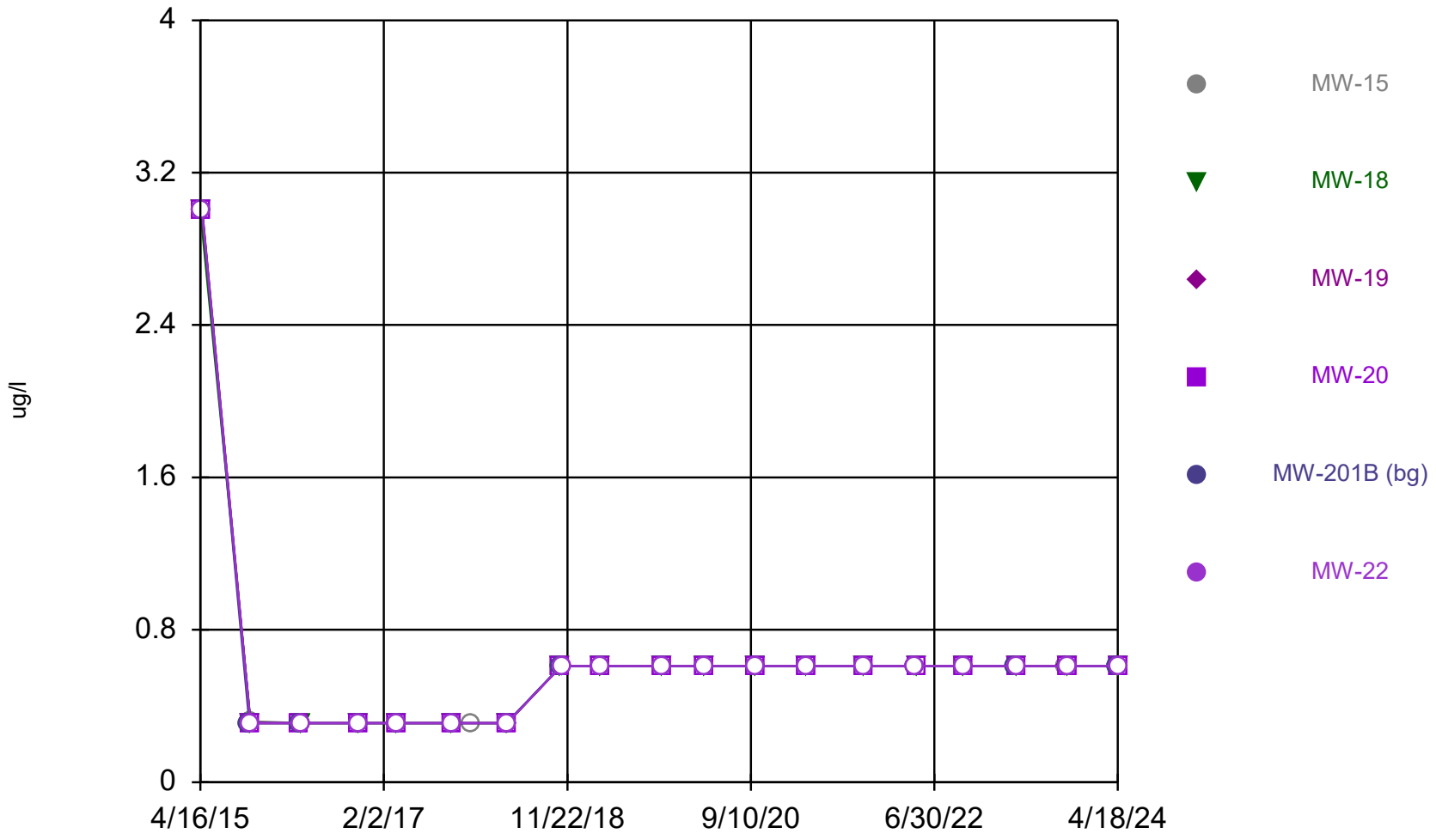


Constituent: Chloroform Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



Constituent: Chloromethane Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

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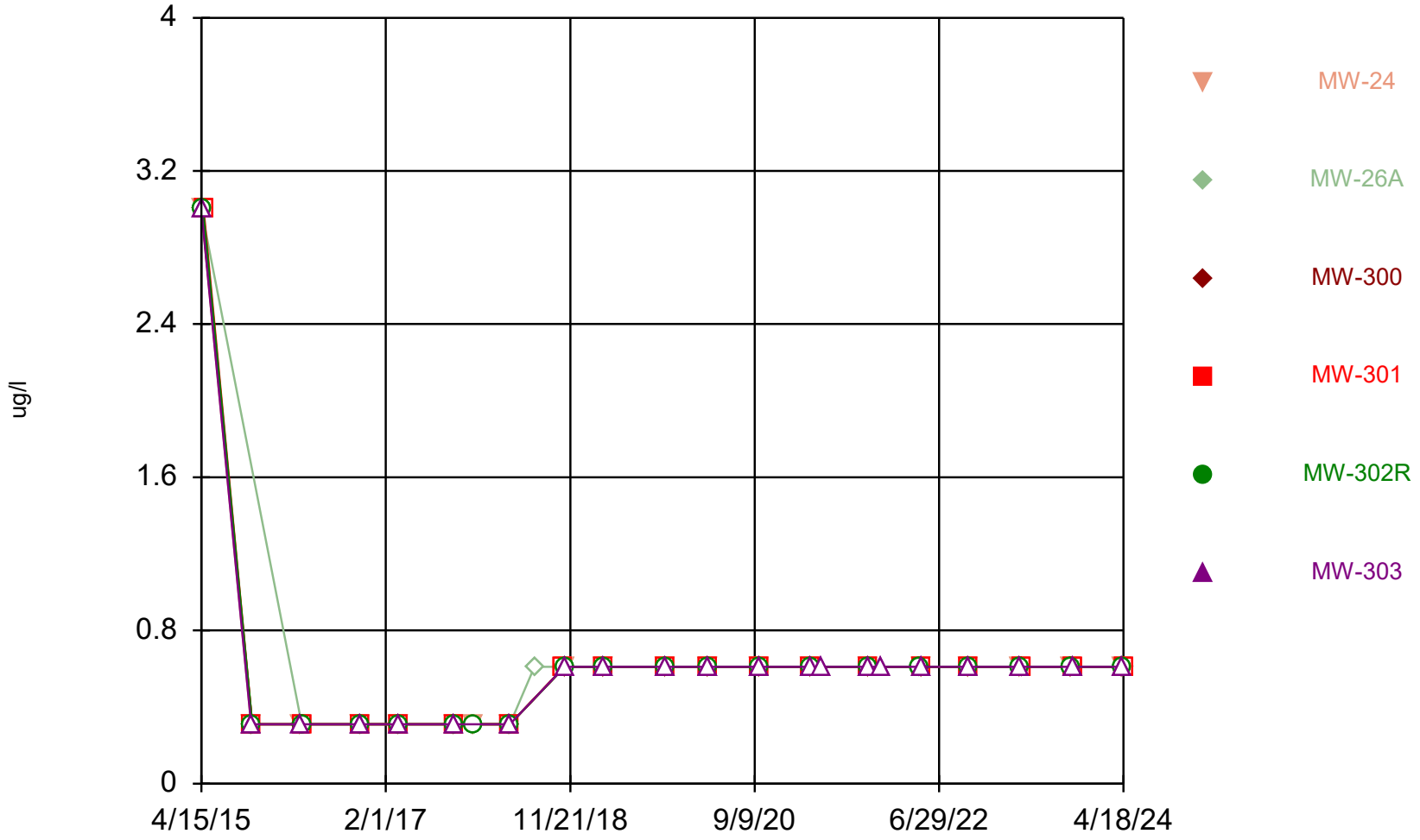
Hollow symbols indicate censored values.

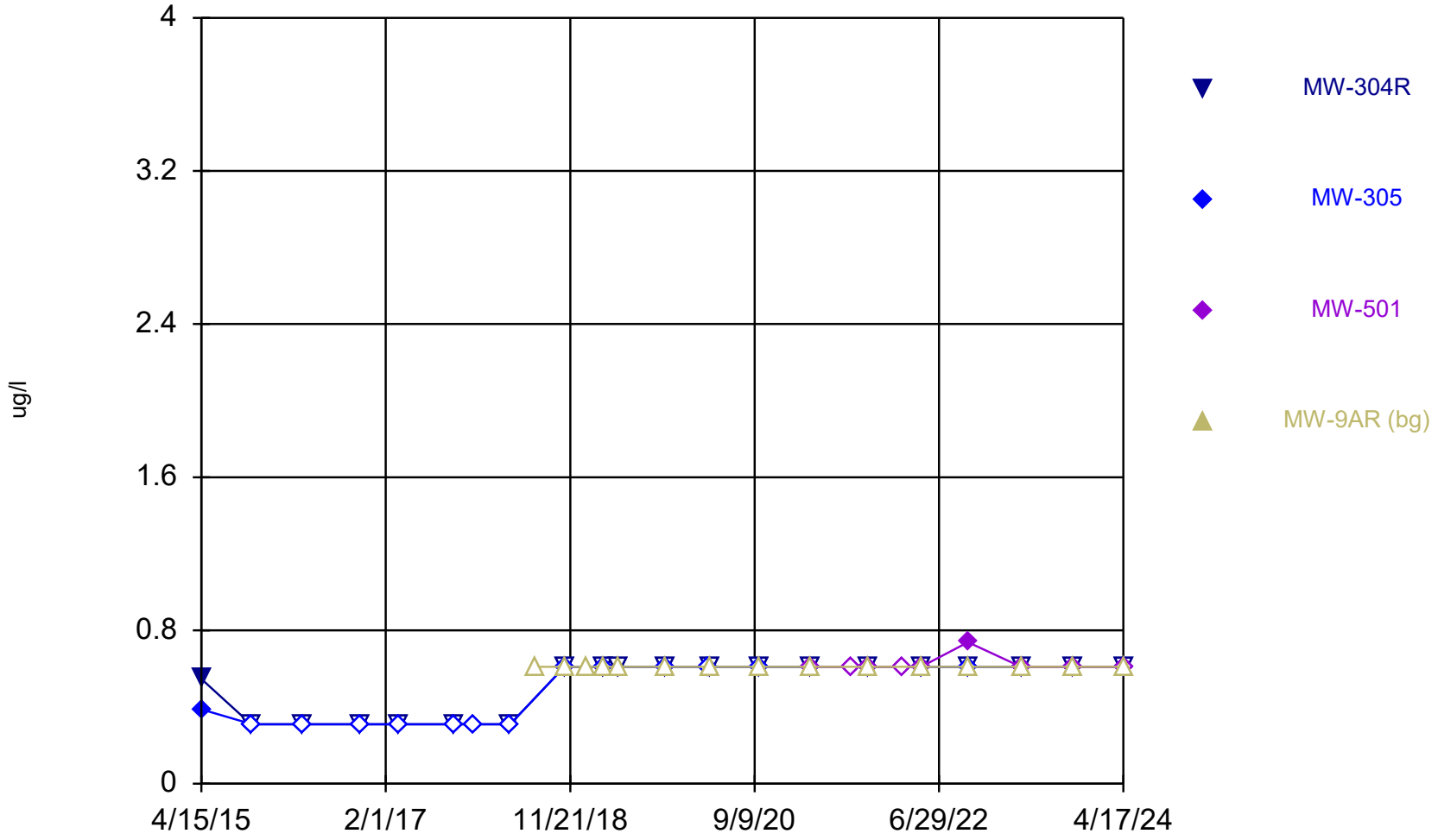
Time Series



Constituent: Chloromethane Analysis Run 7/12/2024 2:51 PM View: App I_VOCs
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

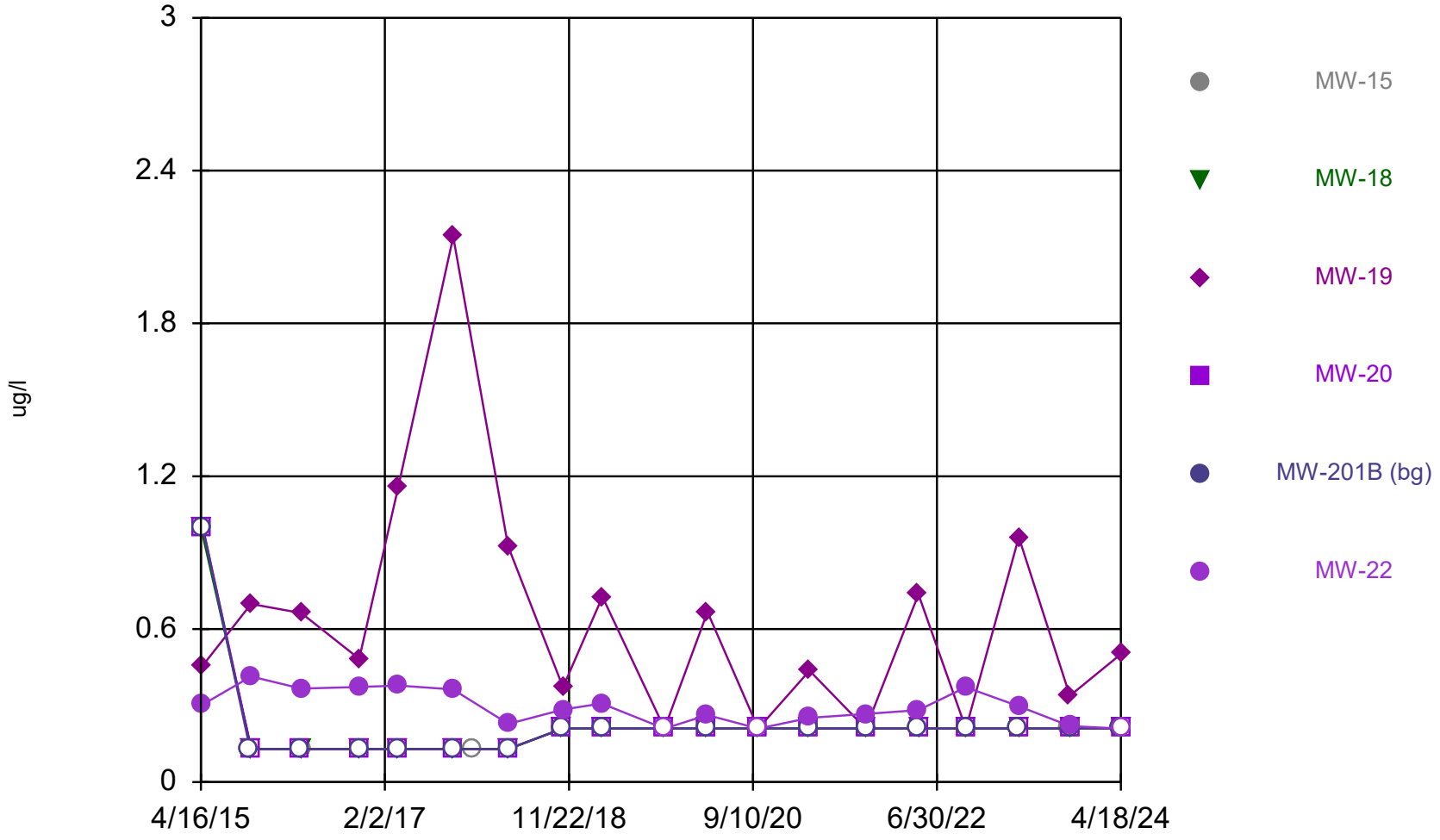


Constituent: Chloromethane Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Sanitas™ v.10.0.15 Software licensed to HDR. UG
Hollow symbols indicate censored values.

Time Series

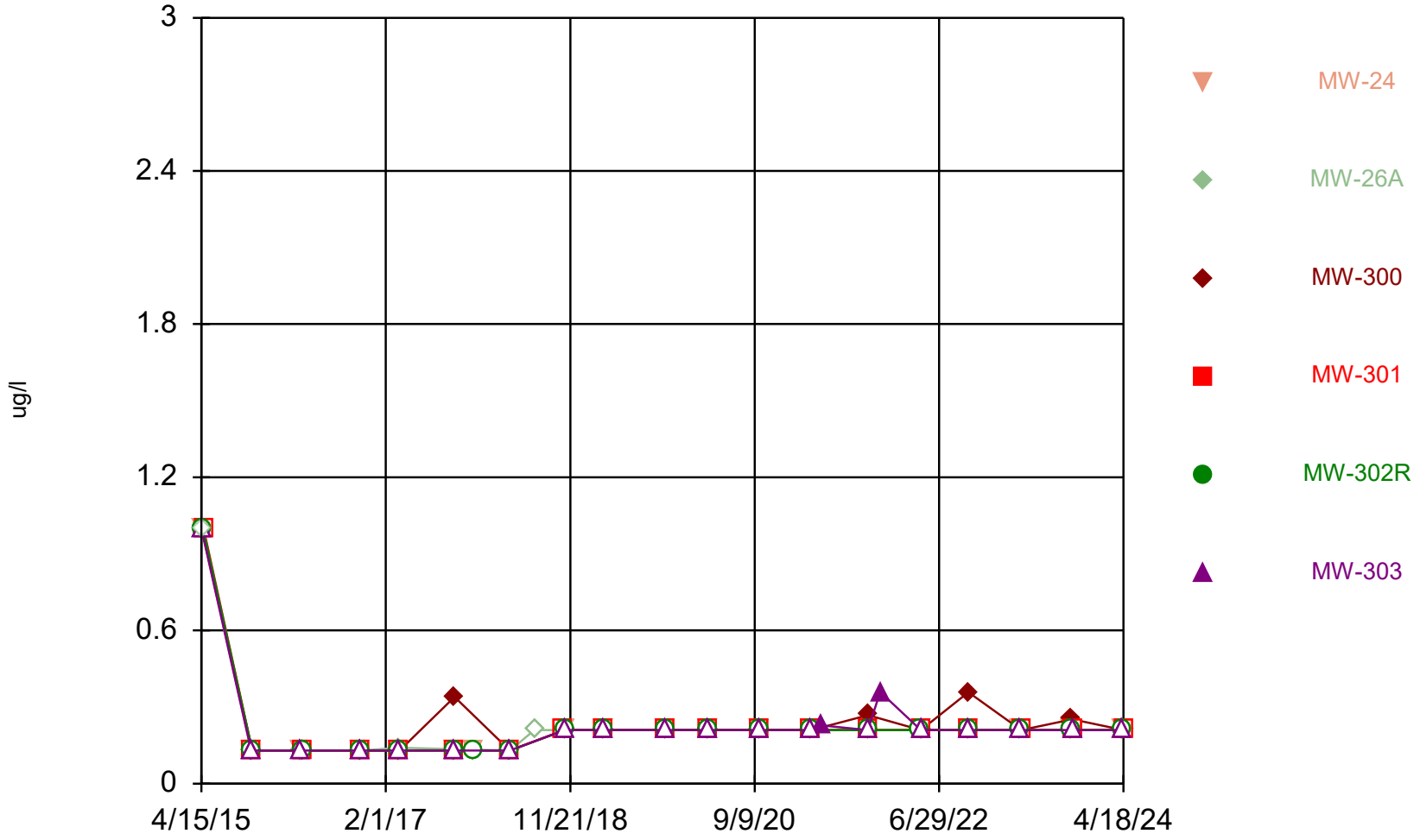


Constituent: cis-1,2-Dichloroethene Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

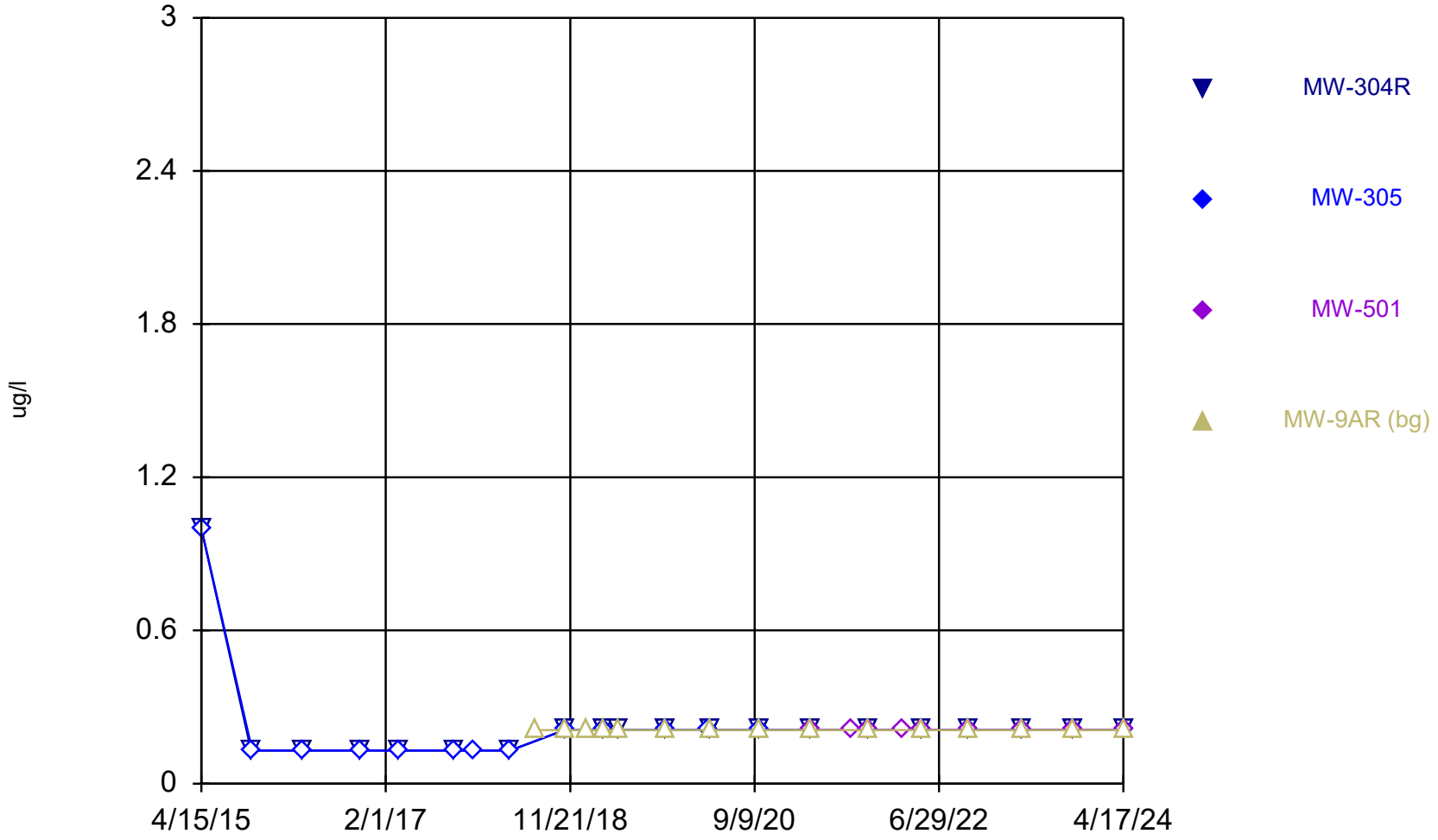


Constituent: cis-1,2-Dichloroethene Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

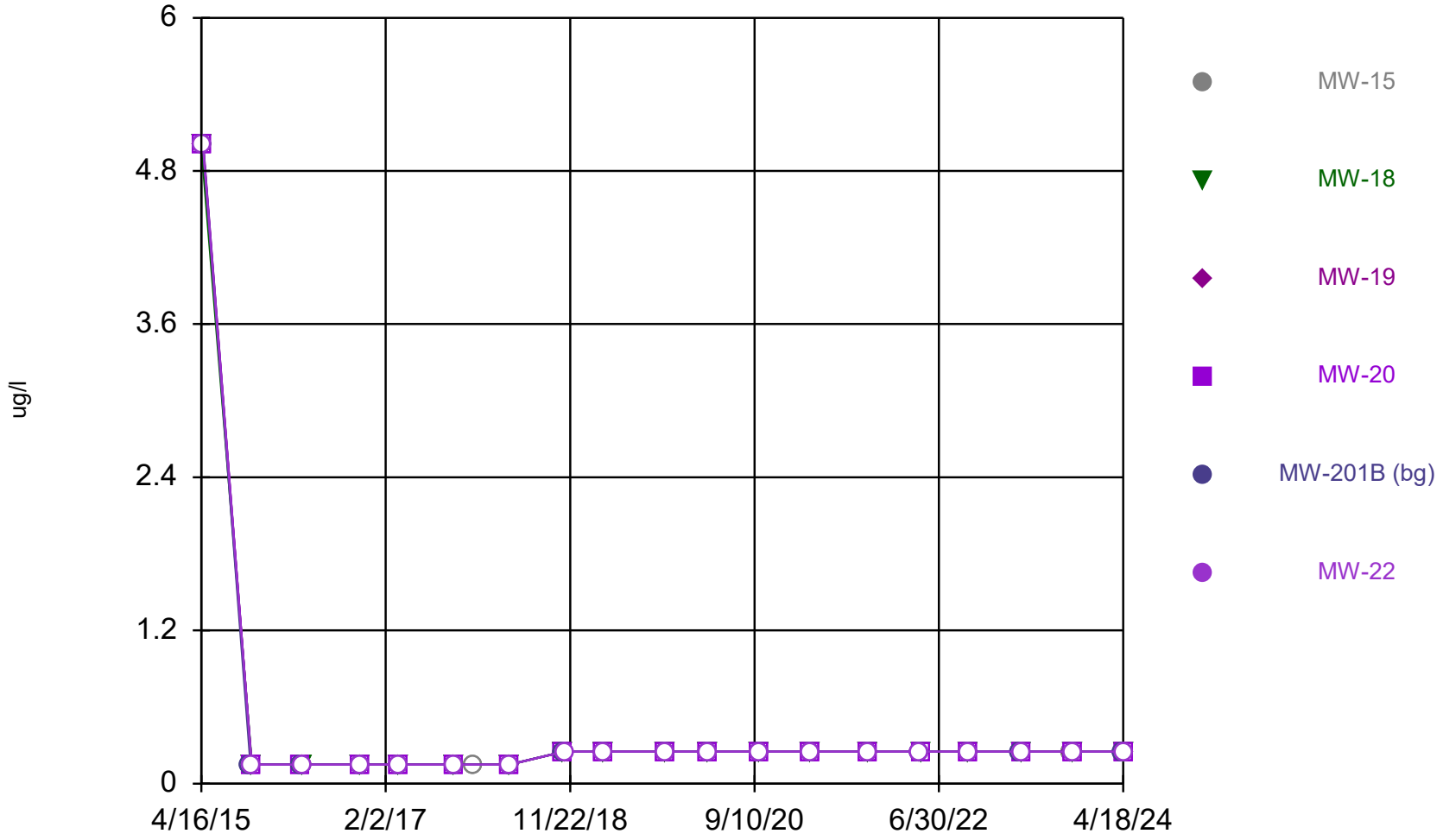


Constituent: cis-1,2-Dichloroethene Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

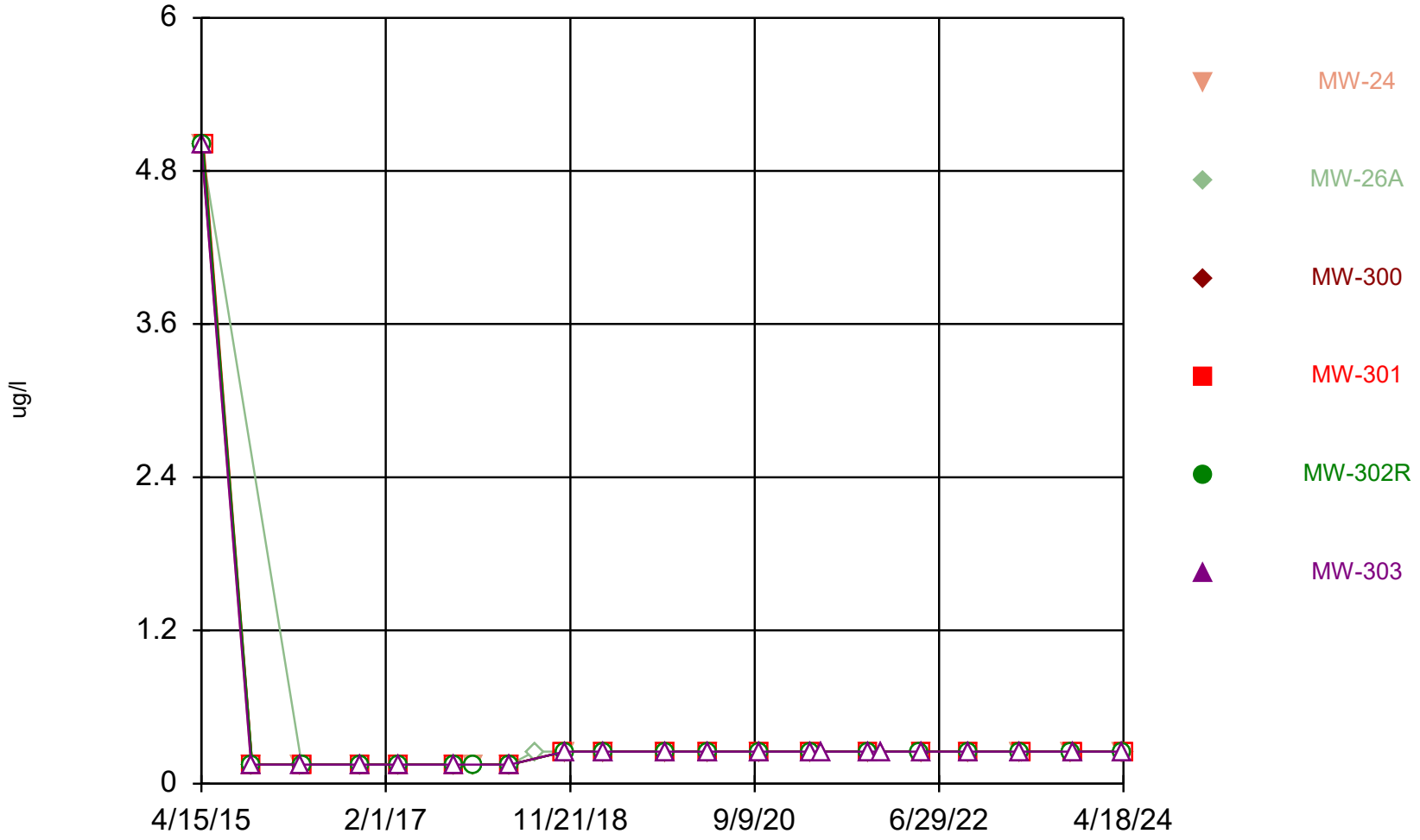


Constituent: cis-1,3-Dichloropropene Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

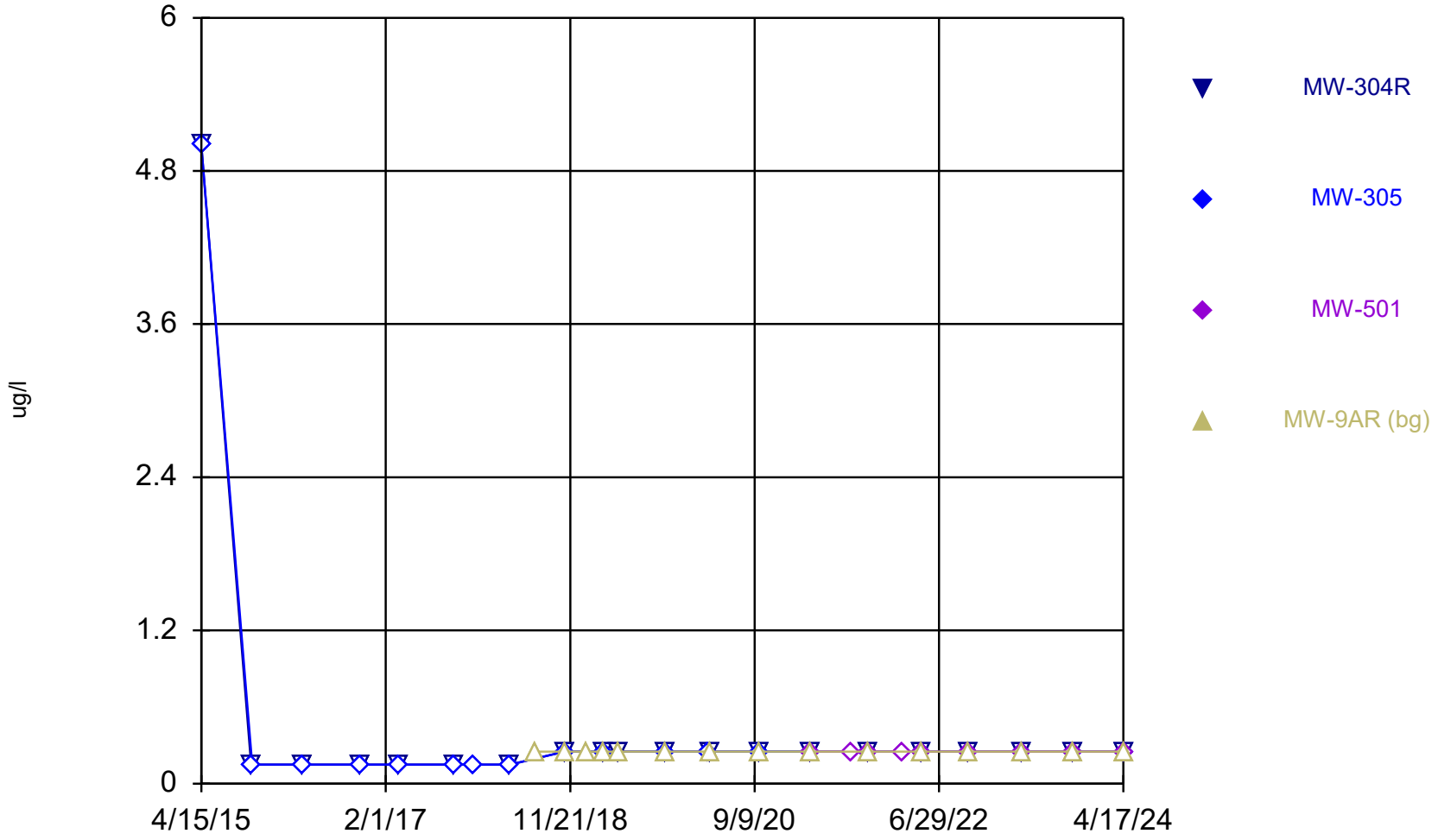


Constituent: cis-1,3-Dichloropropene Analysis Run 7/12/2024 2:51 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

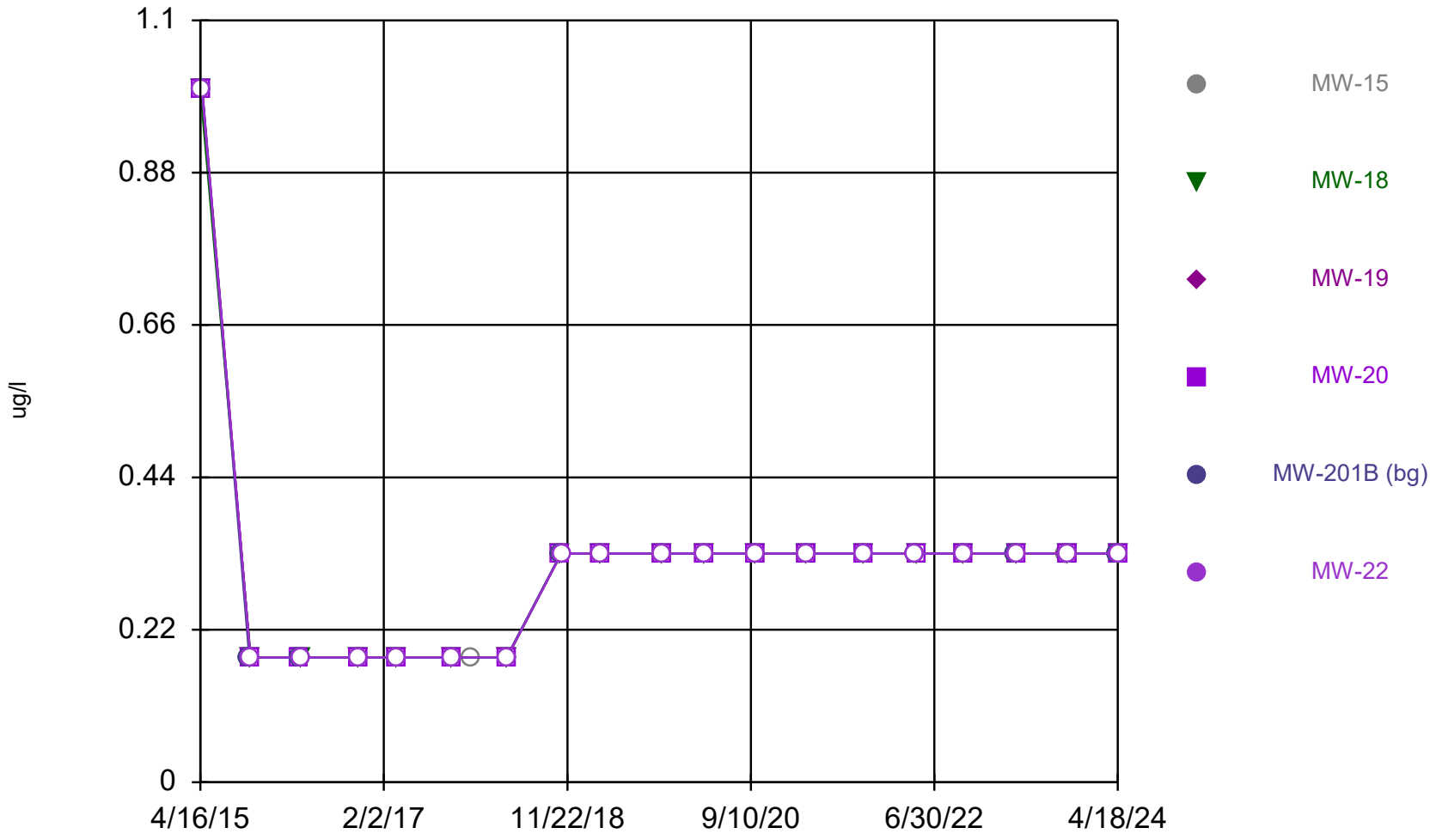


Constituent: cis-1,3-Dichloropropene Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

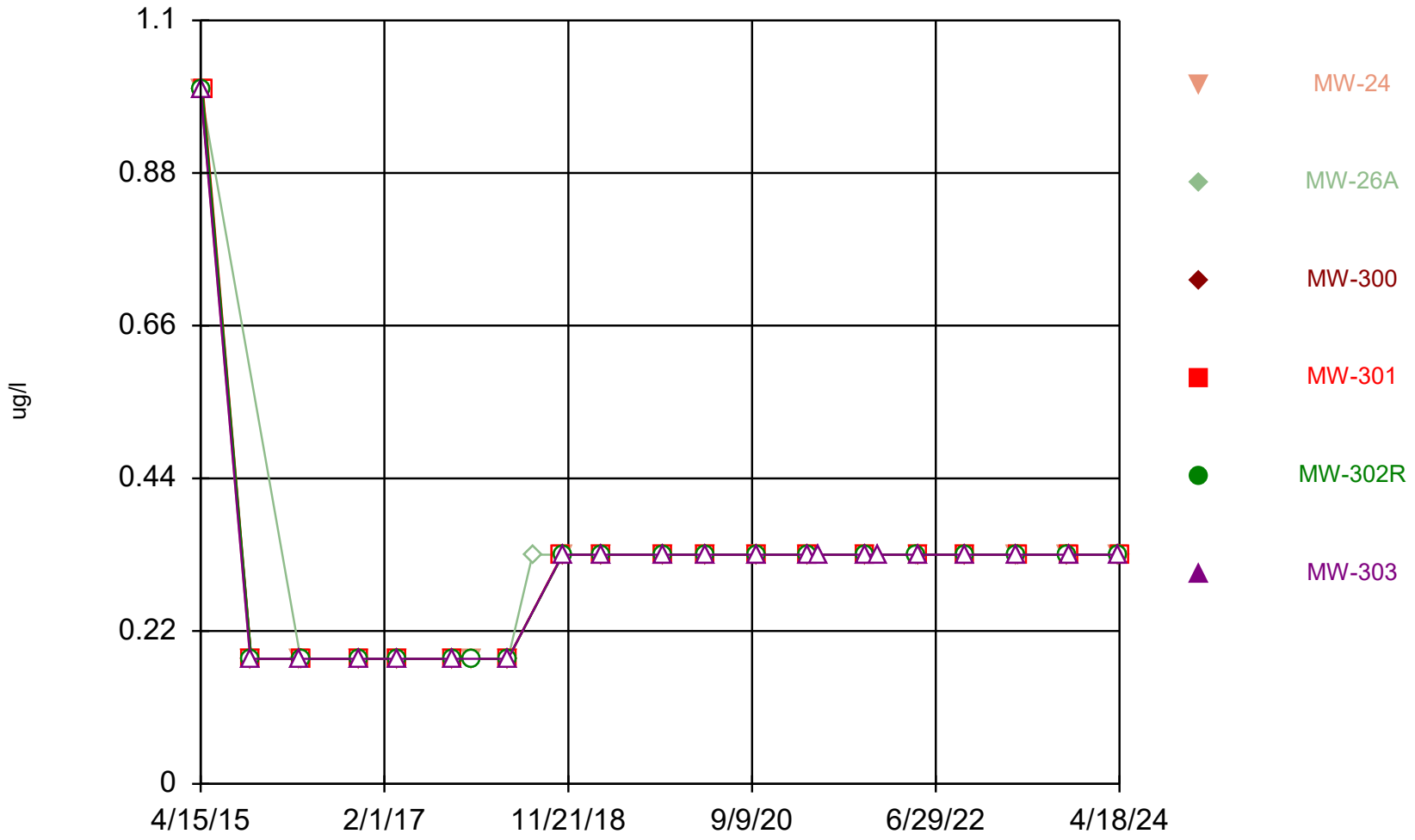


Constituent: Dibromomethane Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

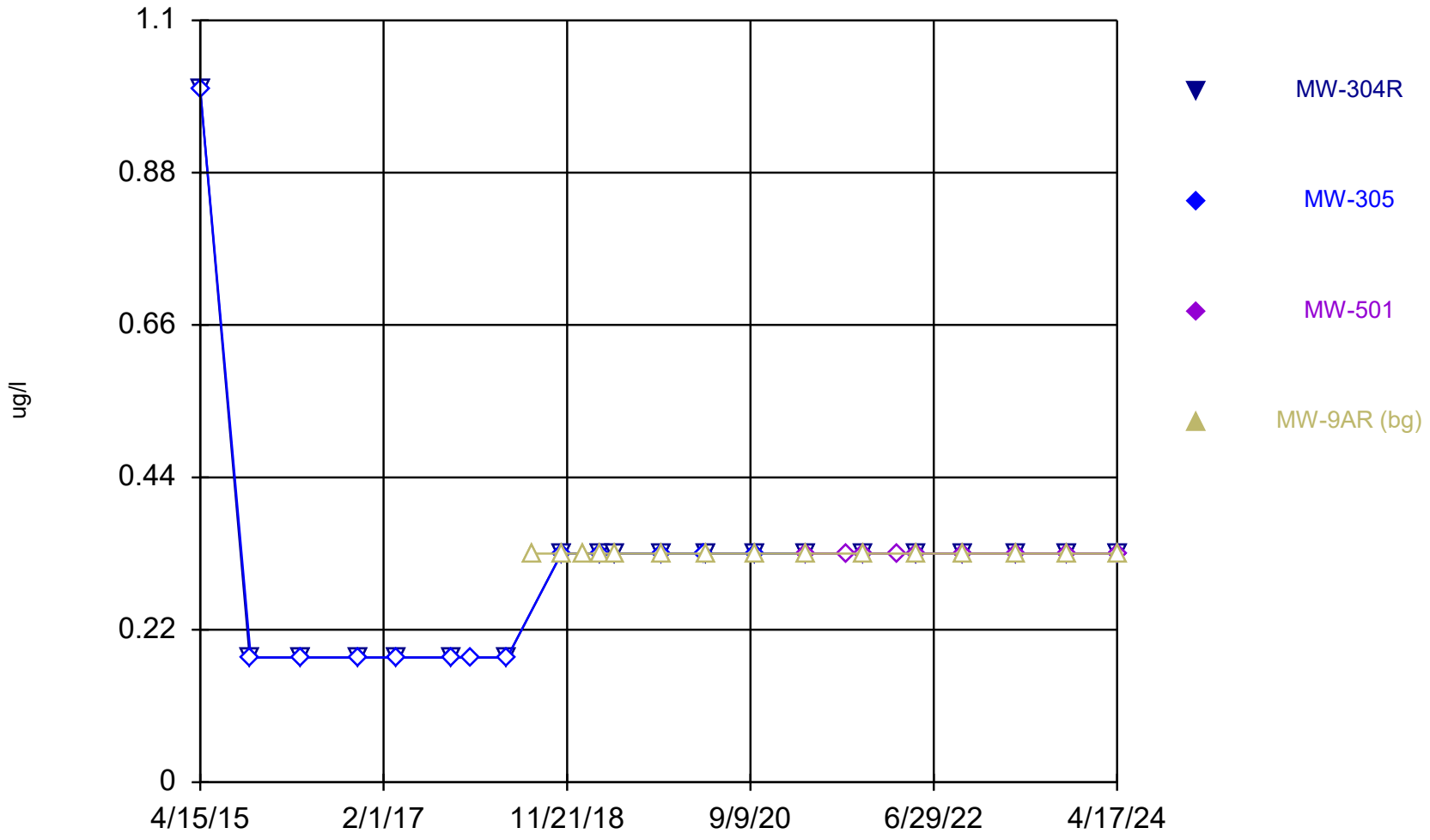


Constituent: Dibromomethane Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



Constituent: Dibromomethane Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

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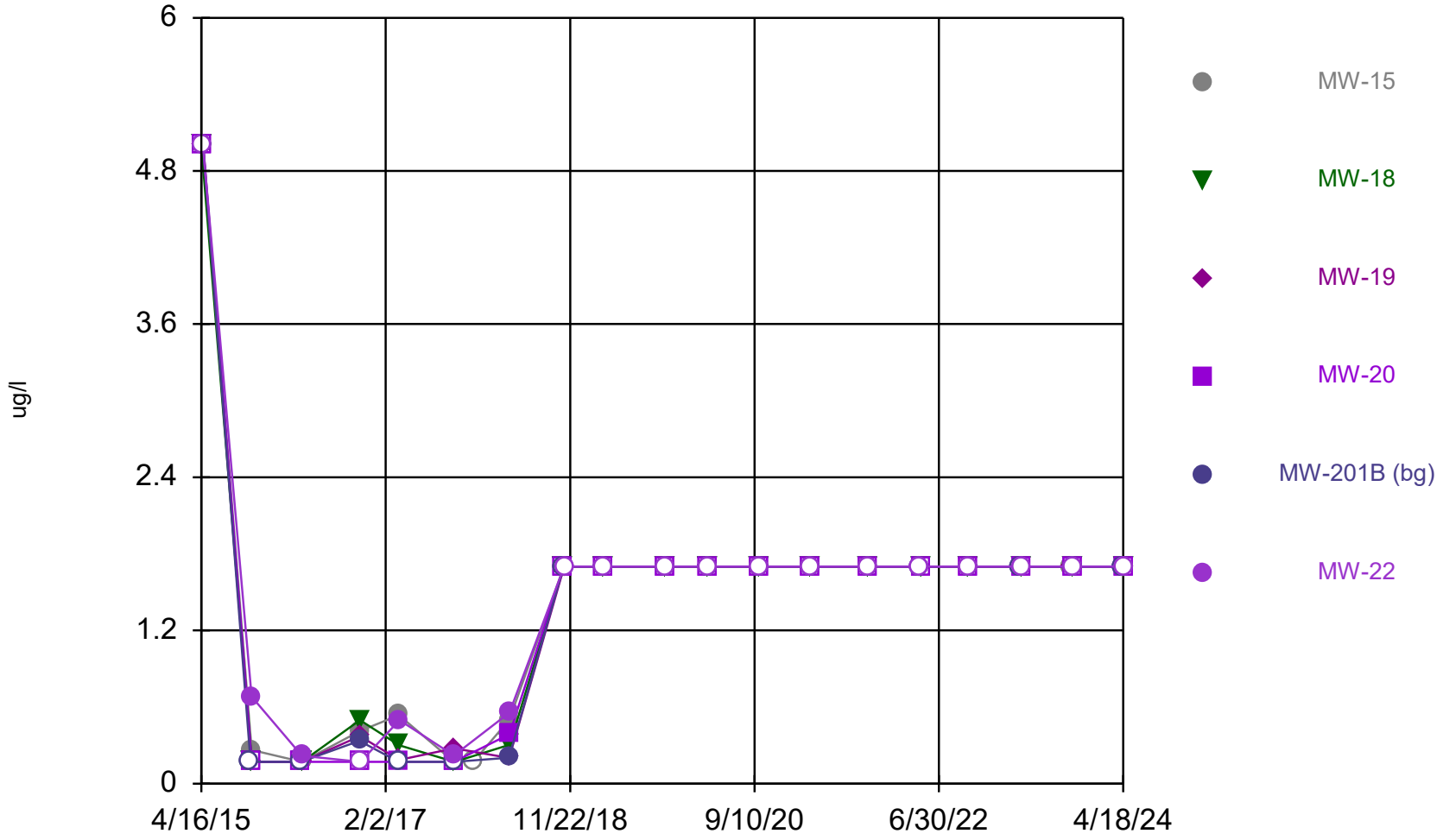
Hollow symbols indicate censored values.

Time Series

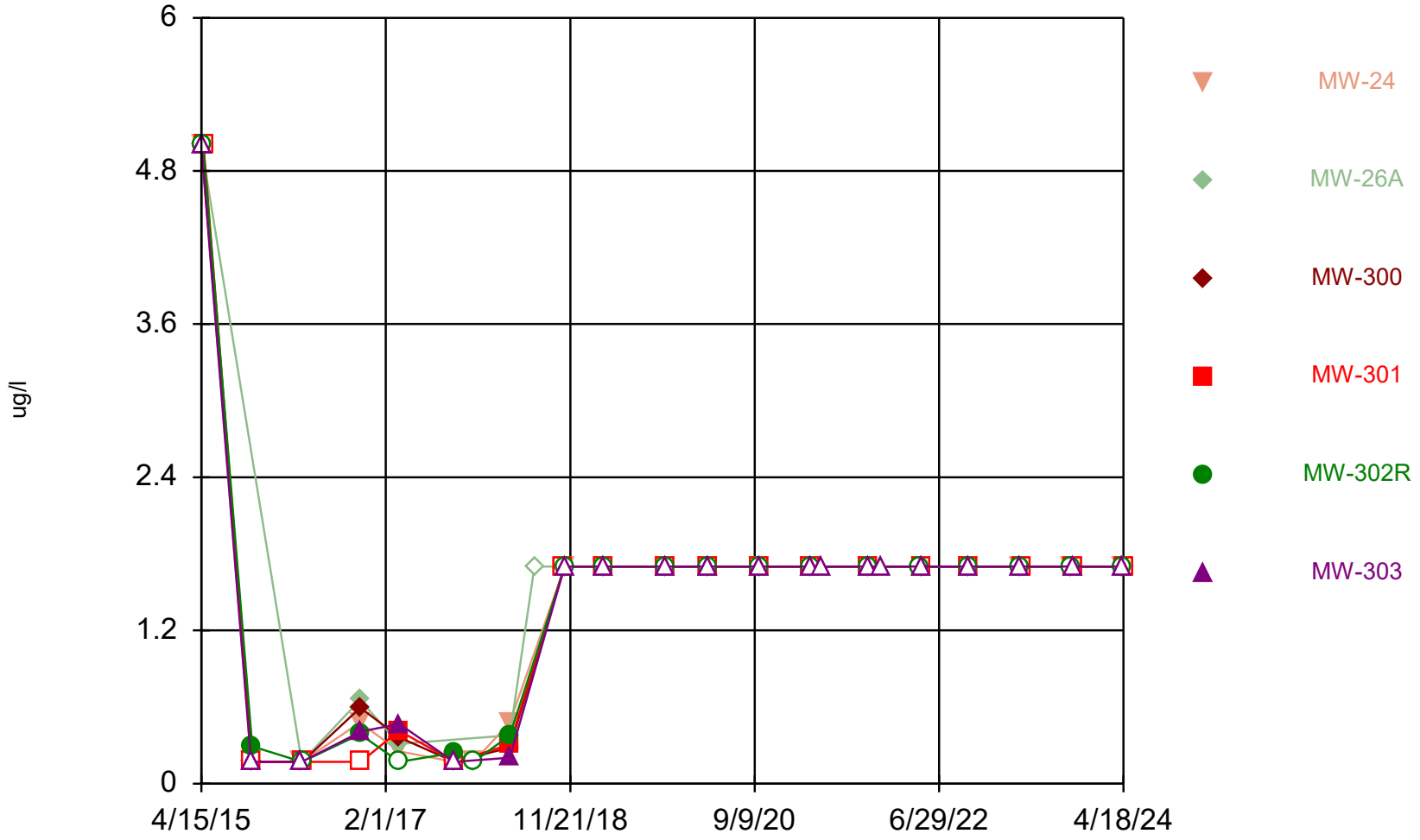


Constituent: Dichloromethane Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

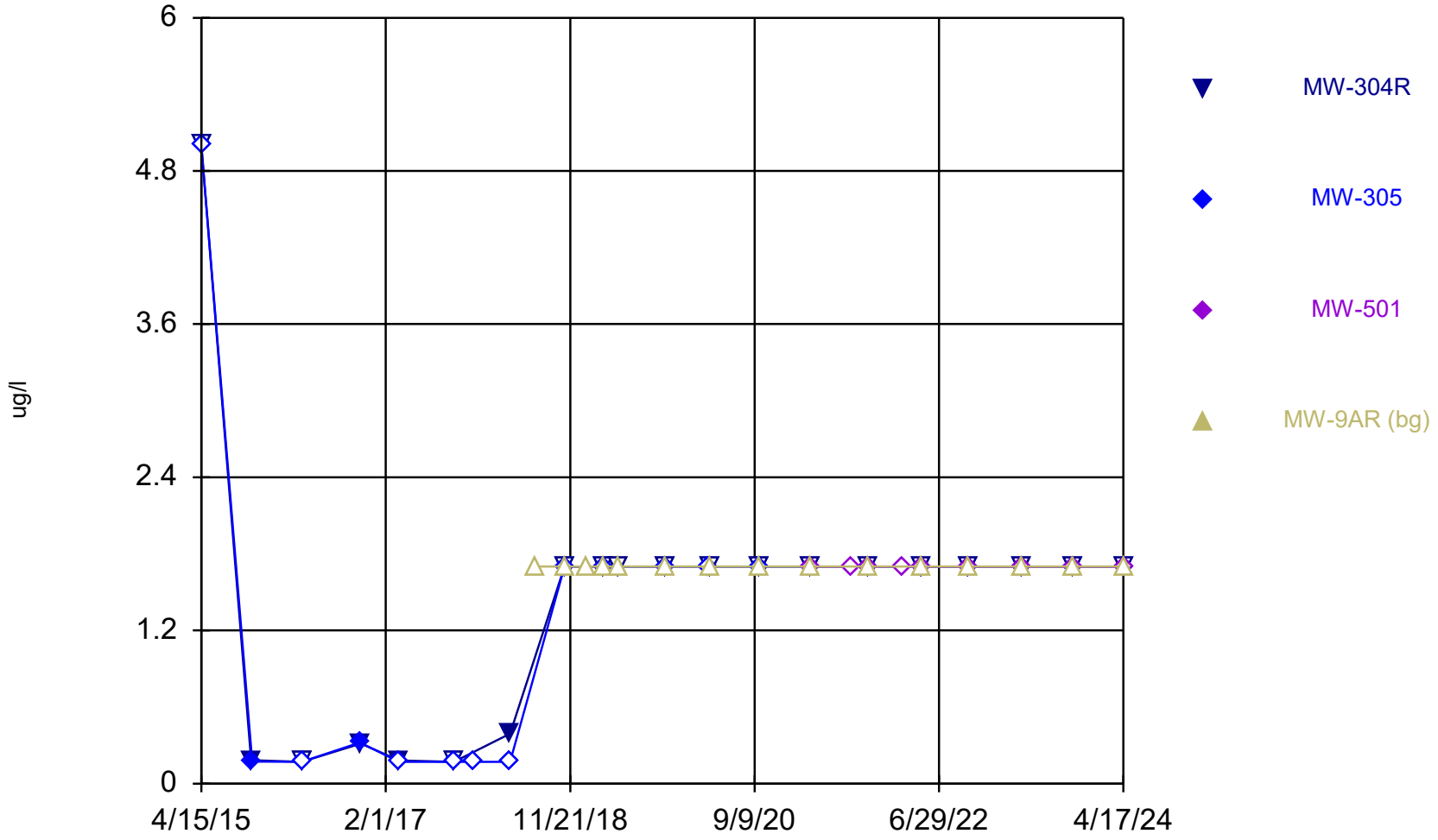


Constituent: Dichloromethane Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

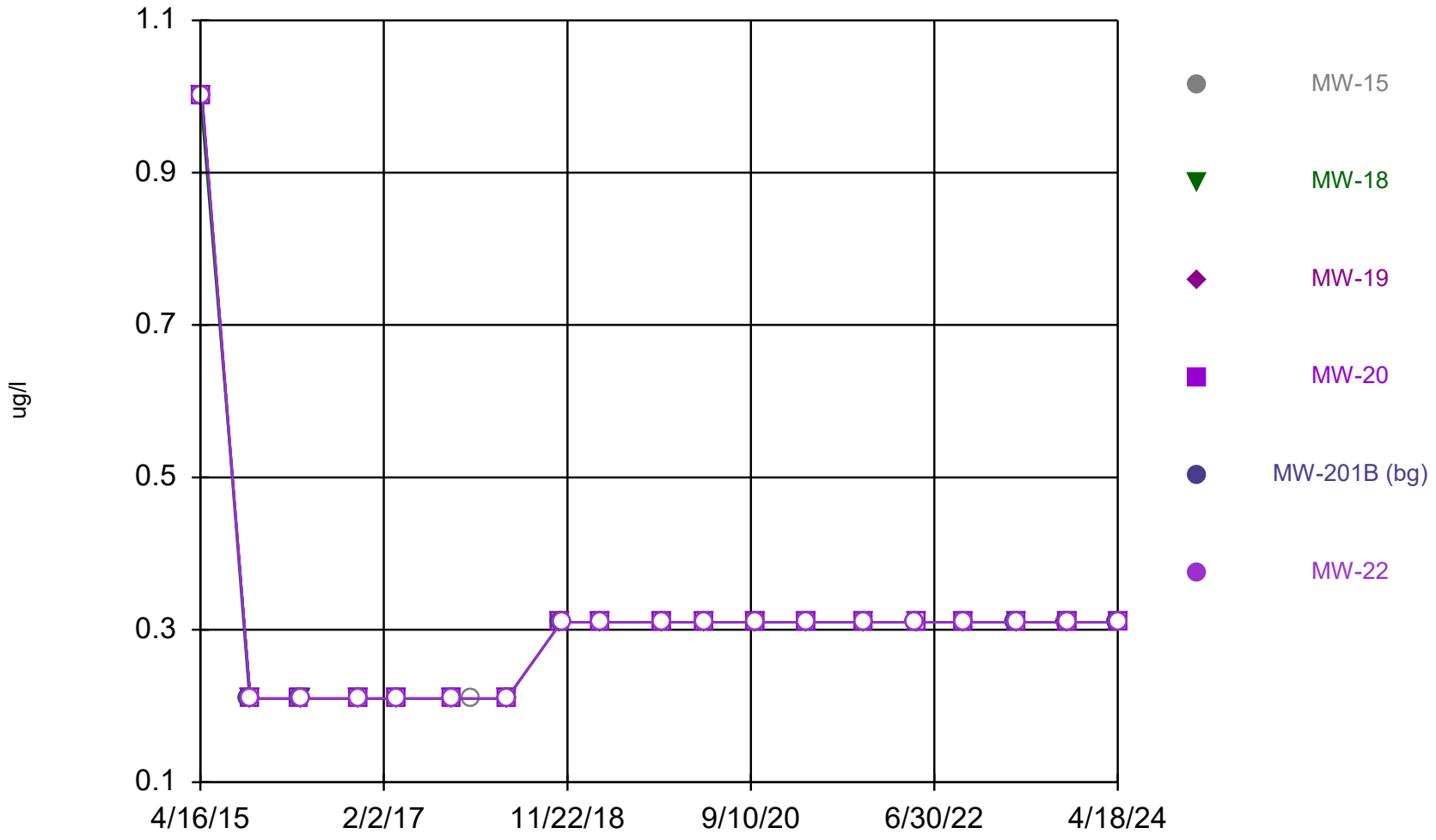


Constituent: Dichloromethane Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

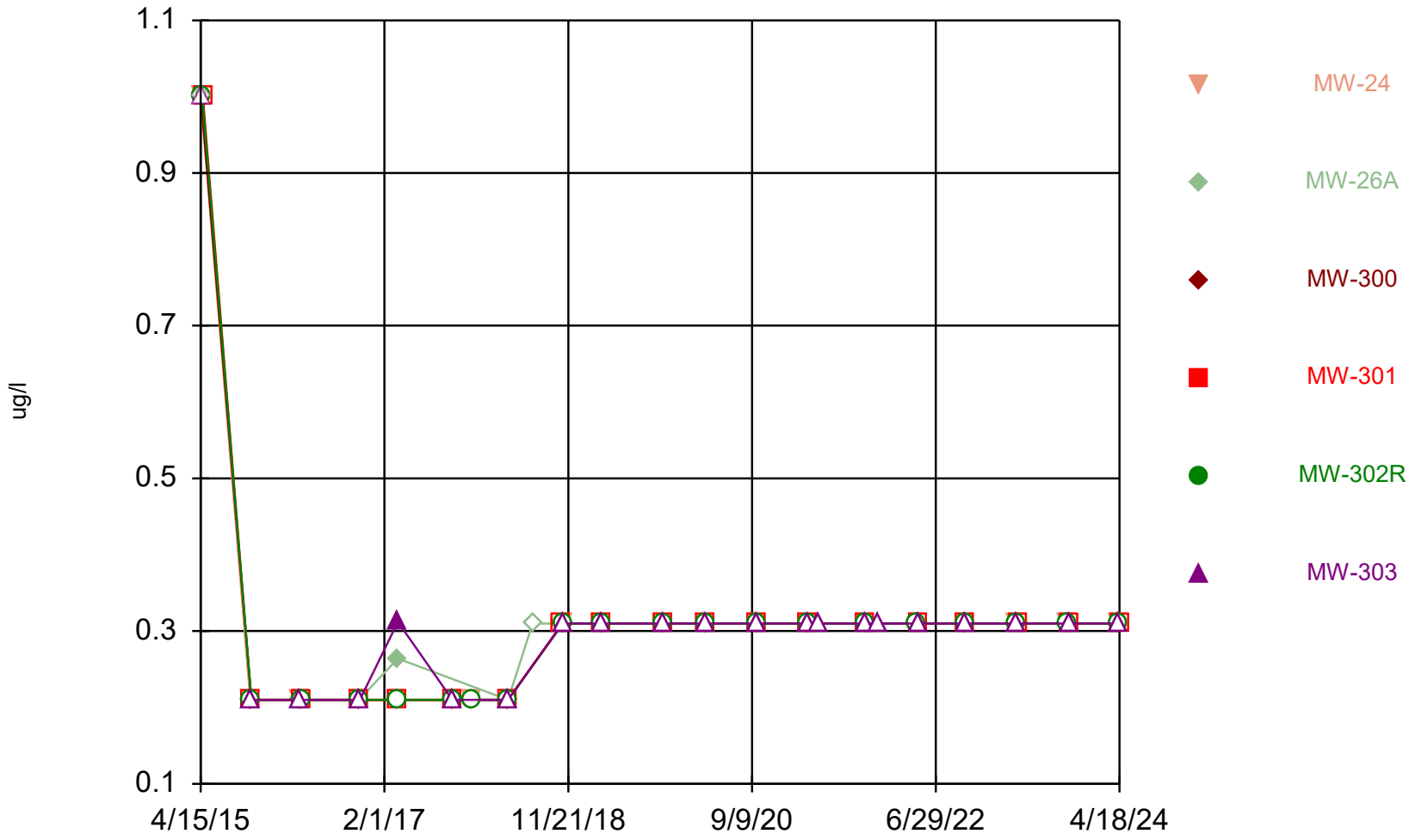


Constituent: Ethylbenzene Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

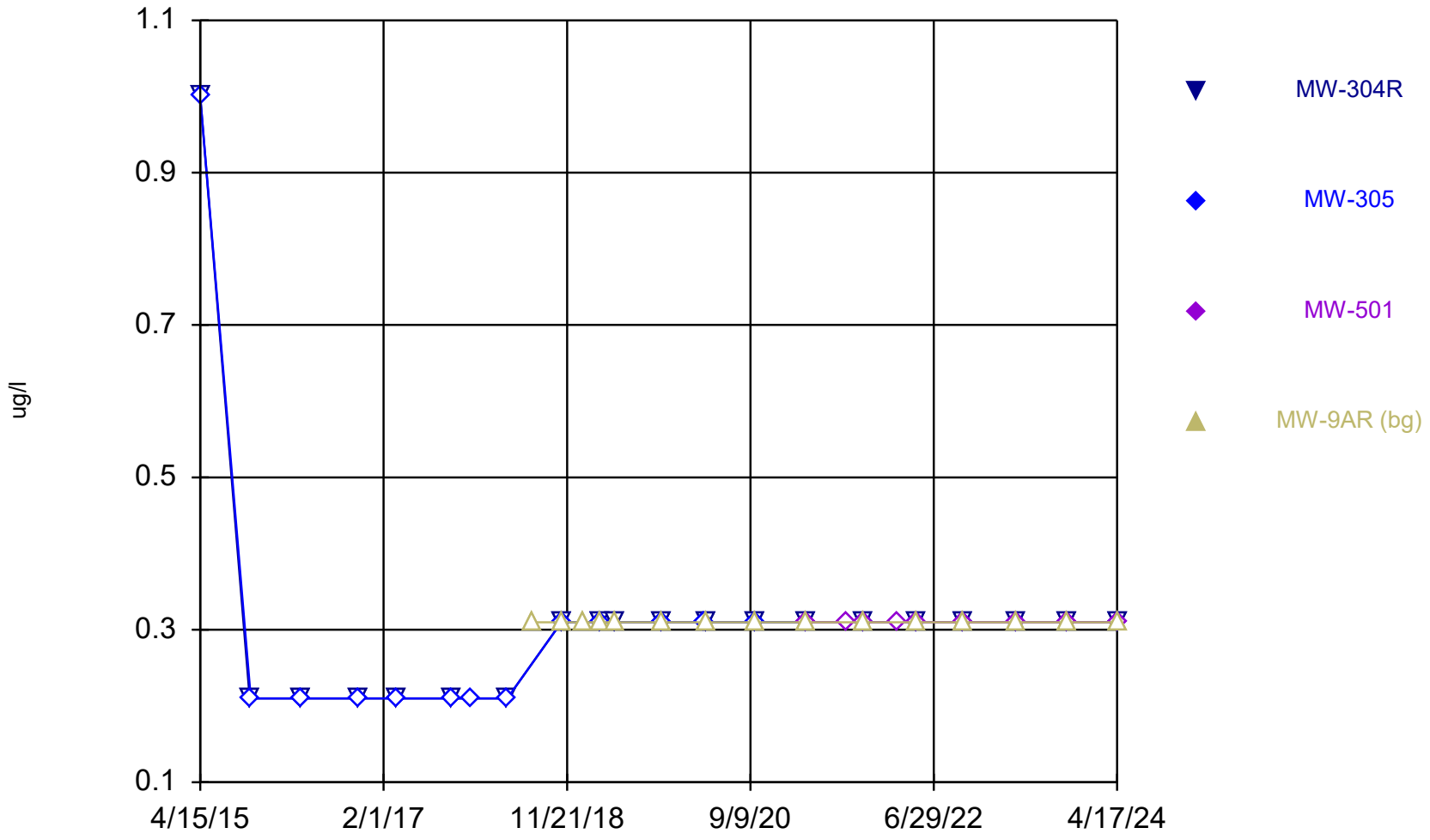


Constituent: Ethylbenzene Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

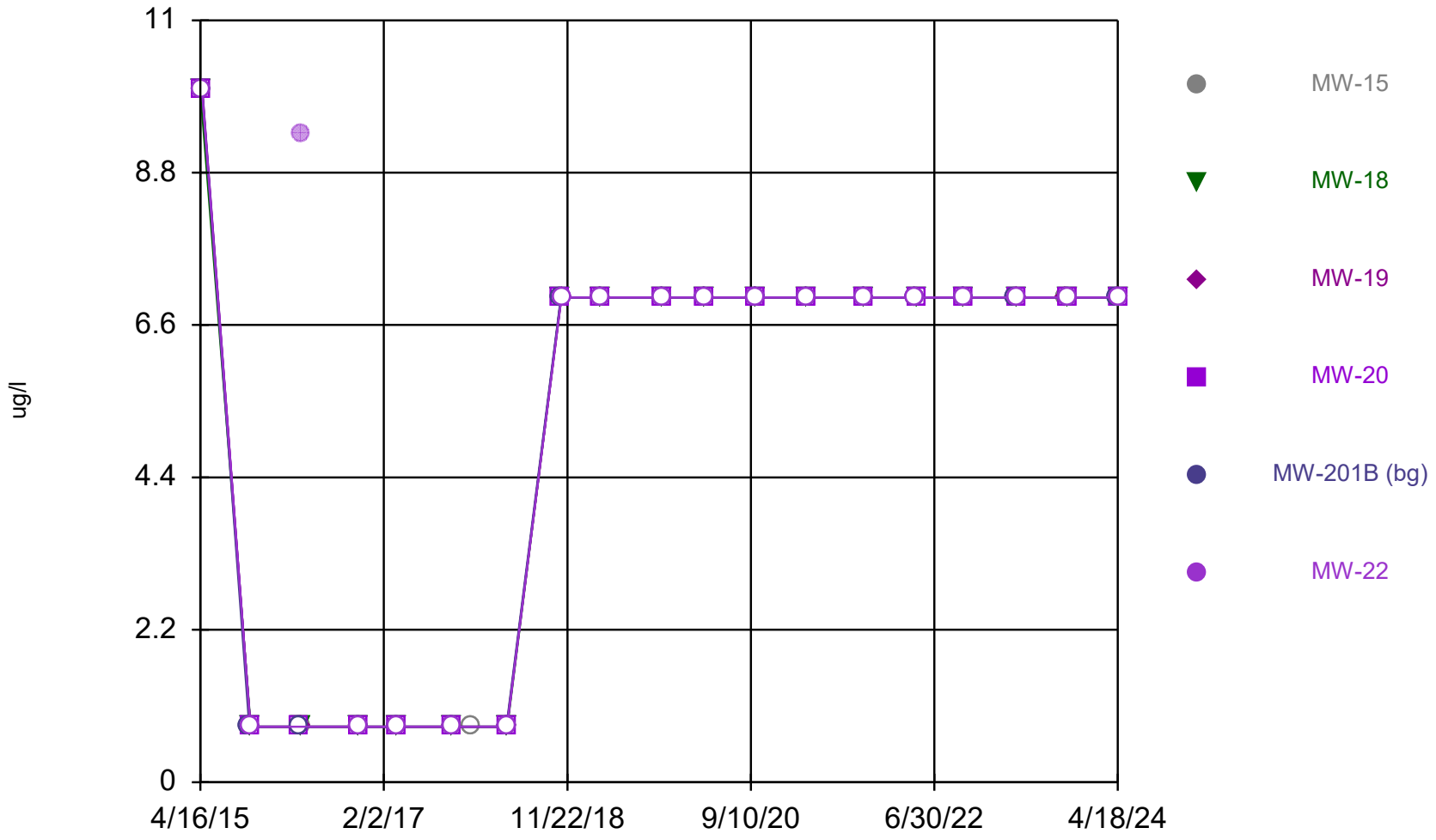


Constituent: Ethylbenzene Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

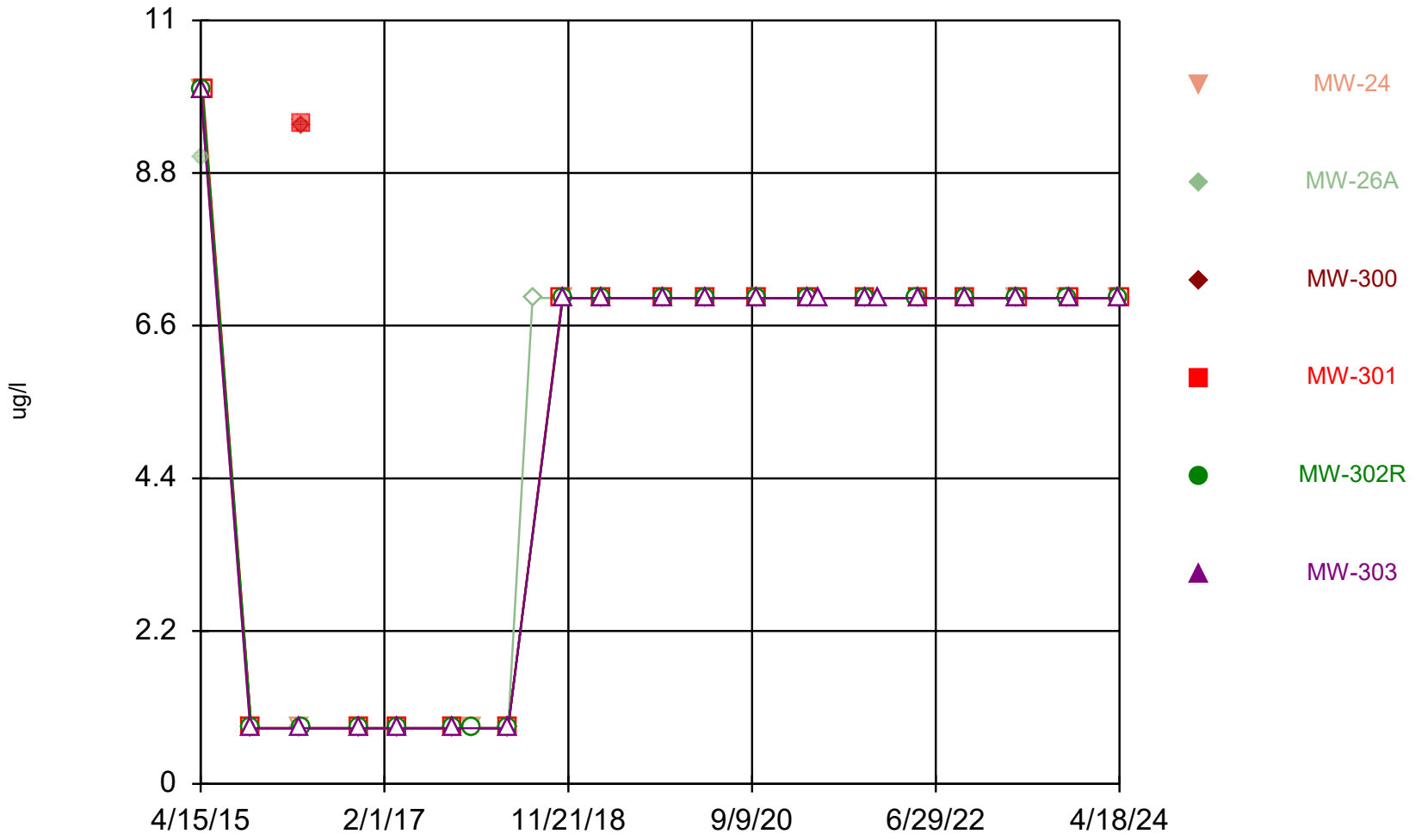


Constituent: Iodomethane Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

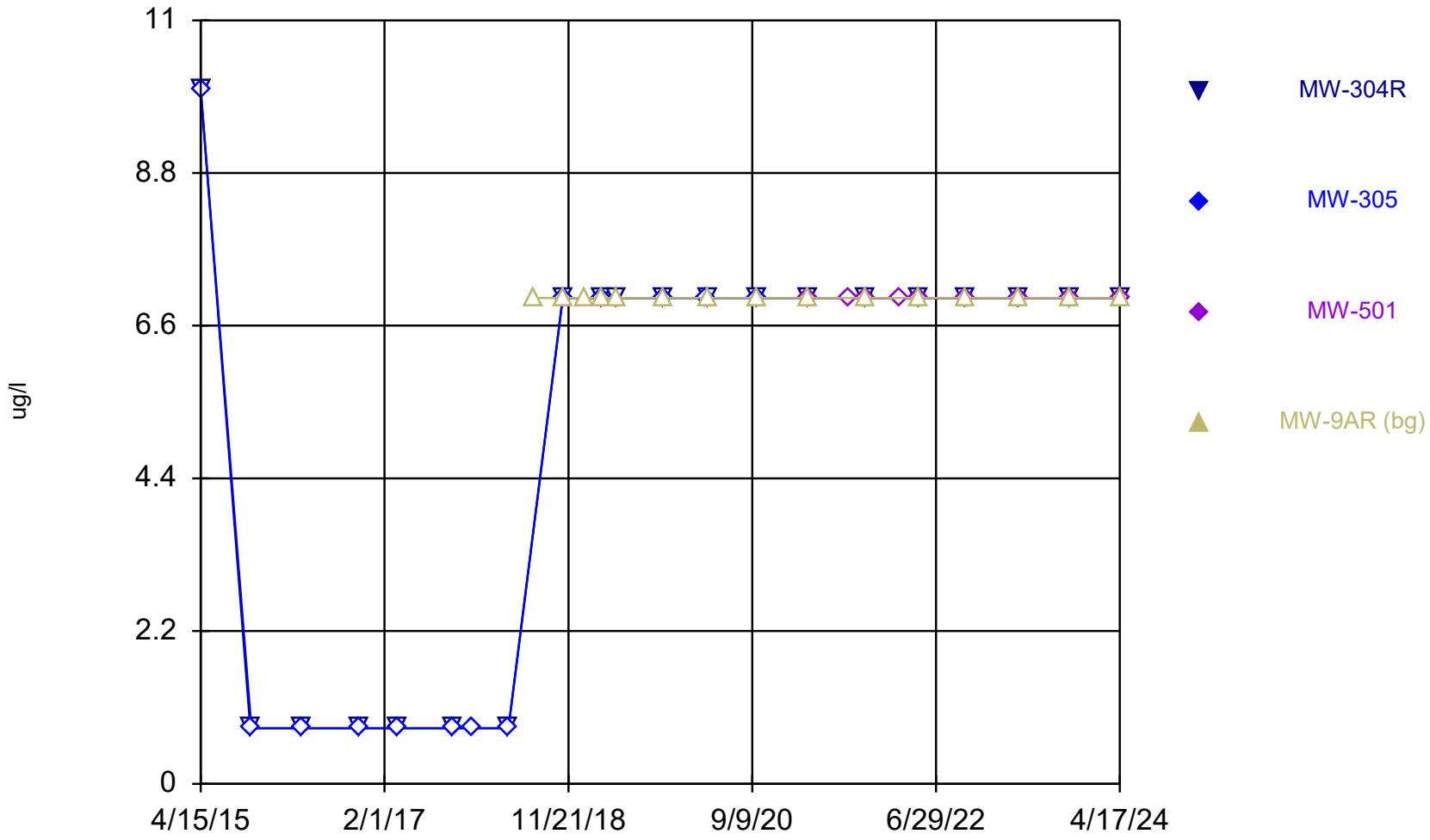


Constituent: Iodomethane Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

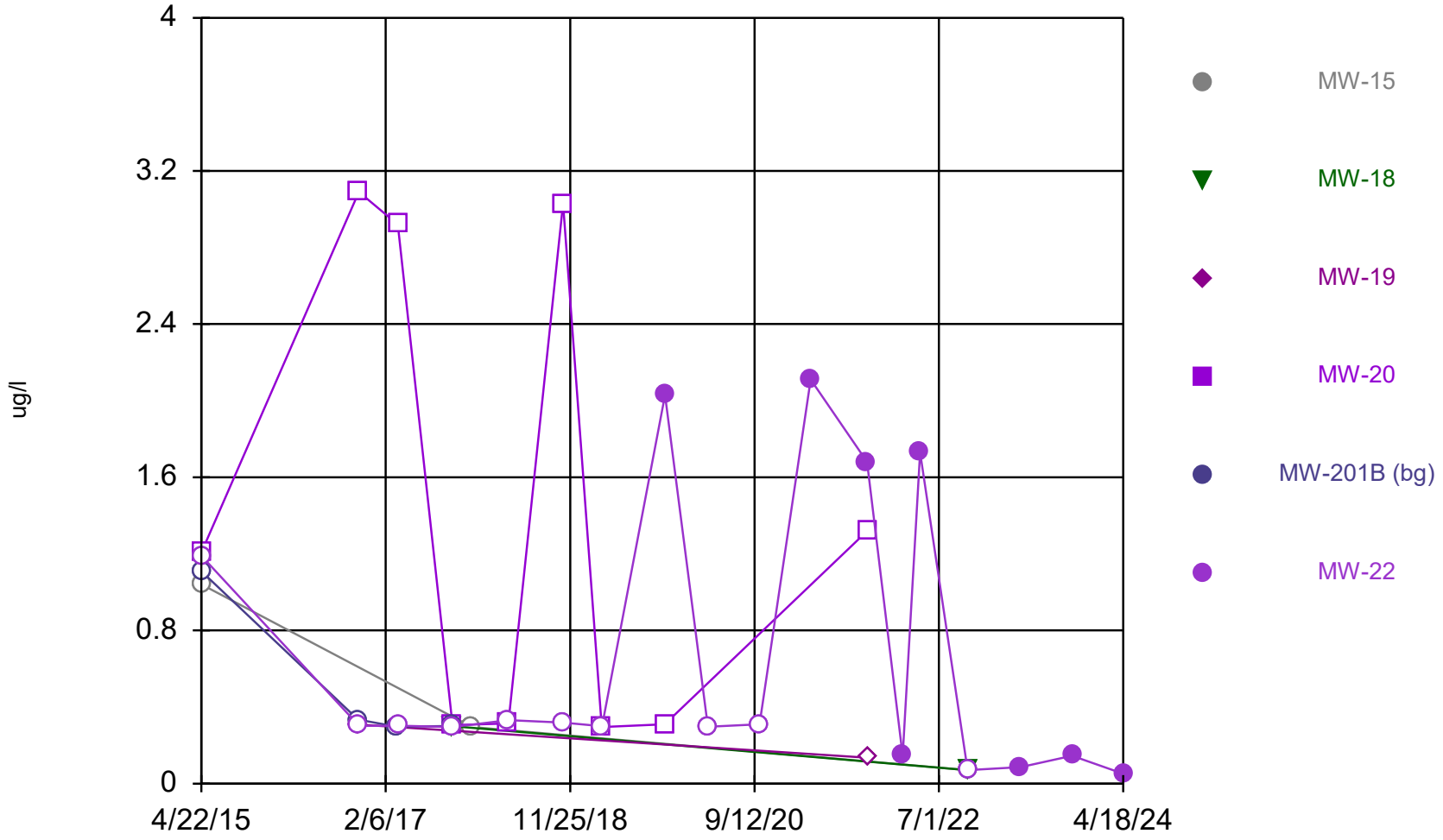


Constituent: Iodomethane Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

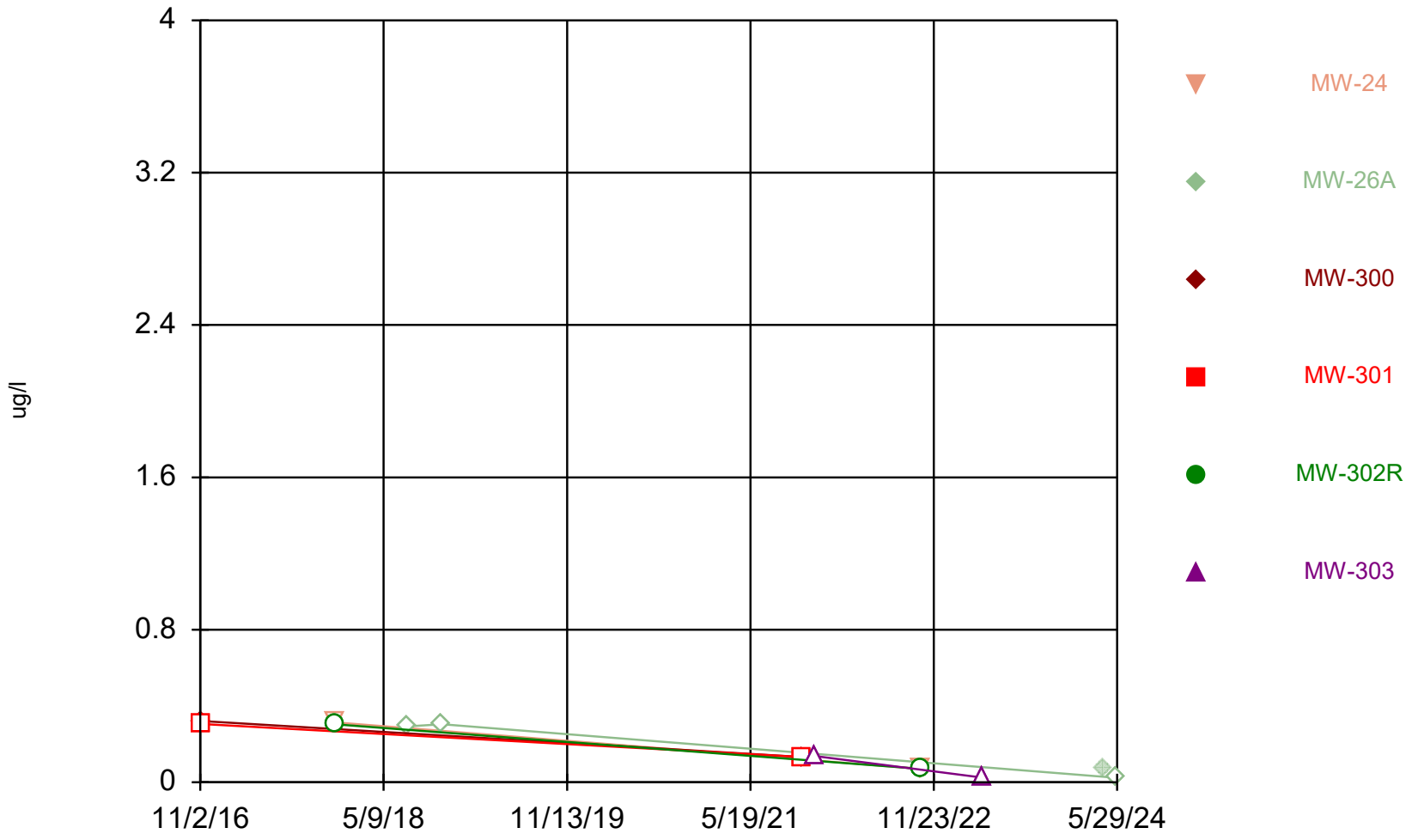


Constituent: Silvex [2,4,5-TP] Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

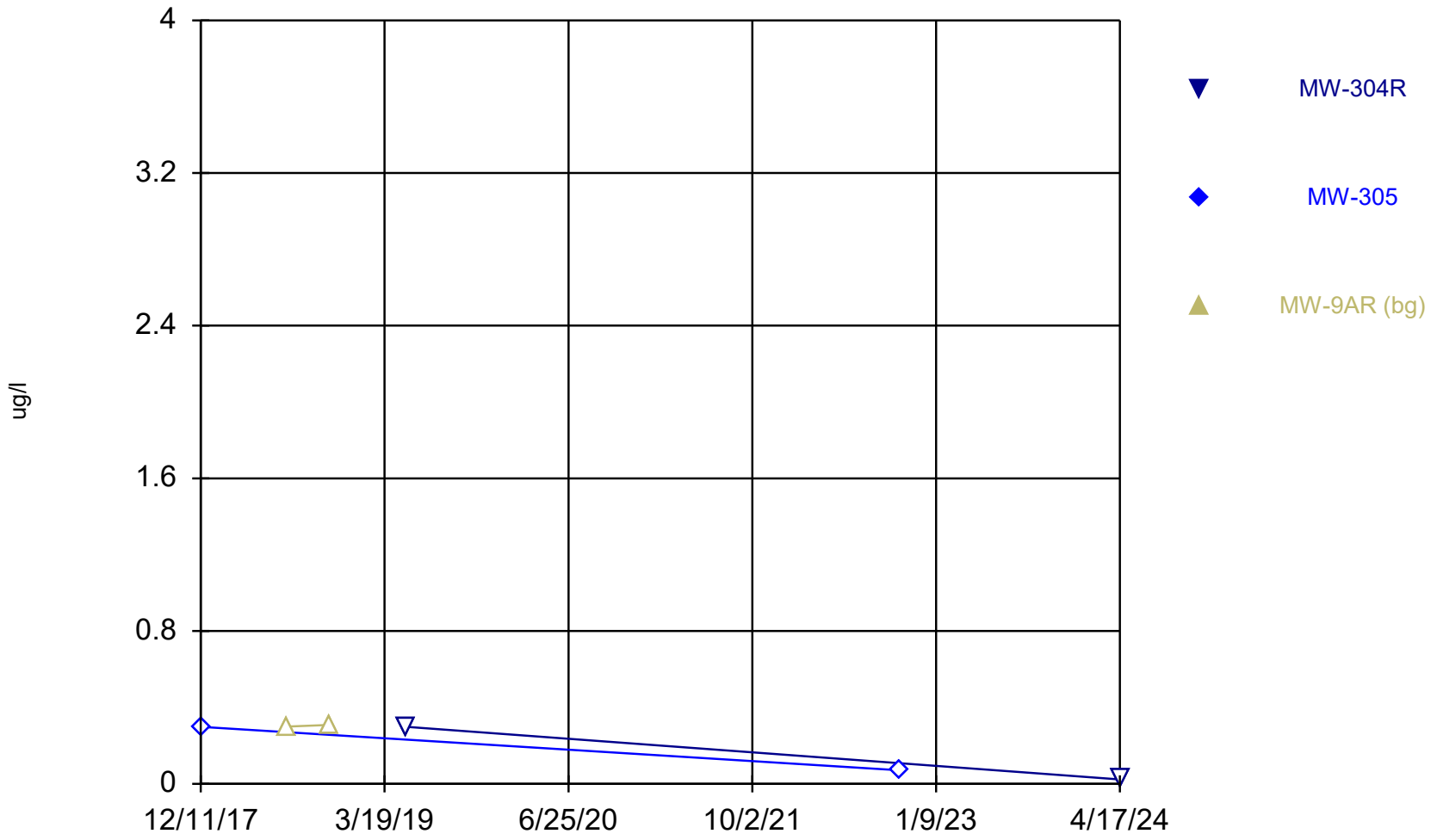


Constituent: Silvex [2,4,5-TP] Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

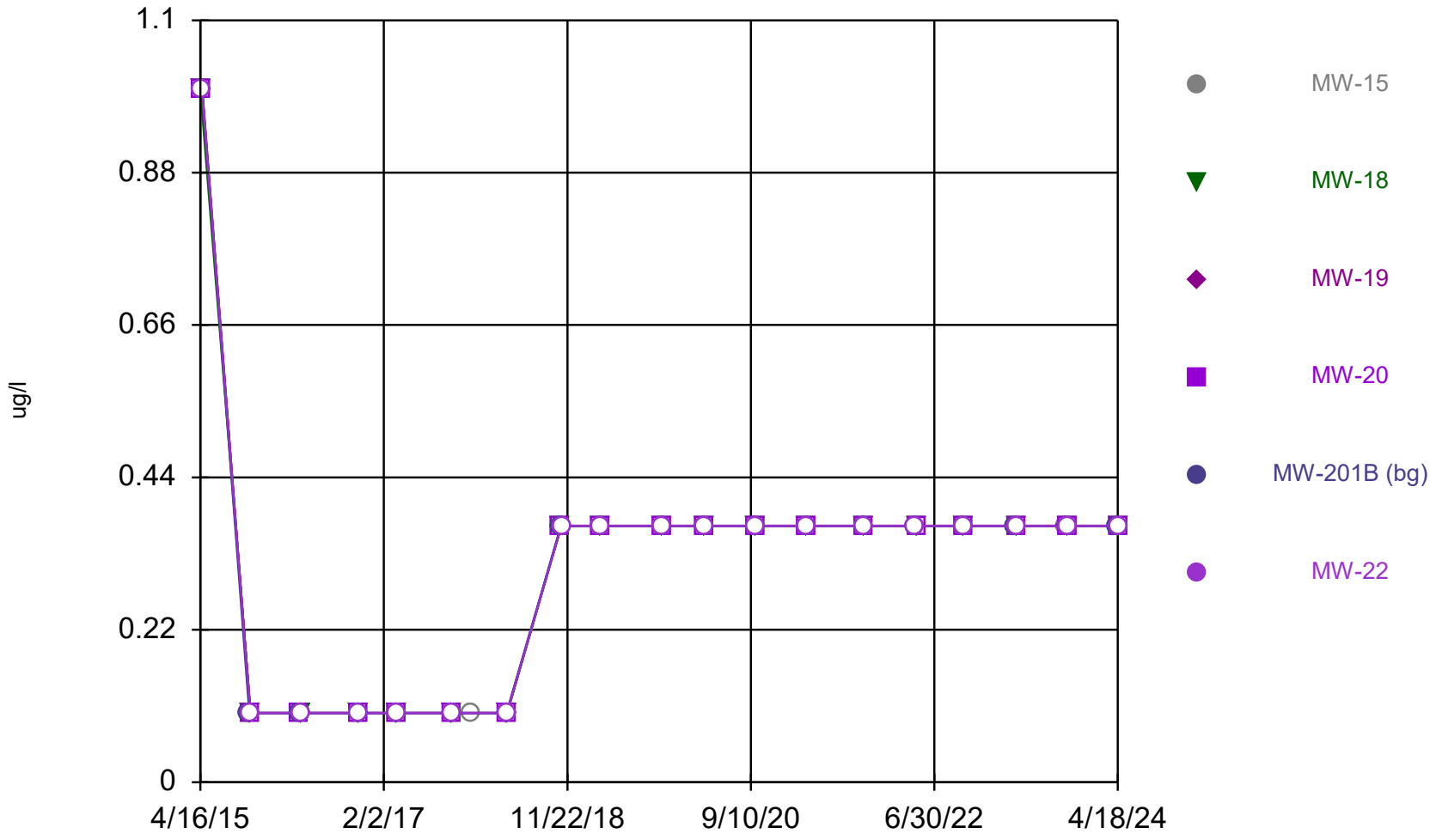


Constituent: Silvex [2,4,5-TP] Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

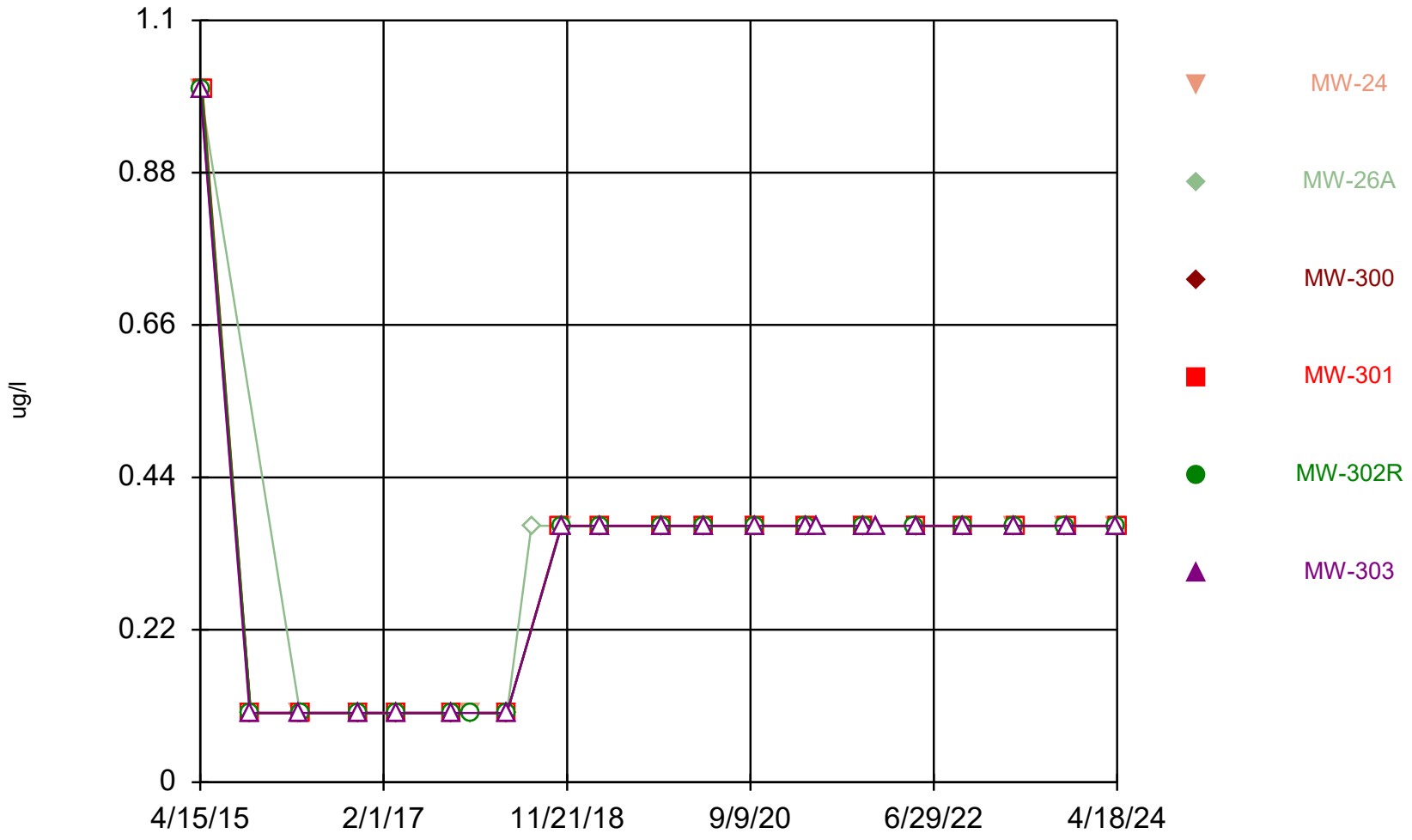


Constituent: Styrene Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

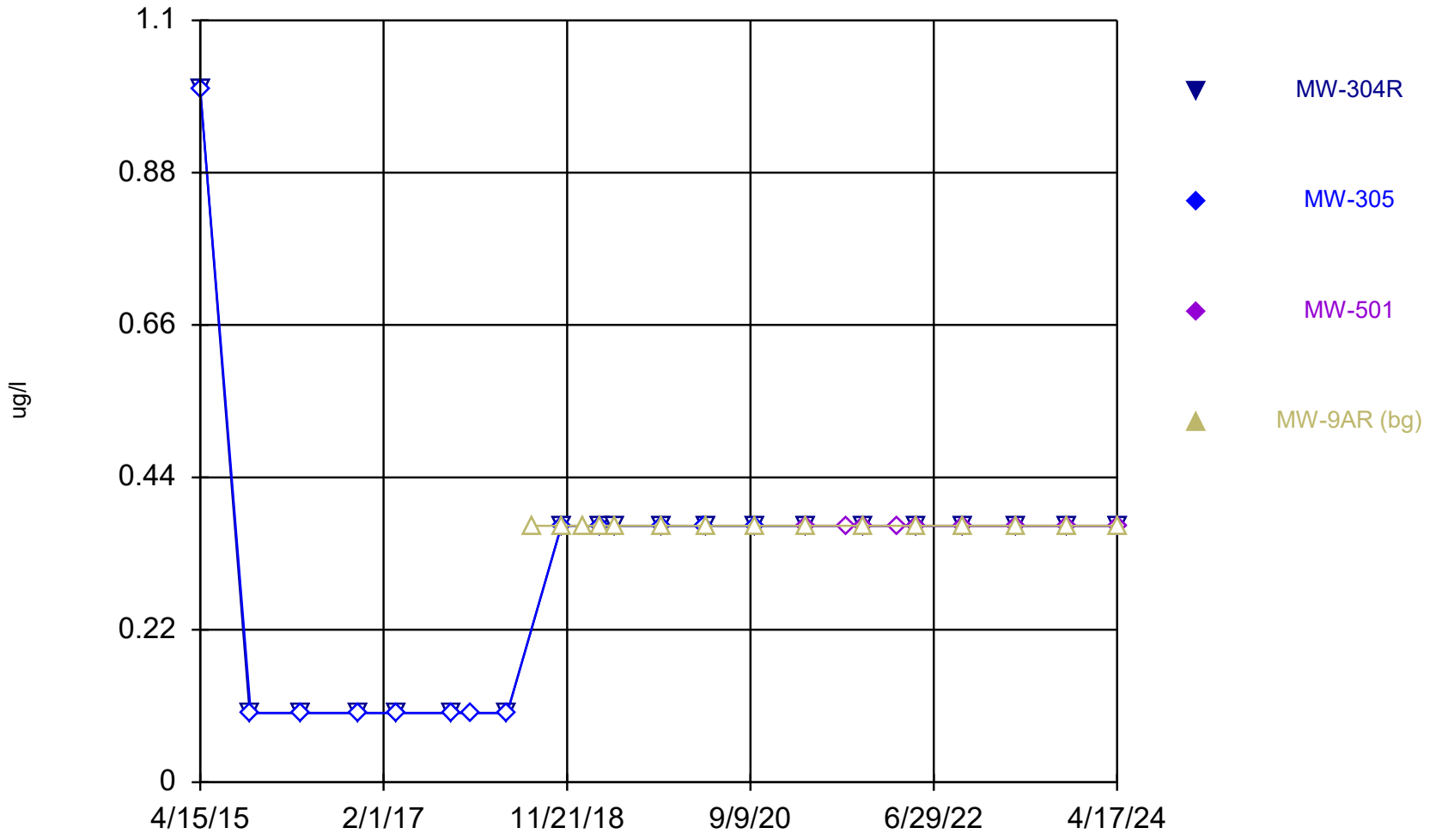


Constituent: Styrene Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

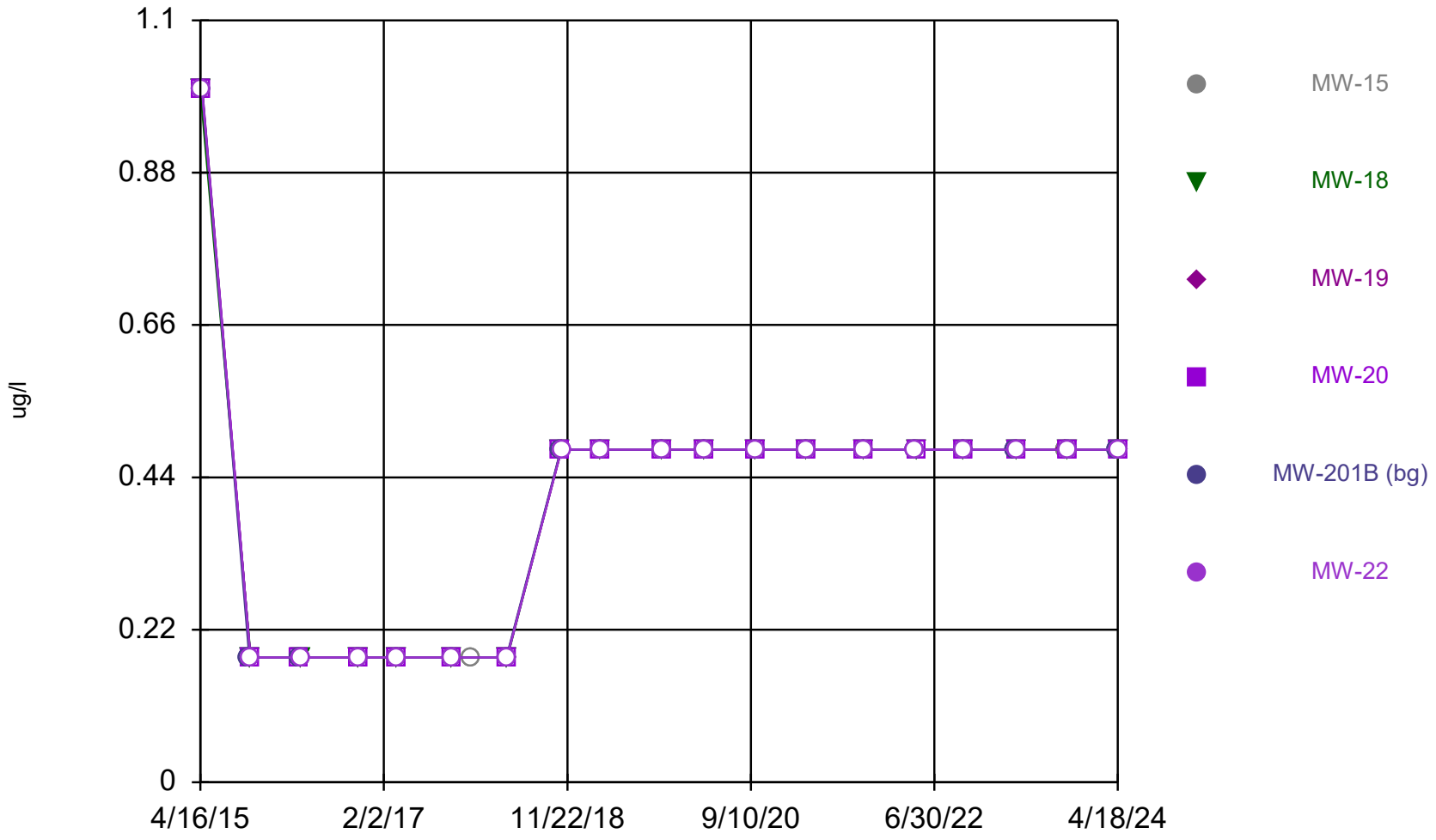


Constituent: Styrene Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

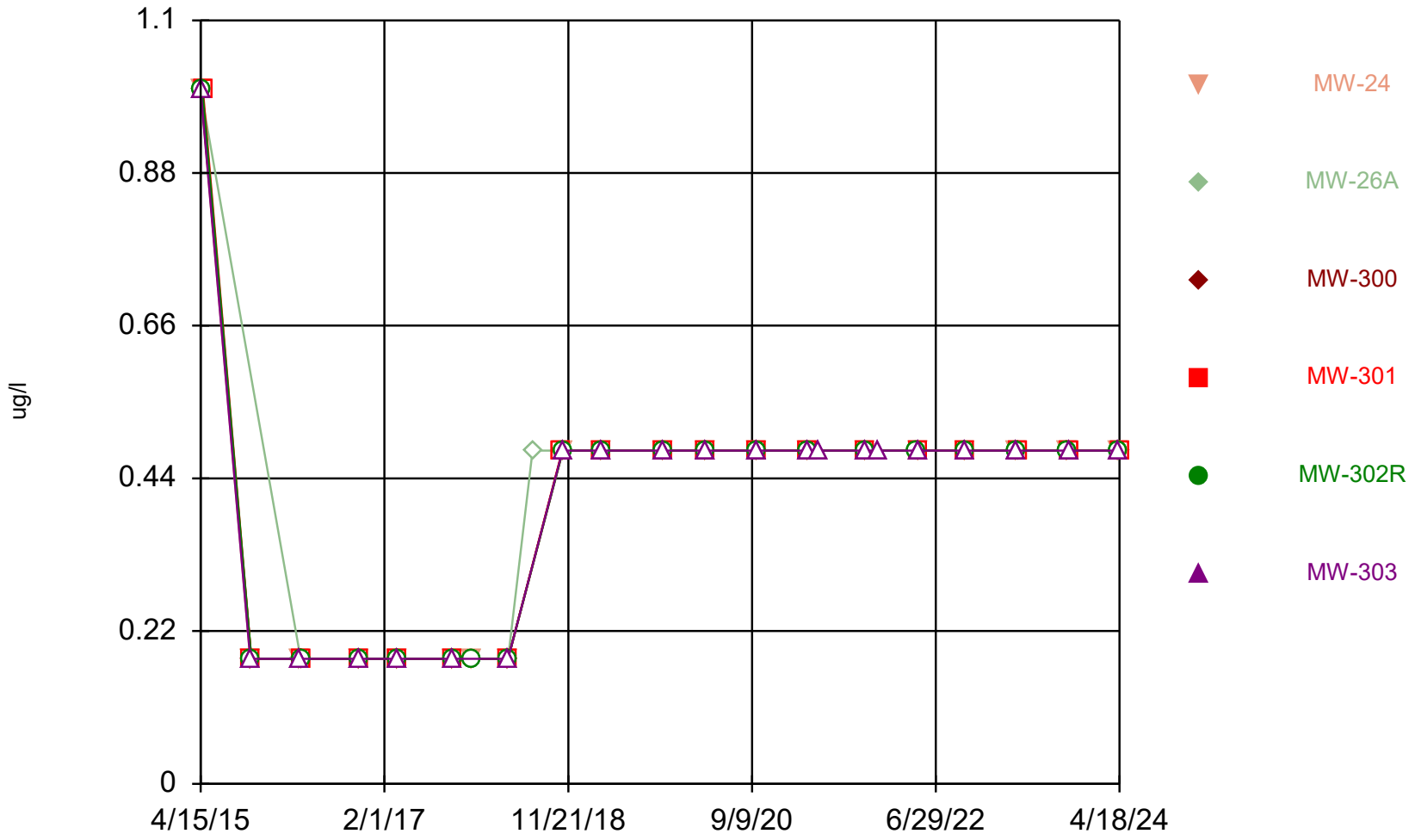


Constituent: Tetrachloroethene Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

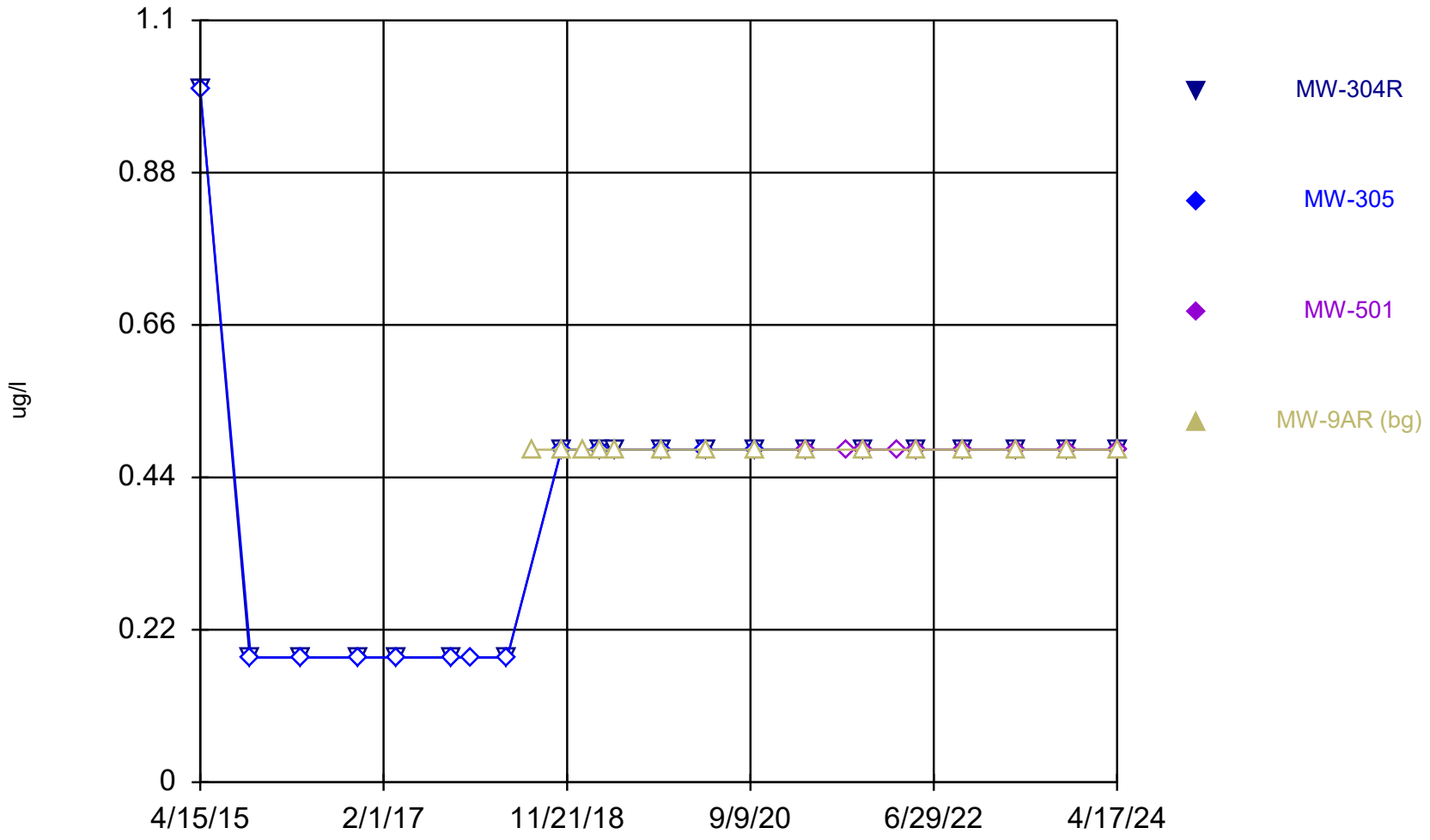


Constituent: Tetrachloroethene Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

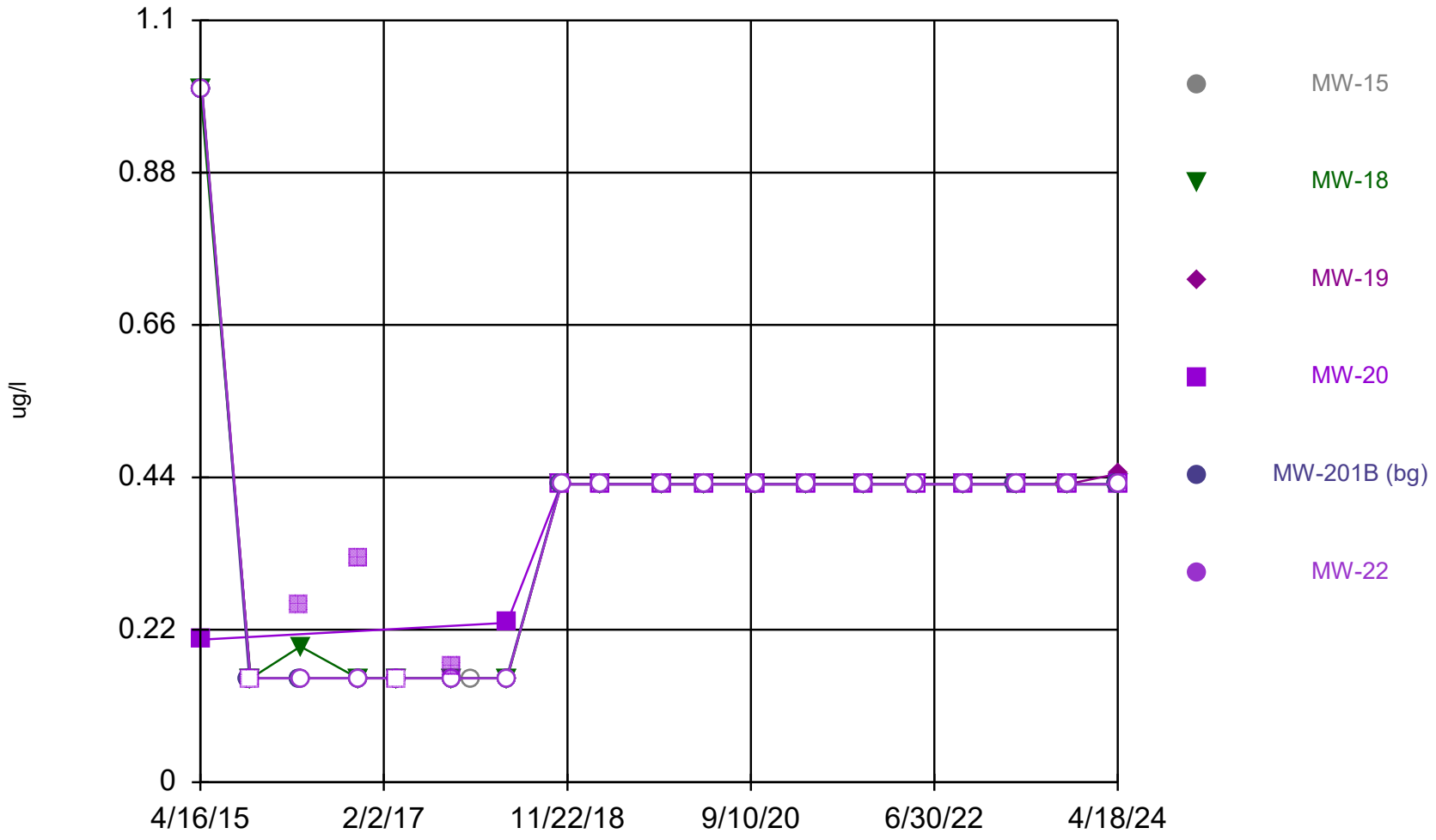


Constituent: Tetrachloroethene Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

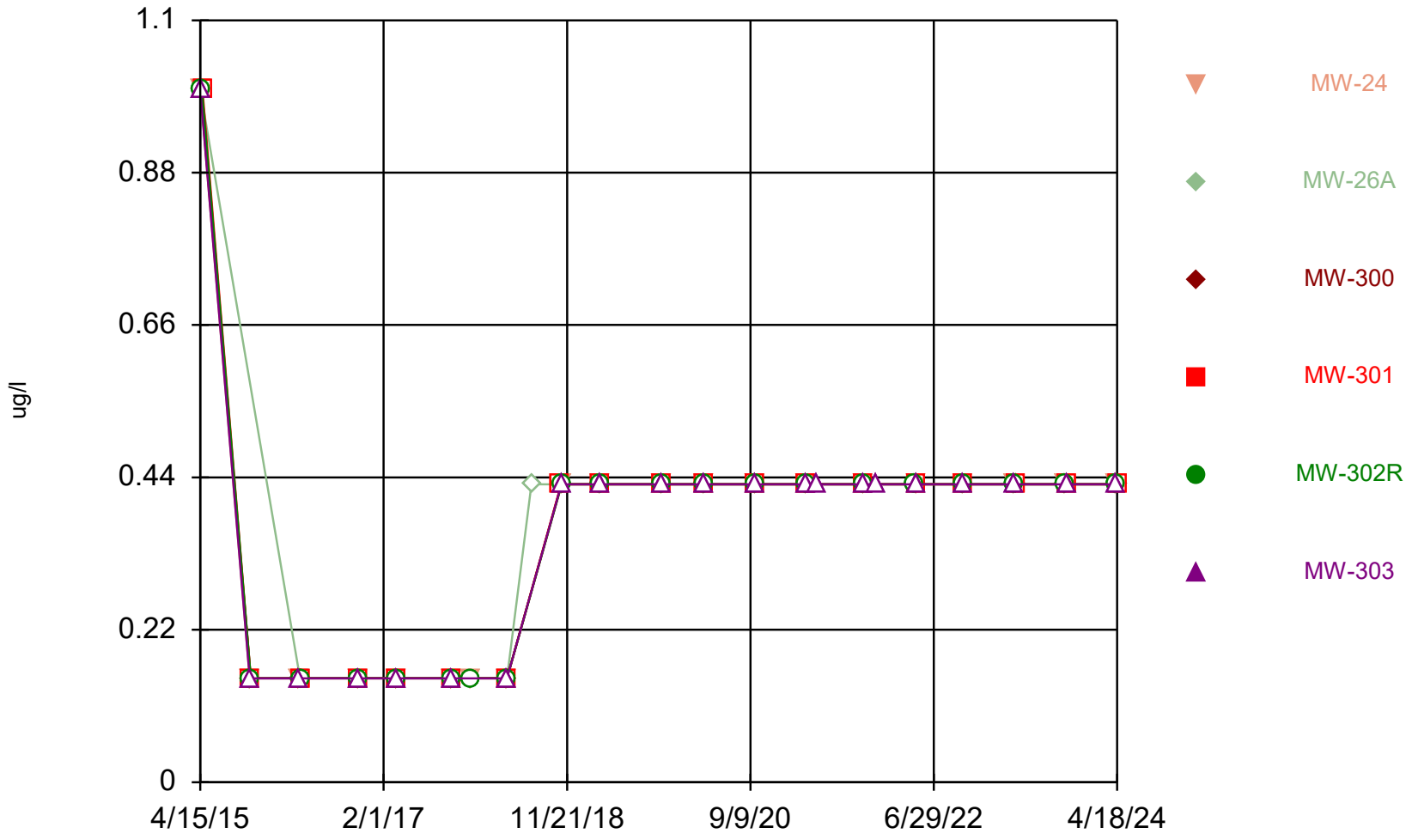


Constituent: Toluene Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

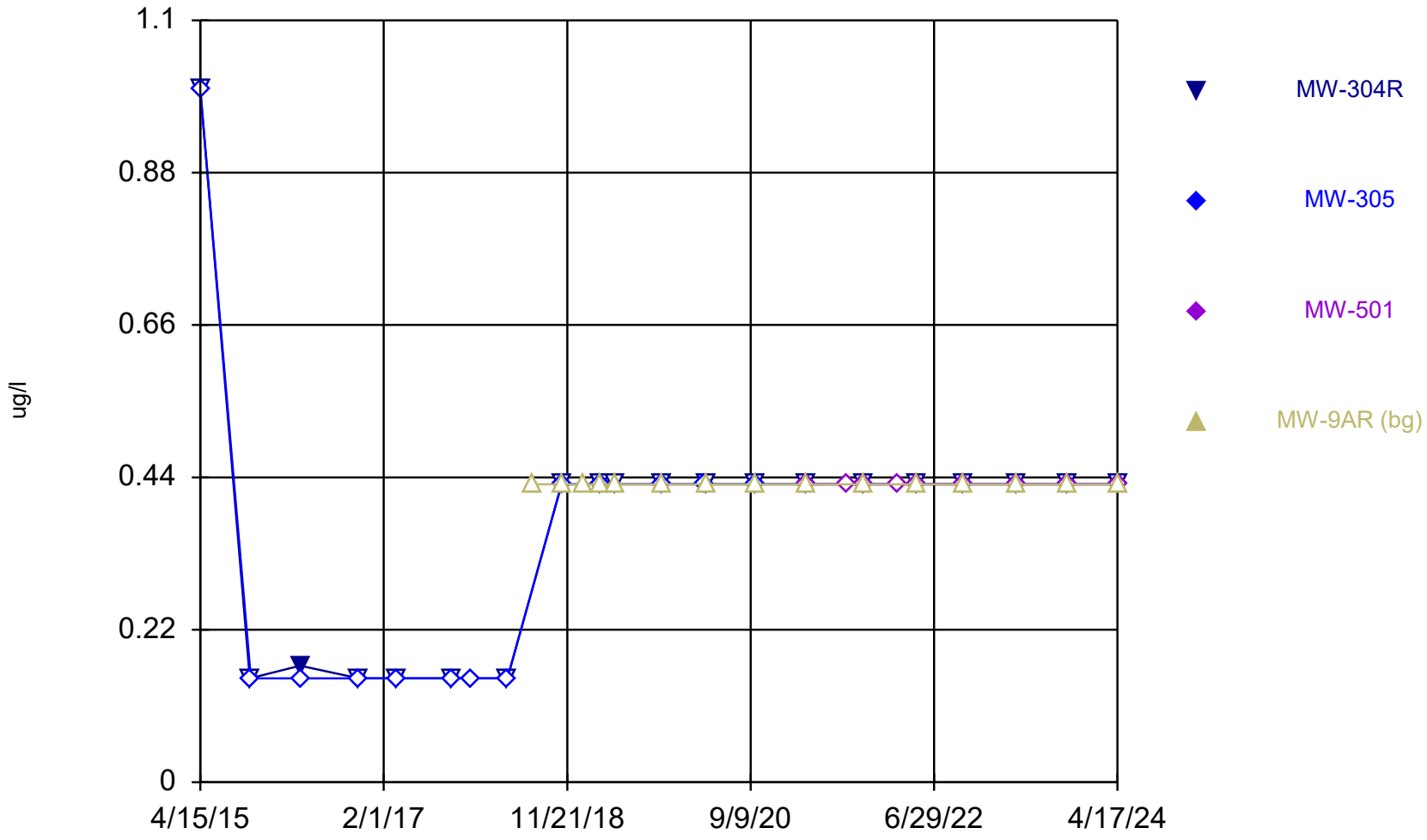


Constituent: Toluene Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

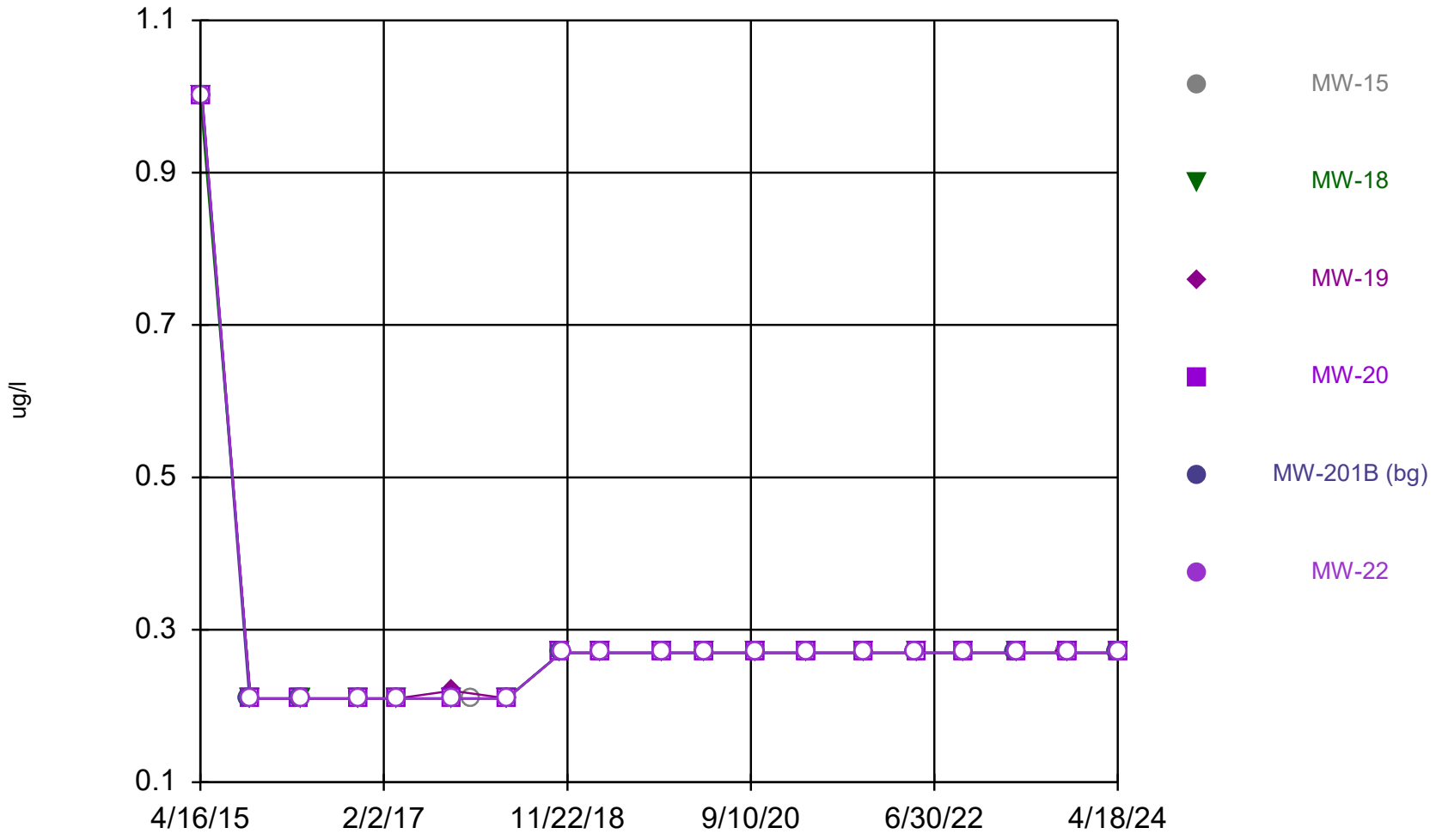


Constituent: Toluene Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

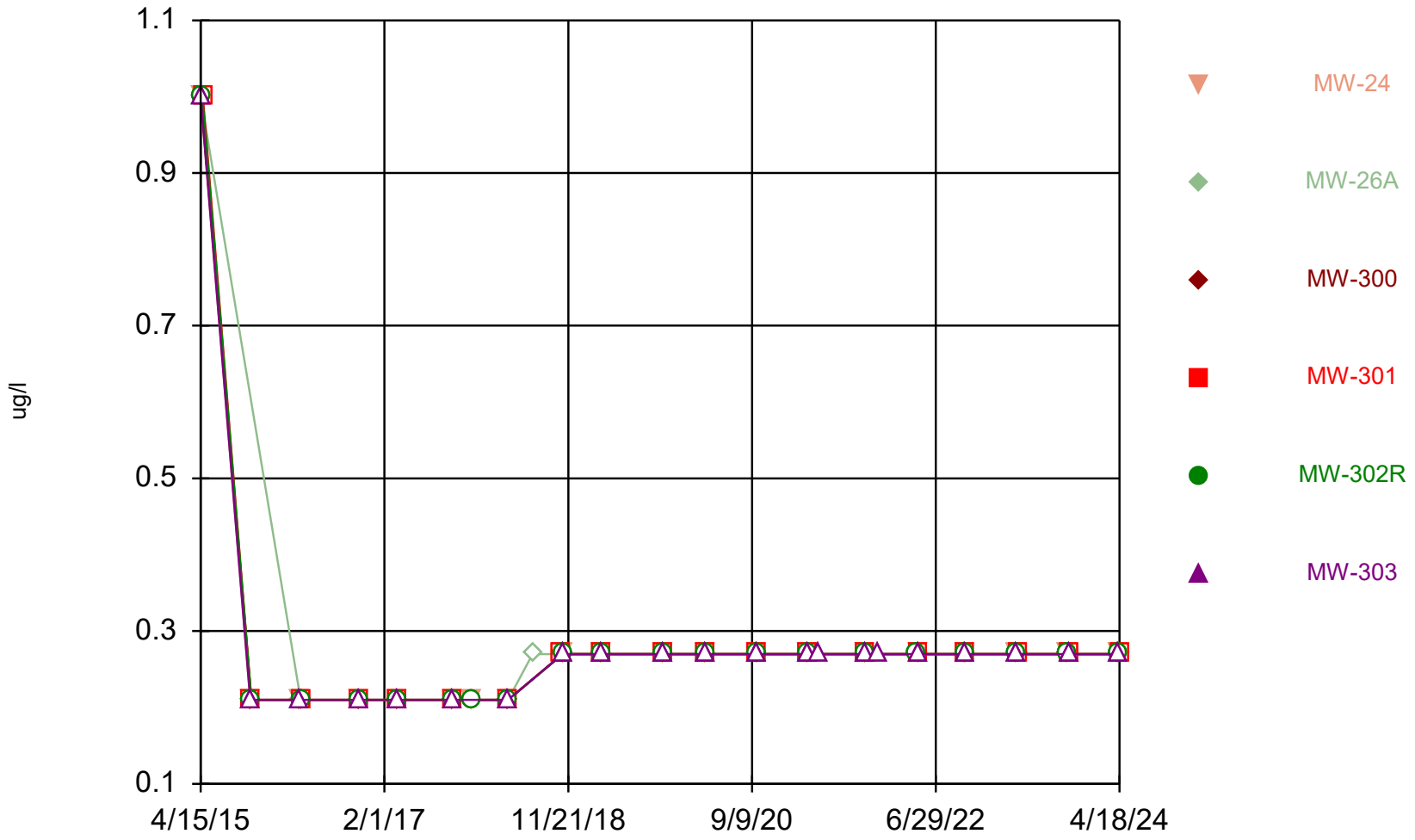


Constituent: trans-1,2-Dichloroethene Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

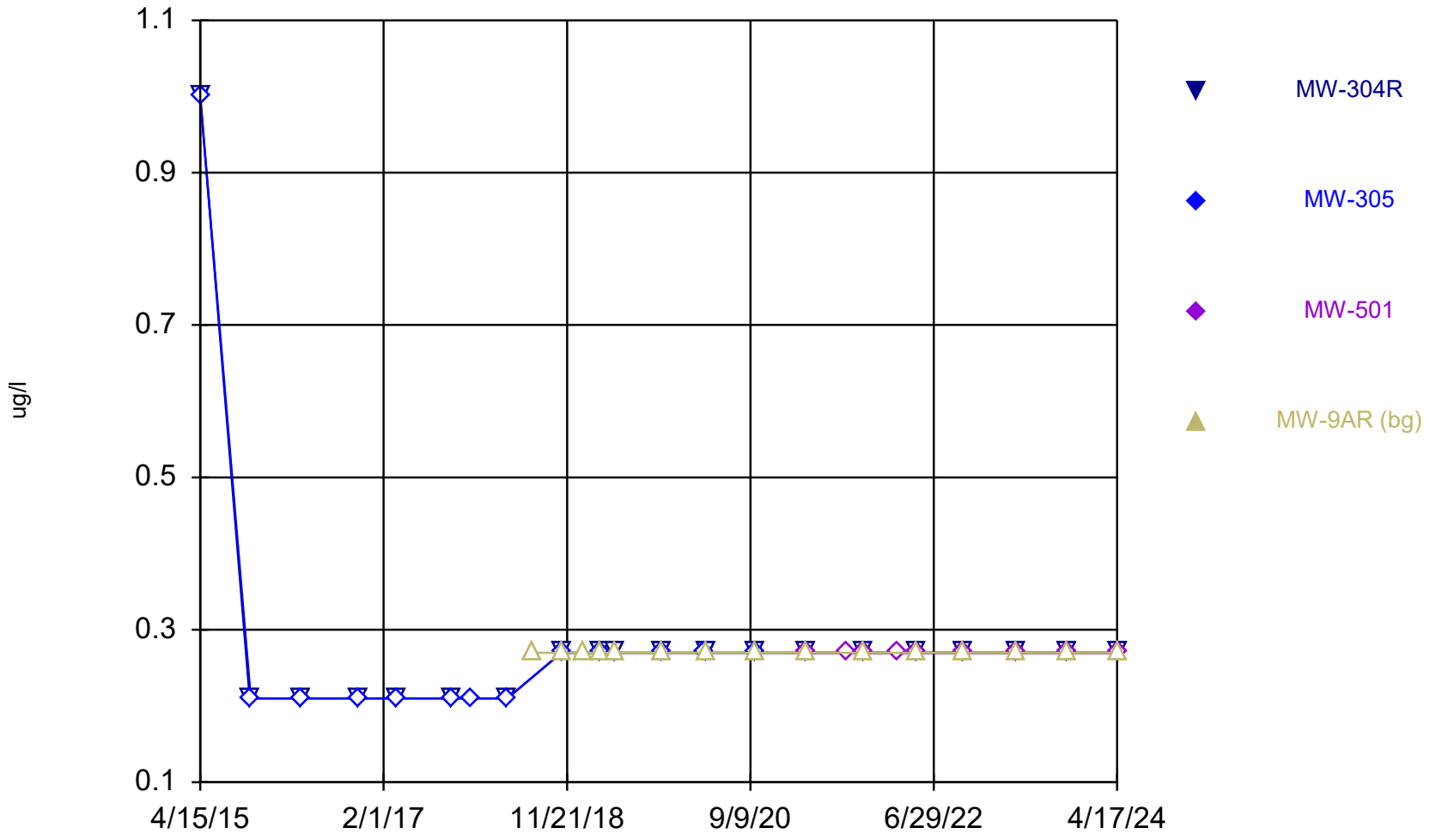


Constituent: trans-1,2-Dichloroethene Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

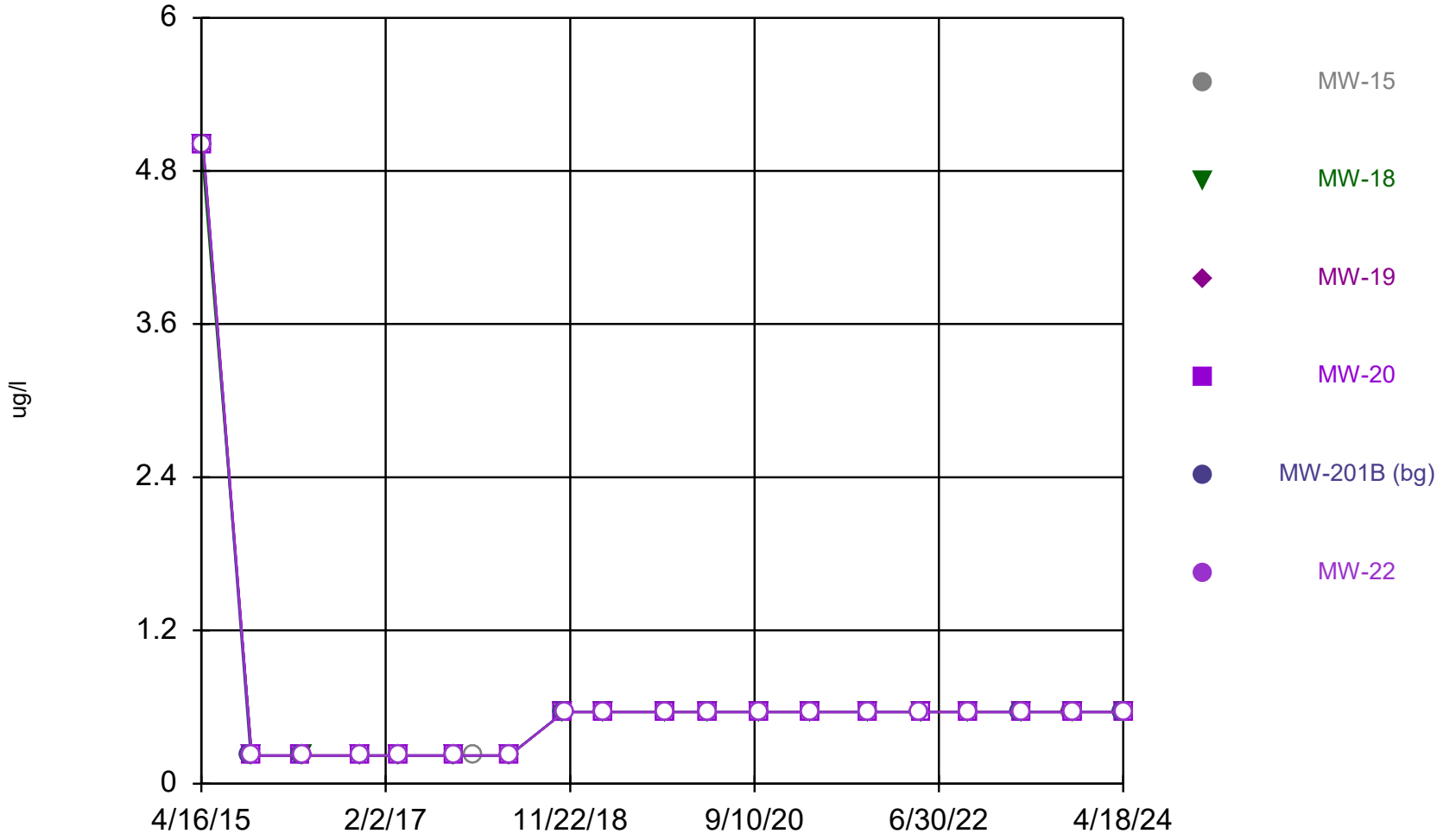


Constituent: trans-1,2-Dichloroethene Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

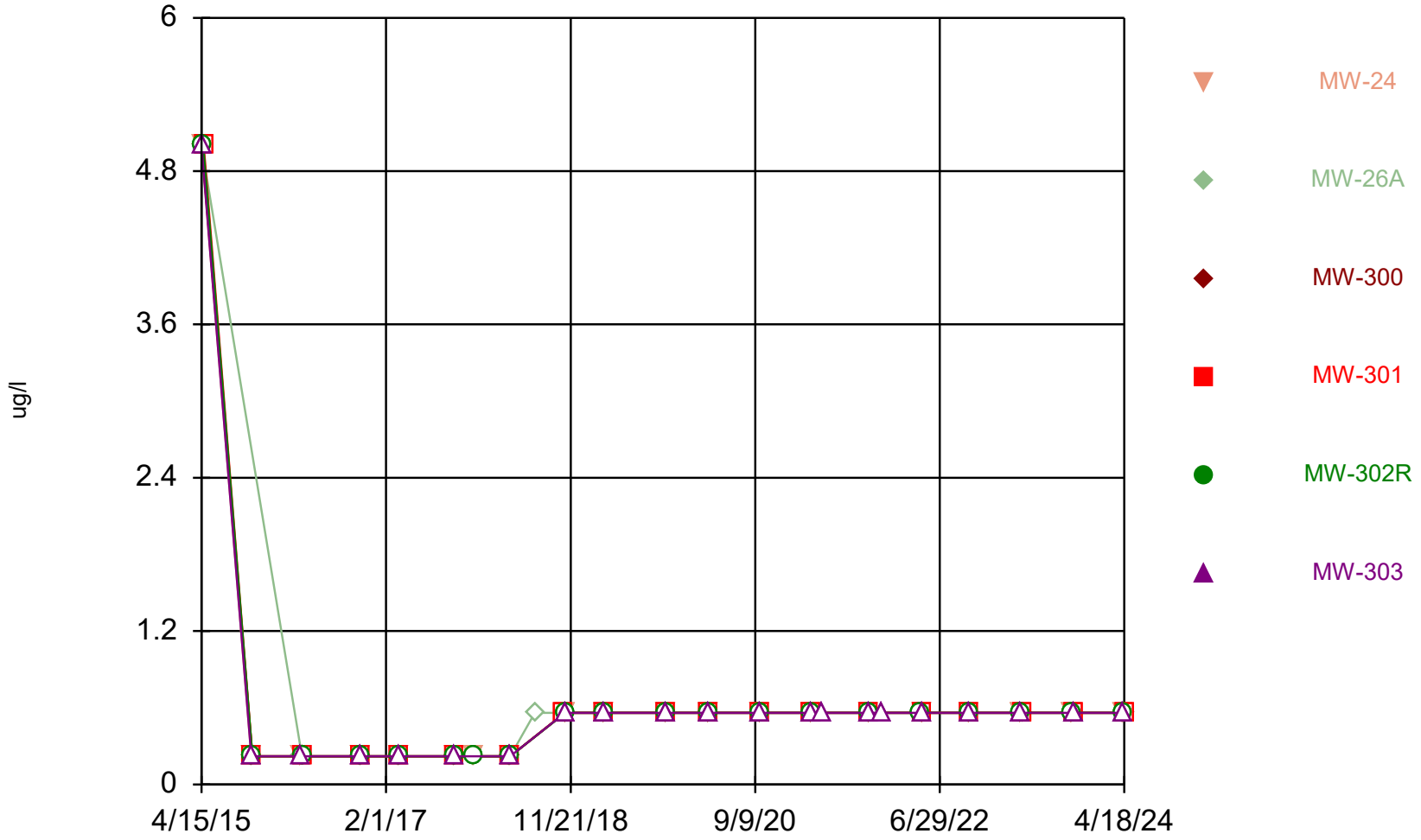


Constituent: trans-1,3-Dichloropropene Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

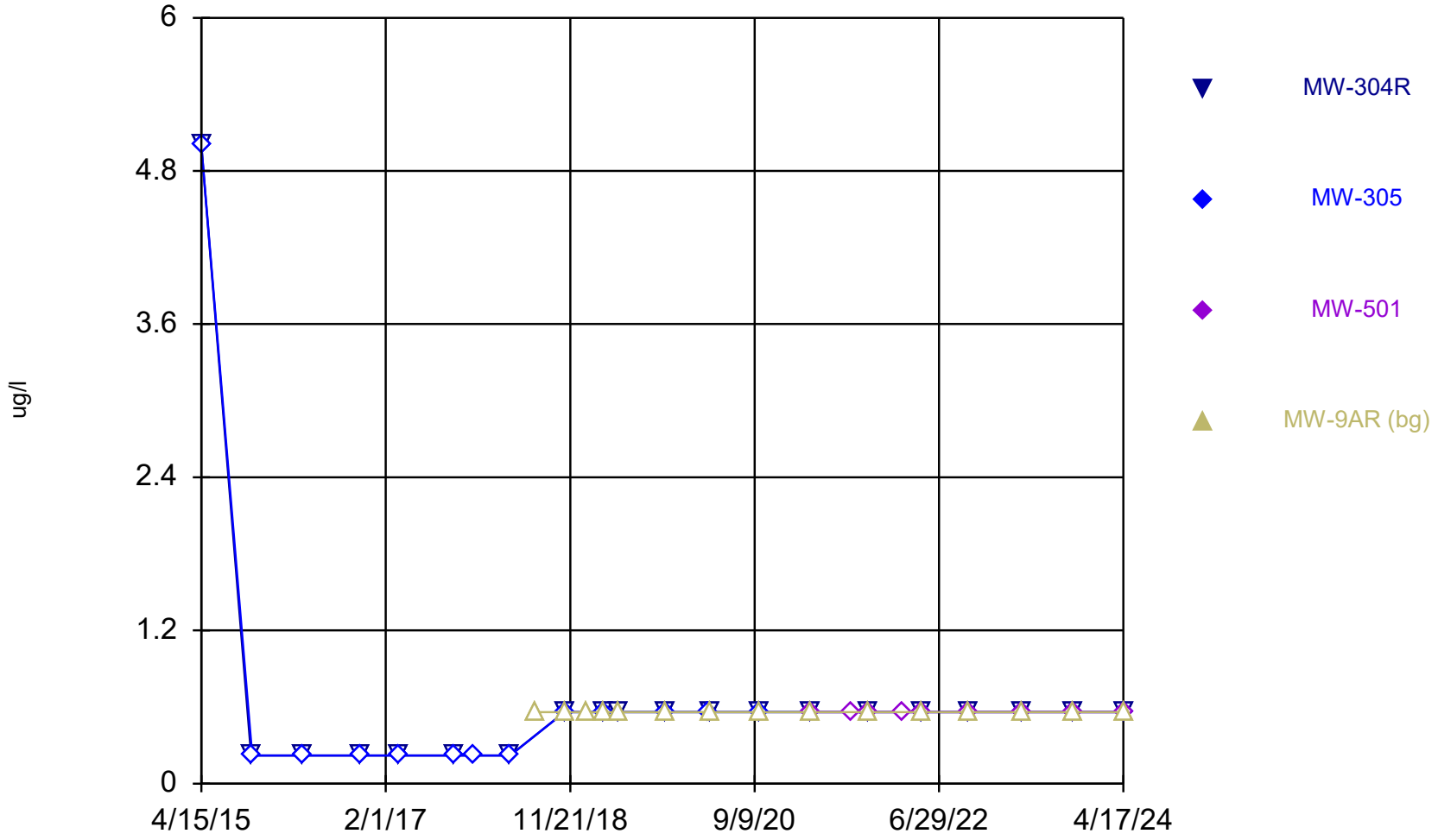


Constituent: trans-1,3-Dichloropropene Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

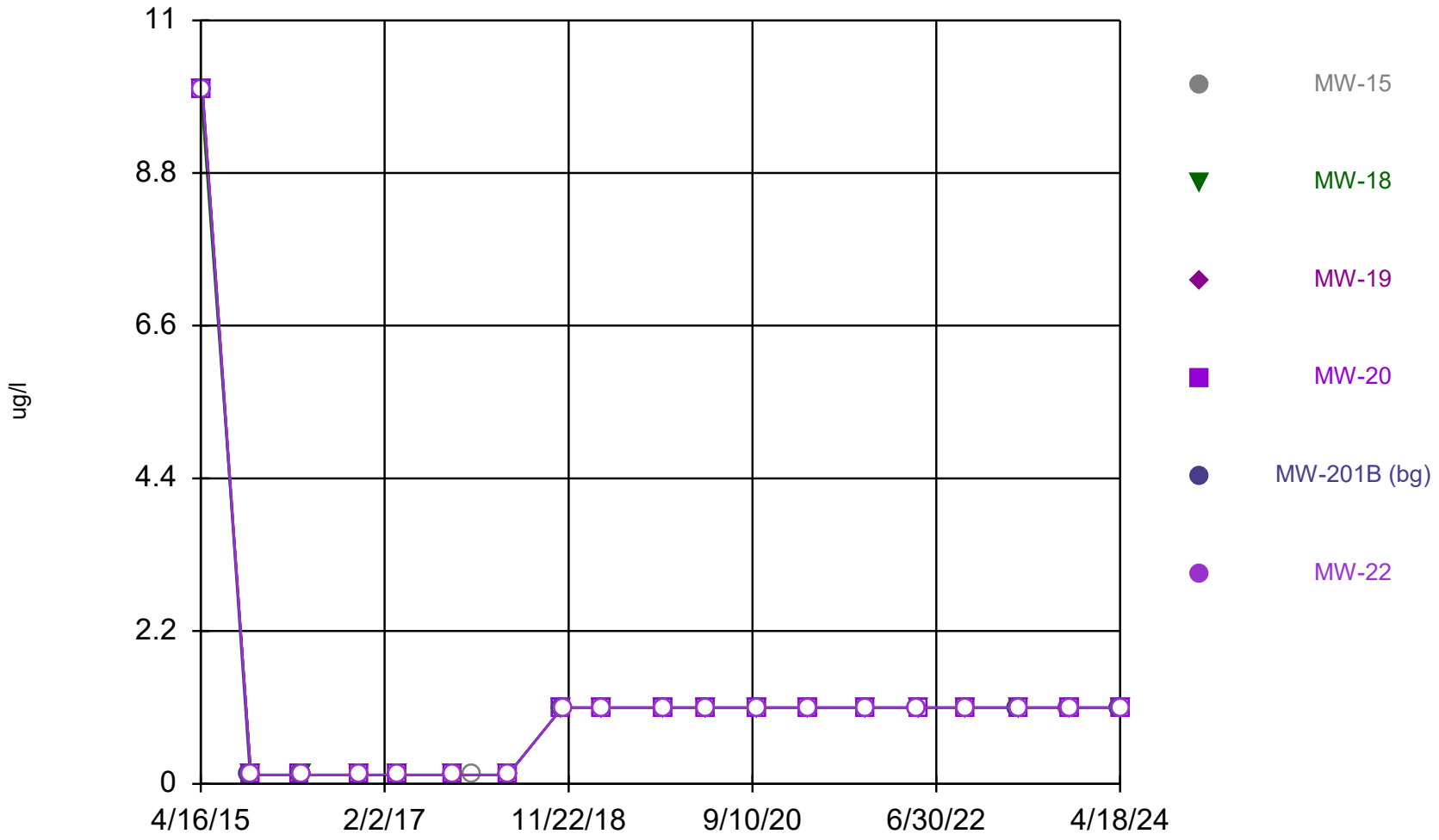


Constituent: trans-1,3-Dichloropropene Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

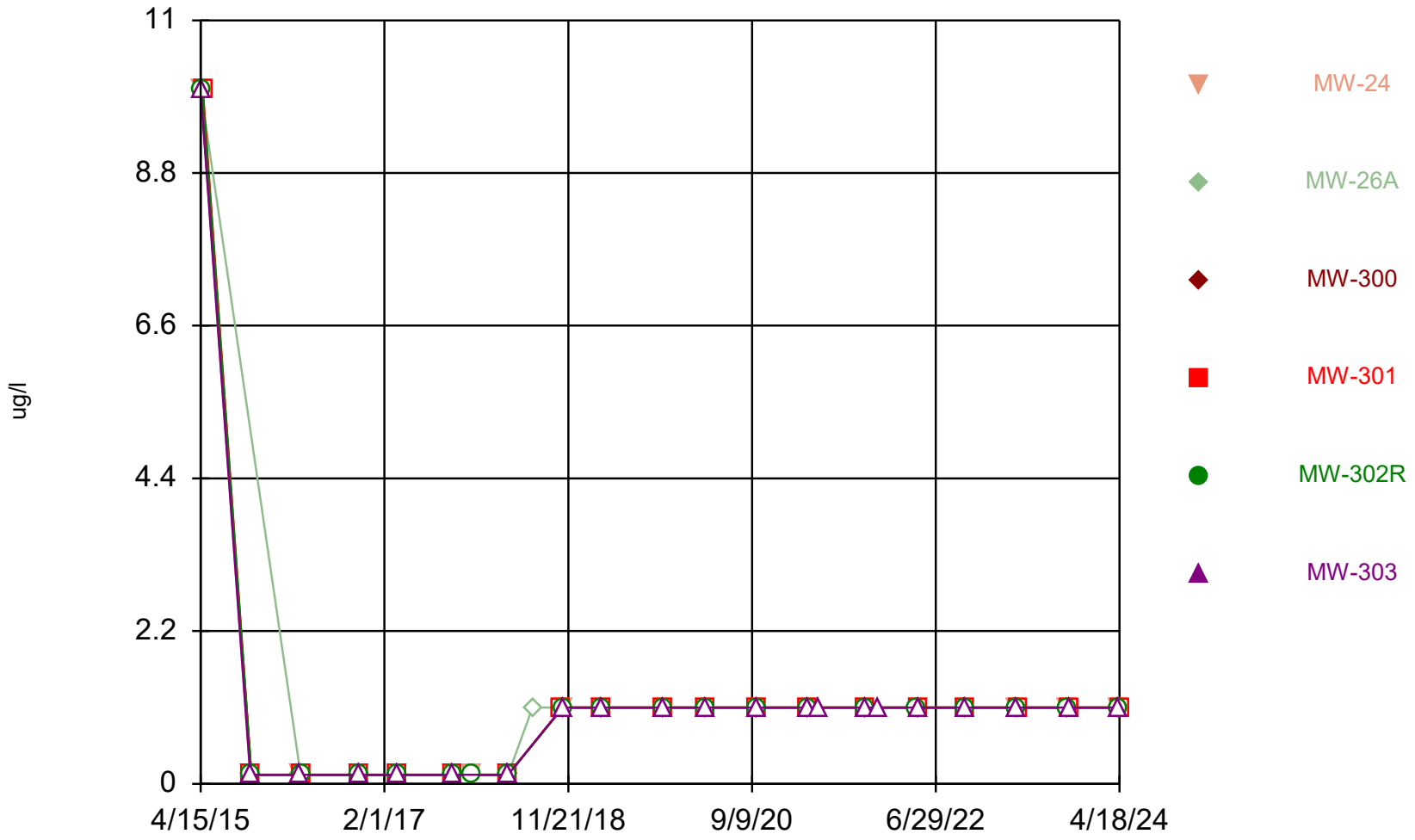


Constituent: trans-1,4-Dichloro-2-butene Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

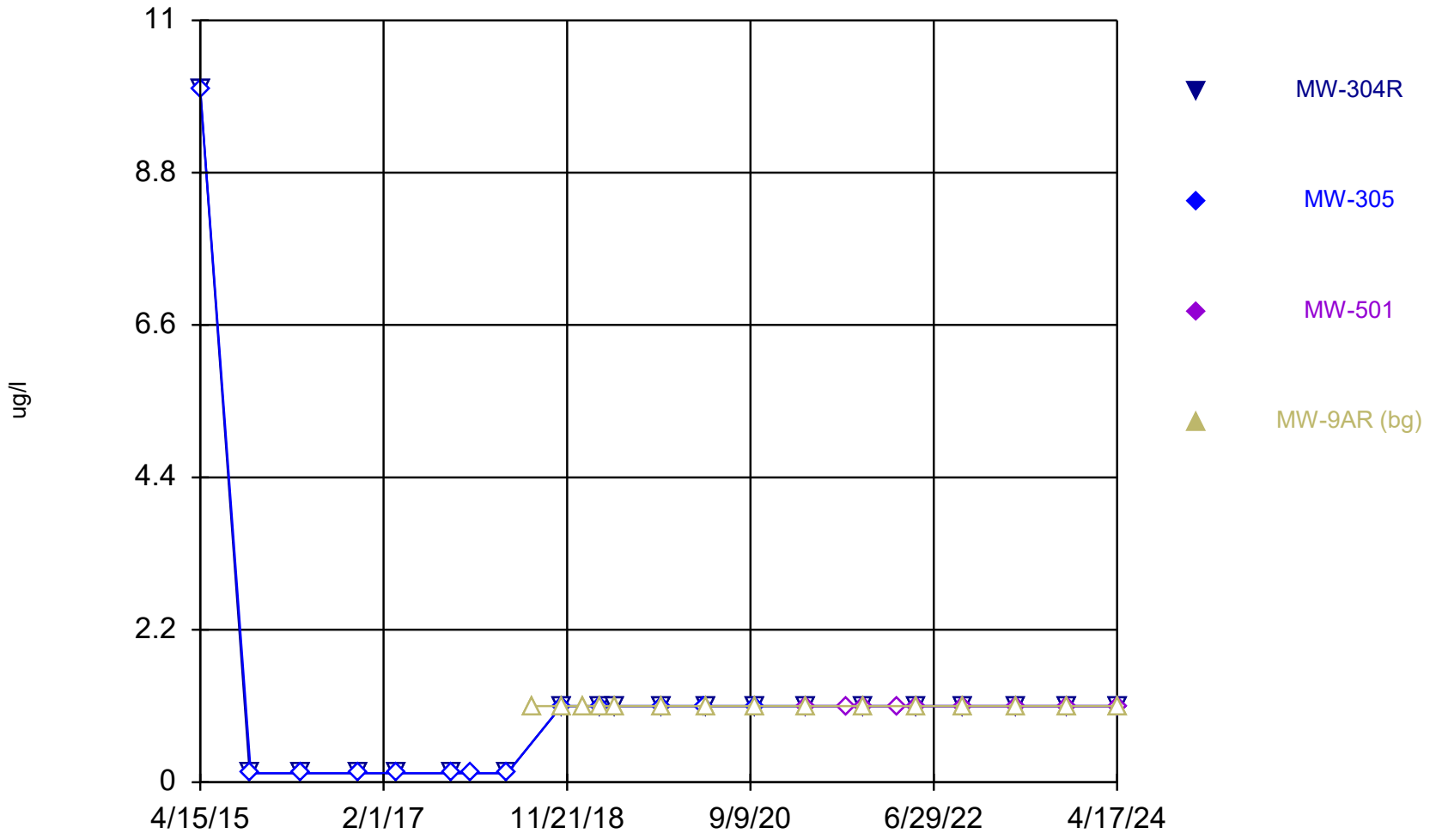


Constituent: trans-1,4-Dichloro-2-butene Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



Constituent: trans-1,4-Dichloro-2-butene Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

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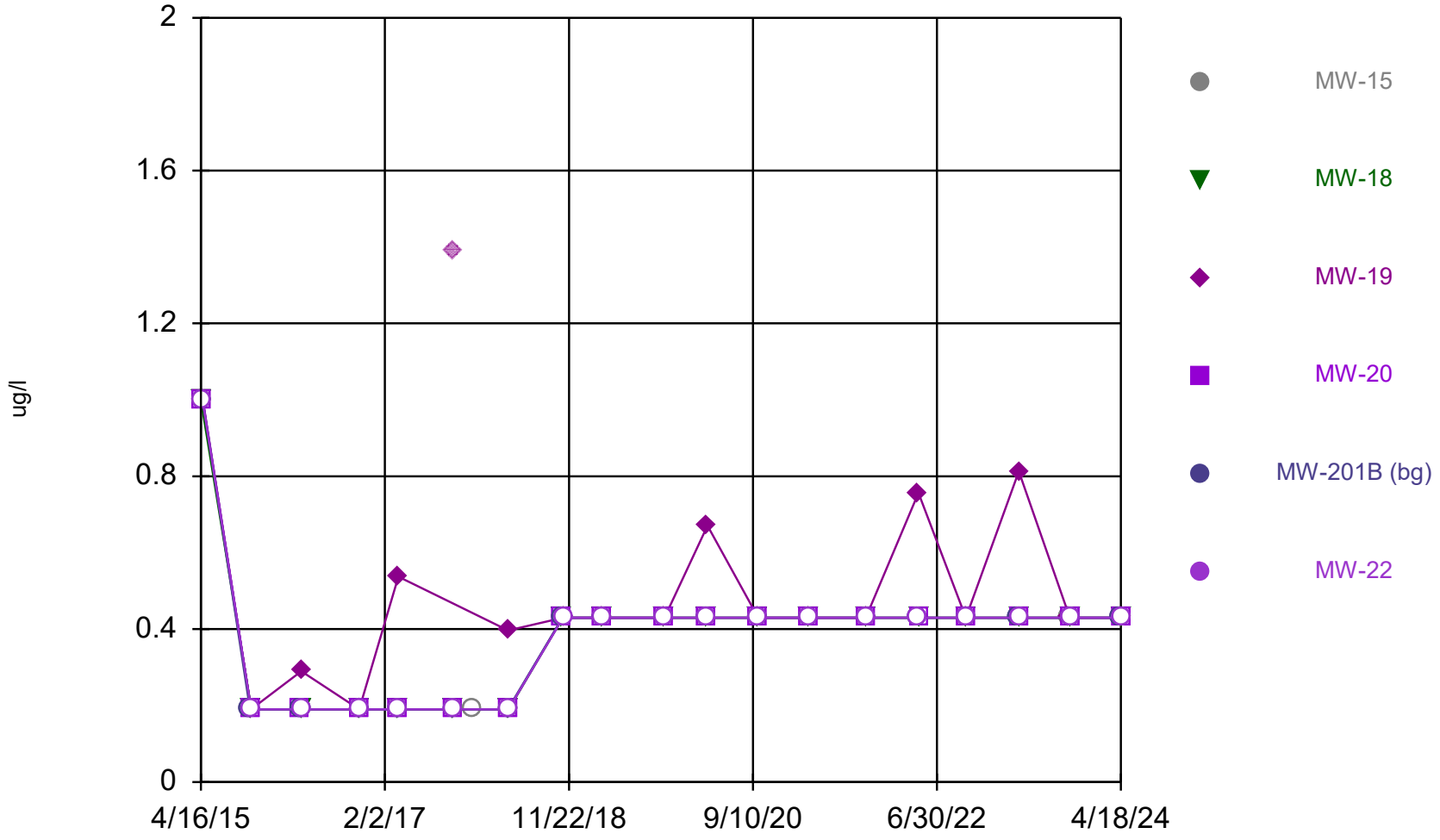
Hollow symbols indicate censored values.

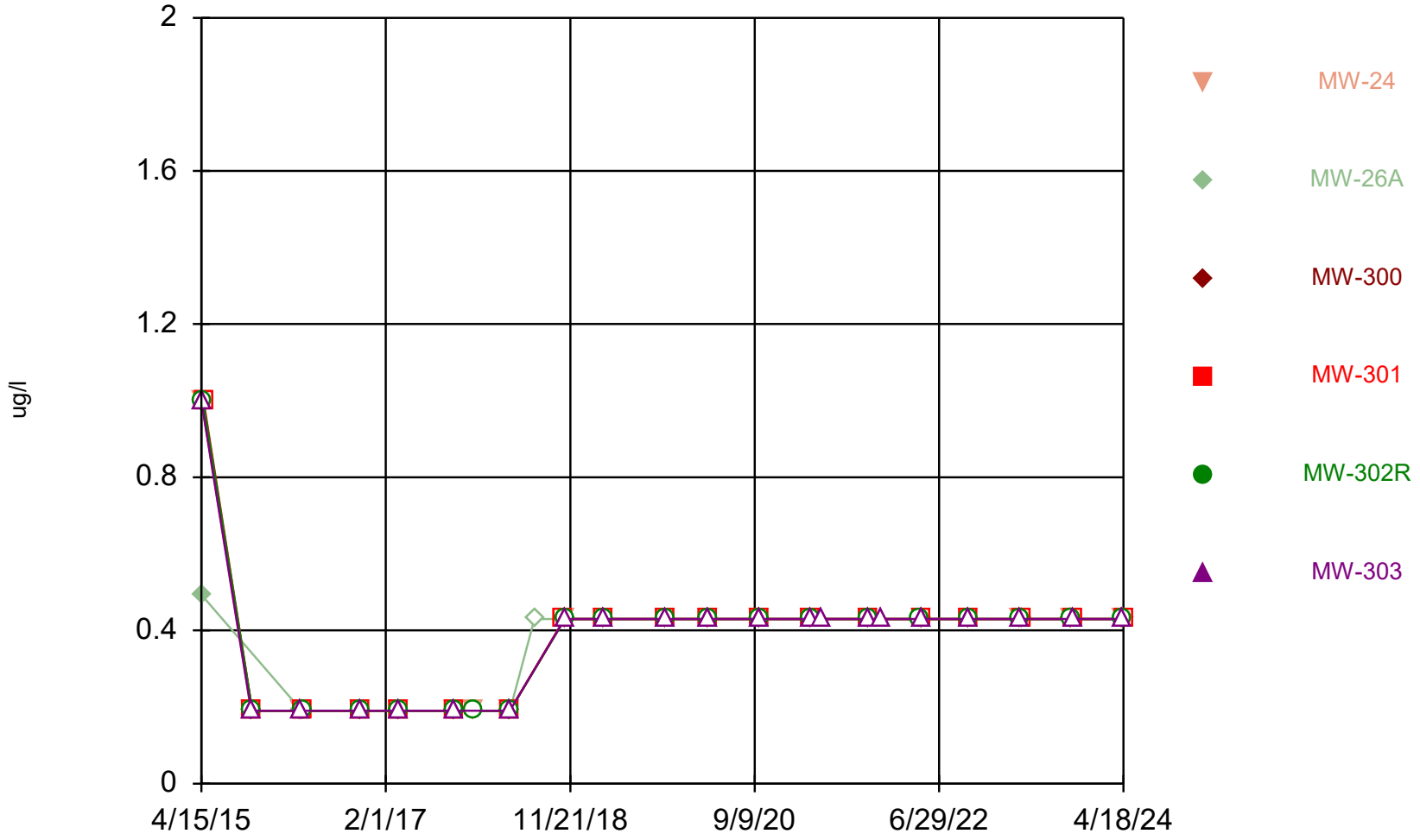
Time Series



Constituent: Trichloroethene Analysis Run 7/12/2024 2:52 PM View: App I_VOCs
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

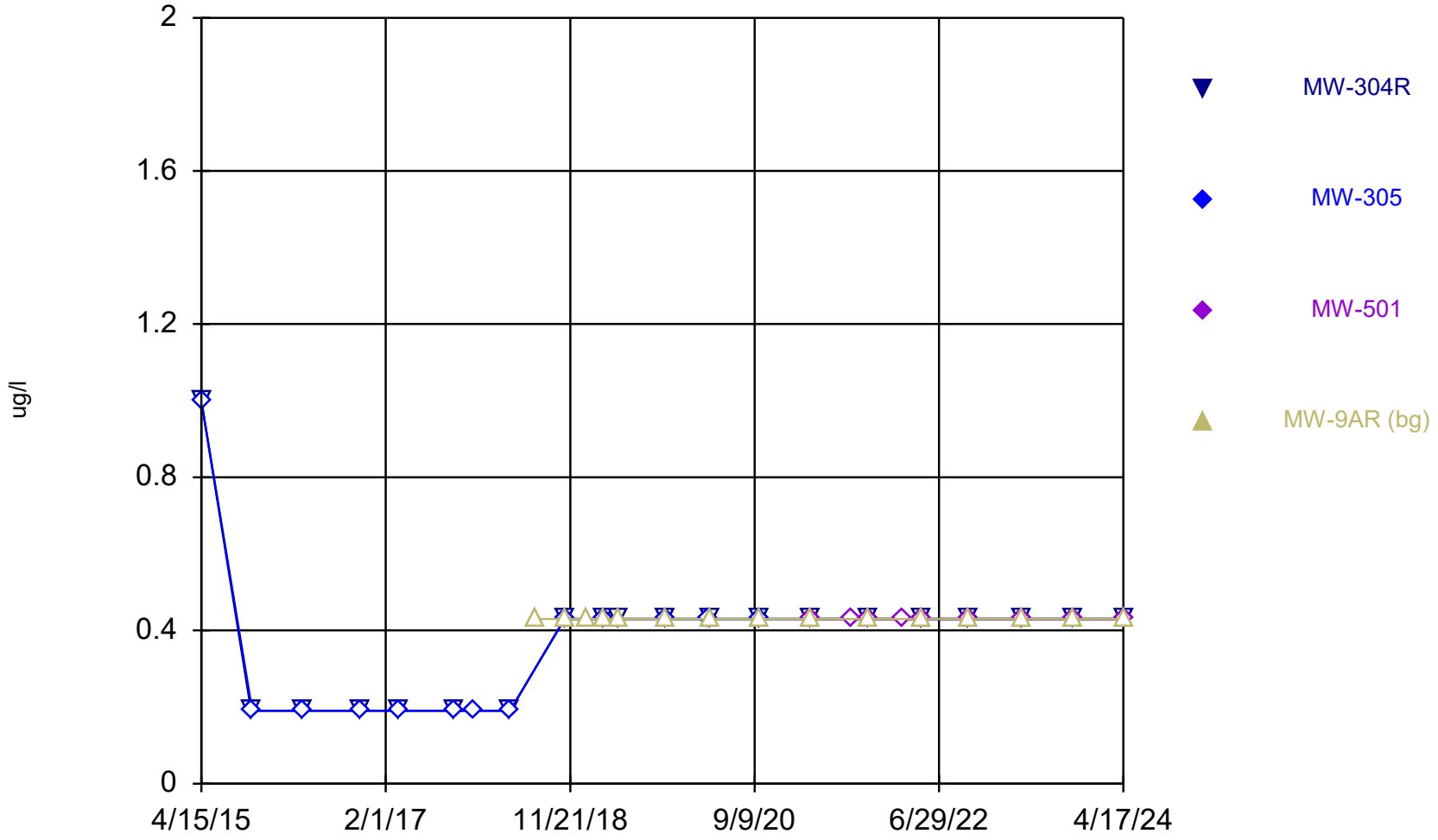


Constituent: Trichloroethene Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

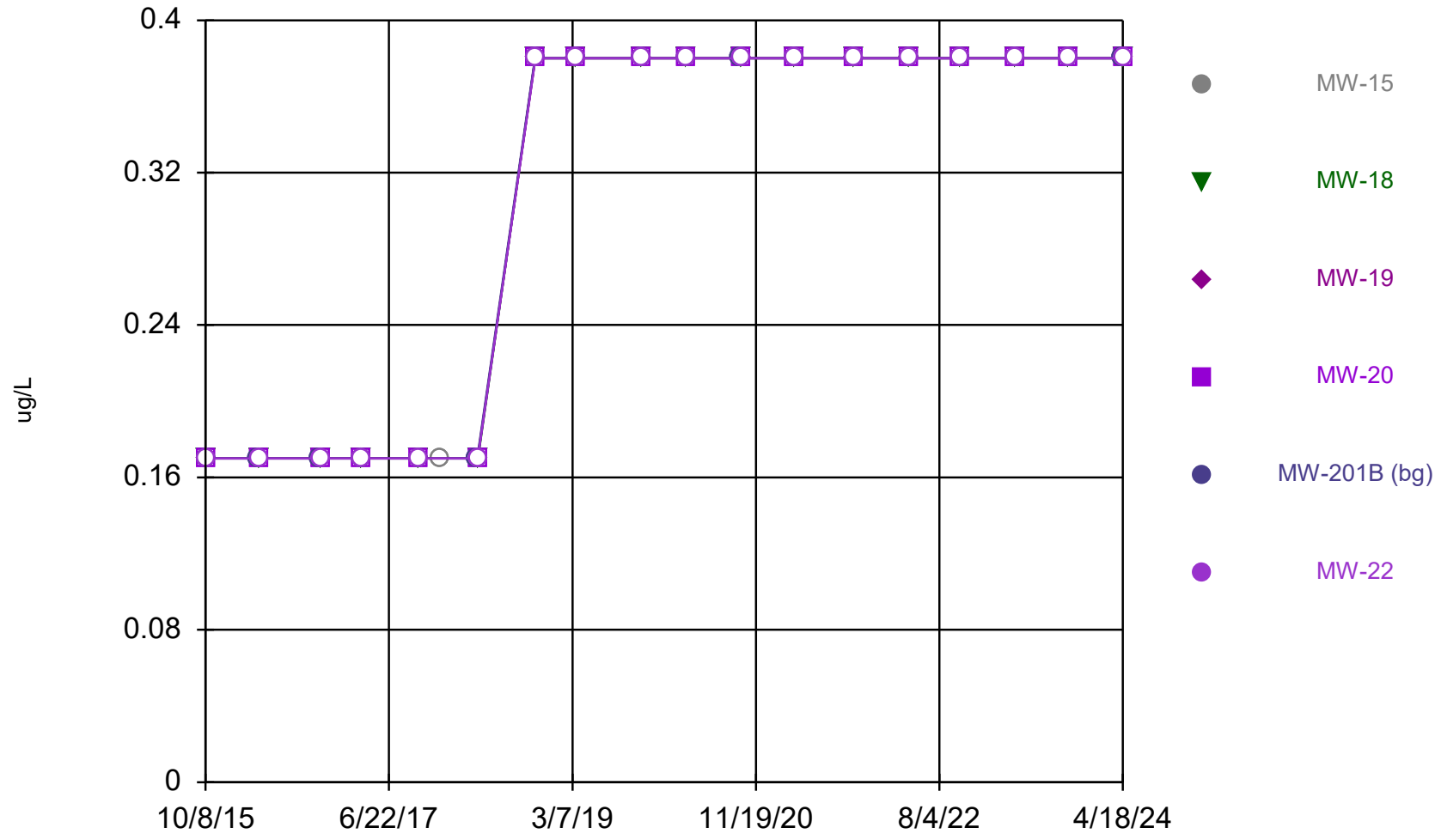


Constituent: Trichloroethene Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

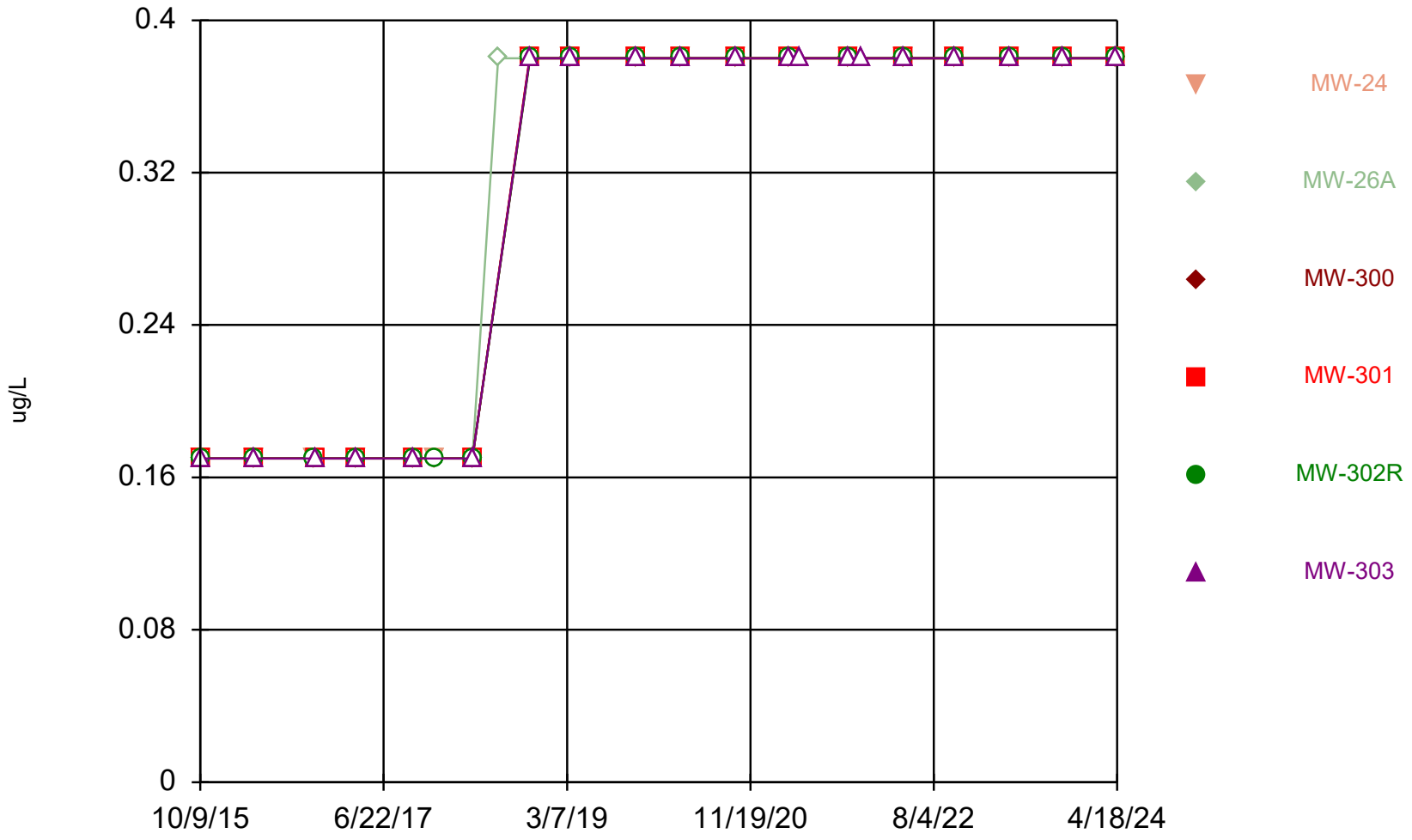


Constituent: Trichlorofluoromethane Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Sanitas™ v.10.0.15 Software licensed to HDR. UG
Hollow symbols indicate censored values.

Time Series

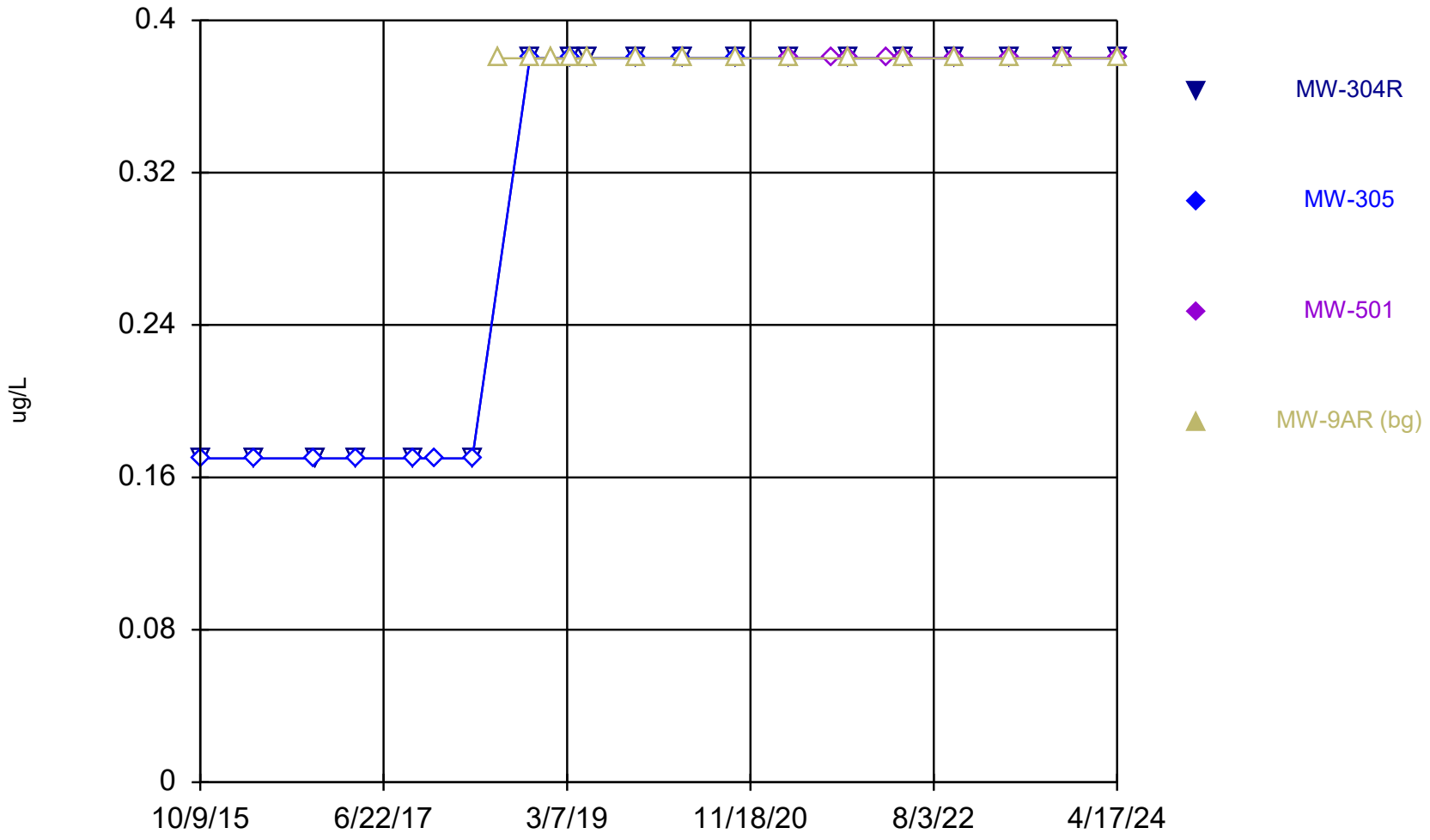


Constituent: Trichlorofluoromethane Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Sanitas™ v.10.0.15 Software licensed to HDR. UG
Hollow symbols indicate censored values.

Time Series

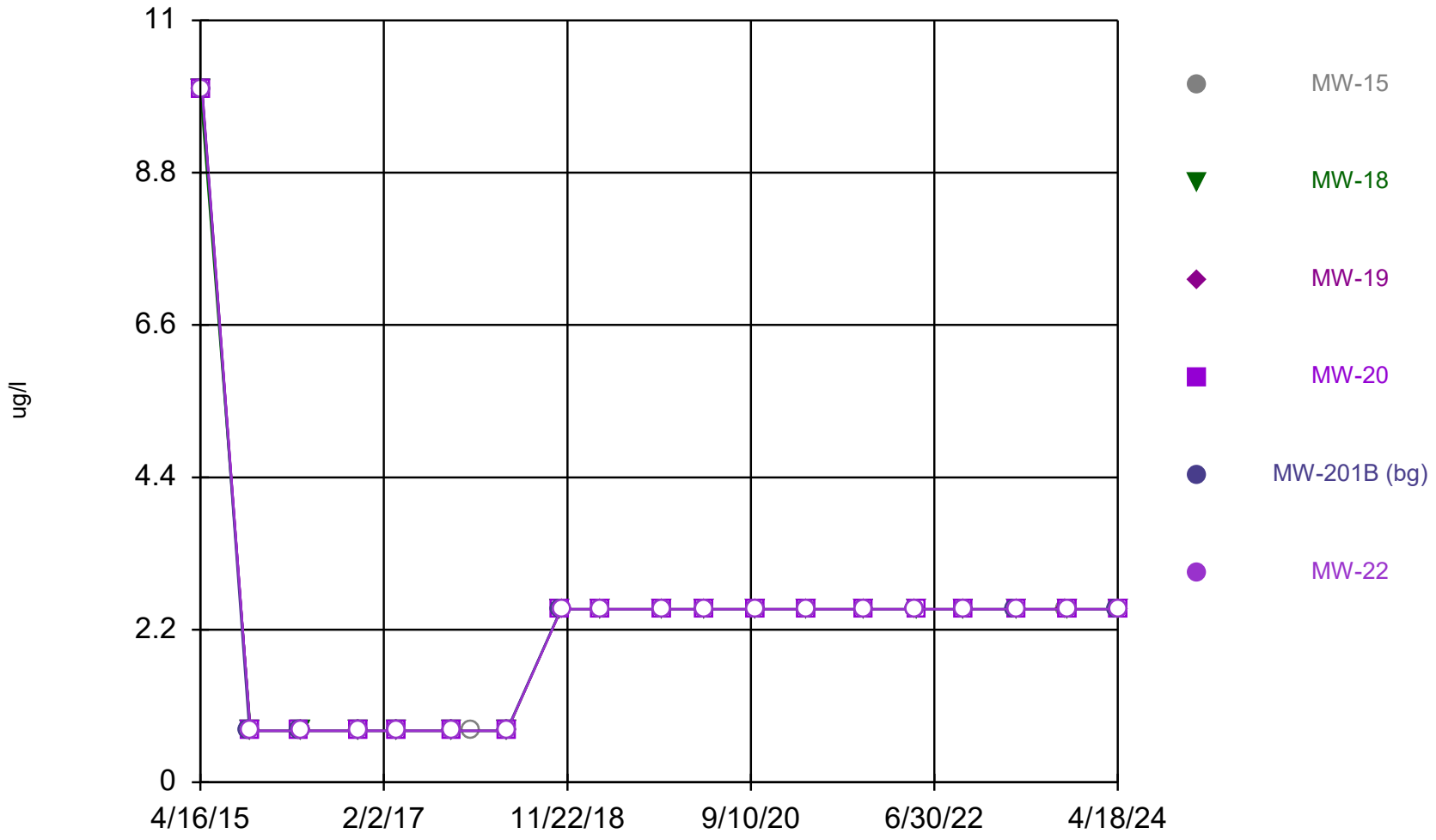


Constituent: Trichlorofluoromethane Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Sanitas™ v.10.0.15 Software licensed to HDR. UG
Hollow symbols indicate censored values.

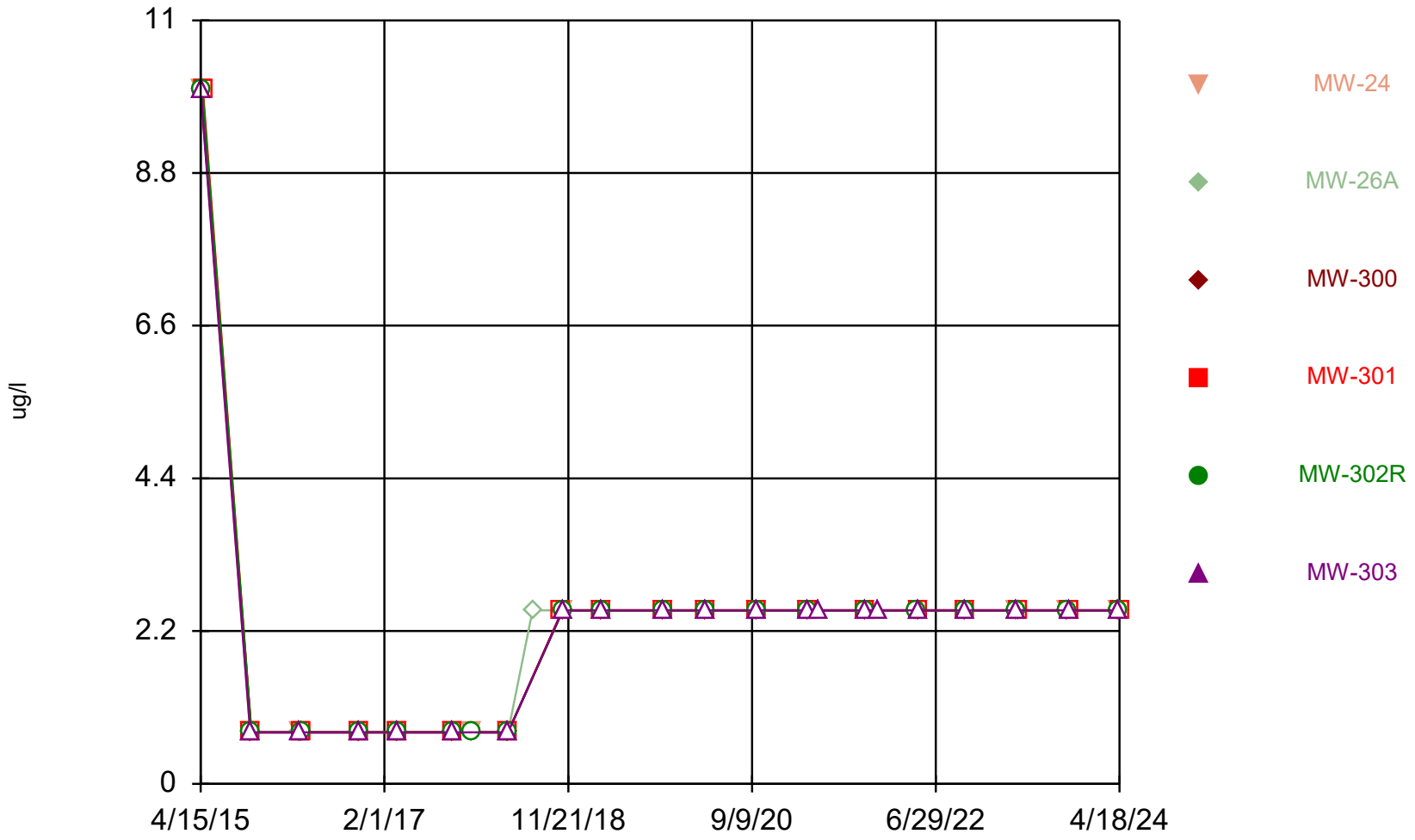
Time Series



Constituent: Vinyl Acetate Analysis Run 7/12/2024 2:52 PM View: App I_VOCs
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

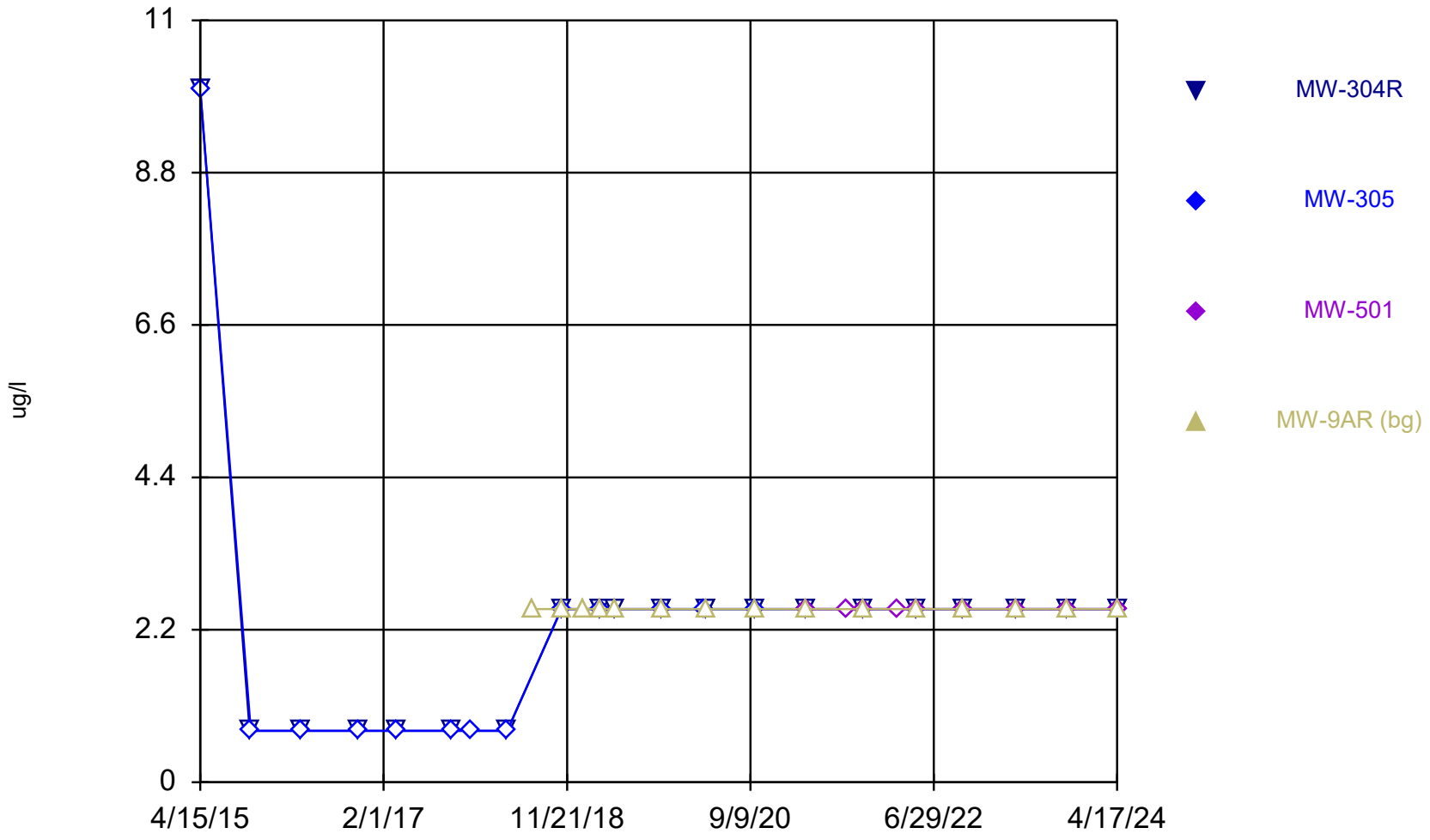


Constituent: Vinyl Acetate Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



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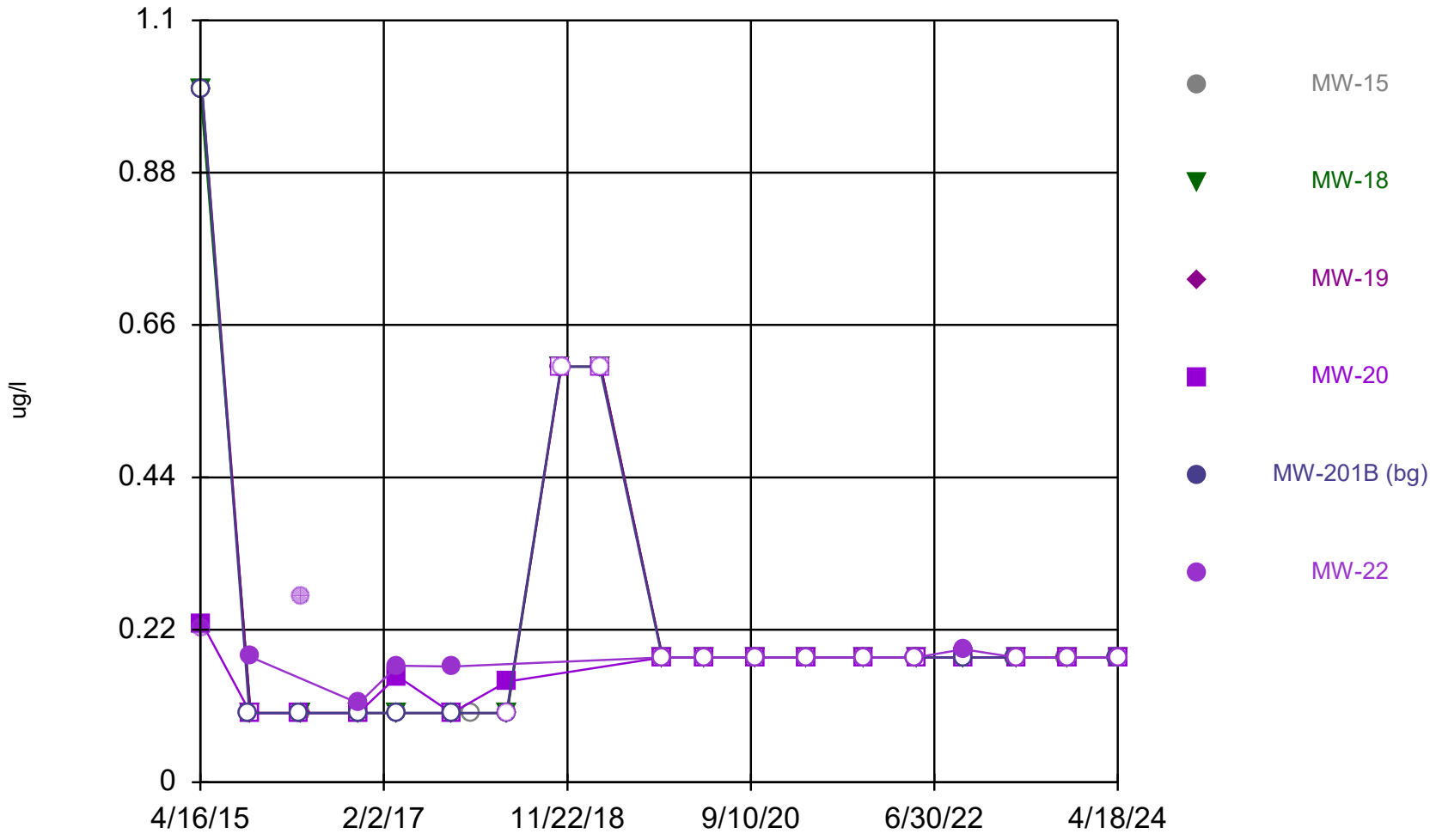
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

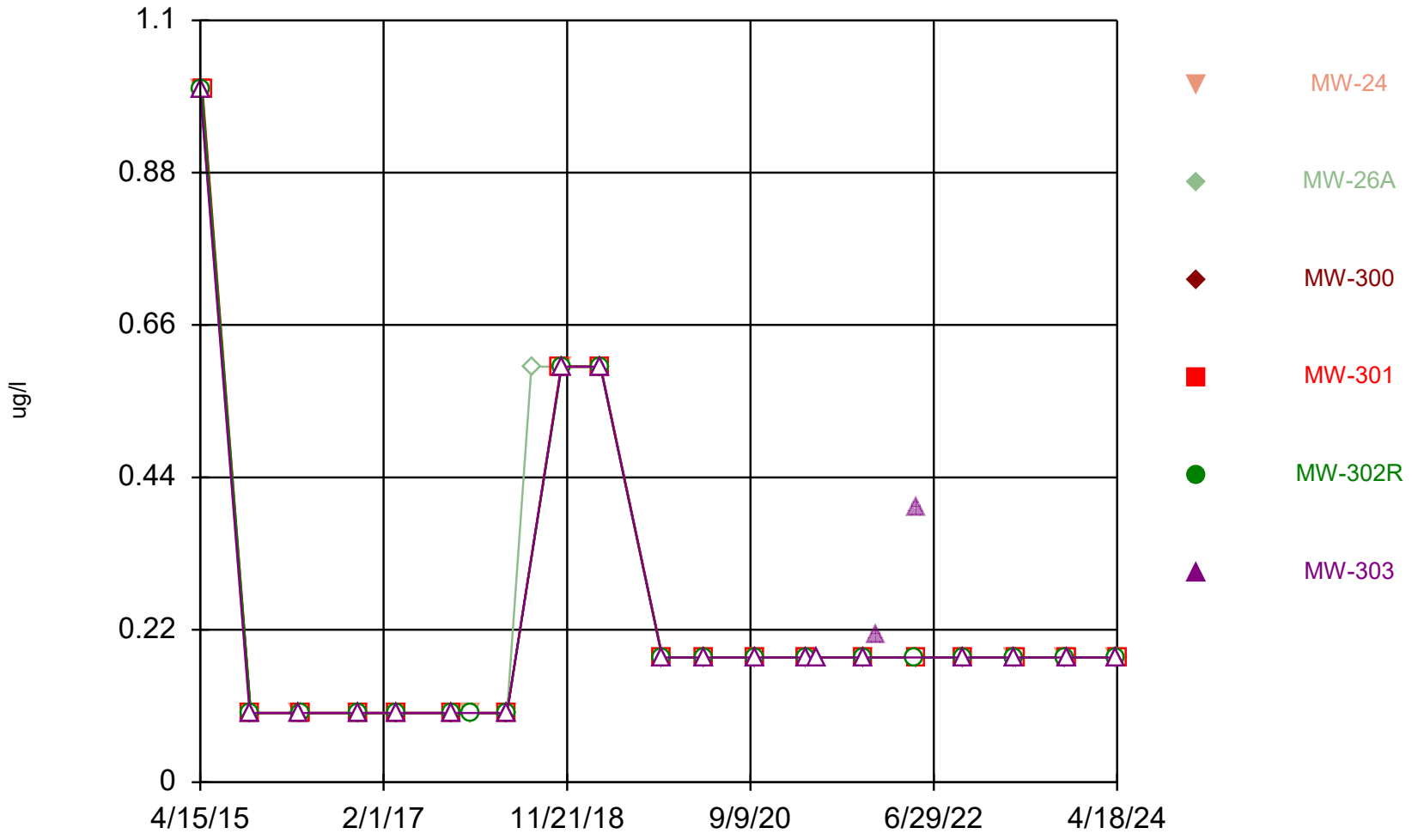


Constituent: Vinyl Chloride Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

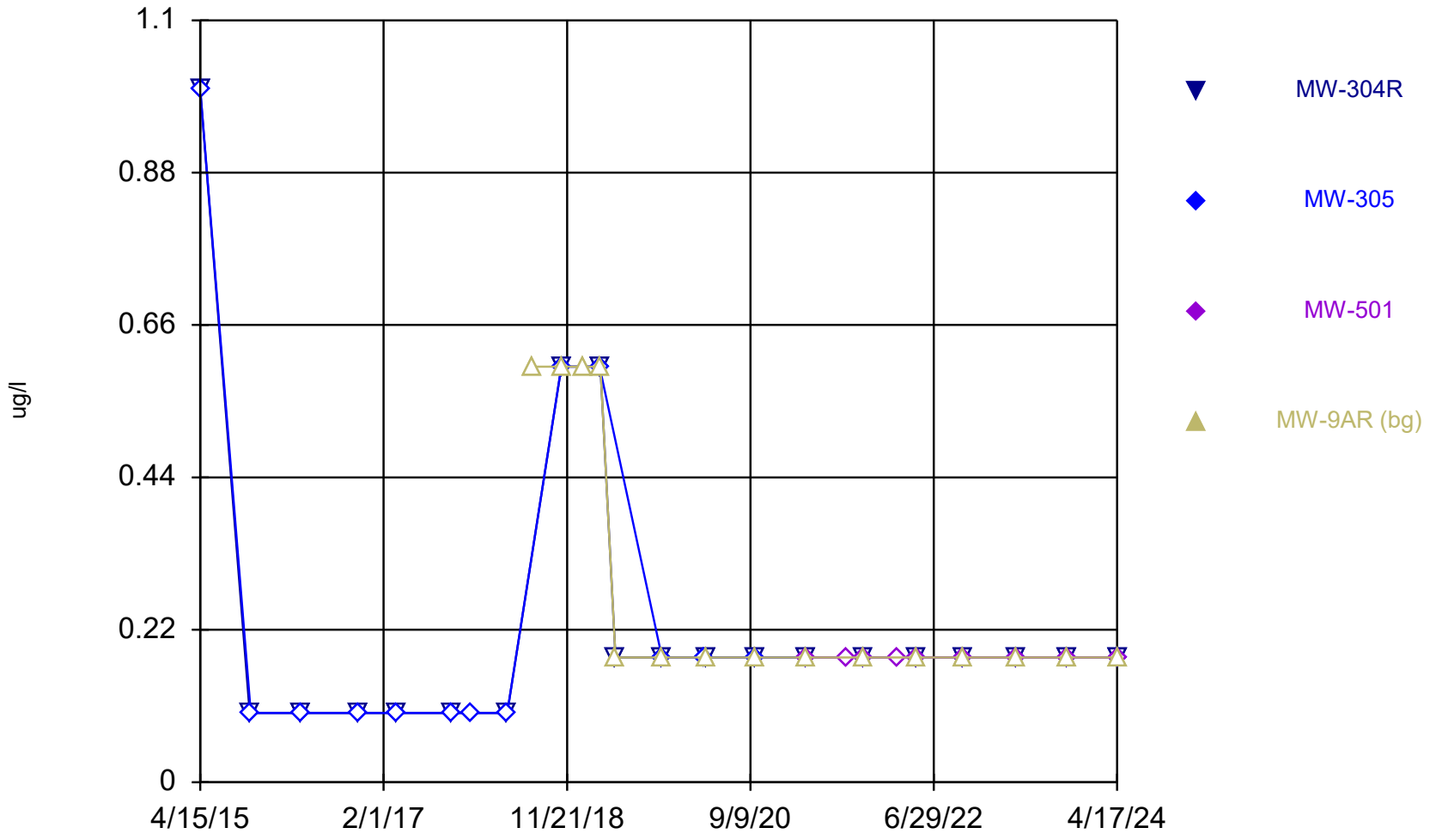


Constituent: Vinyl Chloride Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

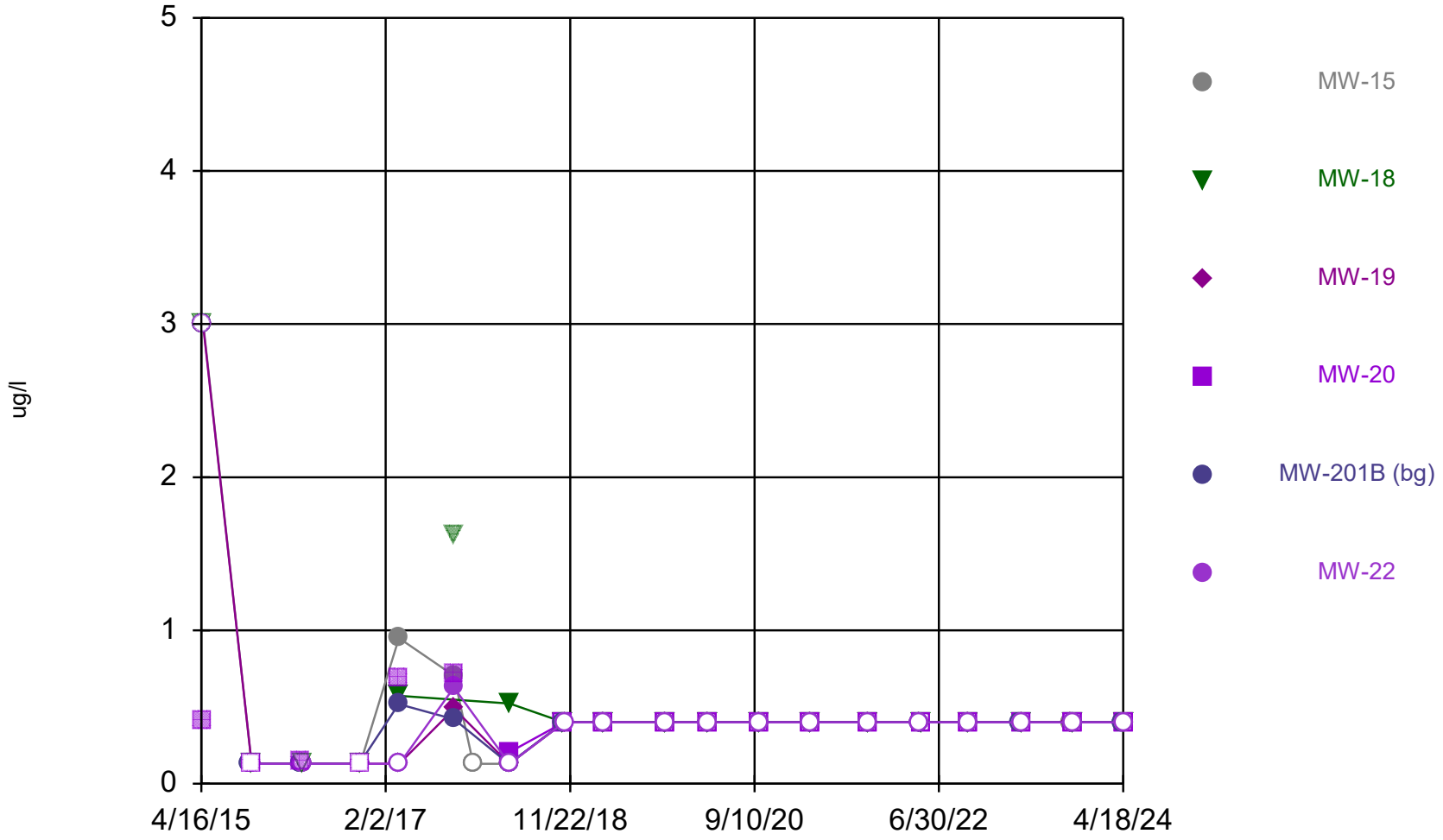


Constituent: Vinyl Chloride Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

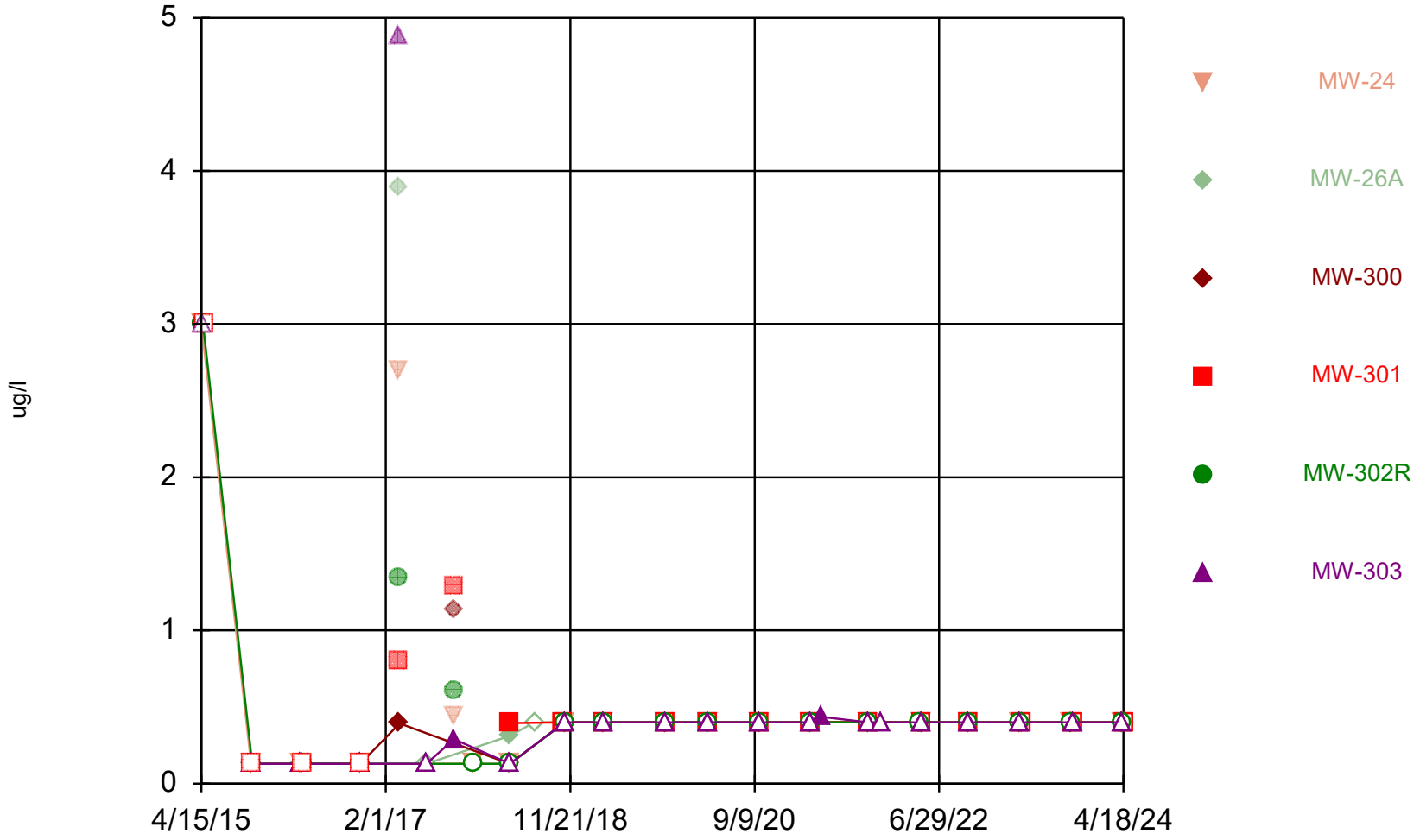


Constituent: Xylenes, Total Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

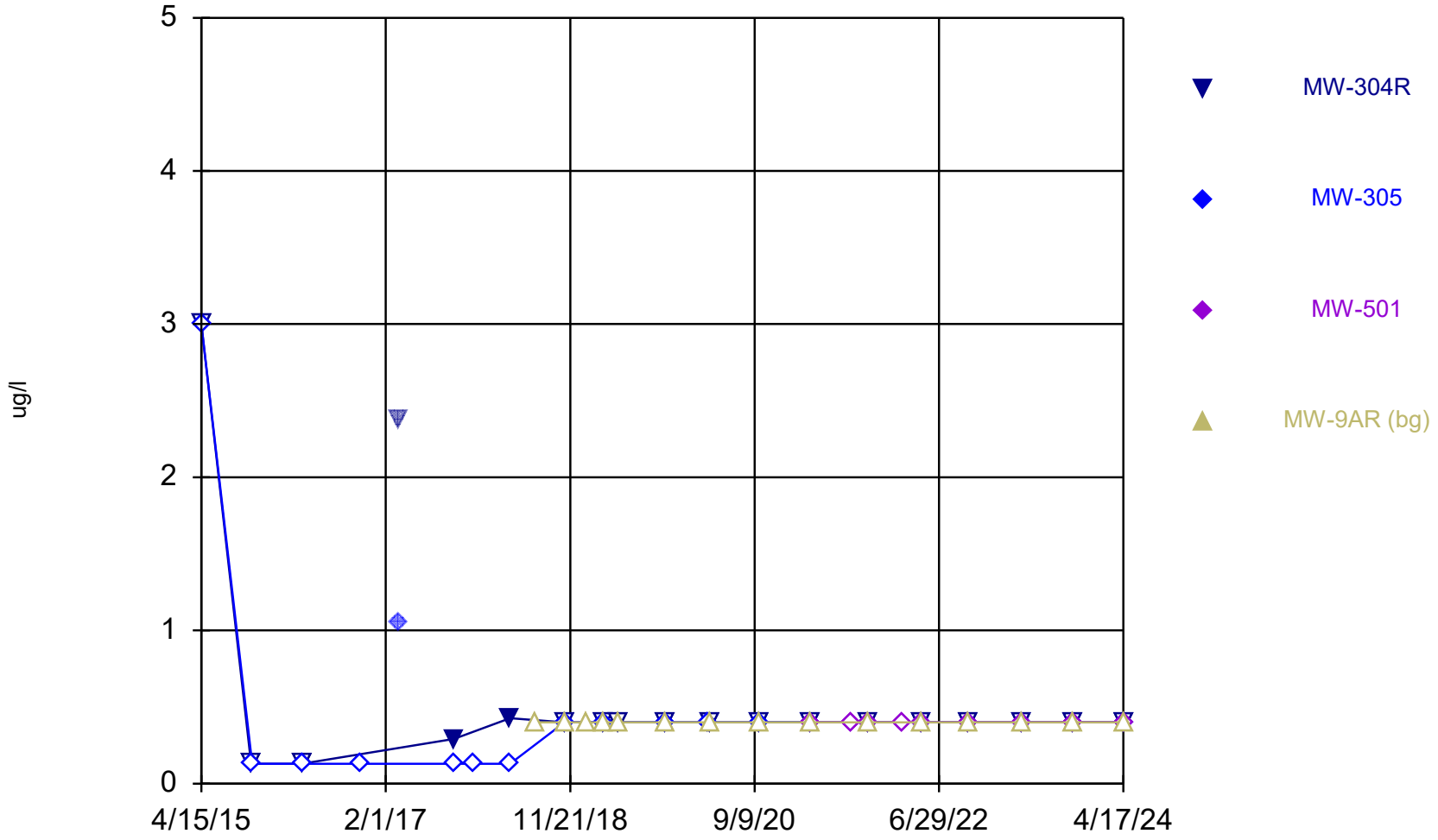


Constituent: Xylenes, Total Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



Constituent: Xylenes, Total Analysis Run 7/12/2024 2:52 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

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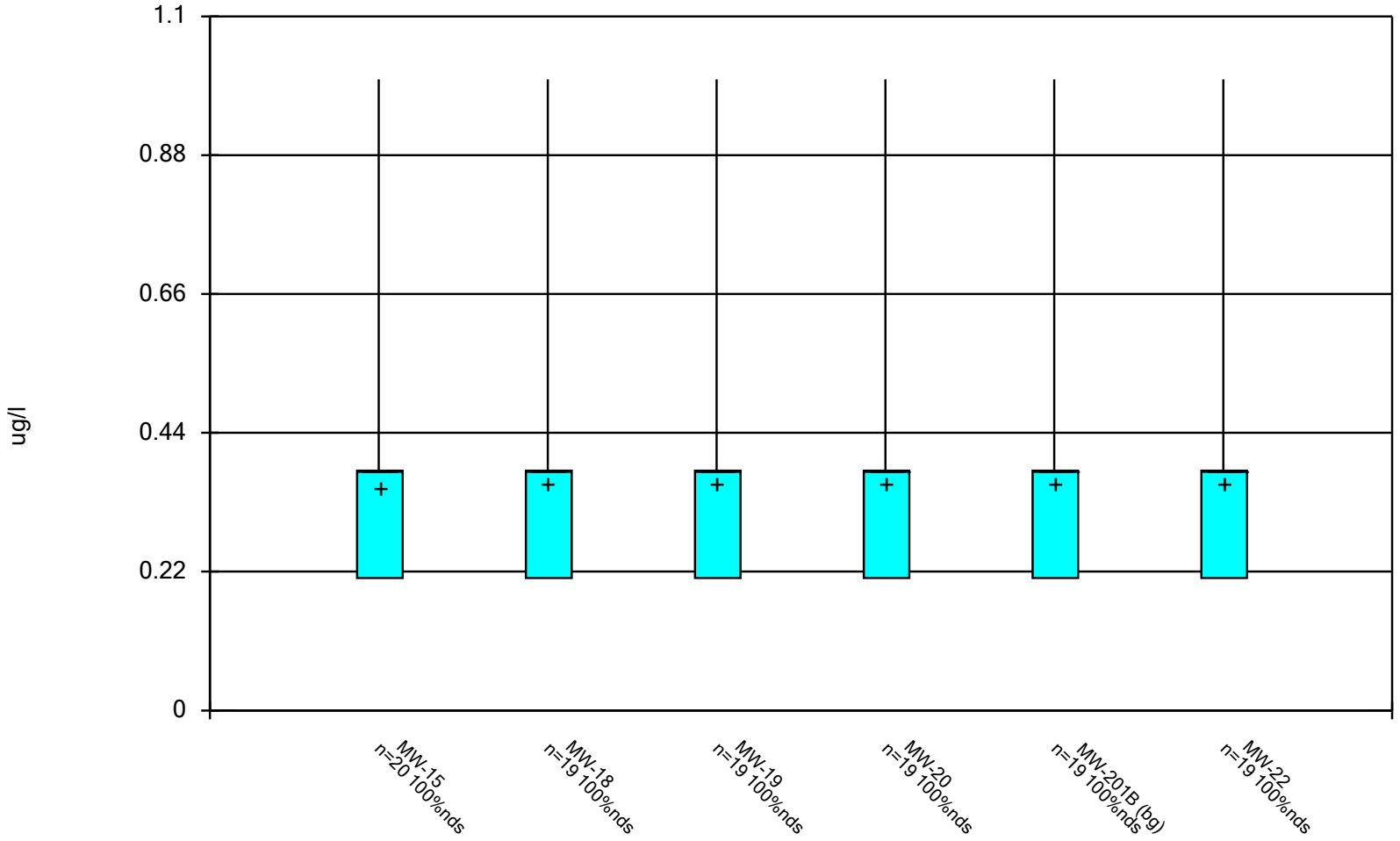
Monitoring Well VOC Box & Whiskers Plot – Spring 2024

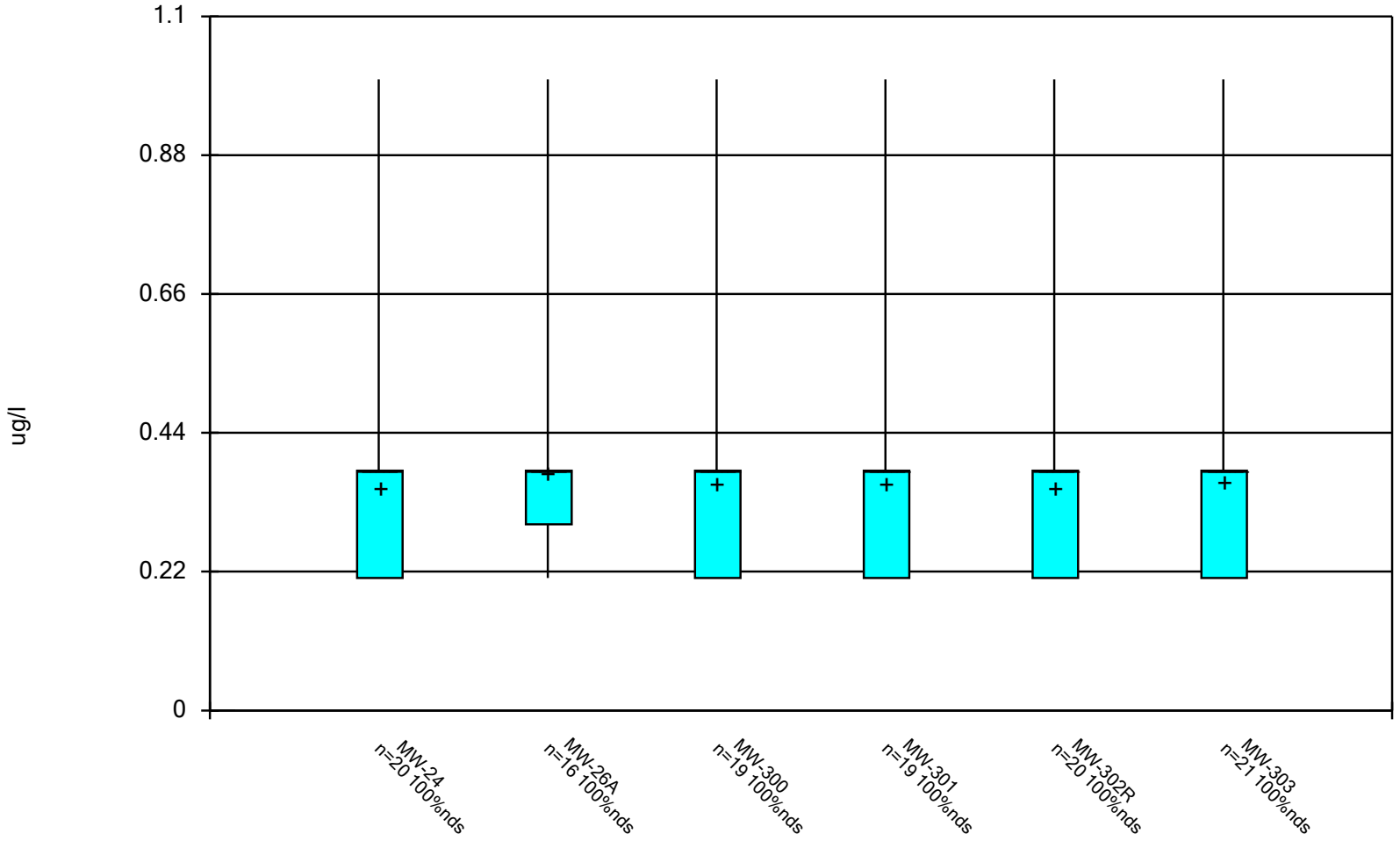
Box & Whiskers Plot



Constituent: 1,1,1,2-Tetrachloroethane Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

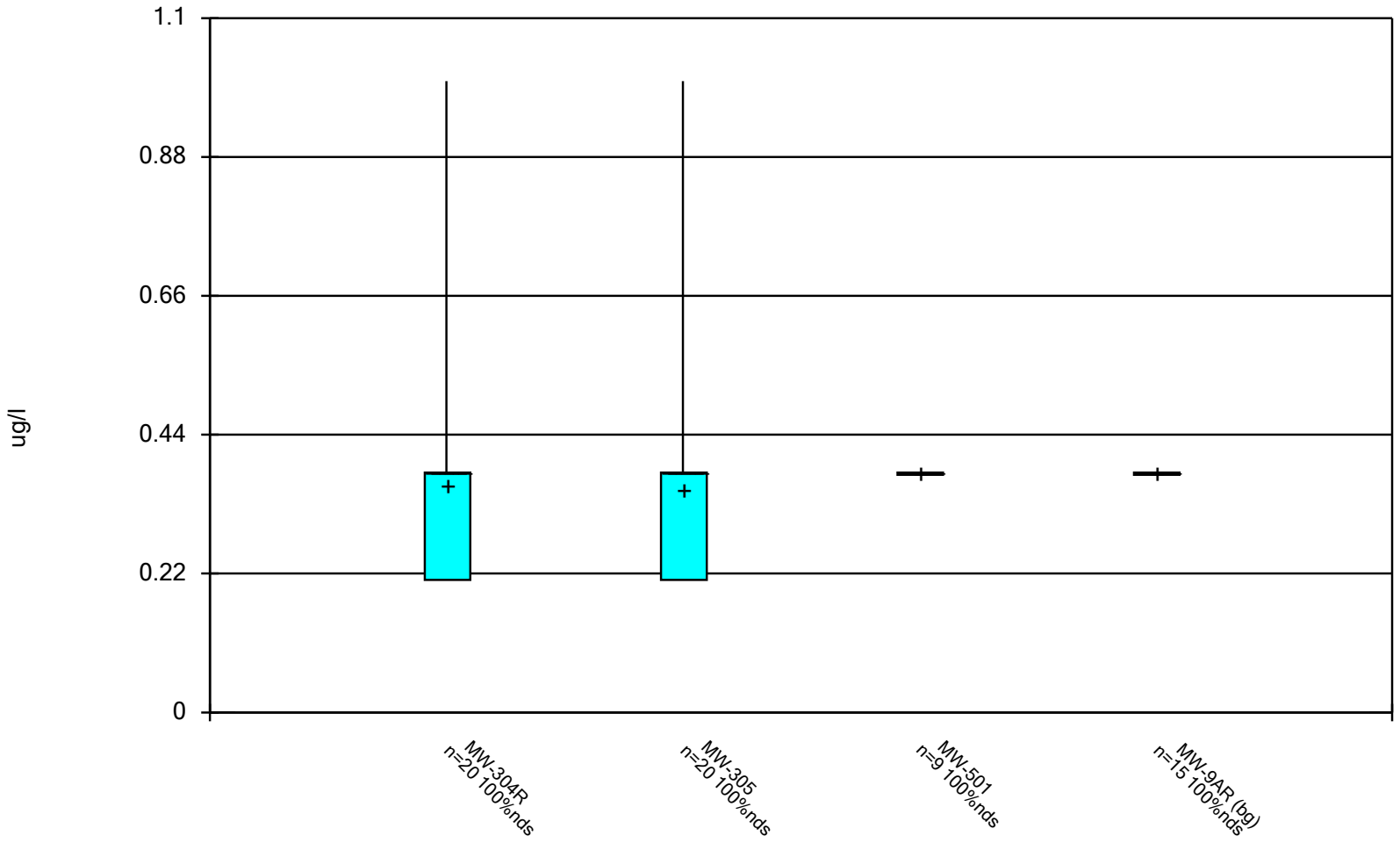
Box & Whiskers Plot



Constituent: 1,1,1,2-Tetrachloroethane Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

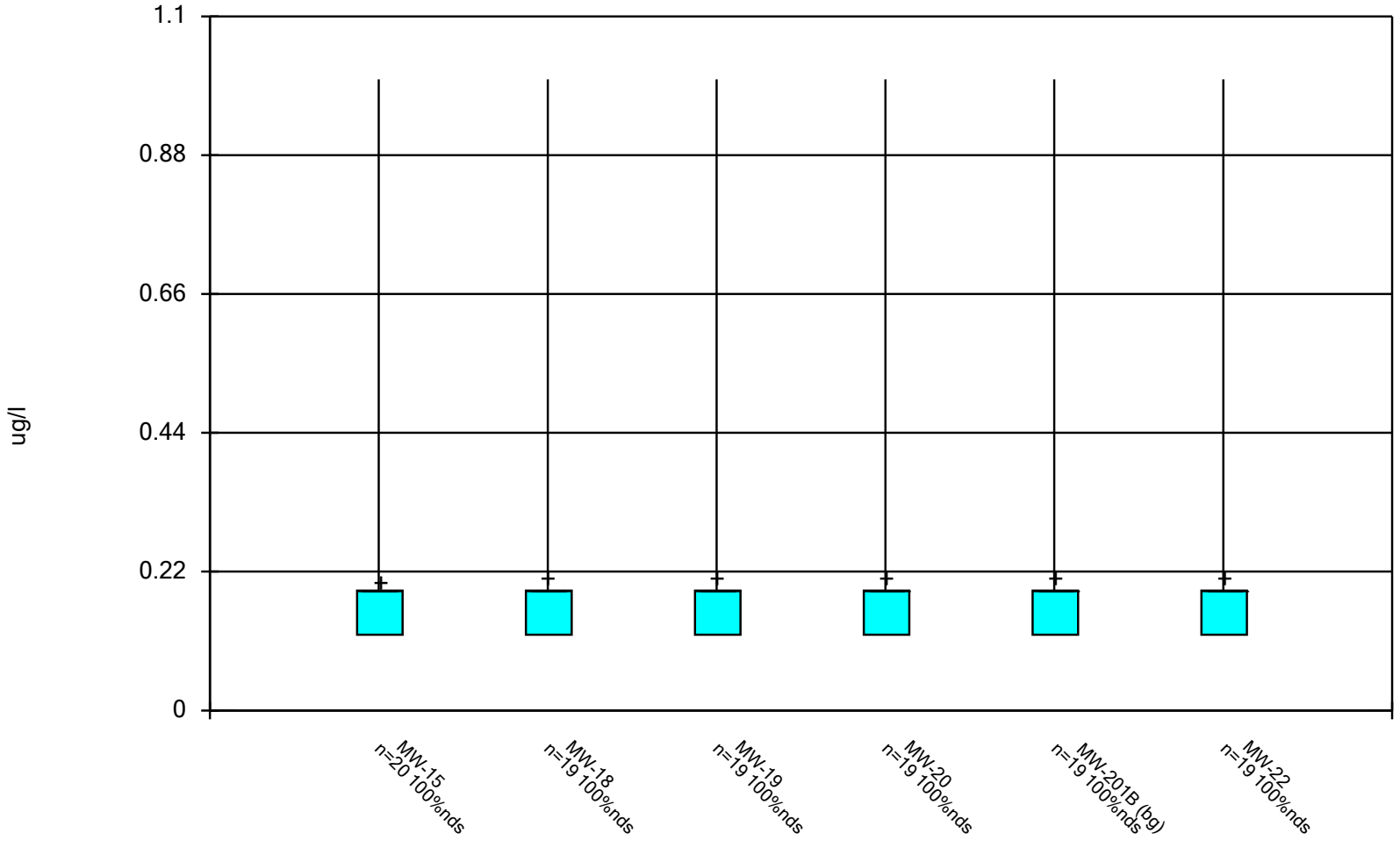
Box & Whiskers Plot



Constituent: 1,1,1,2-Tetrachloroethane Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

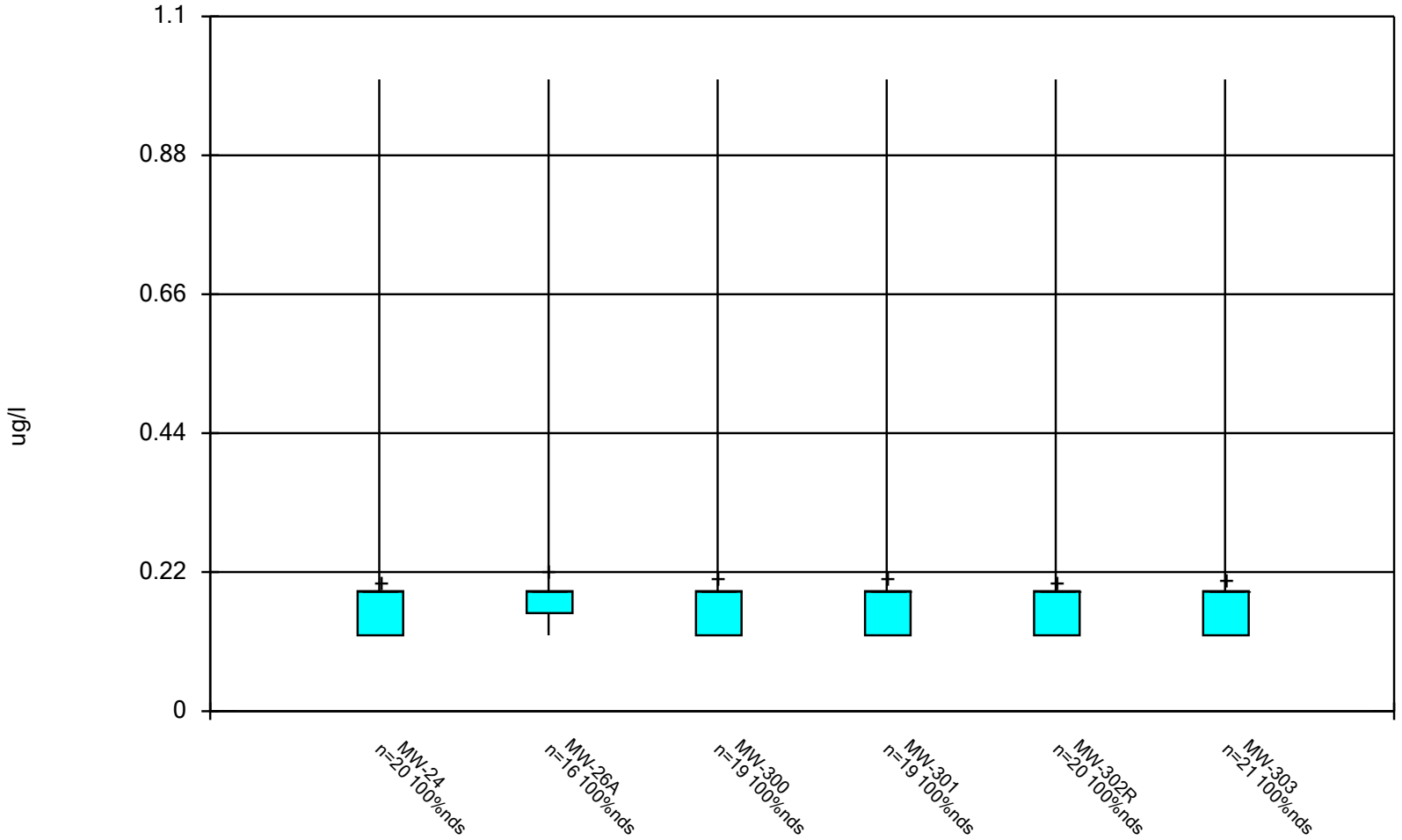
Box & Whiskers Plot



Constituent: 1,1,1-Trichloroethane Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

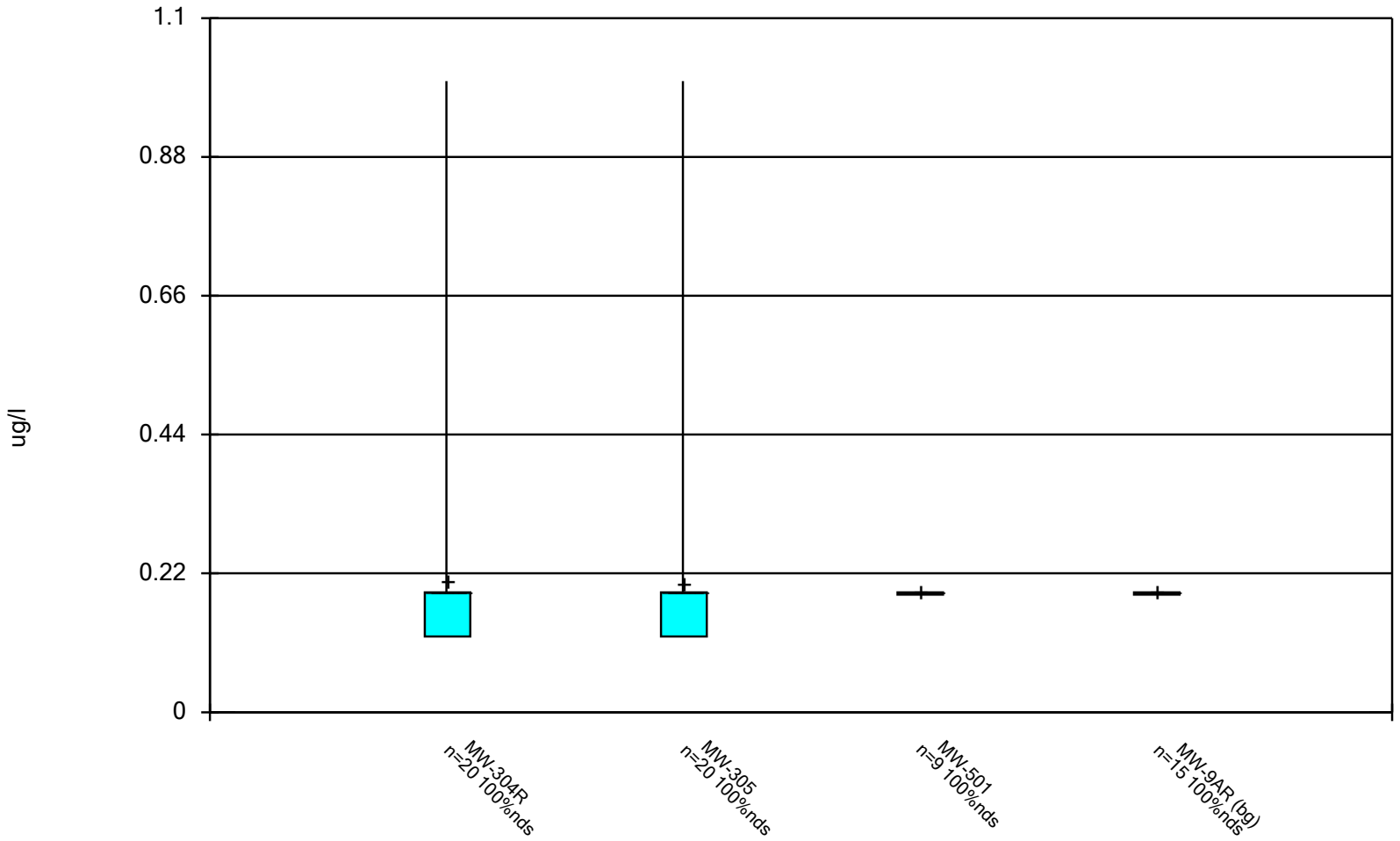
Box & Whiskers Plot



Constituent: 1,1,1-Trichloroethane Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

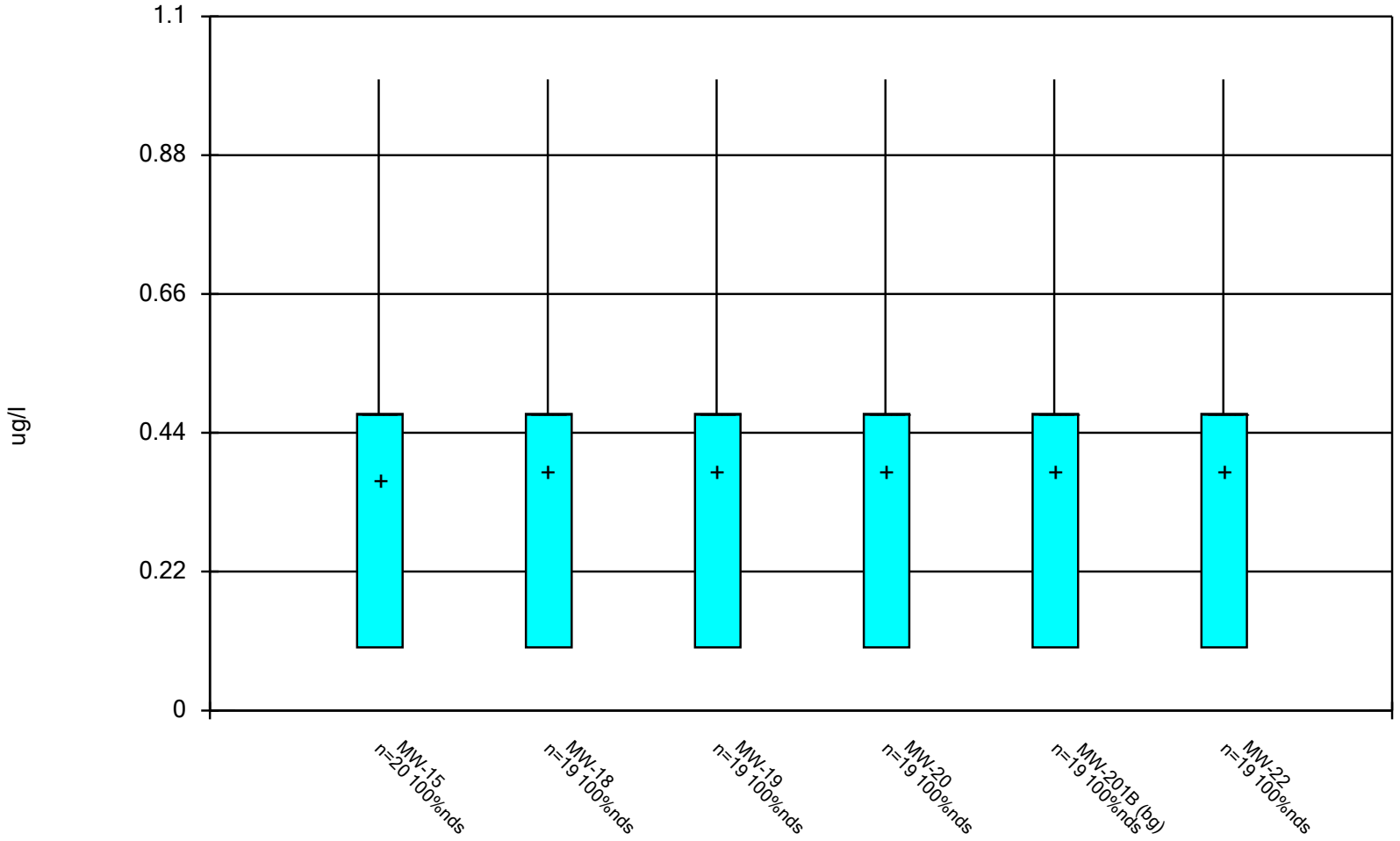
Box & Whiskers Plot



Constituent: 1,1,1-Trichloroethane Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

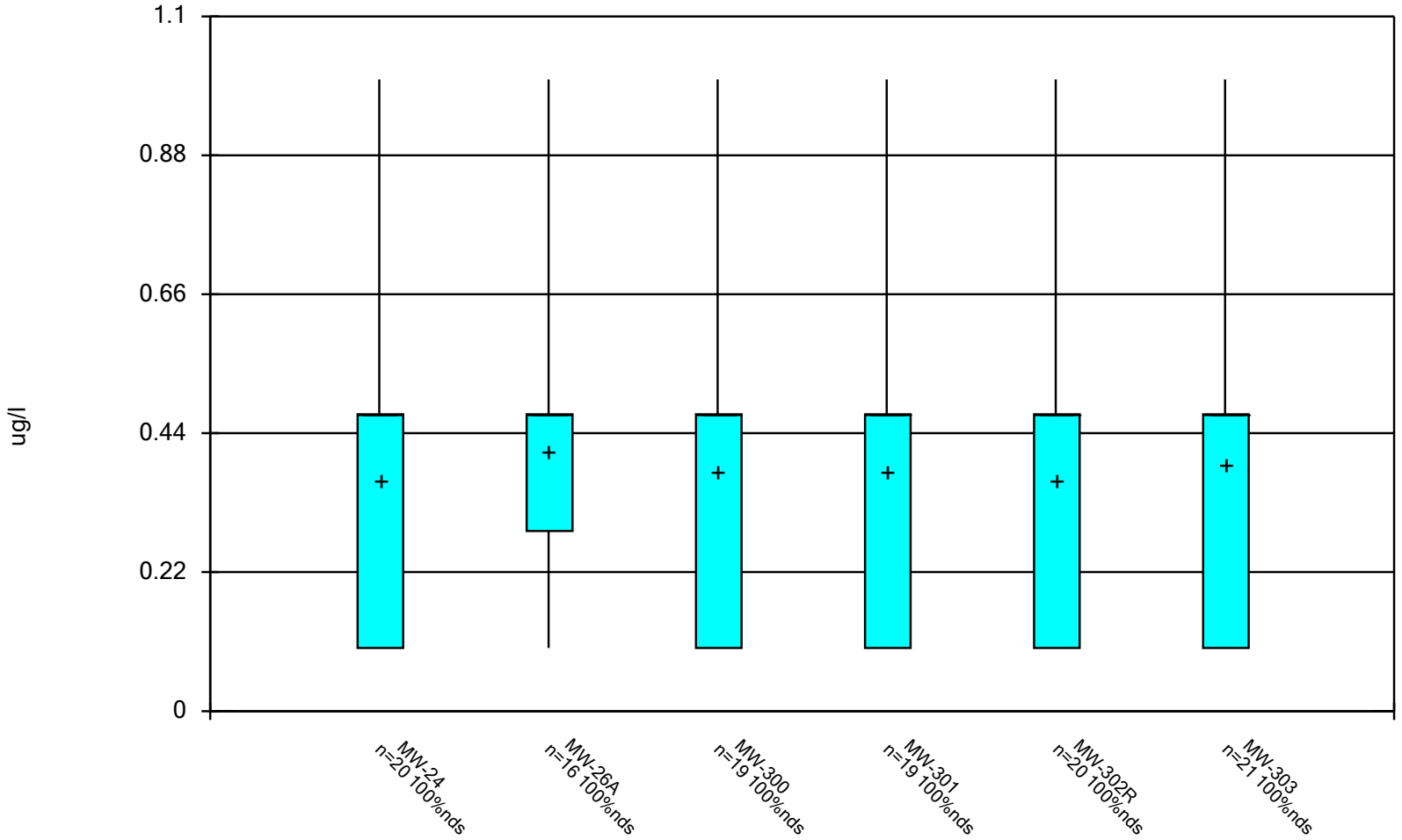
Box & Whiskers Plot



Constituent: 1,1,2,2-Tetrachloroethane Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

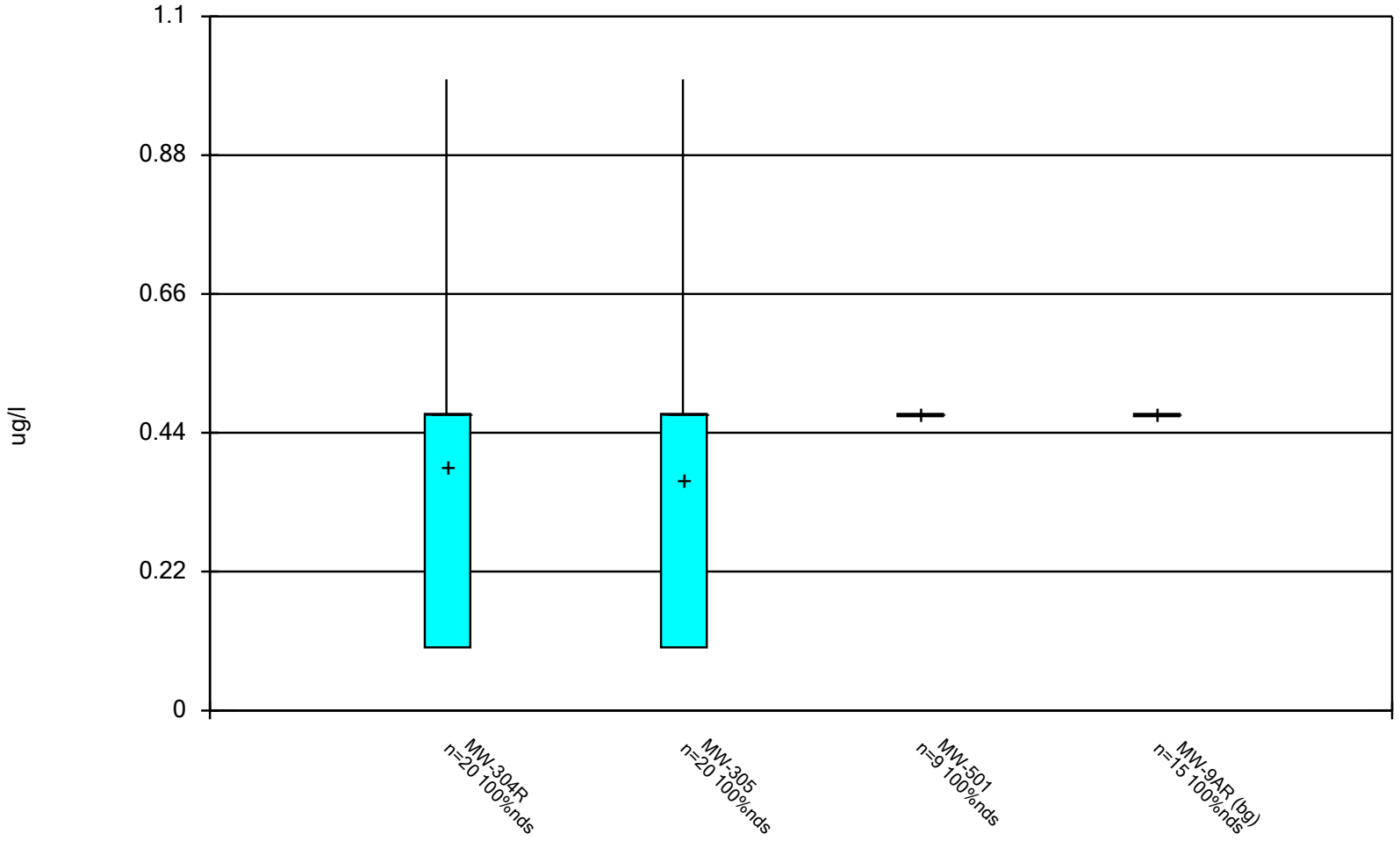
Box & Whiskers Plot



Constituent: 1,1,2,2-Tetrachloroethane Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

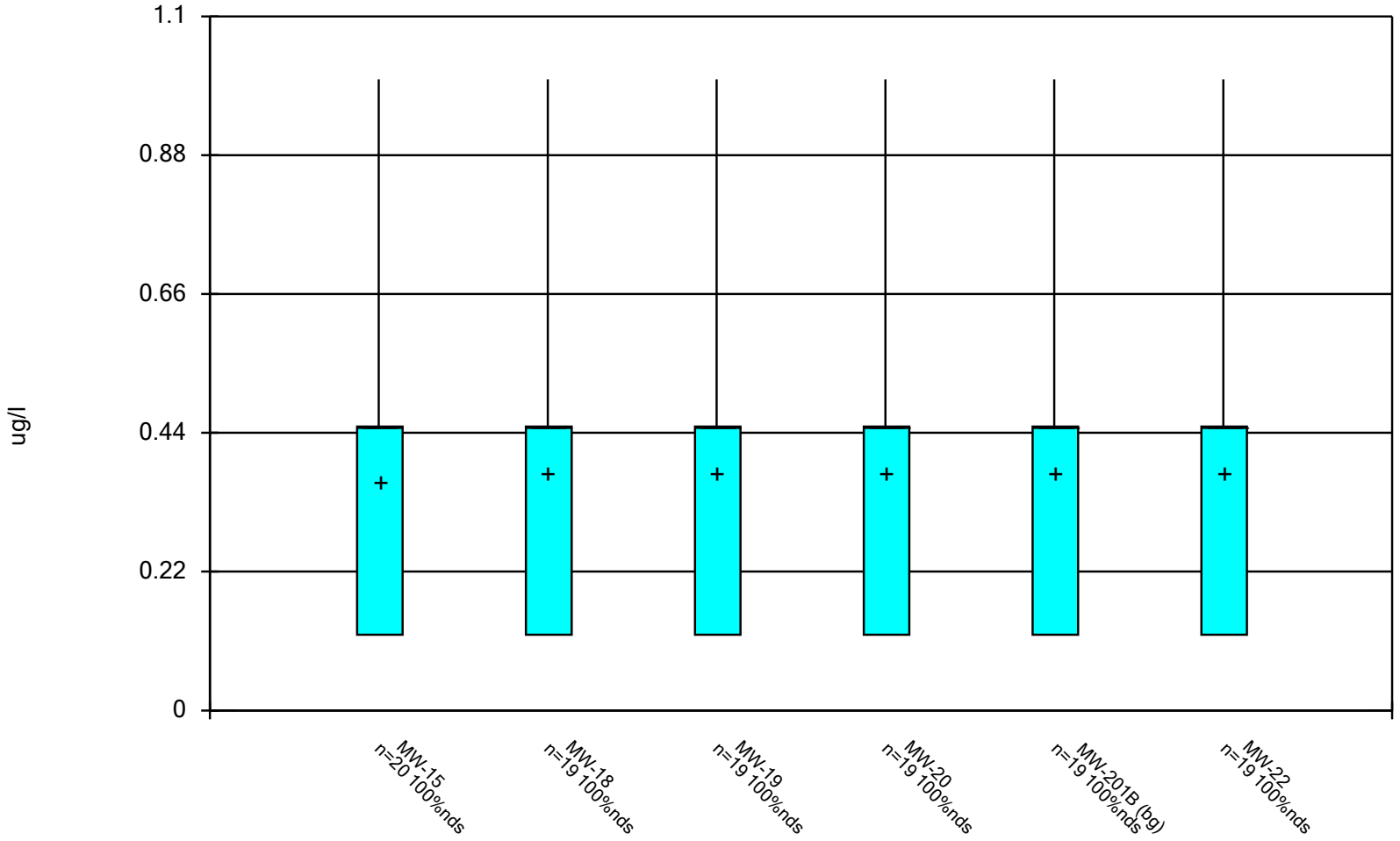
Box & Whiskers Plot



Constituent: 1,1,2,2-Tetrachloroethane Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

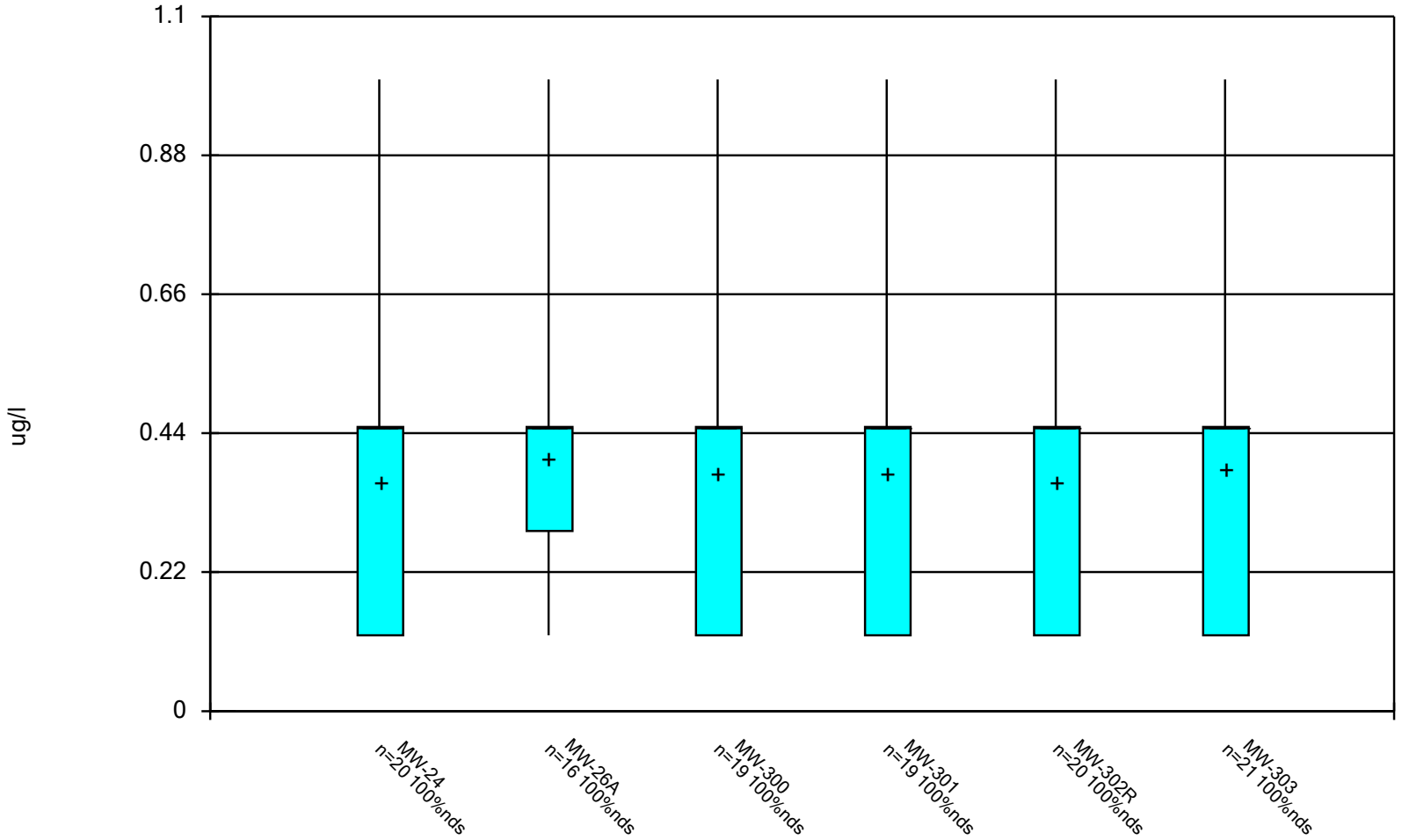
Box & Whiskers Plot



Constituent: 1,1,2-Trichloroethane Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

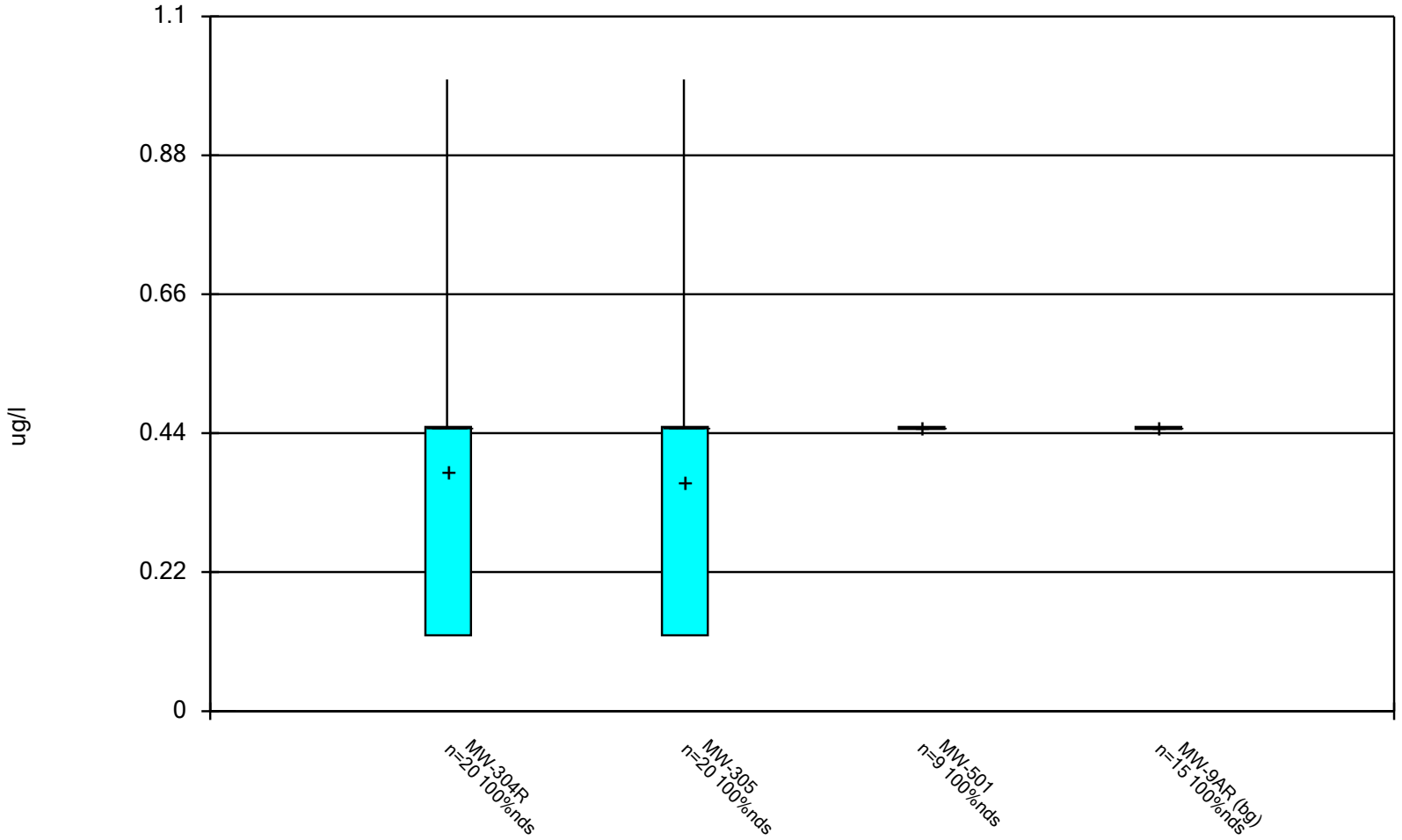
Box & Whiskers Plot



Constituent: 1,1,2-Trichloroethane Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

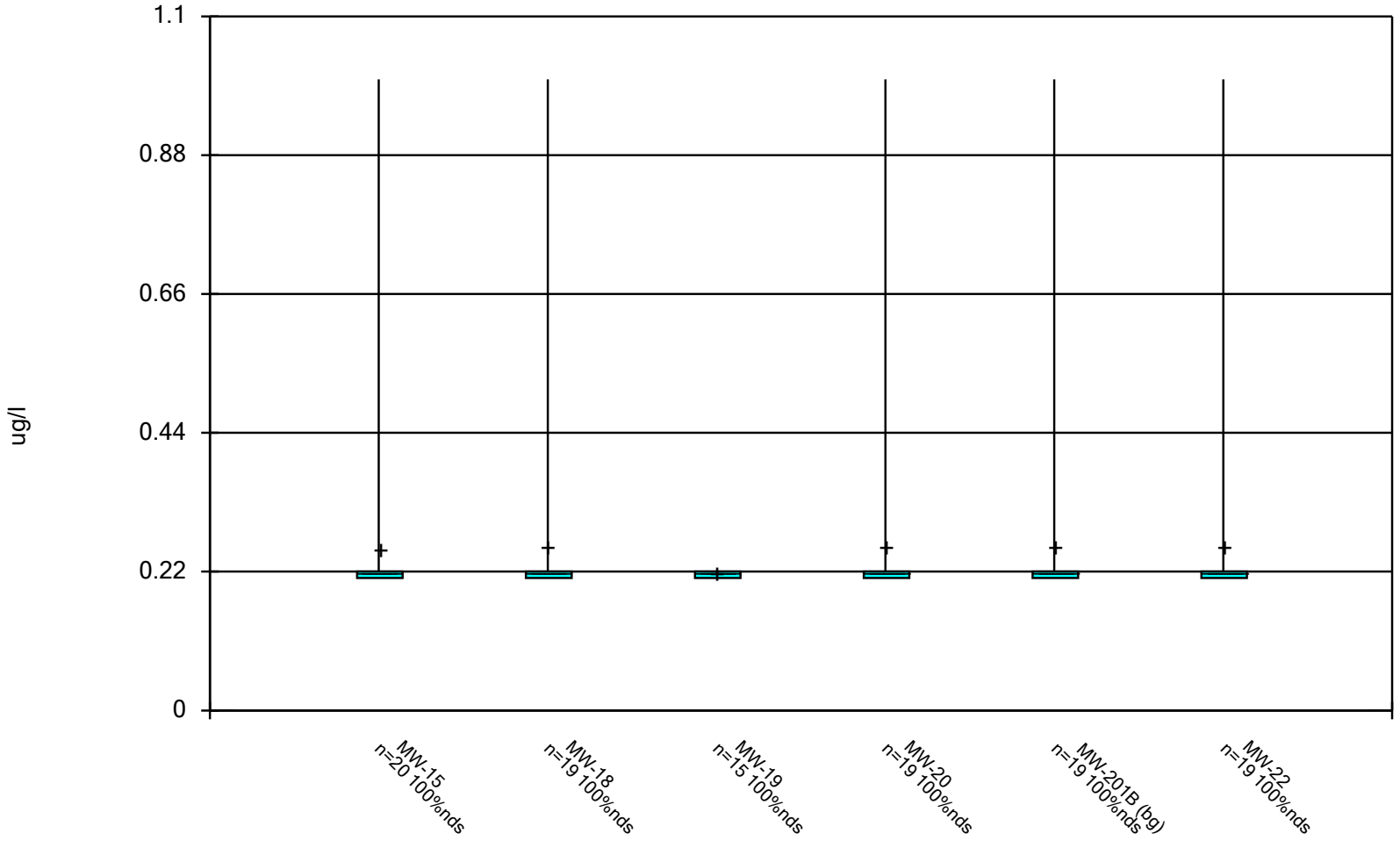
Box & Whiskers Plot



Constituent: 1,1,2-Trichloroethane Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

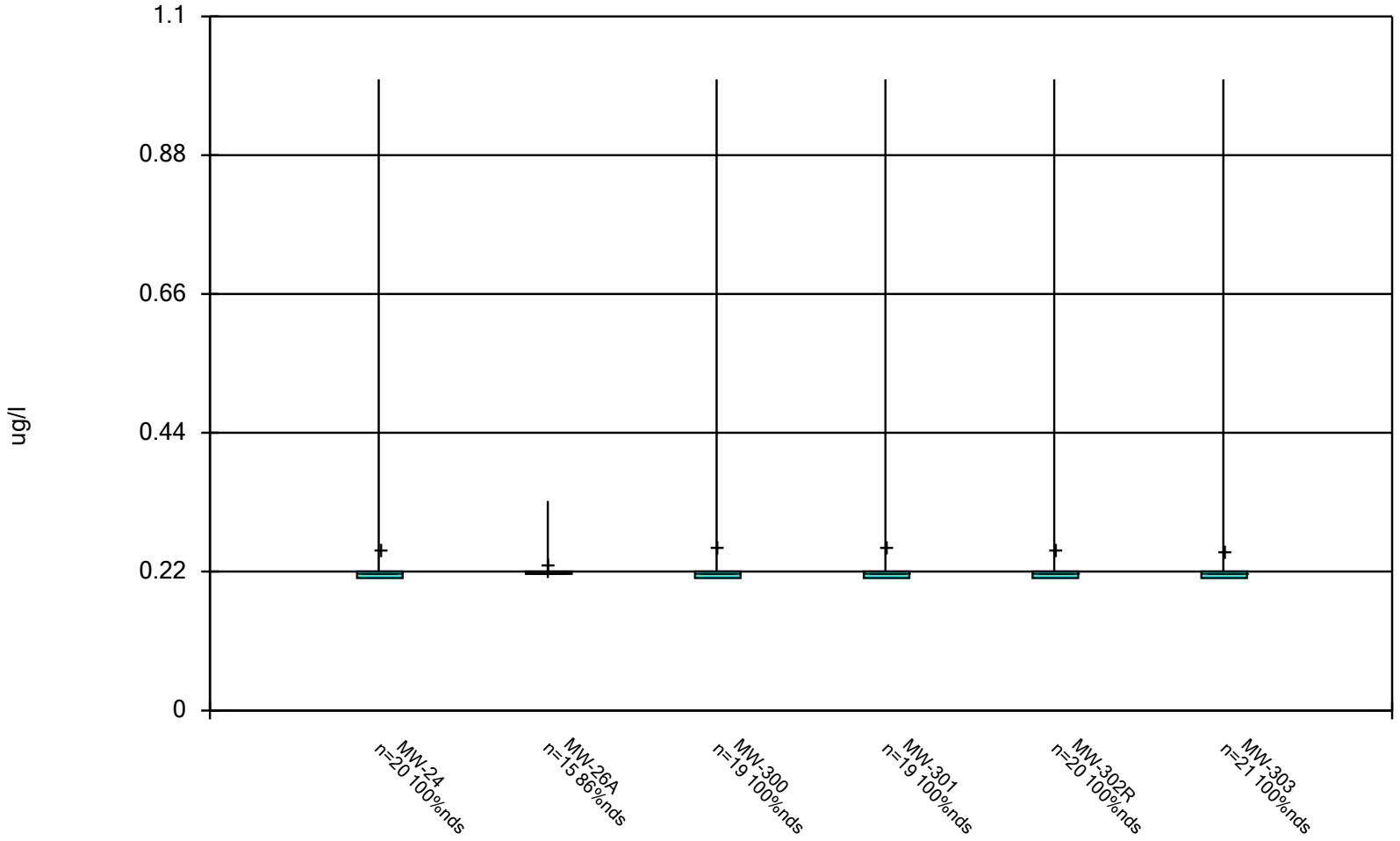
Box & Whiskers Plot



Constituent: 1,1-Dichloroethane Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

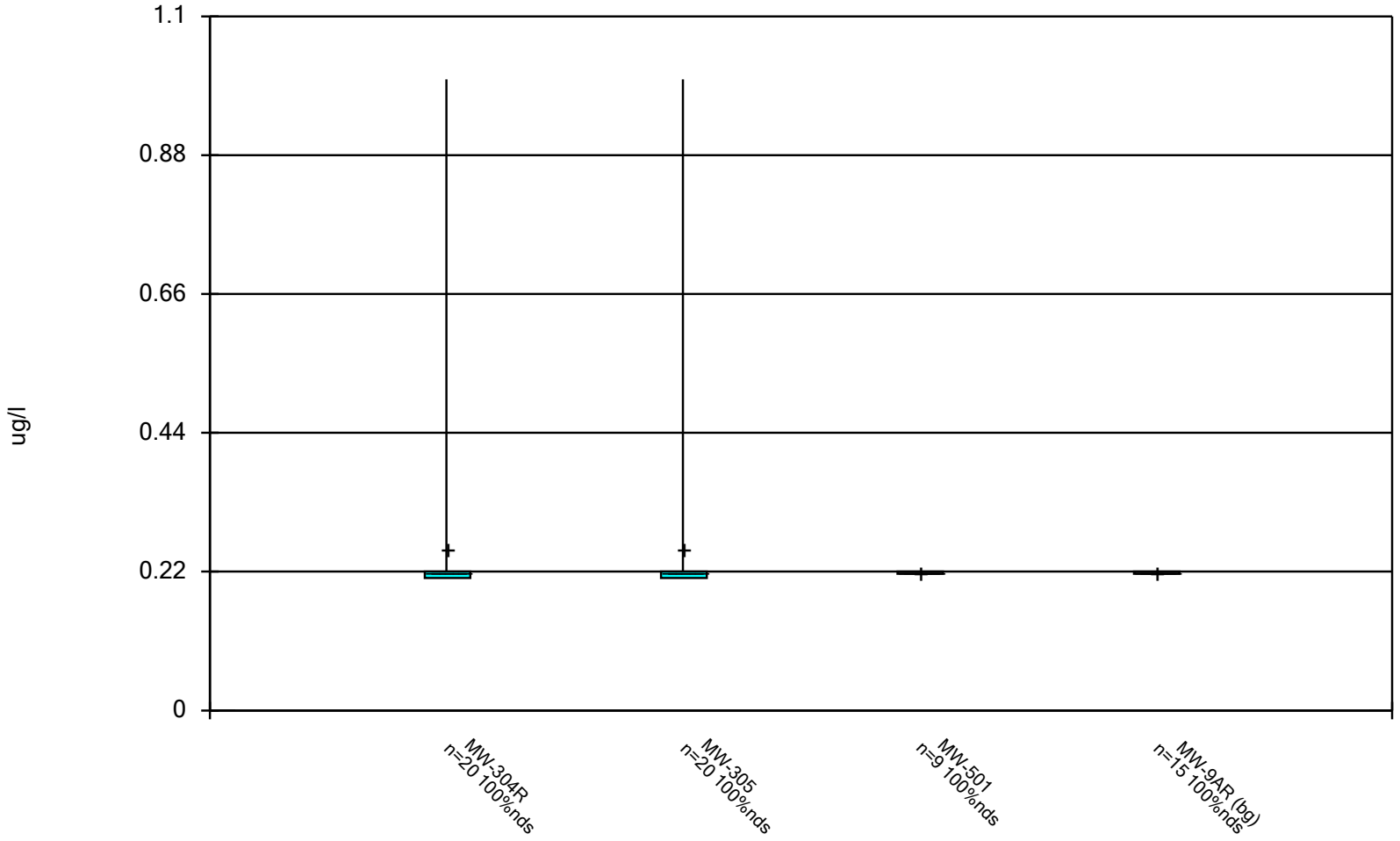
Box & Whiskers Plot



Constituent: 1,1-Dichloroethane Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

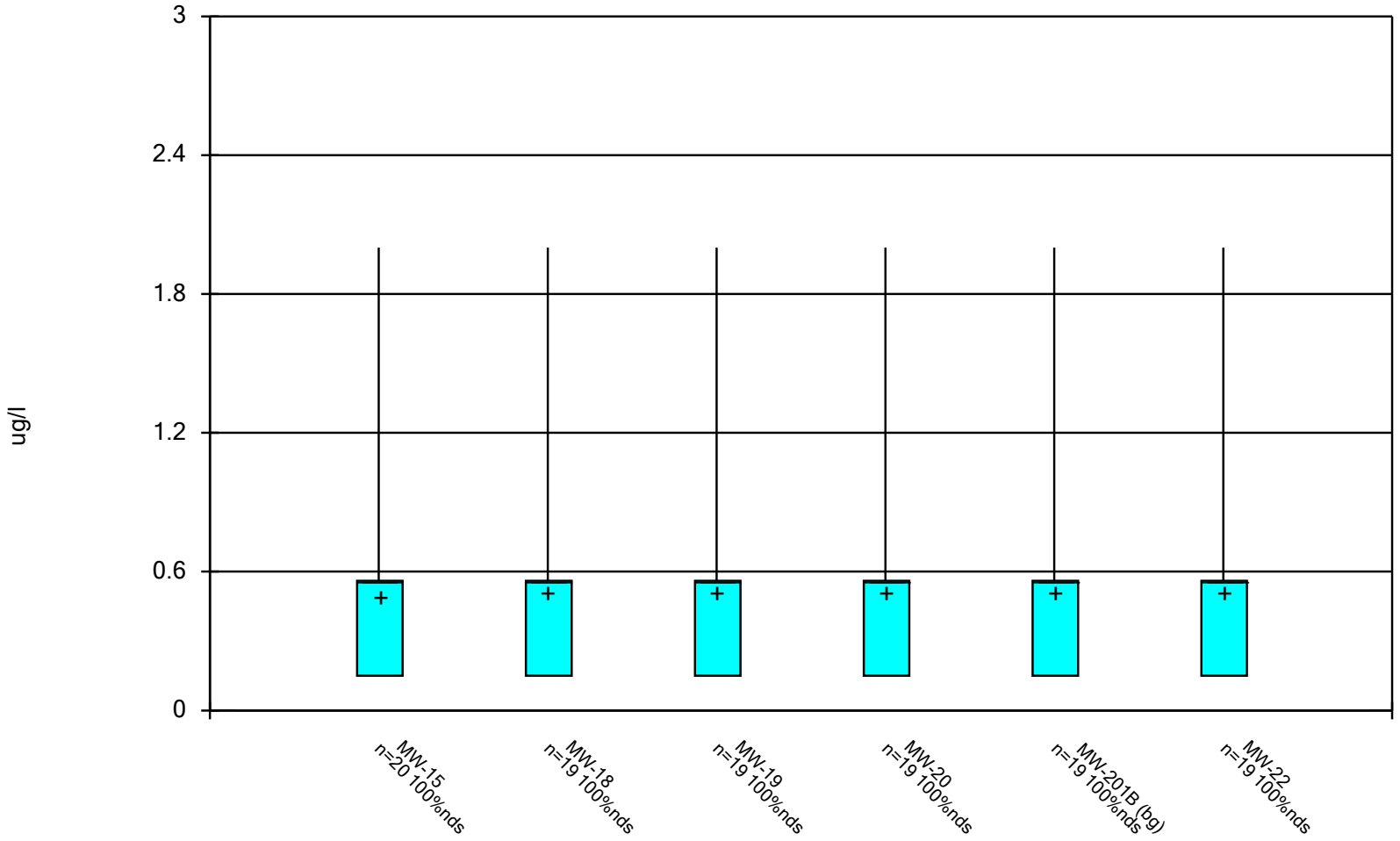
Box & Whiskers Plot



Constituent: 1,1-Dichloroethane Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

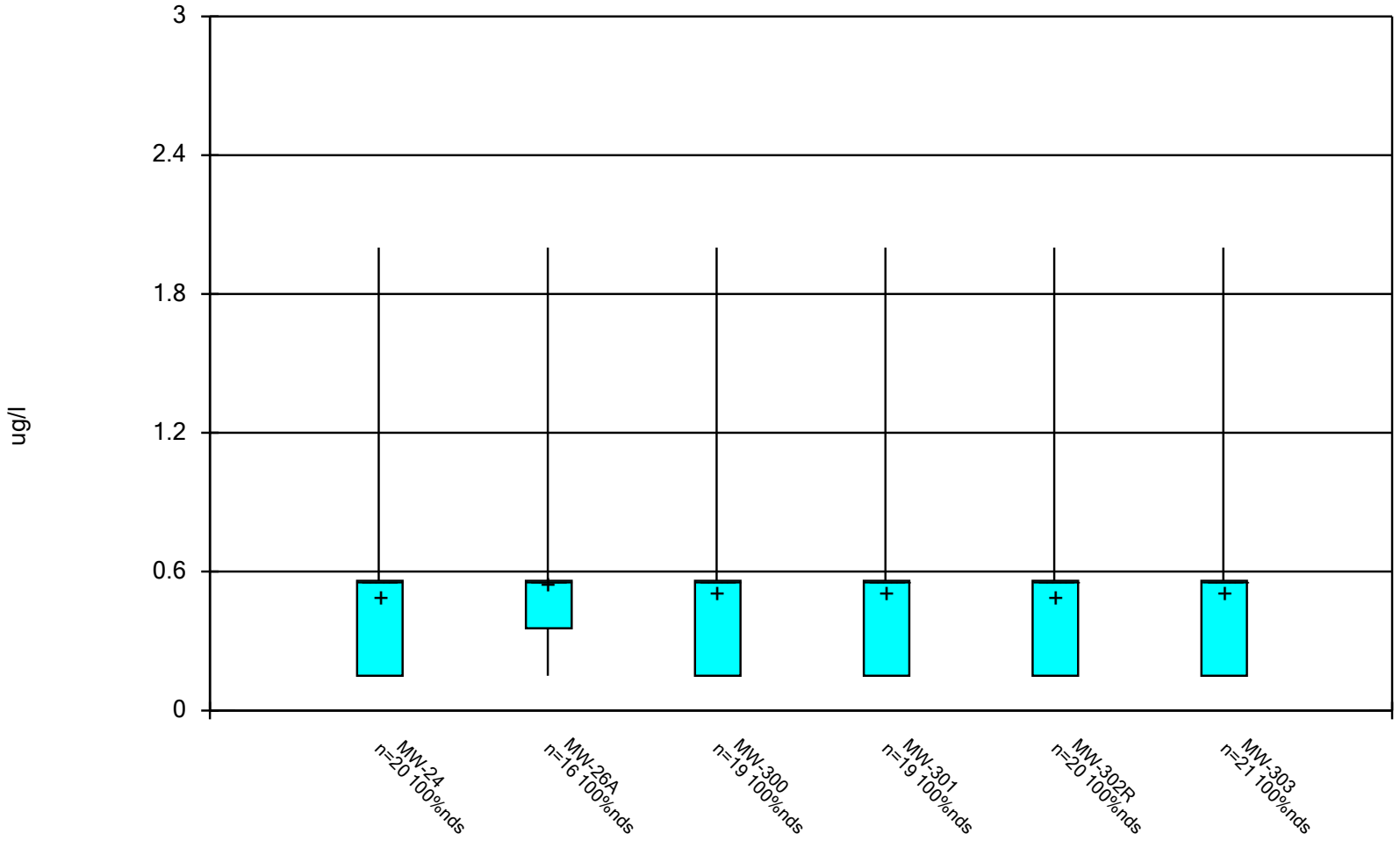
Box & Whiskers Plot



Constituent: 1,1-Dichloroethene Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

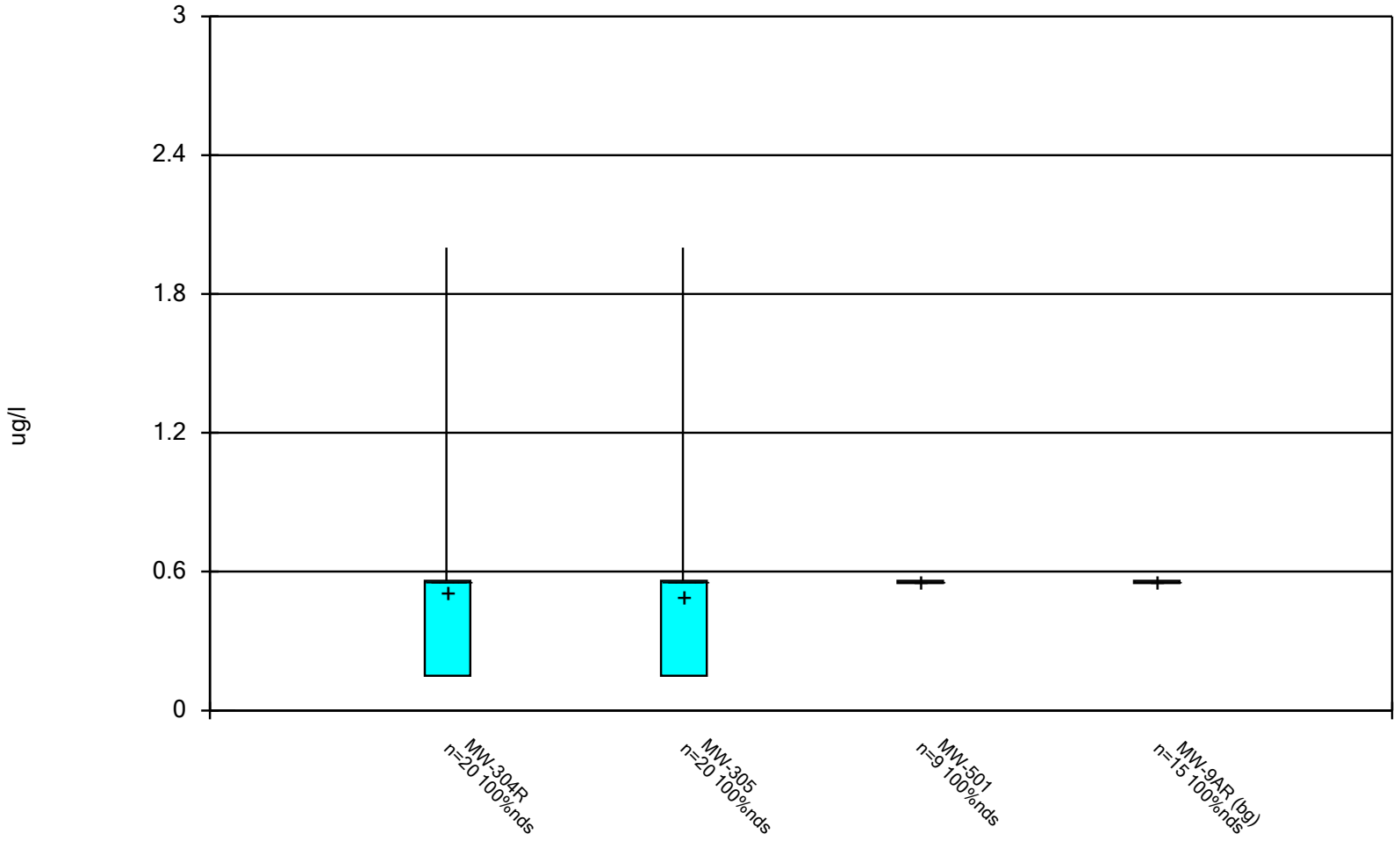
Box & Whiskers Plot



Constituent: 1,1-Dichloroethene Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

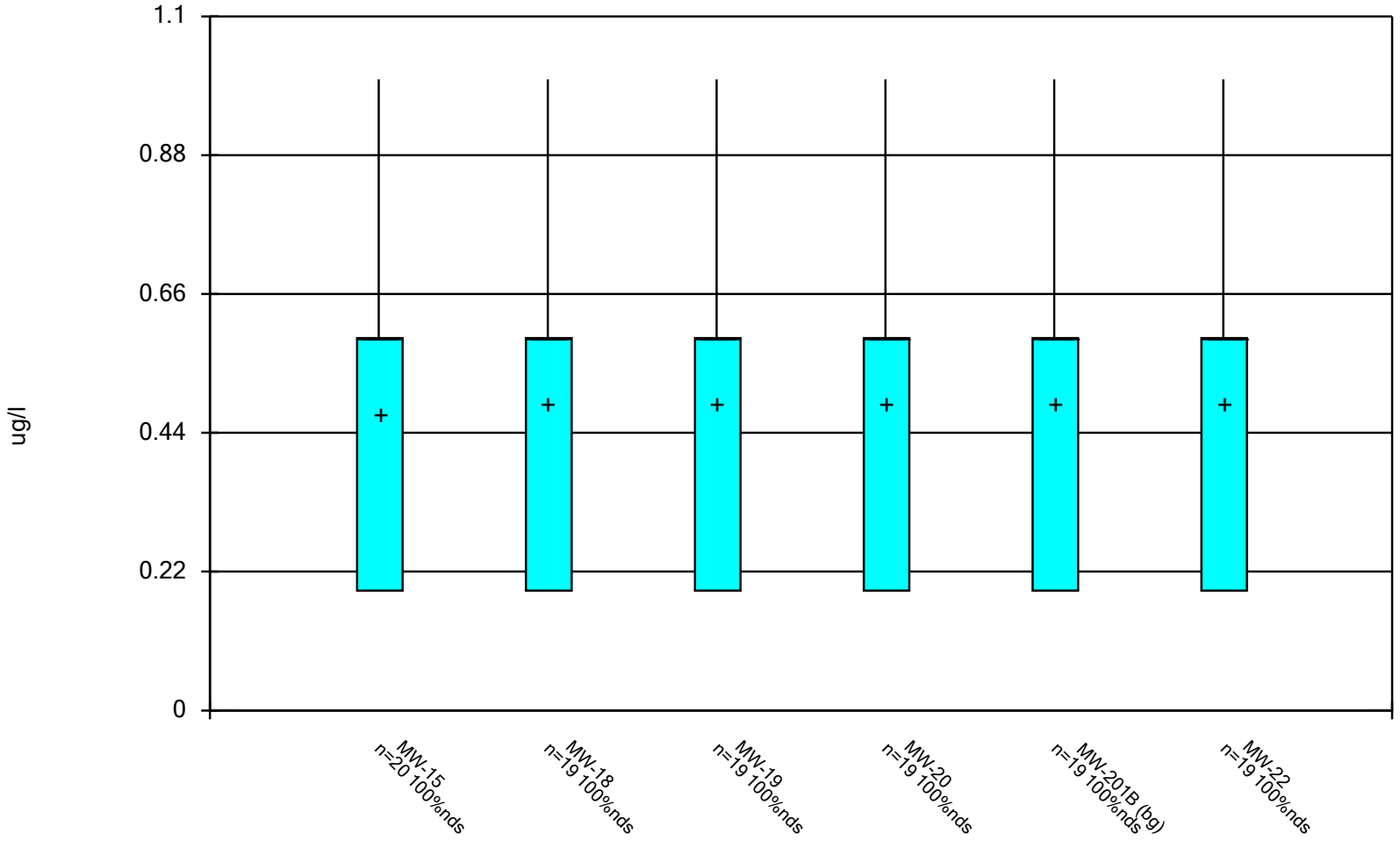
Box & Whiskers Plot



Constituent: 1,1-Dichloroethene Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

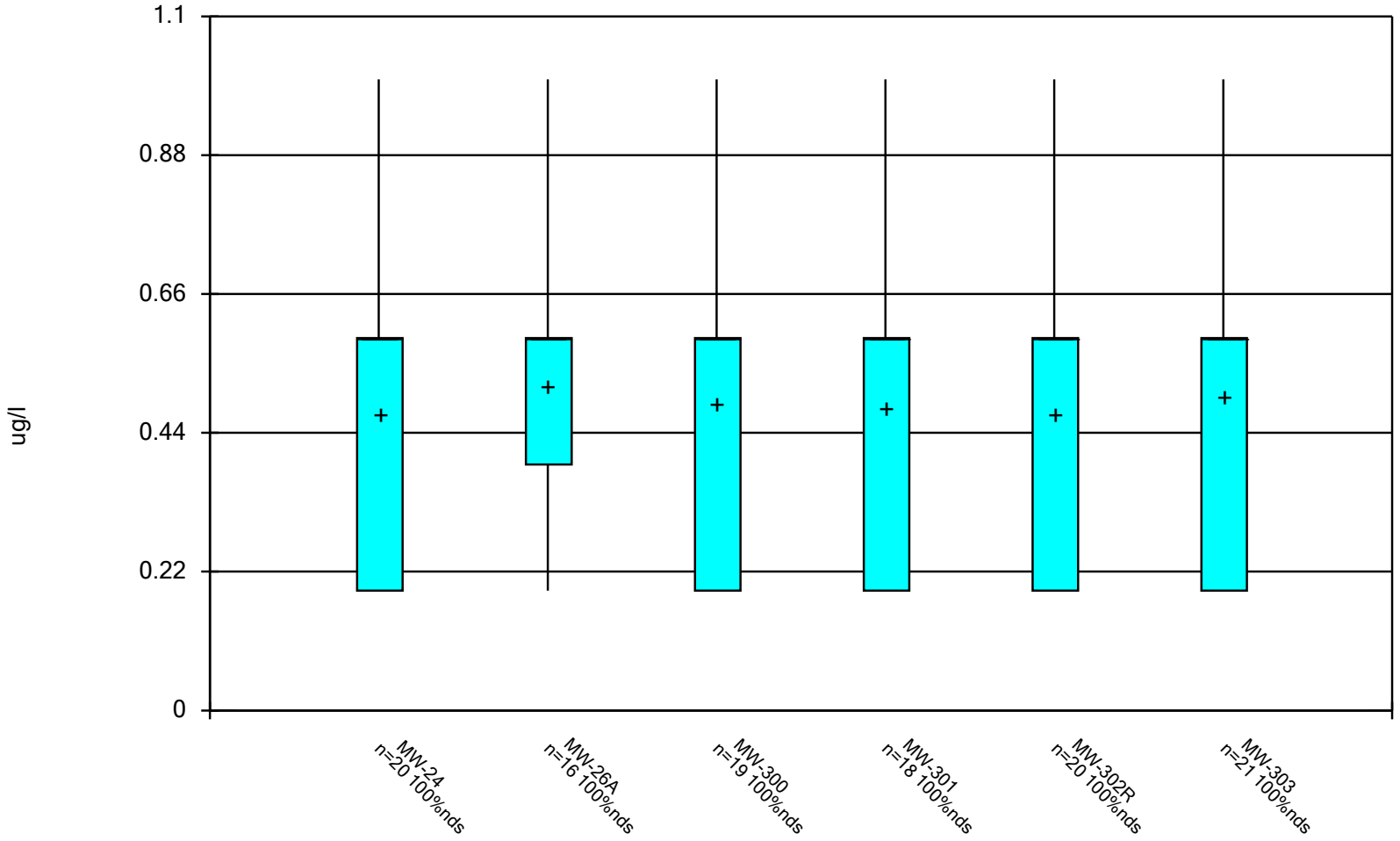
Box & Whiskers Plot



Constituent: 1,2,3-Trichloropropane Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

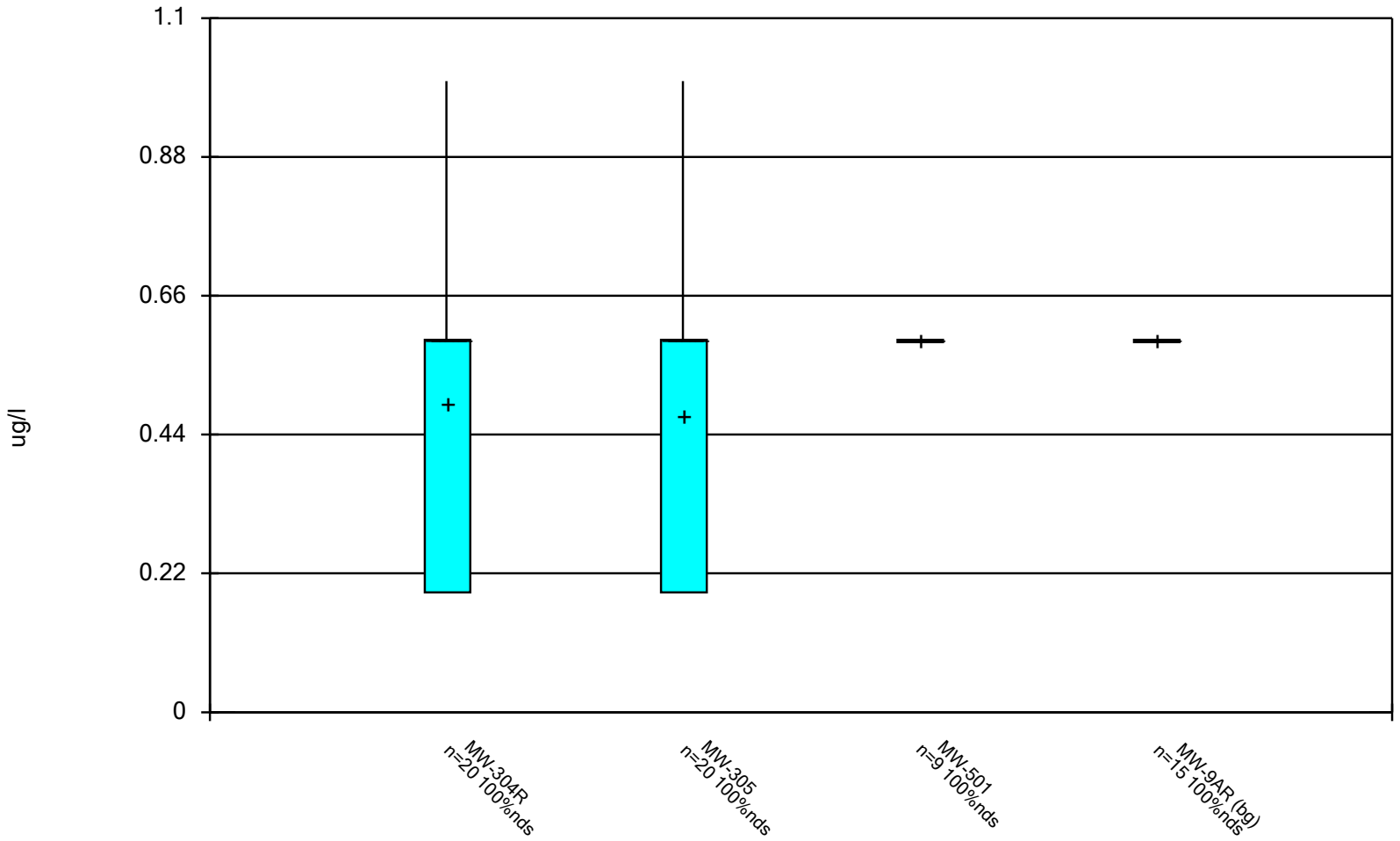
Box & Whiskers Plot



Constituent: 1,2,3-Trichloropropane Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

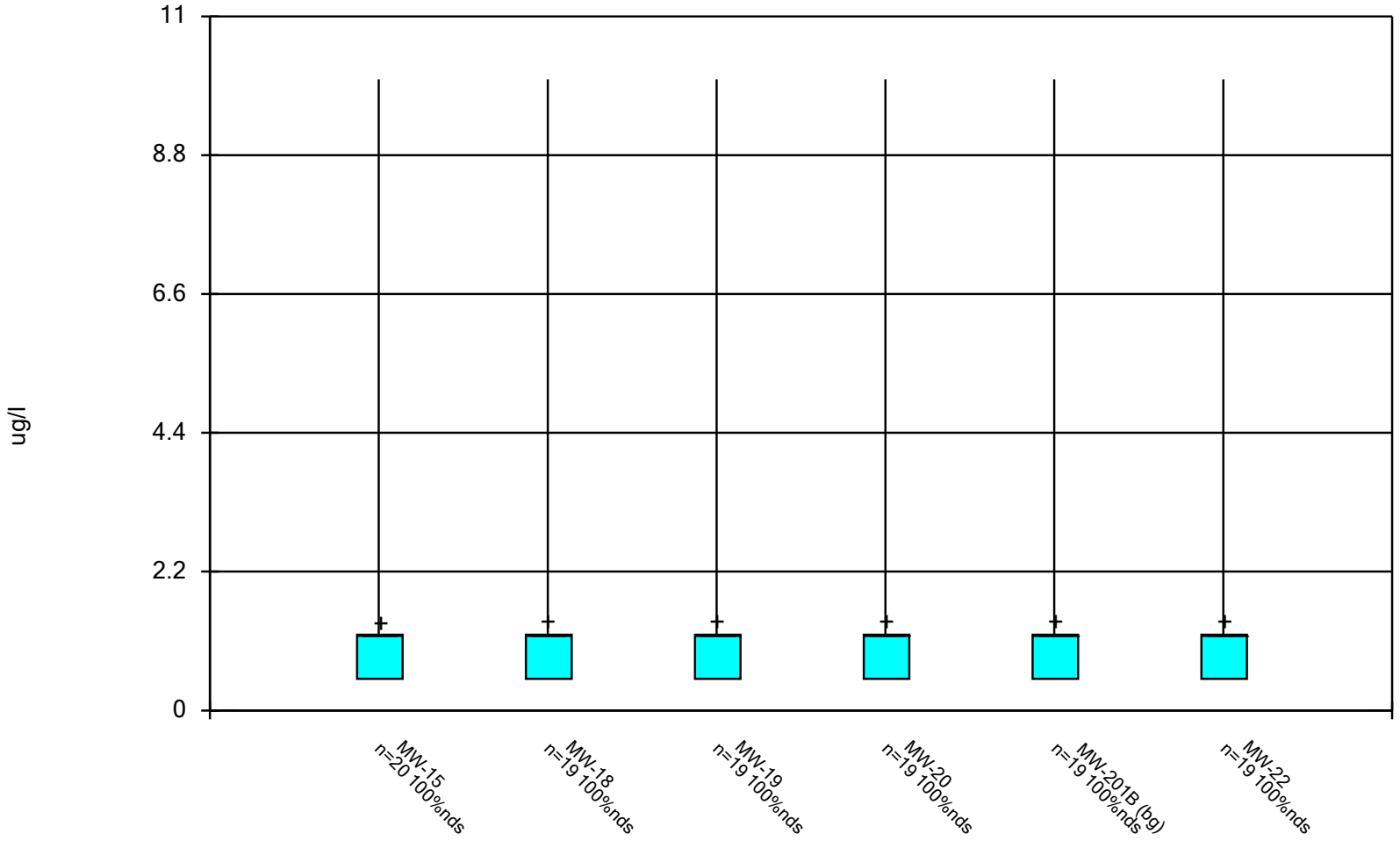
Box & Whiskers Plot



Constituent: 1,2,3-Trichloropropane Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

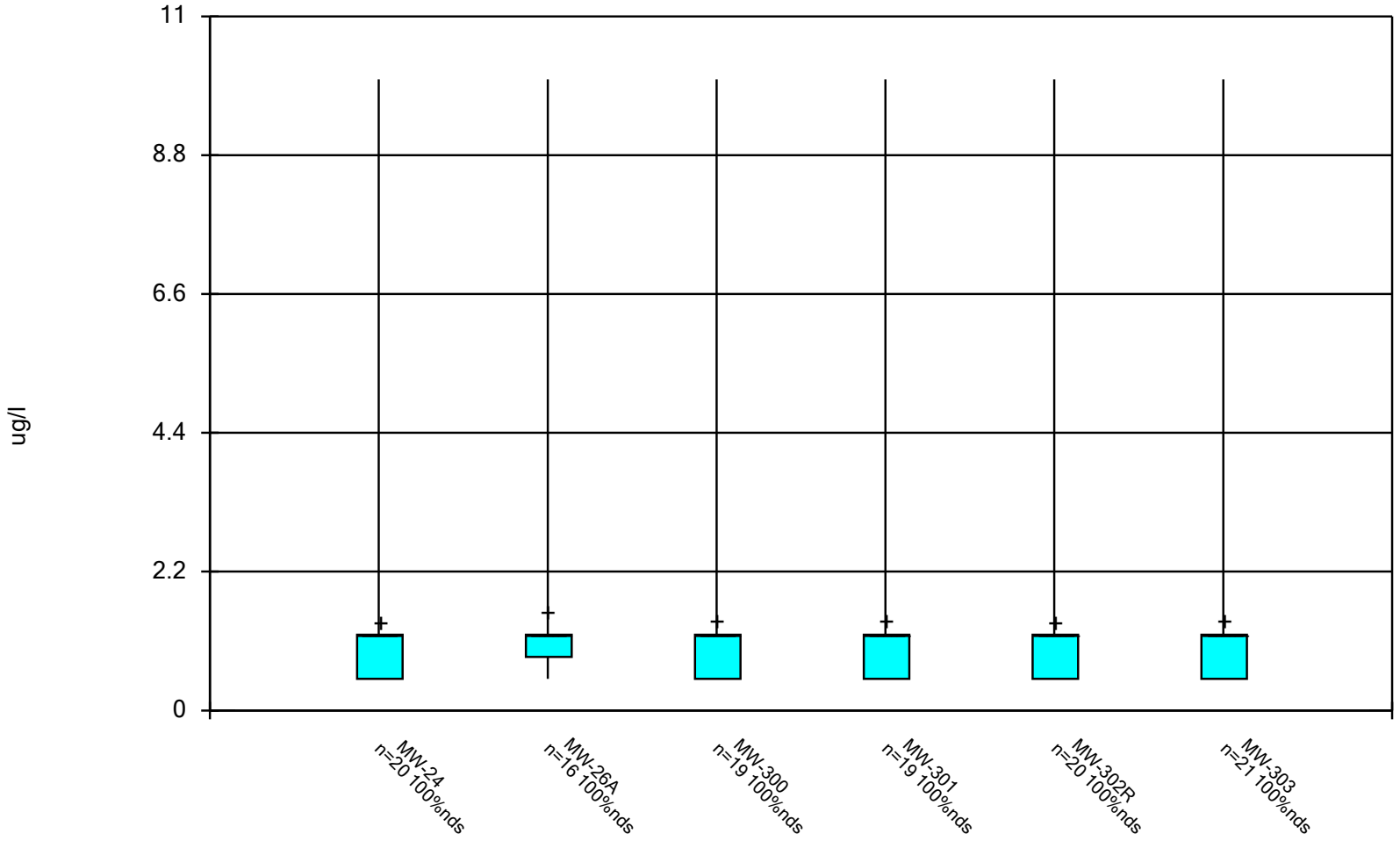
Box & Whiskers Plot



Constituent: 1,2-Dibromo-3-chloropropane Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

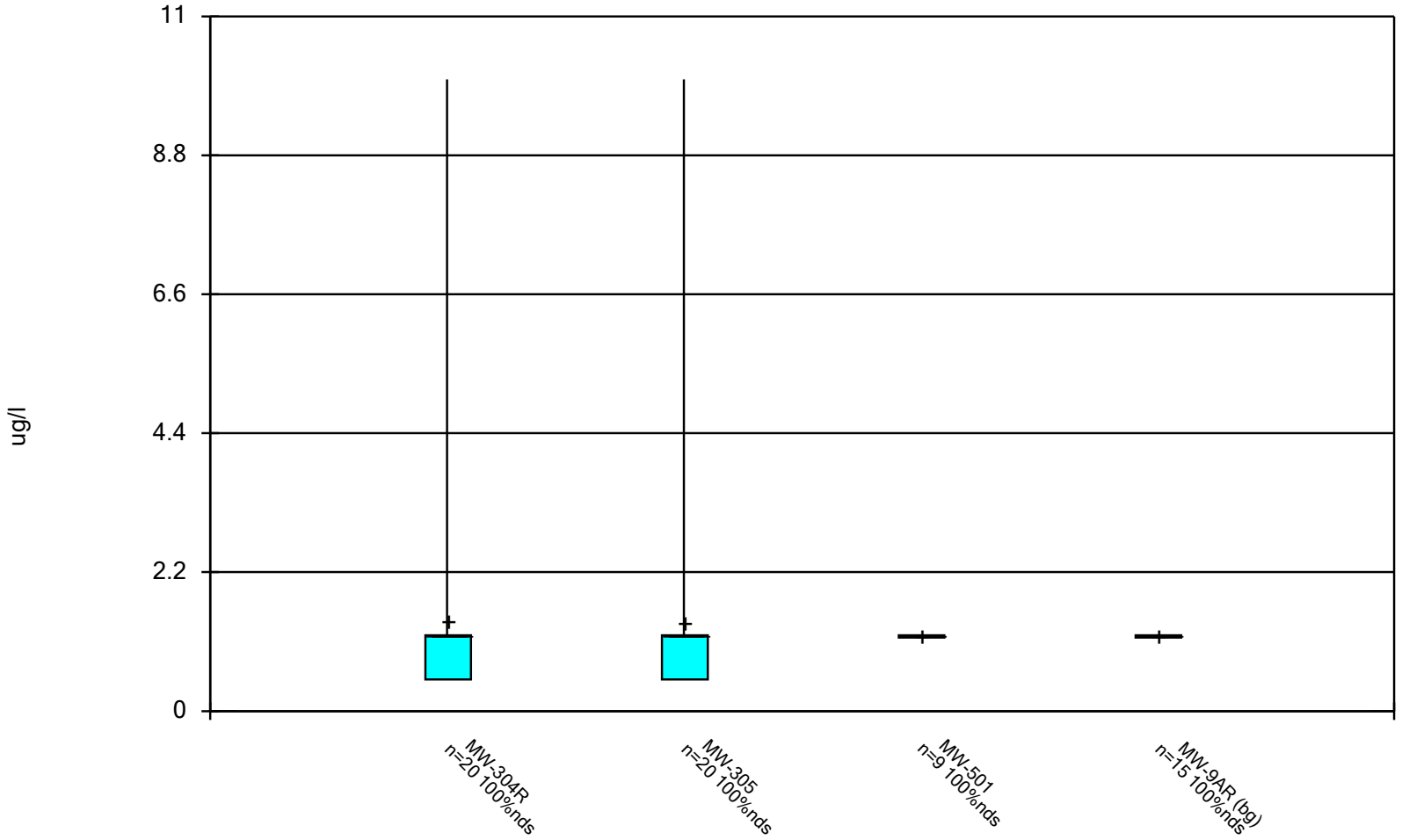
Box & Whiskers Plot



Constituent: 1,2-Dibromo-3-chloropropane Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

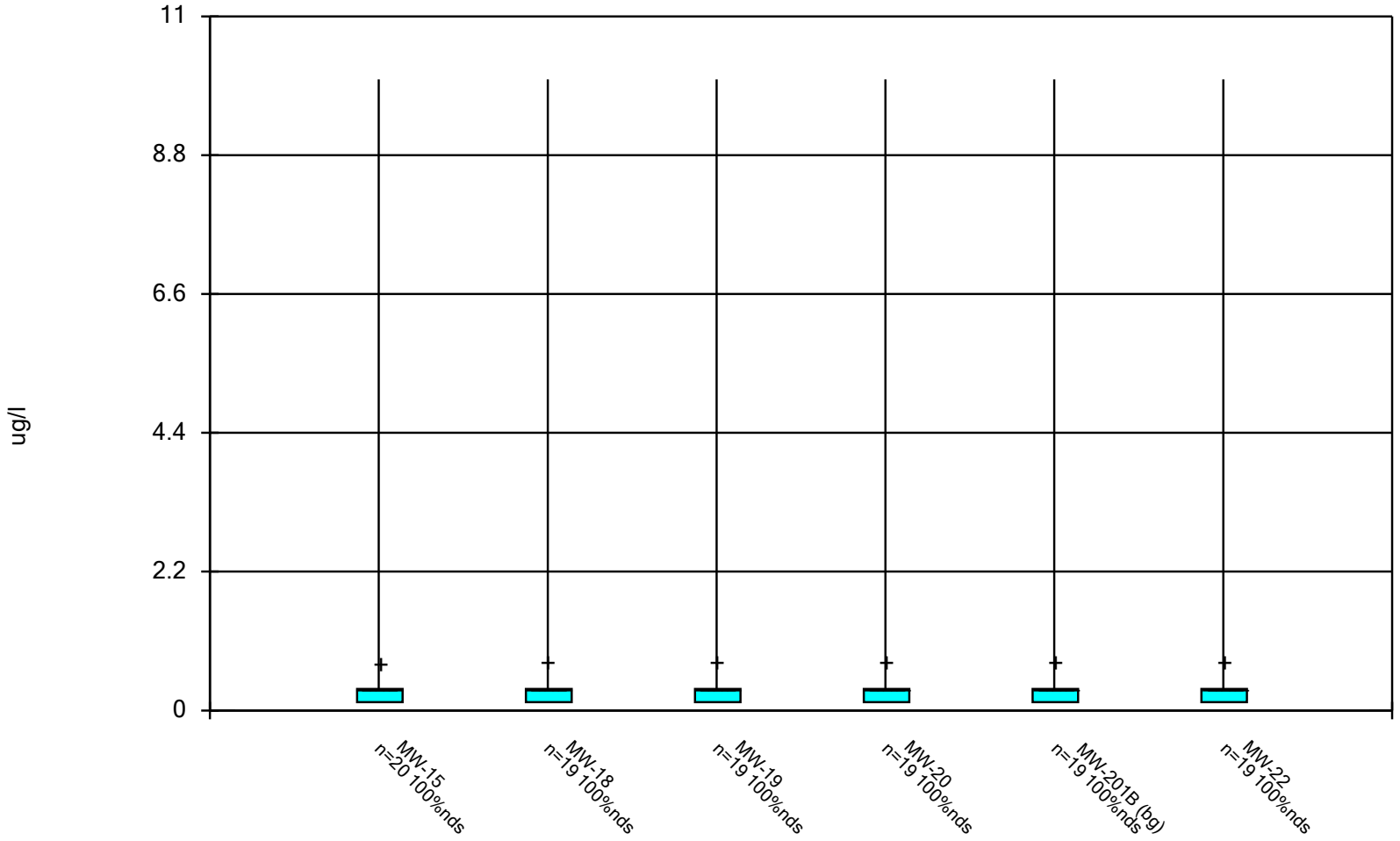
Box & Whiskers Plot



Constituent: 1,2-Dibromo-3-chloropropane Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

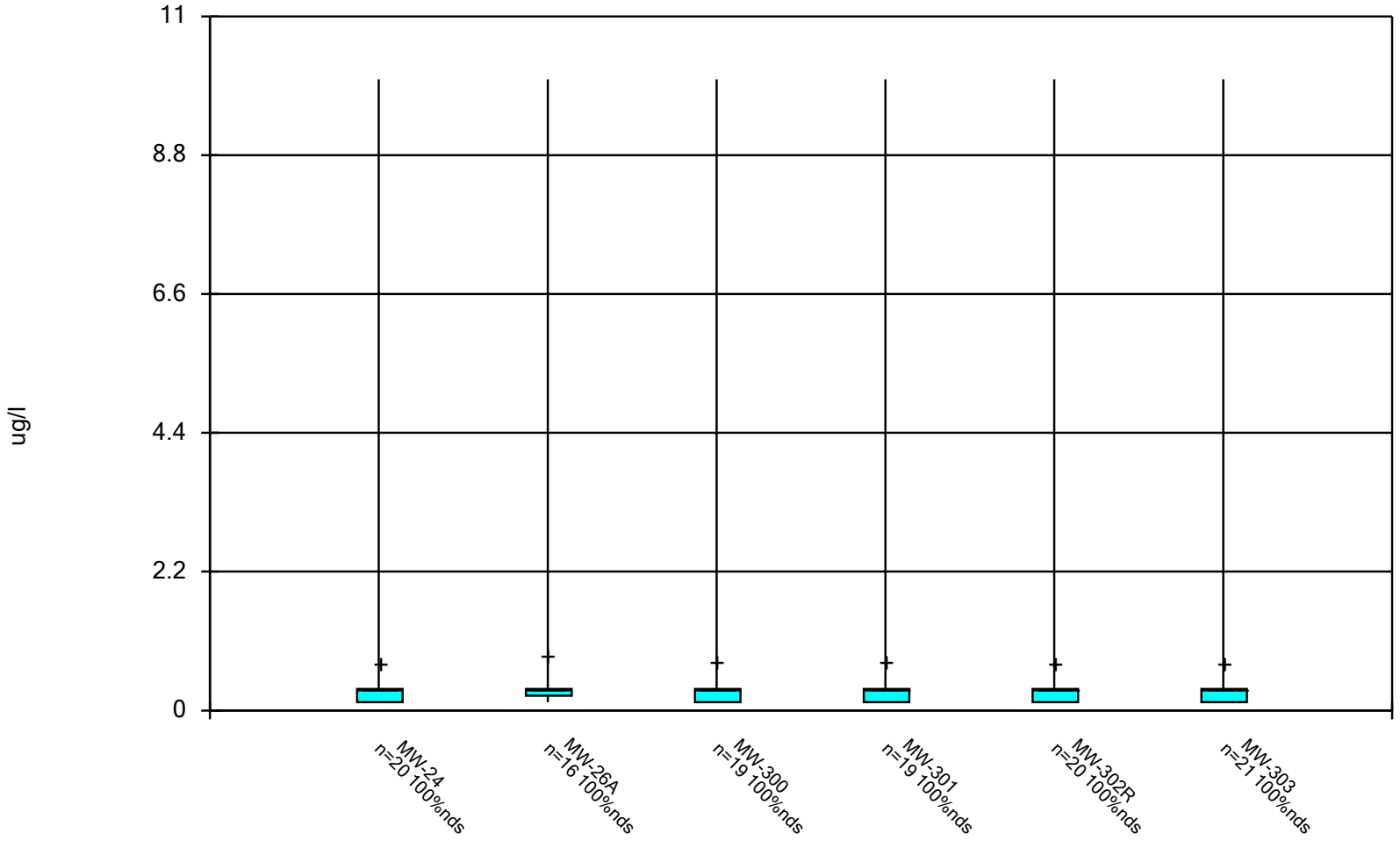
Box & Whiskers Plot



Constituent: 1,2-Dibromoethane [EDB] Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

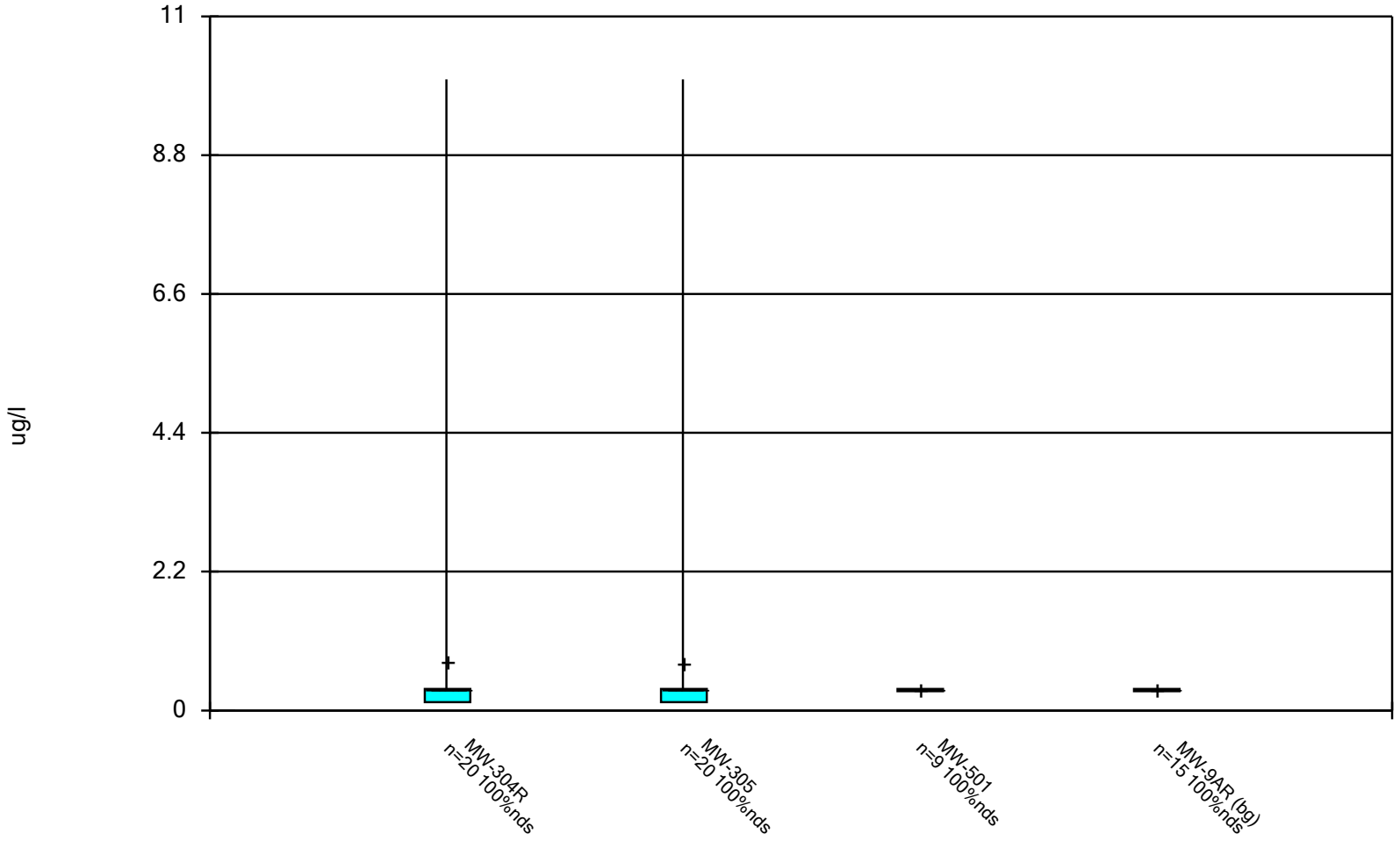
Box & Whiskers Plot



Constituent: 1,2-Dibromoethane [EDB] Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

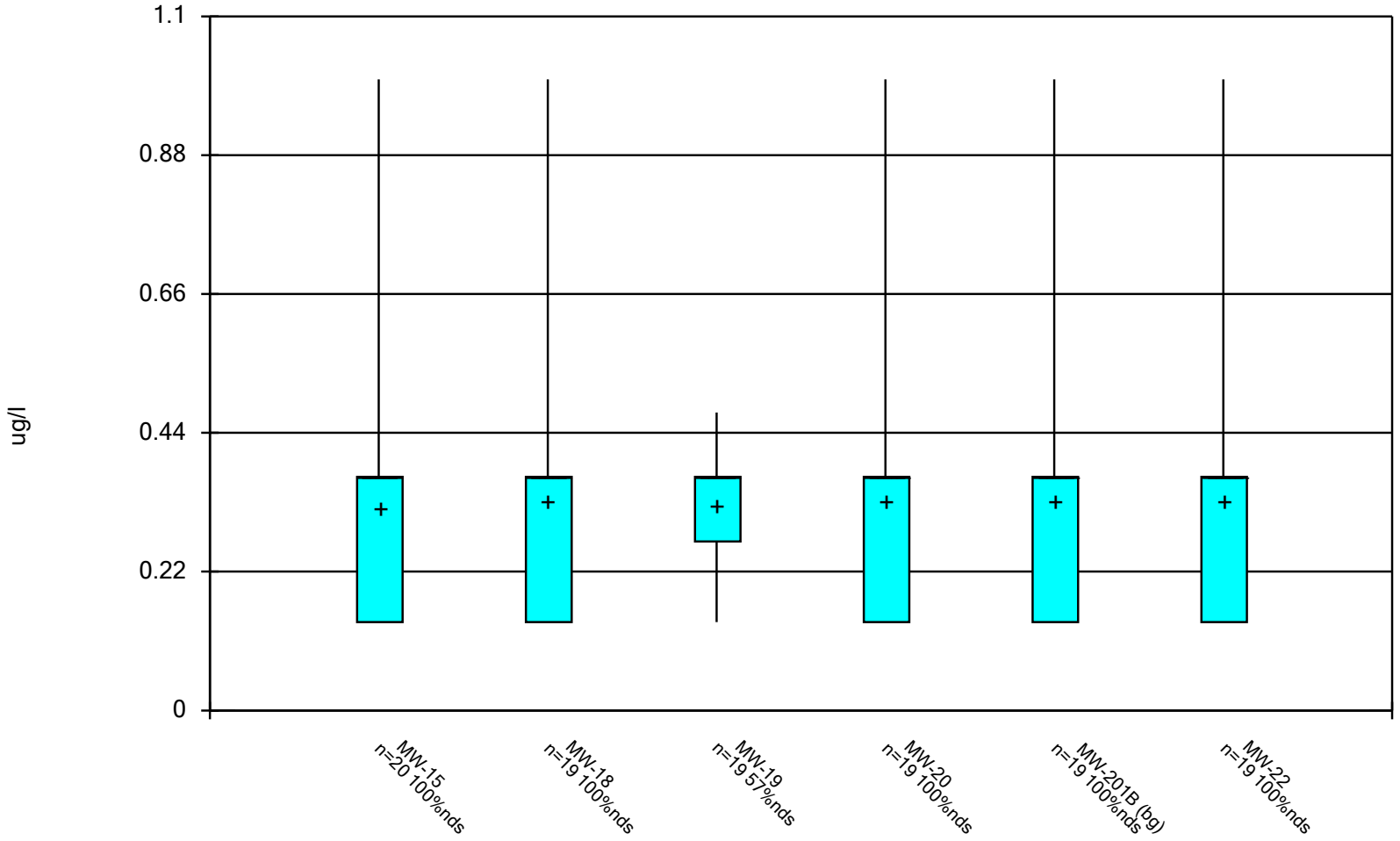
Box & Whiskers Plot



Constituent: 1,2-Dibromoethane [EDB] Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

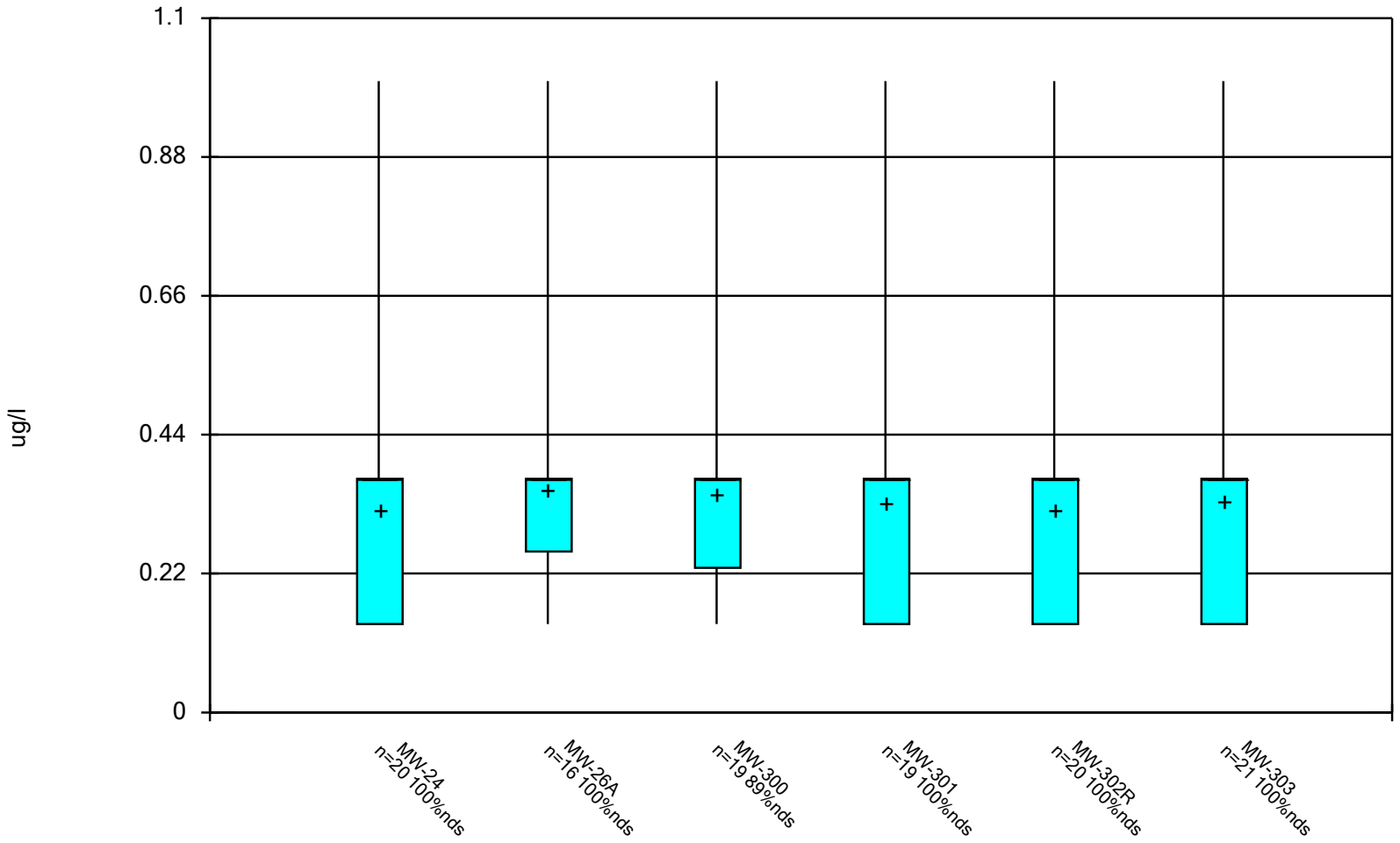
Box & Whiskers Plot



Constituent: 1,2-Dichlorobenzene Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

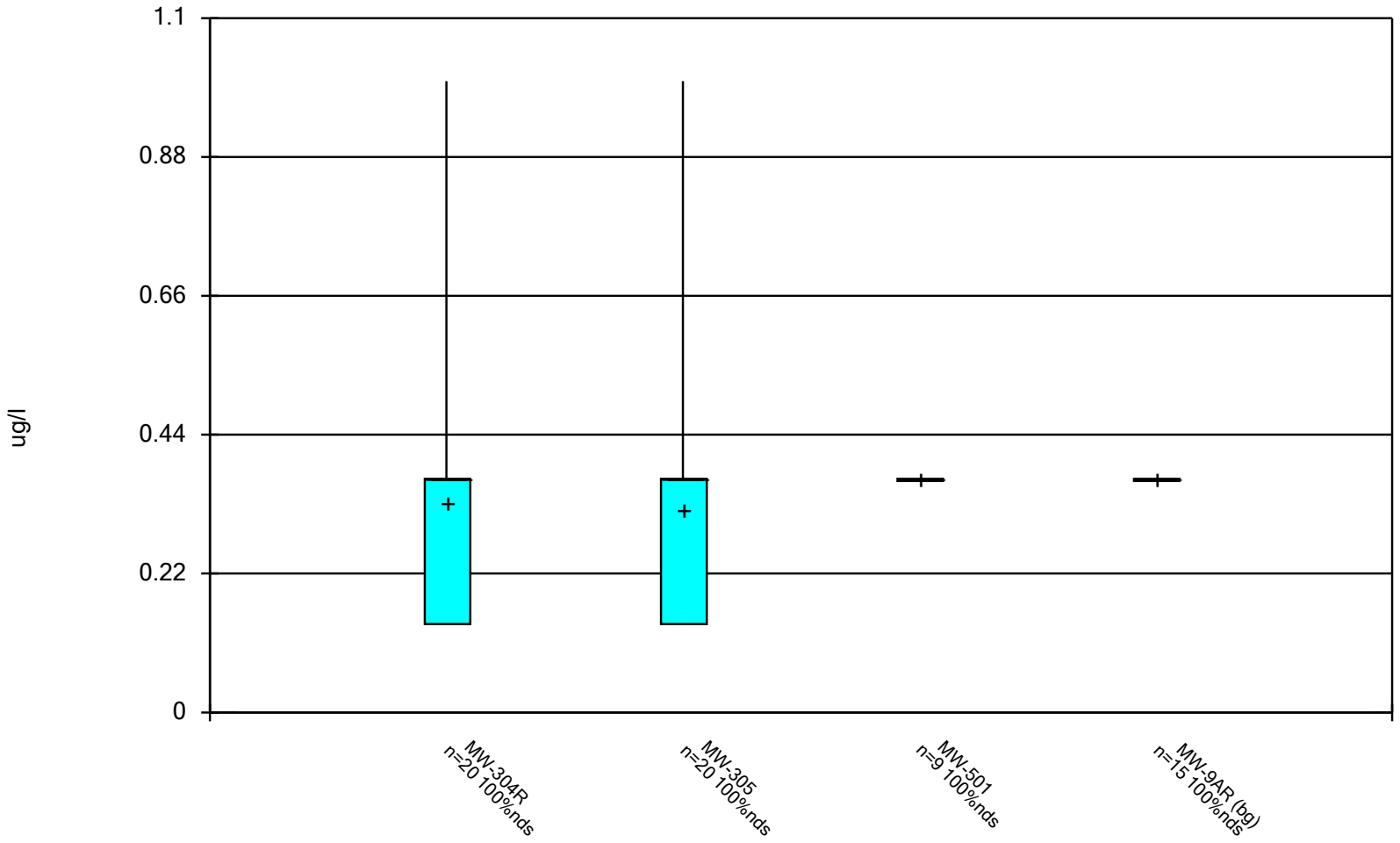
Box & Whiskers Plot



Constituent: 1,2-Dichlorobenzene Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

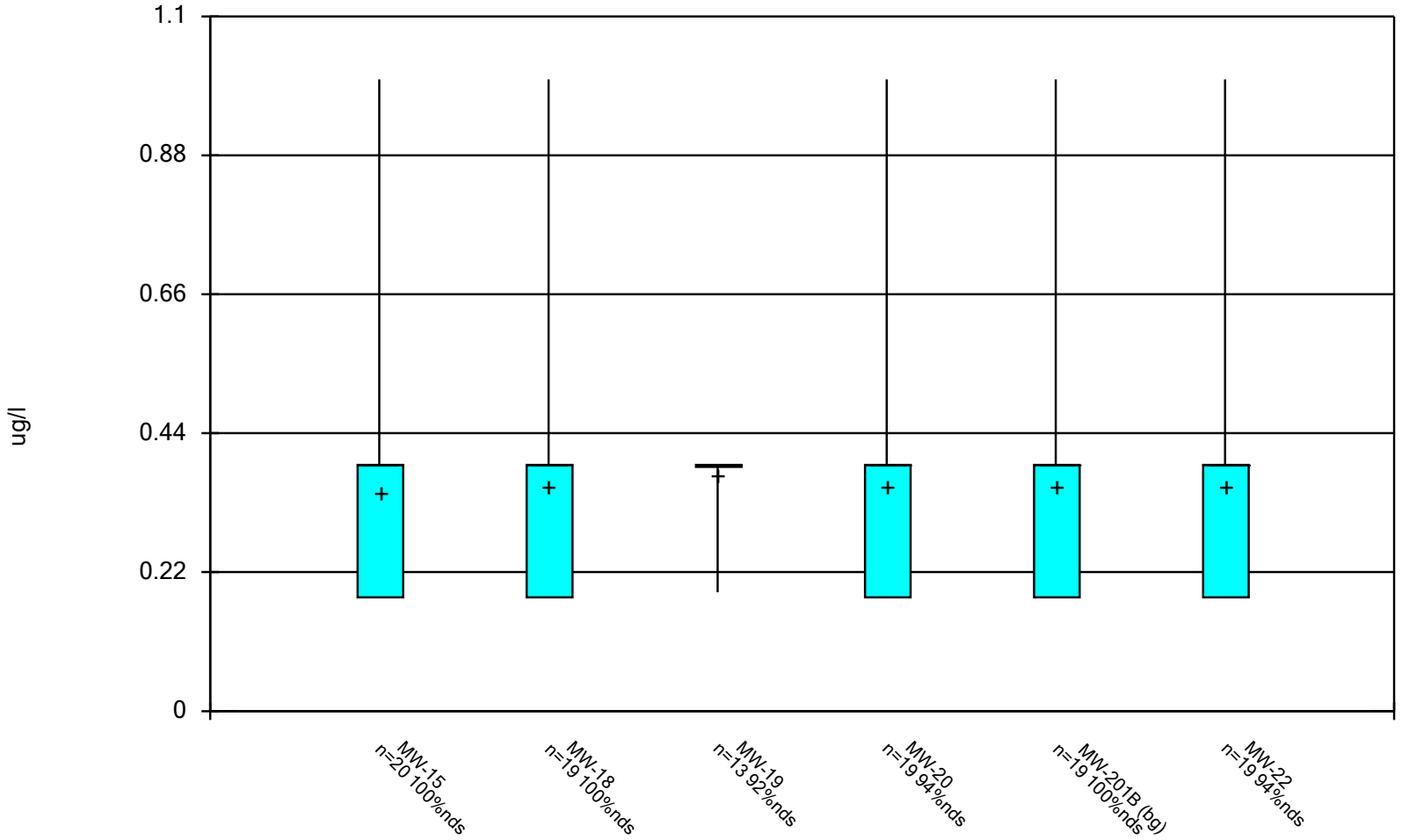
Box & Whiskers Plot



Constituent: 1,2-Dichlorobenzene Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

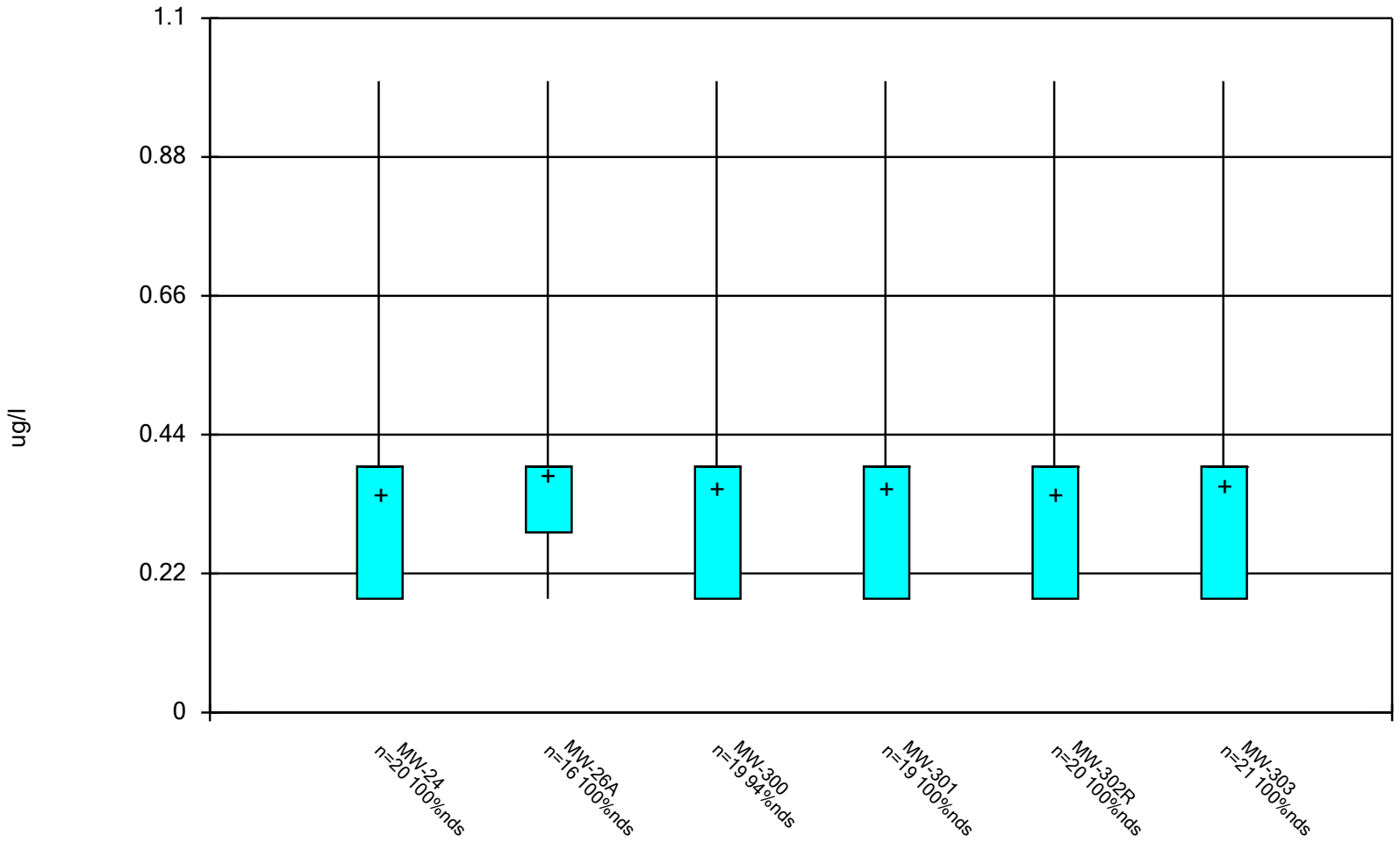
Box & Whiskers Plot



Constituent: 1,2-Dichloroethane Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

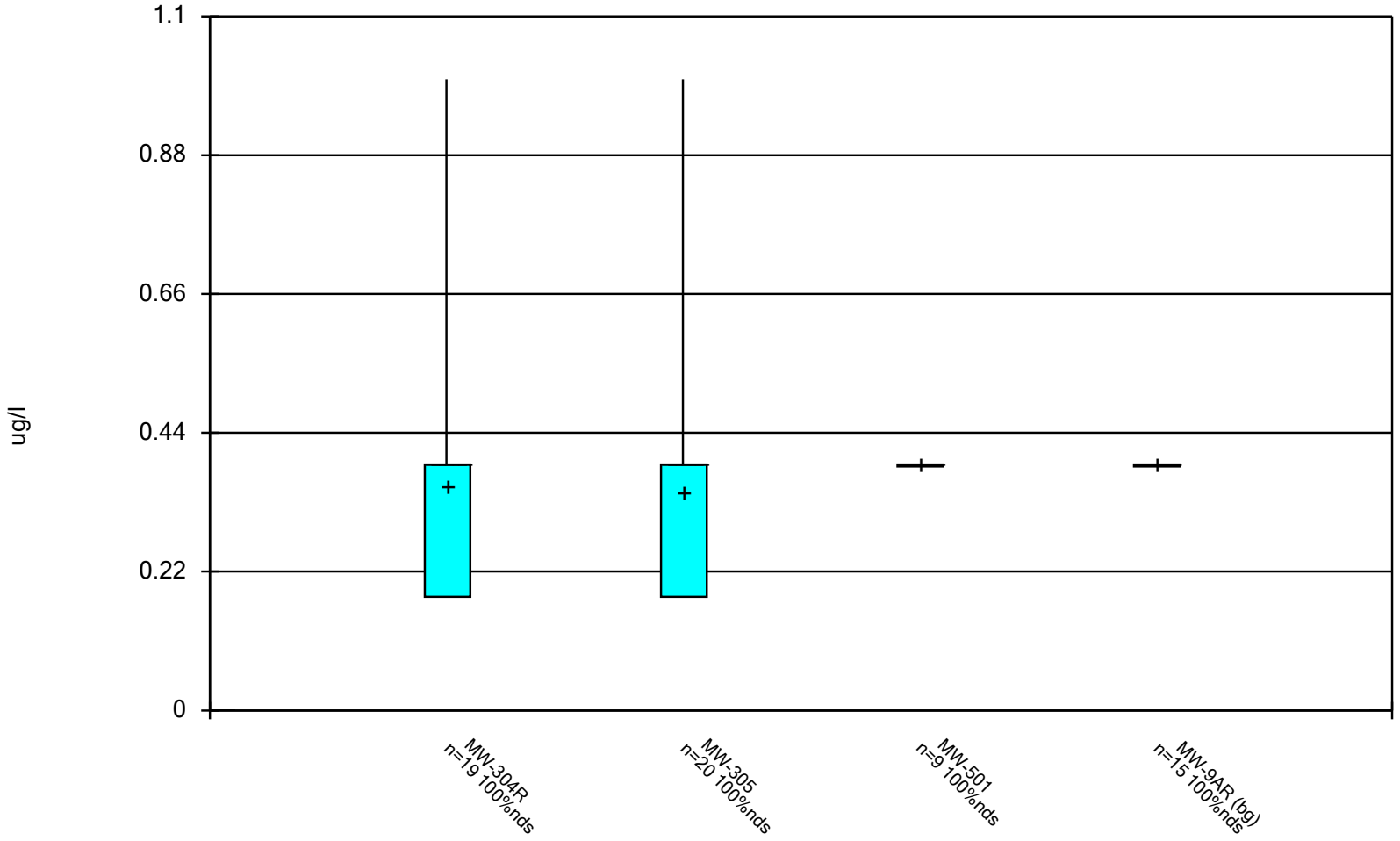
Box & Whiskers Plot



Constituent: 1,2-Dichloroethane Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

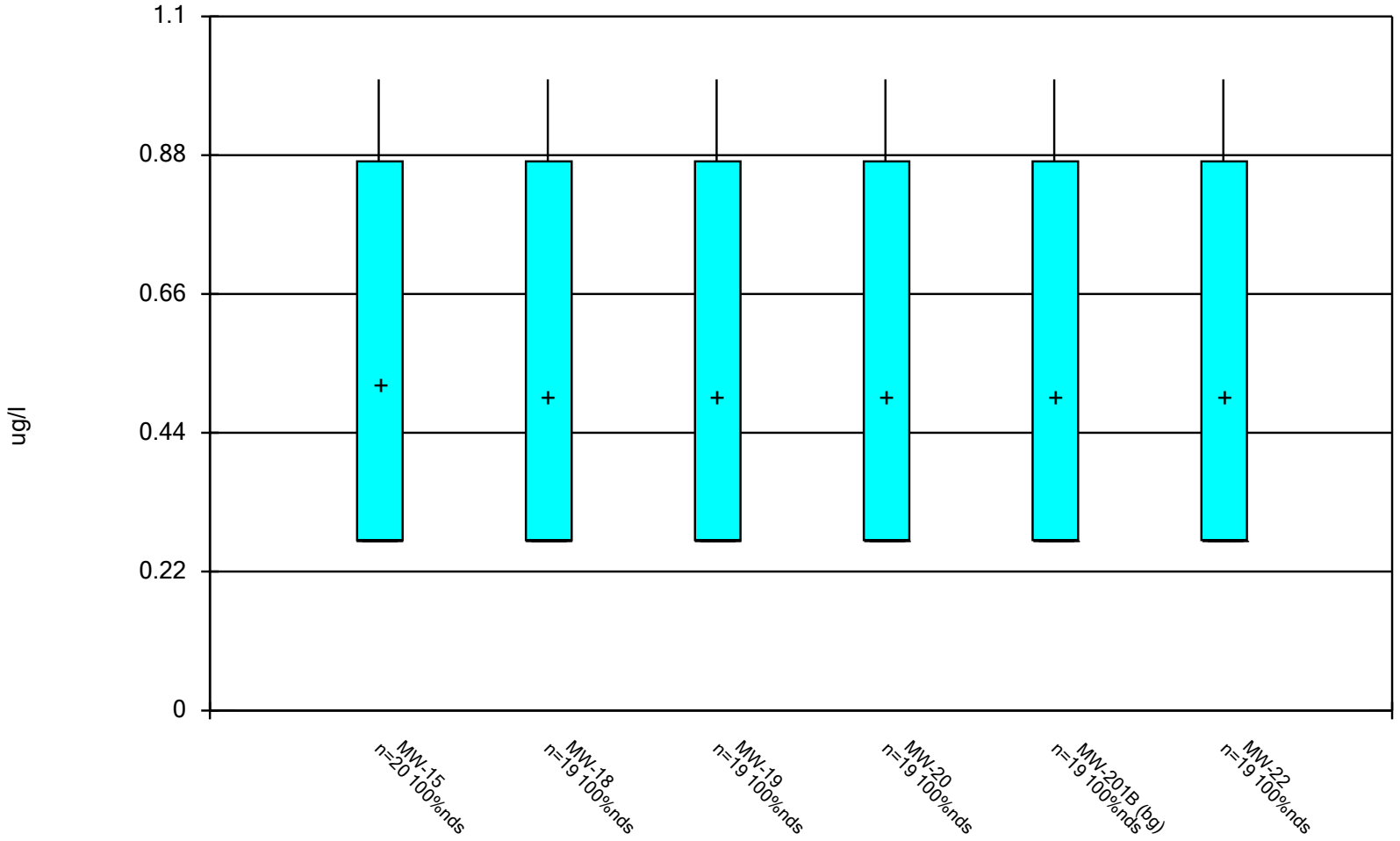
Box & Whiskers Plot



Constituent: 1,2-Dichloroethane Analysis Run 7/12/2024 2:55 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

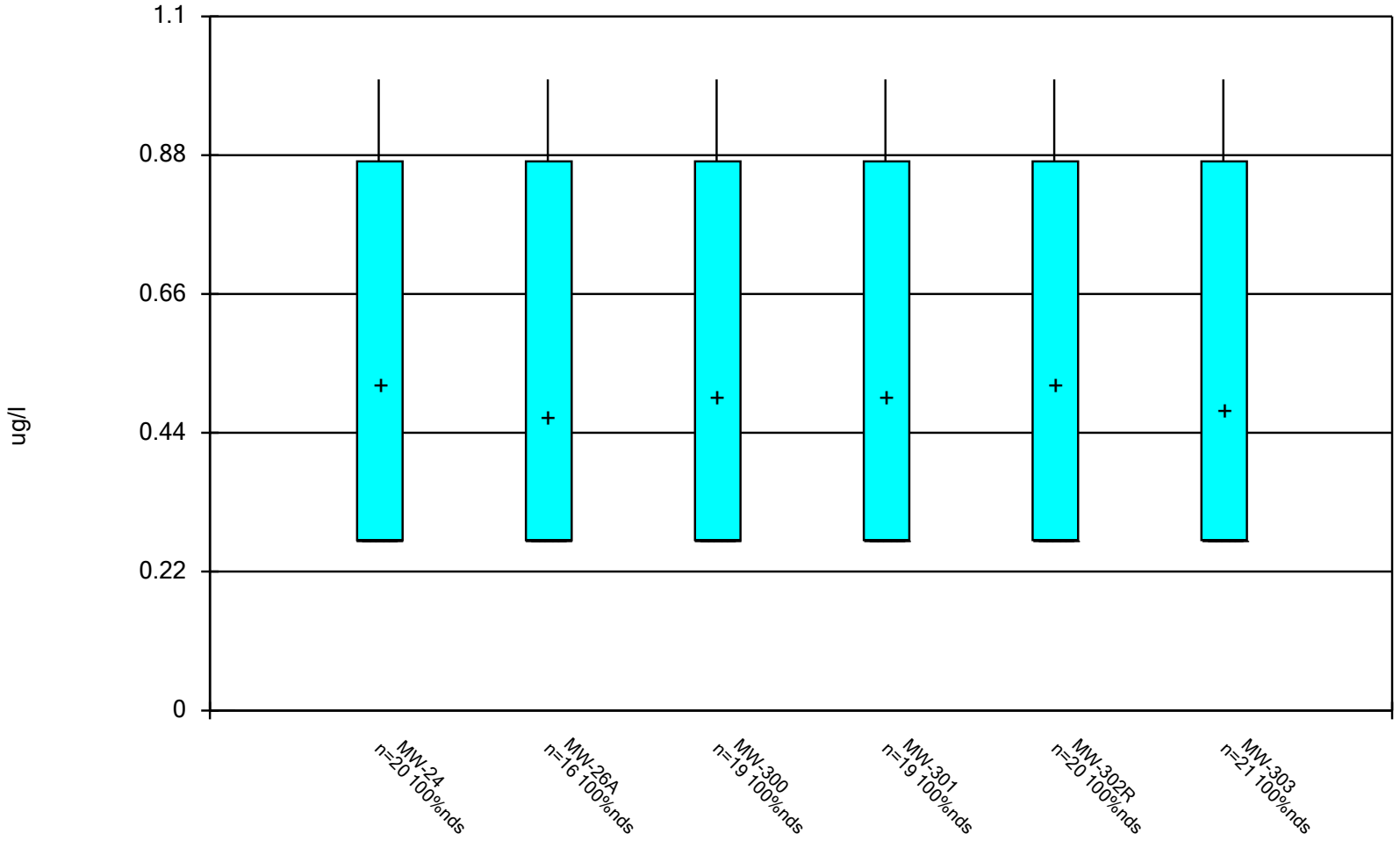
Box & Whiskers Plot



Constituent: 1,2-Dichloropropane Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

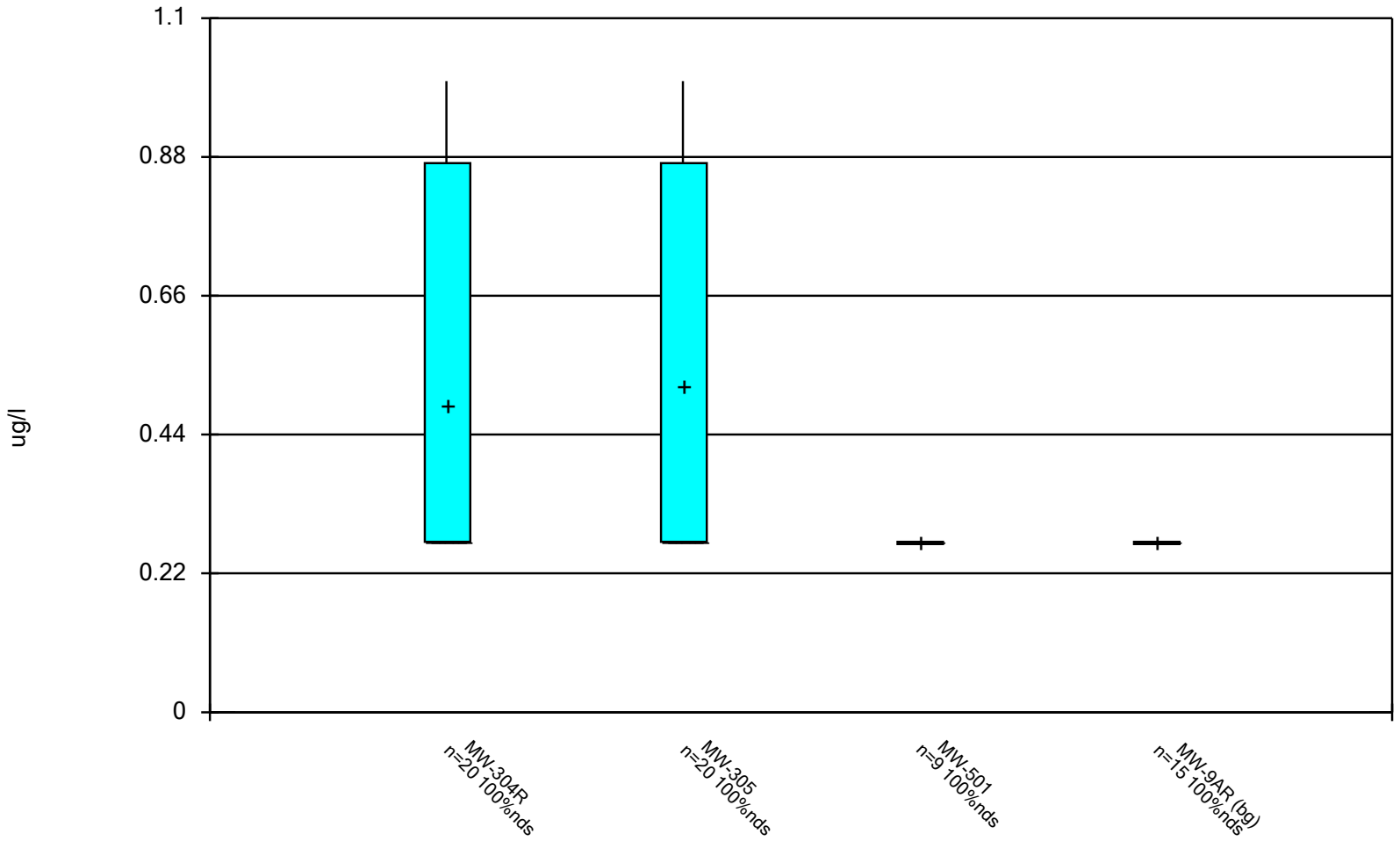
Box & Whiskers Plot



Constituent: 1,2-Dichloropropane Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

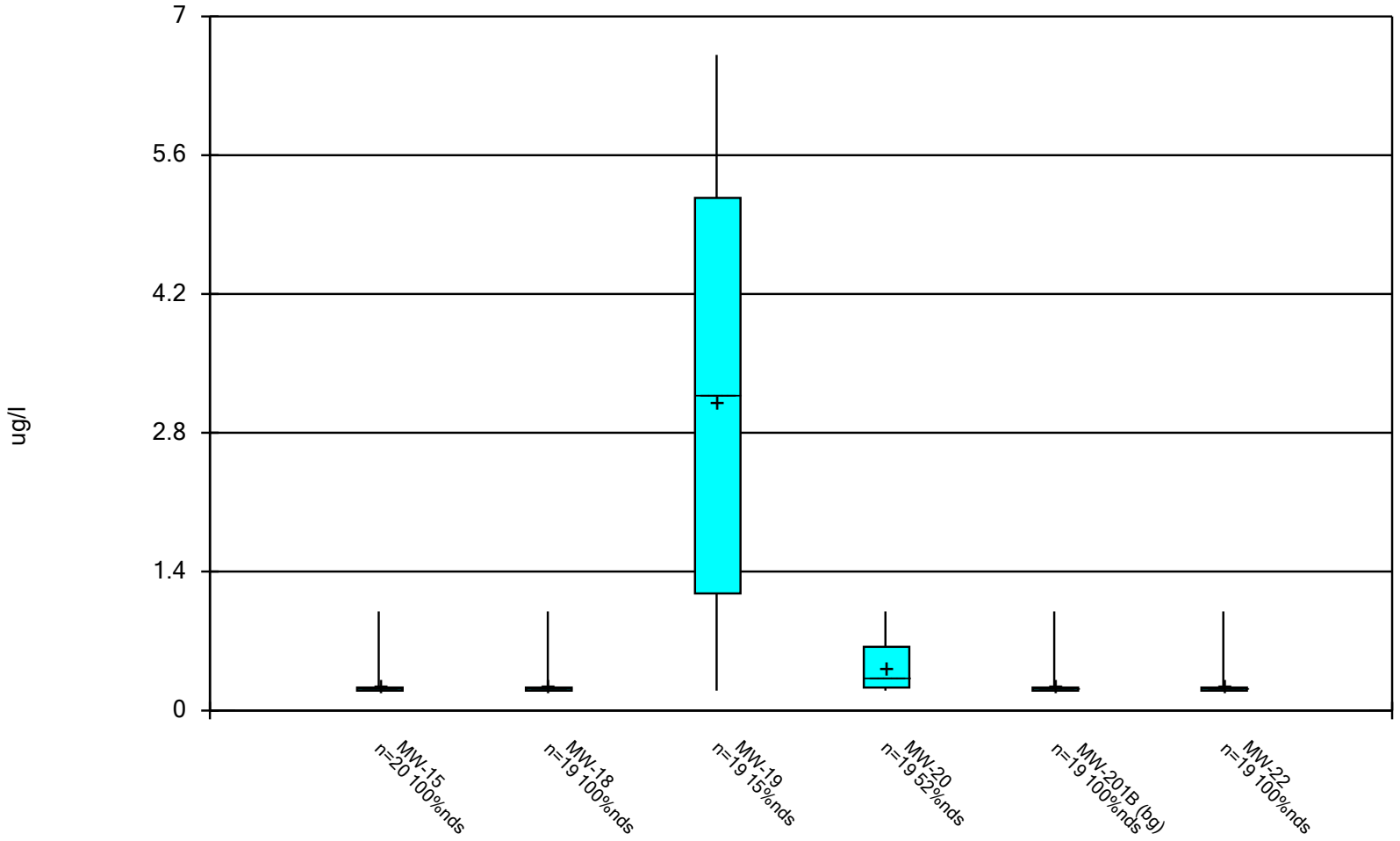
Box & Whiskers Plot



Constituent: 1,2-Dichloropropane Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

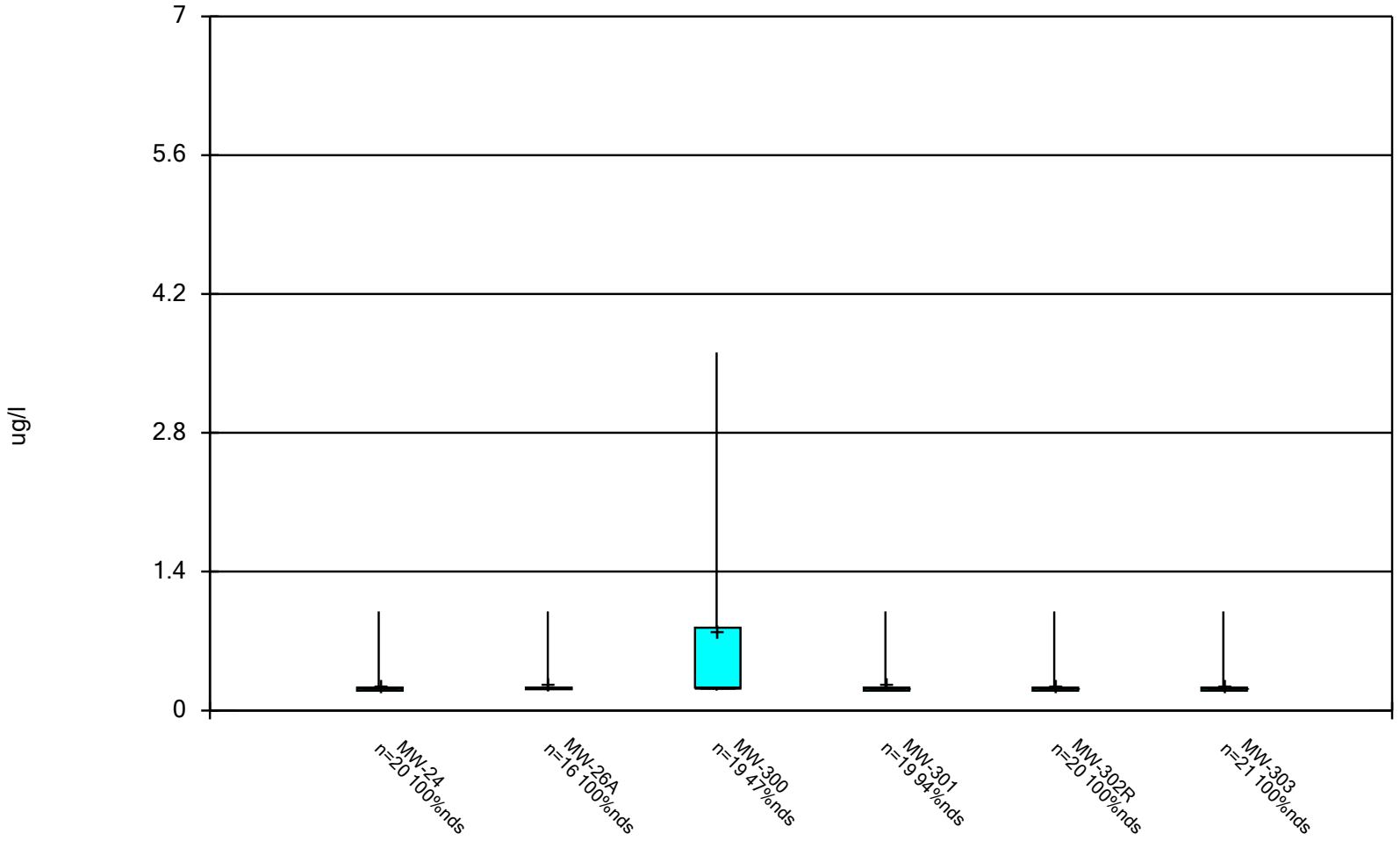
Box & Whiskers Plot



Constituent: 1,4-Dichlorobenzene Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

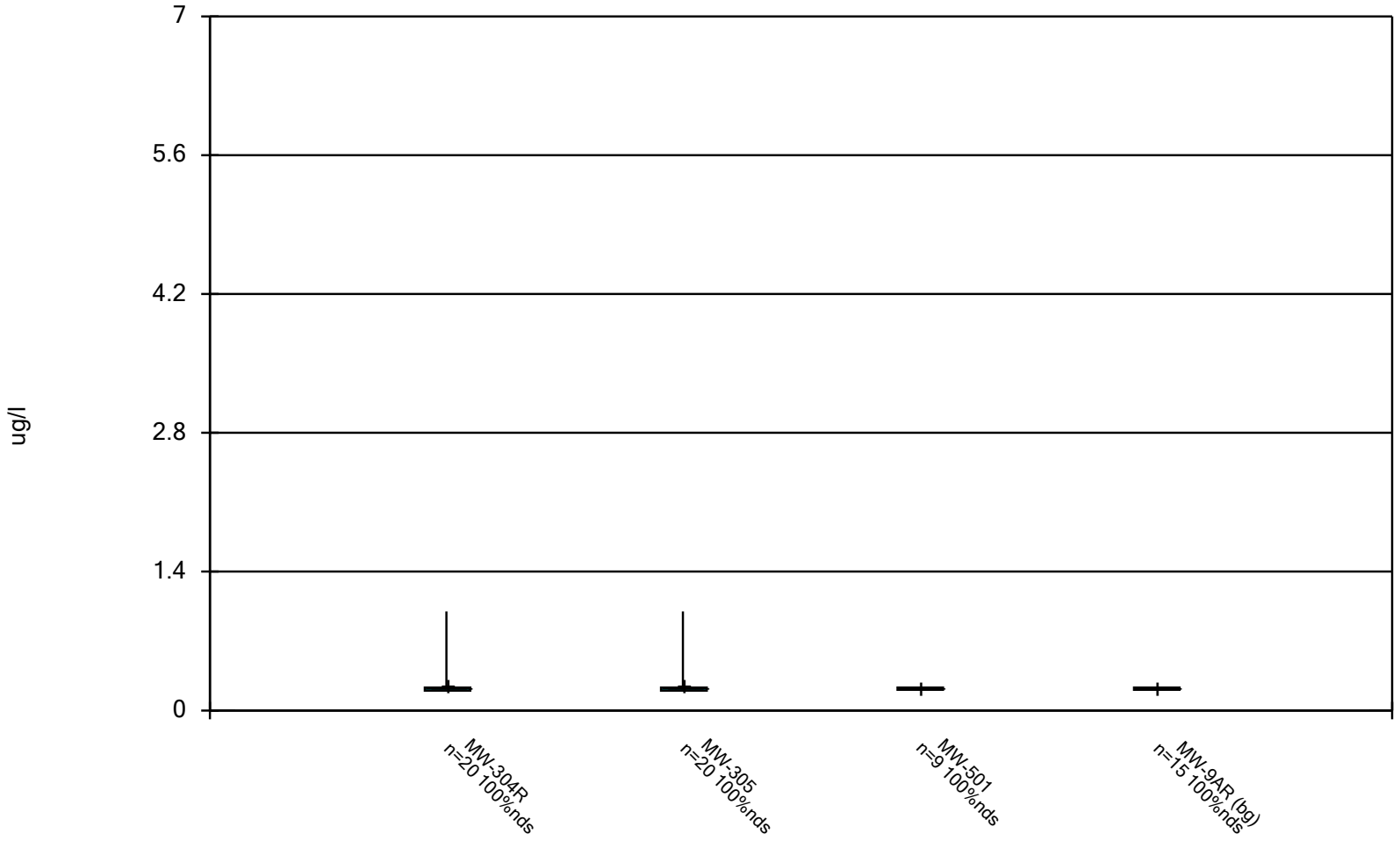
Box & Whiskers Plot



Constituent: 1,4-Dichlorobenzene Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

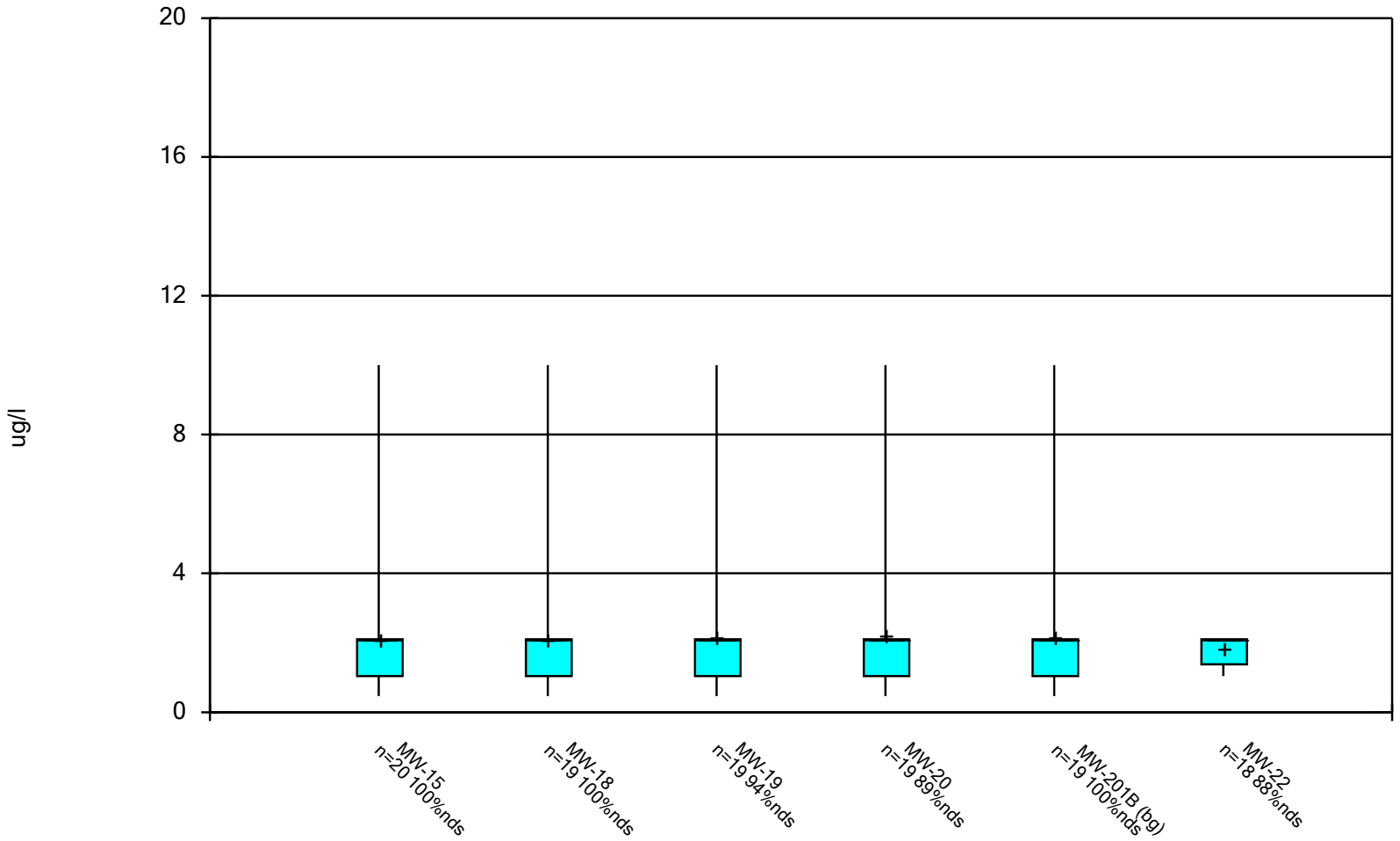
Box & Whiskers Plot



Constituent: 1,4-Dichlorobenzene Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

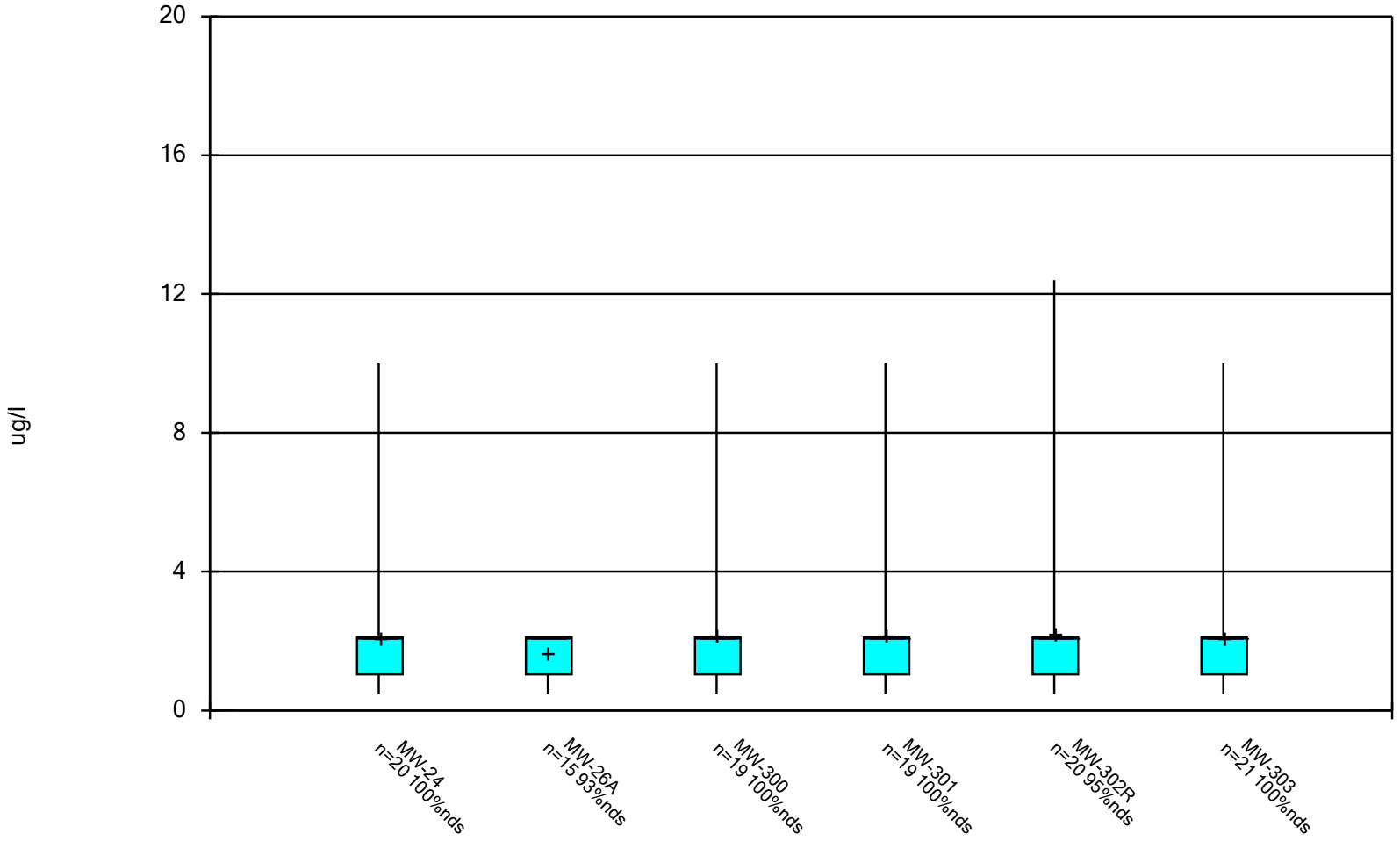
Box & Whiskers Plot



Constituent: 2-Butanone [MEK] Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

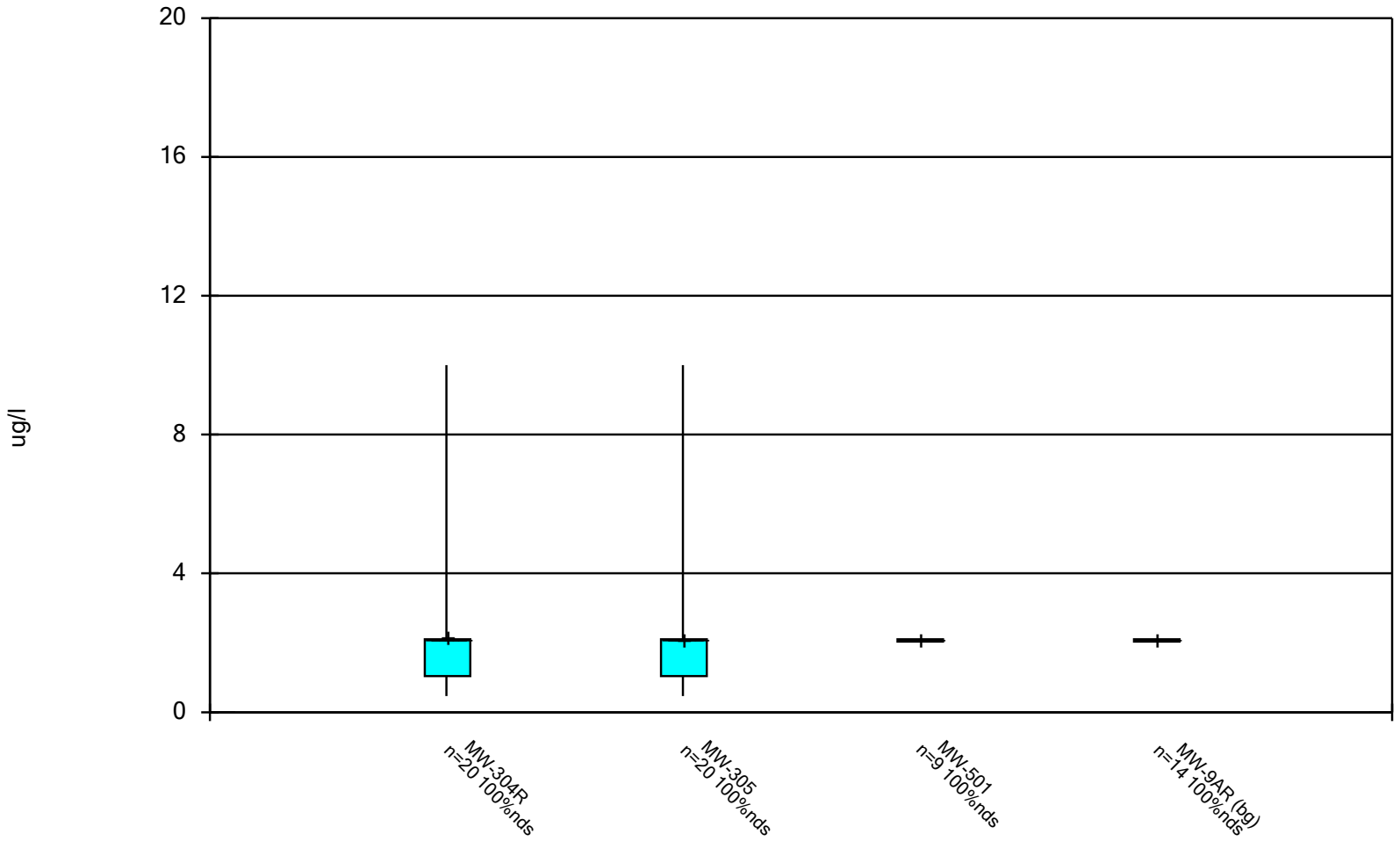
Box & Whiskers Plot



Constituent: 2-Butanone [MEK] Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

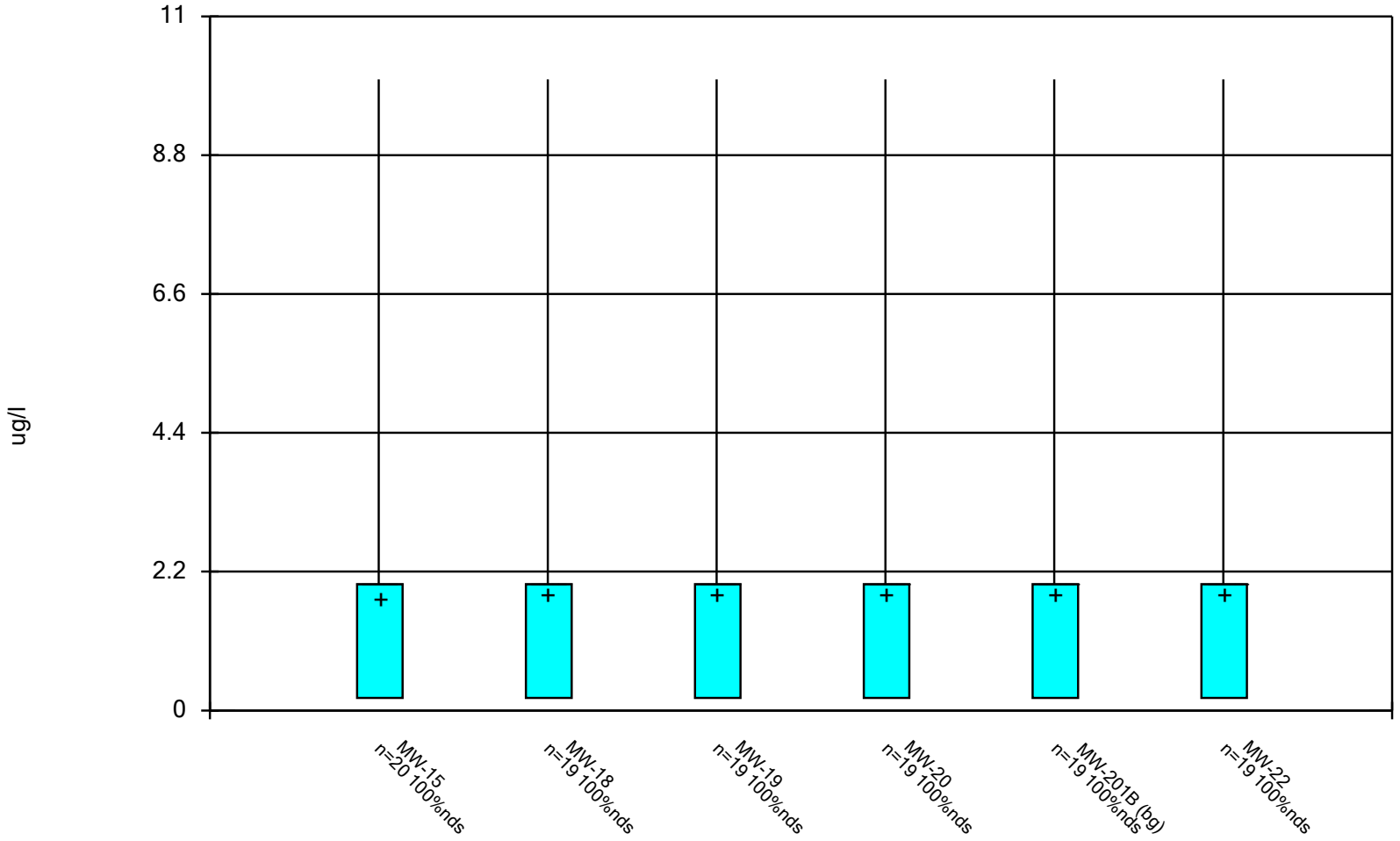
Box & Whiskers Plot



Constituent: 2-Butanone [MEK] Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

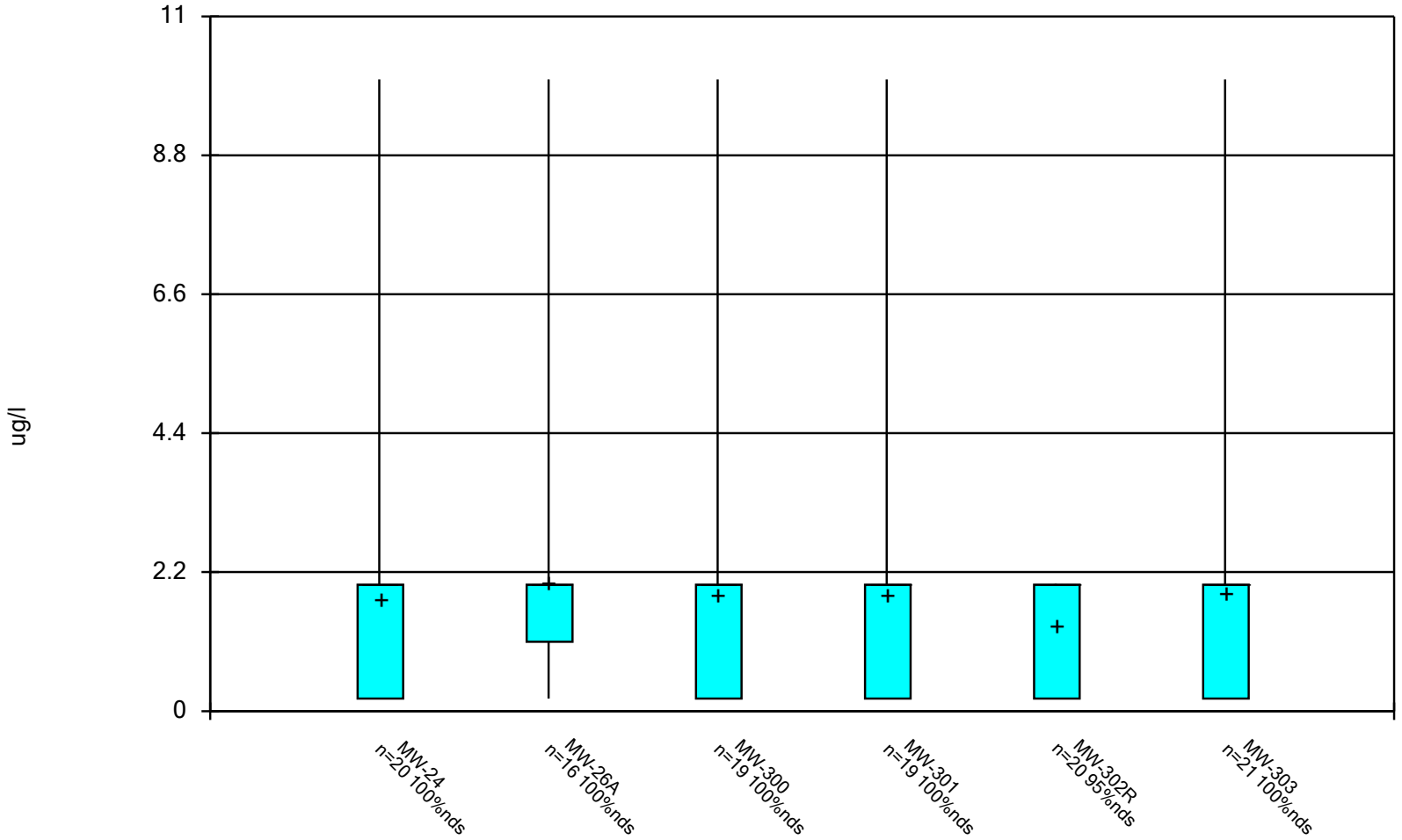
Box & Whiskers Plot



Constituent: 2-Hexanone Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

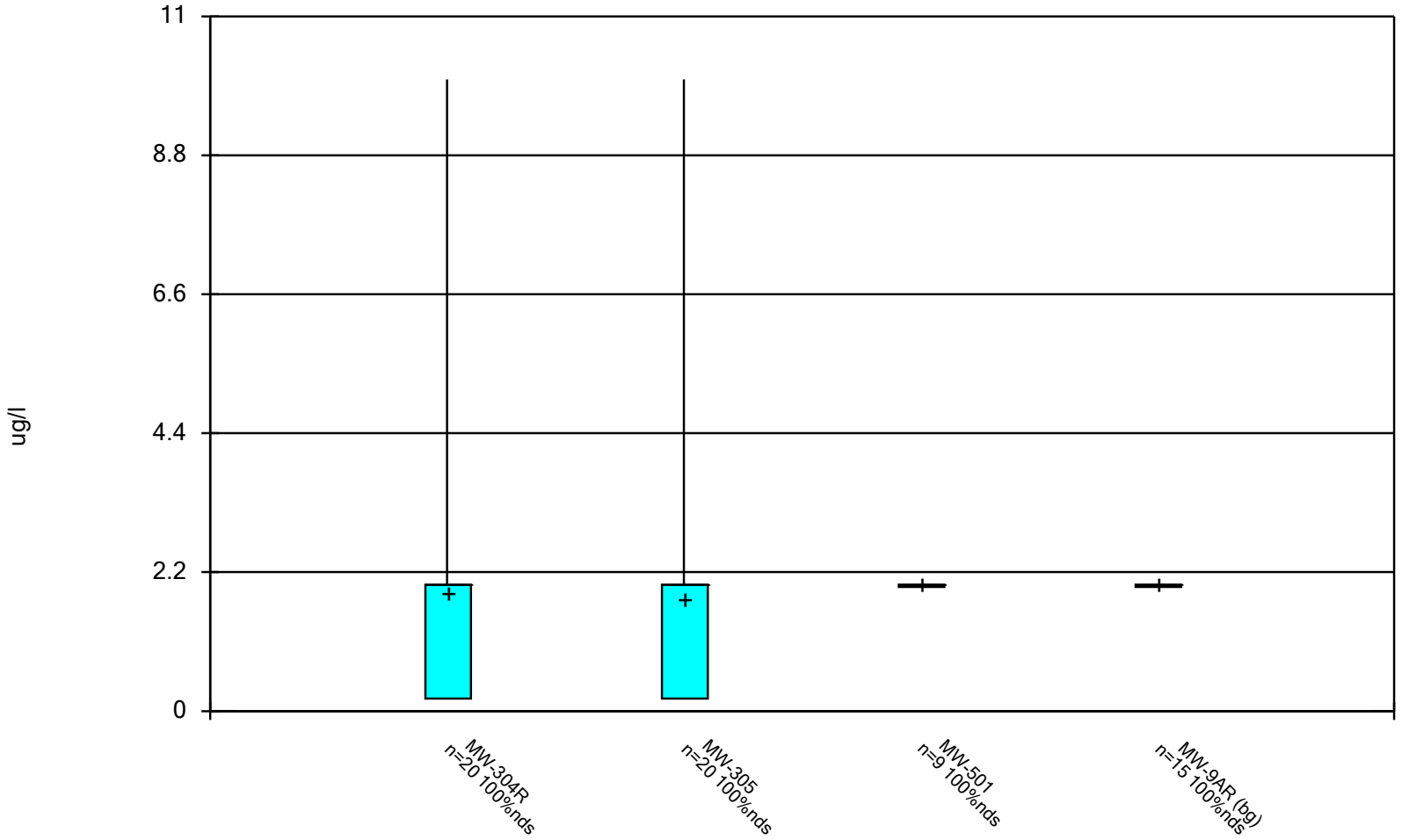
Box & Whiskers Plot



Constituent: 2-Hexanone Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

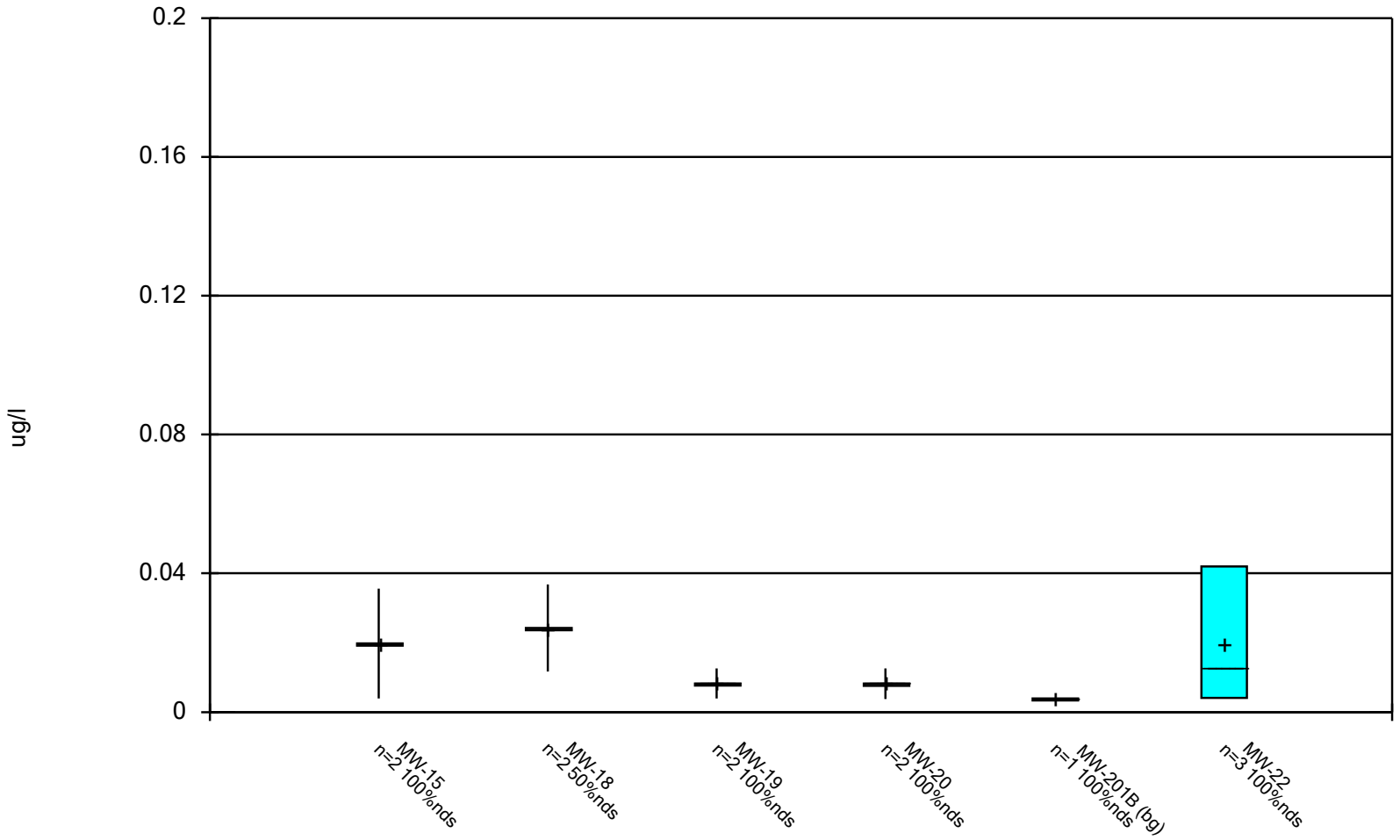
Box & Whiskers Plot



Constituent: 2-Hexanone Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

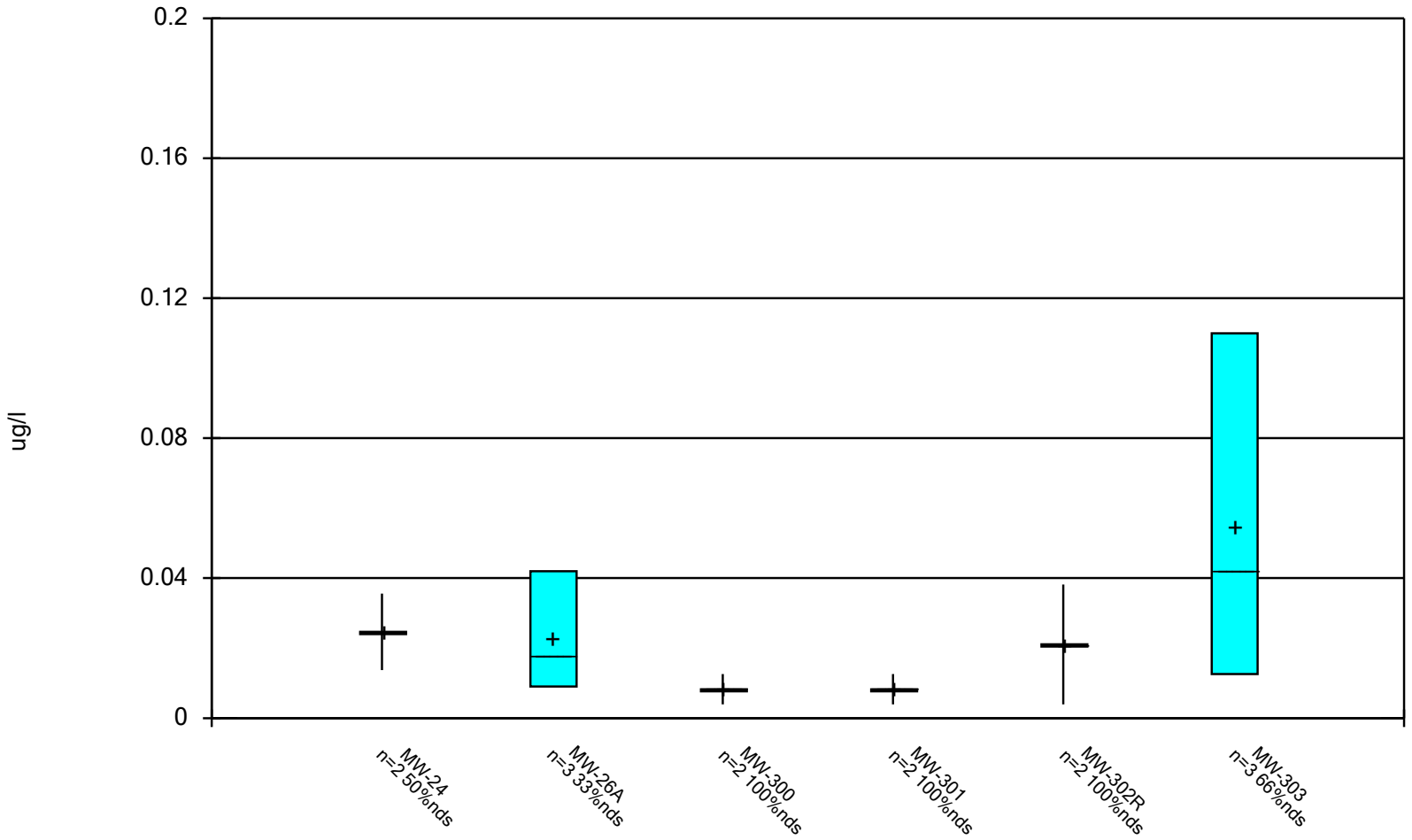
Box & Whiskers Plot



Constituent: 4,4`-DDT Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

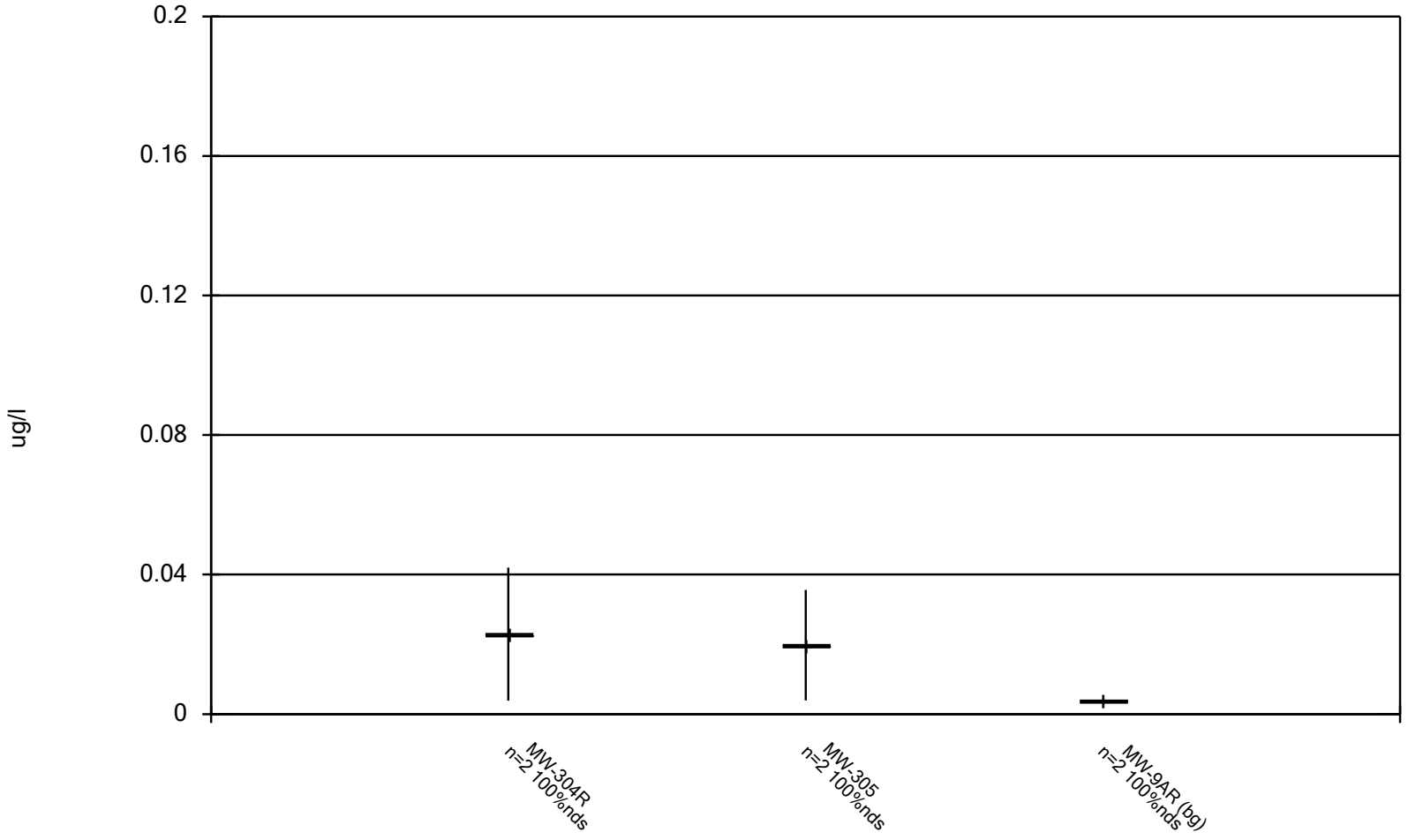
Box & Whiskers Plot



Constituent: 4,4`-DDT Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

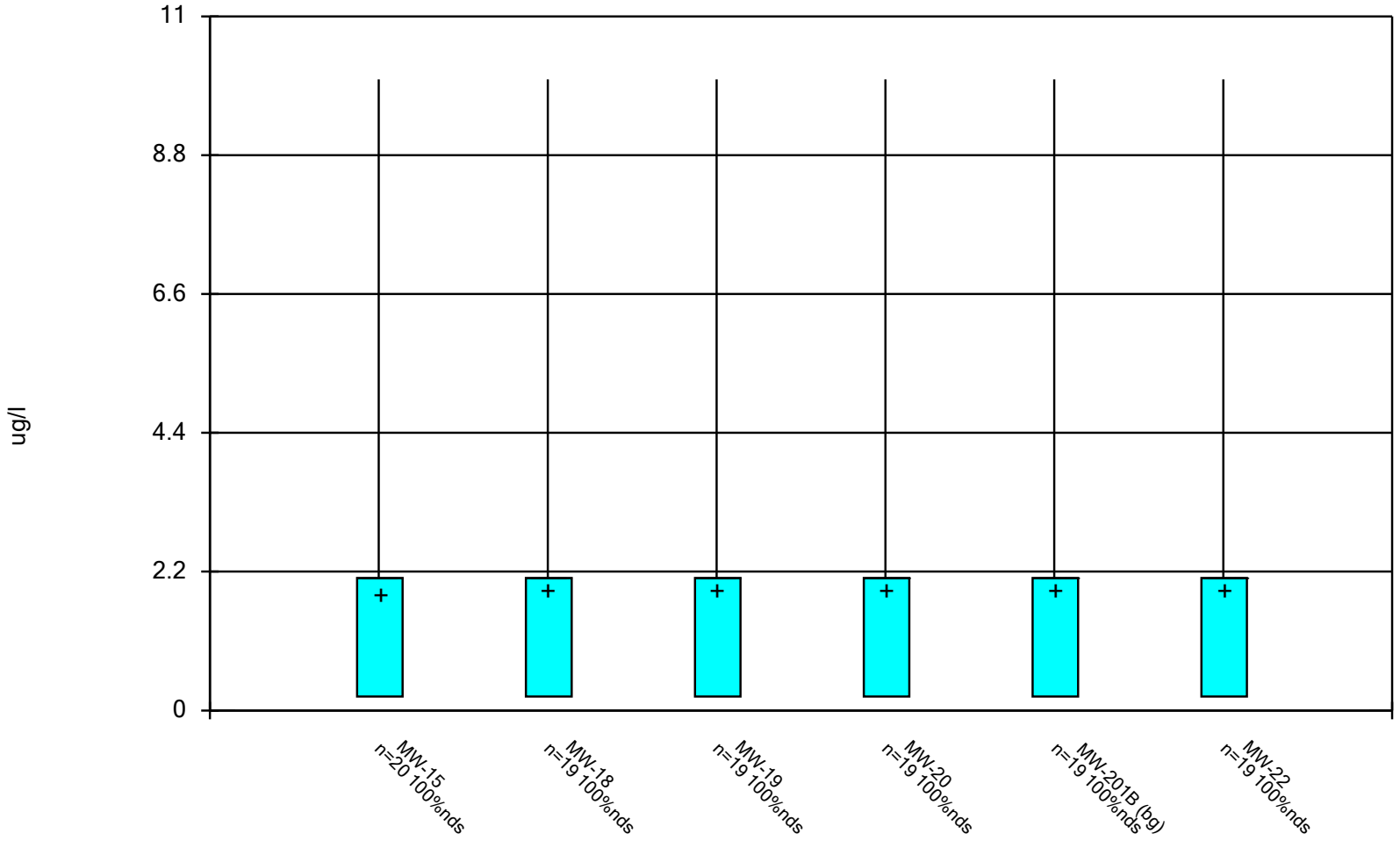
Box & Whiskers Plot



Constituent: 4,4`-DDT Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

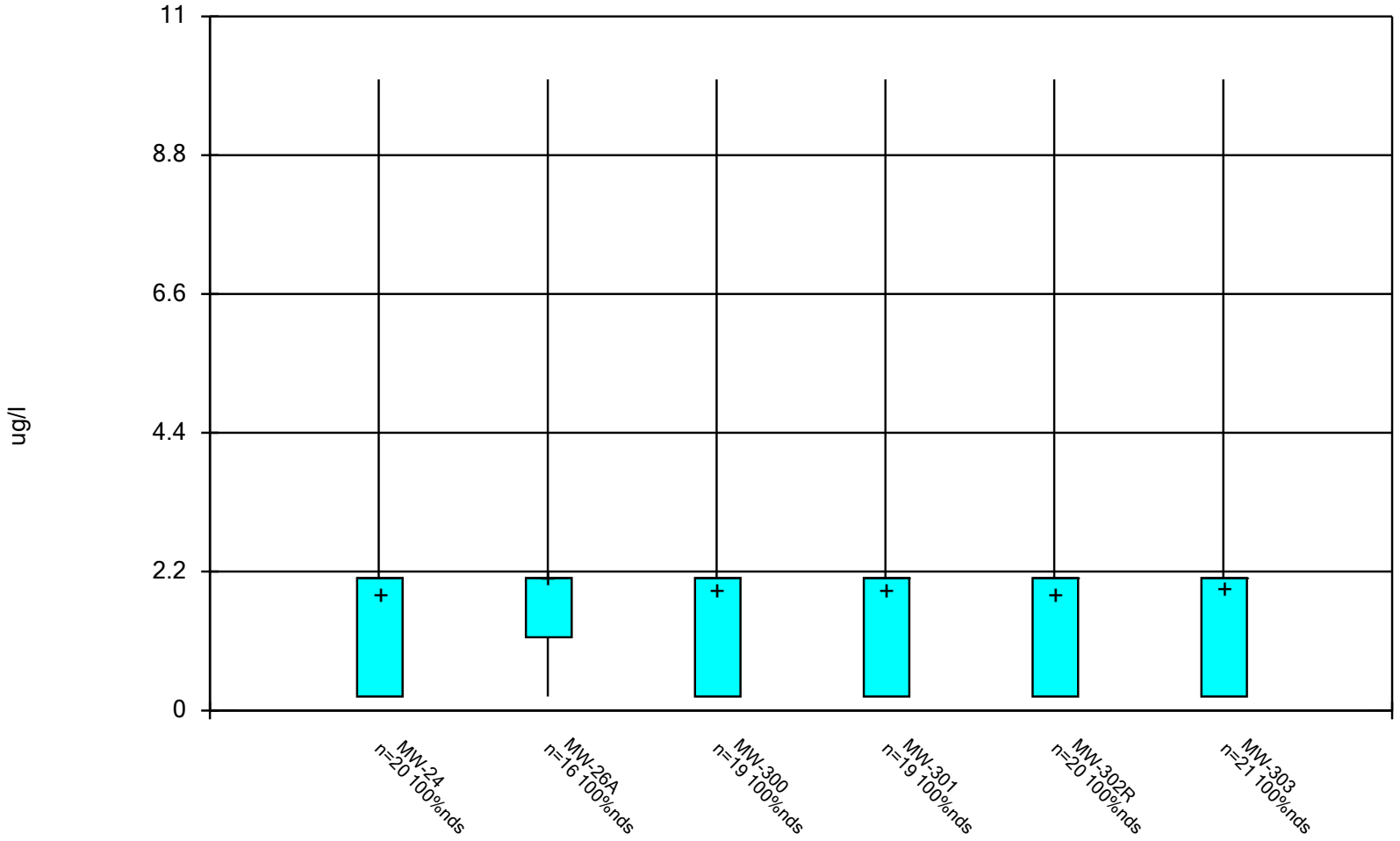
Box & Whiskers Plot



Constituent: 4-Methyl-2-pentanone Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

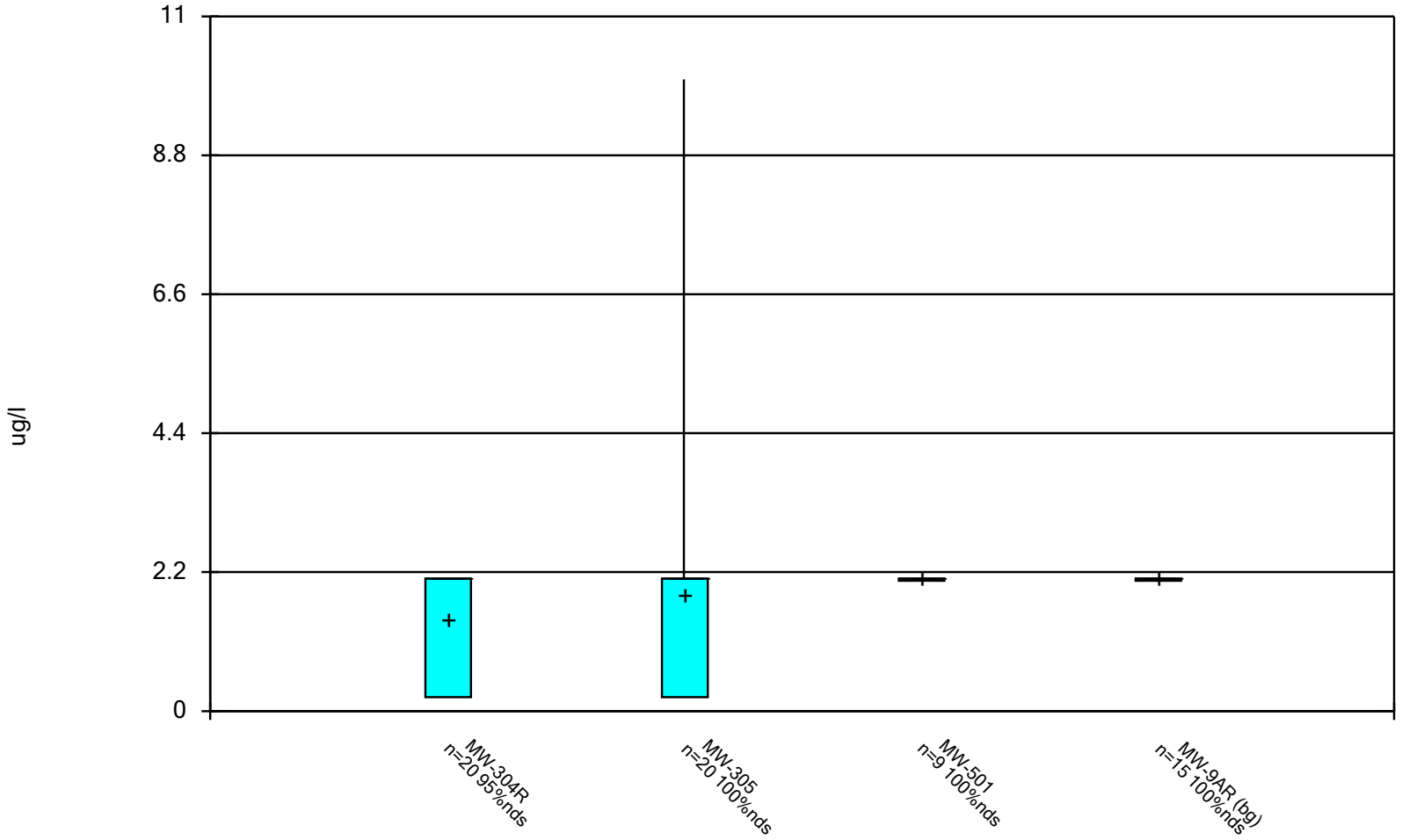
Box & Whiskers Plot



Constituent: 4-Methyl-2-pentanone Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

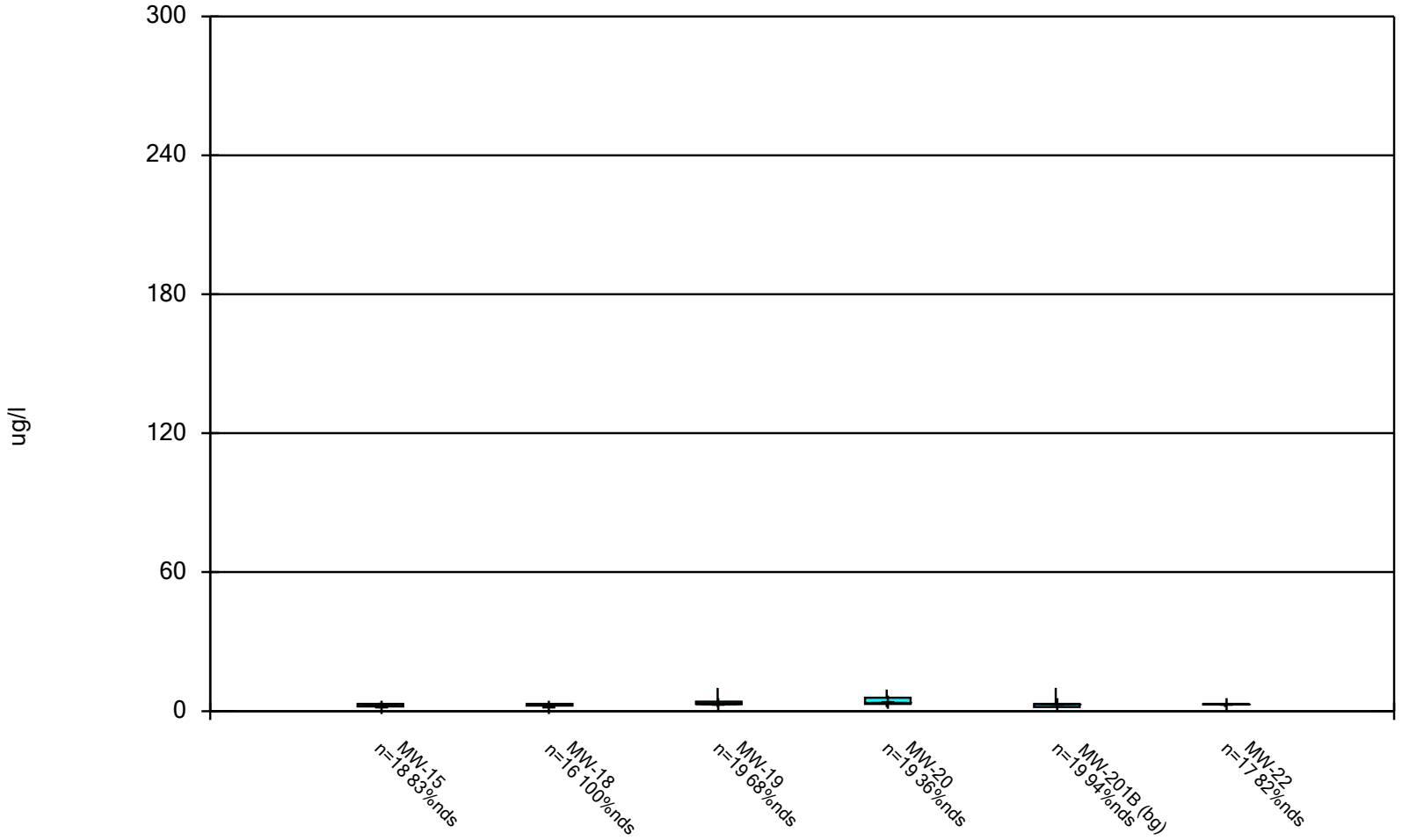
Box & Whiskers Plot



Constituent: 4-Methyl-2-pentanone Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

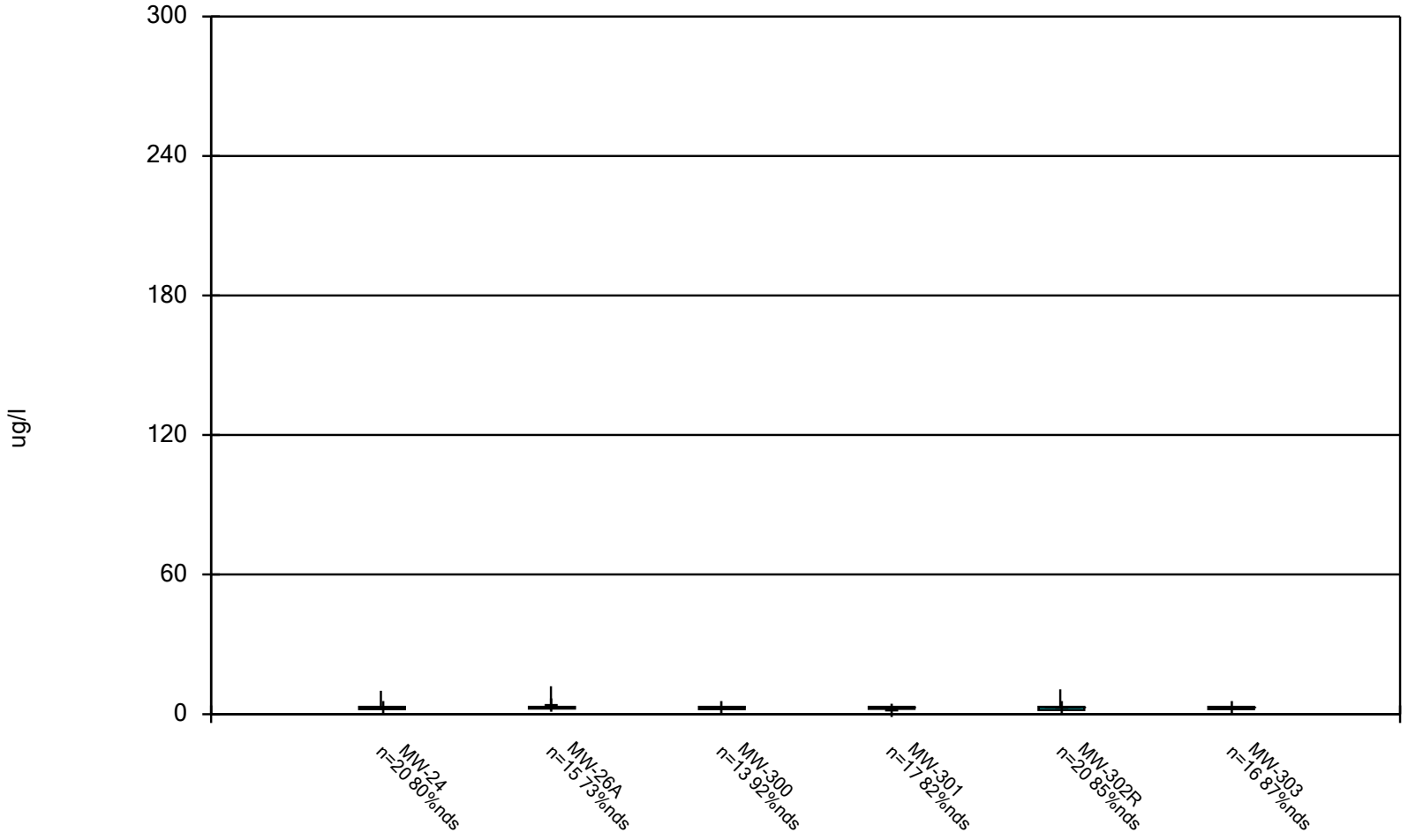
Box & Whiskers Plot



Constituent: Acetone Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

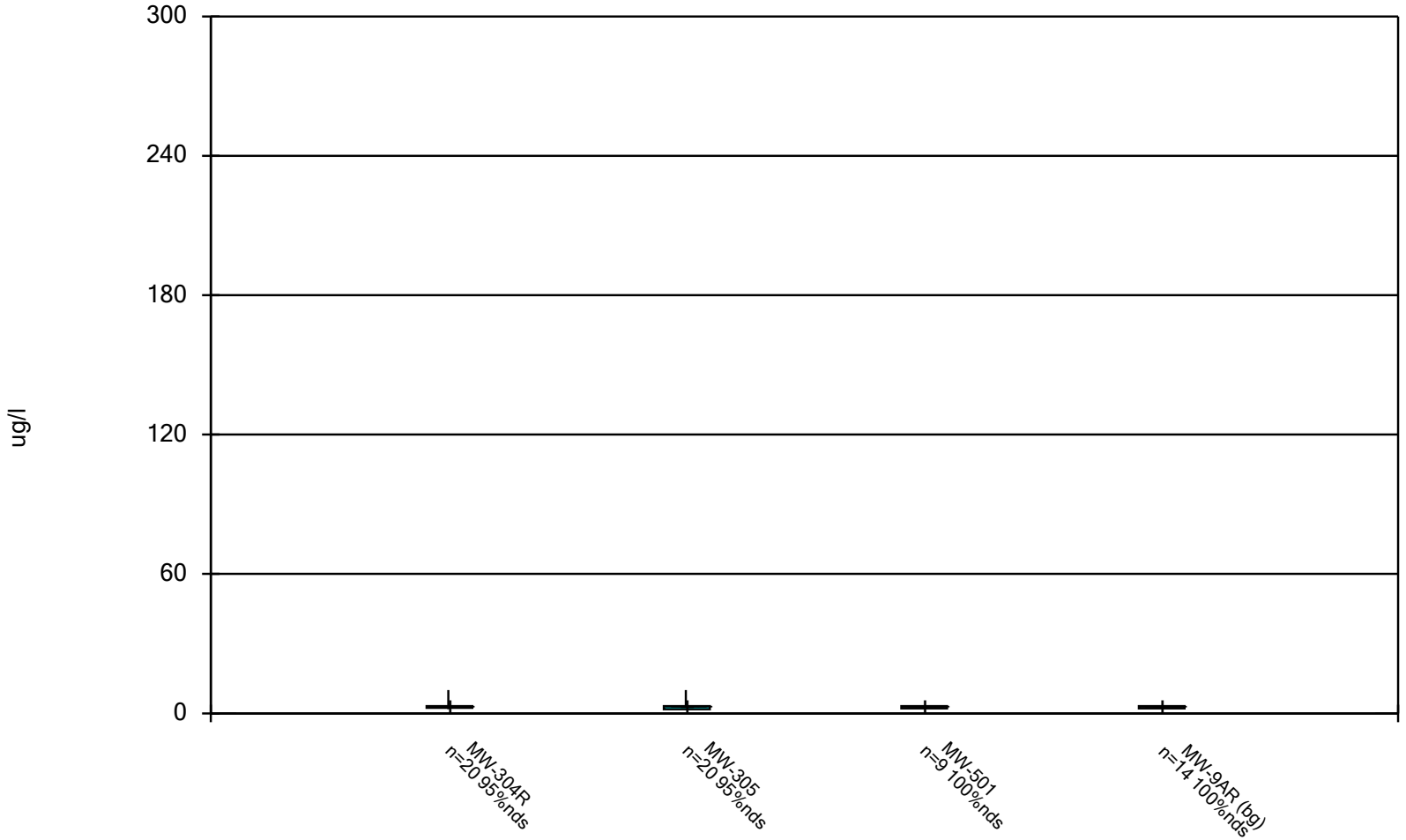
Box & Whiskers Plot



Constituent: Acetone Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

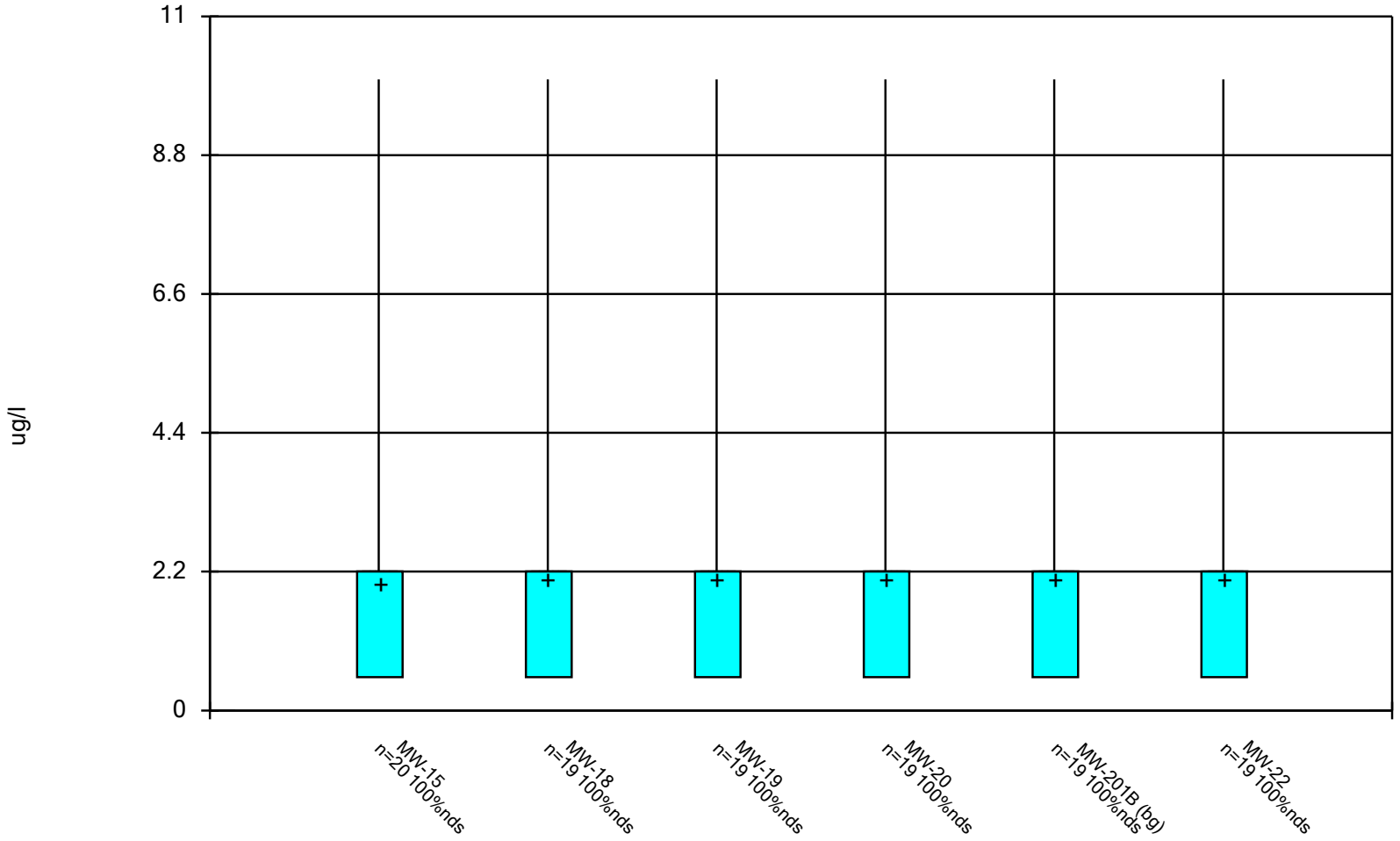
Box & Whiskers Plot



Constituent: Acetone Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

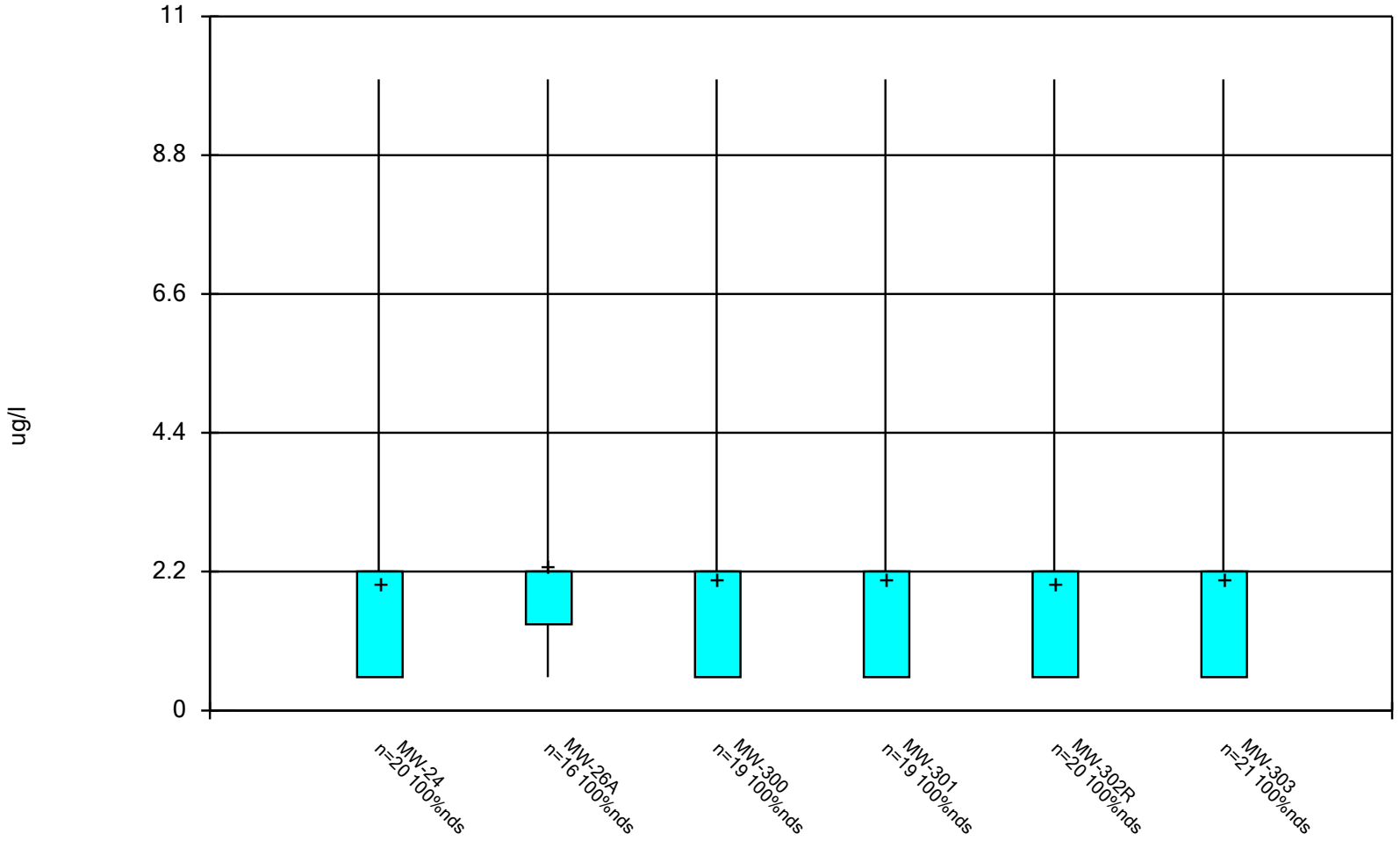
Box & Whiskers Plot



Constituent: Acrylonitrile Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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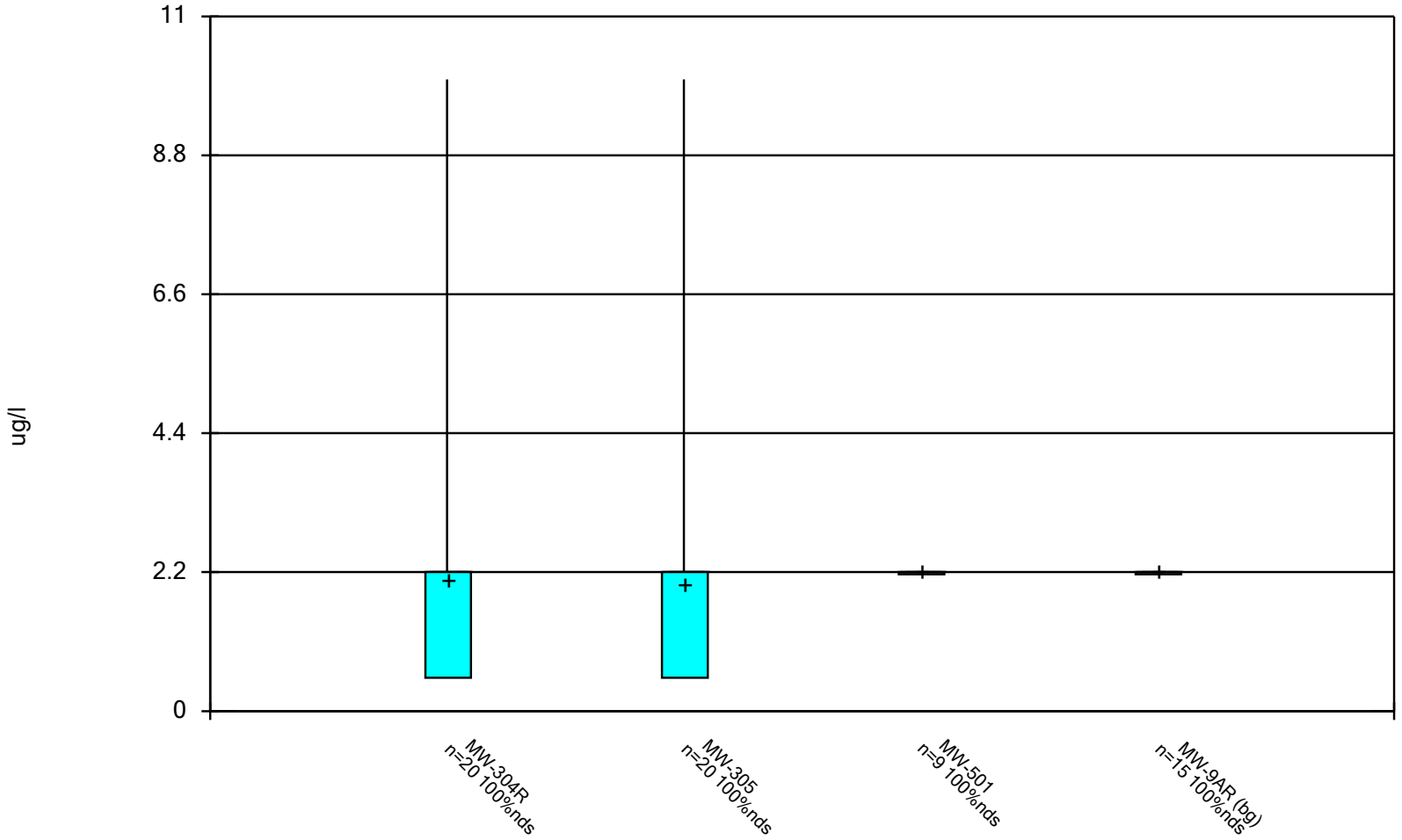
Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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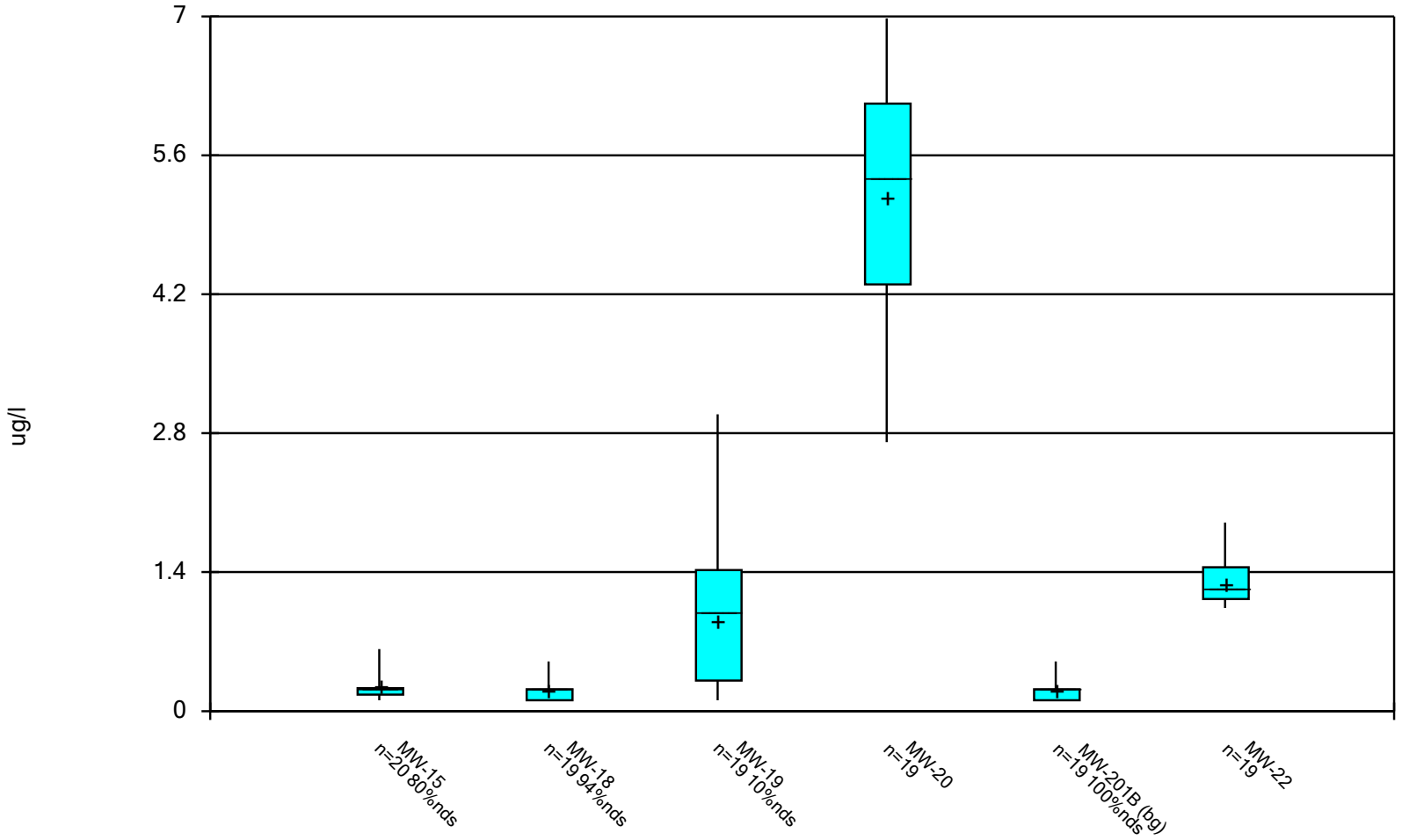
Linn County Data: CRLCSWA_Groundwater Database

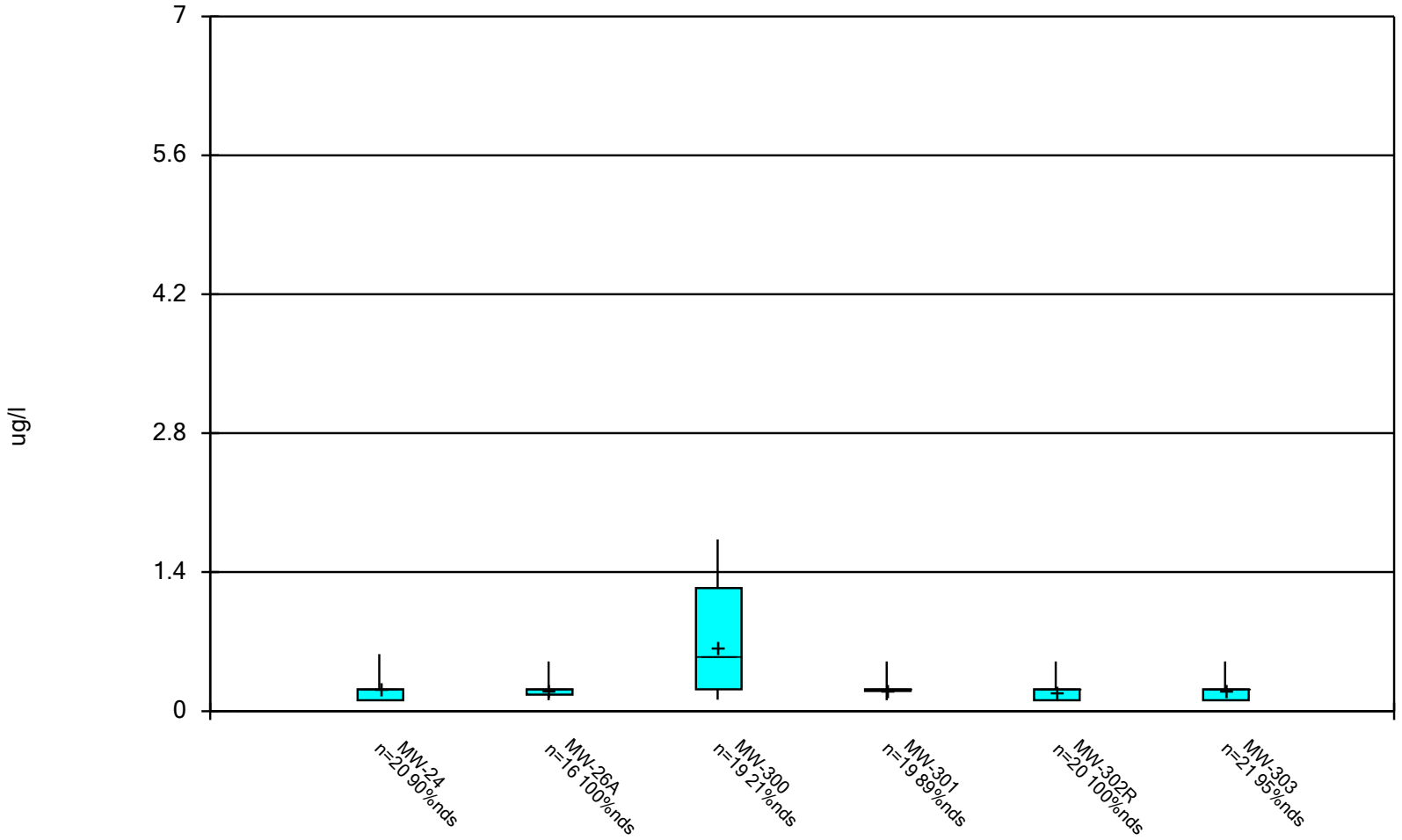
Box & Whiskers Plot



Constituent: Benzene Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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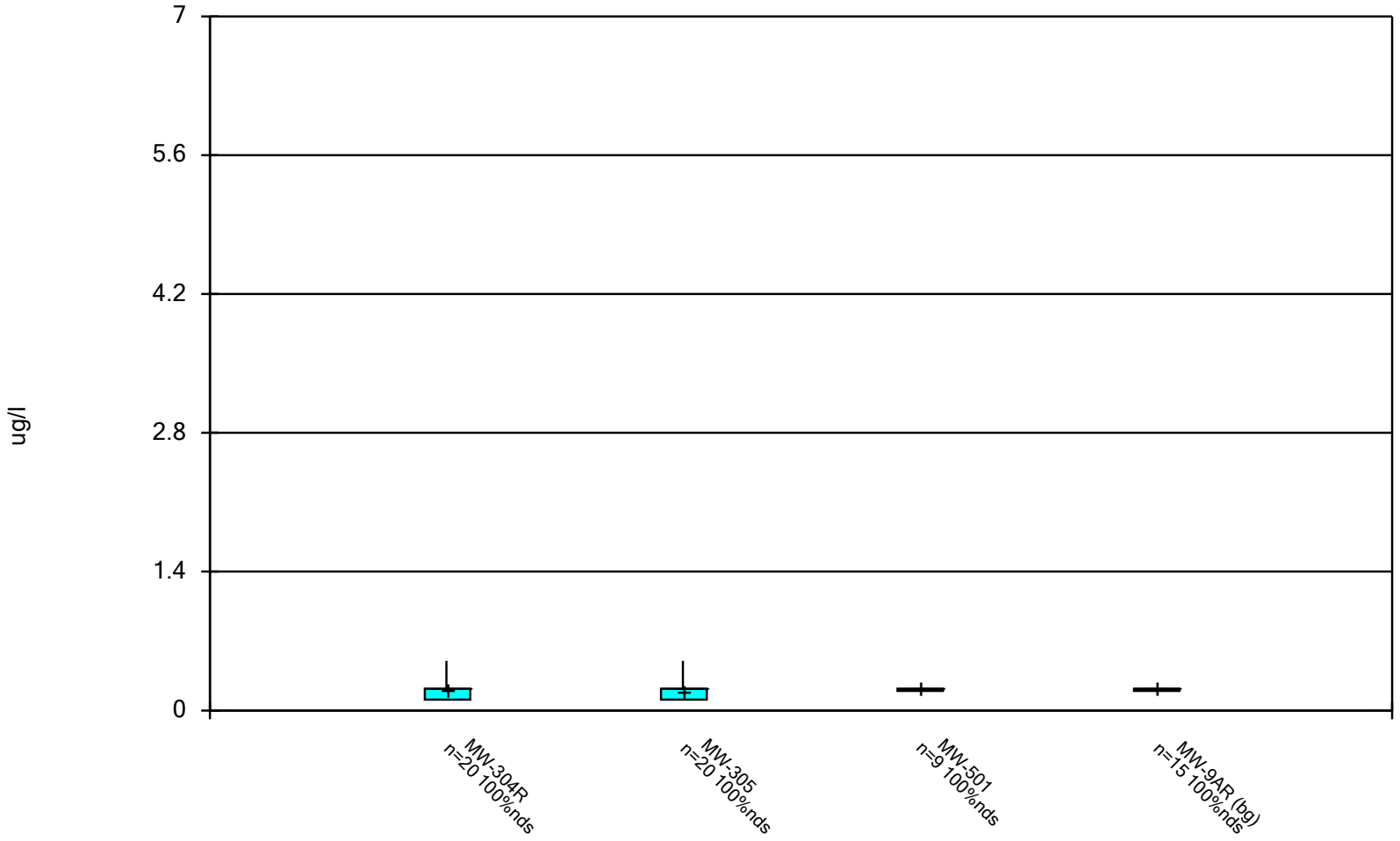
Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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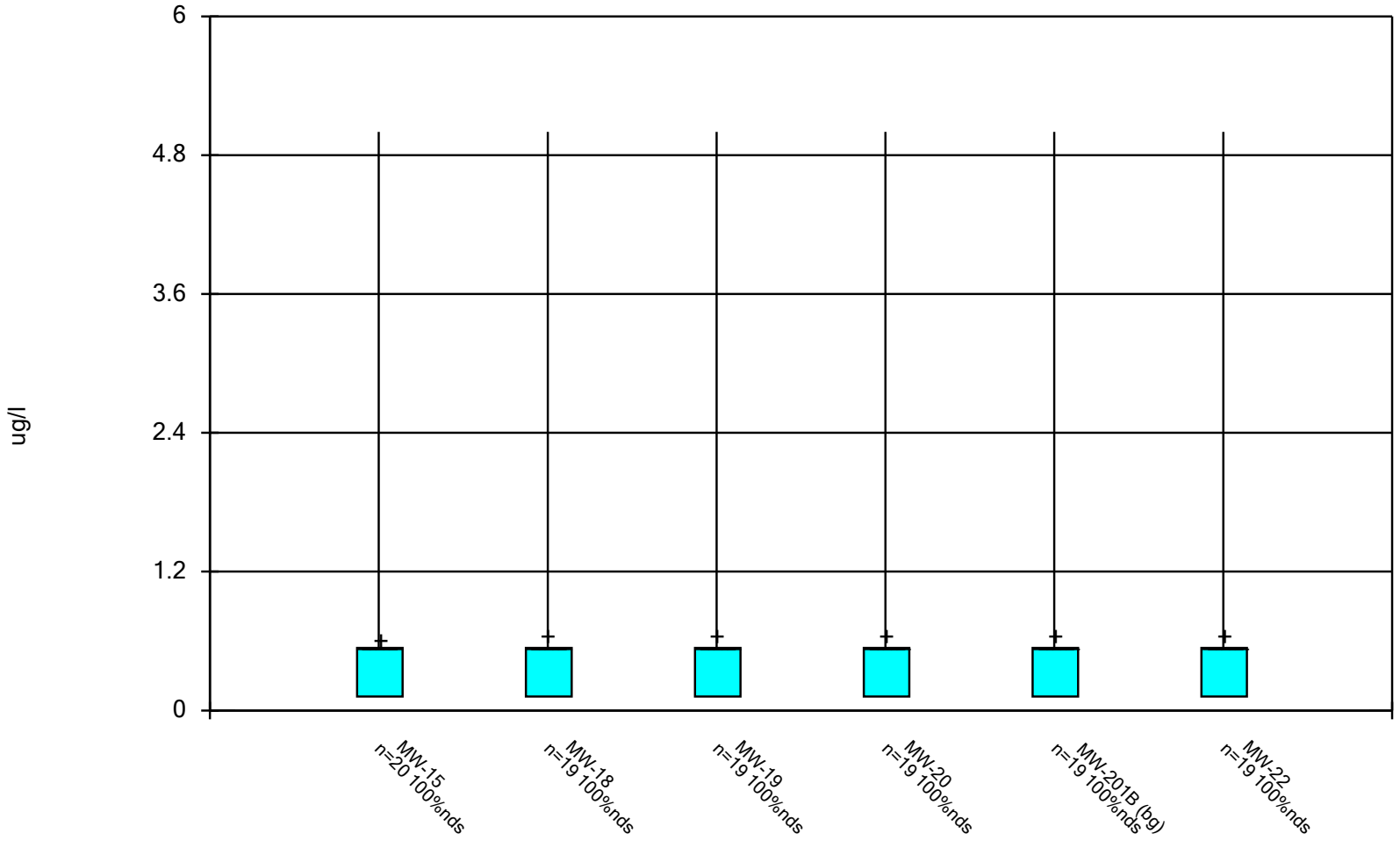
Linn County Data: CRLCSWA_Groundwater Database

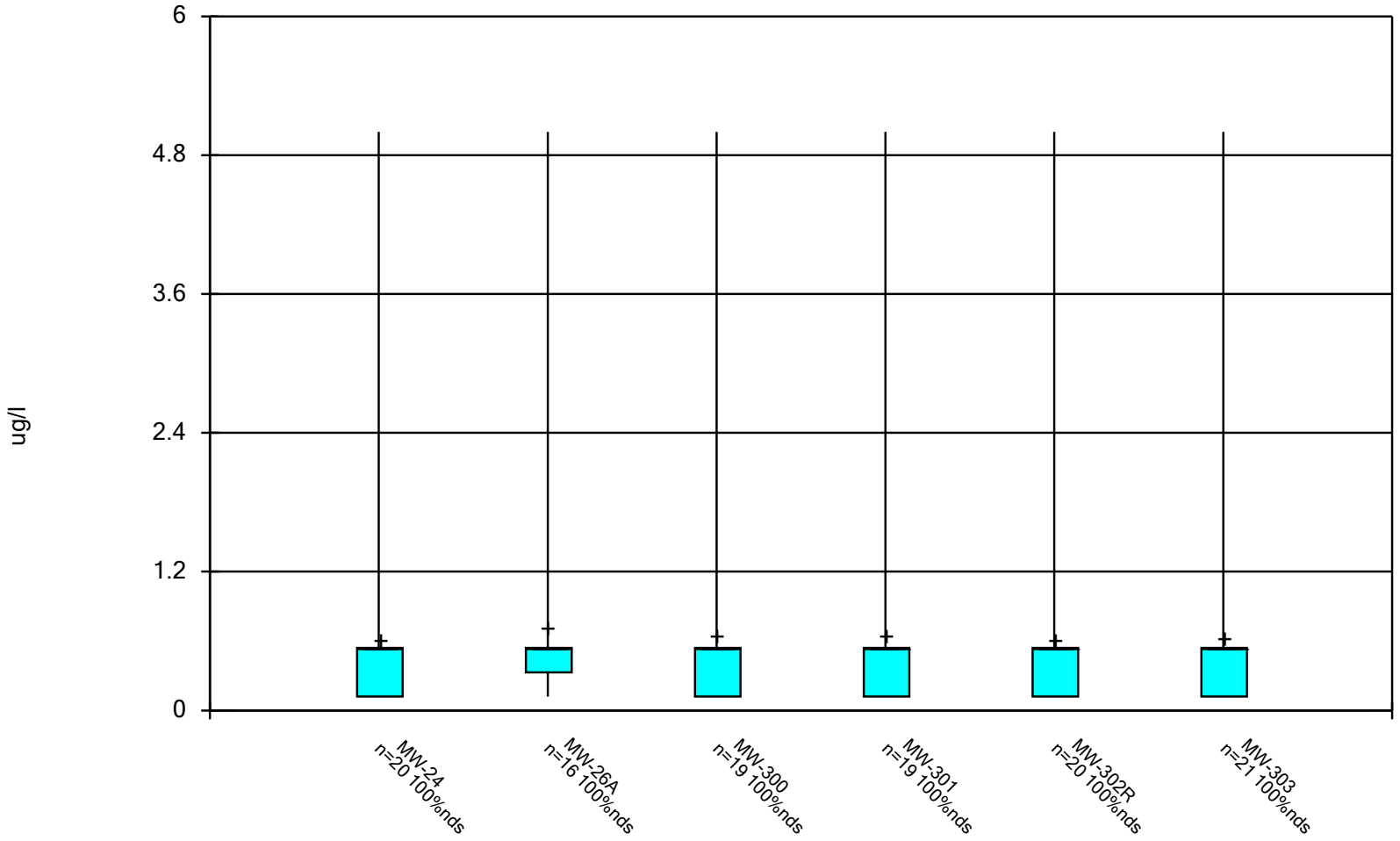
Box & Whiskers Plot



Constituent: Bromochloromethane Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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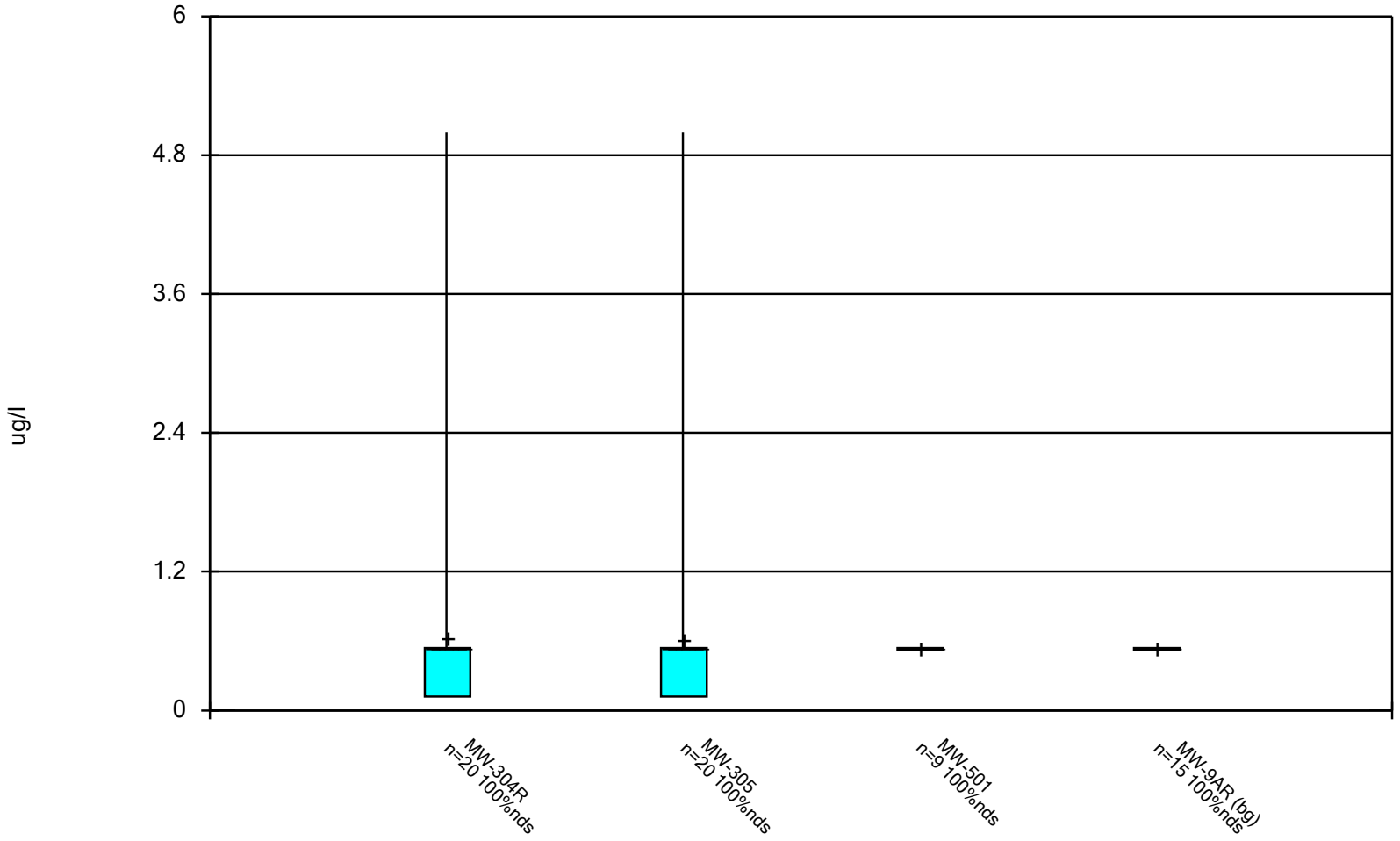
Linn County Data: CRLCSWA_Groundwater Database

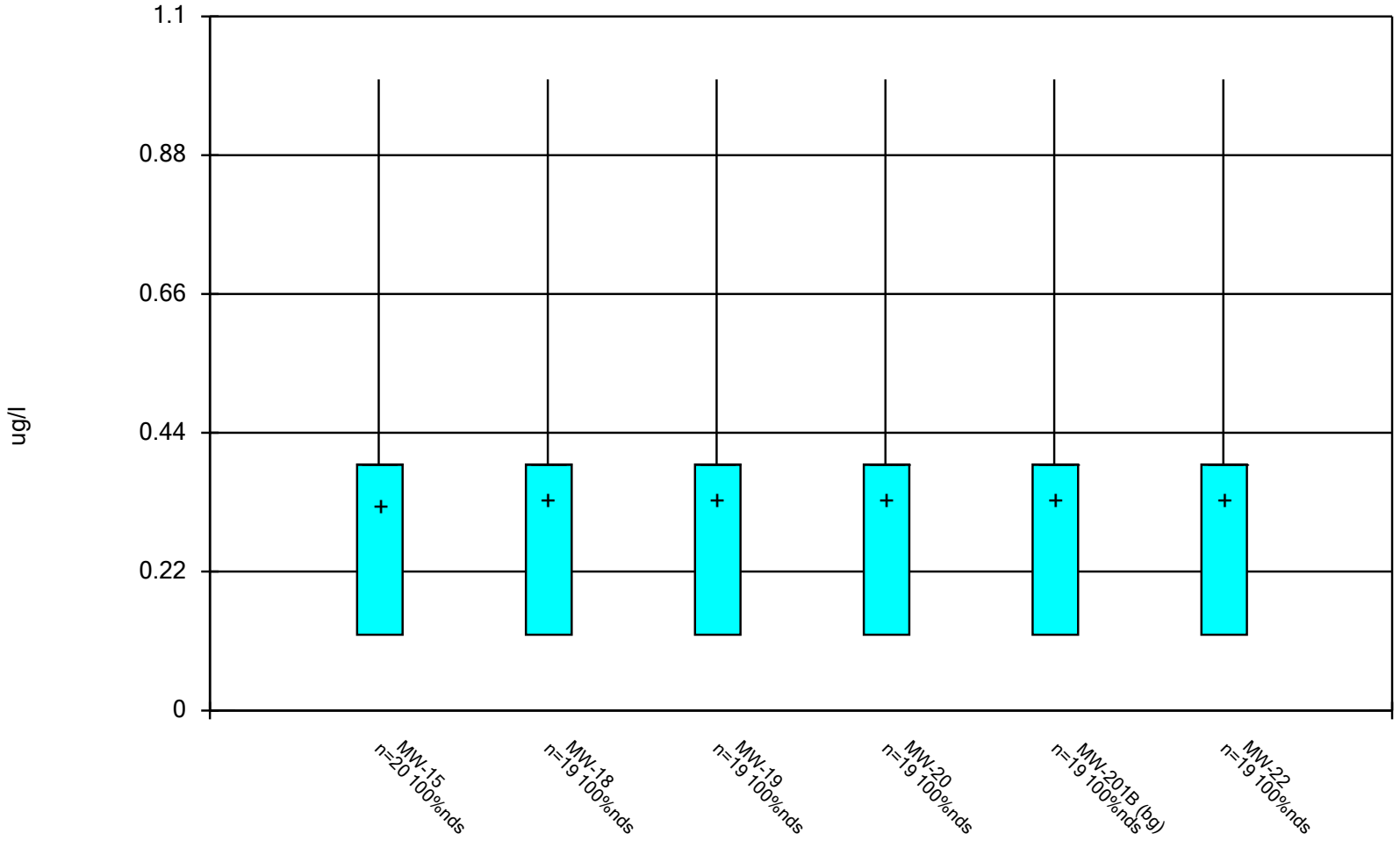
Box & Whiskers Plot



Constituent: Bromochloromethane Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

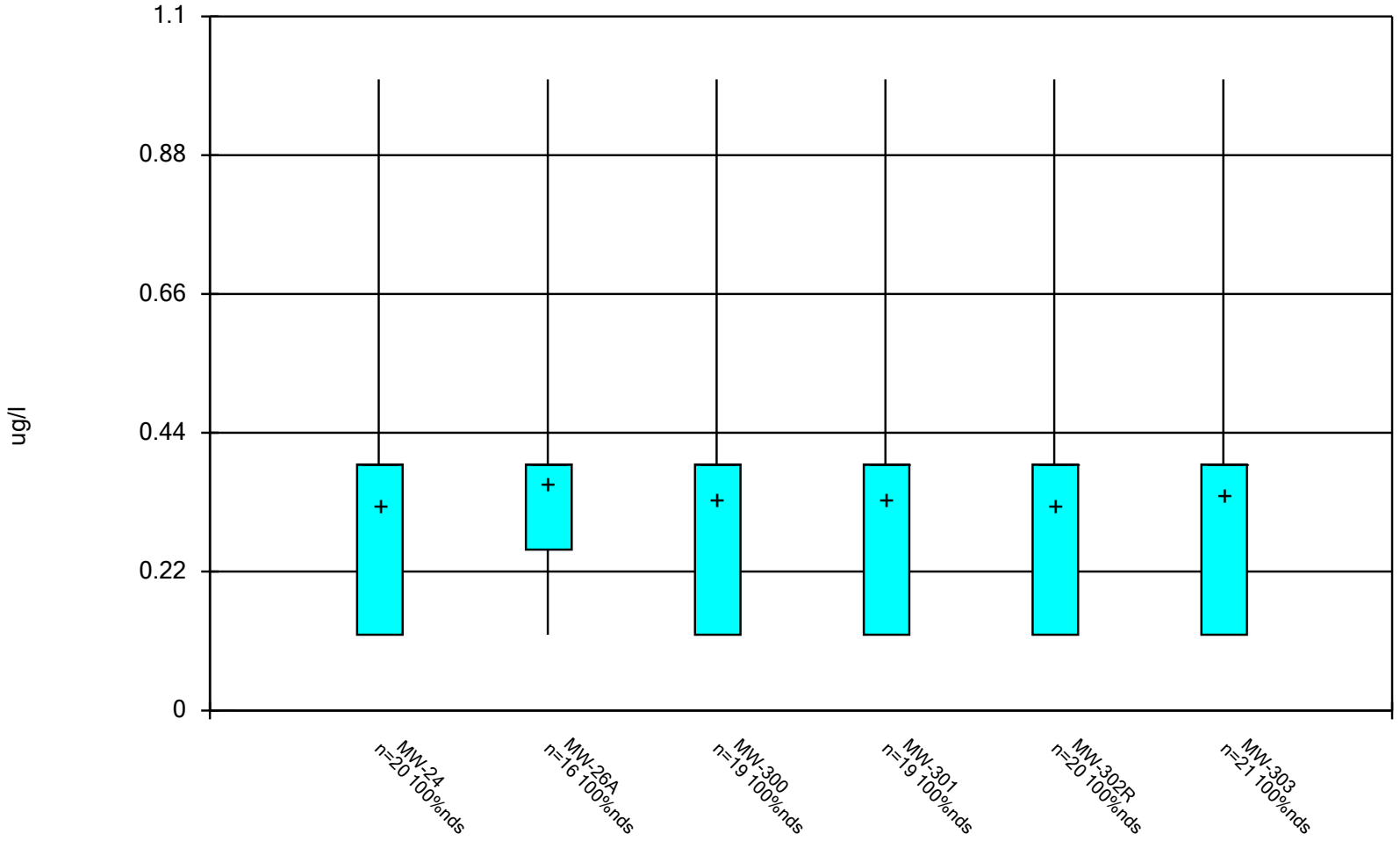
Box & Whiskers Plot



Constituent: Bromodichloromethane Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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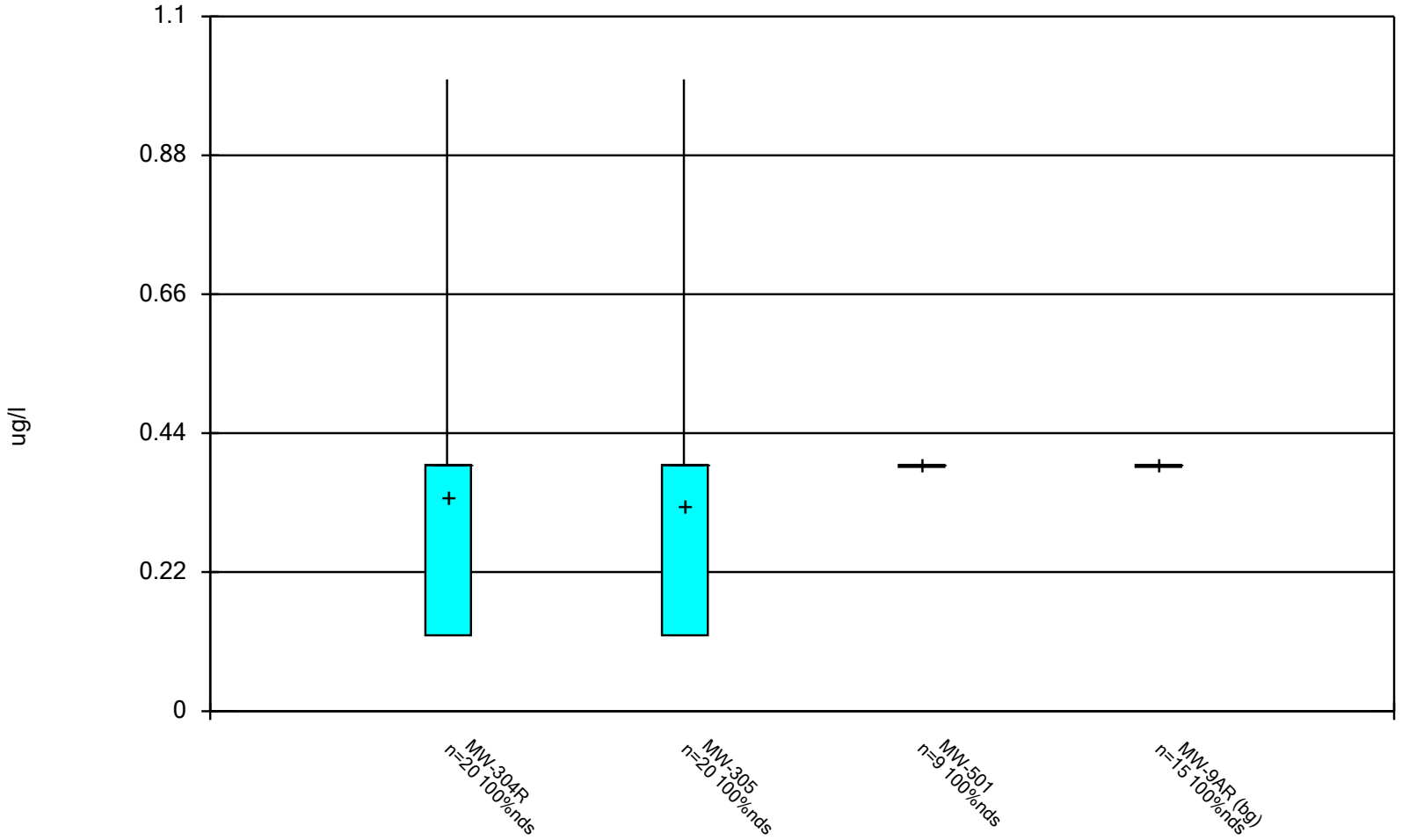
Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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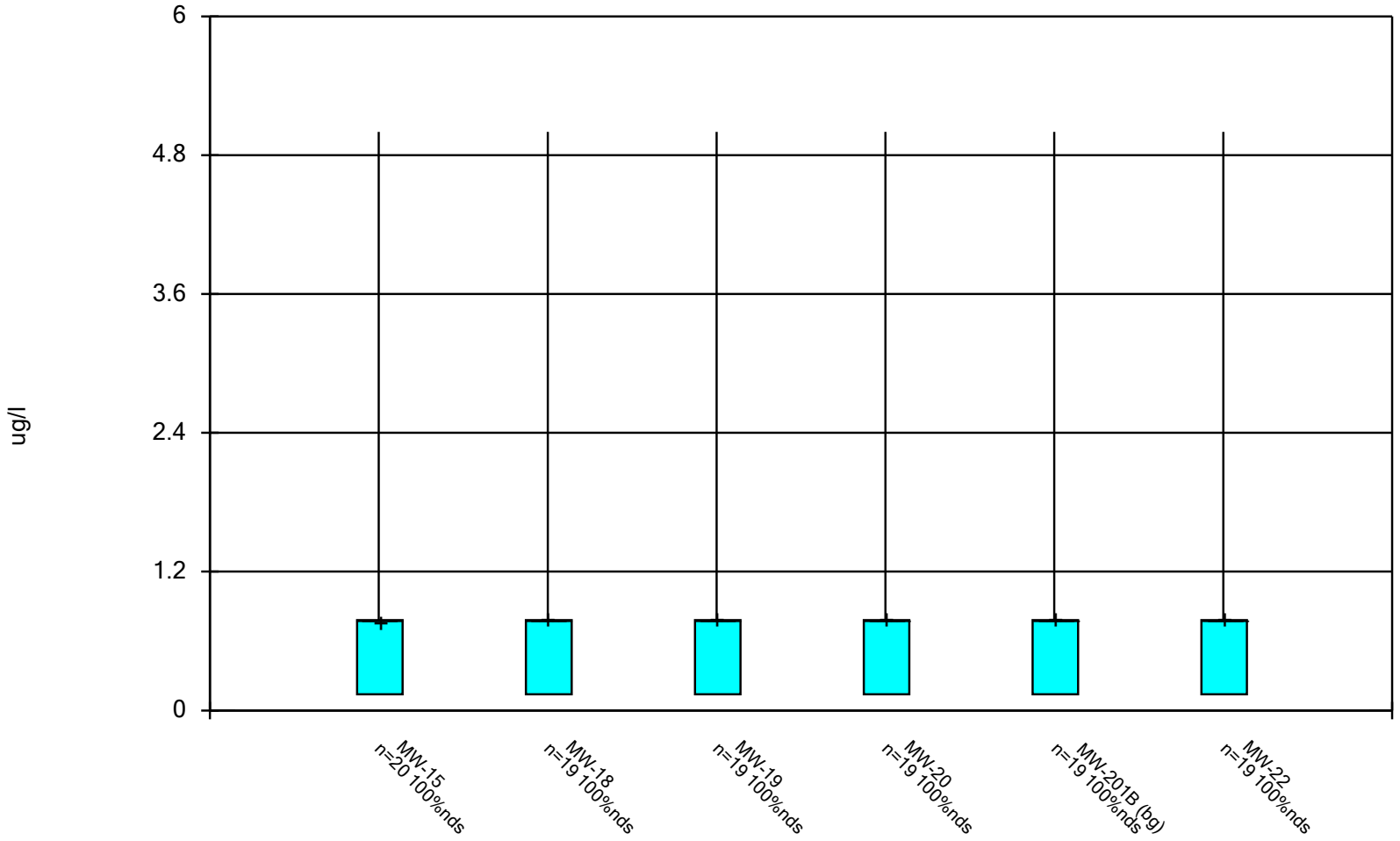
Linn County Data: CRLCSWA_Groundwater Database

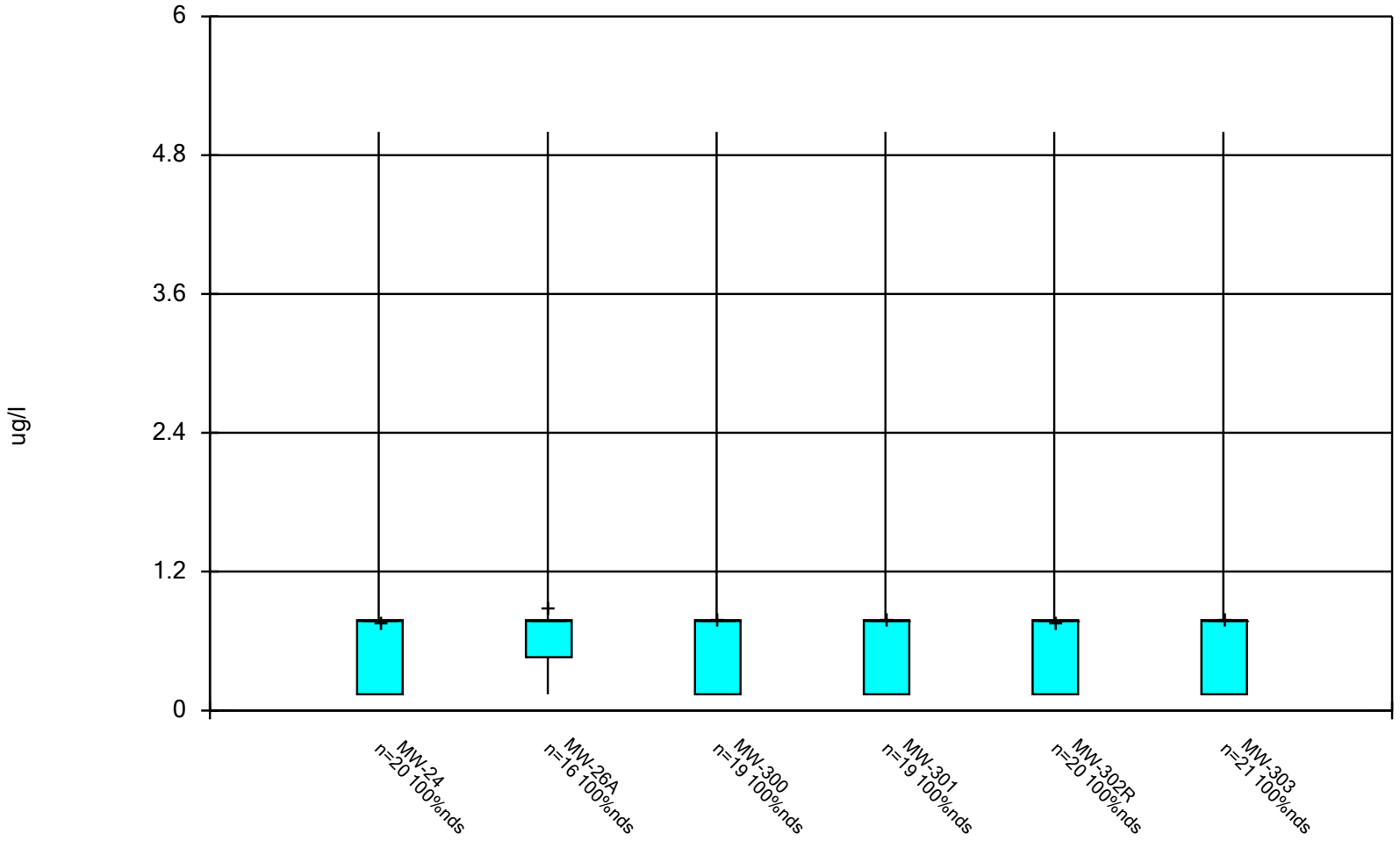
Box & Whiskers Plot



Constituent: Bromoform Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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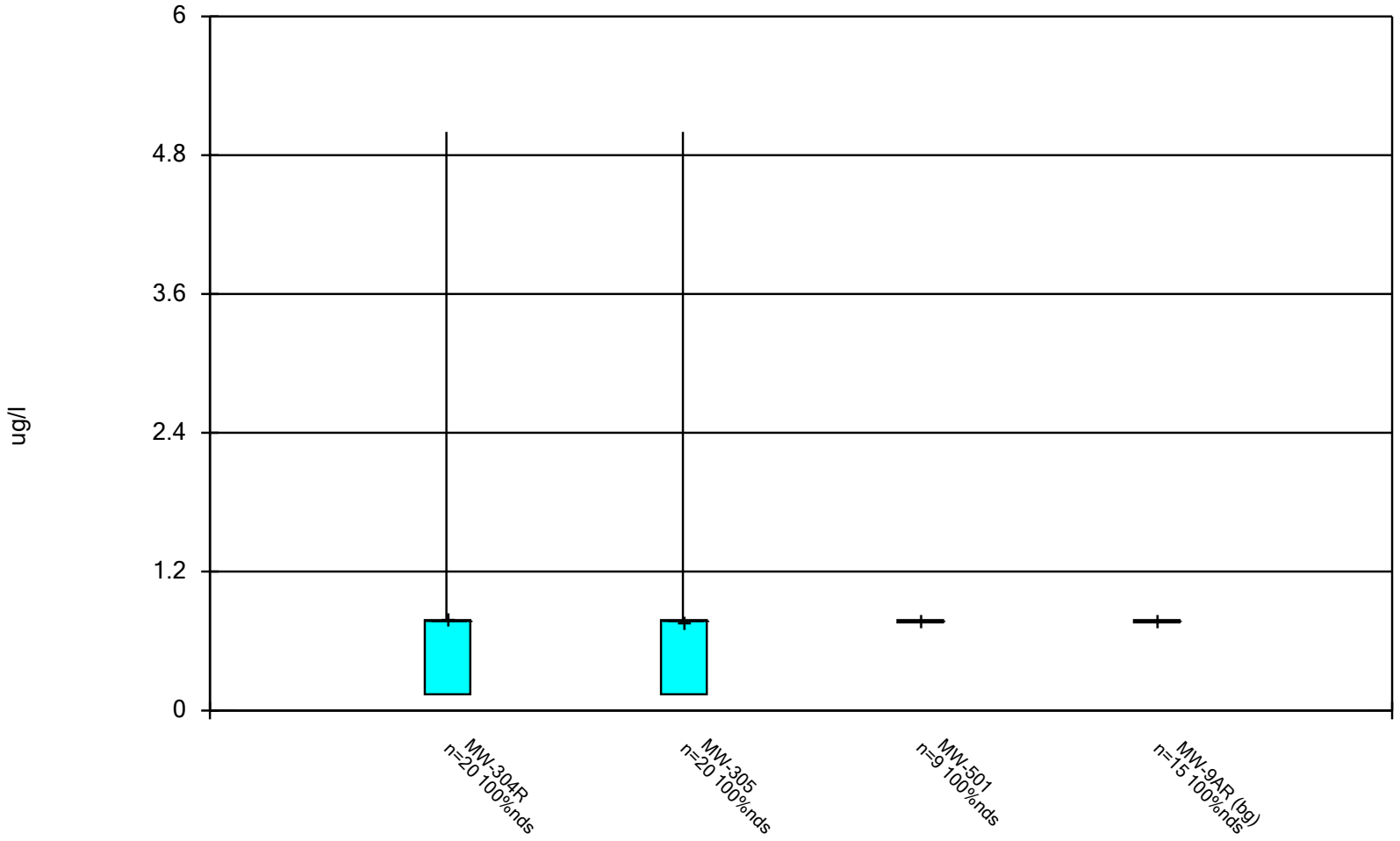
Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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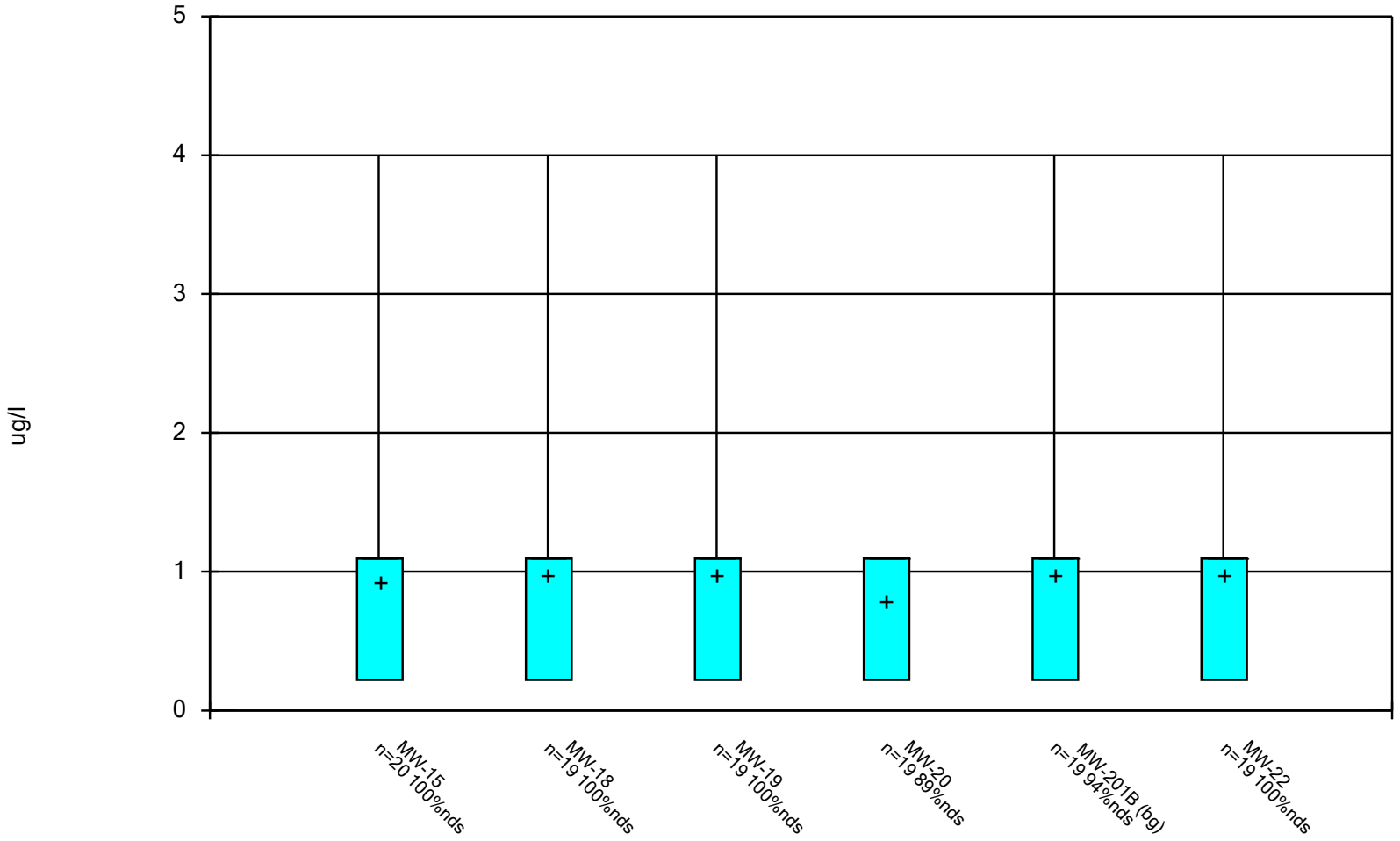
Linn County Data: CRLCSWA_Groundwater Database

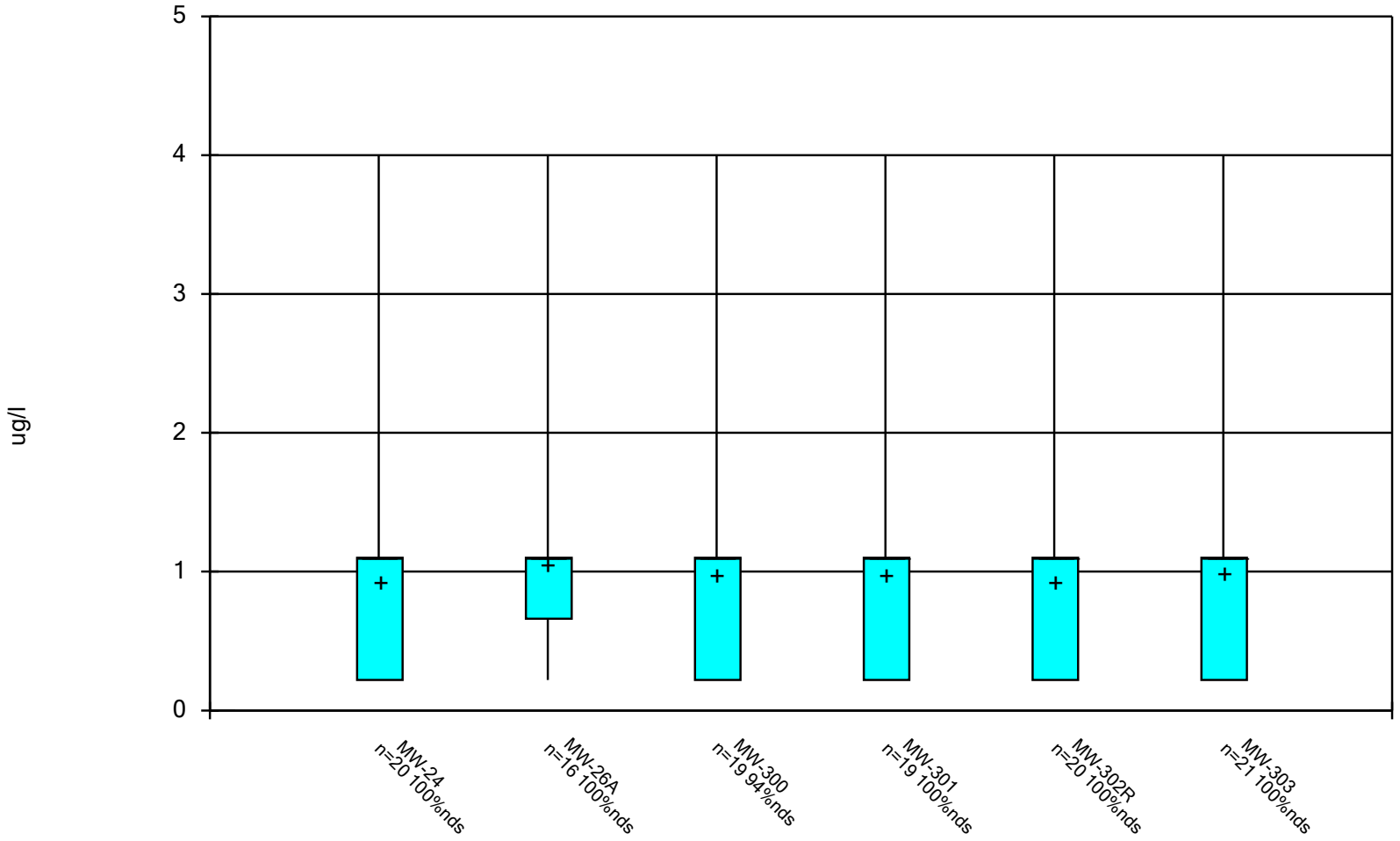
Box & Whiskers Plot



Constituent: Bromomethane Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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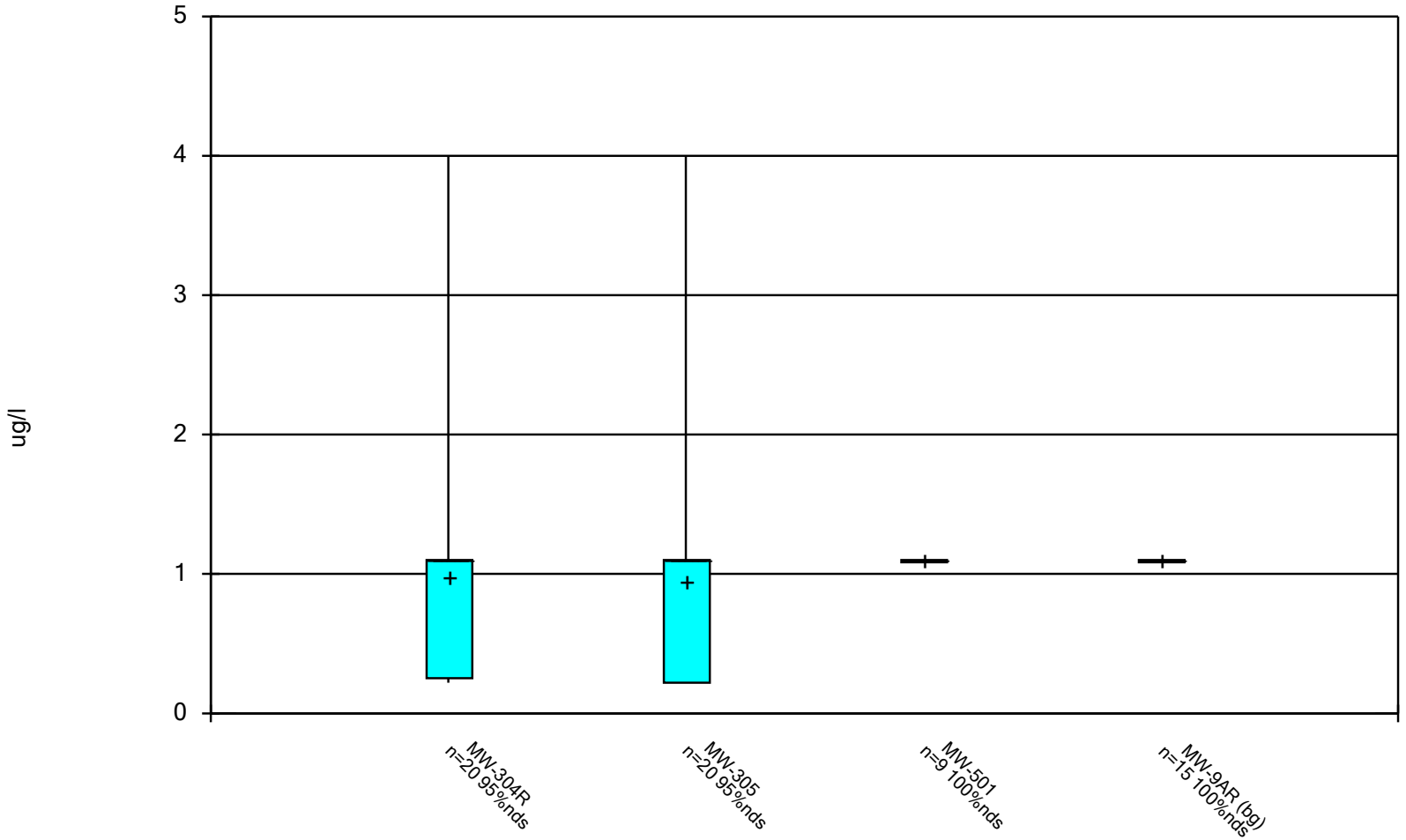
Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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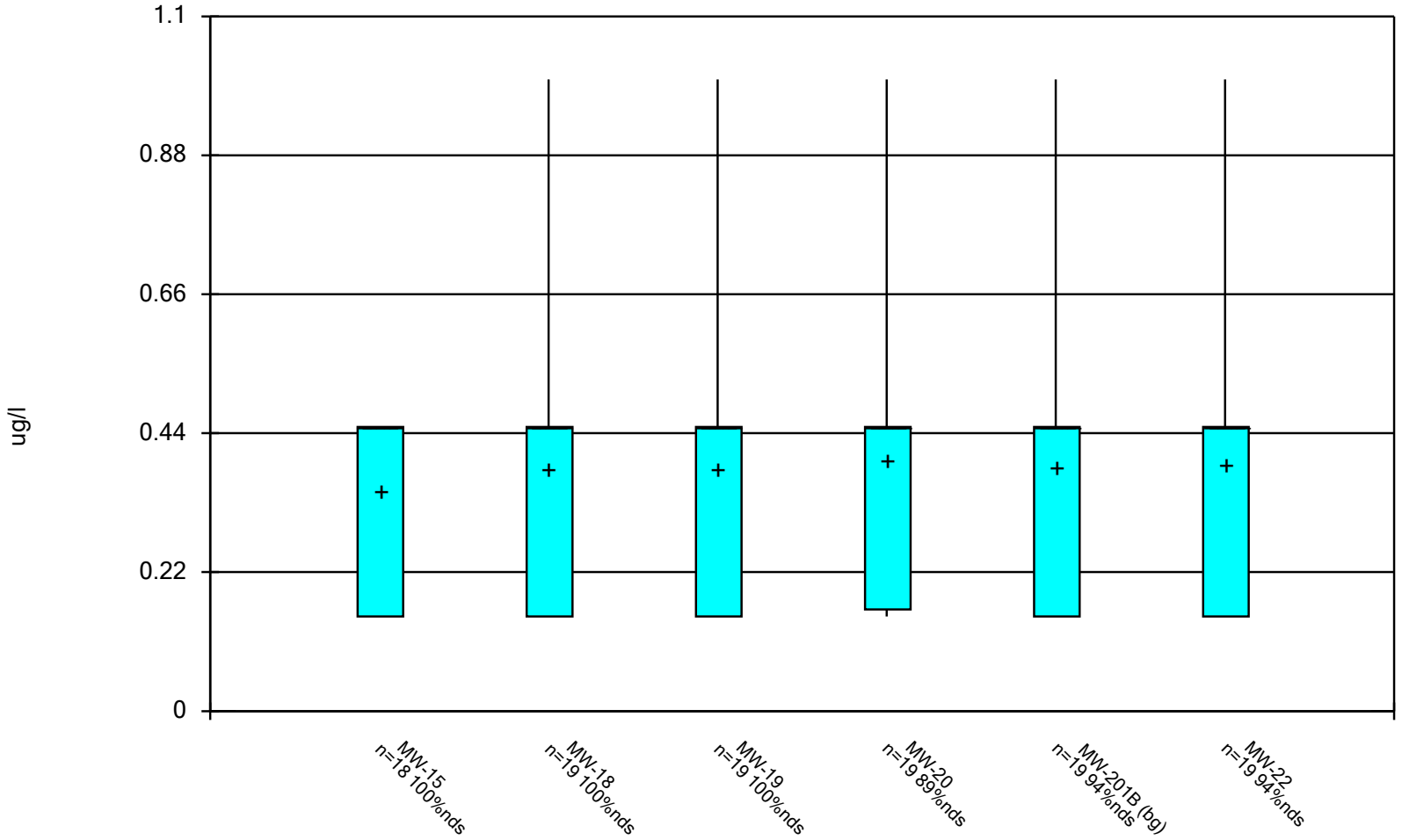
Linn County Data: CRLCSWA_Groundwater Database

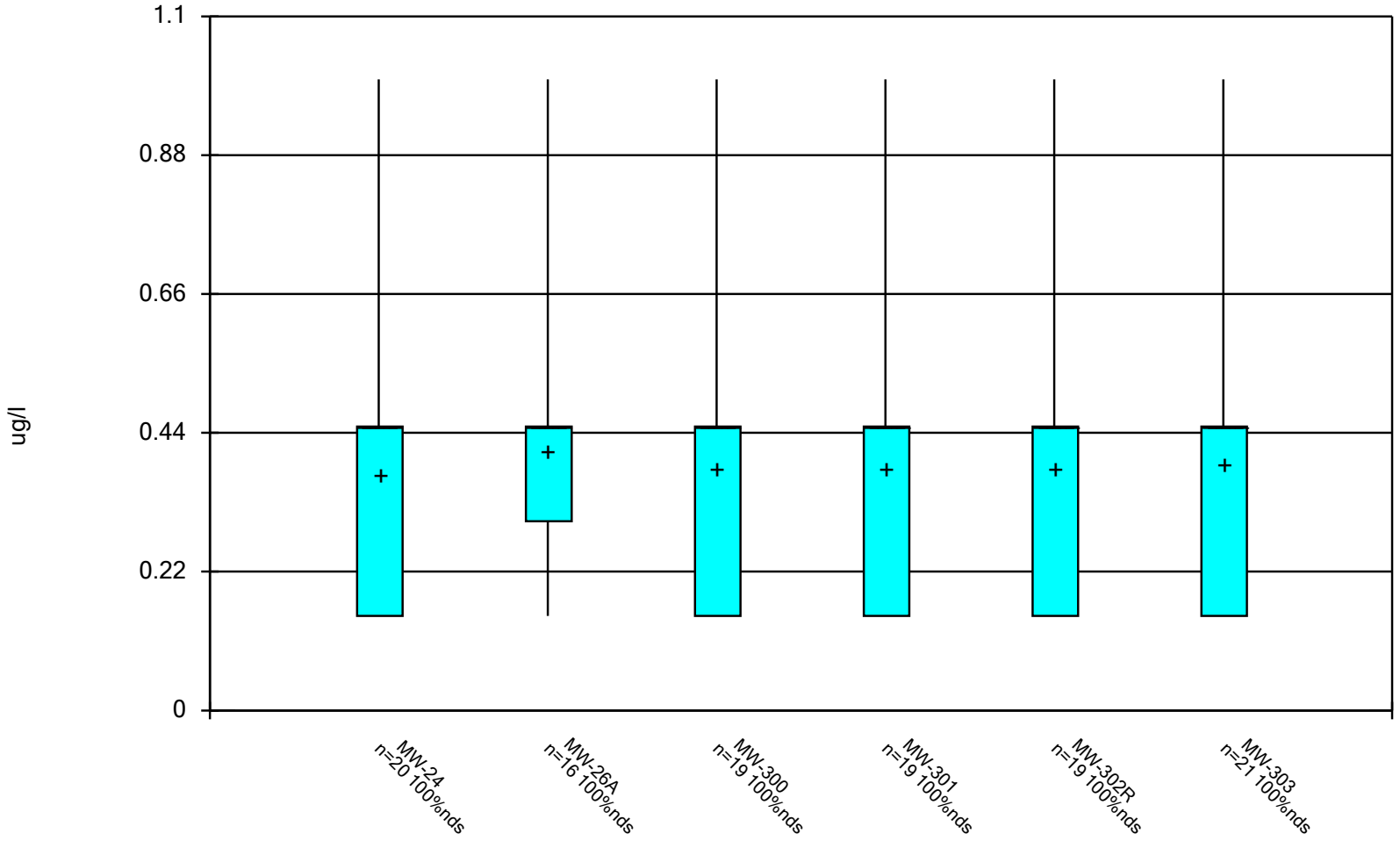
Box & Whiskers Plot



Constituent: Carbon Disulfide Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

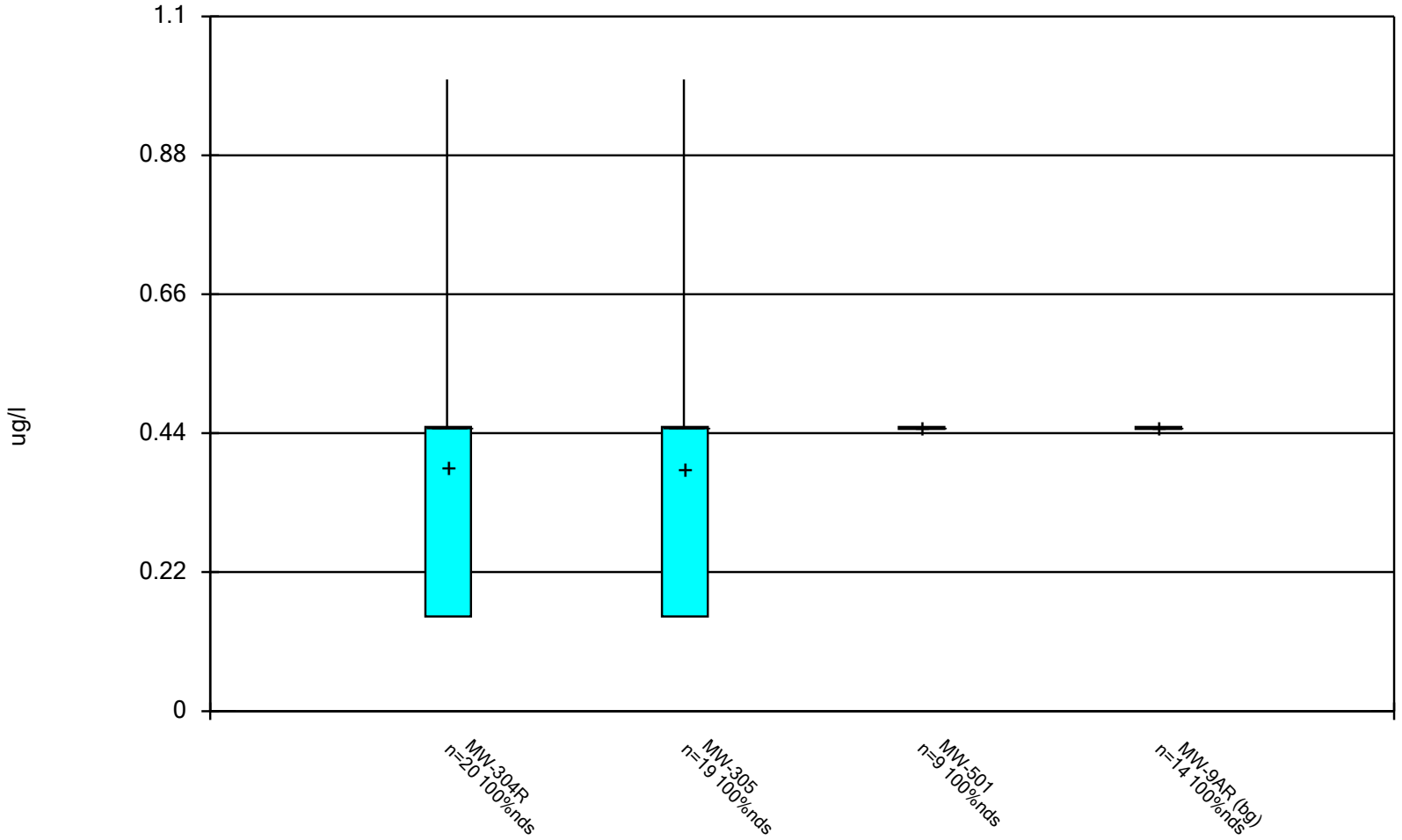
Box & Whiskers Plot



Constituent: Carbon Disulfide Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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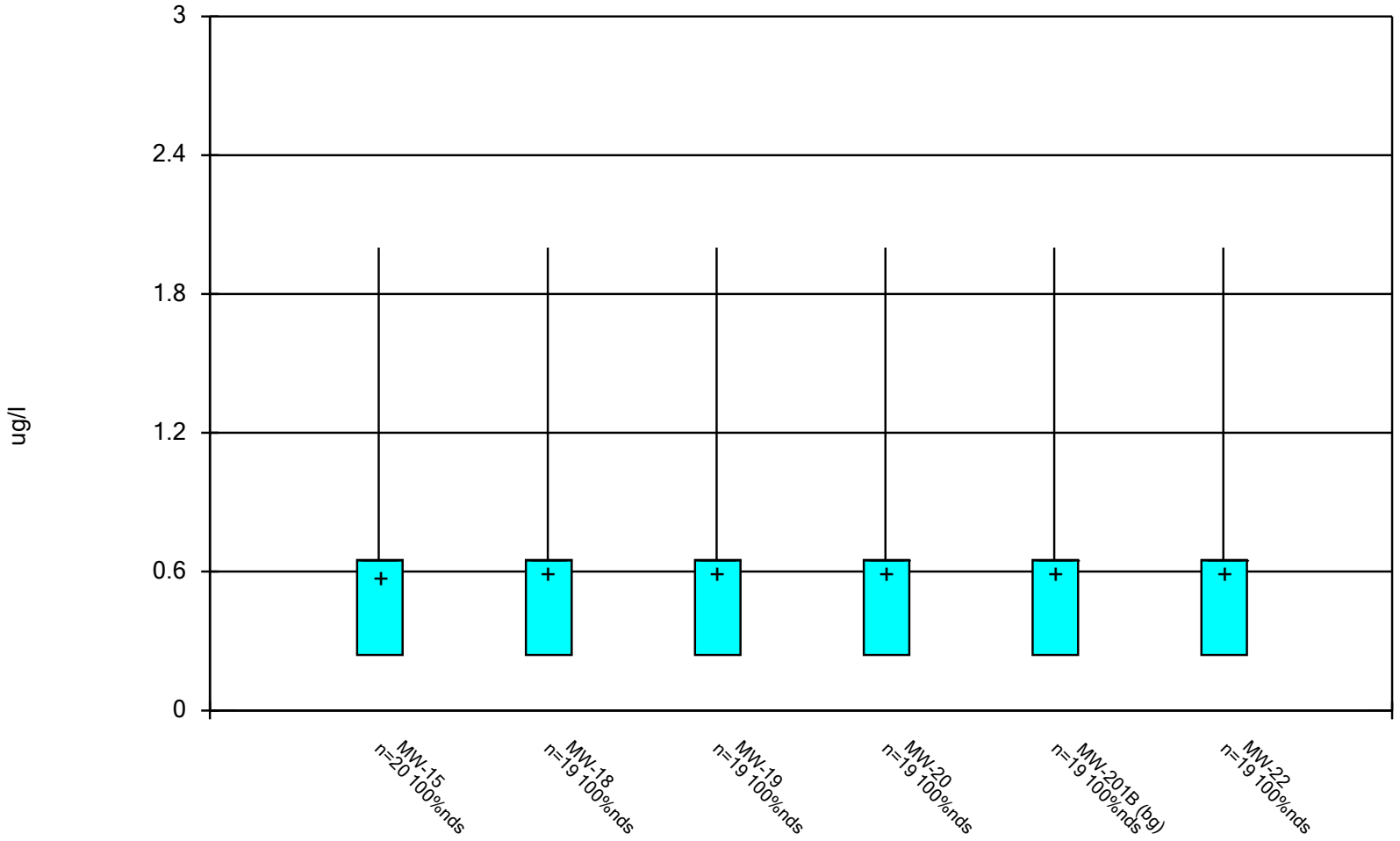
Linn County Data: CRLCSWA_Groundwater Database

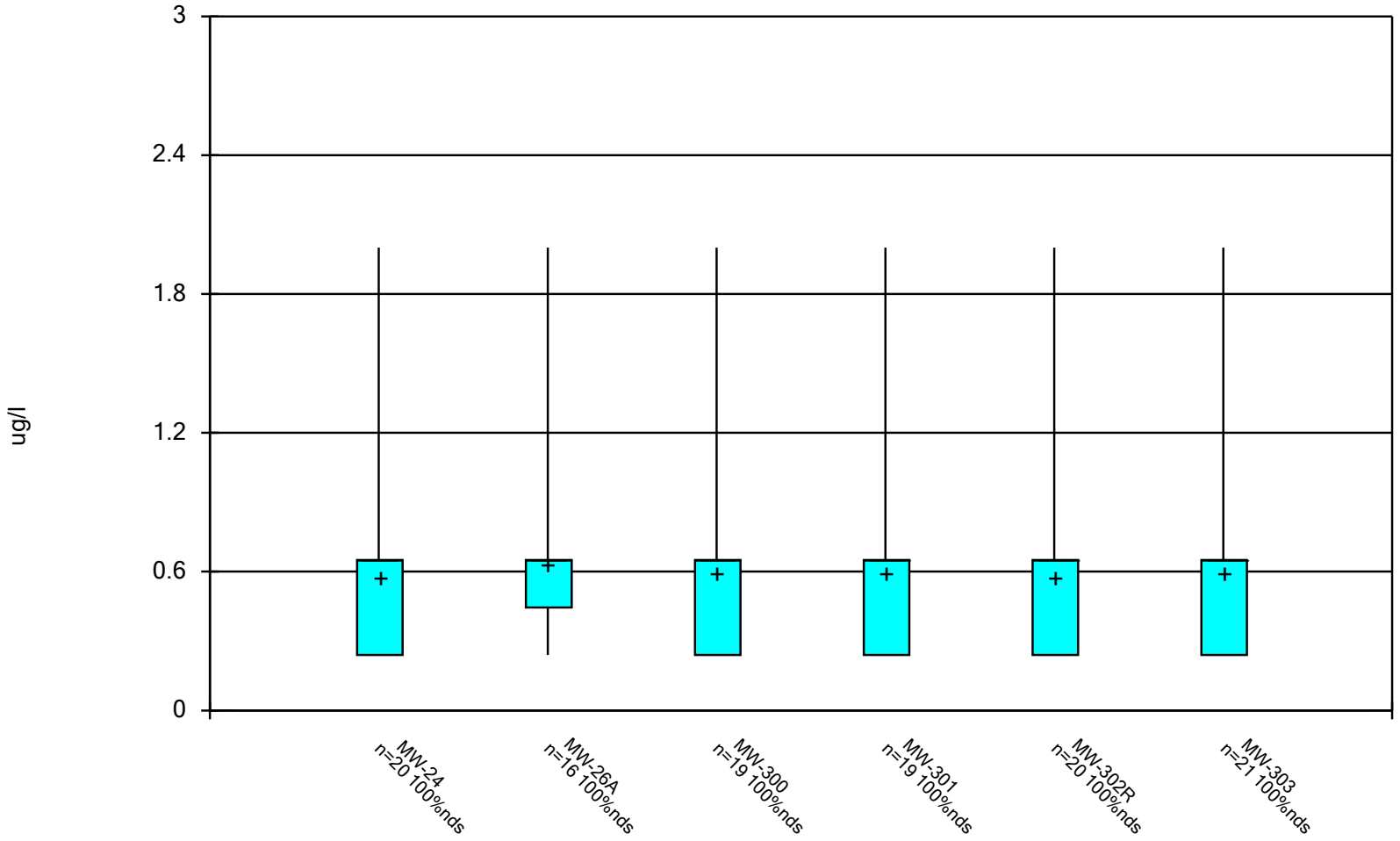
Box & Whiskers Plot



Constituent: Carbon Tetrachloride Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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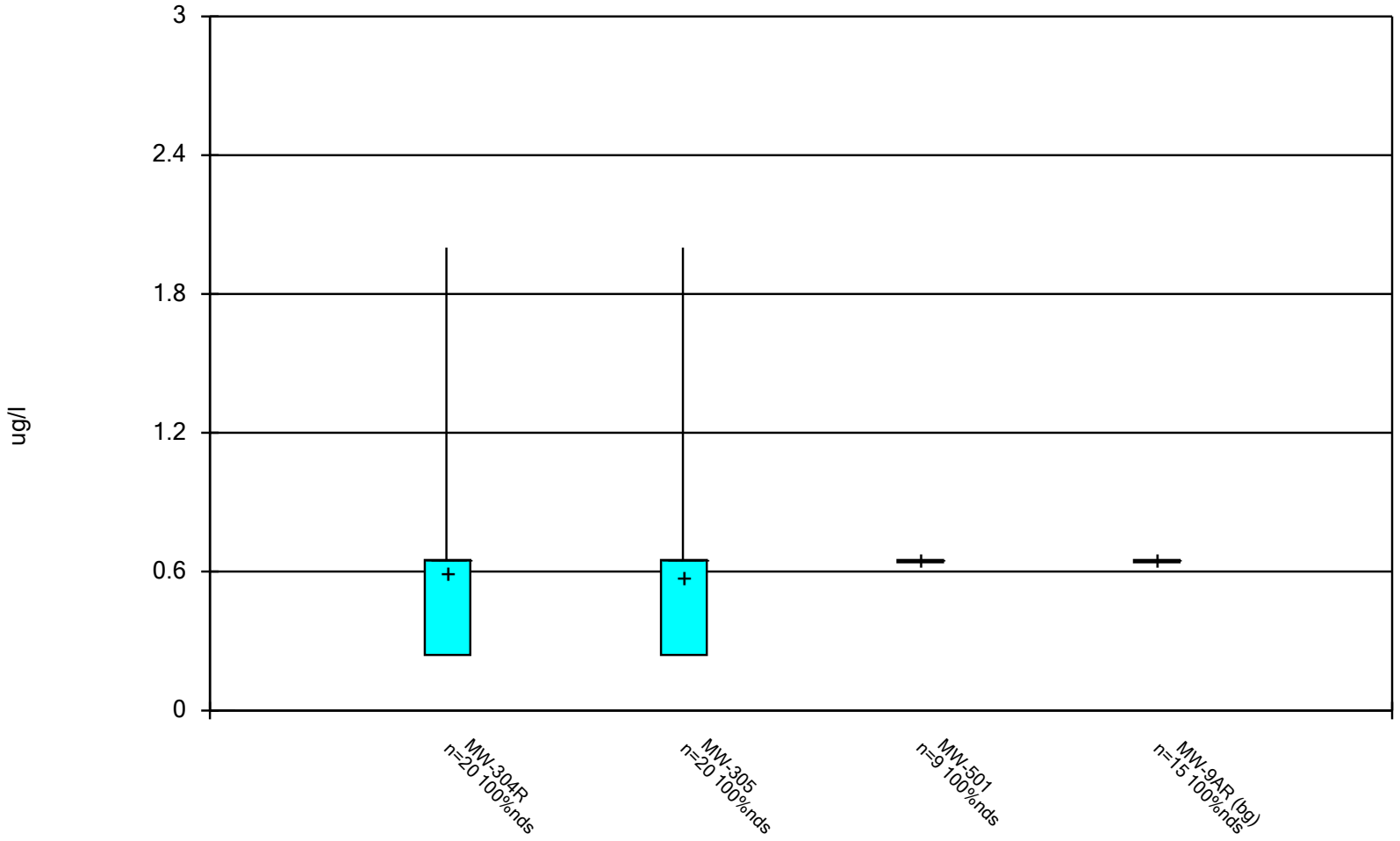
Linn County Data: CRLCSWA_Groundwater Database

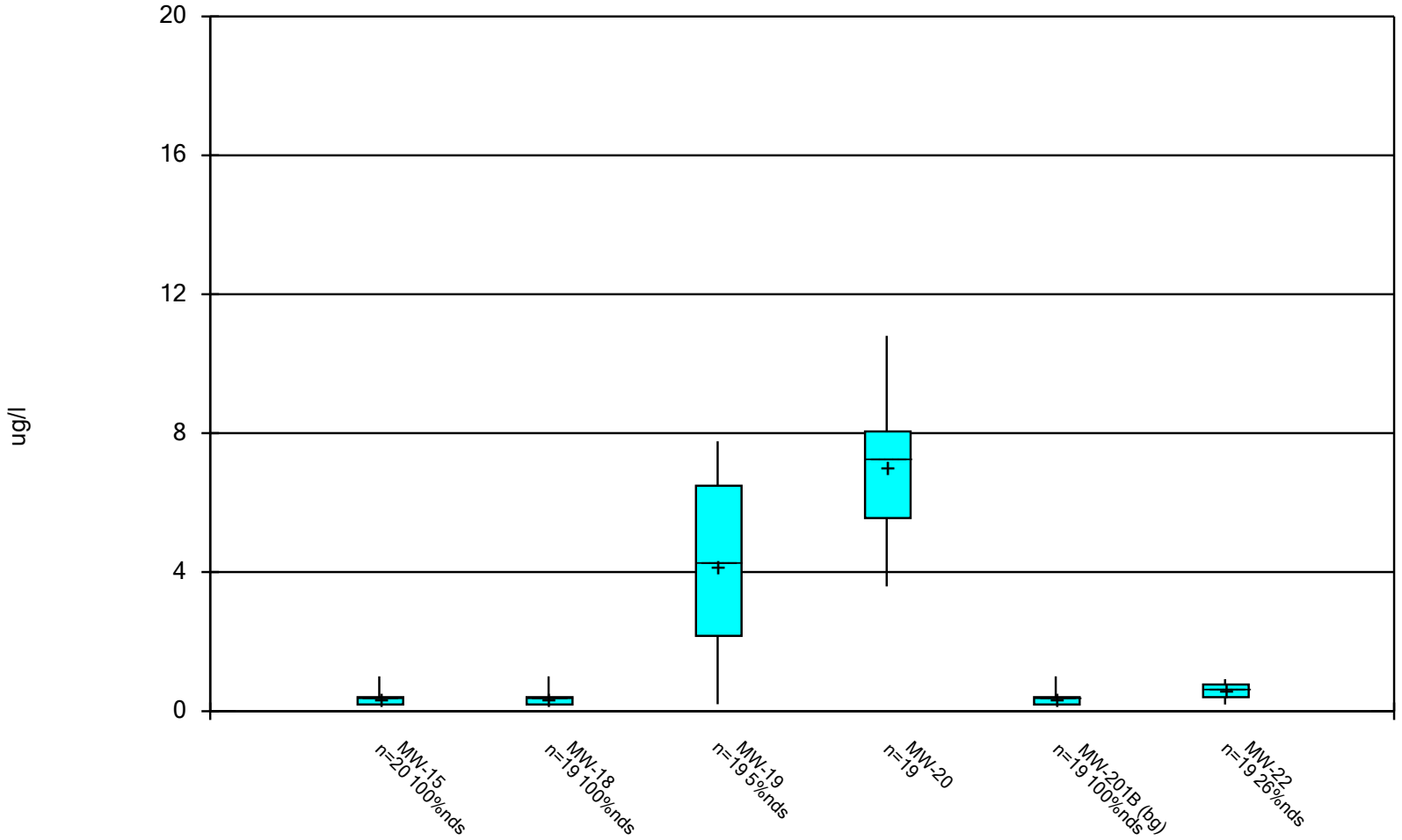
Box & Whiskers Plot



Constituent: Carbon Tetrachloride Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

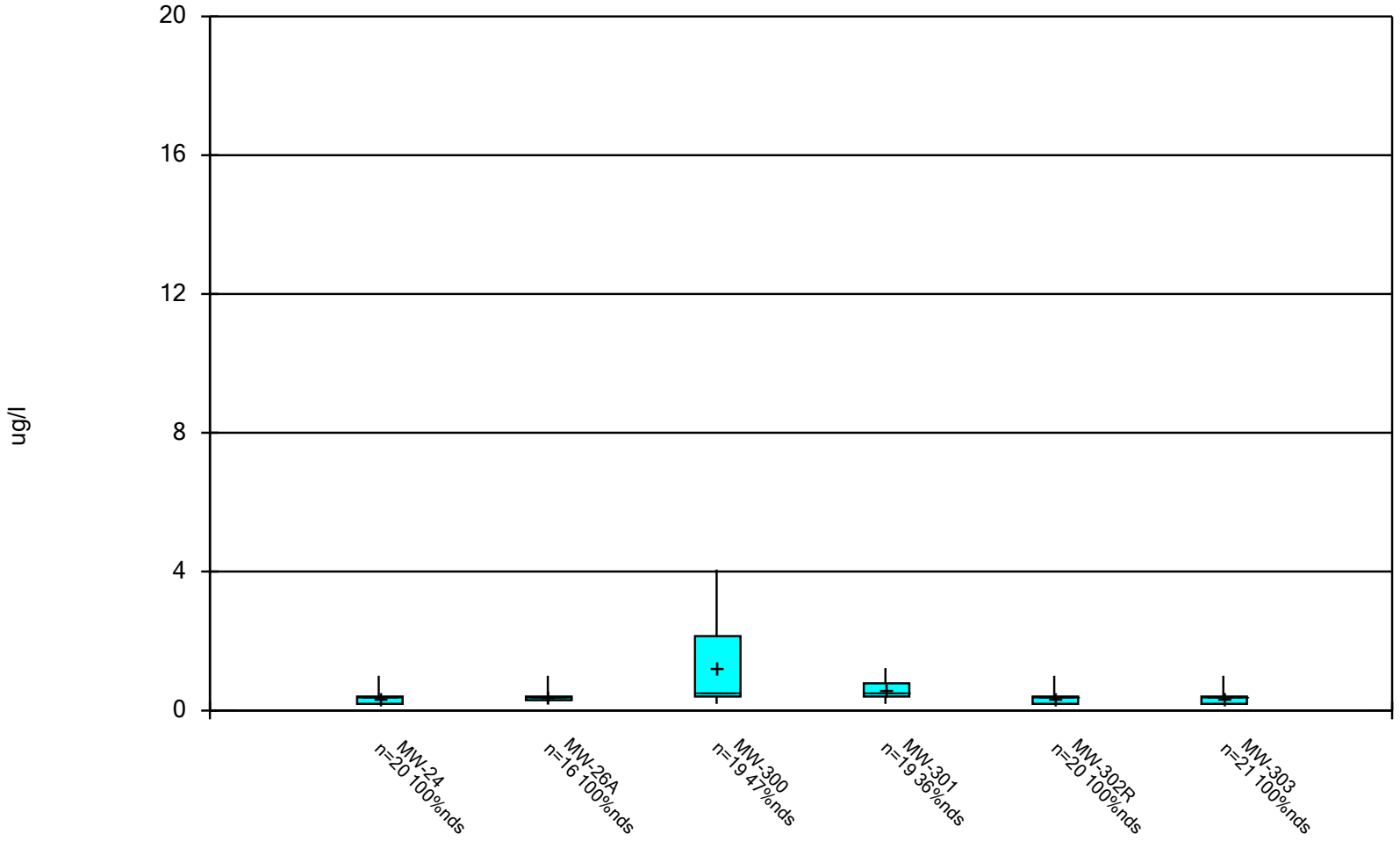
Box & Whiskers Plot



Constituent: Chlorobenzene Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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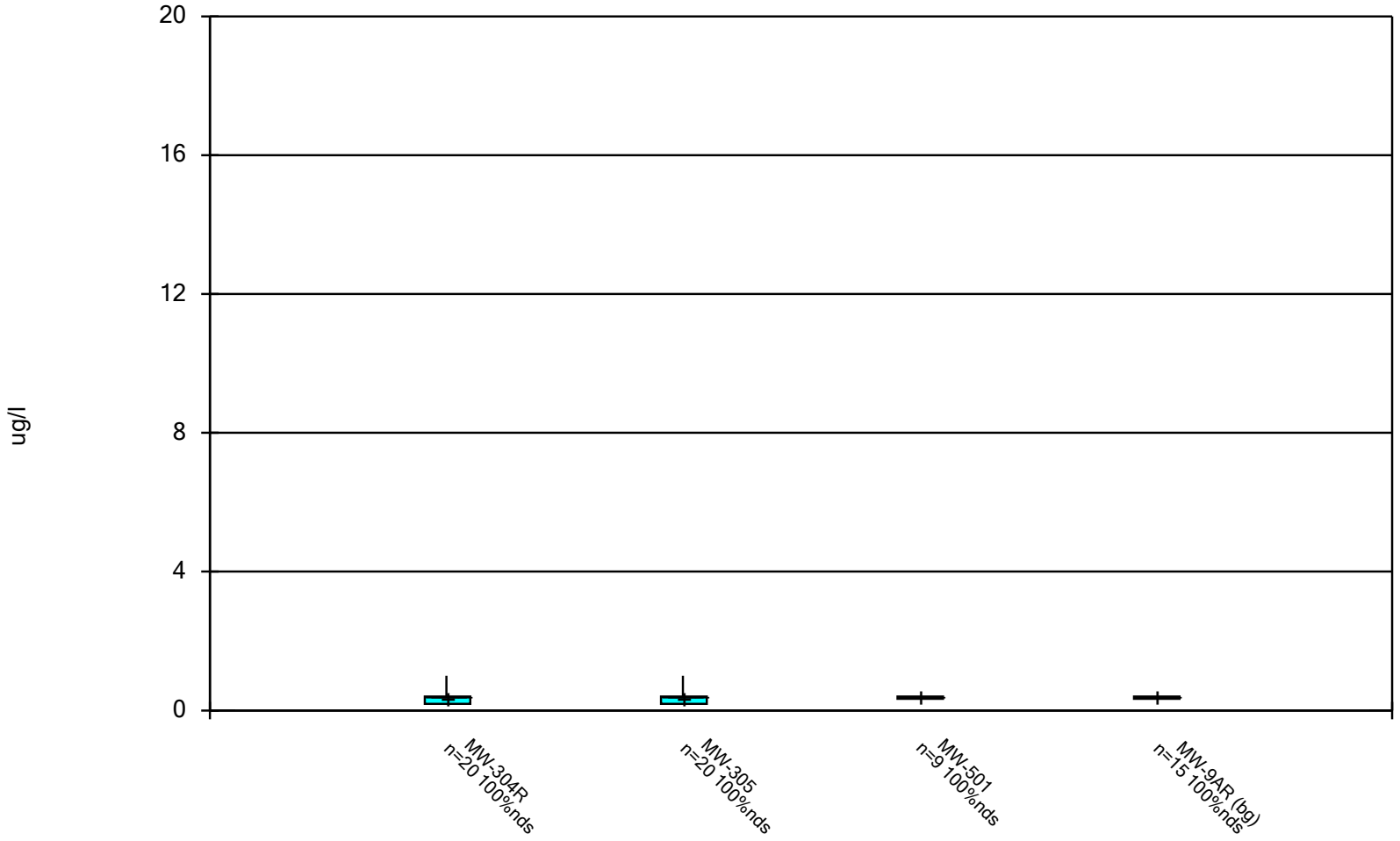
Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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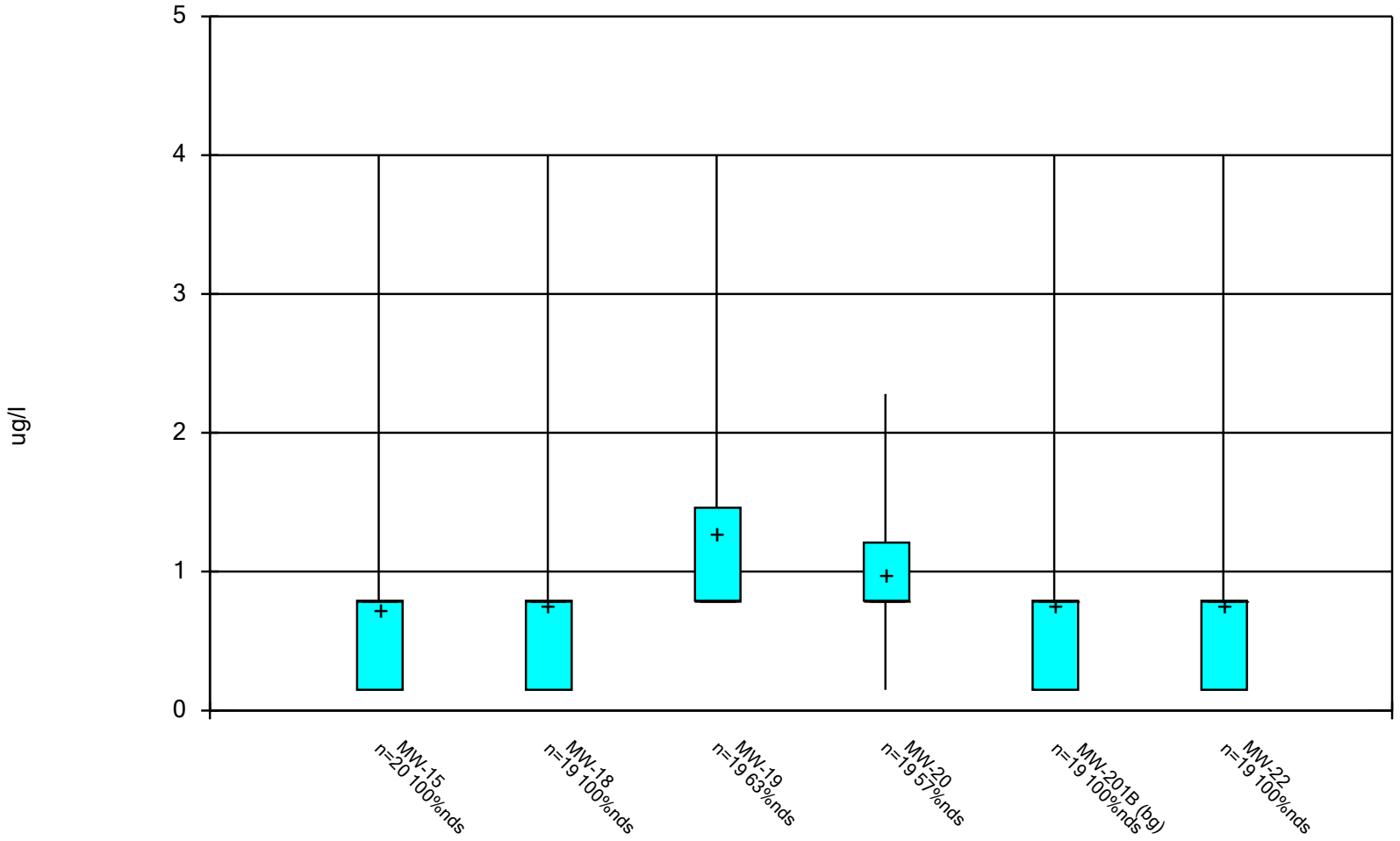
Linn County Data: CRLCSWA_Groundwater Database

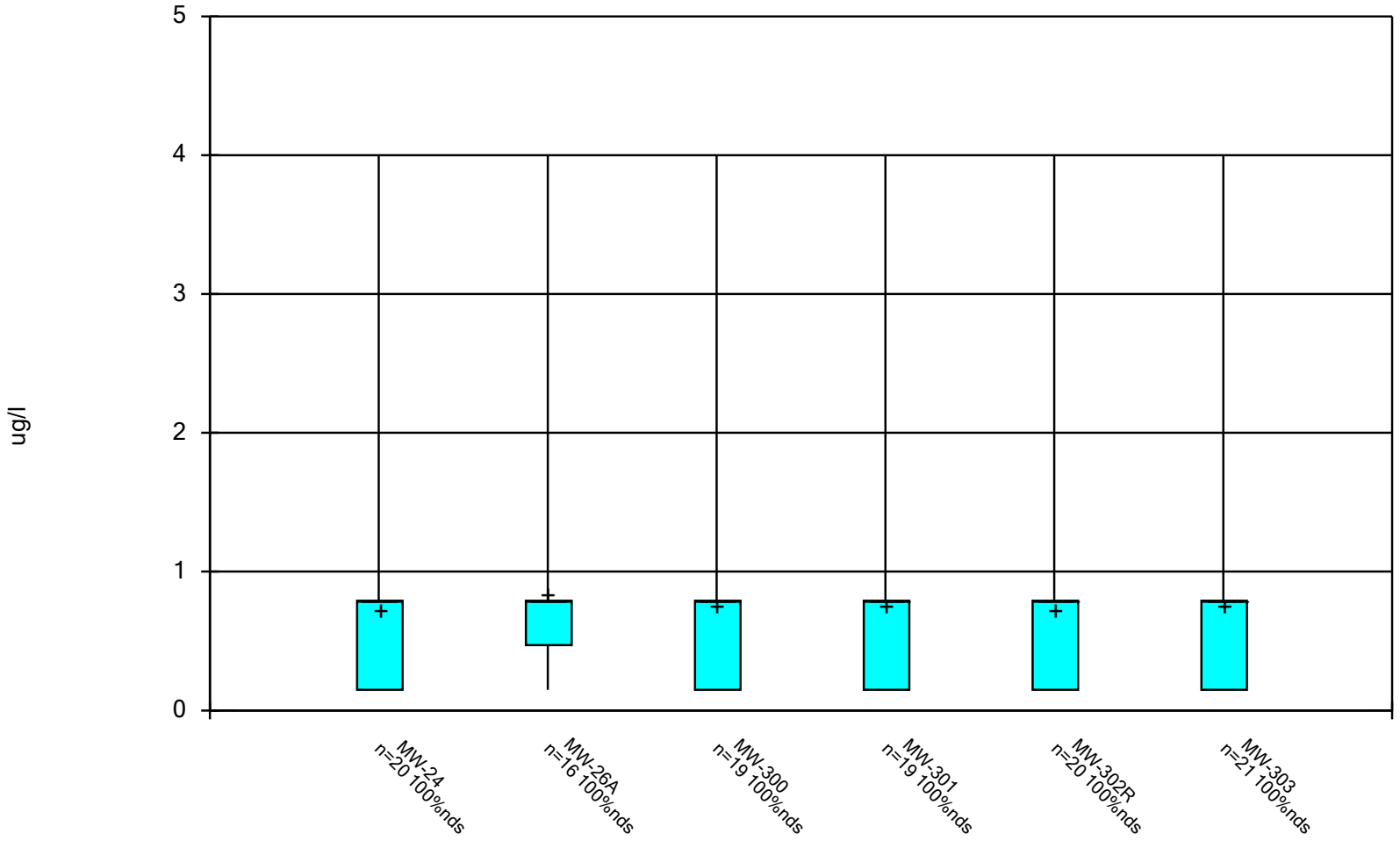
Box & Whiskers Plot



Constituent: Chloroethane Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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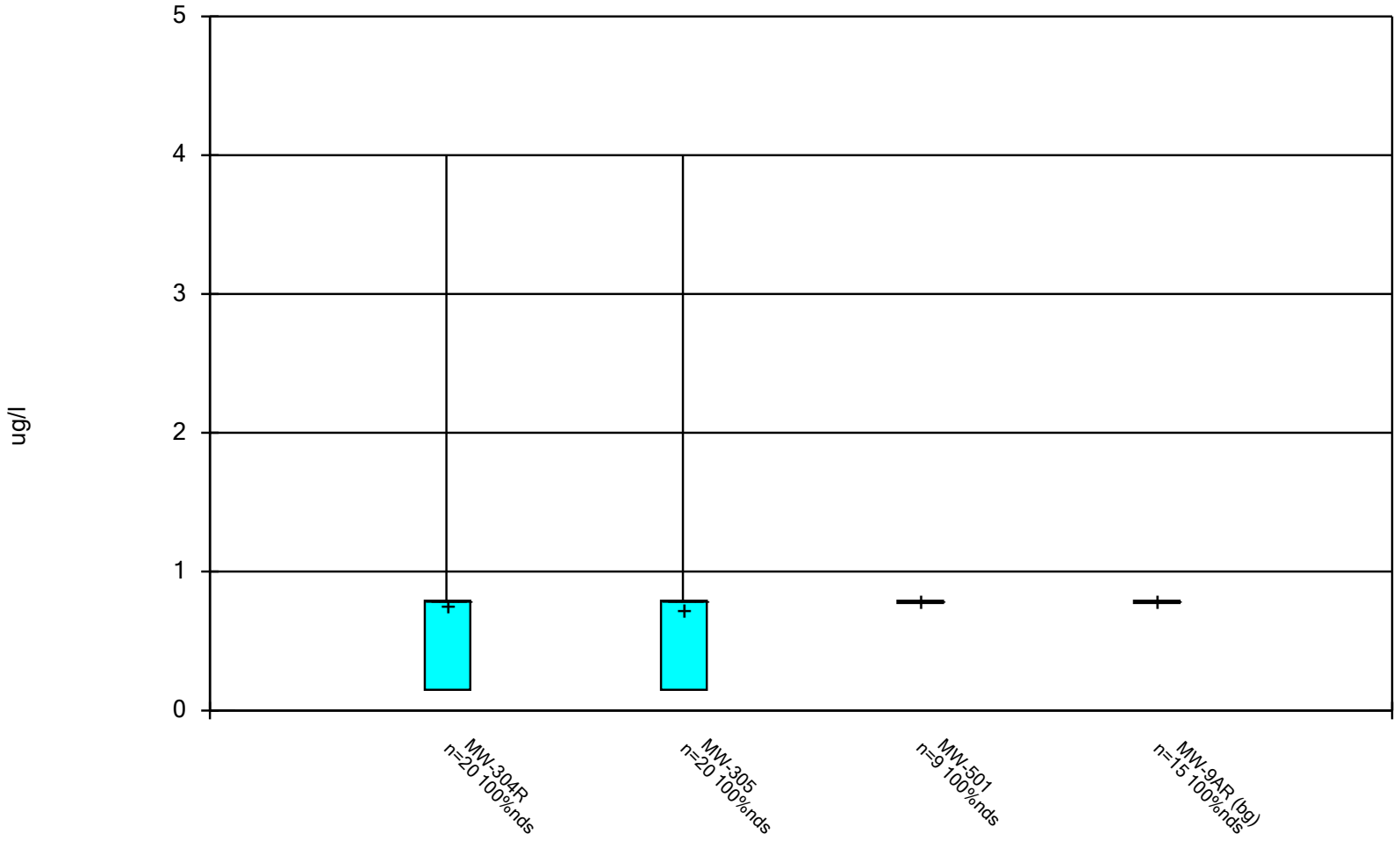
Linn County Data: CRLCSWA_Groundwater Database

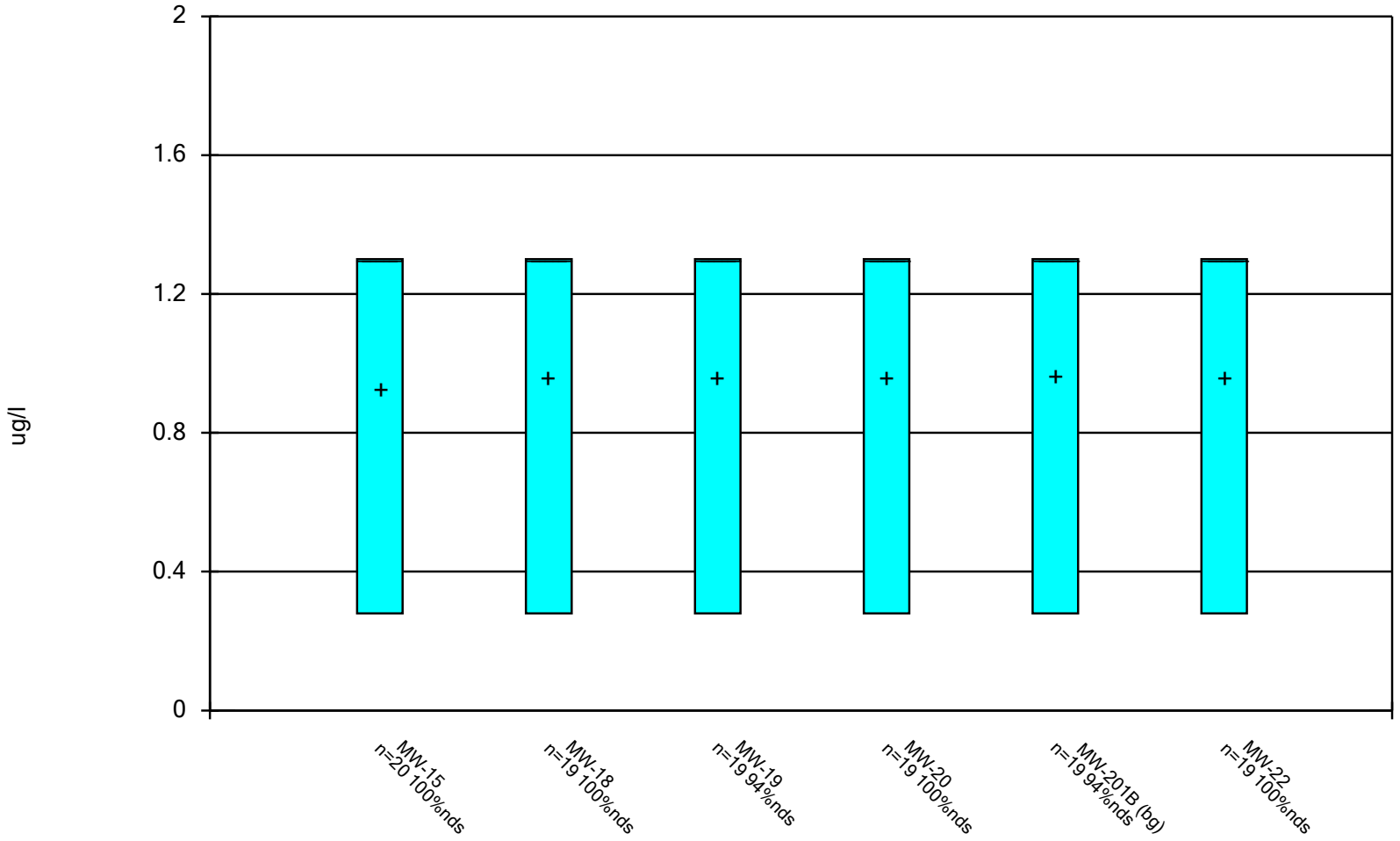
Box & Whiskers Plot



Constituent: Chloroethane Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

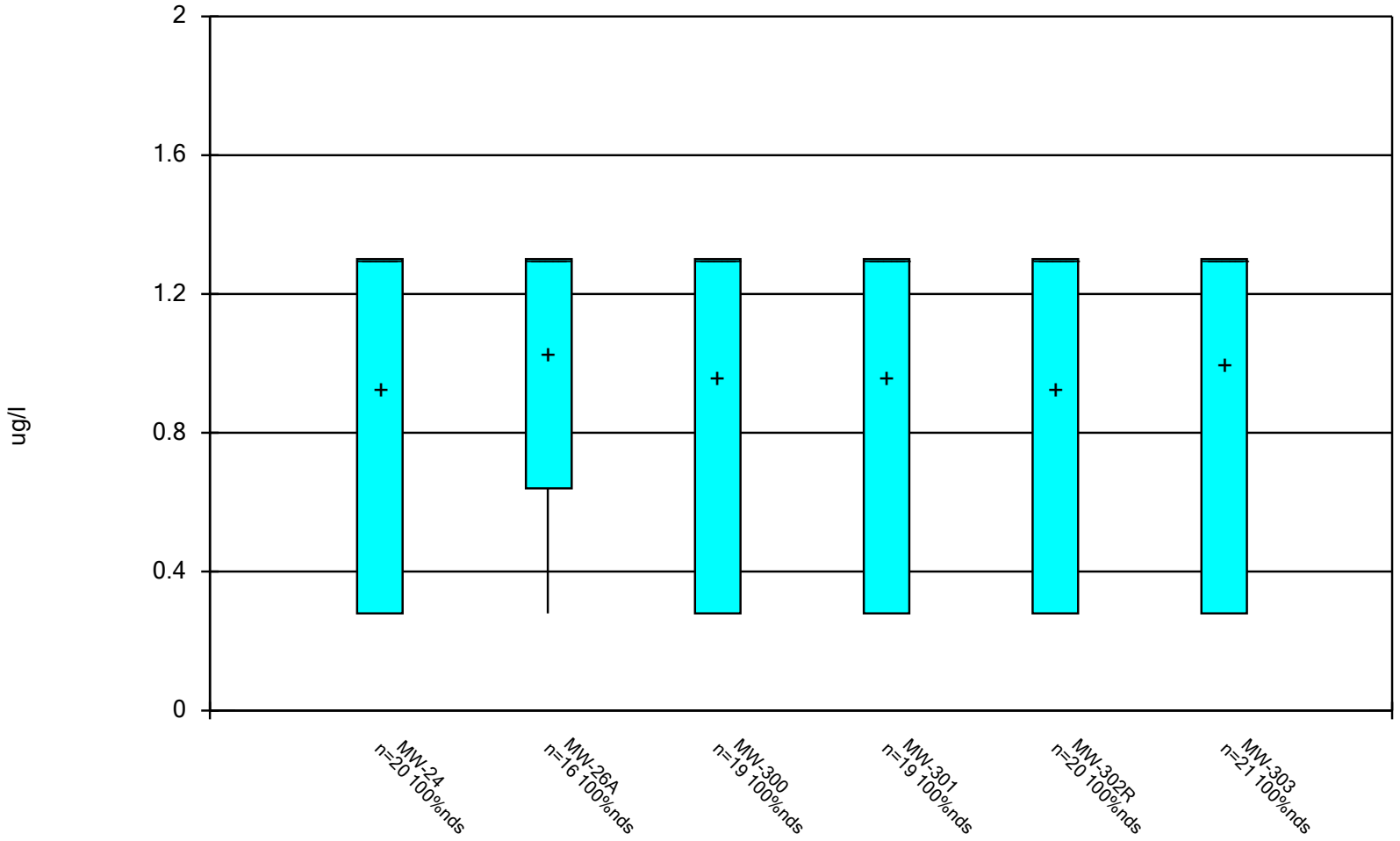
Box & Whiskers Plot



Constituent: Chloroform Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

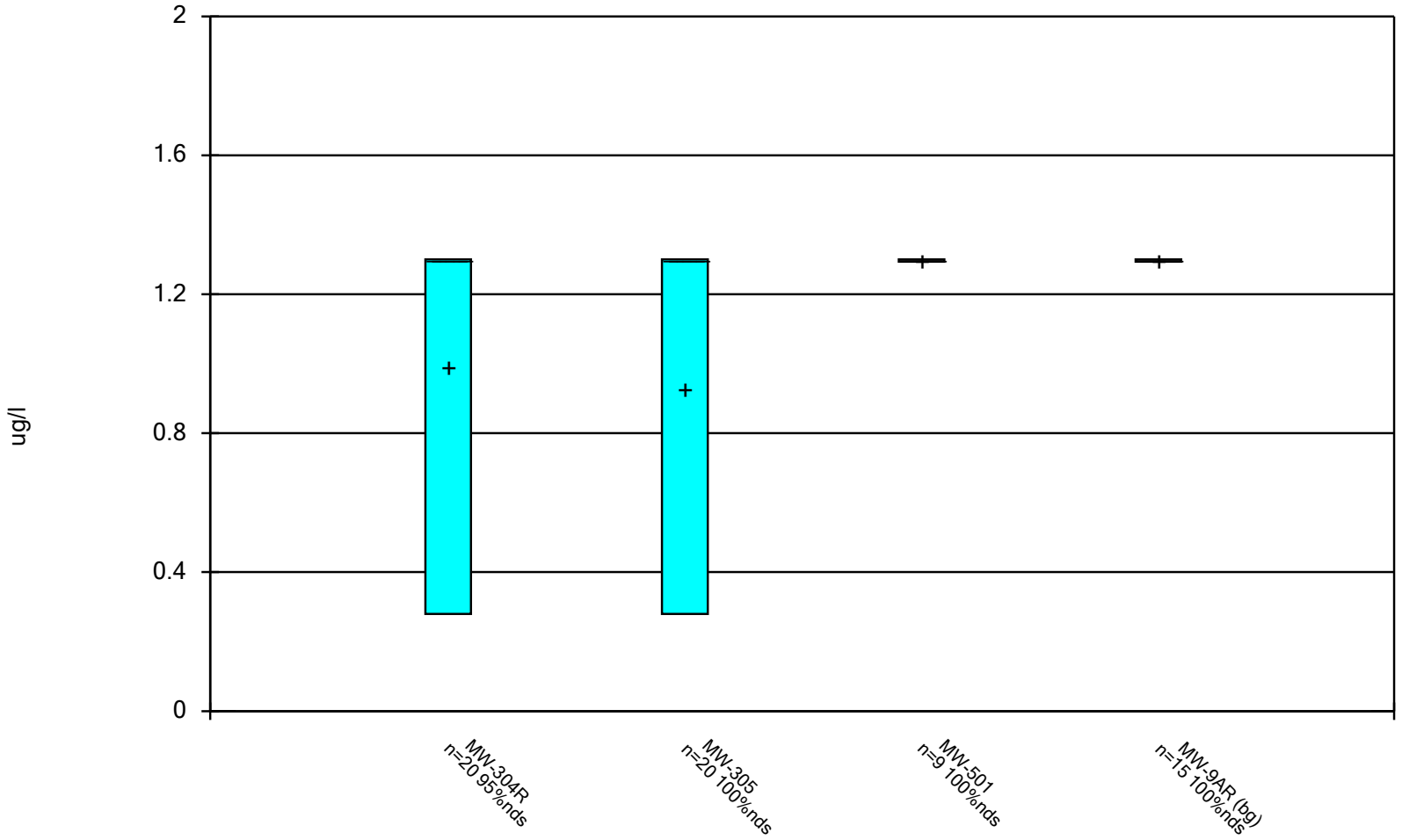
Box & Whiskers Plot



Constituent: Chloroform Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

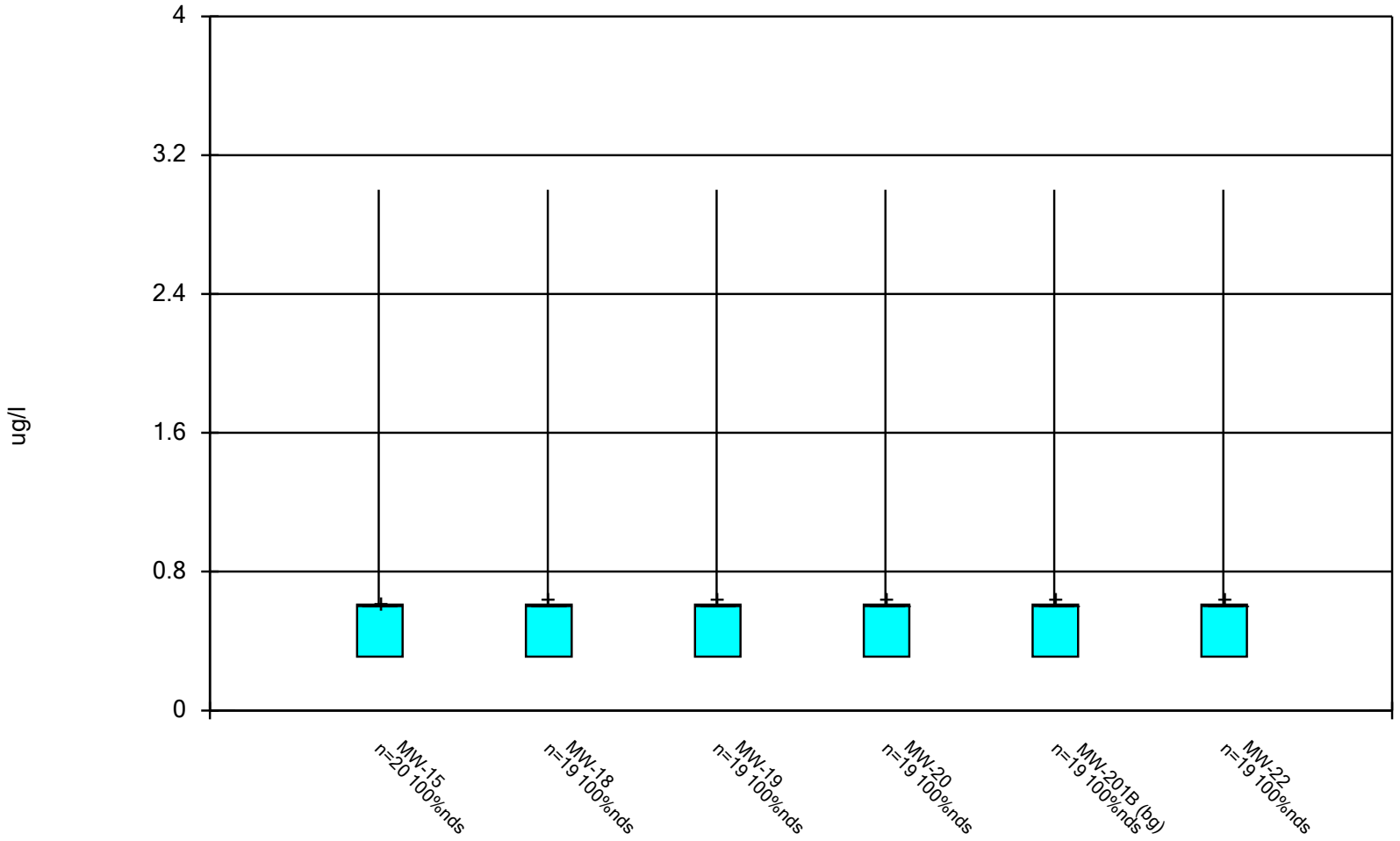
Box & Whiskers Plot



Constituent: Chloroform Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

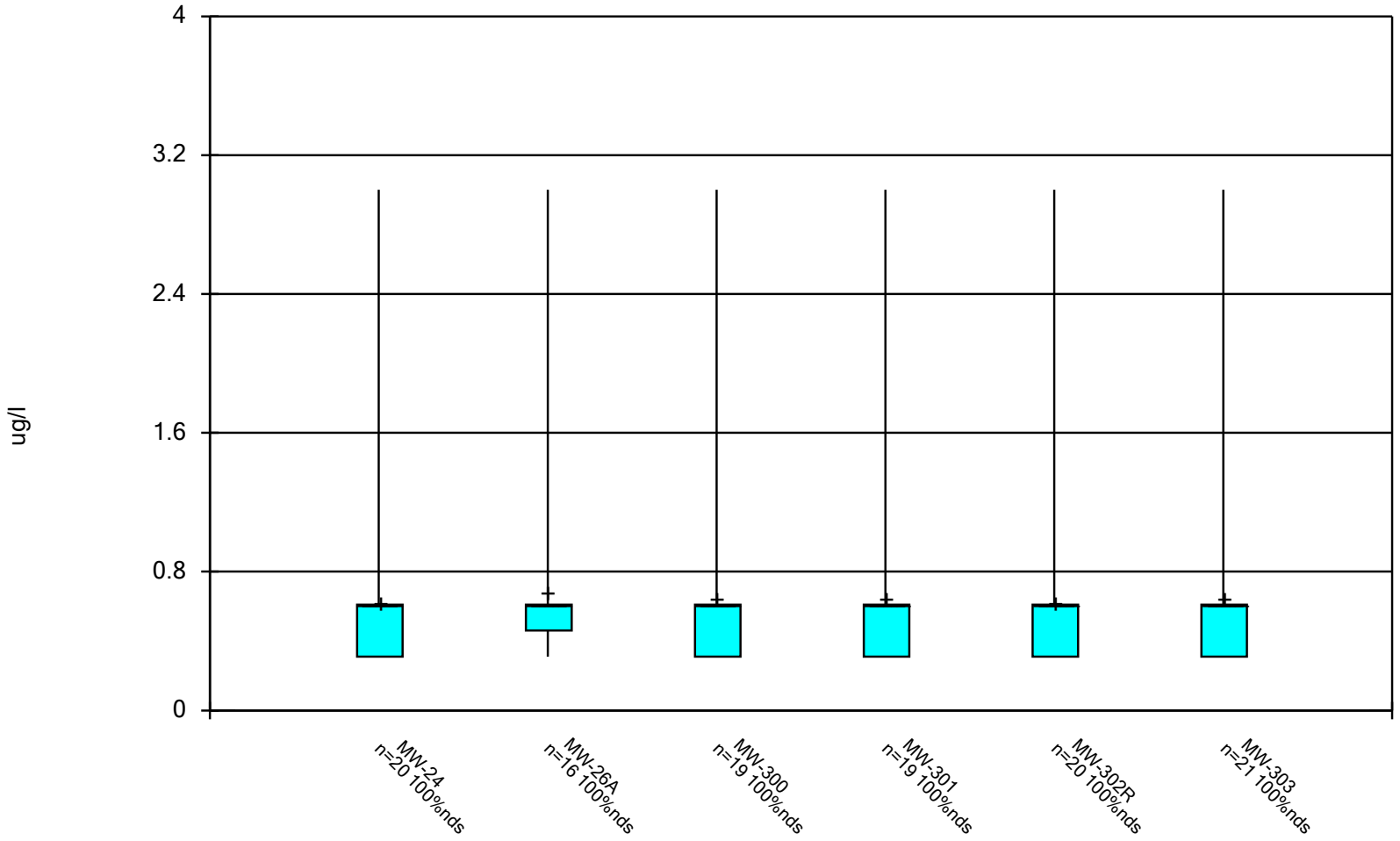
Box & Whiskers Plot



Constituent: Chloromethane Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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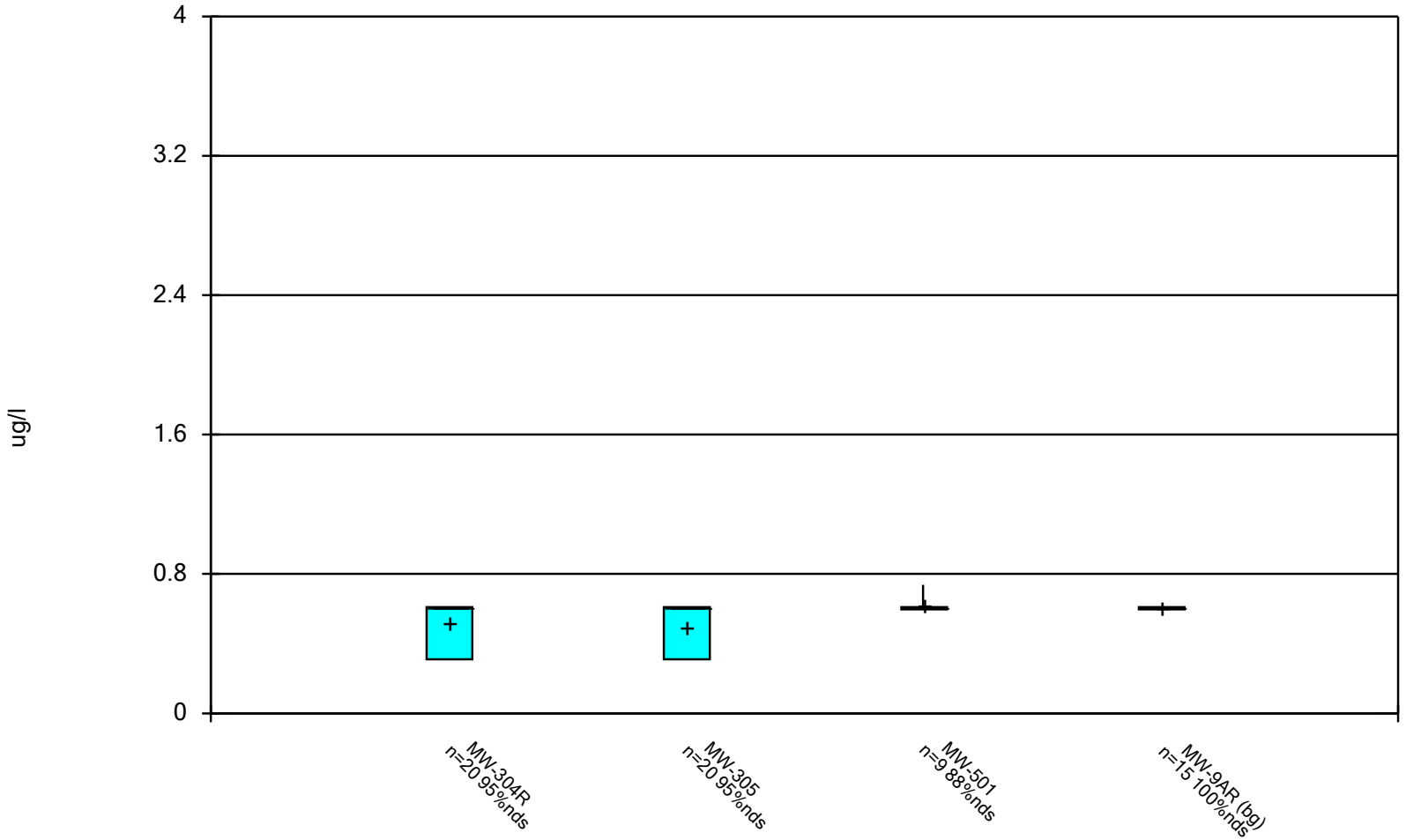
Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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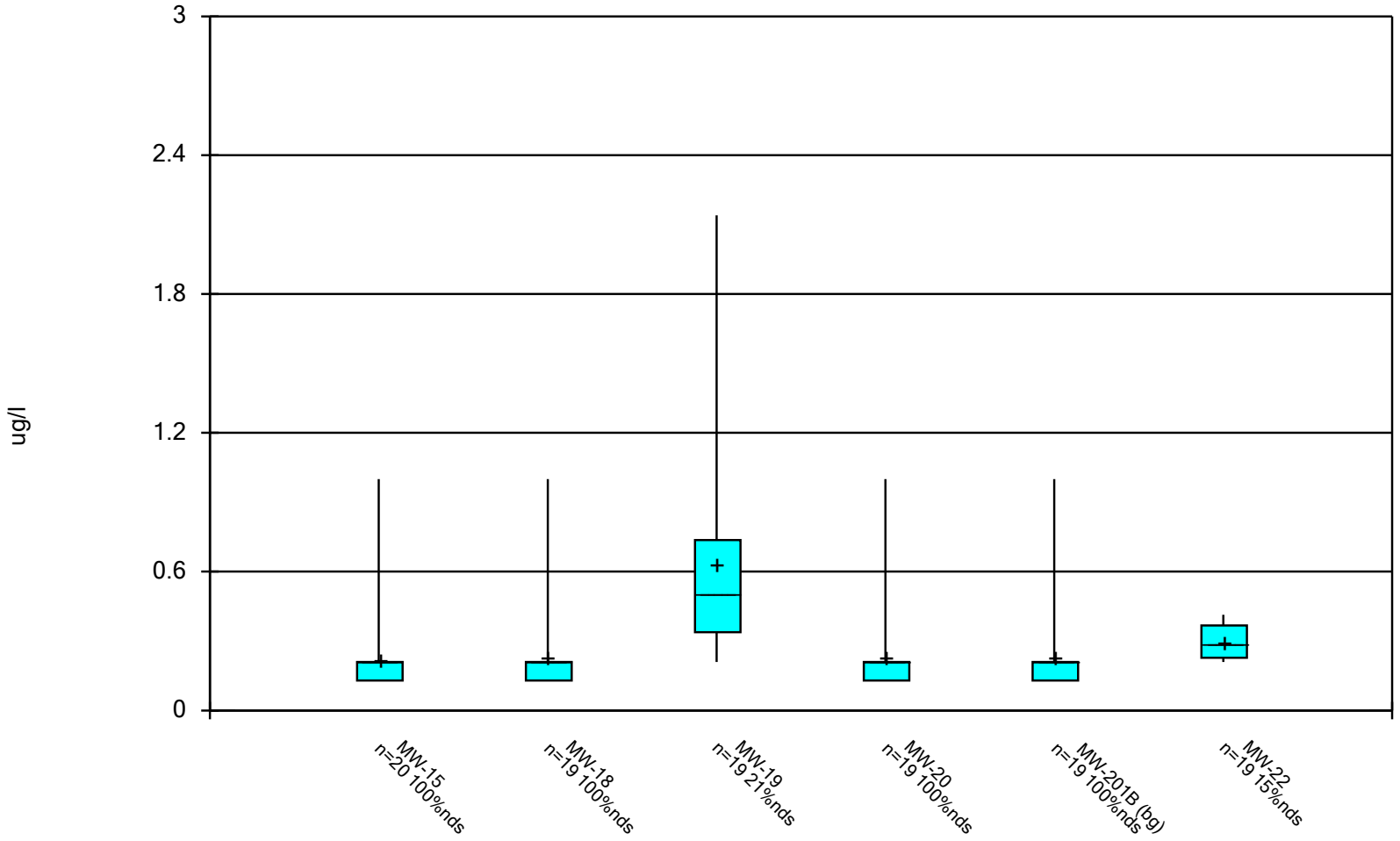
Linn County Data: CRLCSWA_Groundwater Database

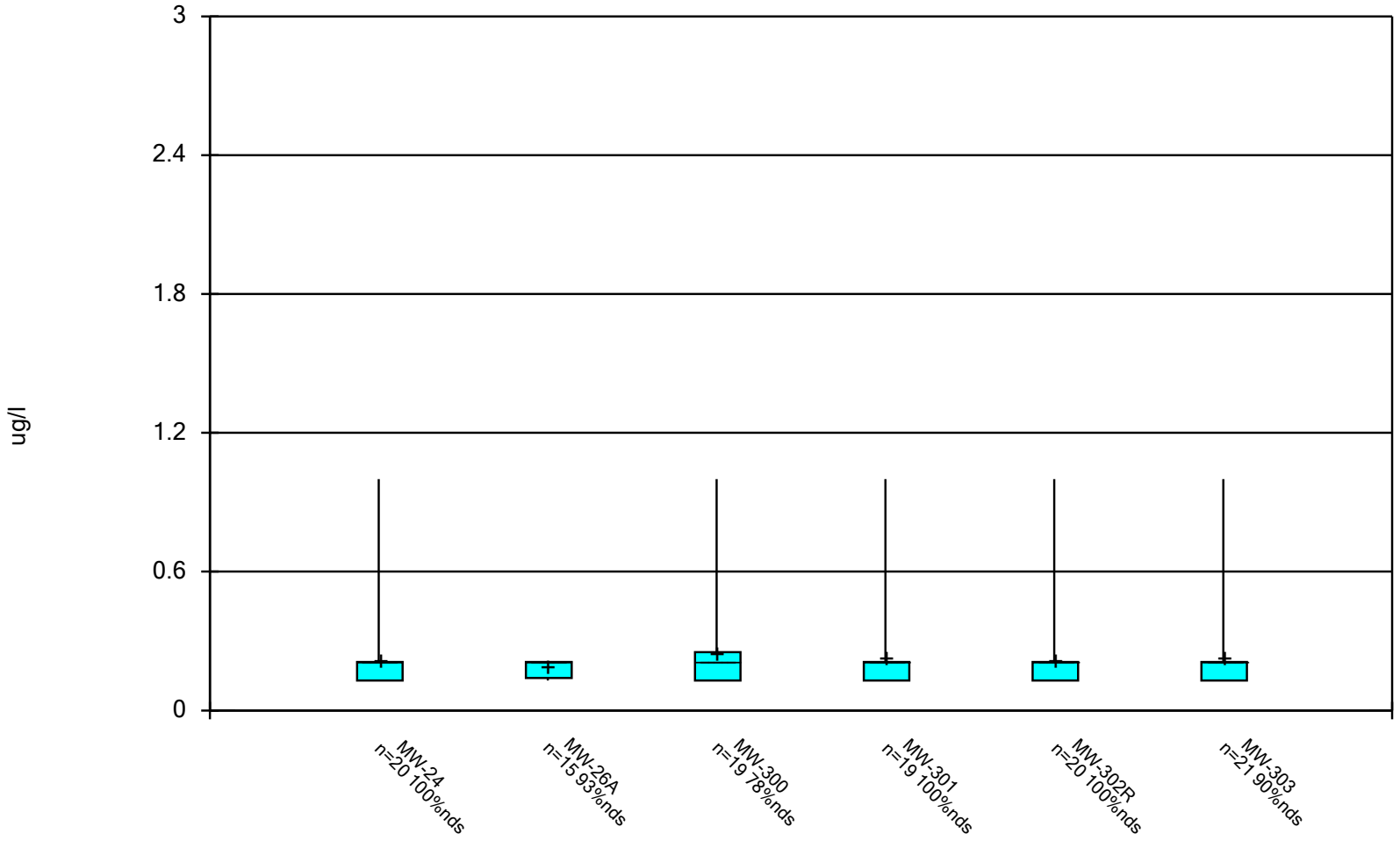
Box & Whiskers Plot



Constituent: cis-1,2-Dichloroethene Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

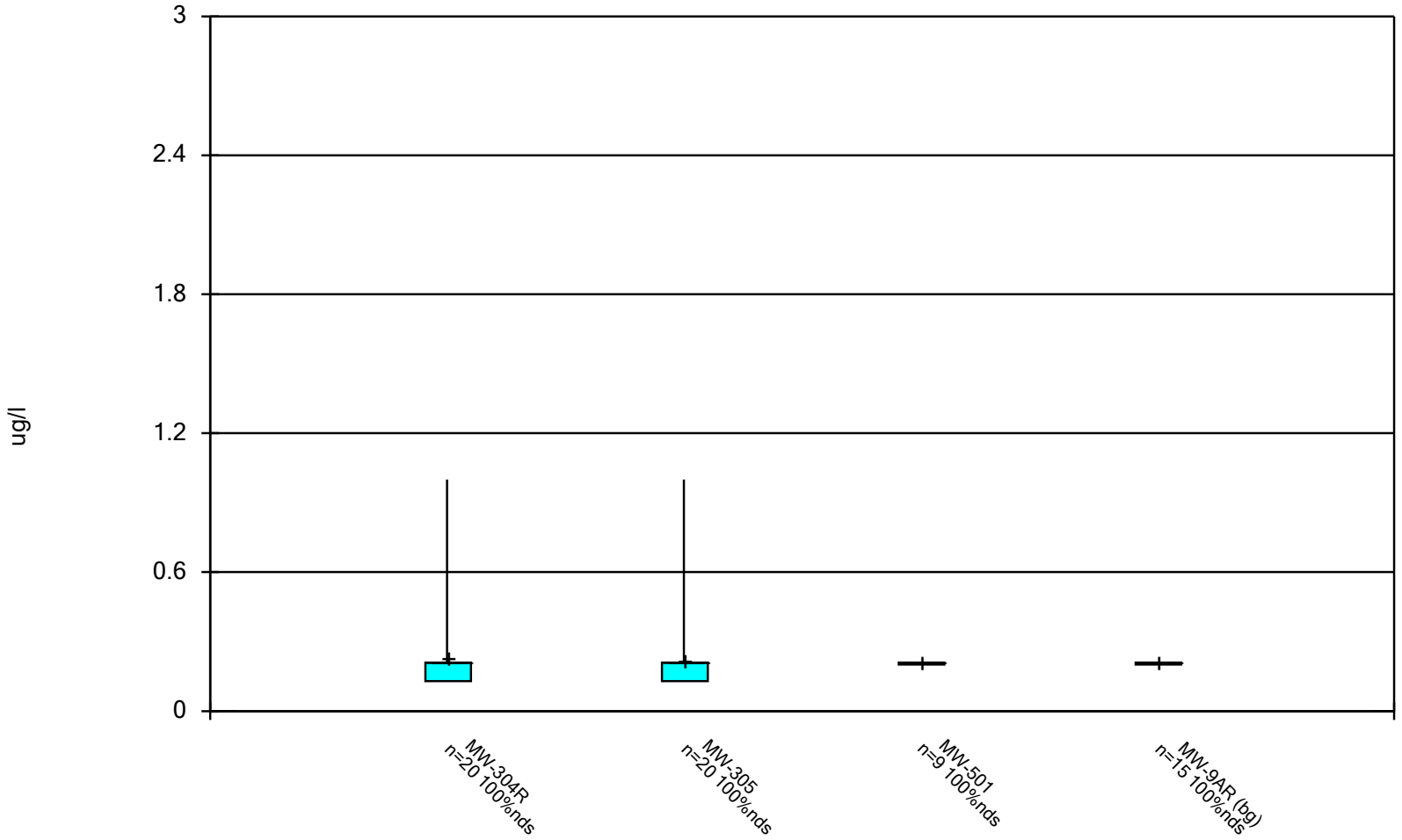
Box & Whiskers Plot



Constituent: cis-1,2-Dichloroethene Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

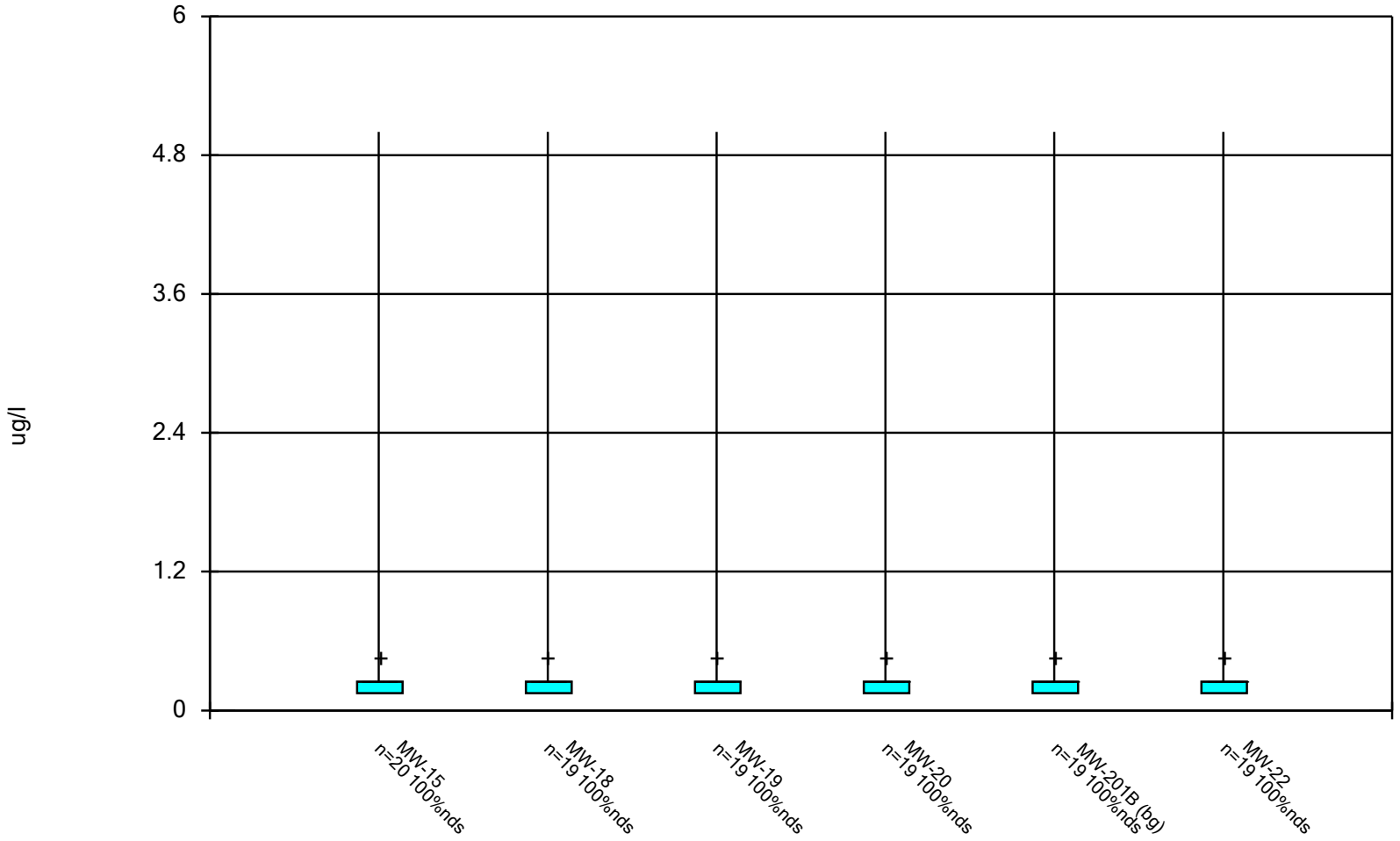
Box & Whiskers Plot



Constituent: cis-1,2-Dichloroethene Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

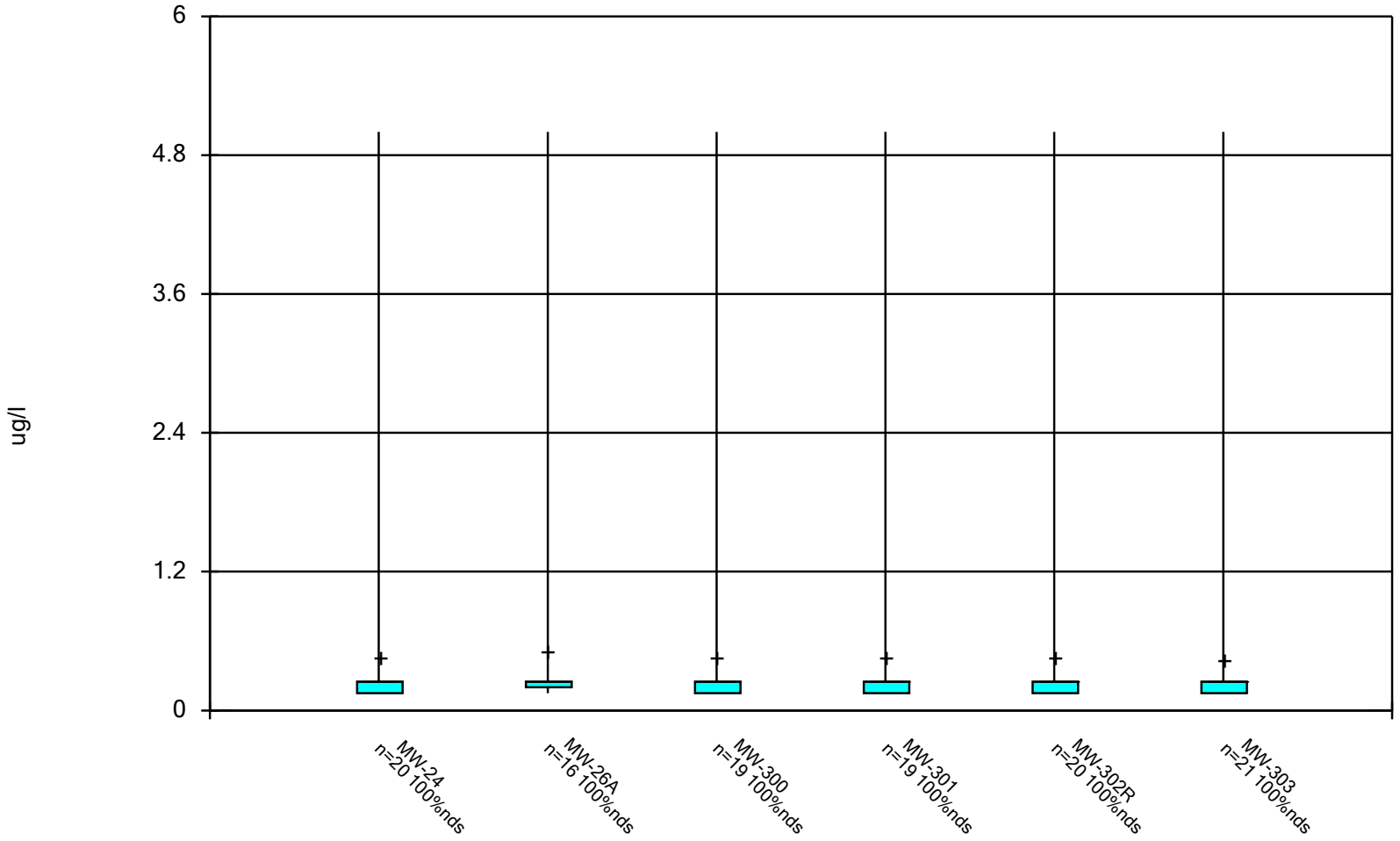
Box & Whiskers Plot



Constituent: cis-1,3-Dichloropropene Analysis Run 7/12/2024 2:56 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

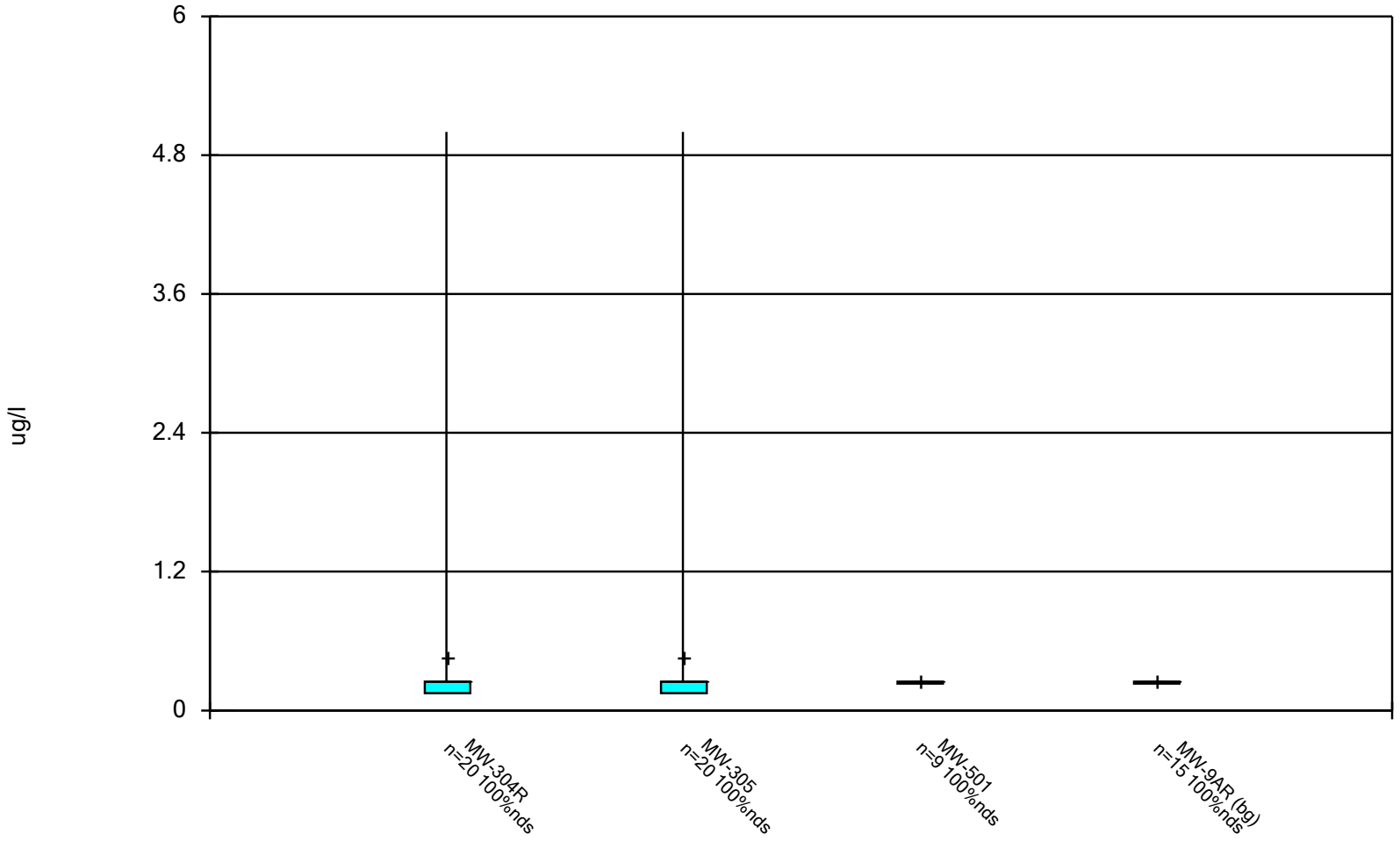
Box & Whiskers Plot



Constituent: cis-1,3-Dichloropropene Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

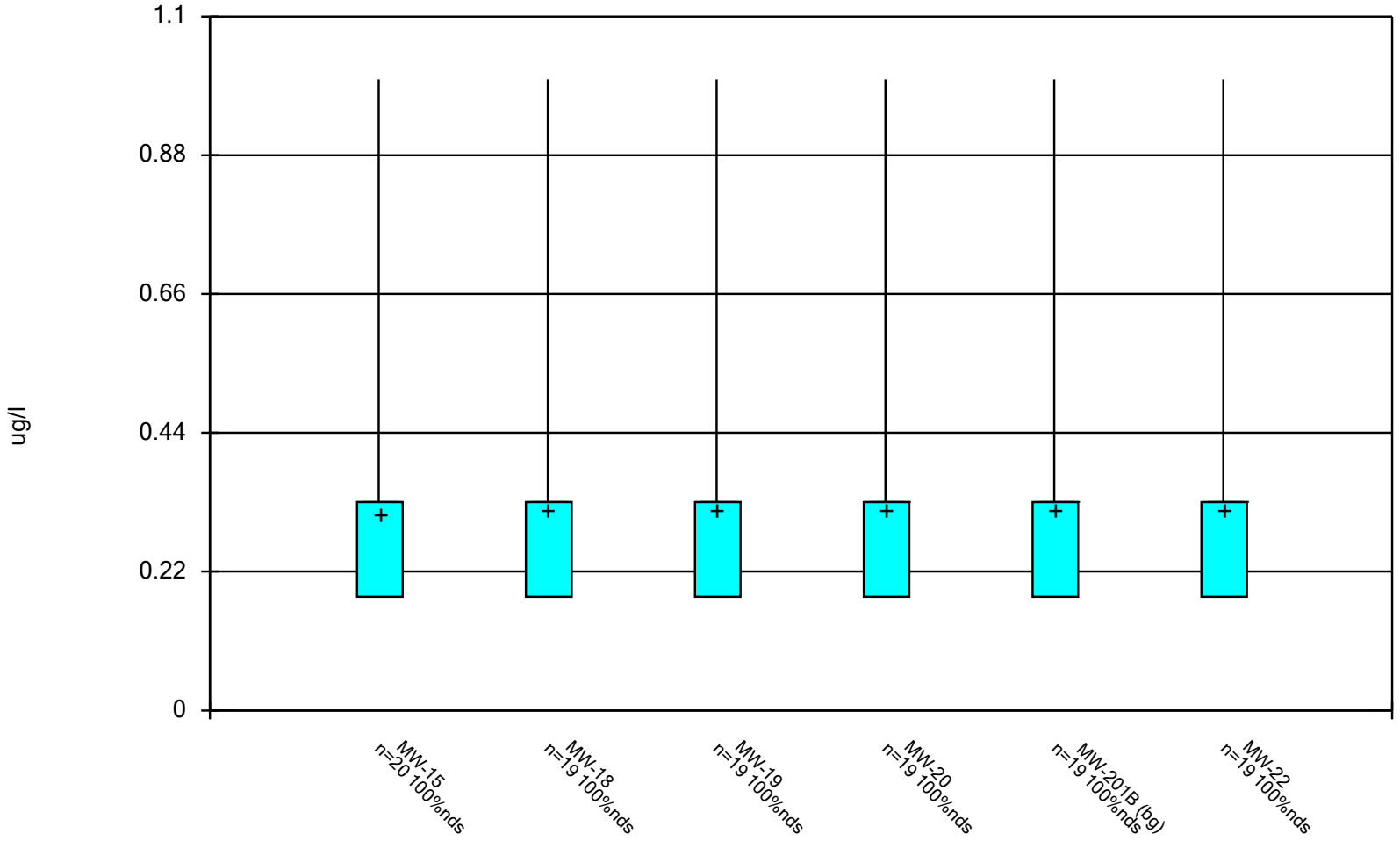
Box & Whiskers Plot



Constituent: cis-1,3-Dichloropropene Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

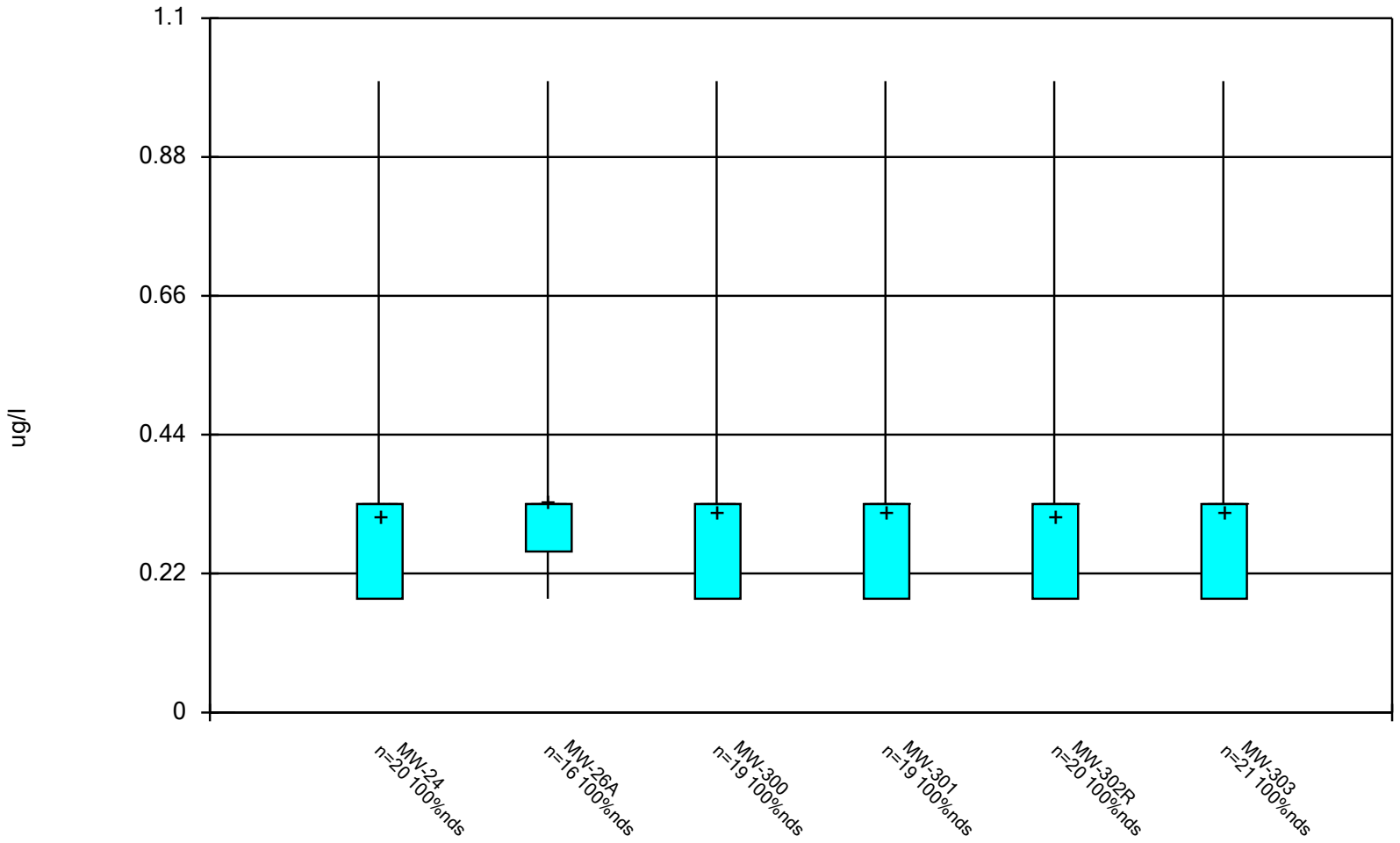
Box & Whiskers Plot



Constituent: Dibromomethane Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

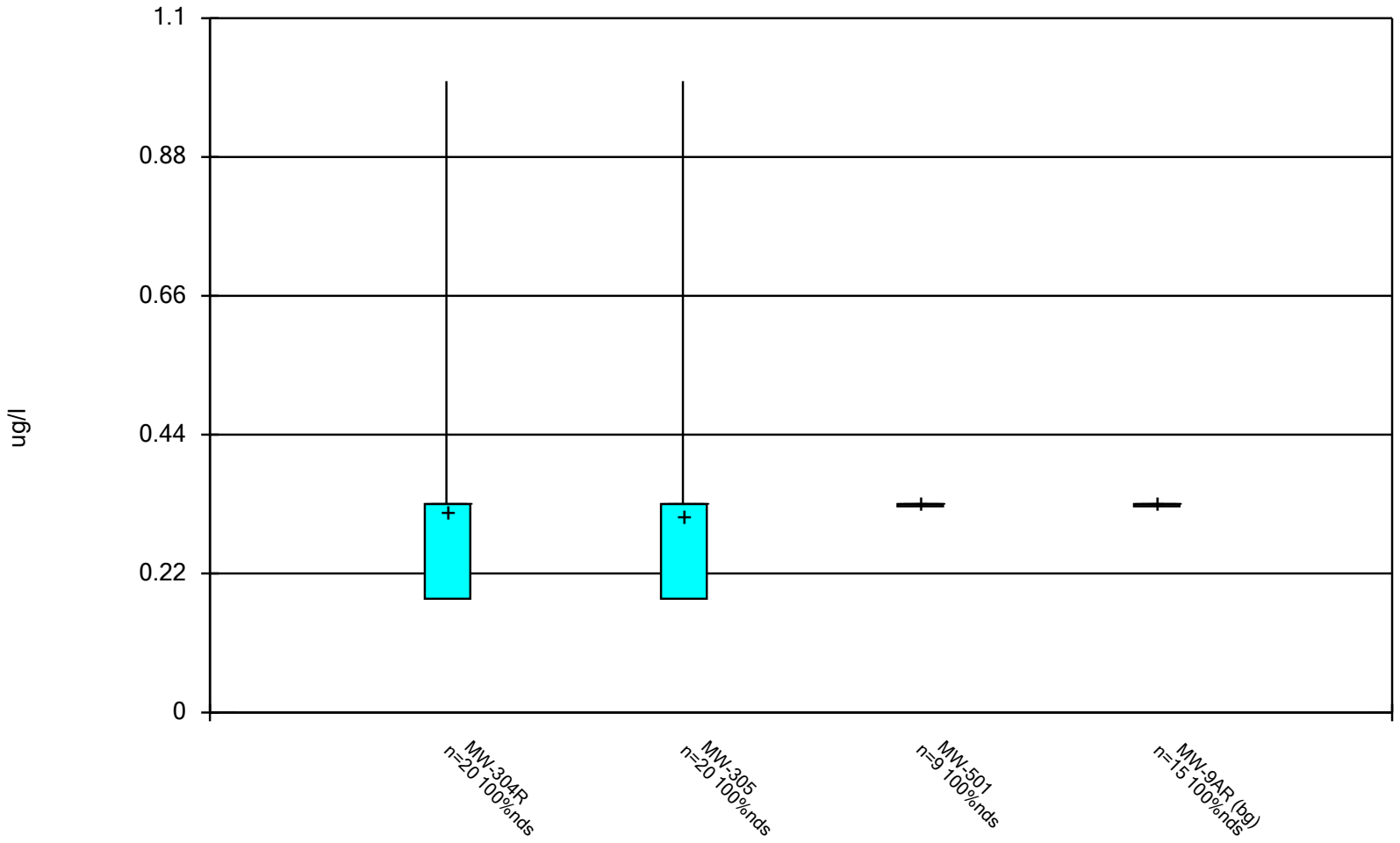
Box & Whiskers Plot



Constituent: Dibromomethane Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

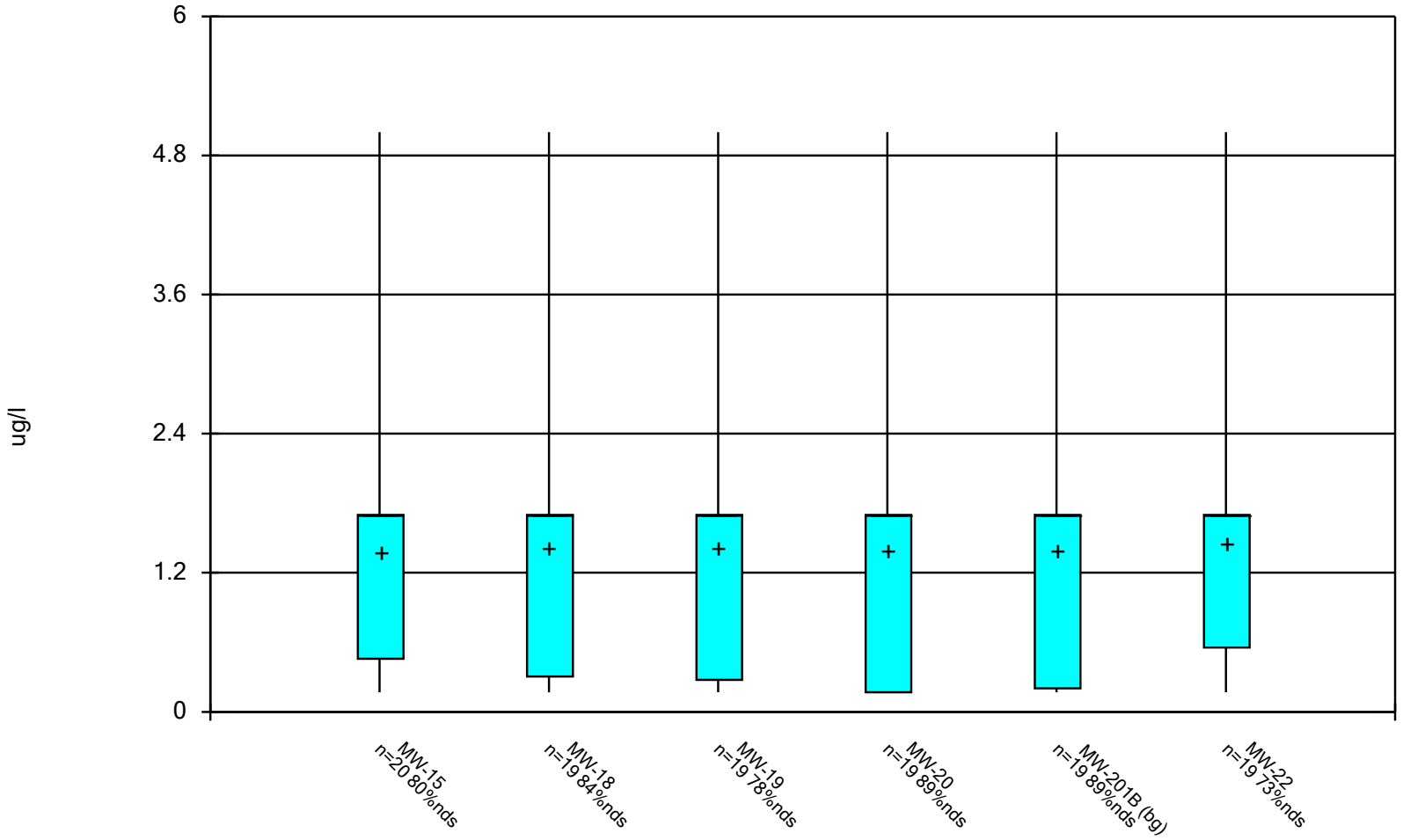
Box & Whiskers Plot



Constituent: Dibromomethane Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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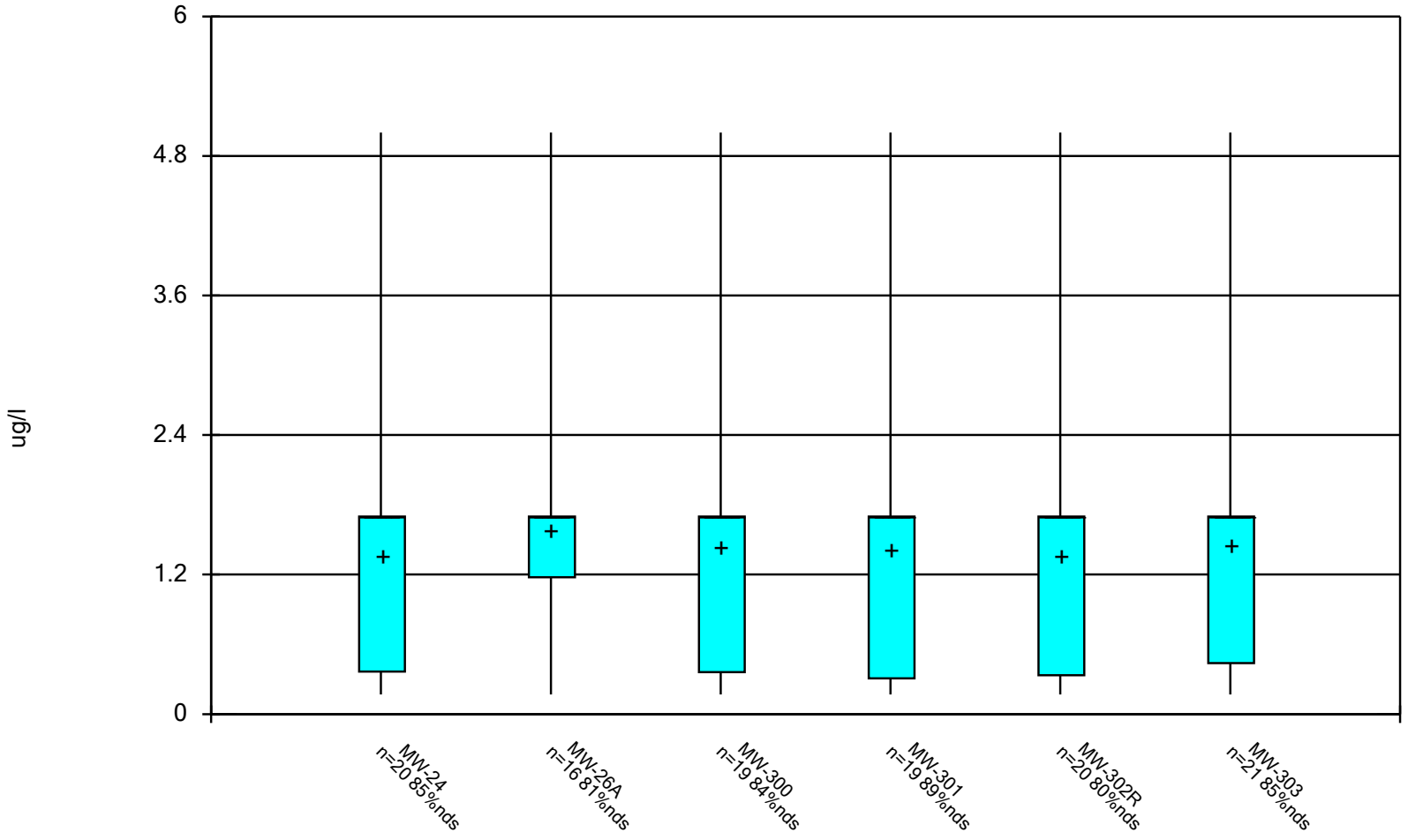
Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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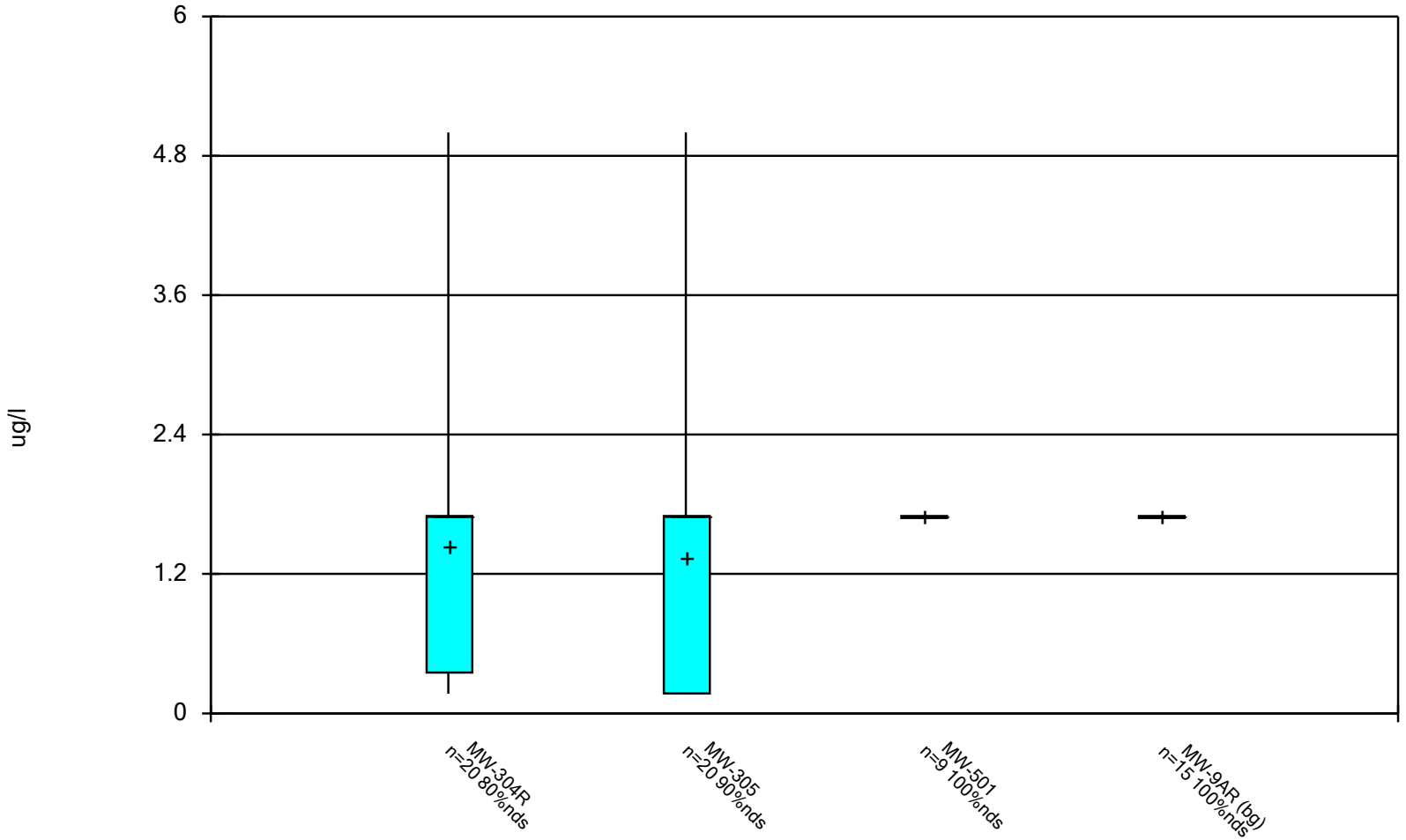
Linn County Data: CRLCSWA_Groundwater Database

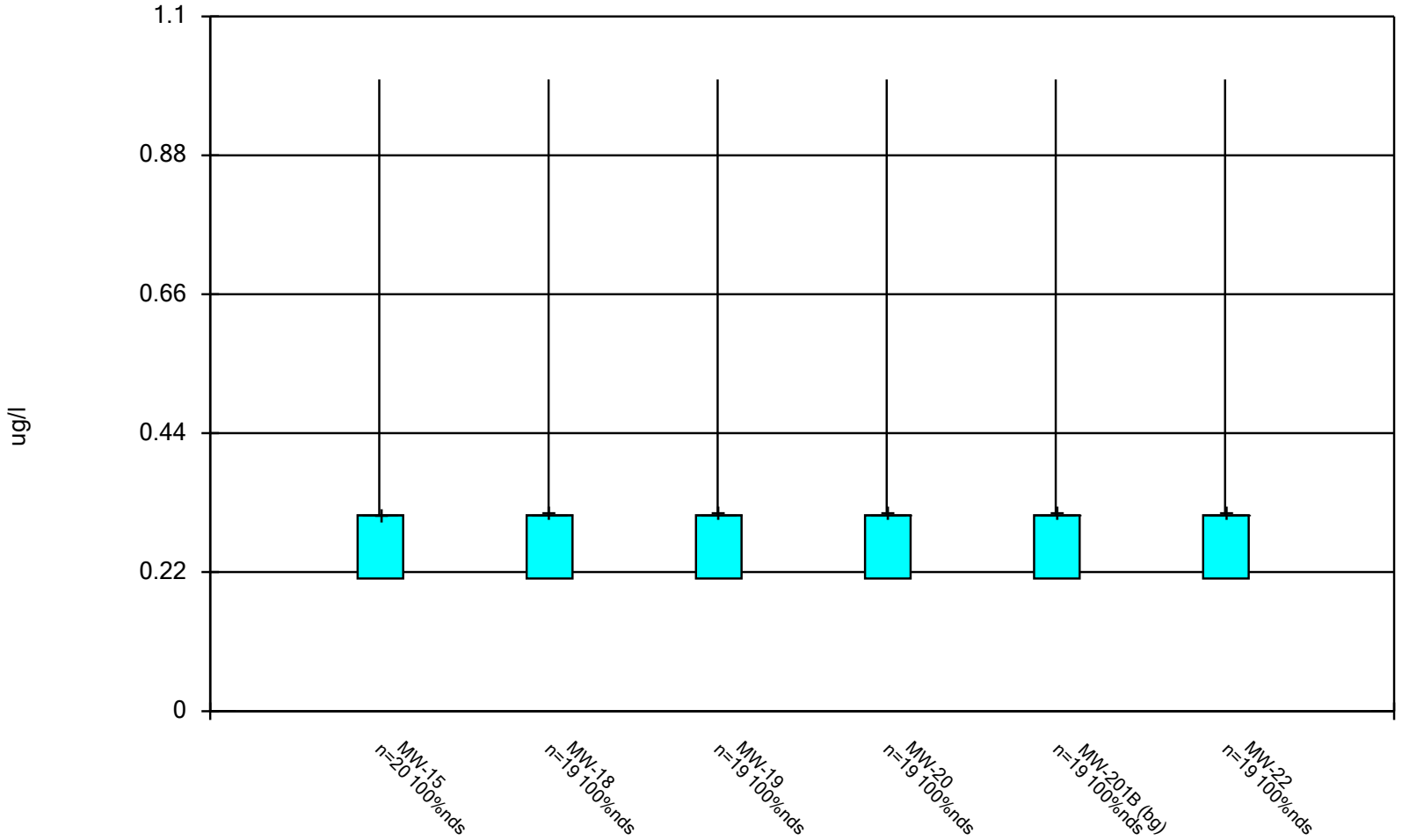
Box & Whiskers Plot



Constituent: Dichloromethane Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

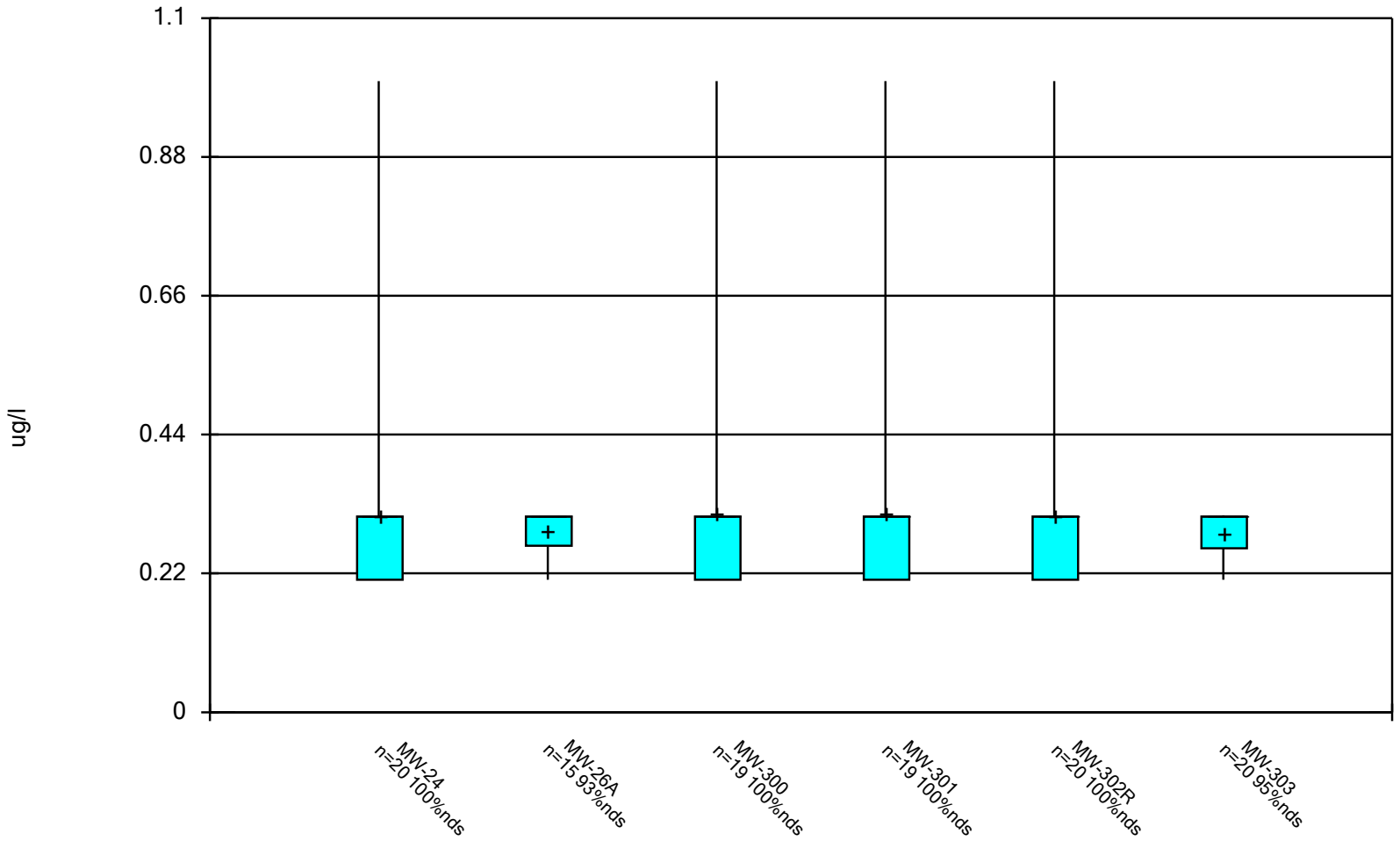
Box & Whiskers Plot



Constituent: Ethylbenzene Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

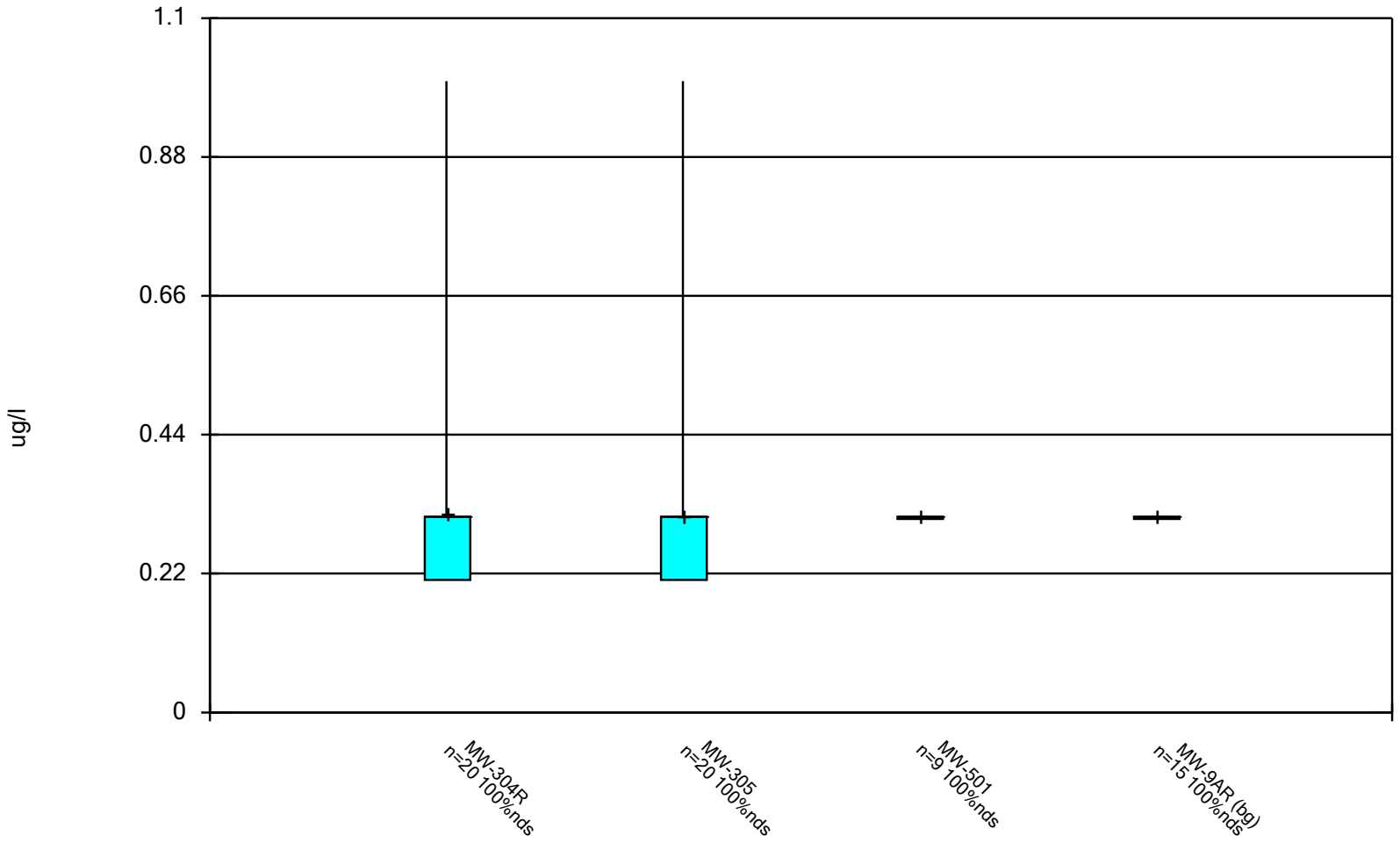
Box & Whiskers Plot



Constituent: Ethylbenzene Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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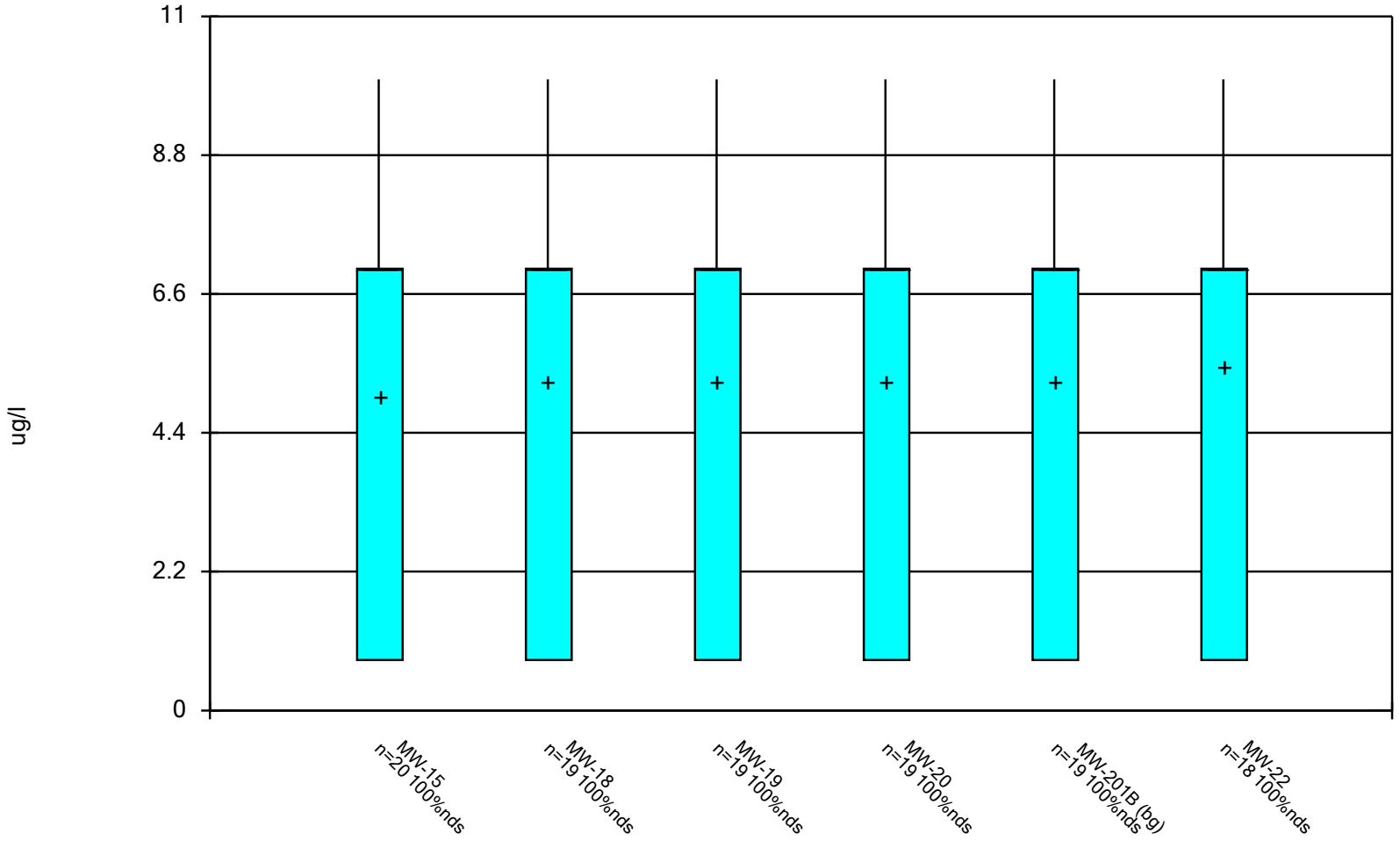
Linn County Data: CRLCSWA_Groundwater Database

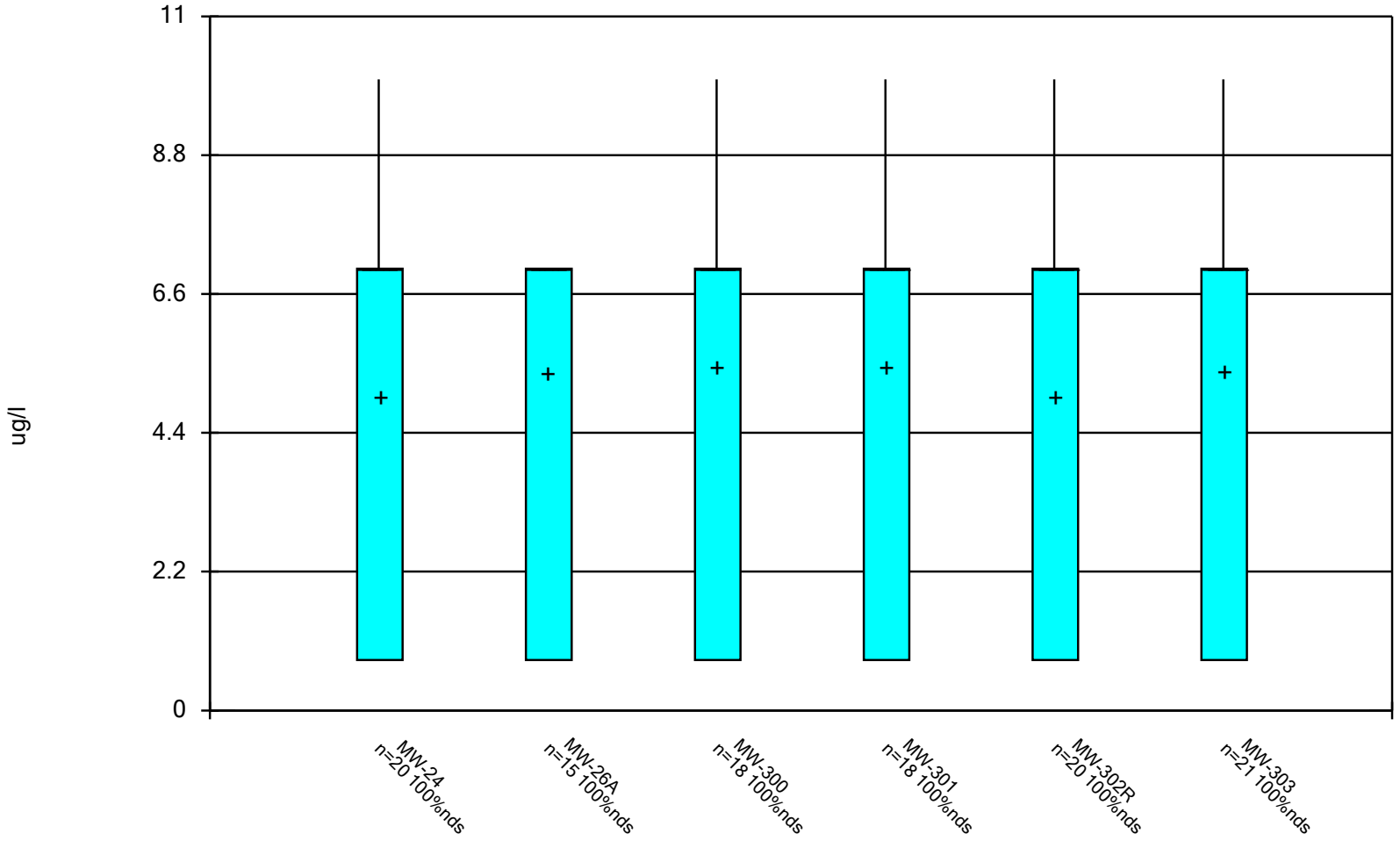
Box & Whiskers Plot



Constituent: Iodomethane Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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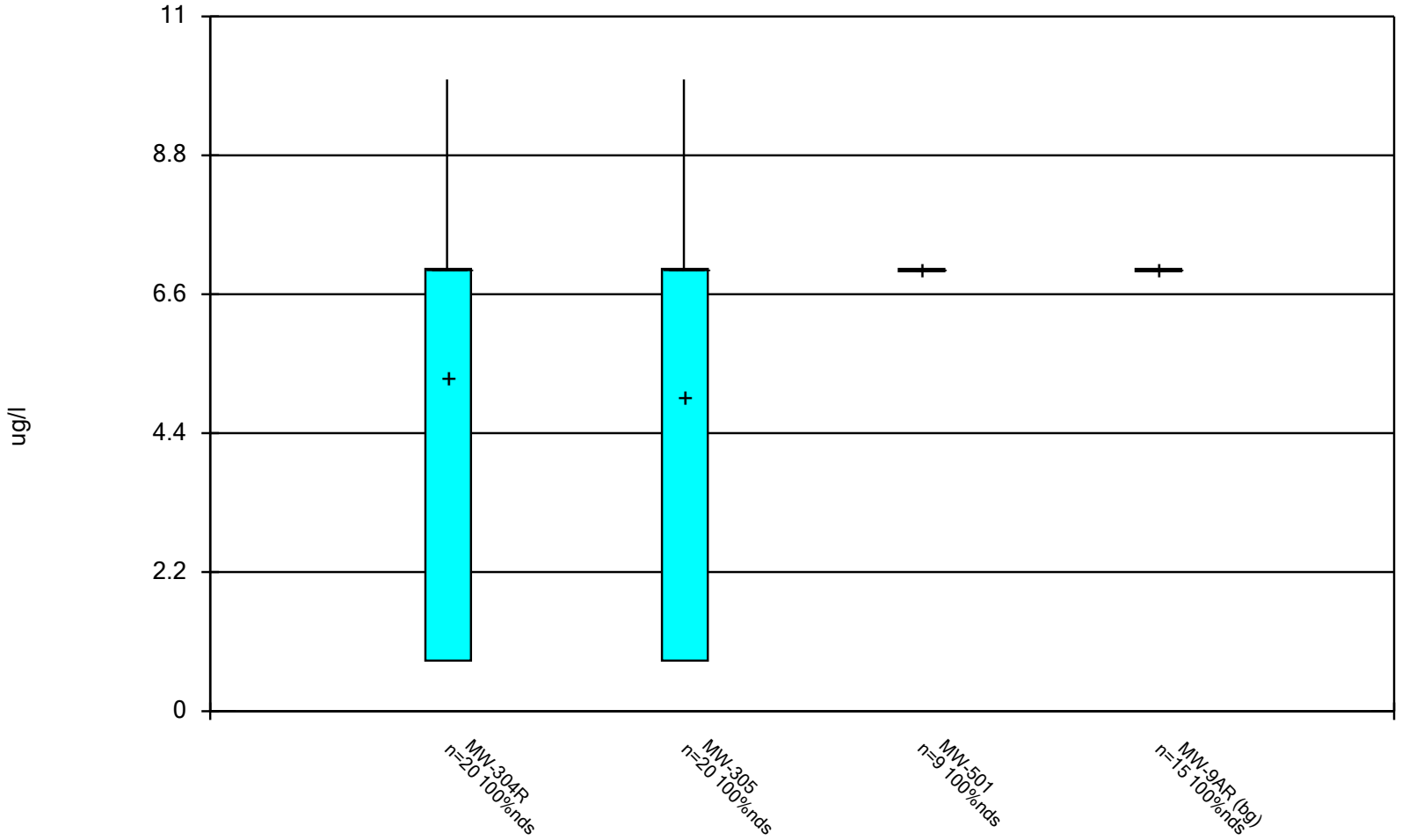
Linn County Data: CRLCSWA_Groundwater Database

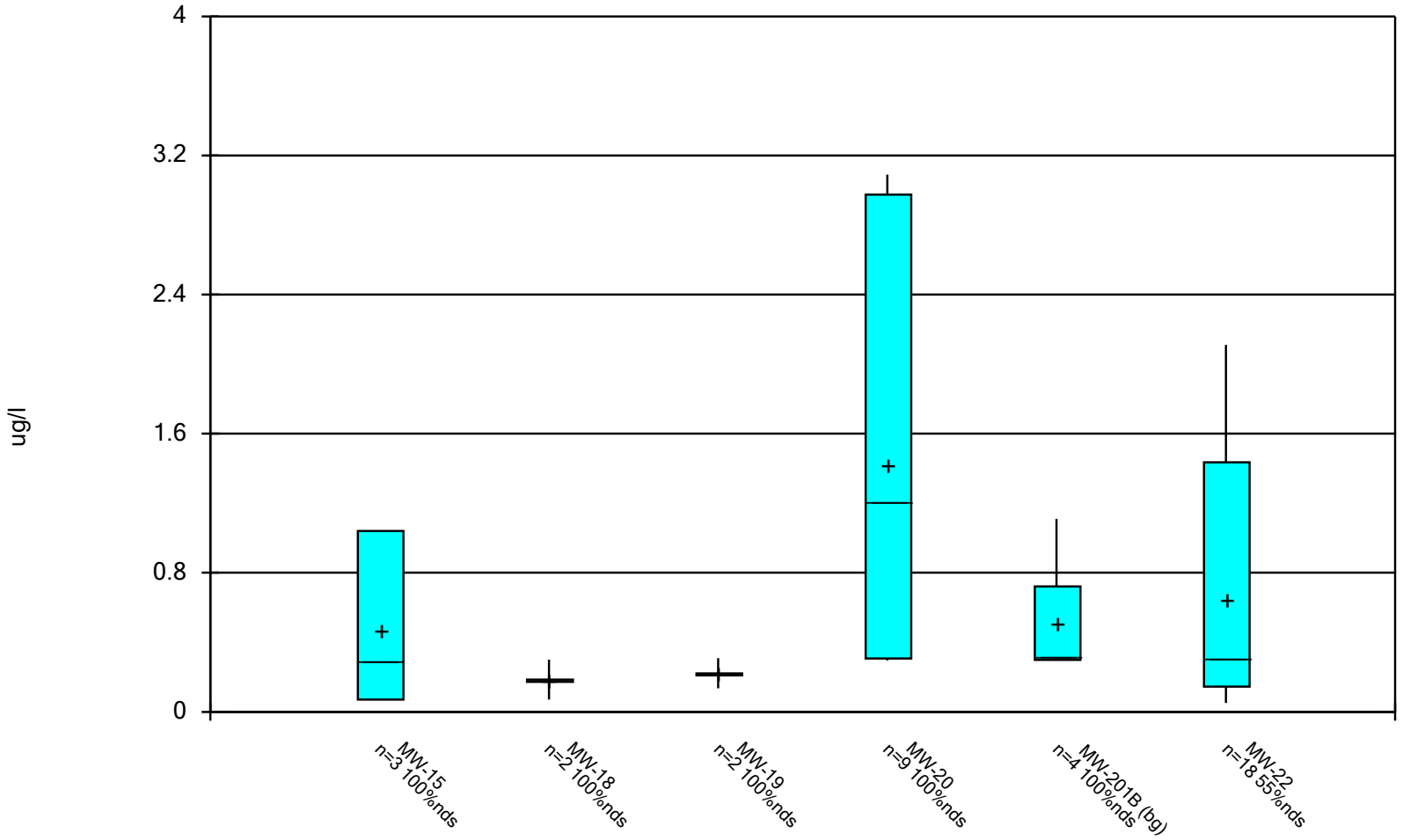
Box & Whiskers Plot



Constituent: Iodomethane Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

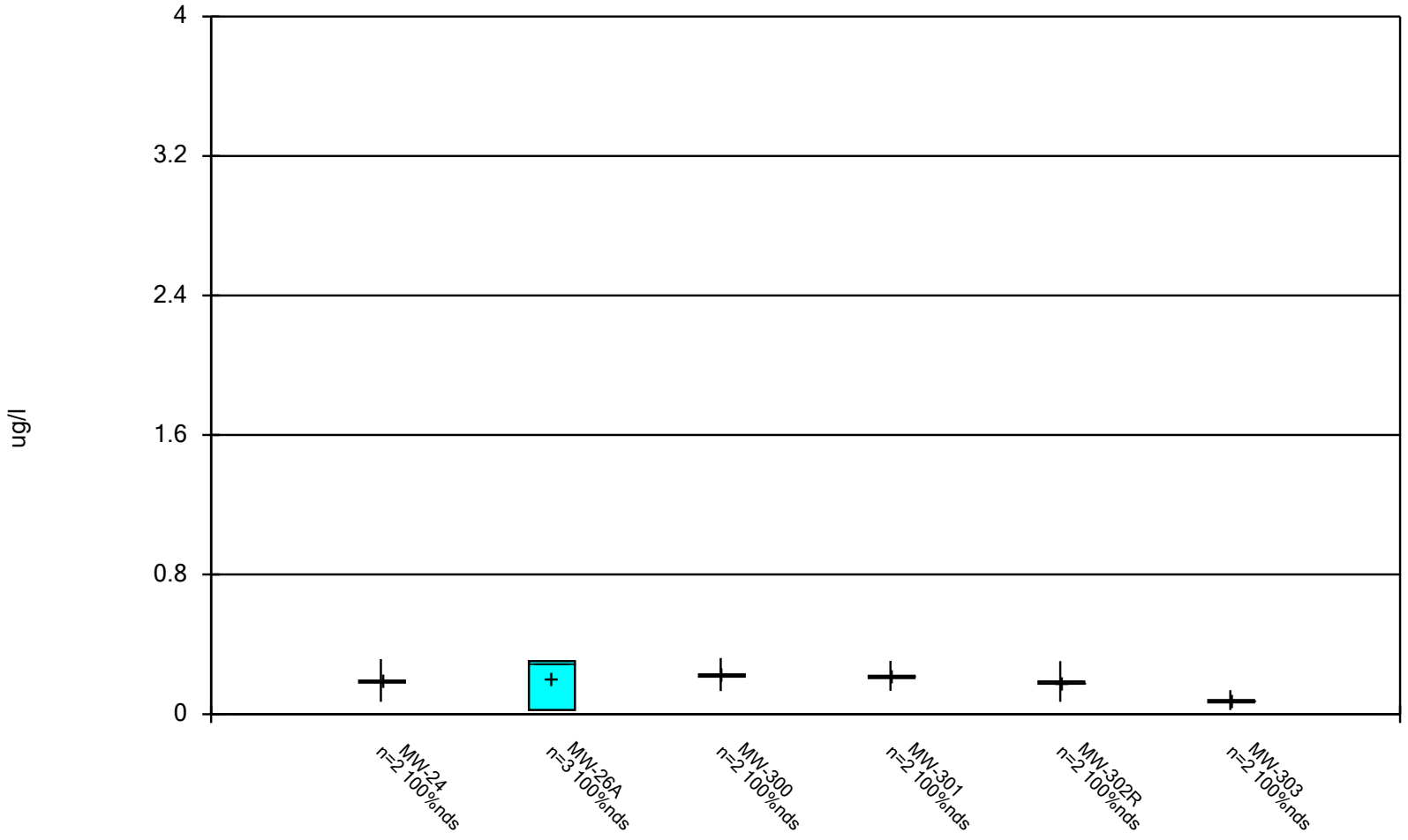
Box & Whiskers Plot



Constituent: Silvex [2,4,5-TP] Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

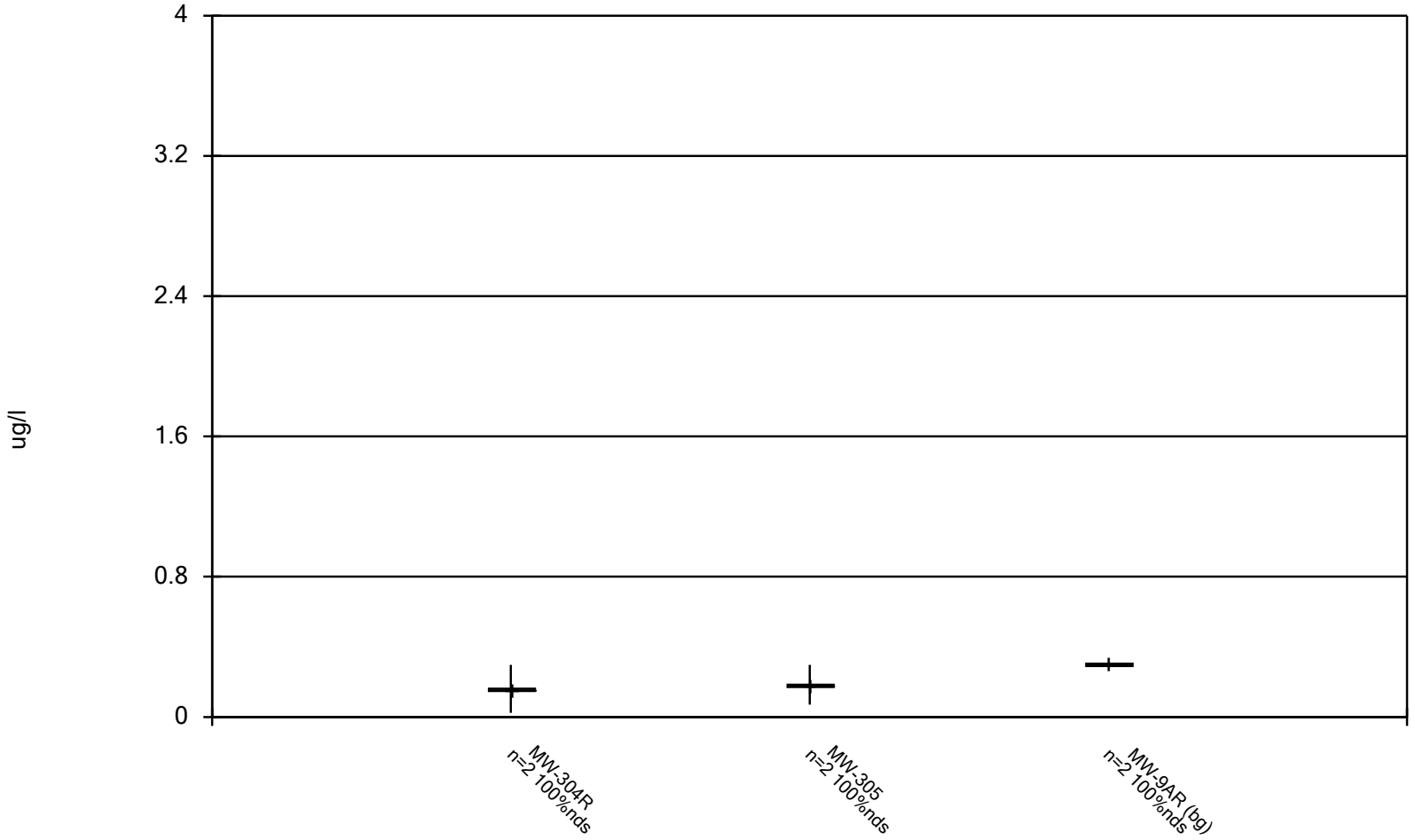
Box & Whiskers Plot



Constituent: Silvex [2,4,5-TP] Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

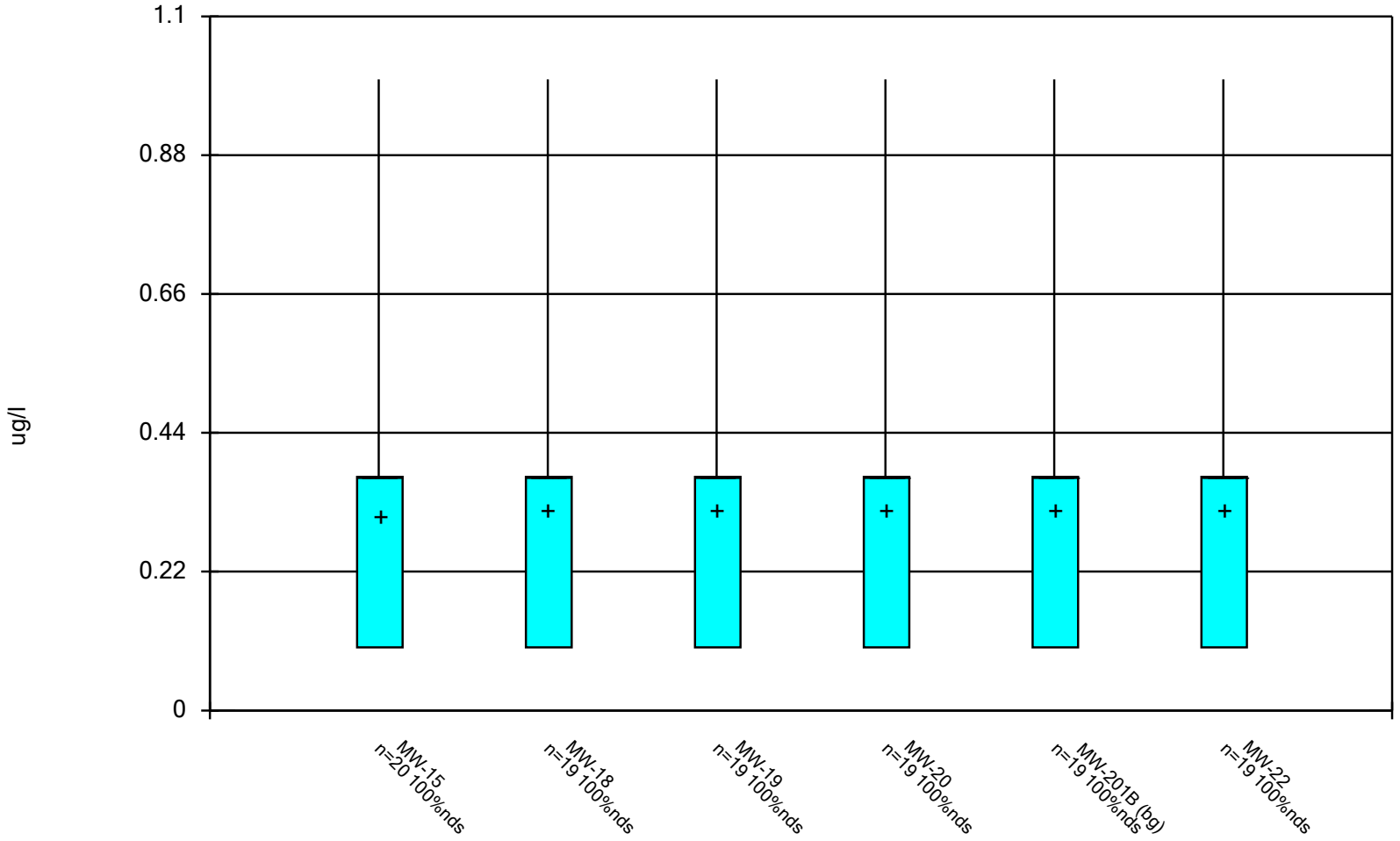
Box & Whiskers Plot



Constituent: Silvex [2,4,5-TP] Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

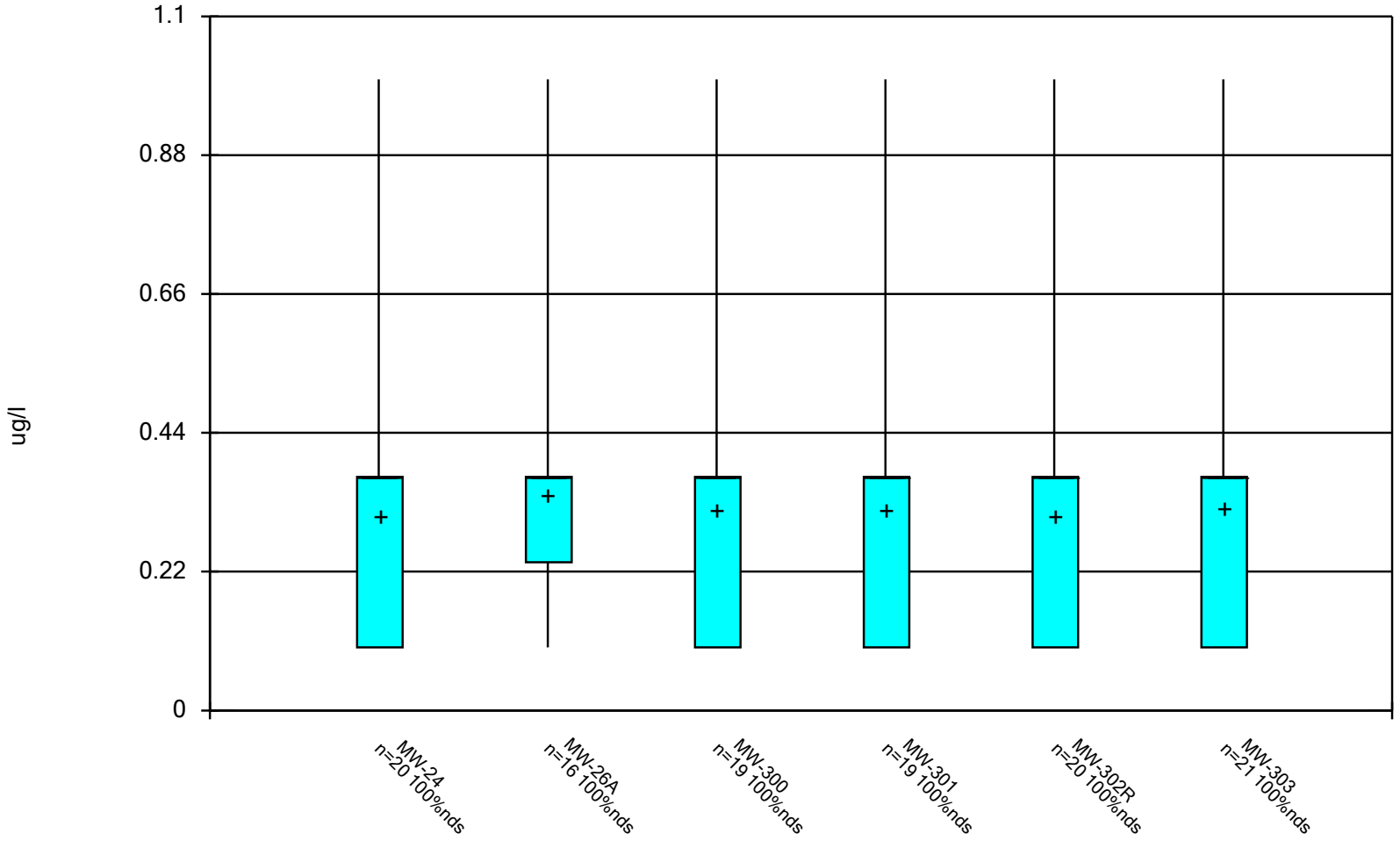
Box & Whiskers Plot



Constituent: Styrene Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

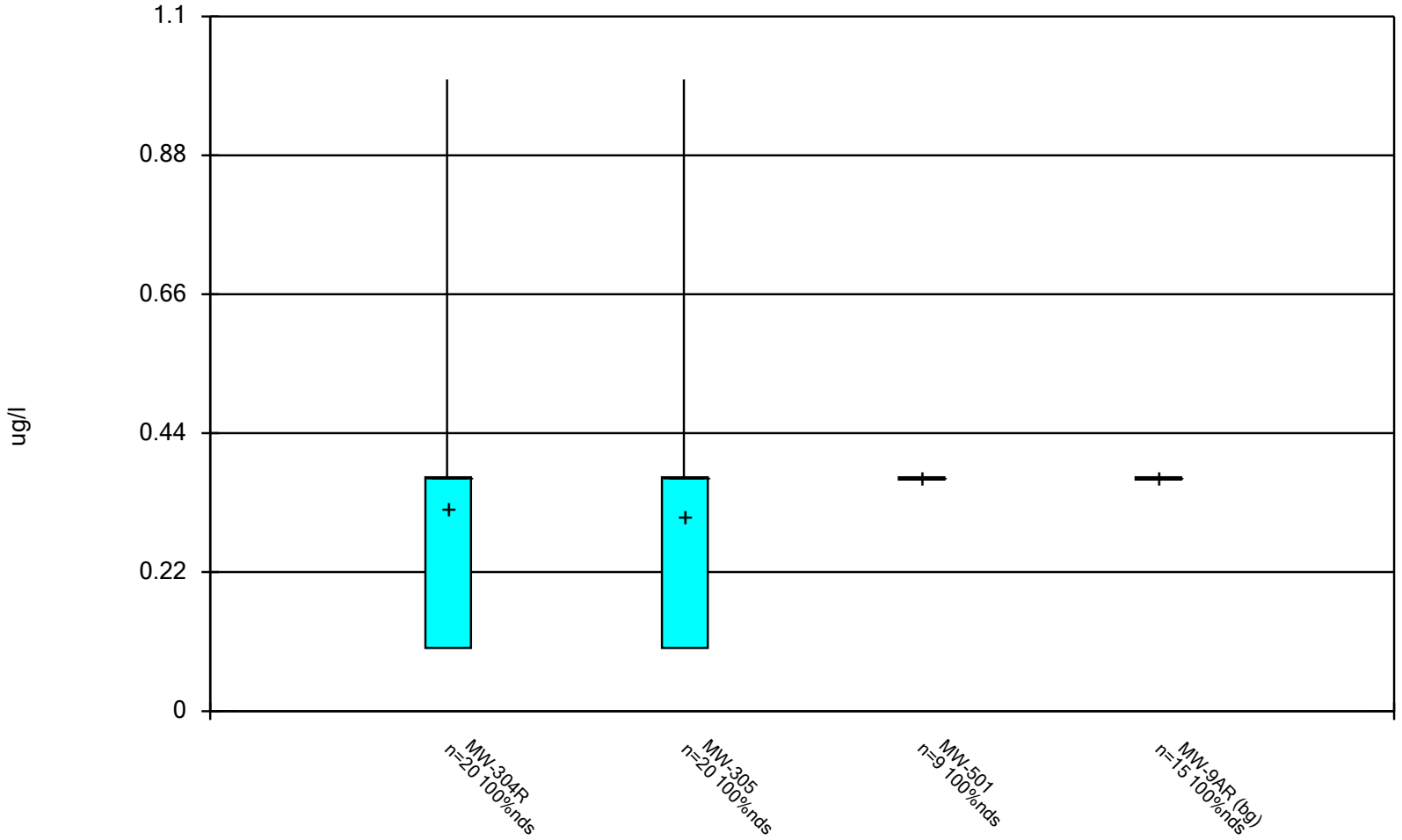
Box & Whiskers Plot



Constituent: Styrene Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

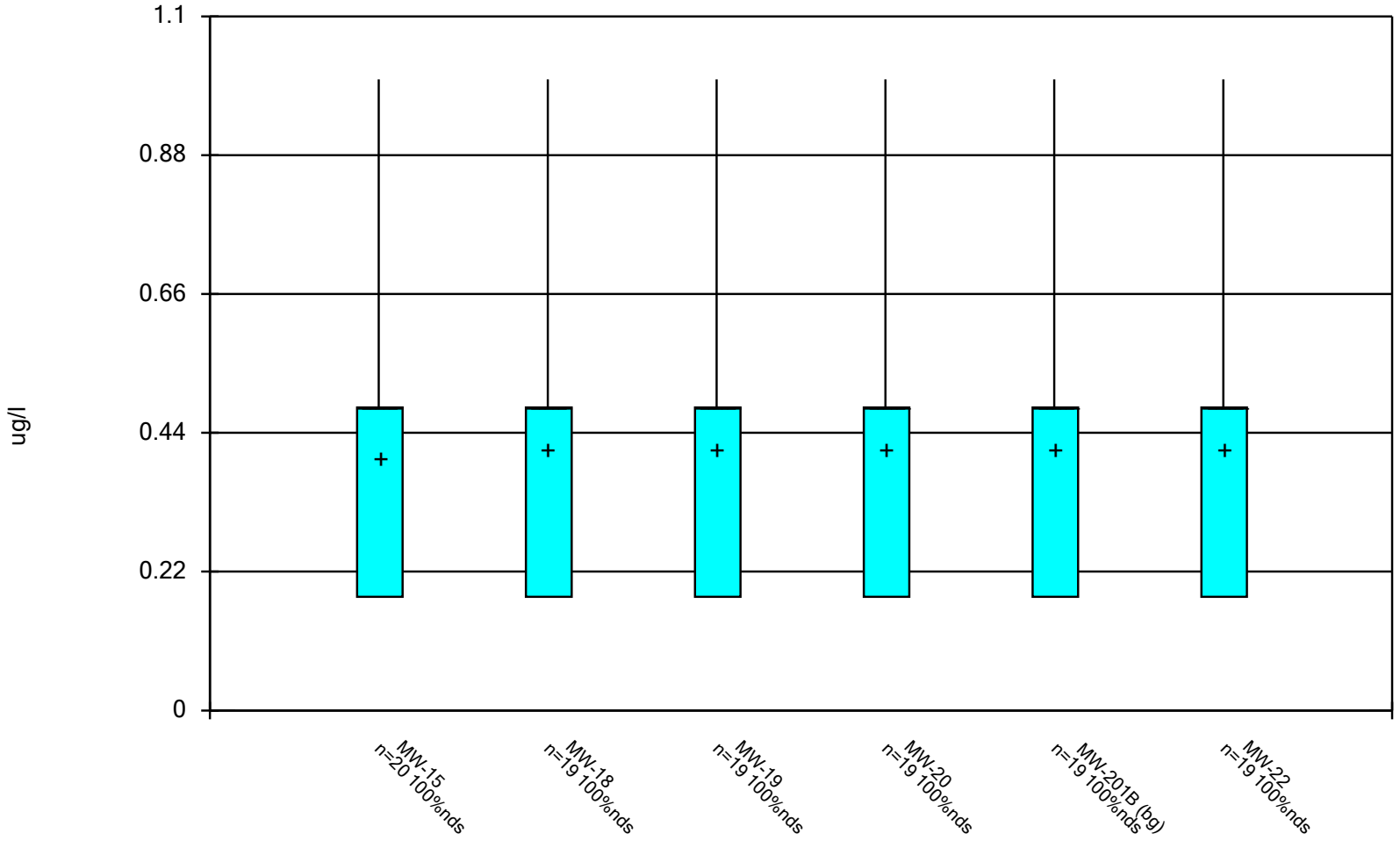
Box & Whiskers Plot



Constituent: Styrene Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

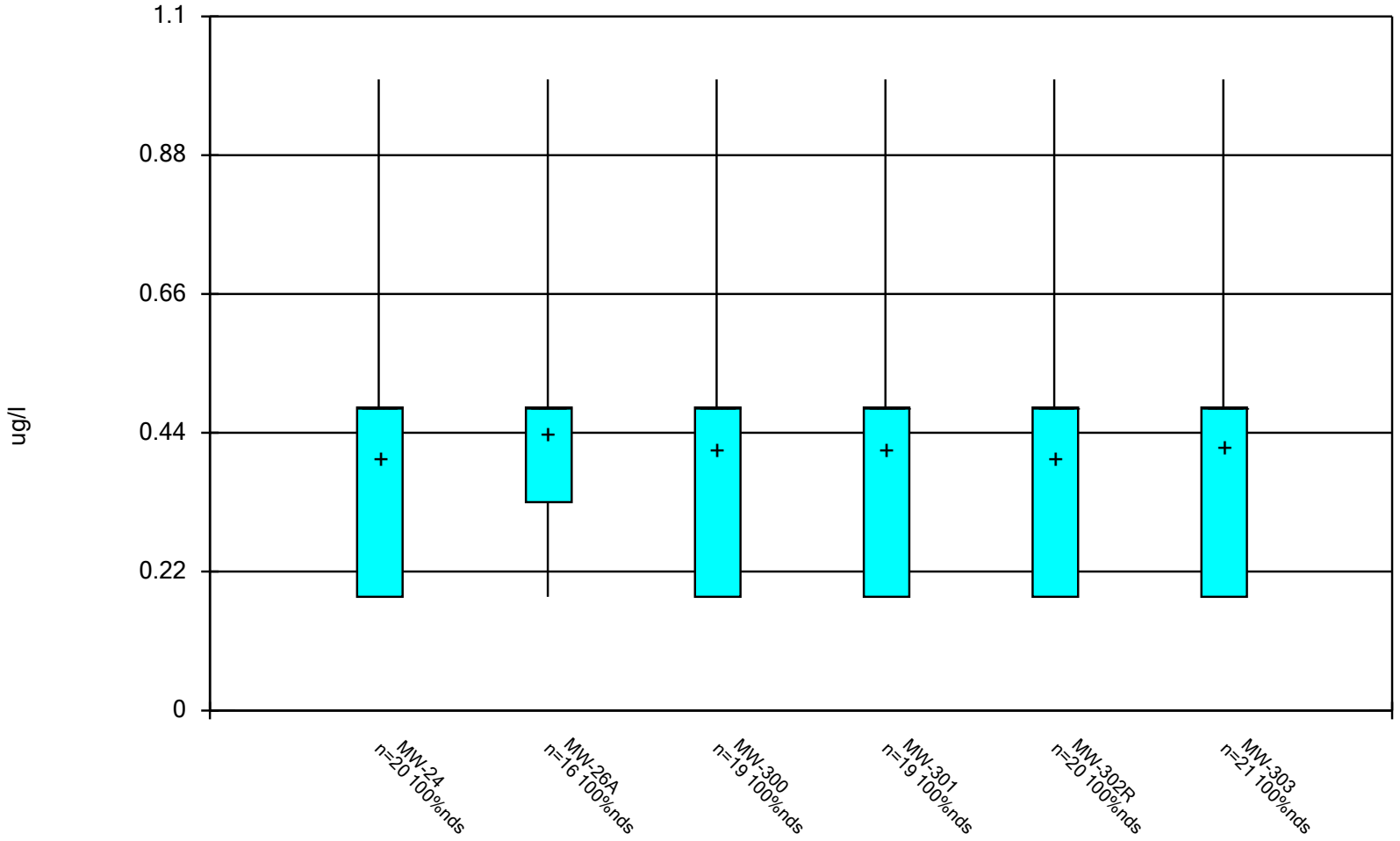
Box & Whiskers Plot



Constituent: Tetrachloroethene Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

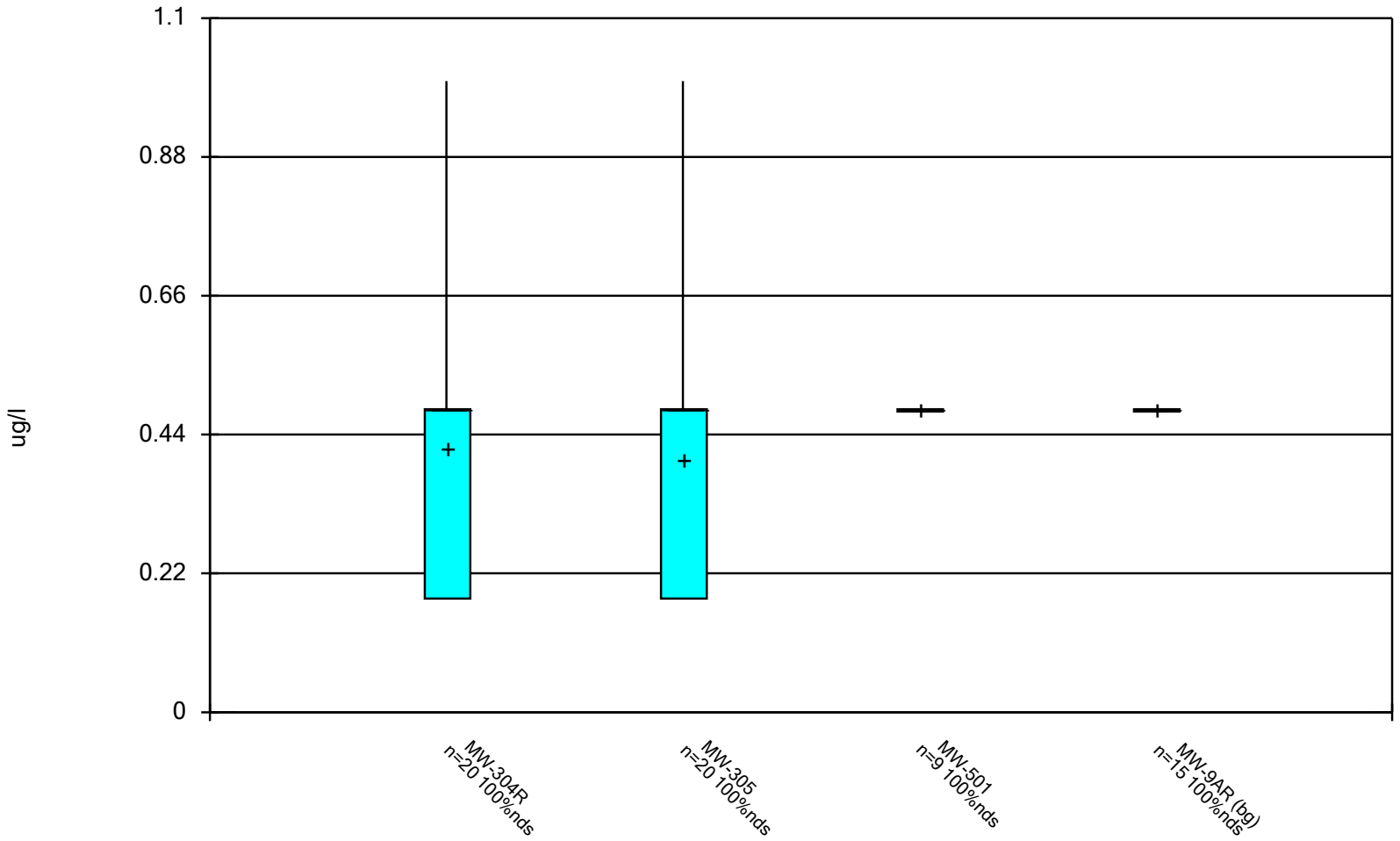
Box & Whiskers Plot



Constituent: Tetrachloroethene Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

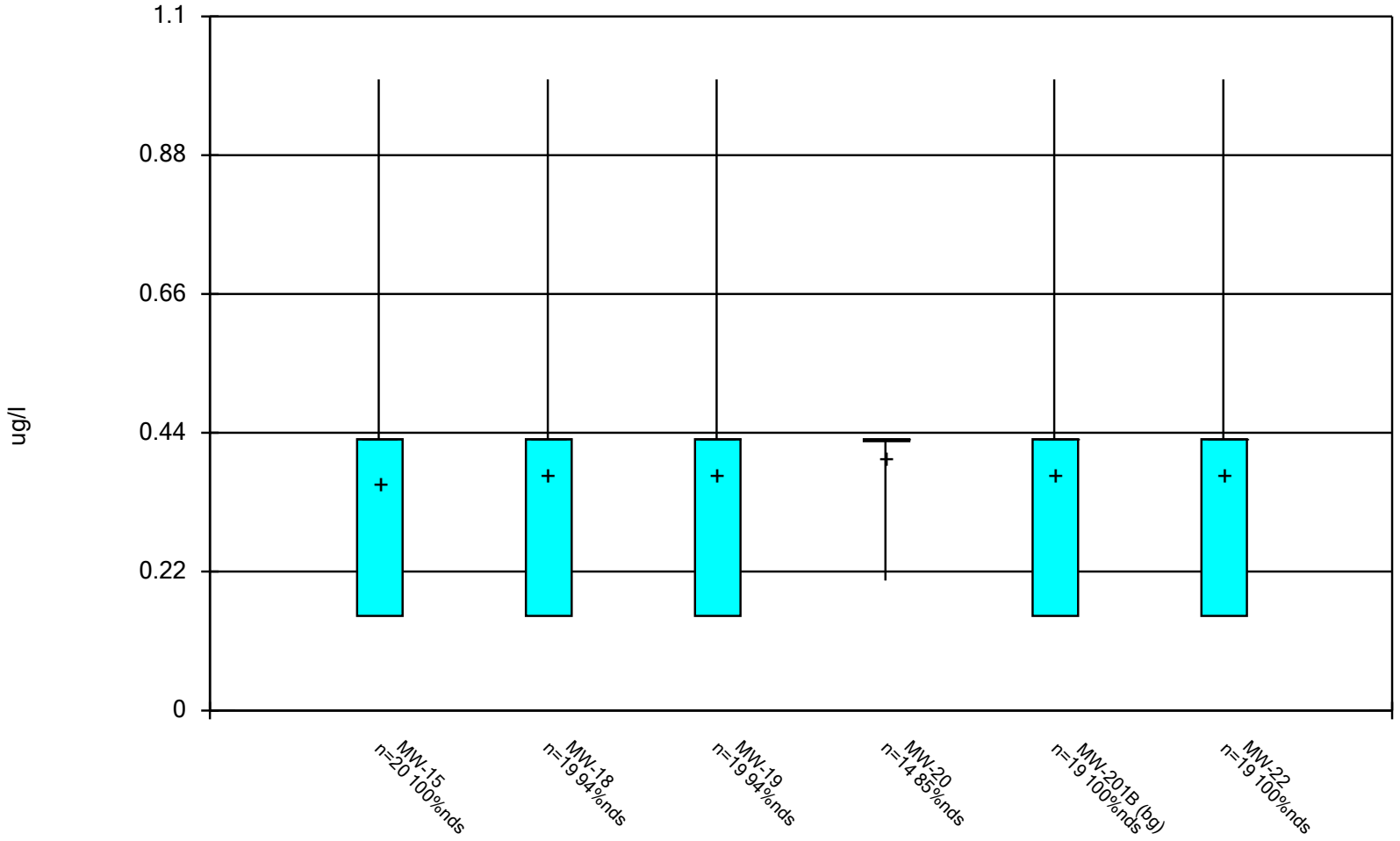
Box & Whiskers Plot



Constituent: Tetrachloroethene Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

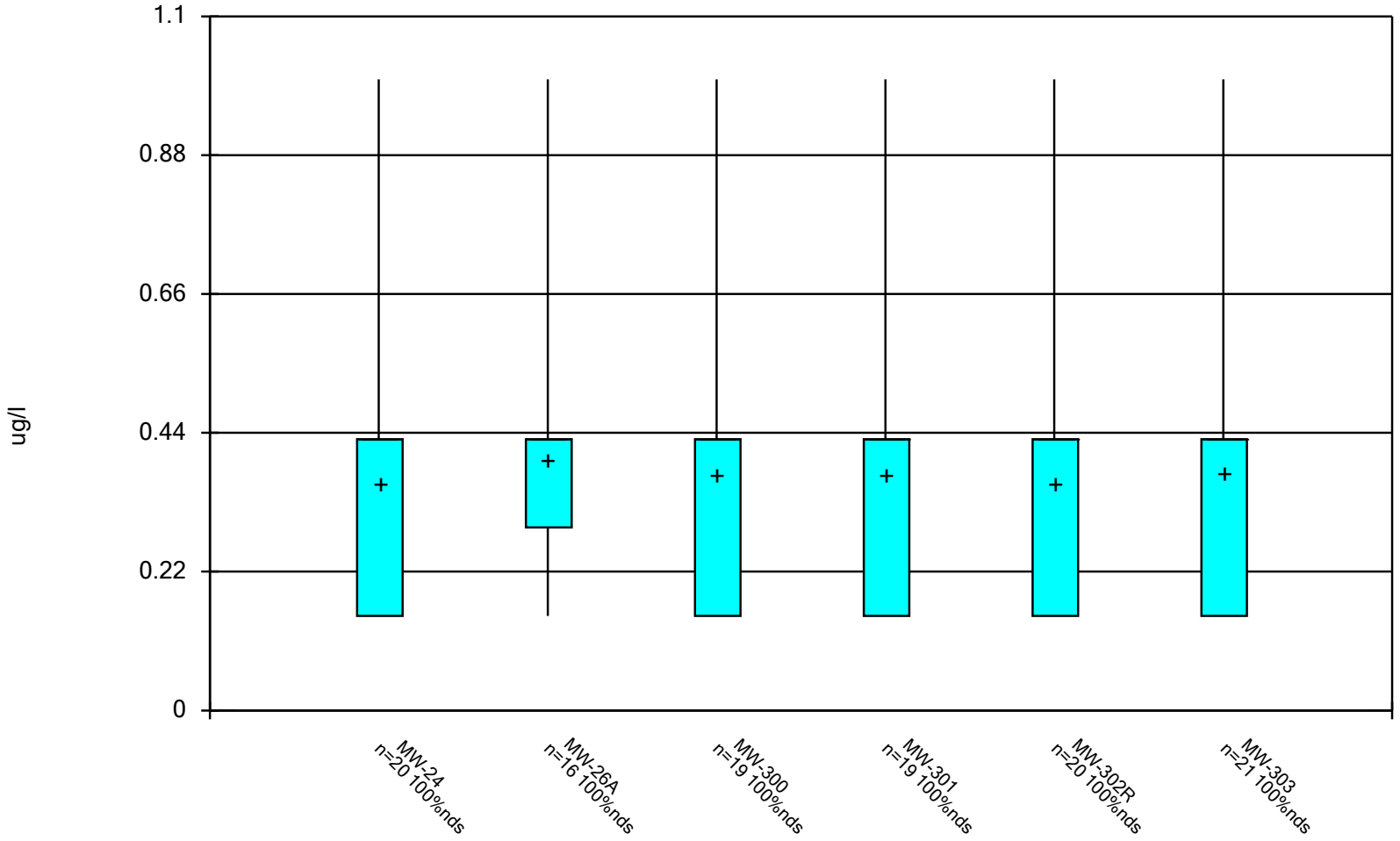
Box & Whiskers Plot



Constituent: Toluene Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

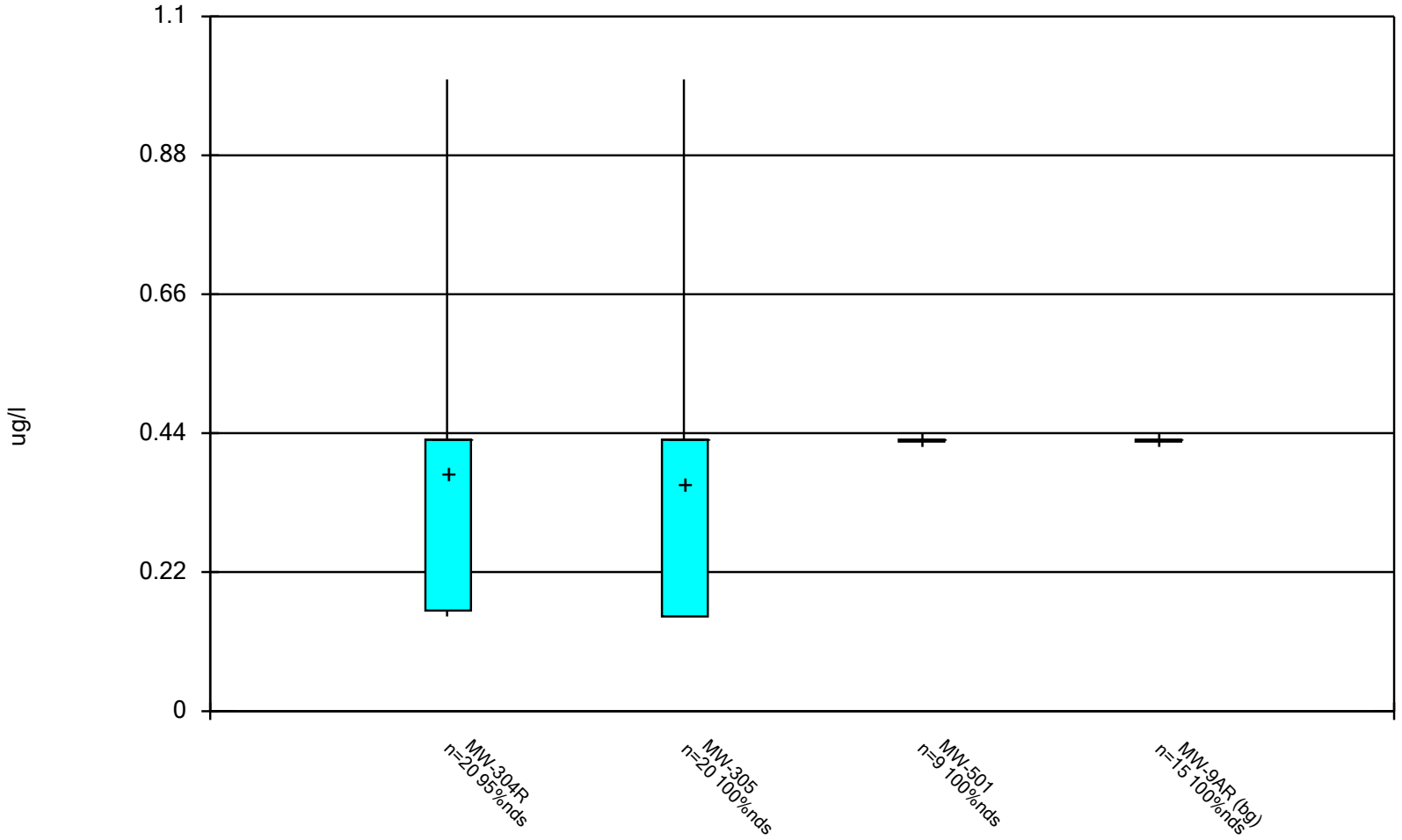
Box & Whiskers Plot



Constituent: Toluene Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

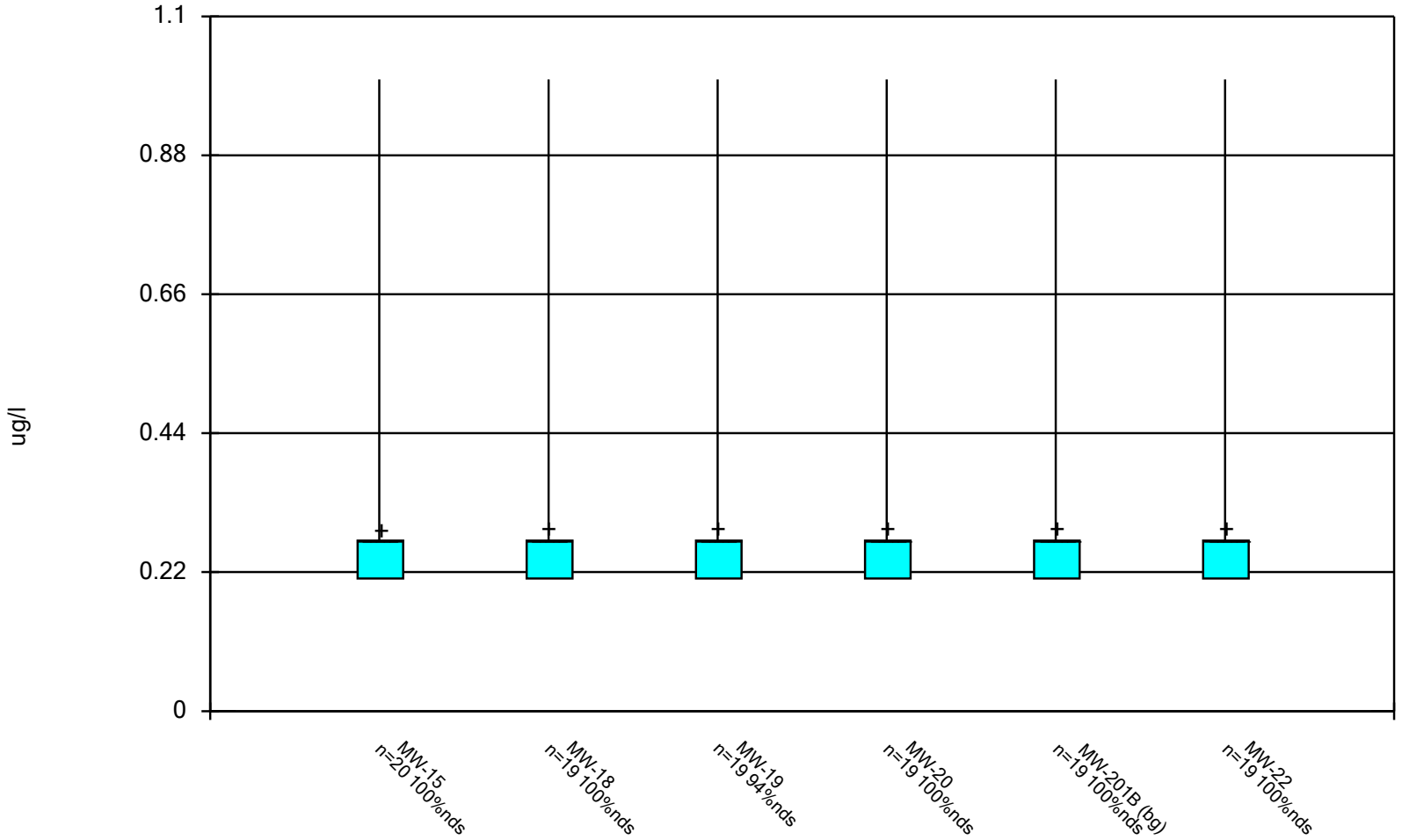
Box & Whiskers Plot



Constituent: Toluene Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

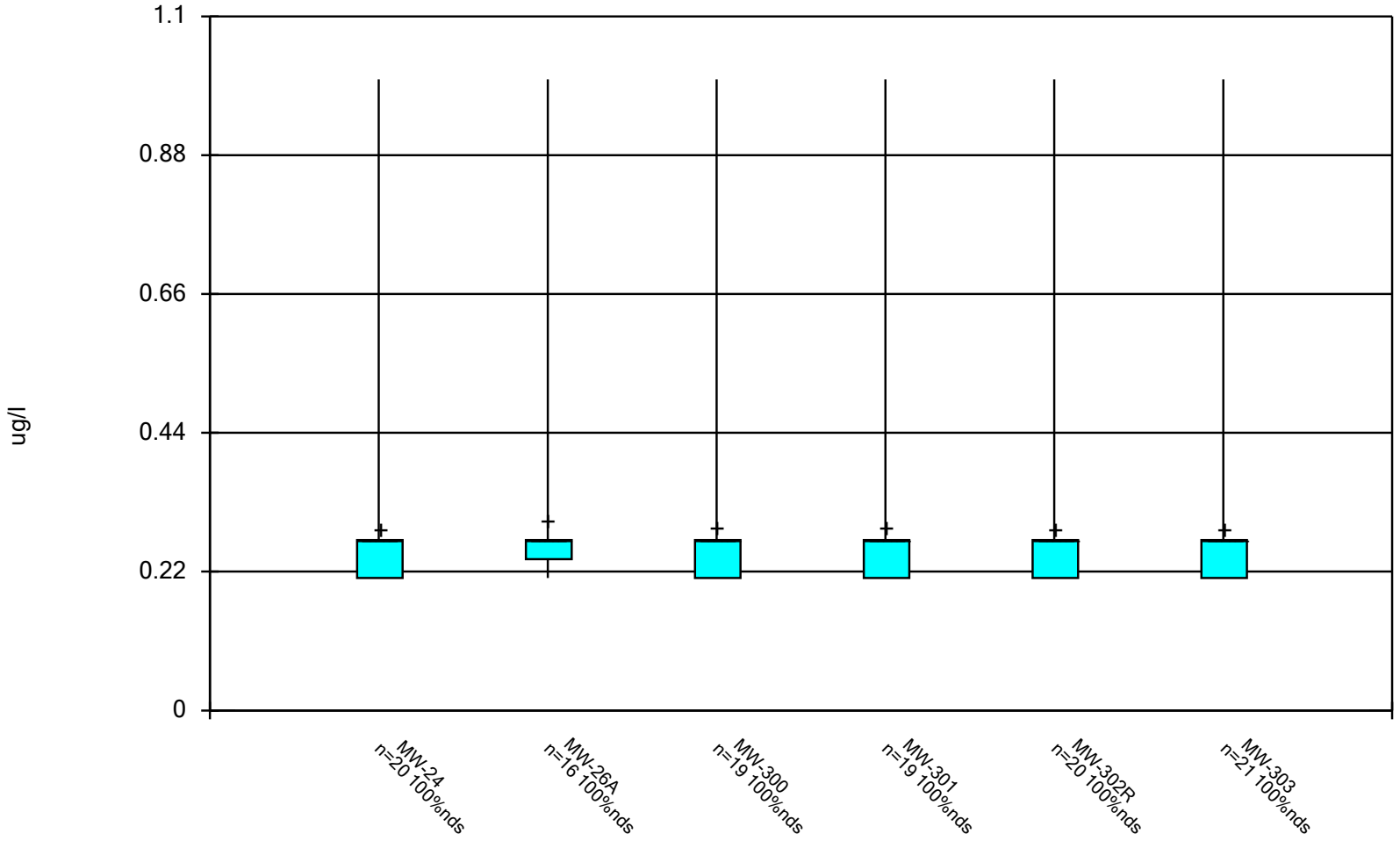
Box & Whiskers Plot



Constituent: trans-1,2-Dichloroethene Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

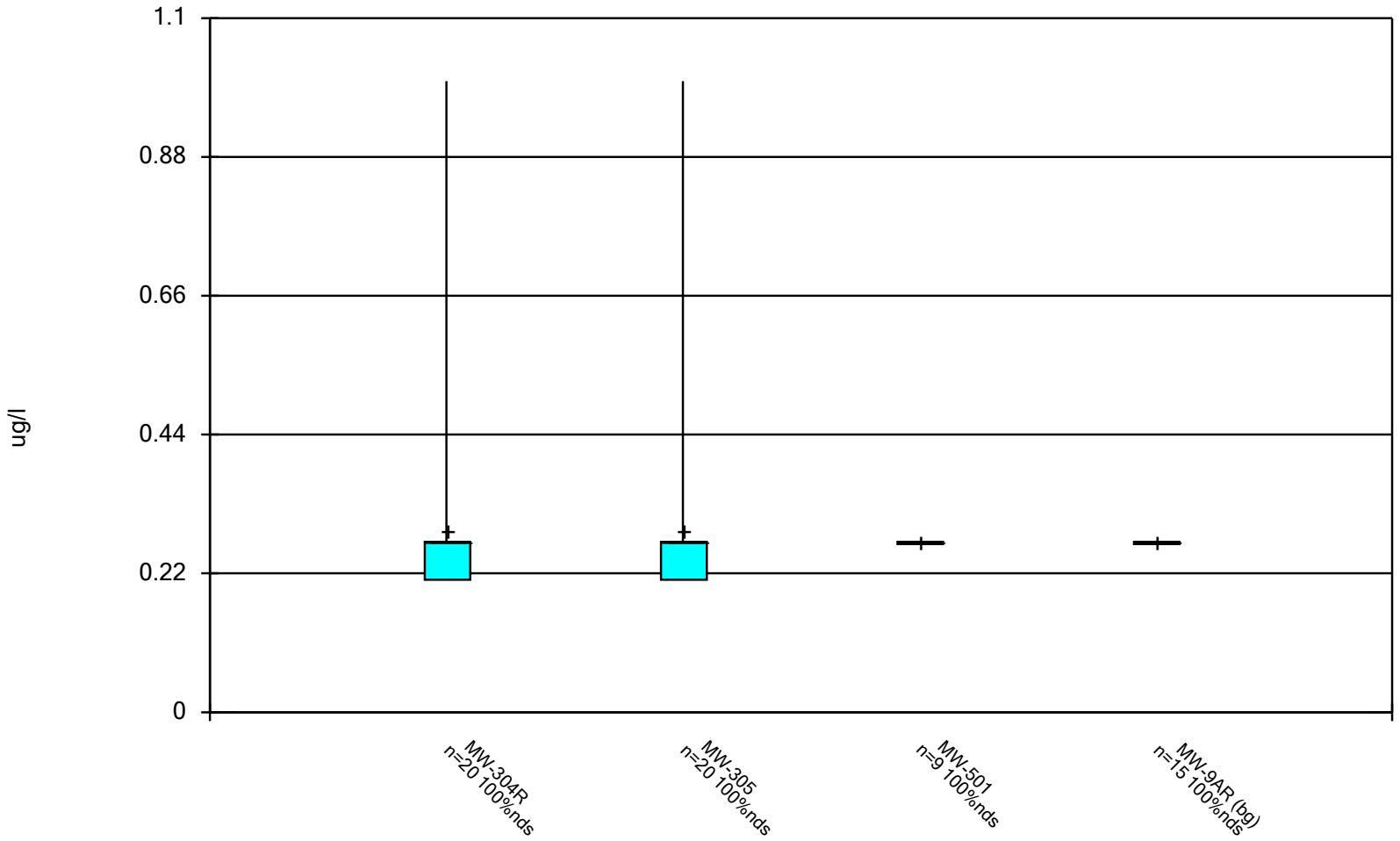
Box & Whiskers Plot



Constituent: trans-1,2-Dichloroethene Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

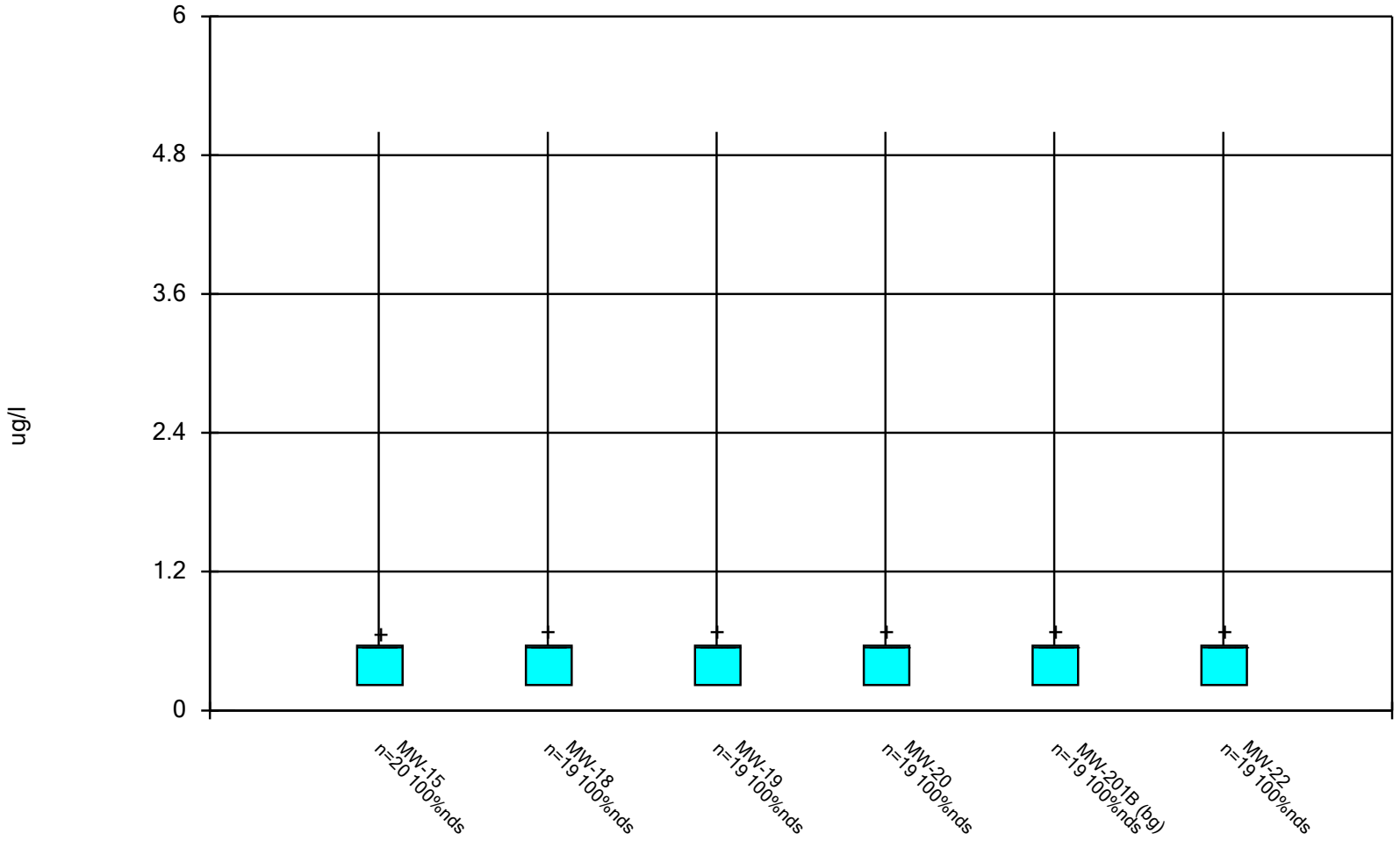
Box & Whiskers Plot



Constituent: trans-1,2-Dichloroethene Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

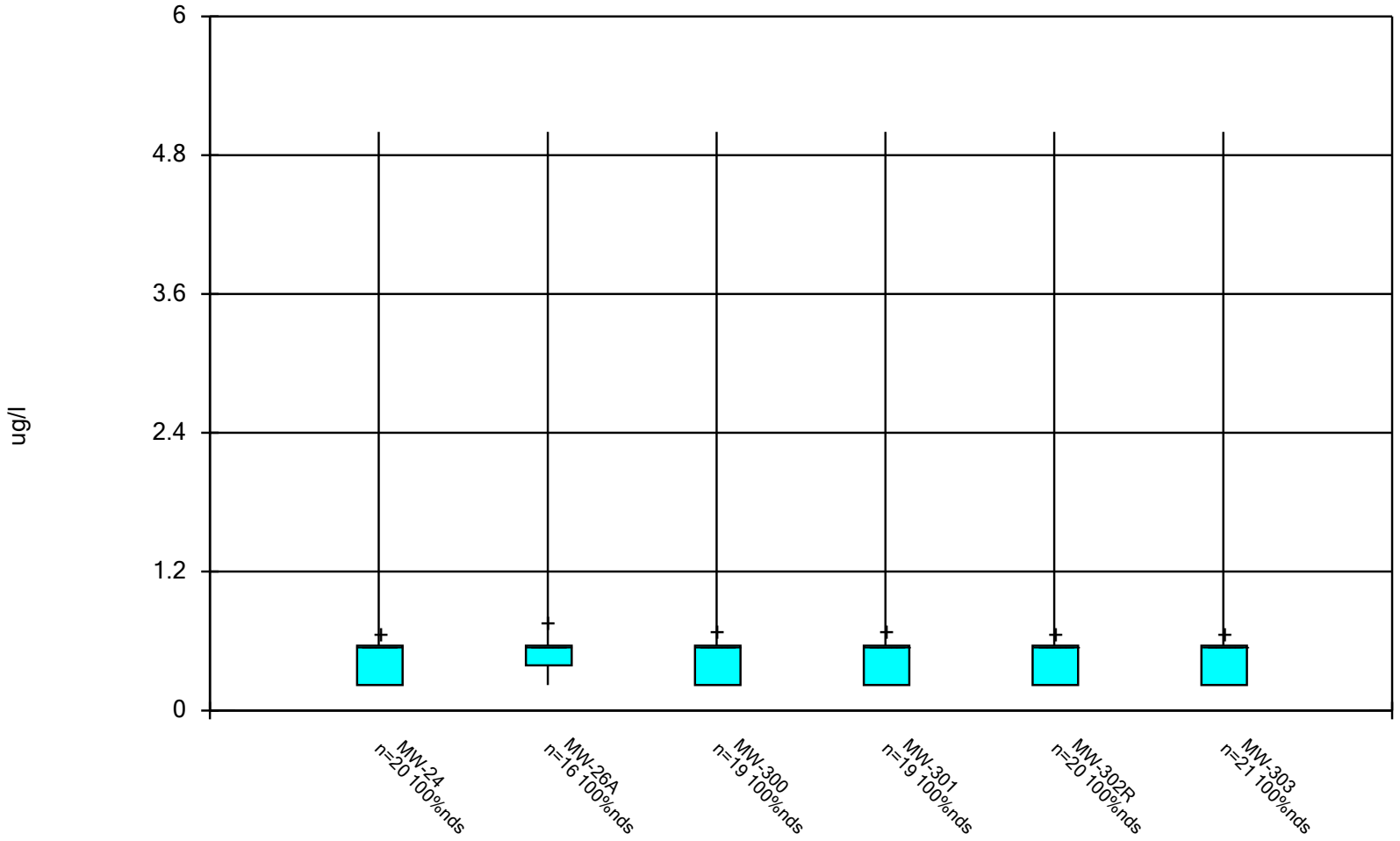
Box & Whiskers Plot



Constituent: trans-1,3-Dichloropropene Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



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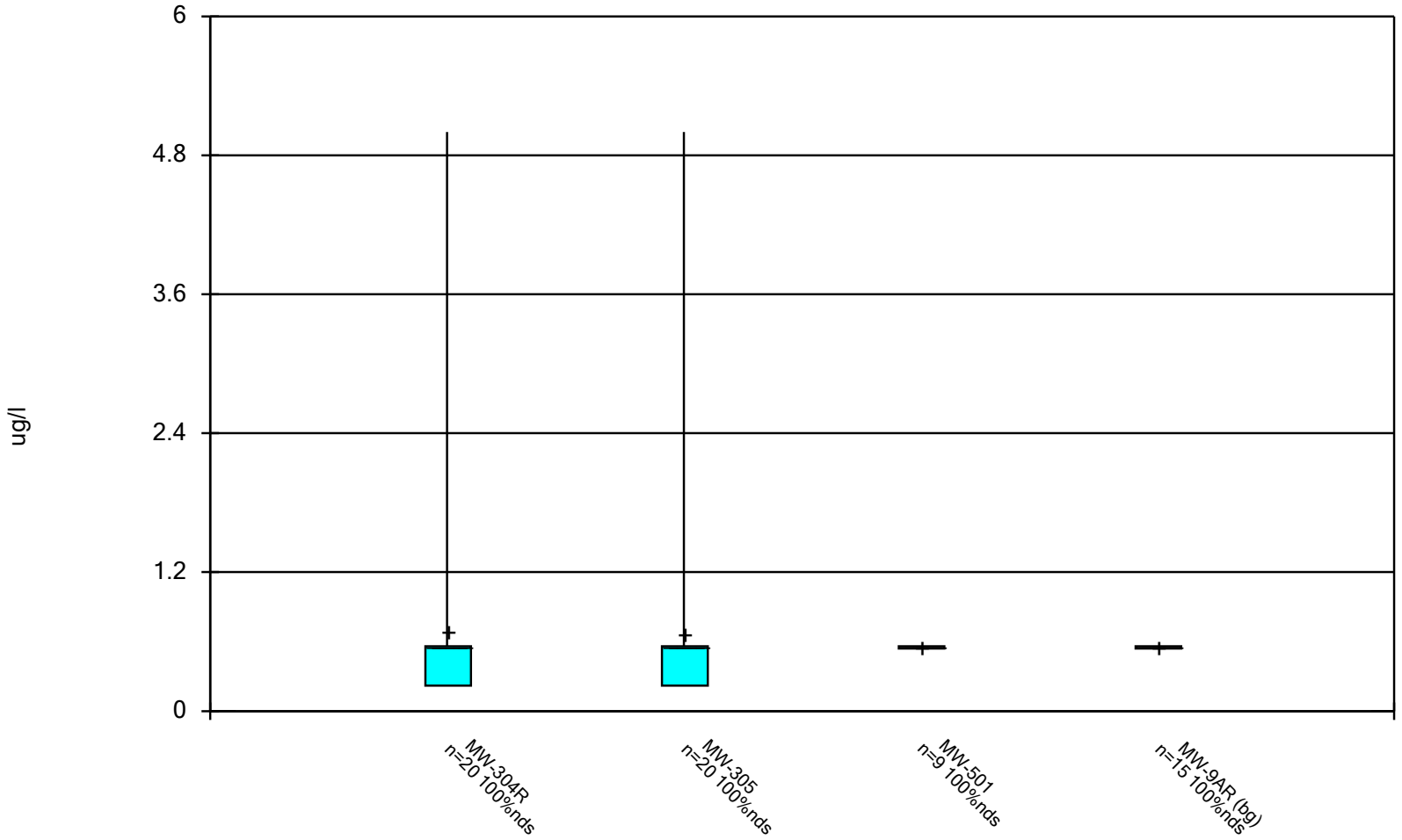
Linn County Data: CRLCSWA_Groundwater Database

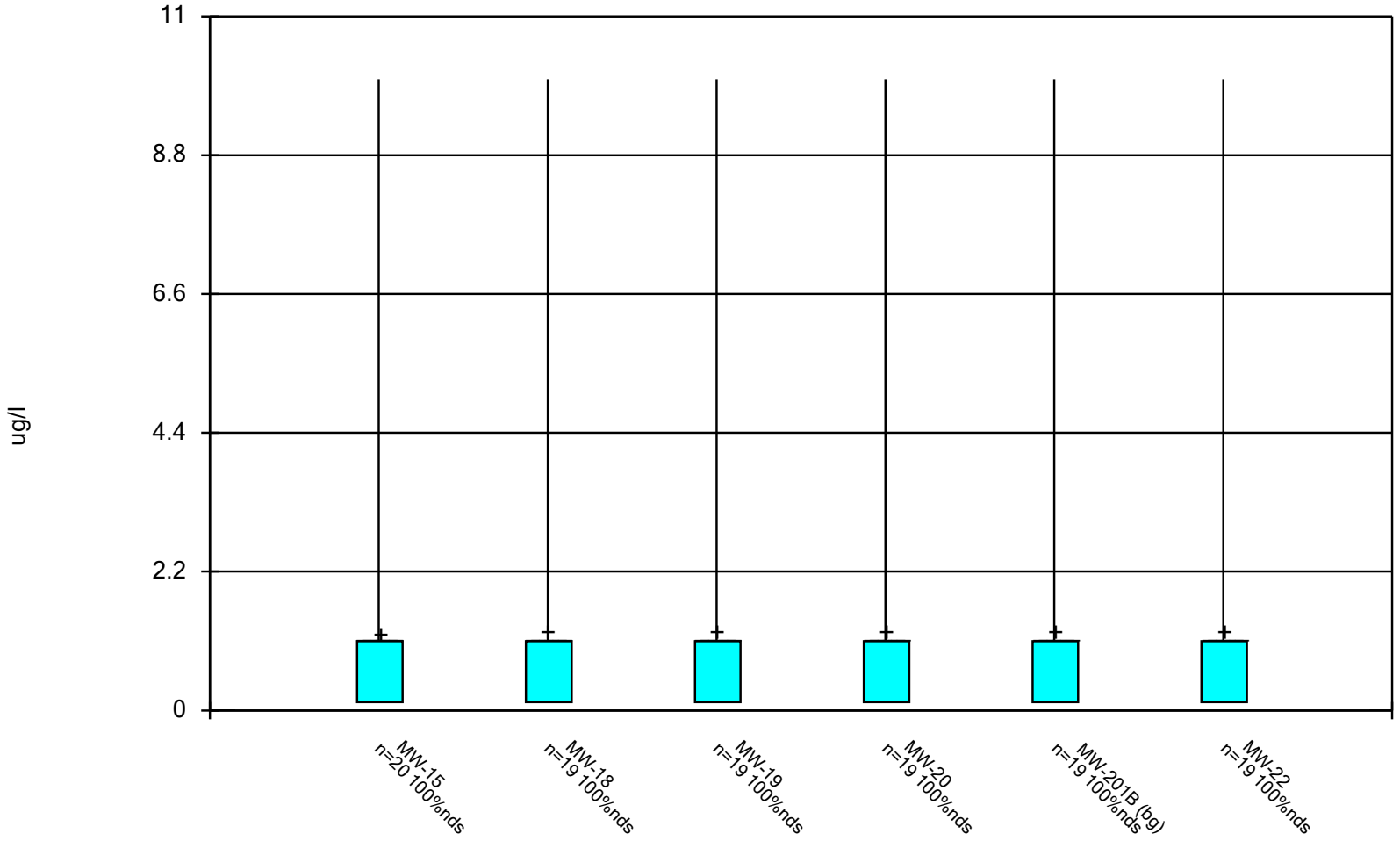
Box & Whiskers Plot



Constituent: trans-1,3-Dichloropropene Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

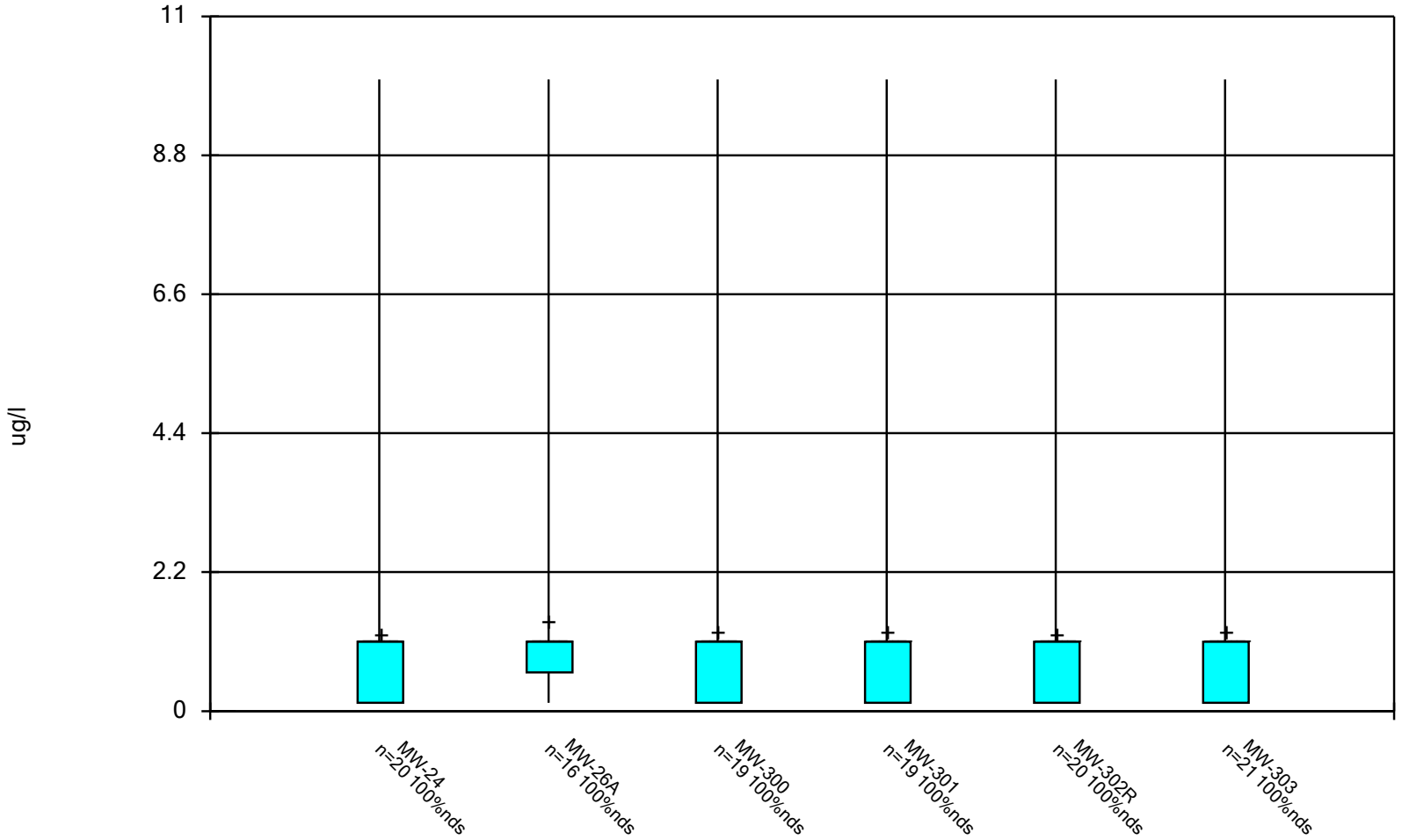
Box & Whiskers Plot



Constituent: trans-1,4-Dichloro-2-butene Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

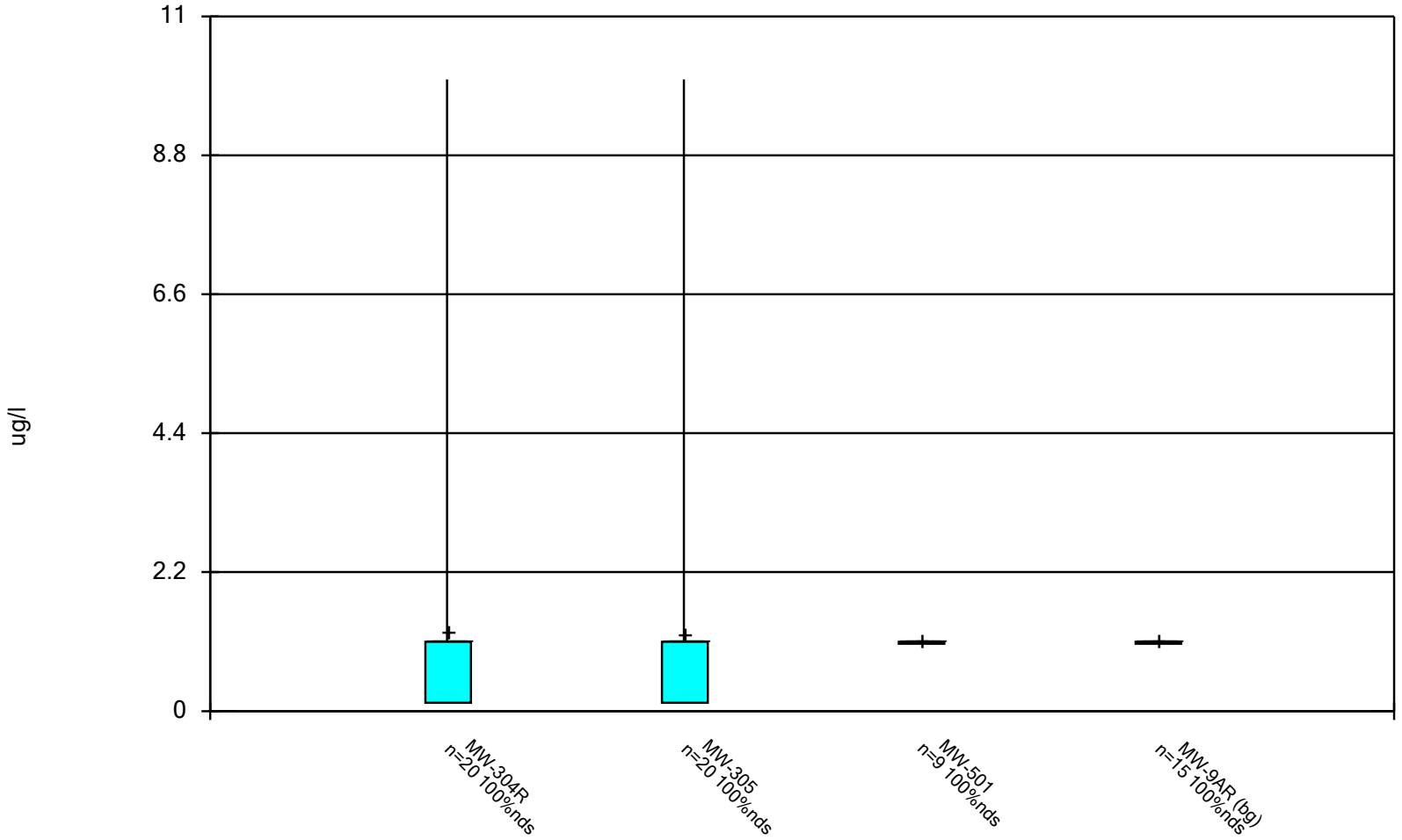
Box & Whiskers Plot



Constituent: trans-1,4-Dichloro-2-butene Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

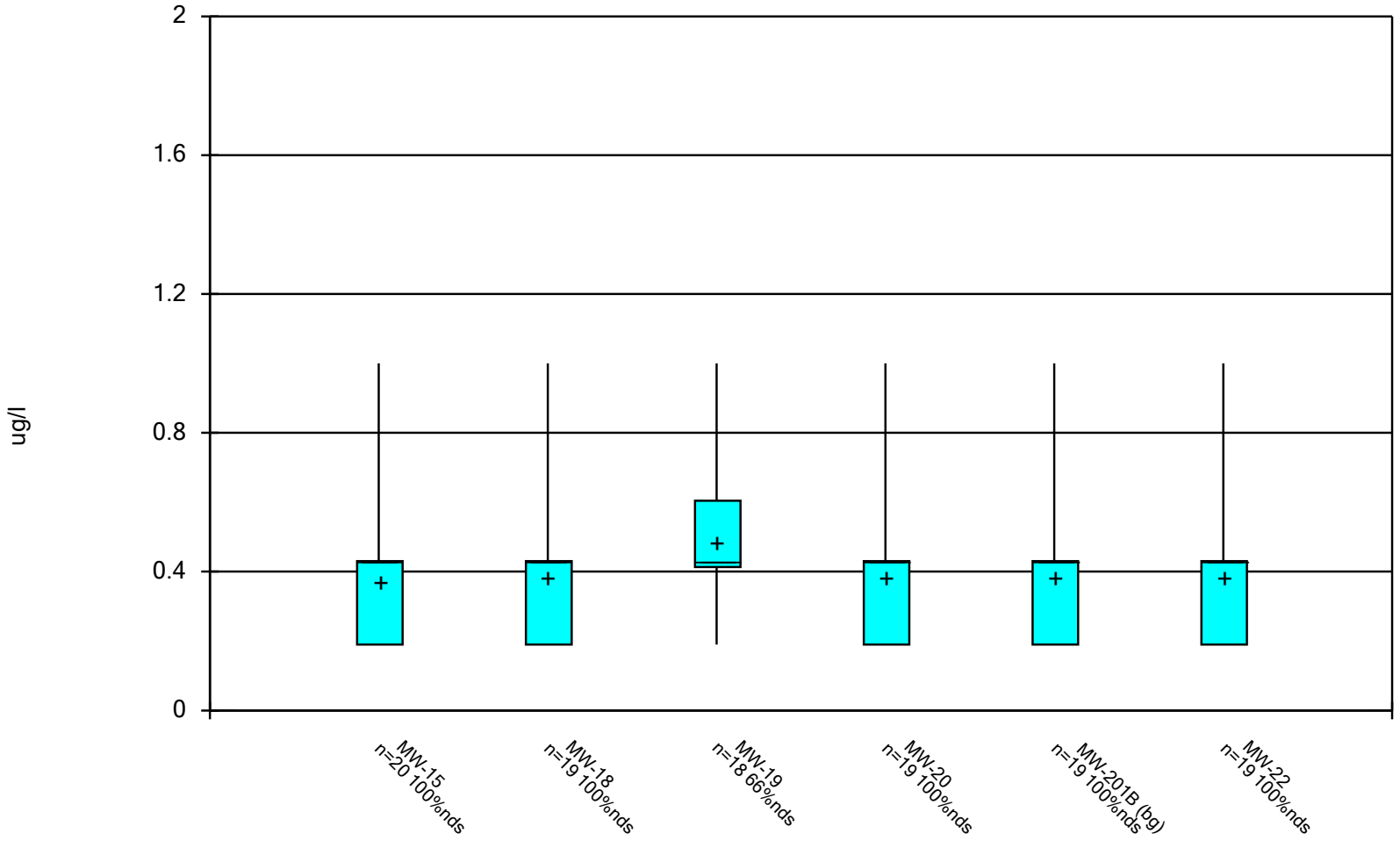
Box & Whiskers Plot



Constituent: trans-1,4-Dichloro-2-butene Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

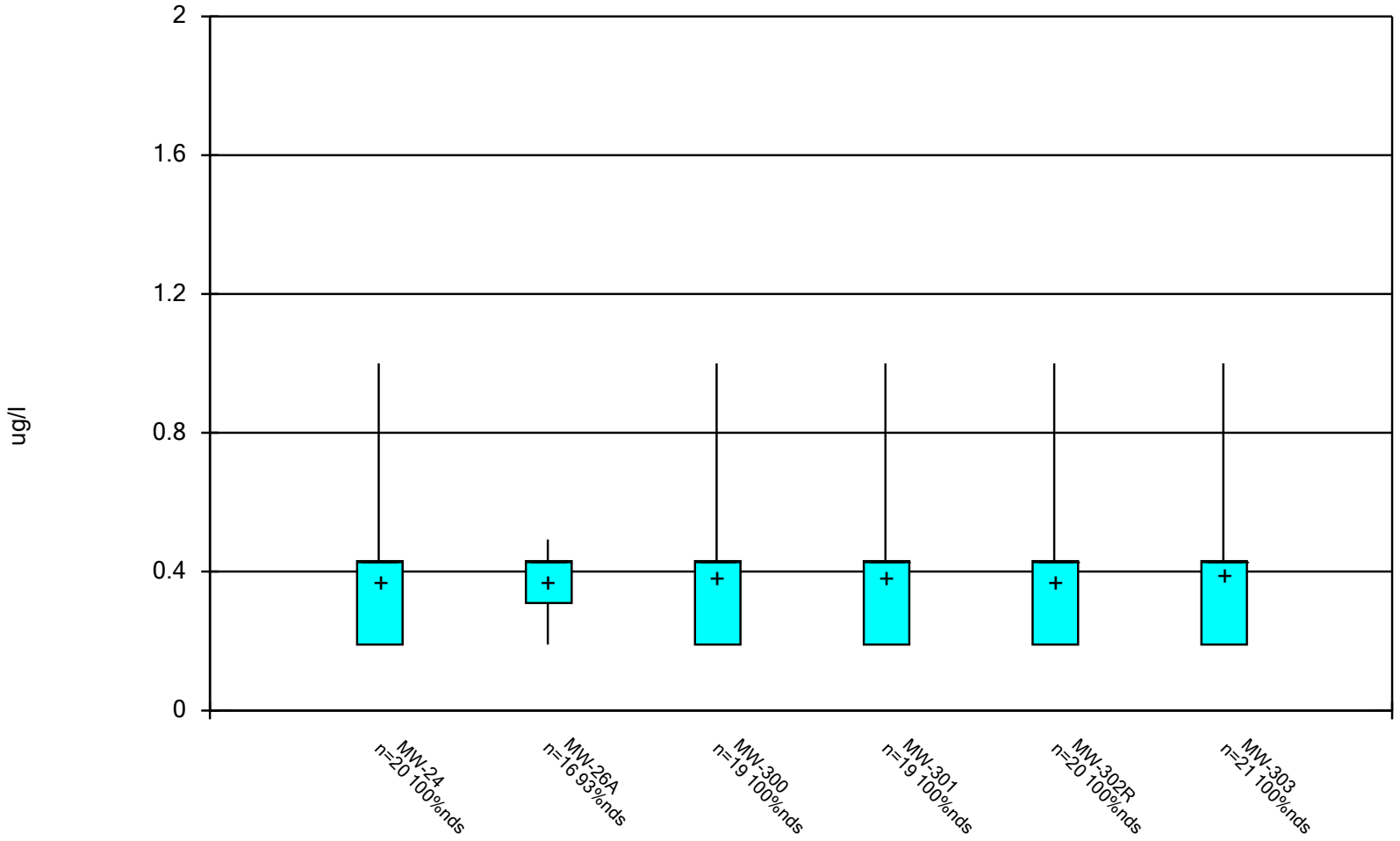
Box & Whiskers Plot



Constituent: Trichloroethene Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

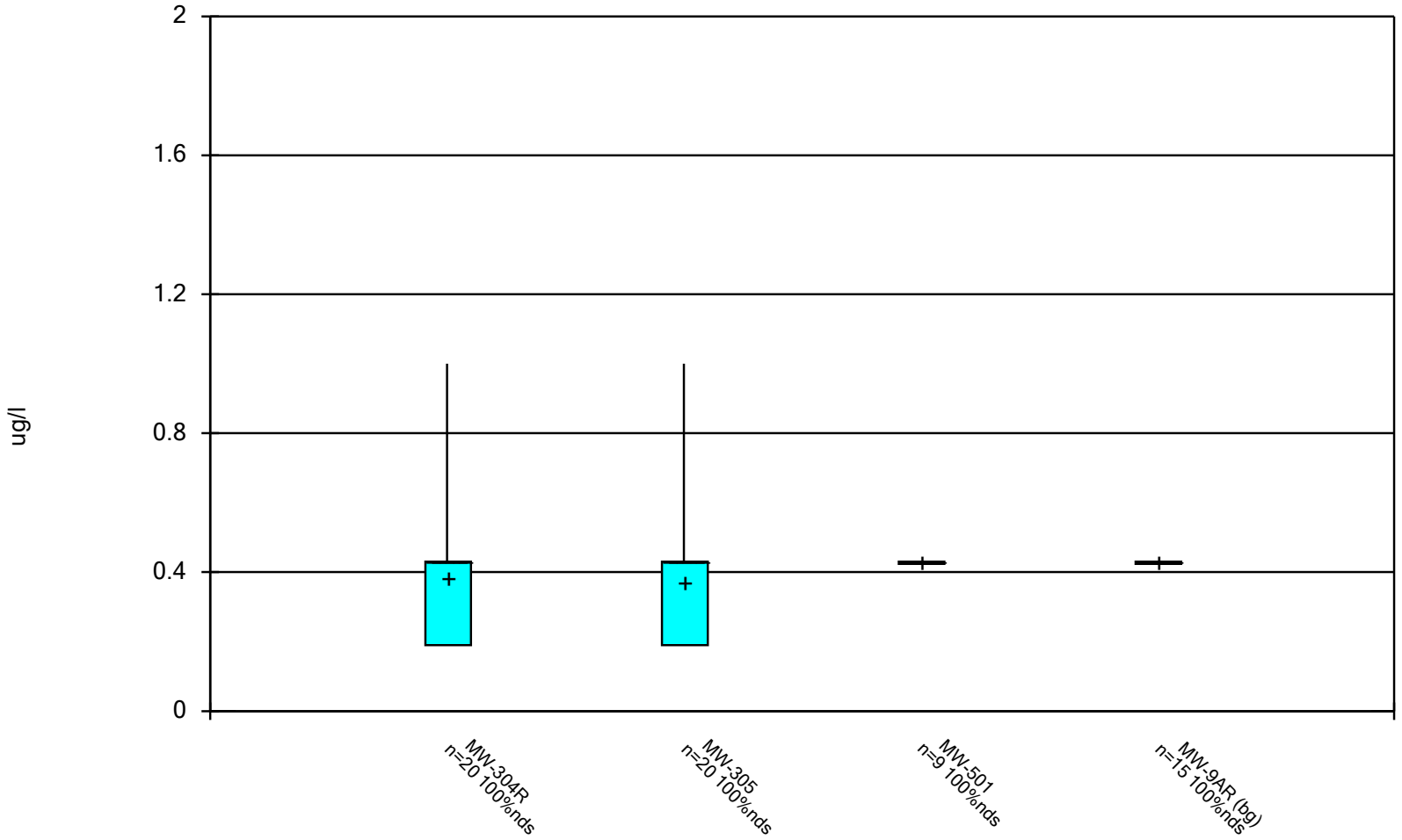
Box & Whiskers Plot



Constituent: Trichloroethene Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

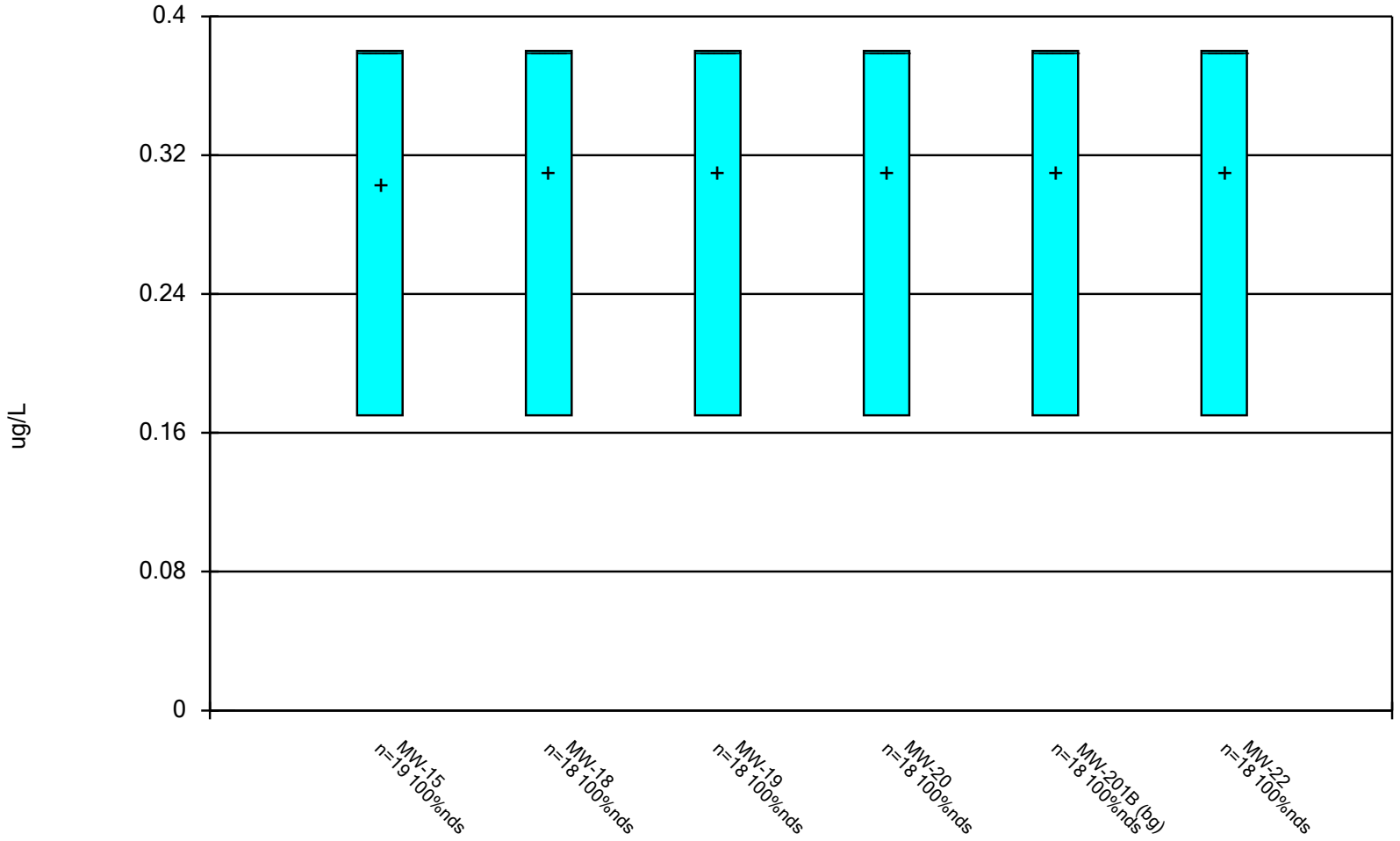
Box & Whiskers Plot



Constituent: Trichloroethene Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

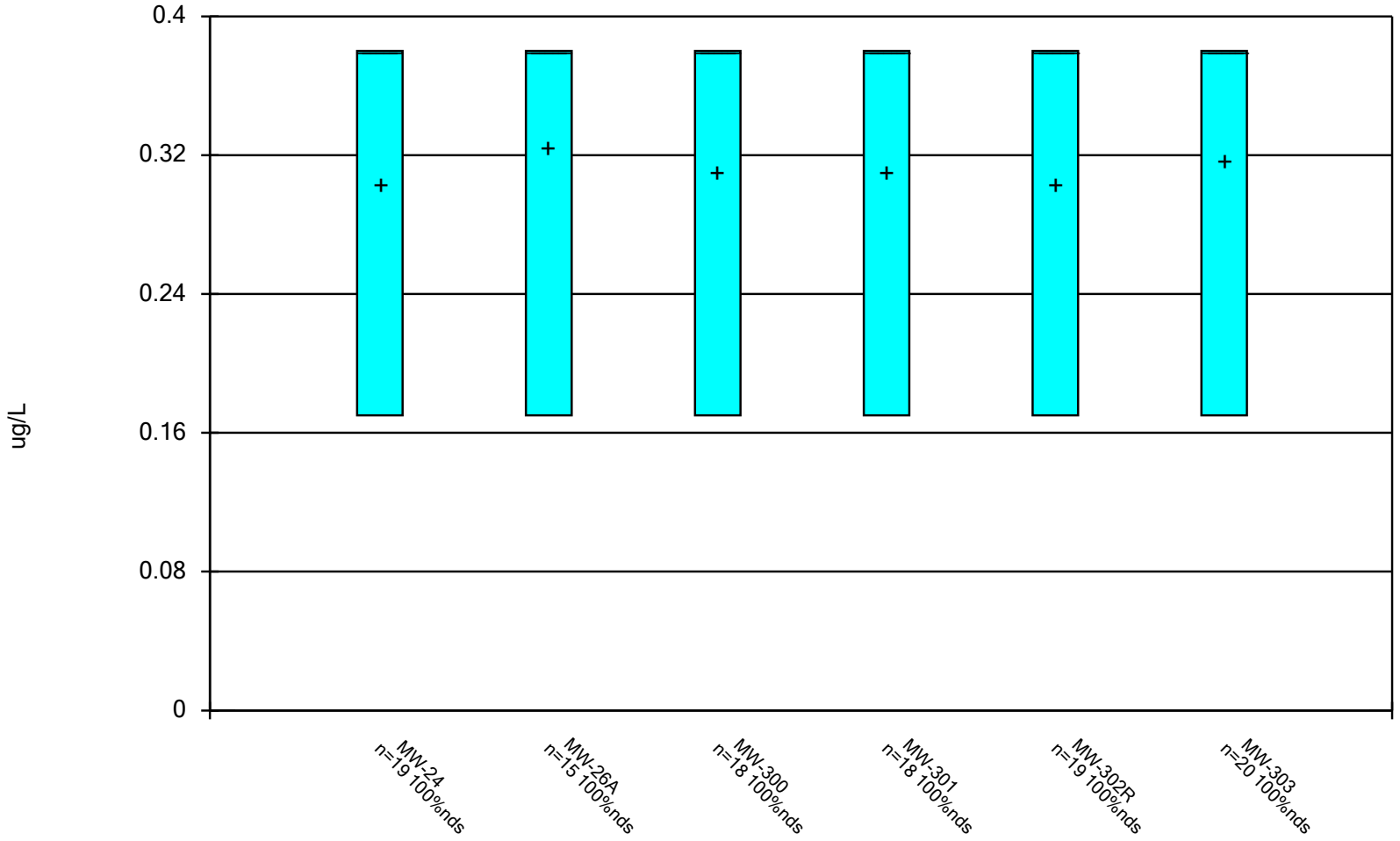
Box & Whiskers Plot



Constituent: Trichlorofluoromethane Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

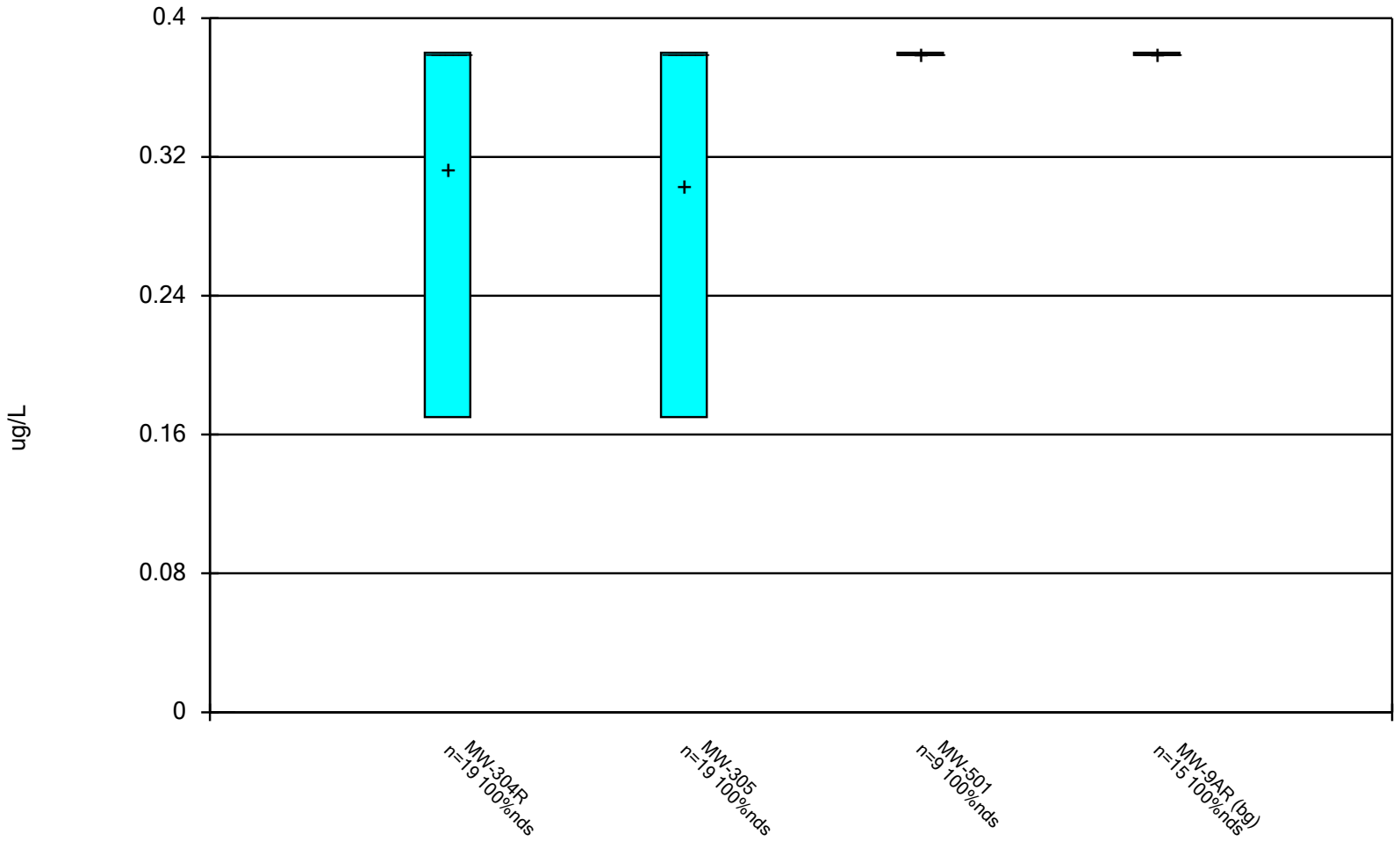
Box & Whiskers Plot



Constituent: Trichlorofluoromethane Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

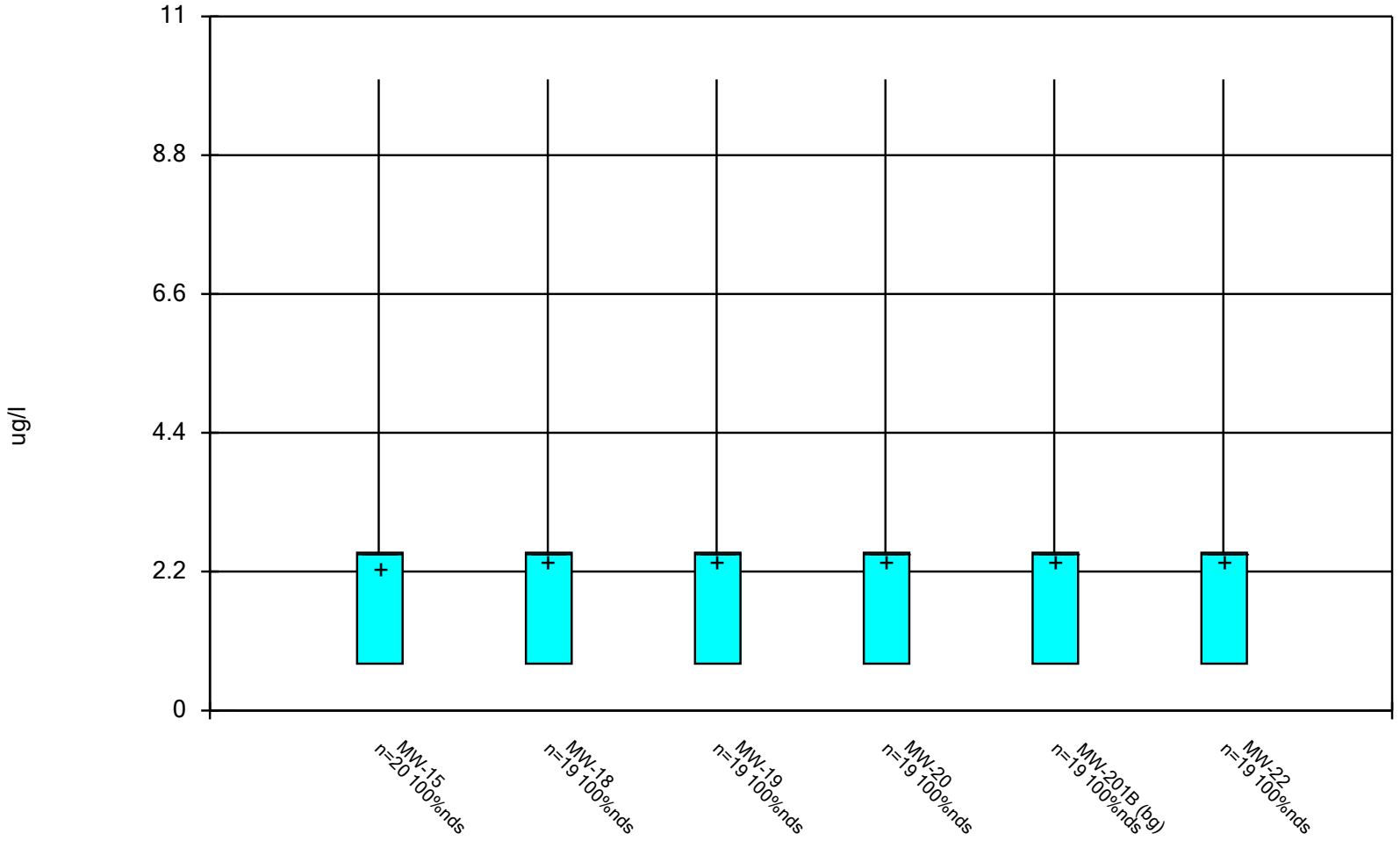
Box & Whiskers Plot



Constituent: Trichlorofluoromethane Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

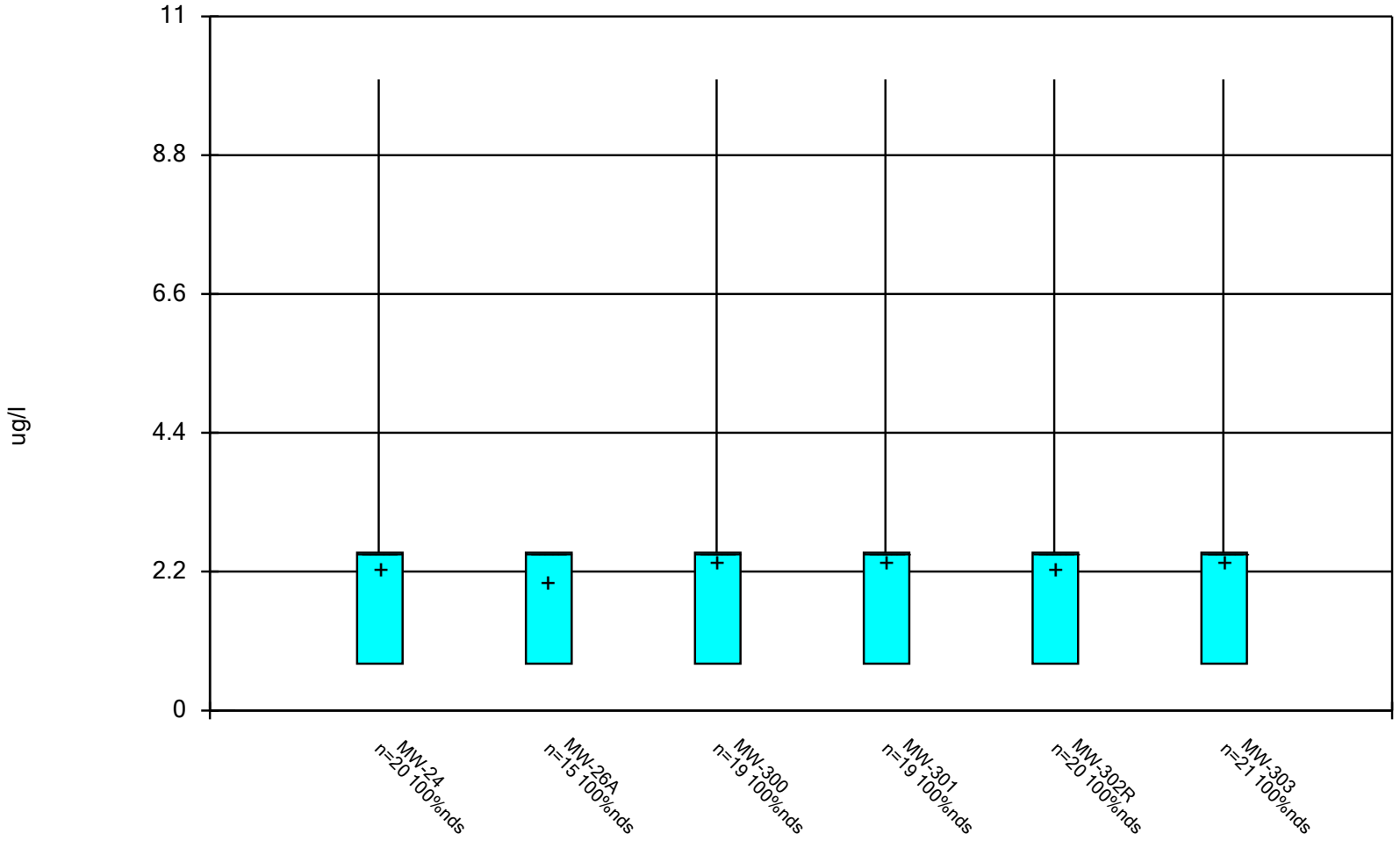
Box & Whiskers Plot



Constituent: Vinyl Acetate Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

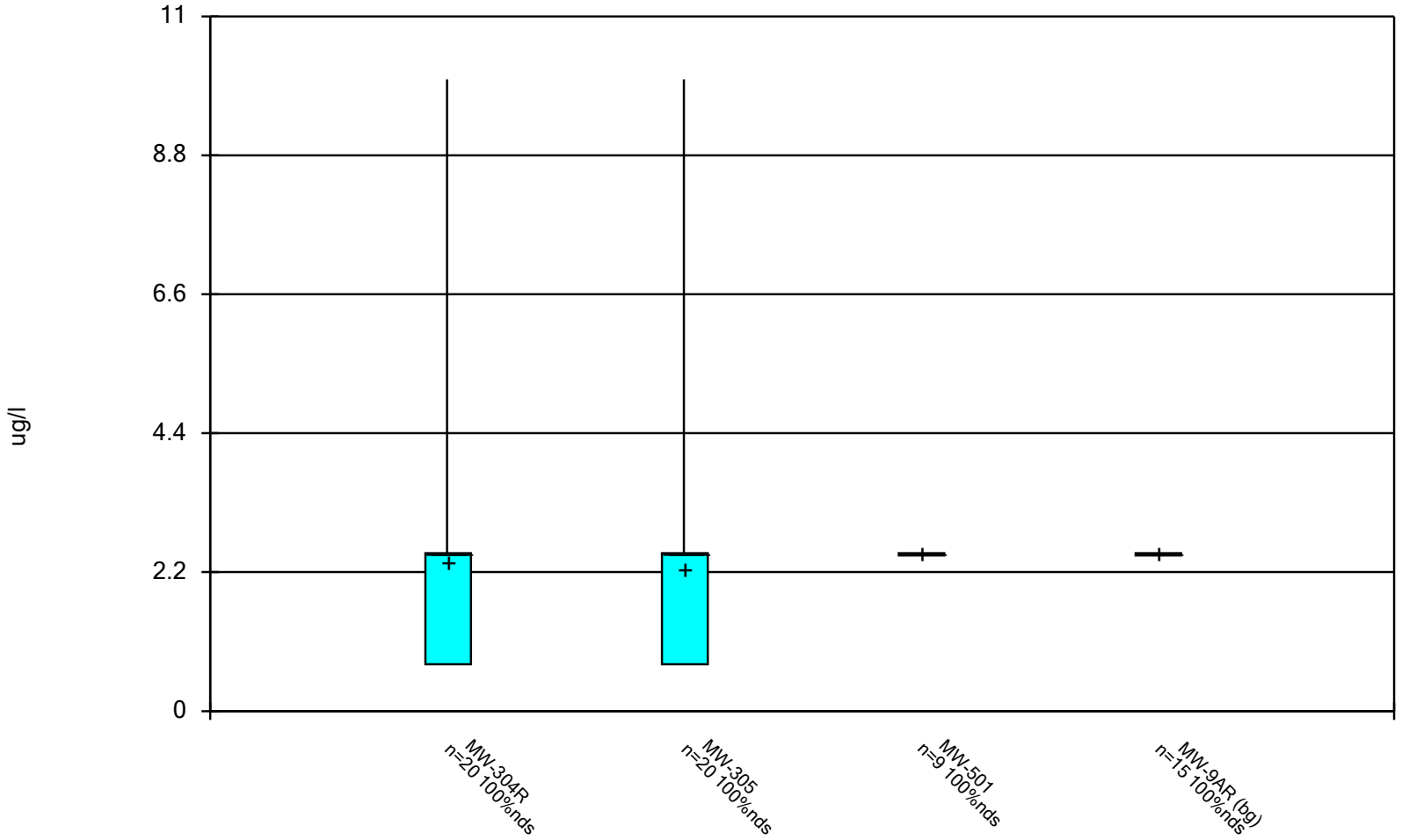
Box & Whiskers Plot



Constituent: Vinyl Acetate Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

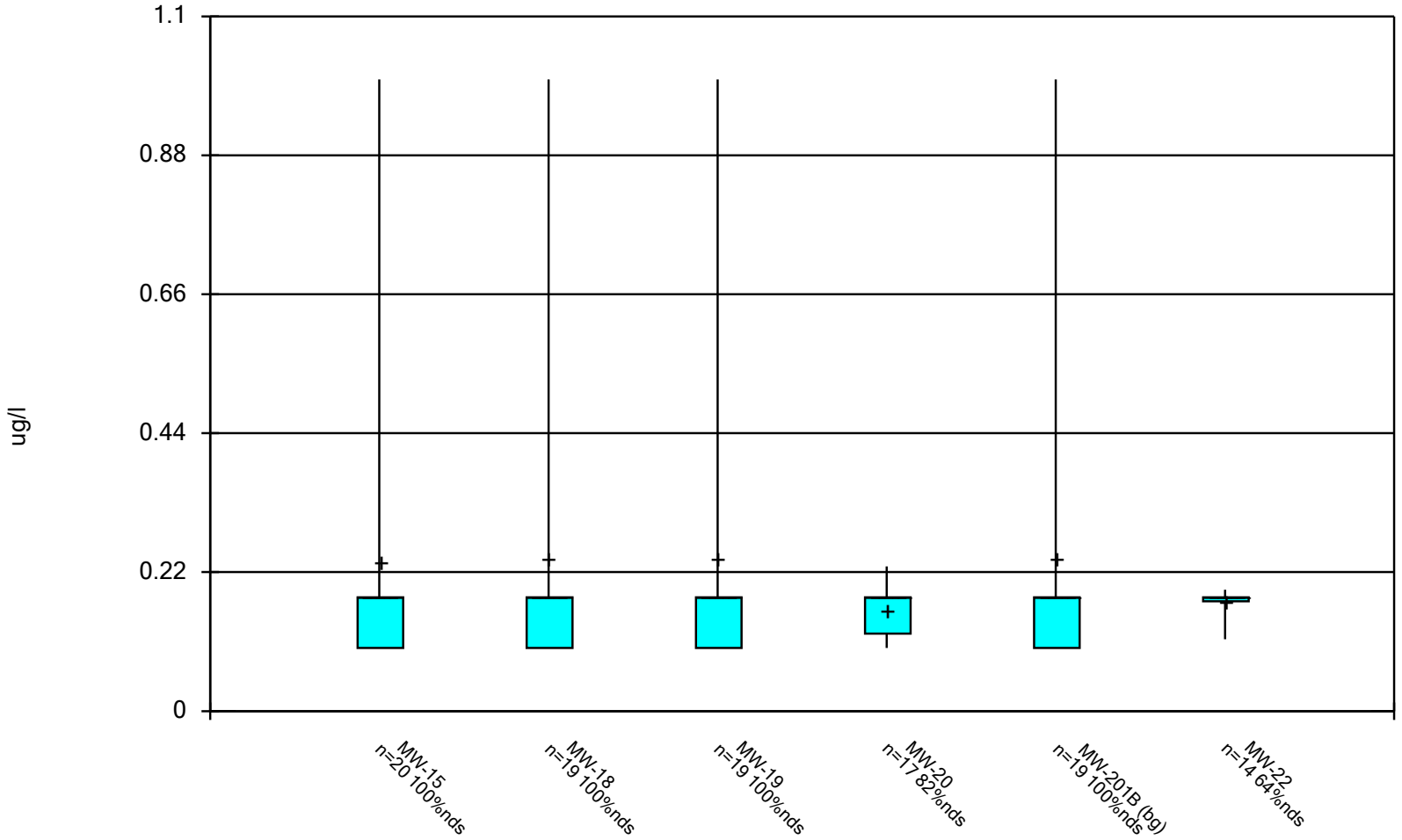
Box & Whiskers Plot



Constituent: Vinyl Acetate Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

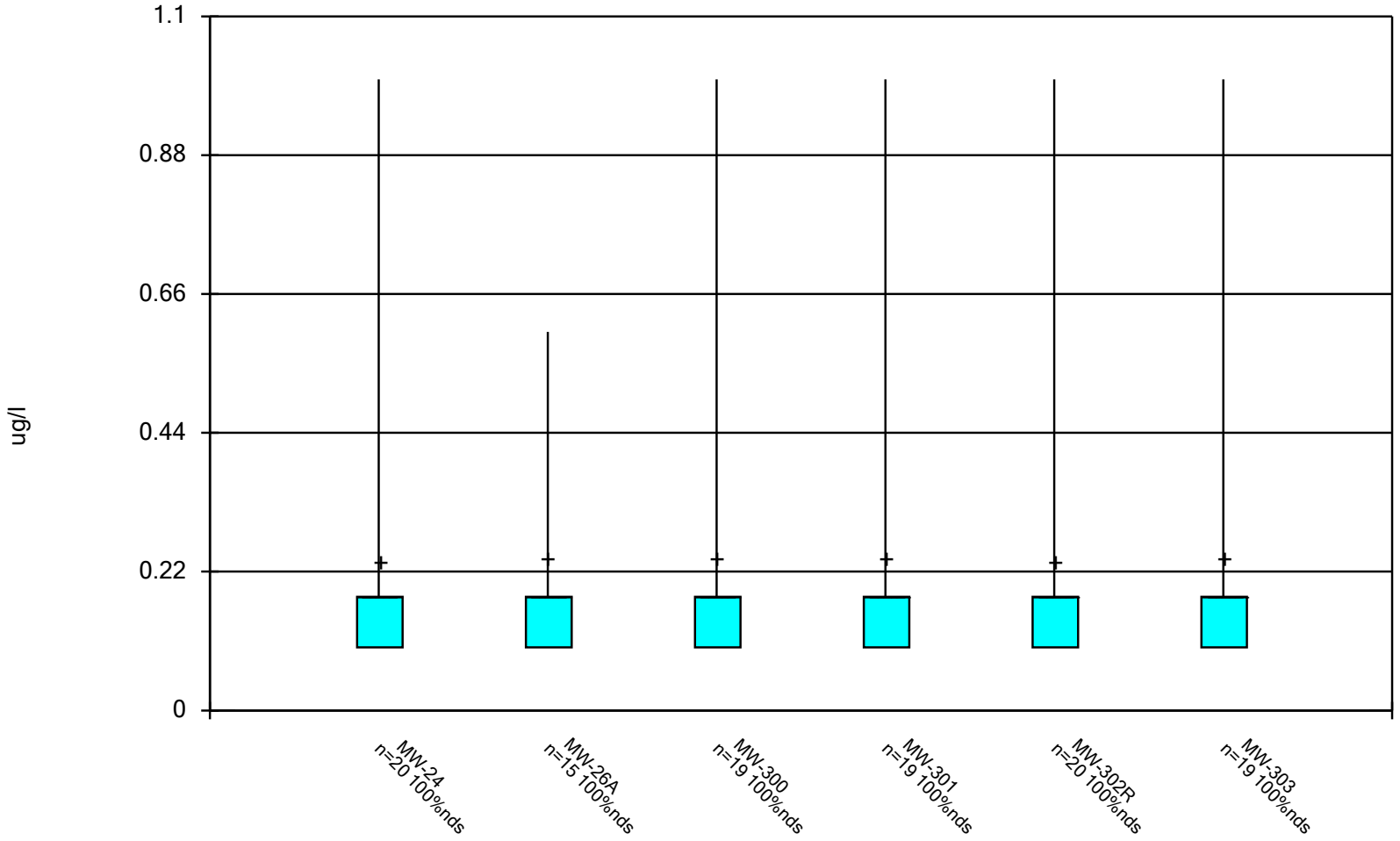
Box & Whiskers Plot



Constituent: Vinyl Chloride Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

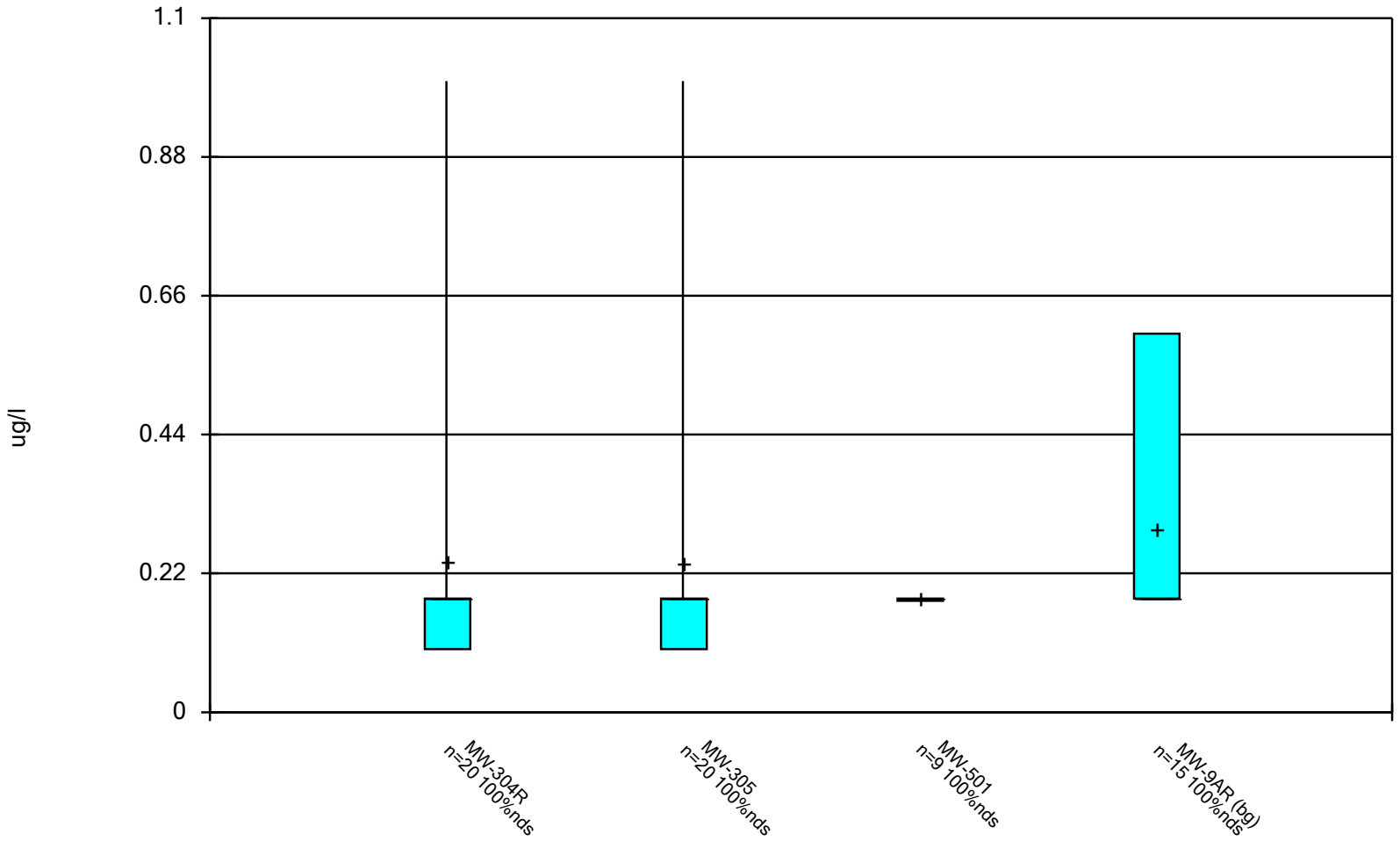
Box & Whiskers Plot



Constituent: Vinyl Chloride Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

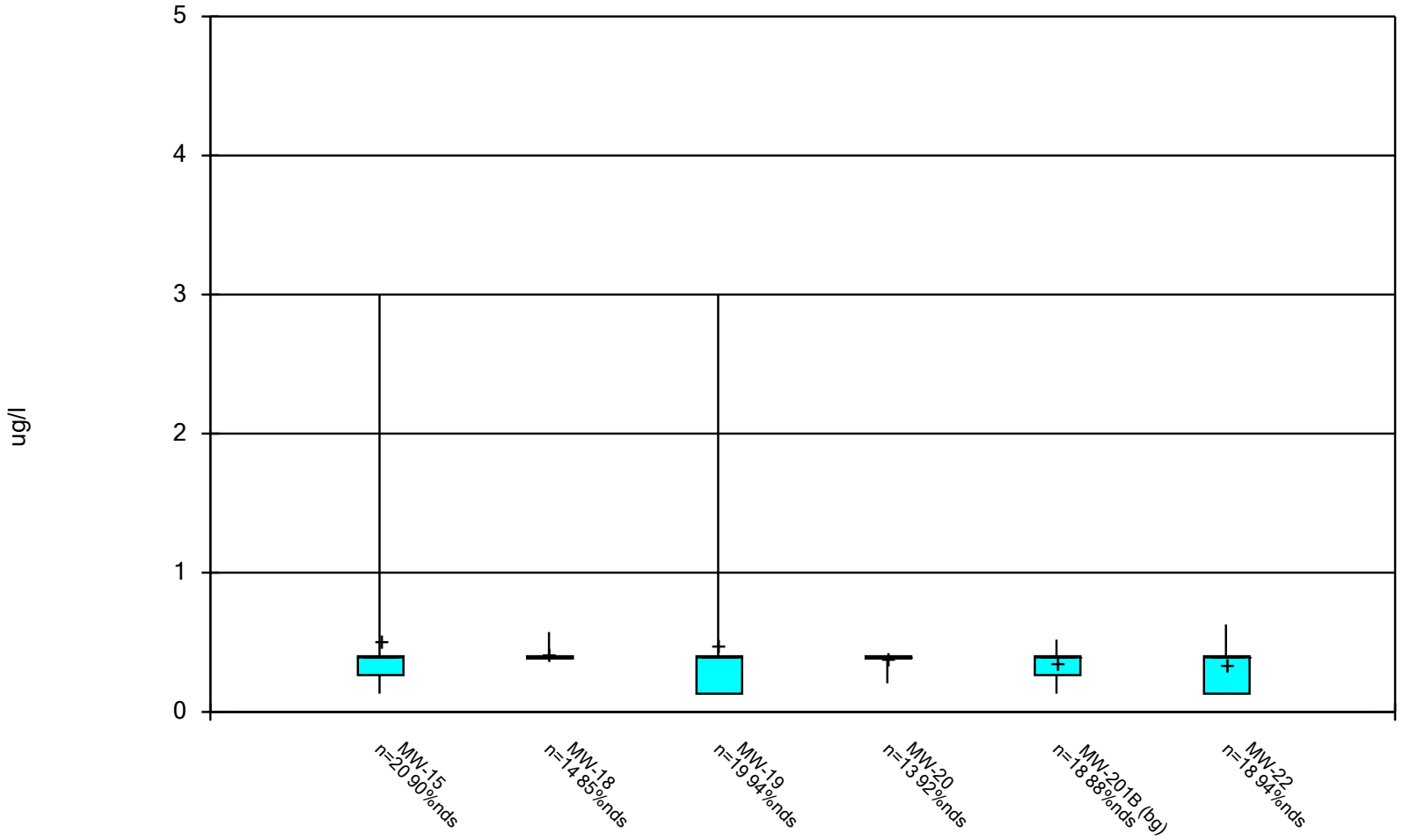
Box & Whiskers Plot



Constituent: Vinyl Chloride Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

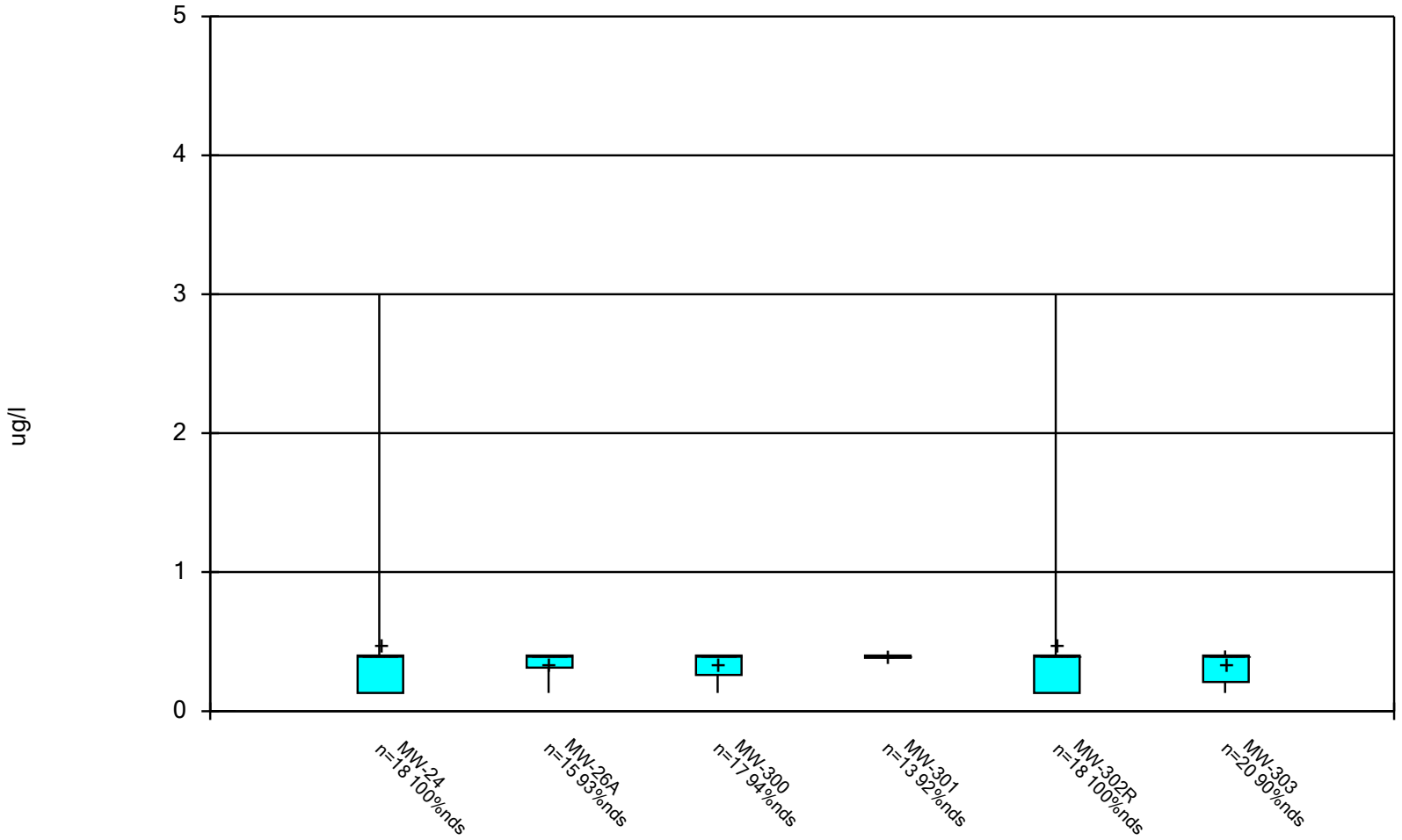
Box & Whiskers Plot



Constituent: Xylenes, Total Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

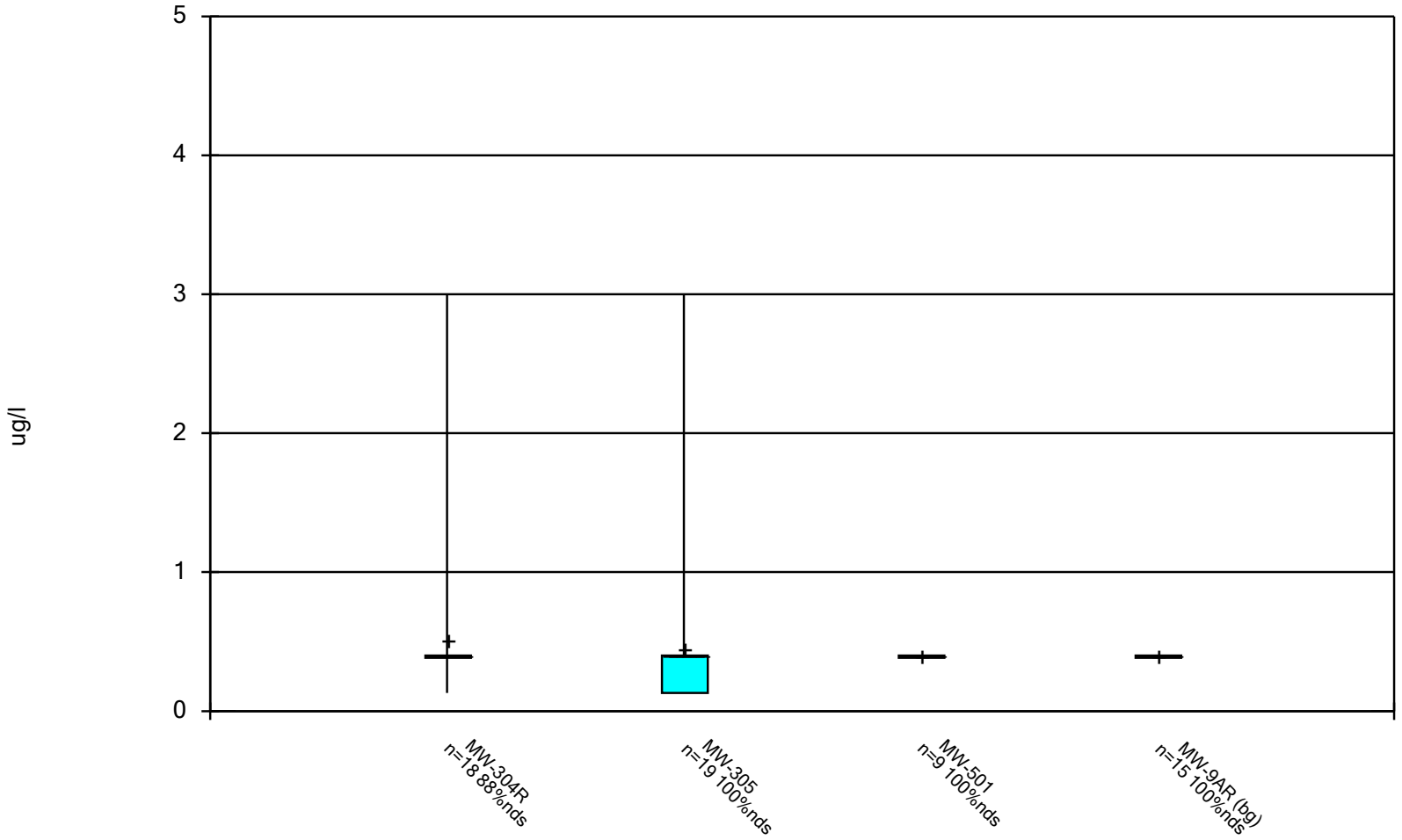
Box & Whiskers Plot



Constituent: Xylenes, Total Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



Constituent: Xylenes, Total Analysis Run 7/12/2024 2:57 PM View: App I_VOCs

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 3:00 PM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Lower Q.	Upper Q.	Min.	Max.	%NDs
1,1,1,2-Tetrachloroethane (ug/l)	MW-15	20	0.3515	0.1733	0.03875	0.38	0.21	0.38	0.21	1	100
1,1,1,2-Tetrachloroethane (ug/l)	MW-18	19	0.3589	0.1747	0.04008	0.38	0.21	0.38	0.21	1	100
1,1,1,2-Tetrachloroethane (ug/l)	MW-19	19	0.3589	0.1747	0.04008	0.38	0.21	0.38	0.21	1	100
1,1,1,2-Tetrachloroethane (ug/l)	MW-20	19	0.3589	0.1747	0.04008	0.38	0.21	0.38	0.21	1	100
1,1,1,2-Tetrachloroethane (ug/l)	MW-201B (bg)	19	0.3589	0.1747	0.04008	0.38	0.21	0.38	0.21	1	100
1,1,1,2-Tetrachloroethane (ug/l)	MW-22	19	0.3589	0.1747	0.04008	0.38	0.21	0.38	0.21	1	100
1,1,1,2-Tetrachloroethane (ug/l)	MW-24	20	0.3515	0.1733	0.03875	0.38	0.21	0.38	0.21	1	100
1,1,1,2-Tetrachloroethane (ug/l)	MW-26A	16	0.3762	0.1825	0.04563	0.38	0.295	0.38	0.21	1	100
1,1,1,2-Tetrachloroethane (ug/l)	MW-300	19	0.3589	0.1747	0.04008	0.38	0.21	0.38	0.21	1	100
1,1,1,2-Tetrachloroethane (ug/l)	MW-301	19	0.3589	0.1747	0.04008	0.38	0.21	0.38	0.21	1	100
1,1,1,2-Tetrachloroethane (ug/l)	MW-302R	20	0.3515	0.1733	0.03875	0.38	0.21	0.38	0.21	1	100
1,1,1,2-Tetrachloroethane (ug/l)	MW-303	21	0.361	0.1659	0.03619	0.38	0.21	0.38	0.21	1	100
1,1,1,2-Tetrachloroethane (ug/l)	MW-304R	20	0.36	0.1701	0.03804	0.38	0.21	0.38	0.21	1	100
1,1,1,2-Tetrachloroethane (ug/l)	MW-305	20	0.3515	0.1733	0.03875	0.38	0.21	0.38	0.21	1	100
1,1,1,2-Tetrachloroethane (ug/l)	MW-501	9	0.38	0	0	0.38	0.38	0.38	0.38	0.38	100
1,1,1,2-Tetrachloroethane (ug/l)	MW-9AR (bg)	15	0.38	0	0	0.38	0.38	0.38	0.38	0.38	100
1,1,1-Trichloroethane (ug/l)	MW-15	20	0.206	0.1899	0.04247	0.19	0.12	0.19	0.12	1	100
1,1,1-Trichloroethane (ug/l)	MW-18	19	0.2105	0.194	0.04451	0.19	0.12	0.19	0.12	1	100
1,1,1-Trichloroethane (ug/l)	MW-19	19	0.2105	0.194	0.04451	0.19	0.12	0.19	0.12	1	100
1,1,1-Trichloroethane (ug/l)	MW-20	19	0.2105	0.194	0.04451	0.19	0.12	0.19	0.12	1	100
1,1,1-Trichloroethane (ug/l)	MW-201B (bg)	19	0.2105	0.194	0.04451	0.19	0.12	0.19	0.12	1	100
1,1,1-Trichloroethane (ug/l)	MW-22	19	0.2105	0.194	0.04451	0.19	0.12	0.19	0.12	1	100
1,1,1-Trichloroethane (ug/l)	MW-24	20	0.206	0.1899	0.04247	0.19	0.12	0.19	0.12	1	100
1,1,1-Trichloroethane (ug/l)	MW-26A	16	0.2231	0.2095	0.05237	0.19	0.155	0.19	0.12	1	100
1,1,1-Trichloroethane (ug/l)	MW-300	19	0.2105	0.194	0.04451	0.19	0.12	0.19	0.12	1	100
1,1,1-Trichloroethane (ug/l)	MW-301	19	0.2105	0.194	0.04451	0.19	0.12	0.19	0.12	1	100
1,1,1-Trichloroethane (ug/l)	MW-302R	20	0.206	0.1899	0.04247	0.19	0.12	0.19	0.12	1	100
1,1,1-Trichloroethane (ug/l)	MW-303	21	0.2086	0.1842	0.04019	0.19	0.12	0.19	0.12	1	100
1,1,1-Trichloroethane (ug/l)	MW-304R	20	0.2095	0.1889	0.04224	0.19	0.12	0.19	0.12	1	100
1,1,1-Trichloroethane (ug/l)	MW-305	20	0.206	0.1899	0.04247	0.19	0.12	0.19	0.12	1	100
1,1,1-Trichloroethane (ug/l)	MW-501	9	0.19	0	0	0.19	0.19	0.19	0.19	0.19	100
1,1,1-Trichloroethane (ug/l)	MW-9AR (bg)	15	0.19	0	0	0.19	0.19	0.19	0.19	0.19	100
1,1,2,2-Tetrachloroethane (ug/l)	MW-15	20	0.367	0.2325	0.05199	0.47	0.1	0.47	0.1	1	100
1,1,2,2-Tetrachloroethane (ug/l)	MW-18	19	0.3811	0.23	0.05276	0.47	0.1	0.47	0.1	1	100
1,1,2,2-Tetrachloroethane (ug/l)	MW-19	19	0.3811	0.23	0.05276	0.47	0.1	0.47	0.1	1	100
1,1,2,2-Tetrachloroethane (ug/l)	MW-20	19	0.3811	0.23	0.05276	0.47	0.1	0.47	0.1	1	100
1,1,2,2-Tetrachloroethane (ug/l)	MW-201B (bg)	19	0.3811	0.23	0.05276	0.47	0.1	0.47	0.1	1	100
1,1,2,2-Tetrachloroethane (ug/l)	MW-22	19	0.3811	0.23	0.05276	0.47	0.1	0.47	0.1	1	100
1,1,2,2-Tetrachloroethane (ug/l)	MW-24	20	0.367	0.2325	0.05199	0.47	0.1	0.47	0.1	1	100
1,1,2,2-Tetrachloroethane (ug/l)	MW-26A	16	0.4106	0.2269	0.05672	0.47	0.285	0.47	0.1	1	100
1,1,2,2-Tetrachloroethane (ug/l)	MW-300	19	0.3811	0.23	0.05276	0.47	0.1	0.47	0.1	1	100
1,1,2,2-Tetrachloroethane (ug/l)	MW-301	19	0.3811	0.23	0.05276	0.47	0.1	0.47	0.1	1	100
1,1,2,2-Tetrachloroethane (ug/l)	MW-302R	20	0.367	0.2325	0.05199	0.47	0.1	0.47	0.1	1	100
1,1,2,2-Tetrachloroethane (ug/l)	MW-303	21	0.3895	0.2198	0.04797	0.47	0.1	0.47	0.1	1	100
1,1,2,2-Tetrachloroethane (ug/l)	MW-304R	20	0.3855	0.2247	0.05025	0.47	0.1	0.47	0.1	1	100
1,1,2,2-Tetrachloroethane (ug/l)	MW-305	20	0.367	0.2325	0.05199	0.47	0.1	0.47	0.1	1	100
1,1,2,2-Tetrachloroethane (ug/l)	MW-501	9	0.47	0	0	0.47	0.47	0.47	0.47	0.47	100
1,1,2,2-Tetrachloroethane (ug/l)	MW-9AR (bg)	15	0.47	0	0	0.47	0.47	0.47	0.47	0.47	100
1,1,2-Trichloroethane (ug/l)	MW-15	20	0.362	0.2188	0.04893	0.45	0.12	0.45	0.12	1	100
1,1,2-Trichloroethane (ug/l)	MW-18	19	0.3747	0.2171	0.0498	0.45	0.12	0.45	0.12	1	100

Box & Whiskers Plot

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 3:00 PM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Lower Q.	Upper Q.	Min.	Max.	%NDs
1,1,2-Trichloroethane (ug/l)	MW-19	19	0.3747	0.2171	0.0498	0.45	0.12	0.45	0.12	1	100
1,1,2-Trichloroethane (ug/l)	MW-20	19	0.3747	0.2171	0.0498	0.45	0.12	0.45	0.12	1	100
1,1,2-Trichloroethane (ug/l)	MW-201B (bg)	19	0.3747	0.2171	0.0498	0.45	0.12	0.45	0.12	1	100
1,1,2-Trichloroethane (ug/l)	MW-22	19	0.3747	0.2171	0.0498	0.45	0.12	0.45	0.12	1	100
1,1,2-Trichloroethane (ug/l)	MW-24	20	0.362	0.2188	0.04893	0.45	0.12	0.45	0.12	1	100
1,1,2-Trichloroethane (ug/l)	MW-26A	16	0.4019	0.2162	0.05405	0.45	0.285	0.45	0.12	1	100
1,1,2-Trichloroethane (ug/l)	MW-300	19	0.3747	0.2171	0.0498	0.45	0.12	0.45	0.12	1	100
1,1,2-Trichloroethane (ug/l)	MW-301	19	0.3747	0.2171	0.0498	0.45	0.12	0.45	0.12	1	100
1,1,2-Trichloroethane (ug/l)	MW-302R	20	0.362	0.2188	0.04893	0.45	0.12	0.45	0.12	1	100
1,1,2-Trichloroethane (ug/l)	MW-303	21	0.3819	0.2072	0.04521	0.45	0.12	0.45	0.12	1	100
1,1,2-Trichloroethane (ug/l)	MW-304R	20	0.3785	0.212	0.0474	0.45	0.12	0.45	0.12	1	100
1,1,2-Trichloroethane (ug/l)	MW-305	20	0.362	0.2188	0.04893	0.45	0.12	0.45	0.12	1	100
1,1,2-Trichloroethane (ug/l)	MW-501	9	0.45	0	0	0.45	0.45	0.45	0.45	0.45	100
1,1,2-Trichloroethane (ug/l)	MW-9AR (bg)	15	0.45	0	0	0.45	0.45	0.45	0.45	0.45	100
1,1-Dichloroethane (ug/l)	MW-15	20	0.2555	0.1753	0.0392	0.22	0.21	0.22	0.21	1	100
1,1-Dichloroethane (ug/l)	MW-18	19	0.2579	0.1798	0.04124	0.22	0.21	0.22	0.21	1	100
1,1-Dichloroethane (ug/l)	MW-19	15	0.2173	0.004577	0.001182	0.22	0.21	0.22	0.21	0.22	100
1,1-Dichloroethane (ug/l)	MW-20	19	0.2579	0.1798	0.04124	0.22	0.21	0.22	0.21	1	100
1,1-Dichloroethane (ug/l)	MW-201B (bg)	19	0.2579	0.1798	0.04124	0.22	0.21	0.22	0.21	1	100
1,1-Dichloroethane (ug/l)	MW-22	19	0.2579	0.1798	0.04124	0.22	0.21	0.22	0.21	1	100
1,1-Dichloroethane (ug/l)	MW-24	20	0.2555	0.1753	0.0392	0.22	0.21	0.22	0.21	1	100
1,1-Dichloroethane (ug/l)	MW-26A	15	0.2333	0.03924	0.01013	0.22	0.22	0.22	0.21	0.332	86.67
1,1-Dichloroethane (ug/l)	MW-300	19	0.2579	0.1798	0.04124	0.22	0.21	0.22	0.21	1	100
1,1-Dichloroethane (ug/l)	MW-301	19	0.2579	0.1798	0.04124	0.22	0.21	0.22	0.21	1	100
1,1-Dichloroethane (ug/l)	MW-302R	20	0.2555	0.1753	0.0392	0.22	0.21	0.22	0.21	1	100
1,1-Dichloroethane (ug/l)	MW-303	21	0.2543	0.1709	0.0373	0.22	0.21	0.22	0.21	1	100
1,1-Dichloroethane (ug/l)	MW-304R	20	0.256	0.1752	0.03917	0.22	0.21	0.22	0.21	1	100
1,1-Dichloroethane (ug/l)	MW-305	20	0.2555	0.1753	0.0392	0.22	0.21	0.22	0.21	1	100
1,1-Dichloroethane (ug/l)	MW-501	9	0.22	0	0	0.22	0.22	0.22	0.22	0.22	100
1,1-Dichloroethane (ug/l)	MW-9AR (bg)	15	0.22	0	0	0.22	0.22	0.22	0.22	0.22	100
1,1-Dichloroethene (ug/l)	MW-15	20	0.4885	0.407	0.09102	0.56	0.15	0.56	0.15	2	100
1,1-Dichloroethene (ug/l)	MW-18	19	0.5063	0.4101	0.09409	0.56	0.15	0.56	0.15	2	100
1,1-Dichloroethene (ug/l)	MW-19	19	0.5063	0.4101	0.09409	0.56	0.15	0.56	0.15	2	100
1,1-Dichloroethene (ug/l)	MW-20	19	0.5063	0.4101	0.09409	0.56	0.15	0.56	0.15	2	100
1,1-Dichloroethene (ug/l)	MW-201B (bg)	19	0.5063	0.4101	0.09409	0.56	0.15	0.56	0.15	2	100
1,1-Dichloroethene (ug/l)	MW-22	19	0.5063	0.4101	0.09409	0.56	0.15	0.56	0.15	2	100
1,1-Dichloroethene (ug/l)	MW-24	20	0.4885	0.407	0.09102	0.56	0.15	0.56	0.15	2	100
1,1-Dichloroethene (ug/l)	MW-26A	16	0.5475	0.4277	0.1069	0.56	0.355	0.56	0.15	2	100
1,1-Dichloroethene (ug/l)	MW-300	19	0.5063	0.4101	0.09409	0.56	0.15	0.56	0.15	2	100
1,1-Dichloroethene (ug/l)	MW-301	19	0.5063	0.4101	0.09409	0.56	0.15	0.56	0.15	2	100
1,1-Dichloroethene (ug/l)	MW-302R	20	0.4885	0.407	0.09102	0.56	0.15	0.56	0.15	2	100
1,1-Dichloroethene (ug/l)	MW-303	21	0.5114	0.3894	0.08497	0.56	0.15	0.56	0.15	2	100
1,1-Dichloroethene (ug/l)	MW-304R	20	0.509	0.3994	0.0893	0.56	0.15	0.56	0.15	2	100
1,1-Dichloroethene (ug/l)	MW-305	20	0.4885	0.407	0.09102	0.56	0.15	0.56	0.15	2	100
1,1-Dichloroethene (ug/l)	MW-501	9	0.56	0	0	0.56	0.56	0.56	0.56	0.56	100
1,1-Dichloroethene (ug/l)	MW-9AR (bg)	15	0.56	0	0	0.56	0.56	0.56	0.56	0.56	100
1,2,3-Trichloropropane (ug/l)	MW-15	20	0.4705	0.2297	0.05136	0.59	0.19	0.59	0.19	1	100
1,2,3-Trichloropropane (ug/l)	MW-18	19	0.4853	0.226	0.05186	0.59	0.19	0.59	0.19	1	100
1,2,3-Trichloropropane (ug/l)	MW-19	19	0.4853	0.226	0.05186	0.59	0.19	0.59	0.19	1	100
1,2,3-Trichloropropane (ug/l)	MW-20	19	0.4853	0.226	0.05186	0.59	0.19	0.59	0.19	1	100

Box & Whiskers Plot

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 3:00 PM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Lower Q.	Upper Q.	Min.	Max.	%NDs
1,2,3-Trichloropropane (ug/l)	MW-201B (bg)	19	0.4853	0.226	0.05186	0.59	0.19	0.59	0.19	1	100
1,2,3-Trichloropropane (ug/l)	MW-22	19	0.4853	0.226	0.05186	0.59	0.19	0.59	0.19	1	100
1,2,3-Trichloropropane (ug/l)	MW-24	20	0.4705	0.2297	0.05136	0.59	0.19	0.59	0.19	1	100
1,2,3-Trichloropropane (ug/l)	MW-26A	16	0.5156	0.219	0.05476	0.59	0.39	0.59	0.19	1	100
1,2,3-Trichloropropane (ug/l)	MW-300	19	0.4853	0.226	0.05186	0.59	0.19	0.59	0.19	1	100
1,2,3-Trichloropropane (ug/l)	MW-301	18	0.4794	0.2311	0.05448	0.59	0.19	0.59	0.19	1	100
1,2,3-Trichloropropane (ug/l)	MW-302R	20	0.4705	0.2297	0.05136	0.59	0.19	0.59	0.19	1	100
1,2,3-Trichloropropane (ug/l)	MW-303	21	0.4952	0.2167	0.0473	0.59	0.19	0.59	0.19	1	100
1,2,3-Trichloropropane (ug/l)	MW-304R	20	0.4905	0.2213	0.04947	0.59	0.19	0.59	0.19	1	100
1,2,3-Trichloropropane (ug/l)	MW-305	20	0.4705	0.2297	0.05136	0.59	0.19	0.59	0.19	1	100
1,2,3-Trichloropropane (ug/l)	MW-501	9	0.59	0	0	0.59	0.59	0.59	0.59	0.59	100
1,2,3-Trichloropropane (ug/l)	MW-9AR (bg)	15	0.59	0	0	0.59	0.59	0.59	0.59	0.59	100
1,2-Dibromo-3-chloropropane (ug/l)	MW-15	20	1.395	2.053	0.4591	1.2	0.5	1.2	0.5	10	100
1,2-Dibromo-3-chloropropane (ug/l)	MW-18	19	1.442	2.098	0.4814	1.2	0.5	1.2	0.5	10	100
1,2-Dibromo-3-chloropropane (ug/l)	MW-19	19	1.442	2.098	0.4814	1.2	0.5	1.2	0.5	10	100
1,2-Dibromo-3-chloropropane (ug/l)	MW-20	19	1.442	2.098	0.4814	1.2	0.5	1.2	0.5	10	100
1,2-Dibromo-3-chloropropane (ug/l)	MW-201B (bg)	19	1.442	2.098	0.4814	1.2	0.5	1.2	0.5	10	100
1,2-Dibromo-3-chloropropane (ug/l)	MW-22	19	1.442	2.098	0.4814	1.2	0.5	1.2	0.5	10	100
1,2-Dibromo-3-chloropropane (ug/l)	MW-24	20	1.395	2.053	0.4591	1.2	0.5	1.2	0.5	10	100
1,2-Dibromo-3-chloropropane (ug/l)	MW-26A	16	1.575	2.268	0.567	1.2	0.85	1.2	0.5	10	100
1,2-Dibromo-3-chloropropane (ug/l)	MW-300	19	1.442	2.098	0.4814	1.2	0.5	1.2	0.5	10	100
1,2-Dibromo-3-chloropropane (ug/l)	MW-301	19	1.442	2.098	0.4814	1.2	0.5	1.2	0.5	10	100
1,2-Dibromo-3-chloropropane (ug/l)	MW-302R	20	1.395	2.053	0.4591	1.2	0.5	1.2	0.5	10	100
1,2-Dibromo-3-chloropropane (ug/l)	MW-303	21	1.419	1.992	0.4347	1.2	0.5	1.2	0.5	10	100
1,2-Dibromo-3-chloropropane (ug/l)	MW-304R	20	1.43	2.043	0.4569	1.2	0.5	1.2	0.5	10	100
1,2-Dibromo-3-chloropropane (ug/l)	MW-305	20	1.395	2.053	0.4591	1.2	0.5	1.2	0.5	10	100
1,2-Dibromo-3-chloropropane (ug/l)	MW-501	9	1.2	0	0	1.2	1.2	1.2	1.2	1.2	100
1,2-Dibromo-3-chloropropane (ug/l)	MW-9AR (bg)	15	1.2	0	0	1.2	1.2	1.2	1.2	1.2	100
1,2-Dibromoethane [EDB] (ug/l)	MW-15	20	0.7495	2.18	0.4874	0.34	0.13	0.34	0.13	10	100
1,2-Dibromoethane [EDB] (ug/l)	MW-18	19	0.7821	2.234	0.5126	0.34	0.13	0.34	0.13	10	100
1,2-Dibromoethane [EDB] (ug/l)	MW-19	19	0.7821	2.234	0.5126	0.34	0.13	0.34	0.13	10	100
1,2-Dibromoethane [EDB] (ug/l)	MW-20	19	0.7821	2.234	0.5126	0.34	0.13	0.34	0.13	10	100
1,2-Dibromoethane [EDB] (ug/l)	MW-201B (bg)	19	0.7821	2.234	0.5126	0.34	0.13	0.34	0.13	10	100
1,2-Dibromoethane [EDB] (ug/l)	MW-22	19	0.7821	2.234	0.5126	0.34	0.13	0.34	0.13	10	100
1,2-Dibromoethane [EDB] (ug/l)	MW-24	20	0.7495	2.18	0.4874	0.34	0.13	0.34	0.13	10	100
1,2-Dibromoethane [EDB] (ug/l)	MW-26A	16	0.8913	2.431	0.6077	0.34	0.235	0.34	0.13	10	100
1,2-Dibromoethane [EDB] (ug/l)	MW-300	19	0.7821	2.234	0.5126	0.34	0.13	0.34	0.13	10	100
1,2-Dibromoethane [EDB] (ug/l)	MW-301	19	0.7821	2.234	0.5126	0.34	0.13	0.34	0.13	10	100
1,2-Dibromoethane [EDB] (ug/l)	MW-302R	20	0.7495	2.18	0.4874	0.34	0.13	0.34	0.13	10	100
1,2-Dibromoethane [EDB] (ug/l)	MW-303	21	0.74	2.124	0.4635	0.34	0.13	0.34	0.13	10	100
1,2-Dibromoethane [EDB] (ug/l)	MW-304R	20	0.76	2.177	0.4868	0.34	0.13	0.34	0.13	10	100
1,2-Dibromoethane [EDB] (ug/l)	MW-305	20	0.7495	2.18	0.4874	0.34	0.13	0.34	0.13	10	100
1,2-Dibromoethane [EDB] (ug/l)	MW-501	9	0.34	0	0	0.34	0.34	0.34	0.34	0.34	100
1,2-Dibromoethane [EDB] (ug/l)	MW-9AR (bg)	15	0.34	0	0	0.34	0.34	0.34	0.34	0.34	100
1,2-Dichlorobenzene (ug/l)	MW-15	20	0.321	0.1946	0.0435	0.37	0.14	0.37	0.14	1	100
1,2-Dichlorobenzene (ug/l)	MW-18	19	0.3305	0.195	0.04474	0.37	0.14	0.37	0.14	1	100
1,2-Dichlorobenzene (ug/l)	MW-19	19	0.3233	0.08761	0.0201	0.37	0.268	0.37	0.14	0.472	57.89
1,2-Dichlorobenzene (ug/l)	MW-20	19	0.3305	0.195	0.04474	0.37	0.14	0.37	0.14	1	100
1,2-Dichlorobenzene (ug/l)	MW-201B (bg)	19	0.3305	0.195	0.04474	0.37	0.14	0.37	0.14	1	100
1,2-Dichlorobenzene (ug/l)	MW-22	19	0.3305	0.195	0.04474	0.37	0.14	0.37	0.14	1	100

Box & Whiskers Plot

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 3:00 PM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Lower Q.	Upper Q.	Min.	Max.	%NDs
1,2-Dichlorobenzene (ug/l)	MW-24	20	0.321	0.1946	0.0435	0.37	0.14	0.37	0.14	1	100
1,2-Dichlorobenzene (ug/l)	MW-26A	16	0.3519	0.2005	0.05013	0.37	0.255	0.37	0.14	1	100
1,2-Dichlorobenzene (ug/l)	MW-300	19	0.3446	0.1854	0.04253	0.37	0.229	0.37	0.14	1	89.47
1,2-Dichlorobenzene (ug/l)	MW-301	19	0.3305	0.195	0.04474	0.37	0.14	0.37	0.14	1	100
1,2-Dichlorobenzene (ug/l)	MW-302R	20	0.321	0.1946	0.0435	0.37	0.14	0.37	0.14	1	100
1,2-Dichlorobenzene (ug/l)	MW-303	21	0.3343	0.1854	0.04046	0.37	0.14	0.37	0.14	1	100
1,2-Dichlorobenzene (ug/l)	MW-304R	20	0.3325	0.19	0.04249	0.37	0.14	0.37	0.14	1	100
1,2-Dichlorobenzene (ug/l)	MW-305	20	0.321	0.1946	0.0435	0.37	0.14	0.37	0.14	1	100
1,2-Dichlorobenzene (ug/l)	MW-501	9	0.37	0	0	0.37	0.37	0.37	0.37	0.37	100
1,2-Dichlorobenzene (ug/l)	MW-9AR (bg)	15	0.37	0	0	0.37	0.37	0.37	0.37	0.37	100
1,2-Dichloroethane (ug/l)	MW-15	20	0.347	0.1841	0.04116	0.39	0.18	0.39	0.18	1	100
1,2-Dichloroethane (ug/l)	MW-18	19	0.3558	0.1848	0.04239	0.39	0.18	0.39	0.18	1	100
1,2-Dichloroethane (ug/l)	MW-19	13	0.3745	0.05602	0.01554	0.39	0.39	0.39	0.188	0.39	92.31
1,2-Dichloroethane (ug/l)	MW-20	19	0.3559	0.1846	0.04235	0.39	0.18	0.39	0.18	1	94.74
1,2-Dichloroethane (ug/l)	MW-201B (bg)	19	0.3558	0.1848	0.04239	0.39	0.18	0.39	0.18	1	100
1,2-Dichloroethane (ug/l)	MW-22	19	0.3568	0.1838	0.04217	0.39	0.18	0.39	0.18	1	94.74
1,2-Dichloroethane (ug/l)	MW-24	20	0.347	0.1841	0.04116	0.39	0.18	0.39	0.18	1	100
1,2-Dichloroethane (ug/l)	MW-26A	16	0.3756	0.1906	0.04766	0.39	0.285	0.39	0.18	1	100
1,2-Dichloroethane (ug/l)	MW-300	19	0.3575	0.1832	0.04203	0.39	0.18	0.39	0.18	1	94.74
1,2-Dichloroethane (ug/l)	MW-301	19	0.3558	0.1848	0.04239	0.39	0.18	0.39	0.18	1	100
1,2-Dichloroethane (ug/l)	MW-302R	20	0.347	0.1841	0.04116	0.39	0.18	0.39	0.18	1	100
1,2-Dichloroethane (ug/l)	MW-303	21	0.359	0.1756	0.03832	0.39	0.18	0.39	0.18	1	100
1,2-Dichloroethane (ug/l)	MW-304R	19	0.3558	0.1848	0.04239	0.39	0.18	0.39	0.18	1	100
1,2-Dichloroethane (ug/l)	MW-305	20	0.347	0.1841	0.04116	0.39	0.18	0.39	0.18	1	100
1,2-Dichloroethane (ug/l)	MW-501	9	0.39	0	0	0.39	0.39	0.39	0.39	0.39	100
1,2-Dichloroethane (ug/l)	MW-9AR (bg)	15	0.39	0	0	0.39	0.39	0.39	0.39	0.39	100
1,2-Dichloropropane (ug/l)	MW-15	20	0.5165	0.311	0.06954	0.27	0.27	0.87	0.27	1	100
1,2-Dichloropropane (ug/l)	MW-18	19	0.4979	0.3079	0.07063	0.27	0.27	0.87	0.27	1	100
1,2-Dichloropropane (ug/l)	MW-19	19	0.4979	0.3079	0.07063	0.27	0.27	0.87	0.27	1	100
1,2-Dichloropropane (ug/l)	MW-20	19	0.4979	0.3079	0.07063	0.27	0.27	0.87	0.27	1	100
1,2-Dichloropropane (ug/l)	MW-201B (bg)	19	0.4979	0.3079	0.07063	0.27	0.27	0.87	0.27	1	100
1,2-Dichloropropane (ug/l)	MW-22	19	0.4979	0.3079	0.07063	0.27	0.27	0.87	0.27	1	100
1,2-Dichloropropane (ug/l)	MW-24	20	0.5165	0.311	0.06954	0.27	0.27	0.87	0.27	1	100
1,2-Dichloropropane (ug/l)	MW-26A	16	0.4656	0.3012	0.07529	0.27	0.27	0.87	0.27	1	100
1,2-Dichloropropane (ug/l)	MW-300	19	0.4979	0.3079	0.07063	0.27	0.27	0.87	0.27	1	100
1,2-Dichloropropane (ug/l)	MW-301	19	0.4979	0.3079	0.07063	0.27	0.27	0.87	0.27	1	100
1,2-Dichloropropane (ug/l)	MW-302R	20	0.5165	0.311	0.06954	0.27	0.27	0.87	0.27	1	100
1,2-Dichloropropane (ug/l)	MW-303	21	0.4762	0.3	0.06547	0.27	0.27	0.87	0.27	1	100
1,2-Dichloropropane (ug/l)	MW-304R	20	0.4865	0.304	0.06797	0.27	0.27	0.87	0.27	1	100
1,2-Dichloropropane (ug/l)	MW-305	20	0.5165	0.311	0.06954	0.27	0.27	0.87	0.27	1	100
1,2-Dichloropropane (ug/l)	MW-501	9	0.27	0	0	0.27	0.27	0.27	0.27	0.27	100
1,2-Dichloropropane (ug/l)	MW-9AR (bg)	15	0.27	0	0	0.27	0.27	0.27	0.27	0.27	100
1,4-Dichlorobenzene (ug/l)	MW-15	20	0.258	0.1752	0.03919	0.23	0.2	0.23	0.2	1	100
1,4-Dichlorobenzene (ug/l)	MW-18	19	0.2611	0.1795	0.04118	0.23	0.2	0.23	0.2	1	100
1,4-Dichlorobenzene (ug/l)	MW-19	19	3.118	2.002	0.4593	3.18	1.18	5.17	0.2	6.61	15.79
1,4-Dichlorobenzene (ug/l)	MW-20	19	0.4344	0.2551	0.05851	0.337	0.23	0.642	0.2	1	52.63
1,4-Dichlorobenzene (ug/l)	MW-201B (bg)	19	0.2611	0.1795	0.04118	0.23	0.2	0.23	0.2	1	100
1,4-Dichlorobenzene (ug/l)	MW-22	19	0.2611	0.1795	0.04118	0.23	0.2	0.23	0.2	1	100
1,4-Dichlorobenzene (ug/l)	MW-24	20	0.258	0.1752	0.03919	0.23	0.2	0.23	0.2	1	100
1,4-Dichlorobenzene (ug/l)	MW-26A	16	0.2706	0.195	0.04874	0.23	0.215	0.23	0.2	1	100

Box & Whiskers Plot

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 3:00 PM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Lower Q.	Upper Q.	Min.	Max.	%NDs
1,4-Dichlorobenzene (ug/l)	MW-300	19	0.8042	1.077	0.2472	0.23	0.23	0.834	0.2	3.61	47.37
1,4-Dichlorobenzene (ug/l)	MW-301	19	0.2658	0.179	0.04106	0.23	0.2	0.23	0.2	1	94.74
1,4-Dichlorobenzene (ug/l)	MW-302R	20	0.258	0.1752	0.03919	0.23	0.2	0.23	0.2	1	100
1,4-Dichlorobenzene (ug/l)	MW-303	21	0.2581	0.1705	0.03722	0.23	0.2	0.23	0.2	1	100
1,4-Dichlorobenzene (ug/l)	MW-304R	20	0.2595	0.1749	0.0391	0.23	0.2	0.23	0.2	1	100
1,4-Dichlorobenzene (ug/l)	MW-305	20	0.258	0.1752	0.03919	0.23	0.2	0.23	0.2	1	100
1,4-Dichlorobenzene (ug/l)	MW-501	9	0.23	0	0	0.23	0.23	0.23	0.23	0.23	100
1,4-Dichlorobenzene (ug/l)	MW-9AR (bg)	15	0.23	0	0	0.23	0.23	0.23	0.23	0.23	100
2-Butanone [MEK] (ug/l)	MW-15	20	2.067	1.964	0.4393	2.1	1.04	2.1	0.47	10	100
2-Butanone [MEK] (ug/l)	MW-18	19	2.121	2.003	0.4595	2.1	1.04	2.1	0.47	10	100
2-Butanone [MEK] (ug/l)	MW-19	19	2.126	2	0.4589	2.1	1.04	2.1	0.47	10	94.74
2-Butanone [MEK] (ug/l)	MW-20	19	2.242	1.967	0.4512	2.1	1.04	2.1	0.47	10	89.47
2-Butanone [MEK] (ug/l)	MW-201B (bg)	19	2.151	1.981	0.4545	2.1	1.04	2.1	0.47	10	100
2-Butanone [MEK] (ug/l)	MW-22	18	1.835	0.4467	0.1053	2.1	1.385	2.1	1.04	2.1	88.89
2-Butanone [MEK] (ug/l)	MW-24	20	2.095	1.944	0.4347	2.1	1.04	2.1	0.47	10	100
2-Butanone [MEK] (ug/l)	MW-26A	15	1.671	0.65	0.1678	2.1	1.04	2.1	0.47	2.1	93.33
2-Butanone [MEK] (ug/l)	MW-300	19	2.151	1.981	0.4545	2.1	1.04	2.1	0.47	10	100
2-Butanone [MEK] (ug/l)	MW-301	19	2.151	1.981	0.4545	2.1	1.04	2.1	0.47	10	100
2-Butanone [MEK] (ug/l)	MW-302R	20	2.215	2.463	0.5506	2.1	1.04	2.1	0.47	12.4	95
2-Butanone [MEK] (ug/l)	MW-303	21	2.119	1.9	0.4146	2.1	1.04	2.1	0.47	10	100
2-Butanone [MEK] (ug/l)	MW-304R	20	2.148	1.928	0.4311	2.1	1.04	2.1	0.47	10	100
2-Butanone [MEK] (ug/l)	MW-305	20	2.095	1.944	0.4347	2.1	1.04	2.1	0.47	10	100
2-Butanone [MEK] (ug/l)	MW-501	9	2.1	0	0	2.1	2.1	2.1	2.1	2.1	100
2-Butanone [MEK] (ug/l)	MW-9AR (bg)	14	2.1	0	0	2.1	2.1	2.1	2.1	2.1	100
2-Hexanone (ug/l)	MW-15	20	1.77	2.123	0.4747	2	0.2	2	0.2	10	100
2-Hexanone (ug/l)	MW-18	19	1.853	2.148	0.4927	2	0.2	2	0.2	10	100
2-Hexanone (ug/l)	MW-19	19	1.853	2.148	0.4927	2	0.2	2	0.2	10	100
2-Hexanone (ug/l)	MW-20	19	1.853	2.148	0.4927	2	0.2	2	0.2	10	100
2-Hexanone (ug/l)	MW-201B (bg)	19	1.853	2.148	0.4927	2	0.2	2	0.2	10	100
2-Hexanone (ug/l)	MW-22	19	1.853	2.148	0.4927	2	0.2	2	0.2	10	100
2-Hexanone (ug/l)	MW-24	20	1.77	2.123	0.4747	2	0.2	2	0.2	10	100
2-Hexanone (ug/l)	MW-26A	16	2.05	2.265	0.5661	2	1.1	2	0.2	10	100
2-Hexanone (ug/l)	MW-300	19	1.853	2.148	0.4927	2	0.2	2	0.2	10	100
2-Hexanone (ug/l)	MW-301	19	1.853	2.148	0.4927	2	0.2	2	0.2	10	100
2-Hexanone (ug/l)	MW-302R	20	1.371	0.8816	0.1971	2	0.2	2	0.2	2.02	95
2-Hexanone (ug/l)	MW-303	21	1.867	2.038	0.4447	2	0.2	2	0.2	10	100
2-Hexanone (ug/l)	MW-304R	20	1.86	2.091	0.4675	2	0.2	2	0.2	10	100
2-Hexanone (ug/l)	MW-305	20	1.77	2.123	0.4747	2	0.2	2	0.2	10	100
2-Hexanone (ug/l)	MW-501	9	2	0	0	2	2	2	2	2	100
2-Hexanone (ug/l)	MW-9AR (bg)	15	2	0	0	2	2	2	2	2	100
4,4`-DDT (ug/l)	MW-15	2	0.01978	0.02237	0.01582	0.01978	0.01978	0.01978	0.00396	0.0356	100
4,4`-DDT (ug/l)	MW-18	2	0.02425	0.01775	0.01255	0.02425	0.02425	0.02425	0.0117	0.0368	50
4,4`-DDT (ug/l)	MW-19	2	0.00826	0.006138	0.00434	0.00826	0.00826	0.00826	0.00392	0.0126	100
4,4`-DDT (ug/l)	MW-20	2	0.0082	0.006223	0.0044	0.0082	0.0082	0.0082	0.0038	0.0126	100
4,4`-DDT (ug/l)	MW-201B (bg)	1	0.00396	0	0	0.00396	0.00396	0.00396	0.00396	0.00396	100
4,4`-DDT (ug/l)	MW-22	3	0.01956	0.01989	0.01148	0.0126	0.00409	0.042	0.00409	0.042	100
4,4`-DDT (ug/l)	MW-24	2	0.02465	0.01549	0.01095	0.02465	0.02465	0.02465	0.0137	0.0356	50
4,4`-DDT (ug/l)	MW-26A	3	0.023	0.01705	0.009846	0.018	0.00901	0.042	0.00901	0.042	33.33
4,4`-DDT (ug/l)	MW-300	2	0.00826	0.006138	0.00434	0.00826	0.00826	0.00826	0.00392	0.0126	100
4,4`-DDT (ug/l)	MW-301	2	0.00826	0.006138	0.00434	0.00826	0.00826	0.00826	0.00392	0.0126	100

Box & Whiskers Plot

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 3:00 PM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Lower Q.	Upper Q.	Min.	Max.	%NDs
4,4`-DDT (ug/l)	MW-302R	2	0.02108	0.02421	0.01712	0.02108	0.02108	0.02108	0.00396	0.0382	100
4,4`-DDT (ug/l)	MW-303	3	0.05487	0.04996	0.02884	0.042	0.0126	0.11	0.0126	0.11	66.67
4,4`-DDT (ug/l)	MW-304R	2	0.02294	0.02695	0.01906	0.02294	0.02294	0.02294	0.00388	0.042	100
4,4`-DDT (ug/l)	MW-305	2	0.01978	0.02237	0.01582	0.01978	0.01978	0.01978	0.00396	0.0356	100
4,4`-DDT (ug/l)	MW-9AR (bg)	2	0.00388	0.0000...	0.00004	0.00388	0.00388	0.00388	0.00384	0.00392	100
4-Methyl-2-pentanone (ug/l)	MW-15	20	1.837	2.125	0.4751	2.1	0.22	2.1	0.22	10	100
4-Methyl-2-pentanone (ug/l)	MW-18	19	1.922	2.148	0.4927	2.1	0.22	2.1	0.22	10	100
4-Methyl-2-pentanone (ug/l)	MW-19	19	1.922	2.148	0.4927	2.1	0.22	2.1	0.22	10	100
4-Methyl-2-pentanone (ug/l)	MW-20	19	1.922	2.148	0.4927	2.1	0.22	2.1	0.22	10	100
4-Methyl-2-pentanone (ug/l)	MW-201B (bg)	19	1.922	2.148	0.4927	2.1	0.22	2.1	0.22	10	100
4-Methyl-2-pentanone (ug/l)	MW-22	19	1.922	2.148	0.4927	2.1	0.22	2.1	0.22	10	100
4-Methyl-2-pentanone (ug/l)	MW-24	20	1.837	2.125	0.4751	2.1	0.22	2.1	0.22	10	100
4-Methyl-2-pentanone (ug/l)	MW-26A	16	2.124	2.259	0.5647	2.1	1.16	2.1	0.22	10	100
4-Methyl-2-pentanone (ug/l)	MW-300	19	1.922	2.148	0.4927	2.1	0.22	2.1	0.22	10	100
4-Methyl-2-pentanone (ug/l)	MW-301	19	1.922	2.148	0.4927	2.1	0.22	2.1	0.22	10	100
4-Methyl-2-pentanone (ug/l)	MW-302R	20	1.837	2.125	0.4751	2.1	0.22	2.1	0.22	10	100
4-Methyl-2-pentanone (ug/l)	MW-303	21	1.939	2.038	0.4447	2.1	0.22	2.1	0.22	10	100
4-Methyl-2-pentanone (ug/l)	MW-304R	20	1.454	0.9049	0.2024	2.1	0.22	2.1	0.22	2.1	95
4-Methyl-2-pentanone (ug/l)	MW-305	20	1.837	2.125	0.4751	2.1	0.22	2.1	0.22	10	100
4-Methyl-2-pentanone (ug/l)	MW-501	9	2.1	0	0	2.1	2.1	2.1	2.1	2.1	100
4-Methyl-2-pentanone (ug/l)	MW-9AR (bg)	15	2.1	0	0	2.1	2.1	2.1	2.1	2.1	100
Acetone (ug/l)	MW-15	18	2.789	0.6002	0.1415	3.1	2.03	3.1	1.79	3.65	83.33
Acetone (ug/l)	MW-18	16	2.772	0.5858	0.1465	3.1	2.445	3.1	1.79	3.1	100
Acetone (ug/l)	MW-19	19	3.643	1.669	0.3829	3.1	3.1	4.14	1.79	10	68.42
Acetone (ug/l)	MW-20	19	4.579	2.099	0.4816	3.83	3.1	5.78	1.79	9.29	36.84
Acetone (ug/l)	MW-201B (bg)	19	3.17	1.78	0.4085	3.1	1.79	3.1	1.79	10	94.74
Acetone (ug/l)	MW-22	17	2.881	0.4464	0.1083	3.1	2.845	3.1	1.79	3.1	82.35
Acetone (ug/l)	MW-24	20	3.155	1.74	0.3891	3.1	2.13	3.1	1.79	10	80
Acetone (ug/l)	MW-26A	15	3.933	2.975	0.7681	3.1	2.33	3.1	1.79	12	73.33
Acetone (ug/l)	MW-300	13	3.006	0.3384	0.09385	3.1	3.1	3.1	1.88	3.1	92.31
Acetone (ug/l)	MW-301	17	2.771	0.542	0.1315	3.1	2.23	3.1	1.79	3.1	82.35
Acetone (ug/l)	MW-302R	20	3.031	1.888	0.4221	3.1	1.79	3.1	1.79	10.6	85
Acetone (ug/l)	MW-303	16	3.086	0.07256	0.01814	3.1	3.1	3.1	2.82	3.16	87.5
Acetone (ug/l)	MW-304R	20	3.143	1.723	0.3853	3.1	2.445	3.1	1.79	10	95
Acetone (ug/l)	MW-305	20	3.093	1.756	0.3926	3.1	1.79	3.1	1.79	10	95
Acetone (ug/l)	MW-501	9	3.1	0	0	3.1	3.1	3.1	3.1	3.1	100
Acetone (ug/l)	MW-9AR (bg)	14	3.1	0	0	3.1	3.1	3.1	3.1	3.1	100
Acrylonitrile (ug/l)	MW-15	20	2.006	2.047	0.4577	2.2	0.53	2.2	0.53	10	100
Acrylonitrile (ug/l)	MW-18	19	2.083	2.072	0.4755	2.2	0.53	2.2	0.53	10	100
Acrylonitrile (ug/l)	MW-19	19	2.083	2.072	0.4755	2.2	0.53	2.2	0.53	10	100
Acrylonitrile (ug/l)	MW-20	19	2.083	2.072	0.4755	2.2	0.53	2.2	0.53	10	100
Acrylonitrile (ug/l)	MW-201B (bg)	19	2.083	2.072	0.4755	2.2	0.53	2.2	0.53	10	100
Acrylonitrile (ug/l)	MW-22	19	2.083	2.072	0.4755	2.2	0.53	2.2	0.53	10	100
Acrylonitrile (ug/l)	MW-24	20	2.006	2.047	0.4577	2.2	0.53	2.2	0.53	10	100
Acrylonitrile (ug/l)	MW-26A	16	2.27	2.19	0.5474	2.2	1.365	2.2	0.53	10	100
Acrylonitrile (ug/l)	MW-300	19	2.083	2.072	0.4755	2.2	0.53	2.2	0.53	10	100
Acrylonitrile (ug/l)	MW-301	19	2.083	2.072	0.4755	2.2	0.53	2.2	0.53	10	100
Acrylonitrile (ug/l)	MW-302R	20	2.006	2.047	0.4577	2.2	0.53	2.2	0.53	10	100
Acrylonitrile (ug/l)	MW-303	21	2.094	1.966	0.4291	2.2	0.53	2.2	0.53	10	100
Acrylonitrile (ug/l)	MW-304R	20	2.089	2.017	0.4511	2.2	0.53	2.2	0.53	10	100

Box & Whiskers Plot

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 3:00 PM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Lower Q.	Upper Q.	Min.	Max.	%NDs
Acrylonitrile (ug/l)	MW-305	20	2.006	2.047	0.4577	2.2	0.53	2.2	0.53	10	100
Acrylonitrile (ug/l)	MW-501	9	2.2	0	0	2.2	2.2	2.2	2.2	2.2	100
Acrylonitrile (ug/l)	MW-9AR (bg)	15	2.2	0	0	2.2	2.2	2.2	2.2	2.2	100
Benzene (ug/l)	MW-15	20	0.2493	0.1476	0.033	0.22	0.165	0.2315	0.11	0.625	80
Benzene (ug/l)	MW-18	19	0.2001	0.08915	0.02045	0.22	0.11	0.22	0.11	0.5	94.74
Benzene (ug/l)	MW-19	19	0.9162	0.7772	0.1783	0.988	0.309	1.42	0.11	2.99	10.53
Benzene (ug/l)	MW-20	19	5.175	1.209	0.2775	5.36	4.3	6.12	2.71	6.98	0
Benzene (ug/l)	MW-201B (bg)	19	0.2	0.08926	0.02048	0.22	0.11	0.22	0.11	0.5	100
Benzene (ug/l)	MW-22	19	1.274	0.2122	0.04867	1.23	1.13	1.45	1.04	1.9	0
Benzene (ug/l)	MW-24	20	0.2189	0.1207	0.027	0.22	0.11	0.22	0.11	0.575	90
Benzene (ug/l)	MW-26A	16	0.21	0.09136	0.02284	0.22	0.165	0.22	0.11	0.5	100
Benzene (ug/l)	MW-300	19	0.6555	0.5115	0.1173	0.562	0.22	1.24	0.114	1.73	21.05
Benzene (ug/l)	MW-301	19	0.2141	0.08525	0.01956	0.22	0.202	0.22	0.11	0.5	89.47
Benzene (ug/l)	MW-302R	20	0.1955	0.08918	0.01994	0.22	0.11	0.22	0.11	0.5	100
Benzene (ug/l)	MW-303	21	0.206	0.08777	0.01915	0.22	0.11	0.22	0.11	0.5	95.24
Benzene (ug/l)	MW-304R	20	0.201	0.08699	0.01945	0.22	0.11	0.22	0.11	0.5	100
Benzene (ug/l)	MW-305	20	0.1955	0.08918	0.01994	0.22	0.11	0.22	0.11	0.5	100
Benzene (ug/l)	MW-501	9	0.22	0	0	0.22	0.22	0.22	0.22	0.22	100
Benzene (ug/l)	MW-9AR (bg)	15	0.22	0	0	0.22	0.22	0.22	0.22	0.22	100
Bromochloromethane (ug/l)	MW-15	20	0.616	1.052	0.2351	0.54	0.12	0.54	0.12	5	100
Bromochloromethane (ug/l)	MW-18	19	0.6421	1.074	0.2463	0.54	0.12	0.54	0.12	5	100
Bromochloromethane (ug/l)	MW-19	19	0.6421	1.074	0.2463	0.54	0.12	0.54	0.12	5	100
Bromochloromethane (ug/l)	MW-20	19	0.6421	1.074	0.2463	0.54	0.12	0.54	0.12	5	100
Bromochloromethane (ug/l)	MW-201B (bg)	19	0.6421	1.074	0.2463	0.54	0.12	0.54	0.12	5	100
Bromochloromethane (ug/l)	MW-22	19	0.6421	1.074	0.2463	0.54	0.12	0.54	0.12	5	100
Bromochloromethane (ug/l)	MW-24	20	0.616	1.052	0.2351	0.54	0.12	0.54	0.12	5	100
Bromochloromethane (ug/l)	MW-26A	16	0.7138	1.158	0.2895	0.54	0.33	0.54	0.12	5	100
Bromochloromethane (ug/l)	MW-300	19	0.6421	1.074	0.2463	0.54	0.12	0.54	0.12	5	100
Bromochloromethane (ug/l)	MW-301	19	0.6421	1.074	0.2463	0.54	0.12	0.54	0.12	5	100
Bromochloromethane (ug/l)	MW-302R	20	0.616	1.052	0.2351	0.54	0.12	0.54	0.12	5	100
Bromochloromethane (ug/l)	MW-303	21	0.6324	1.019	0.2224	0.54	0.12	0.54	0.12	5	100
Bromochloromethane (ug/l)	MW-304R	20	0.637	1.045	0.2337	0.54	0.12	0.54	0.12	5	100
Bromochloromethane (ug/l)	MW-305	20	0.616	1.052	0.2351	0.54	0.12	0.54	0.12	5	100
Bromochloromethane (ug/l)	MW-501	9	0.54	0	0	0.54	0.54	0.54	0.54	0.54	100
Bromochloromethane (ug/l)	MW-9AR (bg)	15	0.54	0	0	0.54	0.54	0.54	0.54	0.54	100
Bromodichloromethane (ug/l)	MW-15	20	0.326	0.2053	0.0459	0.39	0.12	0.39	0.12	1	100
Bromodichloromethane (ug/l)	MW-18	19	0.3368	0.2049	0.04701	0.39	0.12	0.39	0.12	1	100
Bromodichloromethane (ug/l)	MW-19	19	0.3368	0.2049	0.04701	0.39	0.12	0.39	0.12	1	100
Bromodichloromethane (ug/l)	MW-20	19	0.3368	0.2049	0.04701	0.39	0.12	0.39	0.12	1	100
Bromodichloromethane (ug/l)	MW-201B (bg)	19	0.3368	0.2049	0.04701	0.39	0.12	0.39	0.12	1	100
Bromodichloromethane (ug/l)	MW-22	19	0.3368	0.2049	0.04701	0.39	0.12	0.39	0.12	1	100
Bromodichloromethane (ug/l)	MW-24	20	0.326	0.2053	0.0459	0.39	0.12	0.39	0.12	1	100
Bromodichloromethane (ug/l)	MW-26A	16	0.3606	0.2081	0.05204	0.39	0.255	0.39	0.12	1	100
Bromodichloromethane (ug/l)	MW-300	19	0.3368	0.2049	0.04701	0.39	0.12	0.39	0.12	1	100
Bromodichloromethane (ug/l)	MW-301	19	0.3368	0.2049	0.04701	0.39	0.12	0.39	0.12	1	100
Bromodichloromethane (ug/l)	MW-302R	20	0.326	0.2053	0.0459	0.39	0.12	0.39	0.12	1	100
Bromodichloromethane (ug/l)	MW-303	21	0.3419	0.1951	0.04256	0.39	0.12	0.39	0.12	1	100
Bromodichloromethane (ug/l)	MW-304R	20	0.3395	0.1998	0.04468	0.39	0.12	0.39	0.12	1	100
Bromodichloromethane (ug/l)	MW-305	20	0.326	0.2053	0.0459	0.39	0.12	0.39	0.12	1	100
Bromodichloromethane (ug/l)	MW-501	9	0.39	0	0	0.39	0.39	0.39	0.39	0.39	100

Box & Whiskers Plot

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 3:00 PM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Lower Q.	Upper Q.	Min.	Max.	%NDs
Bromodichloromethane (ug/l)	MW-9AR (bg)	15	0.39	0	0	0.39	0.39	0.39	0.39	0.39	100
Bromoform (ug/l)	MW-15	20	0.767	1.043	0.2332	0.78	0.14	0.78	0.14	5	100
Bromoform (ug/l)	MW-18	19	0.8	1.061	0.2434	0.78	0.14	0.78	0.14	5	100
Bromoform (ug/l)	MW-19	19	0.8	1.061	0.2434	0.78	0.14	0.78	0.14	5	100
Bromoform (ug/l)	MW-20	19	0.8	1.061	0.2434	0.78	0.14	0.78	0.14	5	100
Bromoform (ug/l)	MW-201B (bg)	19	0.8	1.061	0.2434	0.78	0.14	0.78	0.14	5	100
Bromoform (ug/l)	MW-22	19	0.8	1.061	0.2434	0.78	0.14	0.78	0.14	5	100
Bromoform (ug/l)	MW-24	20	0.767	1.043	0.2332	0.78	0.14	0.78	0.14	5	100
Bromoform (ug/l)	MW-26A	16	0.8837	1.134	0.2834	0.78	0.46	0.78	0.14	5	100
Bromoform (ug/l)	MW-300	19	0.8	1.061	0.2434	0.78	0.14	0.78	0.14	5	100
Bromoform (ug/l)	MW-301	19	0.8	1.061	0.2434	0.78	0.14	0.78	0.14	5	100
Bromoform (ug/l)	MW-302R	20	0.767	1.043	0.2332	0.78	0.14	0.78	0.14	5	100
Bromoform (ug/l)	MW-303	21	0.7981	1.006	0.2196	0.78	0.14	0.78	0.14	5	100
Bromoform (ug/l)	MW-304R	20	0.799	1.033	0.2309	0.78	0.14	0.78	0.14	5	100
Bromoform (ug/l)	MW-305	20	0.767	1.043	0.2332	0.78	0.14	0.78	0.14	5	100
Bromoform (ug/l)	MW-501	9	0.78	0	0	0.78	0.78	0.78	0.78	0.78	100
Bromoform (ug/l)	MW-9AR (bg)	15	0.78	0	0	0.78	0.78	0.78	0.78	0.78	100
Bromomethane (ug/l)	MW-15	20	0.937	0.8366	0.1871	1.1	0.22	1.1	0.22	4	100
Bromomethane (ug/l)	MW-18	19	0.9747	0.8419	0.1931	1.1	0.22	1.1	0.22	4	100
Bromomethane (ug/l)	MW-19	19	0.9747	0.8419	0.1931	1.1	0.22	1.1	0.22	4	100
Bromomethane (ug/l)	MW-20	19	0.7881	0.4209	0.09657	1.1	0.22	1.1	0.22	1.1	89.47
Bromomethane (ug/l)	MW-201B (bg)	19	0.9782	0.8387	0.1924	1.1	0.22	1.1	0.22	4	94.74
Bromomethane (ug/l)	MW-22	19	0.9747	0.8419	0.1931	1.1	0.22	1.1	0.22	4	100
Bromomethane (ug/l)	MW-24	20	0.937	0.8366	0.1871	1.1	0.22	1.1	0.22	4	100
Bromomethane (ug/l)	MW-26A	16	1.061	0.875	0.2187	1.1	0.66	1.1	0.22	4	100
Bromomethane (ug/l)	MW-300	19	0.9748	0.8418	0.1931	1.1	0.22	1.1	0.22	4	94.74
Bromomethane (ug/l)	MW-301	19	0.9747	0.8419	0.1931	1.1	0.22	1.1	0.22	4	100
Bromomethane (ug/l)	MW-302R	20	0.937	0.8366	0.1871	1.1	0.22	1.1	0.22	4	100
Bromomethane (ug/l)	MW-303	21	0.9867	0.7996	0.1745	1.1	0.22	1.1	0.22	4	100
Bromomethane (ug/l)	MW-304R	20	0.9843	0.8168	0.1826	1.1	0.253	1.1	0.22	4	95
Bromomethane (ug/l)	MW-305	20	0.9411	0.8332	0.1863	1.1	0.22	1.1	0.22	4	95
Bromomethane (ug/l)	MW-501	9	1.1	0	0	1.1	1.1	1.1	1.1	1.1	100
Bromomethane (ug/l)	MW-9AR (bg)	15	1.1	0	0	1.1	1.1	1.1	1.1	1.1	100
Carbon Disulfide (ug/l)	MW-15	18	0.35	0.1455	0.0343	0.45	0.15	0.45	0.15	0.45	100
Carbon Disulfide (ug/l)	MW-18	19	0.3842	0.2055	0.04715	0.45	0.15	0.45	0.15	1	100
Carbon Disulfide (ug/l)	MW-19	19	0.3842	0.2055	0.04715	0.45	0.15	0.45	0.15	1	100
Carbon Disulfide (ug/l)	MW-20	19	0.3971	0.1968	0.04515	0.45	0.161	0.45	0.15	1	89.47
Carbon Disulfide (ug/l)	MW-201B (bg)	19	0.3858	0.2037	0.04674	0.45	0.15	0.45	0.15	1	94.74
Carbon Disulfide (ug/l)	MW-22	19	0.3885	0.2012	0.04615	0.45	0.15	0.45	0.15	1	94.74
Carbon Disulfide (ug/l)	MW-24	20	0.3725	0.2068	0.04624	0.45	0.15	0.45	0.15	1	100
Carbon Disulfide (ug/l)	MW-26A	16	0.4094	0.2059	0.05148	0.45	0.3	0.45	0.15	1	100
Carbon Disulfide (ug/l)	MW-300	19	0.3842	0.2055	0.04715	0.45	0.15	0.45	0.15	1	100
Carbon Disulfide (ug/l)	MW-301	19	0.3842	0.2055	0.04715	0.45	0.15	0.45	0.15	1	100
Carbon Disulfide (ug/l)	MW-302R	19	0.3842	0.2055	0.04715	0.45	0.15	0.45	0.15	1	100
Carbon Disulfide (ug/l)	MW-303	21	0.3905	0.196	0.04276	0.45	0.15	0.45	0.15	1	100
Carbon Disulfide (ug/l)	MW-304R	20	0.3875	0.2006	0.04485	0.45	0.15	0.45	0.15	1	100
Carbon Disulfide (ug/l)	MW-305	19	0.3842	0.2055	0.04715	0.45	0.15	0.45	0.15	1	100
Carbon Disulfide (ug/l)	MW-501	9	0.45	0	0	0.45	0.45	0.45	0.45	0.45	100
Carbon Disulfide (ug/l)	MW-9AR (bg)	14	0.45	0	0	0.45	0.45	0.45	0.45	0.45	100
Carbon Tetrachloride (ug/l)	MW-15	20	0.574	0.3896	0.08711	0.65	0.24	0.65	0.24	2	100

Box & Whiskers Plot

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Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Lower Q.	Upper Q.	Min.	Max.	%NDs
Carbon Tetrachloride (ug/l)	MW-18	19	0.5916	0.392	0.08994	0.65	0.24	0.65	0.24	2	100
Carbon Tetrachloride (ug/l)	MW-19	19	0.5916	0.392	0.08994	0.65	0.24	0.65	0.24	2	100
Carbon Tetrachloride (ug/l)	MW-20	19	0.5916	0.392	0.08994	0.65	0.24	0.65	0.24	2	100
Carbon Tetrachloride (ug/l)	MW-201B (bg)	19	0.5916	0.392	0.08994	0.65	0.24	0.65	0.24	2	100
Carbon Tetrachloride (ug/l)	MW-22	19	0.5916	0.392	0.08994	0.65	0.24	0.65	0.24	2	100
Carbon Tetrachloride (ug/l)	MW-24	20	0.574	0.3896	0.08711	0.65	0.24	0.65	0.24	2	100
Carbon Tetrachloride (ug/l)	MW-26A	16	0.6319	0.4074	0.1019	0.65	0.445	0.65	0.24	2	100
Carbon Tetrachloride (ug/l)	MW-300	19	0.5916	0.392	0.08994	0.65	0.24	0.65	0.24	2	100
Carbon Tetrachloride (ug/l)	MW-301	19	0.5916	0.392	0.08994	0.65	0.24	0.65	0.24	2	100
Carbon Tetrachloride (ug/l)	MW-302R	20	0.574	0.3896	0.08711	0.65	0.24	0.65	0.24	2	100
Carbon Tetrachloride (ug/l)	MW-303	21	0.5971	0.3723	0.08125	0.65	0.24	0.65	0.24	2	100
Carbon Tetrachloride (ug/l)	MW-304R	20	0.5945	0.3818	0.08537	0.65	0.24	0.65	0.24	2	100
Carbon Tetrachloride (ug/l)	MW-305	20	0.574	0.3896	0.08711	0.65	0.24	0.65	0.24	2	100
Carbon Tetrachloride (ug/l)	MW-501	9	0.65	0	0	0.65	0.65	0.65	0.65	0.65	100
Carbon Tetrachloride (ug/l)	MW-9AR (bg)	15	0.65	0	0	0.65	0.65	0.65	0.65	0.65	100
Chlorobenzene (ug/l)	MW-15	20	0.3565	0.1822	0.04074	0.4	0.19	0.4	0.19	1	100
Chlorobenzene (ug/l)	MW-18	19	0.3653	0.1828	0.04194	0.4	0.19	0.4	0.19	1	100
Chlorobenzene (ug/l)	MW-19	19	4.182	2.383	0.5468	4.26	2.17	6.49	0.2	7.77	5.263
Chlorobenzene (ug/l)	MW-20	19	7.025	1.947	0.4466	7.28	5.56	8.05	3.59	10.8	0
Chlorobenzene (ug/l)	MW-201B (bg)	19	0.3653	0.1828	0.04194	0.4	0.19	0.4	0.19	1	100
Chlorobenzene (ug/l)	MW-22	19	0.6137	0.2137	0.04902	0.632	0.4	0.765	0.19	0.922	26.32
Chlorobenzene (ug/l)	MW-24	20	0.3565	0.1822	0.04074	0.4	0.19	0.4	0.19	1	100
Chlorobenzene (ug/l)	MW-26A	16	0.385	0.1885	0.04712	0.4	0.295	0.4	0.19	1	100
Chlorobenzene (ug/l)	MW-300	19	1.234	1.232	0.2827	0.507	0.4	2.14	0.19	4.06	47.37
Chlorobenzene (ug/l)	MW-301	19	0.588	0.294	0.06744	0.524	0.4	0.784	0.19	1.22	36.84
Chlorobenzene (ug/l)	MW-302R	20	0.3565	0.1822	0.04074	0.4	0.19	0.4	0.19	1	100
Chlorobenzene (ug/l)	MW-303	21	0.3686	0.1738	0.03792	0.4	0.19	0.4	0.19	1	100
Chlorobenzene (ug/l)	MW-304R	20	0.367	0.1781	0.03983	0.4	0.19	0.4	0.19	1	100
Chlorobenzene (ug/l)	MW-305	20	0.3565	0.1822	0.04074	0.4	0.19	0.4	0.19	1	100
Chlorobenzene (ug/l)	MW-501	9	0.4	0	0	0.4	0.4	0.4	0.4	0.4	100
Chlorobenzene (ug/l)	MW-9AR (bg)	15	0.4	0	0	0.4	0.4	0.4	0.4	0.4	100
Chloroethane (ug/l)	MW-15	20	0.7265	0.83	0.1856	0.79	0.15	0.79	0.15	4	100
Chloroethane (ug/l)	MW-18	19	0.7568	0.8413	0.193	0.79	0.15	0.79	0.15	4	100
Chloroethane (ug/l)	MW-19	19	1.277	0.9198	0.211	0.79	0.79	1.46	0.79	4	63.16
Chloroethane (ug/l)	MW-20	19	0.9719	0.4332	0.09938	0.79	0.79	1.21	0.15	2.28	57.89
Chloroethane (ug/l)	MW-201B (bg)	19	0.7568	0.8413	0.193	0.79	0.15	0.79	0.15	4	100
Chloroethane (ug/l)	MW-22	19	0.7568	0.8413	0.193	0.79	0.15	0.79	0.15	4	100
Chloroethane (ug/l)	MW-24	20	0.7265	0.83	0.1856	0.79	0.15	0.79	0.15	4	100
Chloroethane (ug/l)	MW-26A	16	0.8306	0.8913	0.2228	0.79	0.47	0.79	0.15	4	100
Chloroethane (ug/l)	MW-300	19	0.7568	0.8413	0.193	0.79	0.15	0.79	0.15	4	100
Chloroethane (ug/l)	MW-301	19	0.7568	0.8413	0.193	0.79	0.15	0.79	0.15	4	100
Chloroethane (ug/l)	MW-302R	20	0.7265	0.83	0.1856	0.79	0.15	0.79	0.15	4	100
Chloroethane (ug/l)	MW-303	21	0.76	0.7982	0.1742	0.79	0.15	0.79	0.15	4	100
Chloroethane (ug/l)	MW-304R	20	0.7585	0.8189	0.1831	0.79	0.15	0.79	0.15	4	100
Chloroethane (ug/l)	MW-305	20	0.7265	0.83	0.1856	0.79	0.15	0.79	0.15	4	100
Chloroethane (ug/l)	MW-501	9	0.79	0	0	0.79	0.79	0.79	0.79	0.79	100
Chloroethane (ug/l)	MW-9AR (bg)	15	0.79	0	0	0.79	0.79	0.79	0.79	0.79	100
Chloroform (ug/l)	MW-15	20	0.928	0.4923	0.1101	1.3	0.28	1.3	0.28	1.3	100
Chloroform (ug/l)	MW-18	19	0.9621	0.4809	0.1103	1.3	0.28	1.3	0.28	1.3	100
Chloroform (ug/l)	MW-19	19	0.9621	0.4809	0.1103	1.3	0.28	1.3	0.28	1.3	94.74

Box & Whiskers Plot

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 3:00 PM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Lower Q.	Upper Q.	Min.	Max.	%NDs
Chloroform (ug/l)	MW-20	19	0.9621	0.4809	0.1103	1.3	0.28	1.3	0.28	1.3	100
Chloroform (ug/l)	MW-201B (bg)	19	0.9628	0.4799	0.1101	1.3	0.28	1.3	0.28	1.3	94.74
Chloroform (ug/l)	MW-22	19	0.9621	0.4809	0.1103	1.3	0.28	1.3	0.28	1.3	100
Chloroform (ug/l)	MW-24	20	0.928	0.4923	0.1101	1.3	0.28	1.3	0.28	1.3	100
Chloroform (ug/l)	MW-26A	16	1.026	0.4511	0.1128	1.3	0.64	1.3	0.28	1.3	100
Chloroform (ug/l)	MW-300	19	0.9621	0.4809	0.1103	1.3	0.28	1.3	0.28	1.3	100
Chloroform (ug/l)	MW-301	19	0.9621	0.4809	0.1103	1.3	0.28	1.3	0.28	1.3	100
Chloroform (ug/l)	MW-302R	20	0.928	0.4923	0.1101	1.3	0.28	1.3	0.28	1.3	100
Chloroform (ug/l)	MW-303	21	0.9943	0.4674	0.102	1.3	0.28	1.3	0.28	1.3	100
Chloroform (ug/l)	MW-304R	20	0.991	0.4777	0.1068	1.3	0.28	1.3	0.28	1.3	95
Chloroform (ug/l)	MW-305	20	0.928	0.4923	0.1101	1.3	0.28	1.3	0.28	1.3	100
Chloroform (ug/l)	MW-501	9	1.3	0	0	1.3	1.3	1.3	1.3	1.3	100
Chloroform (ug/l)	MW-9AR (bg)	15	1.3	0	0	1.3	1.3	1.3	1.3	1.3	100
Chloromethane (ug/l)	MW-15	20	0.625	0.5773	0.1291	0.61	0.31	0.61	0.31	3	100
Chloromethane (ug/l)	MW-18	19	0.6411	0.5885	0.135	0.61	0.31	0.61	0.31	3	100
Chloromethane (ug/l)	MW-19	19	0.6411	0.5885	0.135	0.61	0.31	0.61	0.31	3	100
Chloromethane (ug/l)	MW-20	19	0.6411	0.5885	0.135	0.61	0.31	0.61	0.31	3	100
Chloromethane (ug/l)	MW-201B (bg)	19	0.6411	0.5885	0.135	0.61	0.31	0.61	0.31	3	100
Chloromethane (ug/l)	MW-22	19	0.6411	0.5885	0.135	0.61	0.31	0.61	0.31	3	100
Chloromethane (ug/l)	MW-24	20	0.6245	0.5776	0.1291	0.61	0.31	0.61	0.31	3	100
Chloromethane (ug/l)	MW-26A	16	0.6844	0.6316	0.1579	0.61	0.46	0.61	0.31	3	100
Chloromethane (ug/l)	MW-300	19	0.6411	0.5885	0.135	0.61	0.31	0.61	0.31	3	100
Chloromethane (ug/l)	MW-301	19	0.6411	0.5885	0.135	0.61	0.31	0.61	0.31	3	100
Chloromethane (ug/l)	MW-302R	20	0.6245	0.5776	0.1291	0.61	0.31	0.61	0.31	3	100
Chloromethane (ug/l)	MW-303	21	0.6381	0.5584	0.1218	0.61	0.31	0.61	0.31	3	100
Chloromethane (ug/l)	MW-304R	20	0.5168	0.1396	0.03122	0.61	0.31	0.61	0.31	0.61	95
Chloromethane (ug/l)	MW-305	20	0.4939	0.1468	0.03284	0.61	0.31	0.61	0.31	0.61	95
Chloromethane (ug/l)	MW-501	9	0.6242	0.04267	0.01422	0.61	0.61	0.61	0.61	0.738	88.89
Chloromethane (ug/l)	MW-9AR (bg)	15	0.61	0	0	0.61	0.61	0.61	0.61	0.61	100
cis-1,2-Dichloroethene (ug/l)	MW-15	20	0.2215	0.1873	0.04187	0.21	0.13	0.21	0.13	1	100
cis-1,2-Dichloroethene (ug/l)	MW-18	19	0.2263	0.1911	0.04384	0.21	0.13	0.21	0.13	1	100
cis-1,2-Dichloroethene (ug/l)	MW-19	19	0.6373	0.4563	0.1047	0.502	0.338	0.737	0.21	2.14	21.05
cis-1,2-Dichloroethene (ug/l)	MW-20	19	0.2263	0.1911	0.04384	0.21	0.13	0.21	0.13	1	100
cis-1,2-Dichloroethene (ug/l)	MW-201B (bg)	19	0.2263	0.1911	0.04384	0.21	0.13	0.21	0.13	1	100
cis-1,2-Dichloroethene (ug/l)	MW-22	19	0.2949	0.06626	0.0152	0.284	0.228	0.367	0.21	0.414	15.79
cis-1,2-Dichloroethene (ug/l)	MW-24	20	0.2215	0.1873	0.04187	0.21	0.13	0.21	0.13	1	100
cis-1,2-Dichloroethene (ug/l)	MW-26A	15	0.1894	0.03545	0.009154	0.21	0.141	0.21	0.13	0.21	93.33
cis-1,2-Dichloroethene (ug/l)	MW-300	19	0.2504	0.1928	0.04423	0.21	0.13	0.252	0.13	1	78.95
cis-1,2-Dichloroethene (ug/l)	MW-301	19	0.2263	0.1911	0.04384	0.21	0.13	0.21	0.13	1	100
cis-1,2-Dichloroethene (ug/l)	MW-302R	20	0.2215	0.1873	0.04187	0.21	0.13	0.21	0.13	1	100
cis-1,2-Dichloroethene (ug/l)	MW-303	21	0.2327	0.1836	0.04007	0.21	0.13	0.21	0.13	1	90.48
cis-1,2-Dichloroethene (ug/l)	MW-304R	20	0.2255	0.1861	0.0416	0.21	0.13	0.21	0.13	1	100
cis-1,2-Dichloroethene (ug/l)	MW-305	20	0.2215	0.1873	0.04187	0.21	0.13	0.21	0.13	1	100
cis-1,2-Dichloroethene (ug/l)	MW-501	9	0.21	0	0	0.21	0.21	0.21	0.21	0.21	100
cis-1,2-Dichloroethene (ug/l)	MW-9AR (bg)	15	0.21	0	0	0.21	0.21	0.21	0.21	0.21	100
cis-1,3-Dichloropropene (ug/l)	MW-15	20	0.4525	1.071	0.2396	0.25	0.15	0.25	0.15	5	100
cis-1,3-Dichloropropene (ug/l)	MW-18	19	0.4684	1.098	0.252	0.25	0.15	0.25	0.15	5	100
cis-1,3-Dichloropropene (ug/l)	MW-19	19	0.4684	1.098	0.252	0.25	0.15	0.25	0.15	5	100
cis-1,3-Dichloropropene (ug/l)	MW-20	19	0.4684	1.098	0.252	0.25	0.15	0.25	0.15	5	100
cis-1,3-Dichloropropene (ug/l)	MW-201B (bg)	19	0.4684	1.098	0.252	0.25	0.15	0.25	0.15	5	100

Box & Whiskers Plot

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 3:00 PM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Lower Q.	Upper Q.	Min.	Max.	%NDs
cis-1,3-Dichloropropene (ug/l)	MW-22	19	0.4684	1.098	0.252	0.25	0.15	0.25	0.15	5	100
cis-1,3-Dichloropropene (ug/l)	MW-24	20	0.4525	1.071	0.2396	0.25	0.15	0.25	0.15	5	100
cis-1,3-Dichloropropene (ug/l)	MW-26A	16	0.5219	1.195	0.2987	0.25	0.2	0.25	0.15	5	100
cis-1,3-Dichloropropene (ug/l)	MW-300	19	0.4684	1.098	0.252	0.25	0.15	0.25	0.15	5	100
cis-1,3-Dichloropropene (ug/l)	MW-301	19	0.4684	1.098	0.252	0.25	0.15	0.25	0.15	5	100
cis-1,3-Dichloropropene (ug/l)	MW-302R	20	0.4525	1.071	0.2396	0.25	0.15	0.25	0.15	5	100
cis-1,3-Dichloropropene (ug/l)	MW-303	21	0.4476	1.044	0.2278	0.25	0.15	0.25	0.15	5	100
cis-1,3-Dichloropropene (ug/l)	MW-304R	20	0.4575	1.07	0.2393	0.25	0.15	0.25	0.15	5	100
cis-1,3-Dichloropropene (ug/l)	MW-305	20	0.4525	1.071	0.2396	0.25	0.15	0.25	0.15	5	100
cis-1,3-Dichloropropene (ug/l)	MW-501	9	0.25	0	0	0.25	0.25	0.25	0.25	0.25	100
cis-1,3-Dichloropropene (ug/l)	MW-9AR (bg)	15	0.25	0	0	0.25	0.25	0.25	0.25	0.25	100
Dibromomethane (ug/l)	MW-15	20	0.311	0.1776	0.03971	0.33	0.18	0.33	0.18	1	100
Dibromomethane (ug/l)	MW-18	19	0.3179	0.1797	0.04122	0.33	0.18	0.33	0.18	1	100
Dibromomethane (ug/l)	MW-19	19	0.3179	0.1797	0.04122	0.33	0.18	0.33	0.18	1	100
Dibromomethane (ug/l)	MW-20	19	0.3179	0.1797	0.04122	0.33	0.18	0.33	0.18	1	100
Dibromomethane (ug/l)	MW-201B (bg)	19	0.3179	0.1797	0.04122	0.33	0.18	0.33	0.18	1	100
Dibromomethane (ug/l)	MW-22	19	0.3179	0.1797	0.04122	0.33	0.18	0.33	0.18	1	100
Dibromomethane (ug/l)	MW-24	20	0.311	0.1776	0.03971	0.33	0.18	0.33	0.18	1	100
Dibromomethane (ug/l)	MW-26A	16	0.3344	0.1895	0.04737	0.33	0.255	0.33	0.18	1	100
Dibromomethane (ug/l)	MW-300	19	0.3179	0.1797	0.04122	0.33	0.18	0.33	0.18	1	100
Dibromomethane (ug/l)	MW-301	19	0.3179	0.1797	0.04122	0.33	0.18	0.33	0.18	1	100
Dibromomethane (ug/l)	MW-302R	20	0.311	0.1776	0.03971	0.33	0.18	0.33	0.18	1	100
Dibromomethane (ug/l)	MW-303	21	0.319	0.1705	0.03721	0.33	0.18	0.33	0.18	1	100
Dibromomethane (ug/l)	MW-304R	20	0.3185	0.1749	0.03911	0.33	0.18	0.33	0.18	1	100
Dibromomethane (ug/l)	MW-305	20	0.311	0.1776	0.03971	0.33	0.18	0.33	0.18	1	100
Dibromomethane (ug/l)	MW-501	9	0.33	0	0	0.33	0.33	0.33	0.33	0.33	100
Dibromomethane (ug/l)	MW-9AR (bg)	15	0.33	0	0	0.33	0.33	0.33	0.33	0.33	100
Dichloromethane (ug/l)	MW-15	20	1.381	1.086	0.2427	1.7	0.457	1.7	0.17	5	80
Dichloromethane (ug/l)	MW-18	19	1.422	1.1	0.2524	1.7	0.304	1.7	0.17	5	84.21
Dichloromethane (ug/l)	MW-19	19	1.409	1.113	0.2553	1.7	0.277	1.7	0.17	5	78.95
Dichloromethane (ug/l)	MW-20	19	1.402	1.121	0.2572	1.7	0.17	1.7	0.17	5	89.47
Dichloromethane (ug/l)	MW-201B (bg)	19	1.401	1.122	0.2574	1.7	0.202	1.7	0.17	5	89.47
Dichloromethane (ug/l)	MW-22	19	1.46	1.062	0.2437	1.7	0.556	1.7	0.17	5	73.68
Dichloromethane (ug/l)	MW-24	20	1.365	1.102	0.2464	1.7	0.3655	1.7	0.17	5	85
Dichloromethane (ug/l)	MW-26A	16	1.576	1.088	0.272	1.7	1.178	1.7	0.17	5	81.25
Dichloromethane (ug/l)	MW-300	19	1.429	1.094	0.251	1.7	0.36	1.7	0.17	5	84.21
Dichloromethane (ug/l)	MW-301	19	1.411	1.112	0.2551	1.7	0.307	1.7	0.17	5	89.47
Dichloromethane (ug/l)	MW-302R	20	1.361	1.105	0.247	1.7	0.335	1.7	0.17	5	80
Dichloromethane (ug/l)	MW-303	21	1.447	1.049	0.2289	1.7	0.4375	1.7	0.17	5	85.71
Dichloromethane (ug/l)	MW-304R	20	1.425	1.084	0.2423	1.7	0.352	1.7	0.17	5	80
Dichloromethane (ug/l)	MW-305	20	1.337	1.128	0.2523	1.7	0.1715	1.7	0.17	5	90
Dichloromethane (ug/l)	MW-501	9	1.7	0	0	1.7	1.7	1.7	1.7	1.7	100
Dichloromethane (ug/l)	MW-9AR (bg)	15	1.7	0	0	1.7	1.7	1.7	1.7	1.7	100
Ethylbenzene (ug/l)	MW-15	20	0.3095	0.1695	0.03791	0.31	0.21	0.31	0.21	1	100
Ethylbenzene (ug/l)	MW-18	19	0.3147	0.1725	0.03958	0.31	0.21	0.31	0.21	1	100
Ethylbenzene (ug/l)	MW-19	19	0.3147	0.1725	0.03958	0.31	0.21	0.31	0.21	1	100
Ethylbenzene (ug/l)	MW-20	19	0.3147	0.1725	0.03958	0.31	0.21	0.31	0.21	1	100
Ethylbenzene (ug/l)	MW-201B (bg)	19	0.3147	0.1725	0.03958	0.31	0.21	0.31	0.21	1	100
Ethylbenzene (ug/l)	MW-22	19	0.3147	0.1725	0.03958	0.31	0.21	0.31	0.21	1	100
Ethylbenzene (ug/l)	MW-24	20	0.3095	0.1695	0.03791	0.31	0.21	0.31	0.21	1	100

Box & Whiskers Plot

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 3:00 PM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Lower Q.	Upper Q.	Min.	Max.	%NDs
Ethylbenzene (ug/l)	MW-26A	15	0.2869	0.04152	0.01072	0.31	0.264	0.31	0.21	0.31	93.33
Ethylbenzene (ug/l)	MW-300	19	0.3147	0.1725	0.03958	0.31	0.21	0.31	0.21	1	100
Ethylbenzene (ug/l)	MW-301	19	0.3147	0.1725	0.03958	0.31	0.21	0.31	0.21	1	100
Ethylbenzene (ug/l)	MW-302R	20	0.3095	0.1695	0.03791	0.31	0.21	0.31	0.21	1	100
Ethylbenzene (ug/l)	MW-303	20	0.2851	0.04449	0.009948	0.31	0.26	0.31	0.21	0.312	95
Ethylbenzene (ug/l)	MW-304R	20	0.3145	0.1679	0.03755	0.31	0.21	0.31	0.21	1	100
Ethylbenzene (ug/l)	MW-305	20	0.3095	0.1695	0.03791	0.31	0.21	0.31	0.21	1	100
Ethylbenzene (ug/l)	MW-501	9	0.31	0	0	0.31	0.31	0.31	0.31	0.31	100
Ethylbenzene (ug/l)	MW-9AR (bg)	15	0.31	0	0	0.31	0.31	0.31	0.31	0.31	100
Iodomethane (ug/l)	MW-15	20	4.98	3.216	0.719	7	0.8	7	0.8	10	100
Iodomethane (ug/l)	MW-18	19	5.2	3.145	0.7216	7	0.8	7	0.8	10	100
Iodomethane (ug/l)	MW-19	19	5.2	3.145	0.7216	7	0.8	7	0.8	10	100
Iodomethane (ug/l)	MW-20	19	5.2	3.145	0.7216	7	0.8	7	0.8	10	100
Iodomethane (ug/l)	MW-201B (bg)	19	5.2	3.145	0.7216	7	0.8	7	0.8	10	100
Iodomethane (ug/l)	MW-22	18	5.444	3.045	0.7178	7	0.8	7	0.8	10	100
Iodomethane (ug/l)	MW-24	20	4.98	3.216	0.719	7	0.8	7	0.8	10	100
Iodomethane (ug/l)	MW-26A	15	5.347	2.838	0.7328	7	0.8	7	0.8	7	100
Iodomethane (ug/l)	MW-300	18	5.444	3.045	0.7178	7	0.8	7	0.8	10	100
Iodomethane (ug/l)	MW-301	18	5.444	3.045	0.7178	7	0.8	7	0.8	10	100
Iodomethane (ug/l)	MW-302R	20	4.98	3.216	0.719	7	0.8	7	0.8	10	100
Iodomethane (ug/l)	MW-303	21	5.371	3.033	0.6618	7	0.8	7	0.8	10	100
Iodomethane (ug/l)	MW-304R	20	5.29	3.088	0.6905	7	0.8	7	0.8	10	100
Iodomethane (ug/l)	MW-305	20	4.98	3.216	0.719	7	0.8	7	0.8	10	100
Iodomethane (ug/l)	MW-501	9	7	0	0	7	7	7	7	7	100
Iodomethane (ug/l)	MW-9AR (bg)	15	7	0	0	7	7	7	7	7	100
Silvex [2,4,5-TP] (ug/l)	MW-15	3	0.4687	0.5075	0.293	0.296	0.07	1.04	0.07	1.04	100
Silvex [2,4,5-TP] (ug/l)	MW-18	2	0.185	0.1626	0.115	0.185	0.185	0.185	0.07	0.3	100
Silvex [2,4,5-TP] (ug/l)	MW-19	2	0.222	0.123	0.087	0.222	0.222	0.222	0.135	0.309	100
Silvex [2,4,5-TP] (ug/l)	MW-20	9	1.422	1.257	0.4191	1.21	0.3075	2.975	0.296	3.09	100
Silvex [2,4,5-TP] (ug/l)	MW-201B (bg)	4	0.5105	0.4	0.2	0.3175	0.299	0.722	0.297	1.11	100
Silvex [2,4,5-TP] (ug/l)	MW-22	18	0.6497	0.7284	0.1717	0.3025	0.145	1.435	0.0511	2.11	55.56
Silvex [2,4,5-TP] (ug/l)	MW-24	2	0.1925	0.1732	0.1225	0.1925	0.1925	0.1925	0.07	0.315	100
Silvex [2,4,5-TP] (ug/l)	MW-26A	3	0.2067	0.1592	0.09189	0.293	0.023	0.304	0.023	0.304	100
Silvex [2,4,5-TP] (ug/l)	MW-300	2	0.227	0.1344	0.095	0.227	0.227	0.227	0.132	0.322	100
Silvex [2,4,5-TP] (ug/l)	MW-301	2	0.2195	0.1223	0.0865	0.2195	0.2195	0.2195	0.133	0.306	100
Silvex [2,4,5-TP] (ug/l)	MW-302R	2	0.187	0.1655	0.117	0.187	0.187	0.187	0.07	0.304	100
Silvex [2,4,5-TP] (ug/l)	MW-303	2	0.08045	0.07997	0.05655	0.08045	0.08045	0.08045	0.0239	0.137	100
Silvex [2,4,5-TP] (ug/l)	MW-304R	2	0.1608	0.1941	0.1373	0.1608	0.1608	0.1608	0.0235	0.298	100
Silvex [2,4,5-TP] (ug/l)	MW-305	2	0.184	0.1612	0.114	0.184	0.184	0.184	0.07	0.298	100
Silvex [2,4,5-TP] (ug/l)	MW-9AR (bg)	2	0.304	0.005657	0.004	0.304	0.304	0.304	0.3	0.308	100
Styrene (ug/l)	MW-15	20	0.307	0.2087	0.04667	0.37	0.1	0.37	0.1	1	100
Styrene (ug/l)	MW-18	19	0.3179	0.2085	0.04784	0.37	0.1	0.37	0.1	1	100
Styrene (ug/l)	MW-19	19	0.3179	0.2085	0.04784	0.37	0.1	0.37	0.1	1	100
Styrene (ug/l)	MW-20	19	0.3179	0.2085	0.04784	0.37	0.1	0.37	0.1	1	100
Styrene (ug/l)	MW-201B (bg)	19	0.3179	0.2085	0.04784	0.37	0.1	0.37	0.1	1	100
Styrene (ug/l)	MW-22	19	0.3179	0.2085	0.04784	0.37	0.1	0.37	0.1	1	100
Styrene (ug/l)	MW-24	20	0.307	0.2087	0.04667	0.37	0.1	0.37	0.1	1	100
Styrene (ug/l)	MW-26A	16	0.3419	0.2123	0.05307	0.37	0.235	0.37	0.1	1	100
Styrene (ug/l)	MW-300	19	0.3179	0.2085	0.04784	0.37	0.1	0.37	0.1	1	100
Styrene (ug/l)	MW-301	19	0.3179	0.2085	0.04784	0.37	0.1	0.37	0.1	1	100

Box & Whiskers Plot

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 3:00 PM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Lower Q.	Upper Q.	Min.	Max.	%NDs
Styrene (ug/l)	MW-302R	20	0.307	0.2087	0.04667	0.37	0.1	0.37	0.1	1	100
Styrene (ug/l)	MW-303	21	0.3229	0.1984	0.0433	0.37	0.1	0.37	0.1	1	100
Styrene (ug/l)	MW-304R	20	0.3205	0.2033	0.04546	0.37	0.1	0.37	0.1	1	100
Styrene (ug/l)	MW-305	20	0.307	0.2087	0.04667	0.37	0.1	0.37	0.1	1	100
Styrene (ug/l)	MW-501	9	0.37	0	0	0.37	0.37	0.37	0.37	0.37	100
Styrene (ug/l)	MW-9AR (bg)	15	0.37	0	0	0.37	0.37	0.37	0.37	0.37	100
Tetrachloroethene (ug/l)	MW-15	20	0.401	0.202	0.04518	0.48	0.18	0.48	0.18	1	100
Tetrachloroethene (ug/l)	MW-18	19	0.4126	0.2006	0.04602	0.48	0.18	0.48	0.18	1	100
Tetrachloroethene (ug/l)	MW-19	19	0.4126	0.2006	0.04602	0.48	0.18	0.48	0.18	1	100
Tetrachloroethene (ug/l)	MW-20	19	0.4126	0.2006	0.04602	0.48	0.18	0.48	0.18	1	100
Tetrachloroethene (ug/l)	MW-201B (bg)	19	0.4126	0.2006	0.04602	0.48	0.18	0.48	0.18	1	100
Tetrachloroethene (ug/l)	MW-22	19	0.4126	0.2006	0.04602	0.48	0.18	0.48	0.18	1	100
Tetrachloroethene (ug/l)	MW-24	20	0.401	0.202	0.04518	0.48	0.18	0.48	0.18	1	100
Tetrachloroethene (ug/l)	MW-26A	16	0.4375	0.2002	0.05006	0.48	0.33	0.48	0.18	1	100
Tetrachloroethene (ug/l)	MW-300	19	0.4126	0.2006	0.04602	0.48	0.18	0.48	0.18	1	100
Tetrachloroethene (ug/l)	MW-301	19	0.4126	0.2006	0.04602	0.48	0.18	0.48	0.18	1	100
Tetrachloroethene (ug/l)	MW-302R	20	0.401	0.202	0.04518	0.48	0.18	0.48	0.18	1	100
Tetrachloroethene (ug/l)	MW-303	21	0.419	0.1914	0.04176	0.48	0.18	0.48	0.18	1	100
Tetrachloroethene (ug/l)	MW-304R	20	0.416	0.1958	0.04378	0.48	0.18	0.48	0.18	1	100
Tetrachloroethene (ug/l)	MW-305	20	0.401	0.202	0.04518	0.48	0.18	0.48	0.18	1	100
Tetrachloroethene (ug/l)	MW-501	9	0.48	0	0	0.48	0.48	0.48	0.48	0.48	100
Tetrachloroethene (ug/l)	MW-9AR (bg)	15	0.48	0	0	0.48	0.48	0.48	0.48	0.48	100
Toluene (ug/l)	MW-15	20	0.3605	0.2022	0.04522	0.43	0.15	0.43	0.15	1	100
Toluene (ug/l)	MW-18	19	0.374	0.1989	0.04563	0.43	0.15	0.43	0.15	1	94.74
Toluene (ug/l)	MW-19	19	0.3724	0.2017	0.04628	0.43	0.15	0.43	0.15	1	94.74
Toluene (ug/l)	MW-20	14	0.3997	0.07713	0.02061	0.43	0.43	0.43	0.206	0.43	85.71
Toluene (ug/l)	MW-201B (bg)	19	0.3716	0.2014	0.04622	0.43	0.15	0.43	0.15	1	100
Toluene (ug/l)	MW-22	19	0.3716	0.2014	0.04622	0.43	0.15	0.43	0.15	1	100
Toluene (ug/l)	MW-24	20	0.3605	0.2022	0.04522	0.43	0.15	0.43	0.15	1	100
Toluene (ug/l)	MW-26A	16	0.3956	0.2032	0.05081	0.43	0.29	0.43	0.15	1	100
Toluene (ug/l)	MW-300	19	0.3716	0.2014	0.04622	0.43	0.15	0.43	0.15	1	100
Toluene (ug/l)	MW-301	19	0.3716	0.2014	0.04622	0.43	0.15	0.43	0.15	1	100
Toluene (ug/l)	MW-302R	20	0.3605	0.2022	0.04522	0.43	0.15	0.43	0.15	1	100
Toluene (ug/l)	MW-303	21	0.3771	0.1919	0.04188	0.43	0.15	0.43	0.15	1	100
Toluene (ug/l)	MW-304R	20	0.3754	0.1955	0.04371	0.43	0.159	0.43	0.15	1	95
Toluene (ug/l)	MW-305	20	0.3605	0.2022	0.04522	0.43	0.15	0.43	0.15	1	100
Toluene (ug/l)	MW-501	9	0.43	0	0	0.43	0.43	0.43	0.43	0.43	100
Toluene (ug/l)	MW-9AR (bg)	15	0.43	0	0	0.43	0.43	0.43	0.43	0.43	100
trans-1,2-Dichloroethene (ug/l)	MW-15	20	0.2855	0.1706	0.03816	0.27	0.21	0.27	0.21	1	100
trans-1,2-Dichloroethene (ug/l)	MW-18	19	0.2895	0.1744	0.04	0.27	0.21	0.27	0.21	1	100
trans-1,2-Dichloroethene (ug/l)	MW-19	19	0.29	0.1741	0.03995	0.27	0.21	0.27	0.21	1	94.74
trans-1,2-Dichloroethene (ug/l)	MW-20	19	0.2895	0.1744	0.04	0.27	0.21	0.27	0.21	1	100
trans-1,2-Dichloroethene (ug/l)	MW-201B (bg)	19	0.2895	0.1744	0.04	0.27	0.21	0.27	0.21	1	100
trans-1,2-Dichloroethene (ug/l)	MW-22	19	0.2895	0.1744	0.04	0.27	0.21	0.27	0.21	1	100
trans-1,2-Dichloroethene (ug/l)	MW-24	20	0.2855	0.1706	0.03816	0.27	0.21	0.27	0.21	1	100
trans-1,2-Dichloroethene (ug/l)	MW-26A	16	0.3006	0.1884	0.04709	0.27	0.24	0.27	0.21	1	100
trans-1,2-Dichloroethene (ug/l)	MW-300	19	0.2895	0.1744	0.04	0.27	0.21	0.27	0.21	1	100
trans-1,2-Dichloroethene (ug/l)	MW-301	19	0.2895	0.1744	0.04	0.27	0.21	0.27	0.21	1	100
trans-1,2-Dichloroethene (ug/l)	MW-302R	20	0.2855	0.1706	0.03816	0.27	0.21	0.27	0.21	1	100
trans-1,2-Dichloroethene (ug/l)	MW-303	21	0.2876	0.1655	0.03612	0.27	0.21	0.27	0.21	1	100

Box & Whiskers Plot

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 3:00 PM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Lower Q.	Upper Q.	Min.	Max.	%NDs
trans-1,2-Dichloroethene (ug/l)	MW-304R	20	0.2885	0.1698	0.03796	0.27	0.21	0.27	0.21	1	100
trans-1,2-Dichloroethene (ug/l)	MW-305	20	0.2855	0.1706	0.03816	0.27	0.21	0.27	0.21	1	100
trans-1,2-Dichloroethene (ug/l)	MW-501	9	0.27	0	0	0.27	0.27	0.27	0.27	0.27	100
trans-1,2-Dichloroethene (ug/l)	MW-9AR (bg)	15	0.27	0	0	0.27	0.27	0.27	0.27	0.27	100
trans-1,3-Dichloropropene (ug/l)	MW-15	20	0.663	1.034	0.2312	0.56	0.22	0.56	0.22	5	100
trans-1,3-Dichloropropene (ug/l)	MW-18	19	0.6863	1.057	0.2425	0.56	0.22	0.56	0.22	5	100
trans-1,3-Dichloropropene (ug/l)	MW-19	19	0.6863	1.057	0.2425	0.56	0.22	0.56	0.22	5	100
trans-1,3-Dichloropropene (ug/l)	MW-20	19	0.6863	1.057	0.2425	0.56	0.22	0.56	0.22	5	100
trans-1,3-Dichloropropene (ug/l)	MW-201B (bg)	19	0.6863	1.057	0.2425	0.56	0.22	0.56	0.22	5	100
trans-1,3-Dichloropropene (ug/l)	MW-22	19	0.6863	1.057	0.2425	0.56	0.22	0.56	0.22	5	100
trans-1,3-Dichloropropene (ug/l)	MW-24	20	0.663	1.034	0.2312	0.56	0.22	0.56	0.22	5	100
trans-1,3-Dichloropropene (ug/l)	MW-26A	16	0.7525	1.143	0.2857	0.56	0.39	0.56	0.22	5	100
trans-1,3-Dichloropropene (ug/l)	MW-300	19	0.6863	1.057	0.2425	0.56	0.22	0.56	0.22	5	100
trans-1,3-Dichloropropene (ug/l)	MW-301	19	0.6863	1.057	0.2425	0.56	0.22	0.56	0.22	5	100
trans-1,3-Dichloropropene (ug/l)	MW-302R	20	0.663	1.034	0.2312	0.56	0.22	0.56	0.22	5	100
trans-1,3-Dichloropropene (ug/l)	MW-303	21	0.6743	1.003	0.2189	0.56	0.22	0.56	0.22	5	100
trans-1,3-Dichloropropene (ug/l)	MW-304R	20	0.68	1.029	0.2301	0.56	0.22	0.56	0.22	5	100
trans-1,3-Dichloropropene (ug/l)	MW-305	20	0.663	1.034	0.2312	0.56	0.22	0.56	0.22	5	100
trans-1,3-Dichloropropene (ug/l)	MW-501	9	0.56	0	0	0.56	0.56	0.56	0.56	0.56	100
trans-1,3-Dichloropropene (ug/l)	MW-9AR (bg)	15	0.56	0	0	0.56	0.56	0.56	0.56	0.56	100
trans-1,4-Dichloro-2-butene (ug/l)	MW-15	20	1.206	2.122	0.4745	1.1	0.13	1.1	0.13	10	100
trans-1,4-Dichloro-2-butene (ug/l)	MW-18	19	1.262	2.165	0.4966	1.1	0.13	1.1	0.13	10	100
trans-1,4-Dichloro-2-butene (ug/l)	MW-19	19	1.262	2.165	0.4966	1.1	0.13	1.1	0.13	10	100
trans-1,4-Dichloro-2-butene (ug/l)	MW-20	19	1.262	2.165	0.4966	1.1	0.13	1.1	0.13	10	100
trans-1,4-Dichloro-2-butene (ug/l)	MW-201B (bg)	19	1.262	2.165	0.4966	1.1	0.13	1.1	0.13	10	100
trans-1,4-Dichloro-2-butene (ug/l)	MW-22	19	1.262	2.165	0.4966	1.1	0.13	1.1	0.13	10	100
trans-1,4-Dichloro-2-butene (ug/l)	MW-24	20	1.206	2.122	0.4745	1.1	0.13	1.1	0.13	10	100
trans-1,4-Dichloro-2-butene (ug/l)	MW-26A	16	1.414	2.33	0.5824	1.1	0.615	1.1	0.13	10	100
trans-1,4-Dichloro-2-butene (ug/l)	MW-300	19	1.262	2.165	0.4966	1.1	0.13	1.1	0.13	10	100
trans-1,4-Dichloro-2-butene (ug/l)	MW-301	19	1.262	2.165	0.4966	1.1	0.13	1.1	0.13	10	100
trans-1,4-Dichloro-2-butene (ug/l)	MW-302R	20	1.206	2.122	0.4745	1.1	0.13	1.1	0.13	10	100
trans-1,4-Dichloro-2-butene (ug/l)	MW-303	21	1.247	2.054	0.4483	1.1	0.13	1.1	0.13	10	100
trans-1,4-Dichloro-2-butene (ug/l)	MW-304R	20	1.254	2.107	0.4712	1.1	0.13	1.1	0.13	10	100
trans-1,4-Dichloro-2-butene (ug/l)	MW-305	20	1.206	2.122	0.4745	1.1	0.13	1.1	0.13	10	100
trans-1,4-Dichloro-2-butene (ug/l)	MW-501	9	1.1	0	0	1.1	1.1	1.1	1.1	1.1	100
trans-1,4-Dichloro-2-butene (ug/l)	MW-9AR (bg)	15	1.1	0	0	1.1	1.1	1.1	1.1	1.1	100
Trichloroethene (ug/l)	MW-15	20	0.3745	0.1873	0.04188	0.43	0.19	0.43	0.19	1	100
Trichloroethene (ug/l)	MW-18	19	0.3842	0.1872	0.04294	0.43	0.19	0.43	0.19	1	100
Trichloroethene (ug/l)	MW-19	18	0.4842	0.2074	0.04888	0.43	0.4135	0.604	0.19	1	66.67
Trichloroethene (ug/l)	MW-20	19	0.3842	0.1872	0.04294	0.43	0.19	0.43	0.19	1	100
Trichloroethene (ug/l)	MW-201B (bg)	19	0.3842	0.1872	0.04294	0.43	0.19	0.43	0.19	1	100
Trichloroethene (ug/l)	MW-22	19	0.3842	0.1872	0.04294	0.43	0.19	0.43	0.19	1	100
Trichloroethene (ug/l)	MW-24	20	0.3745	0.1873	0.04188	0.43	0.19	0.43	0.19	1	100
Trichloroethene (ug/l)	MW-26A	16	0.3739	0.1108	0.02769	0.43	0.31	0.43	0.19	0.493	93.75
Trichloroethene (ug/l)	MW-300	19	0.3842	0.1872	0.04294	0.43	0.19	0.43	0.19	1	100
Trichloroethene (ug/l)	MW-301	19	0.3842	0.1872	0.04294	0.43	0.19	0.43	0.19	1	100
Trichloroethene (ug/l)	MW-302R	20	0.3745	0.1873	0.04188	0.43	0.19	0.43	0.19	1	100
Trichloroethene (ug/l)	MW-303	21	0.3886	0.1781	0.03887	0.43	0.19	0.43	0.19	1	100
Trichloroethene (ug/l)	MW-304R	20	0.3865	0.1825	0.0408	0.43	0.19	0.43	0.19	1	100
Trichloroethene (ug/l)	MW-305	20	0.3745	0.1873	0.04188	0.43	0.19	0.43	0.19	1	100

Box & Whiskers Plot

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 3:00 PM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Lower Q.	Upper Q.	Min.	Max.	%NDs
Trichloroethene (ug/l)	MW-501	9	0.43	0	0	0.43	0.43	0.43	0.43	0.43	100
Trichloroethene (ug/l)	MW-9AR (bg)	15	0.43	0	0	0.43	0.43	0.43	0.43	0.43	100
Trichlorofluoromethane (ug/L)	MW-15	19	0.3026	0.1041	0.02388	0.38	0.17	0.38	0.17	0.38	100
Trichlorofluoromethane (ug/L)	MW-18	18	0.31	0.1019	0.02401	0.38	0.17	0.38	0.17	0.38	100
Trichlorofluoromethane (ug/L)	MW-19	18	0.31	0.1019	0.02401	0.38	0.17	0.38	0.17	0.38	100
Trichlorofluoromethane (ug/L)	MW-20	18	0.31	0.1019	0.02401	0.38	0.17	0.38	0.17	0.38	100
Trichlorofluoromethane (ug/L)	MW-201B (bg)	18	0.31	0.1019	0.02401	0.38	0.17	0.38	0.17	0.38	100
Trichlorofluoromethane (ug/L)	MW-22	18	0.31	0.1019	0.02401	0.38	0.17	0.38	0.17	0.38	100
Trichlorofluoromethane (ug/L)	MW-24	19	0.3026	0.1041	0.02388	0.38	0.17	0.38	0.17	0.38	100
Trichlorofluoromethane (ug/L)	MW-26A	15	0.324	0.09612	0.02482	0.38	0.17	0.38	0.17	0.38	100
Trichlorofluoromethane (ug/L)	MW-300	18	0.31	0.1019	0.02401	0.38	0.17	0.38	0.17	0.38	100
Trichlorofluoromethane (ug/L)	MW-301	18	0.31	0.1019	0.02401	0.38	0.17	0.38	0.17	0.38	100
Trichlorofluoromethane (ug/L)	MW-302R	19	0.3026	0.1041	0.02388	0.38	0.17	0.38	0.17	0.38	100
Trichlorofluoromethane (ug/L)	MW-303	20	0.317	0.09873	0.02208	0.38	0.17	0.38	0.17	0.38	100
Trichlorofluoromethane (ug/L)	MW-304R	19	0.3137	0.1003	0.02301	0.38	0.17	0.38	0.17	0.38	100
Trichlorofluoromethane (ug/L)	MW-305	19	0.3026	0.1041	0.02388	0.38	0.17	0.38	0.17	0.38	100
Trichlorofluoromethane (ug/L)	MW-501	9	0.38	0	0	0.38	0.38	0.38	0.38	0.38	100
Trichlorofluoromethane (ug/L)	MW-9AR (bg)	15	0.38	0	0	0.38	0.38	0.38	0.38	0.38	100
Vinyl Acetate (ug/l)	MW-15	20	2.259	2.01	0.4495	2.5	0.74	2.5	0.74	10	100
Vinyl Acetate (ug/l)	MW-18	19	2.339	2.032	0.4662	2.5	0.74	2.5	0.74	10	100
Vinyl Acetate (ug/l)	MW-19	19	2.339	2.032	0.4662	2.5	0.74	2.5	0.74	10	100
Vinyl Acetate (ug/l)	MW-20	19	2.339	2.032	0.4662	2.5	0.74	2.5	0.74	10	100
Vinyl Acetate (ug/l)	MW-201B (bg)	19	2.339	2.032	0.4662	2.5	0.74	2.5	0.74	10	100
Vinyl Acetate (ug/l)	MW-22	19	2.339	2.032	0.4662	2.5	0.74	2.5	0.74	10	100
Vinyl Acetate (ug/l)	MW-24	20	2.259	2.01	0.4495	2.5	0.74	2.5	0.74	10	100
Vinyl Acetate (ug/l)	MW-26A	15	2.031	0.8056	0.208	2.5	0.74	2.5	0.74	2.5	100
Vinyl Acetate (ug/l)	MW-300	19	2.339	2.032	0.4662	2.5	0.74	2.5	0.74	10	100
Vinyl Acetate (ug/l)	MW-301	19	2.339	2.032	0.4662	2.5	0.74	2.5	0.74	10	100
Vinyl Acetate (ug/l)	MW-302R	20	2.259	2.01	0.4495	2.5	0.74	2.5	0.74	10	100
Vinyl Acetate (ug/l)	MW-303	21	2.354	1.929	0.4209	2.5	0.74	2.5	0.74	10	100
Vinyl Acetate (ug/l)	MW-304R	20	2.347	1.978	0.4424	2.5	0.74	2.5	0.74	10	100
Vinyl Acetate (ug/l)	MW-305	20	2.259	2.01	0.4495	2.5	0.74	2.5	0.74	10	100
Vinyl Acetate (ug/l)	MW-501	9	2.5	0	0	2.5	2.5	2.5	2.5	2.5	100
Vinyl Acetate (ug/l)	MW-9AR (bg)	15	2.5	0	0	2.5	2.5	2.5	2.5	2.5	100
Vinyl Chloride (ug/l)	MW-15	20	0.235	0.2305	0.05154	0.18	0.1	0.18	0.1	1	100
Vinyl Chloride (ug/l)	MW-18	19	0.2421	0.2346	0.05381	0.18	0.1	0.18	0.1	1	100
Vinyl Chloride (ug/l)	MW-19	19	0.2421	0.2346	0.05381	0.18	0.1	0.18	0.1	1	100
Vinyl Chloride (ug/l)	MW-20	17	0.1604	0.03827	0.009282	0.18	0.1225	0.18	0.1	0.229	82.35
Vinyl Chloride (ug/l)	MW-201B (bg)	19	0.2421	0.2346	0.05381	0.18	0.1	0.18	0.1	1	100
Vinyl Chloride (ug/l)	MW-22	14	0.1744	0.01835	0.004905	0.18	0.174	0.18	0.114	0.192	64.29
Vinyl Chloride (ug/l)	MW-24	20	0.235	0.2305	0.05154	0.18	0.1	0.18	0.1	1	100
Vinyl Chloride (ug/l)	MW-26A	15	0.2427	0.1882	0.04859	0.18	0.1	0.18	0.1	0.6	100
Vinyl Chloride (ug/l)	MW-300	19	0.2421	0.2346	0.05381	0.18	0.1	0.18	0.1	1	100
Vinyl Chloride (ug/l)	MW-301	19	0.2421	0.2346	0.05381	0.18	0.1	0.18	0.1	1	100
Vinyl Chloride (ug/l)	MW-302R	20	0.235	0.2305	0.05154	0.18	0.1	0.18	0.1	1	100
Vinyl Chloride (ug/l)	MW-303	19	0.2421	0.2346	0.05381	0.18	0.1	0.18	0.1	1	100
Vinyl Chloride (ug/l)	MW-304R	20	0.239	0.2287	0.05114	0.18	0.1	0.18	0.1	1	100
Vinyl Chloride (ug/l)	MW-305	20	0.235	0.2305	0.05154	0.18	0.1	0.18	0.1	1	100
Vinyl Chloride (ug/l)	MW-501	9	0.18	0	0	0.18	0.18	0.18	0.18	0.18	100
Vinyl Chloride (ug/l)	MW-9AR (bg)	15	0.292	0.1922	0.04964	0.18	0.18	0.6	0.18	0.6	100

Box & Whiskers Plot

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 3:00 PM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Lower Q.	Upper Q.	Min.	Max.	%NDs
Xylenes, Total (ug/l)	MW-15	20	0.5053	0.6198	0.1386	0.4	0.265	0.4	0.13	3	90
Xylenes, Total (ug/l)	MW-18	14	0.4211	0.05449	0.01456	0.4	0.4	0.4	0.4	0.573	85.71
Xylenes, Total (ug/l)	MW-19	19	0.4704	0.6253	0.1435	0.4	0.13	0.4	0.13	3	94.74
Xylenes, Total (ug/l)	MW-20	13	0.385	0.05408	0.015	0.4	0.4	0.4	0.205	0.4	92.31
Xylenes, Total (ug/l)	MW-201B (bg)	18	0.3477	0.1229	0.02898	0.4	0.265	0.4	0.13	0.519	88.89
Xylenes, Total (ug/l)	MW-22	18	0.3377	0.1428	0.03365	0.4	0.13	0.4	0.13	0.628	94.44
Xylenes, Total (ug/l)	MW-24	18	0.4694	0.6434	0.1517	0.4	0.13	0.4	0.13	3	100
Xylenes, Total (ug/l)	MW-26A	15	0.3401	0.1111	0.02868	0.4	0.312	0.4	0.13	0.4	93.33
Xylenes, Total (ug/l)	MW-300	17	0.336	0.1178	0.02857	0.4	0.261	0.4	0.13	0.4	94.12
Xylenes, Total (ug/l)	MW-301	13	0.3996	0.001387	0.0003846	0.4	0.4	0.4	0.395	0.4	92.31
Xylenes, Total (ug/l)	MW-302R	18	0.4694	0.6434	0.1517	0.4	0.13	0.4	0.13	3	100
Xylenes, Total (ug/l)	MW-303	20	0.3288	0.1206	0.02697	0.4	0.21	0.4	0.13	0.436	90
Xylenes, Total (ug/l)	MW-304R	18	0.5099	0.6278	0.148	0.4	0.4	0.4	0.13	3	88.89
Xylenes, Total (ug/l)	MW-305	19	0.4516	0.6301	0.1446	0.4	0.13	0.4	0.13	3	100
Xylenes, Total (ug/l)	MW-501	9	0.4	0	0	0.4	0.4	0.4	0.4	0.4	100
Xylenes, Total (ug/l)	MW-9AR (bg)	15	0.4	0	0	0.4	0.4	0.4	0.4	0.4	100

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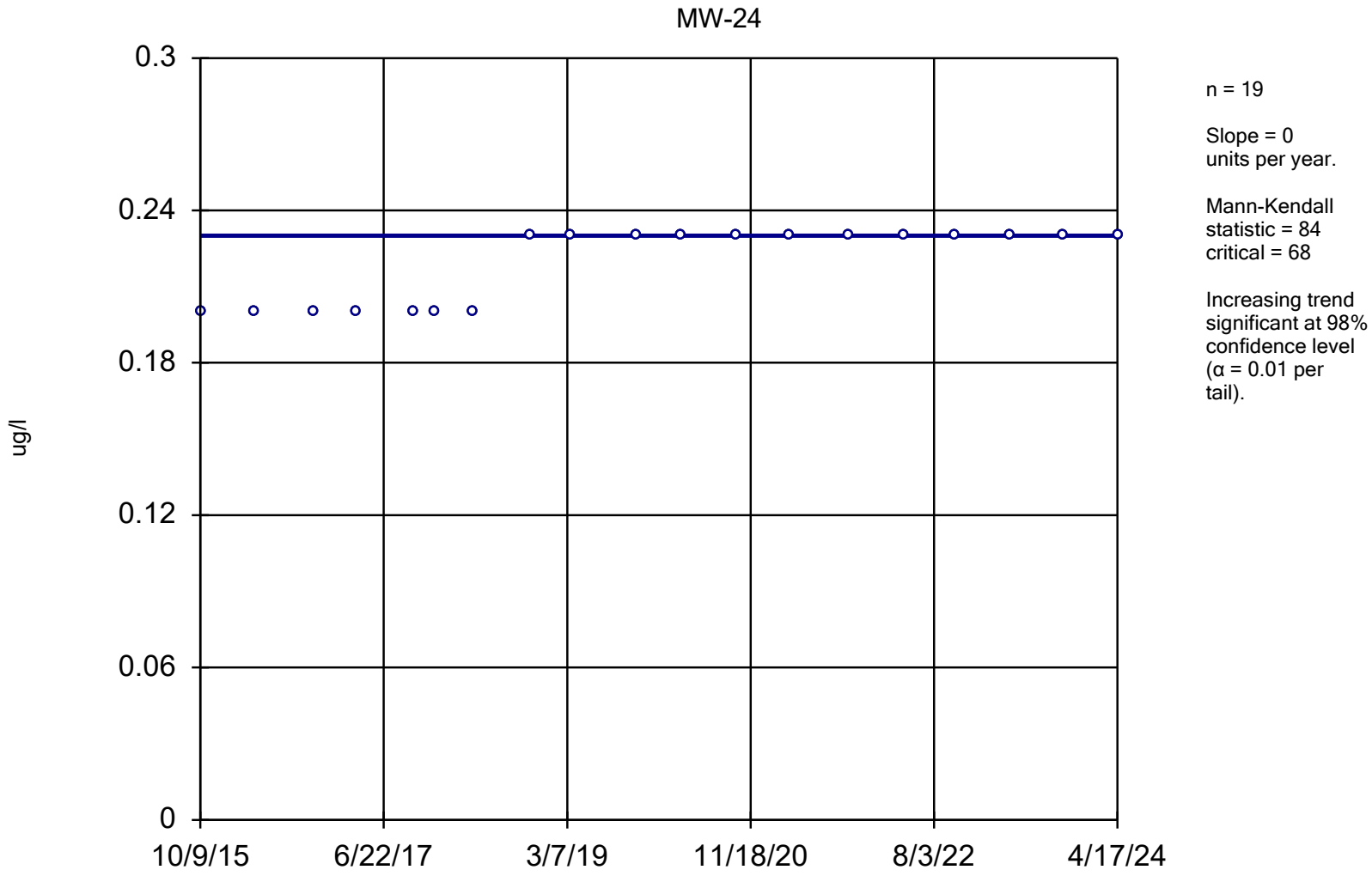
Monitoring Well VOC Trend Analysis – Full Dataset – Spring 2024

Hollow symbols indicate censored values.

Sen's Slope Estimator

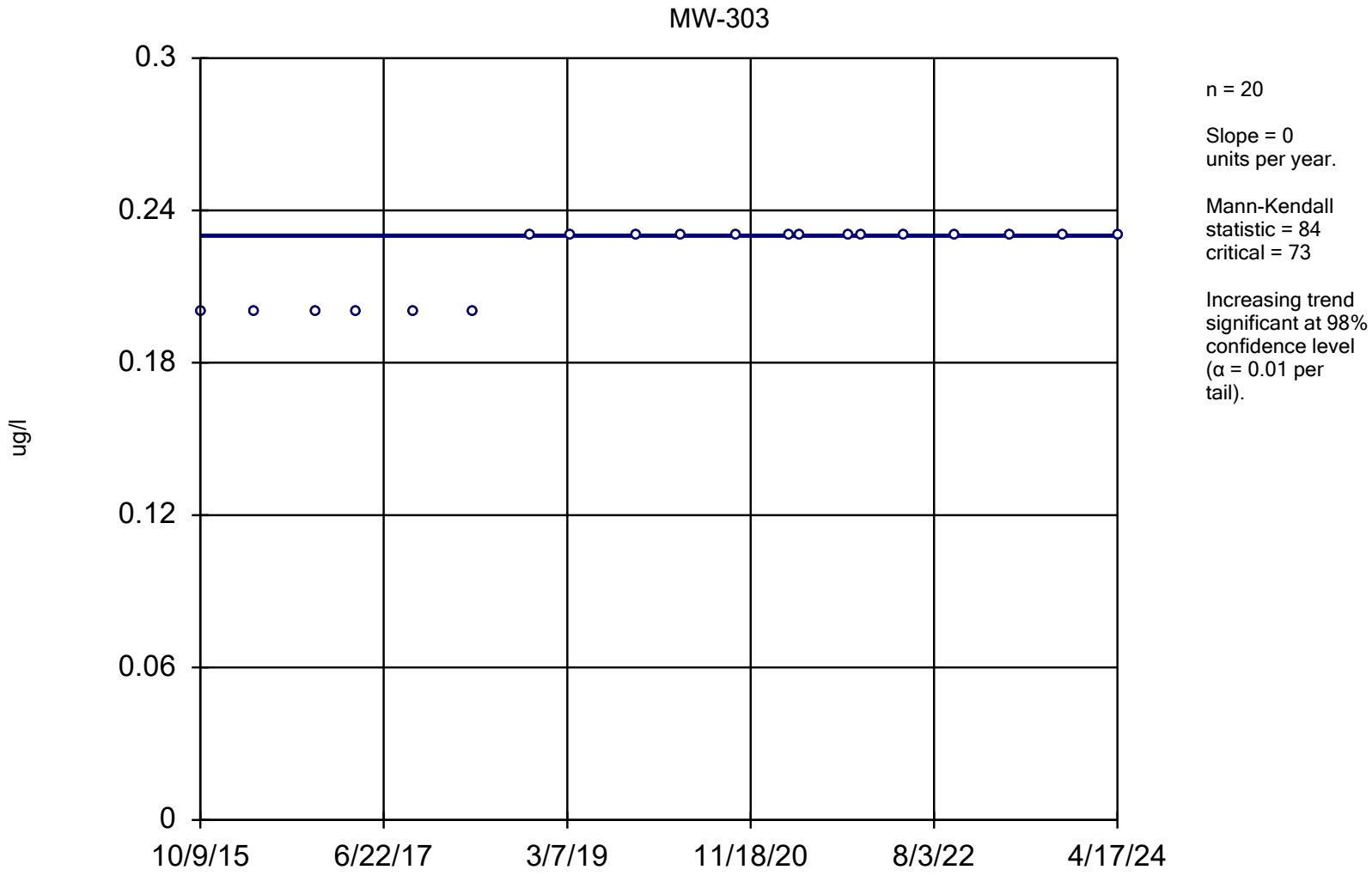


Constituent: 1,4-Dichlorobenzene Analysis Run 7/12/2024 3:04 PM View: App I VOCs_detected

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

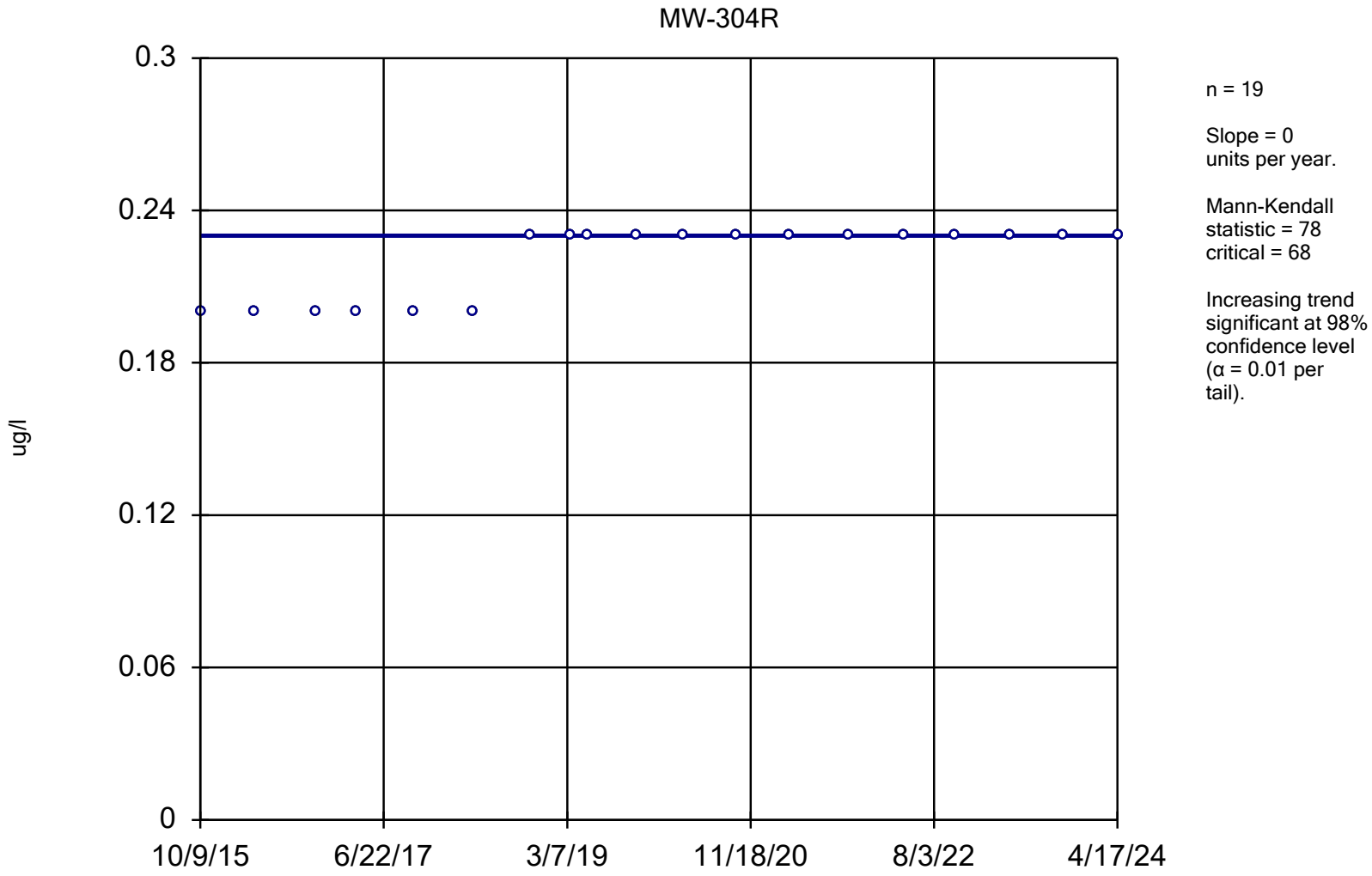


Constituent: 1,4-Dichlorobenzene Analysis Run 7/12/2024 3:05 PM View: App I VOCs_detected

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

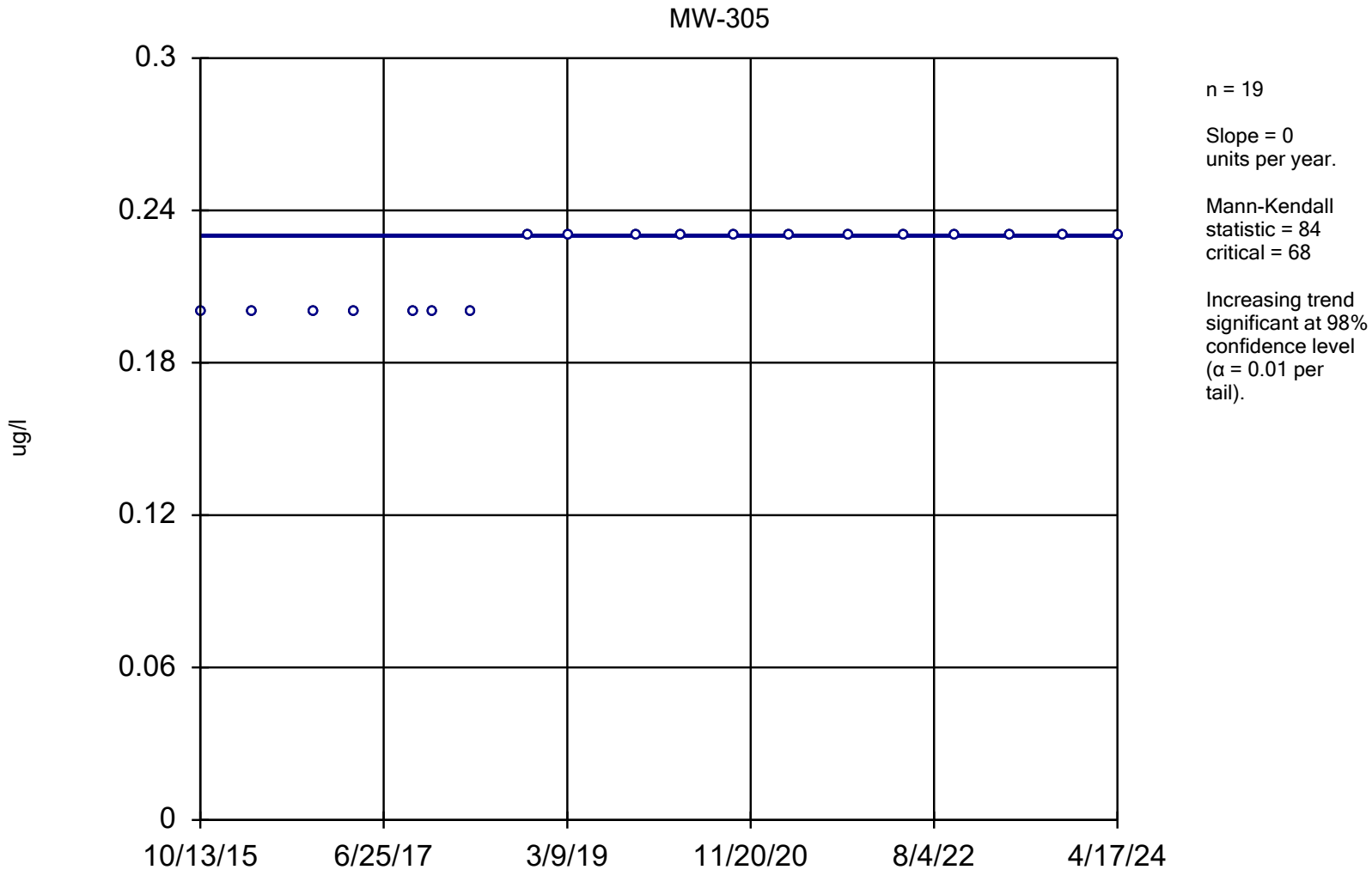


Constituent: 1,4-Dichlorobenzene Analysis Run 7/12/2024 3:05 PM View: App I VOCs_detected

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



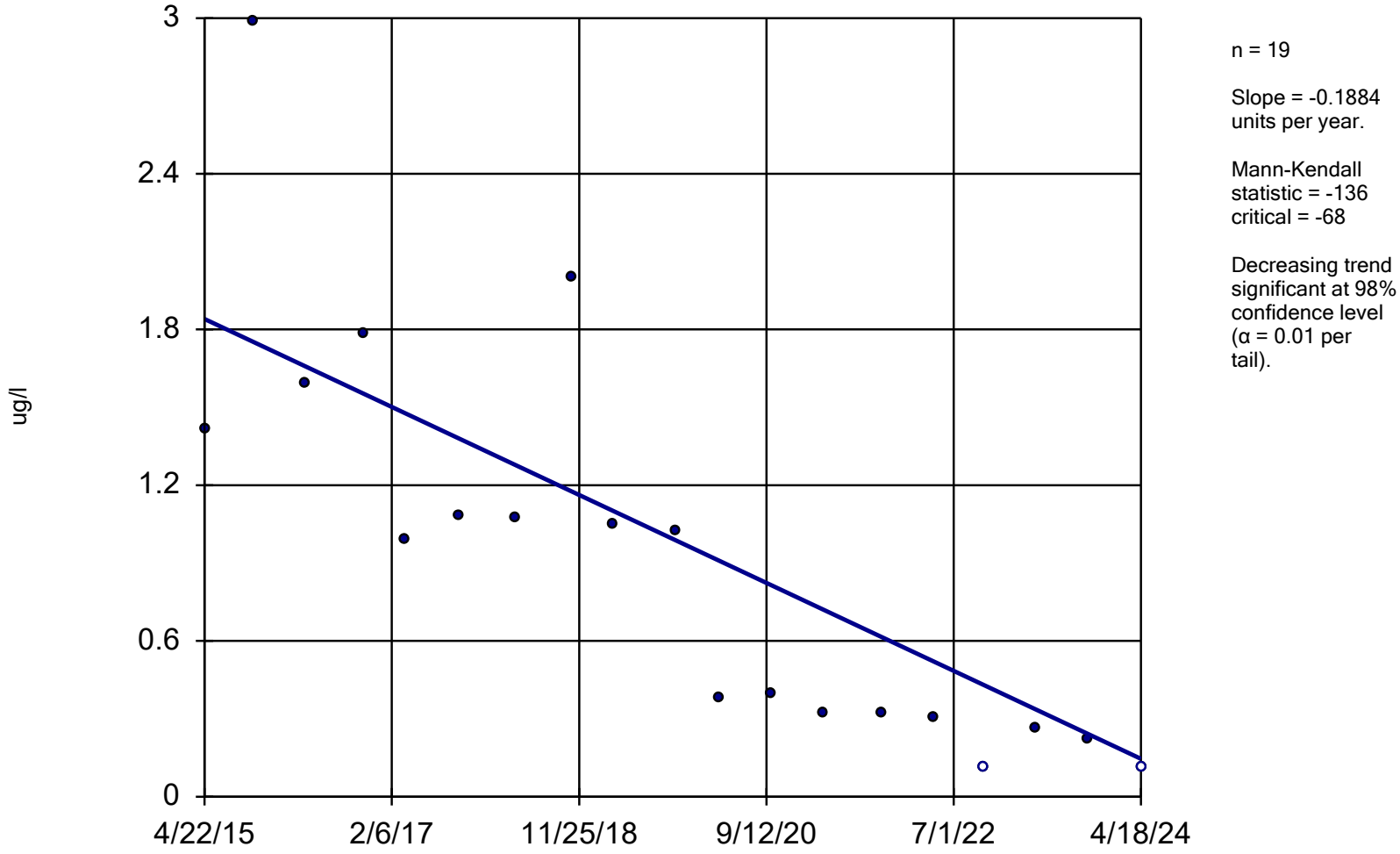
Constituent: 1,4-Dichlorobenzene Analysis Run 7/12/2024 3:05 PM View: App I VOCs_detected

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-19



n = 19

Slope = -0.1884 units per year.

Mann-Kendall statistic = -136
critical = -68

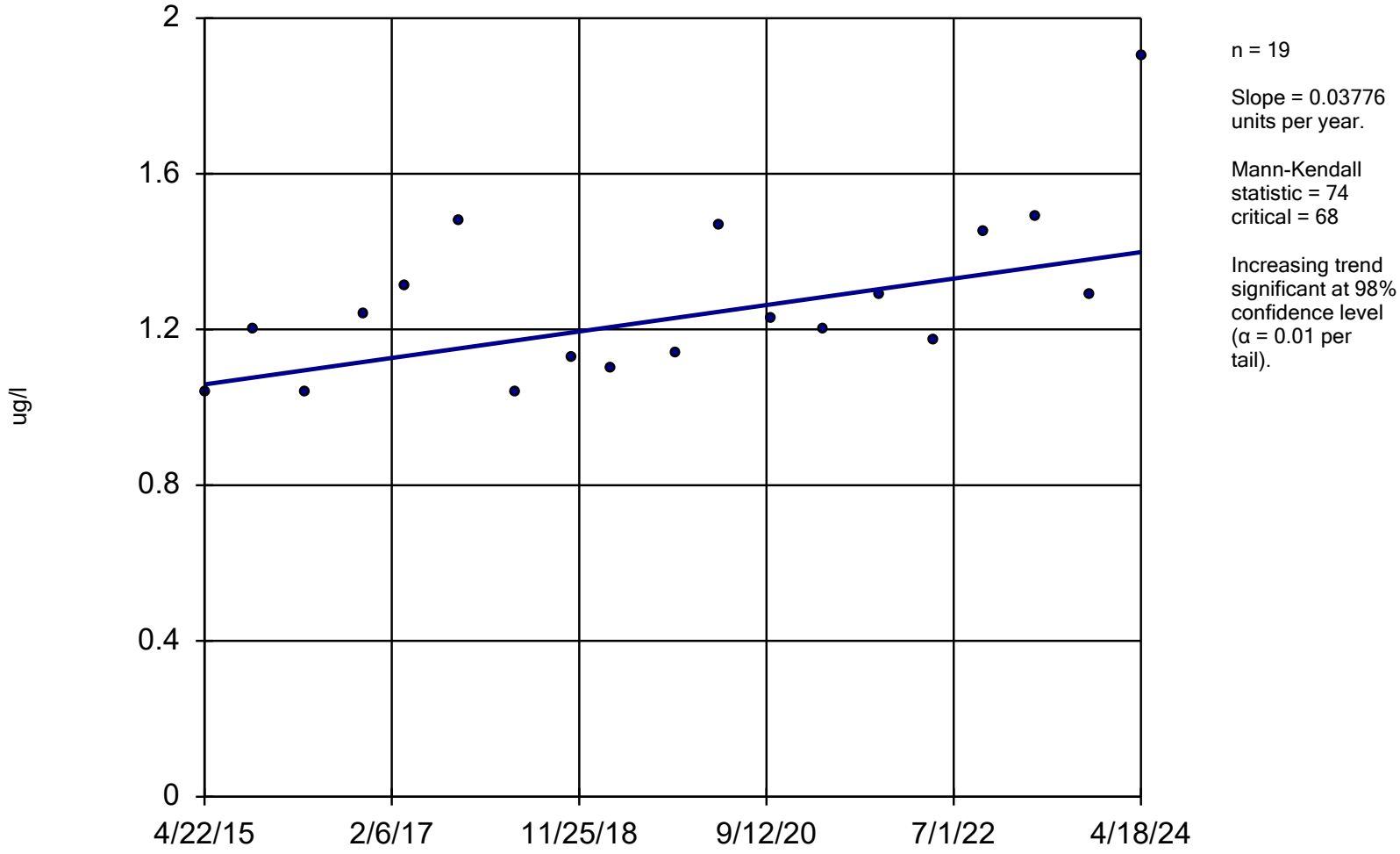
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Benzene Analysis Run 7/12/2024 3:05 PM View: App I VOCs_detected

Linn County Data: CRLCSWA_Groundwater Database

Sen's Slope Estimator

MW-22



n = 19

Slope = 0.03776 units per year.

Mann-Kendall statistic = 74
critical = 68

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

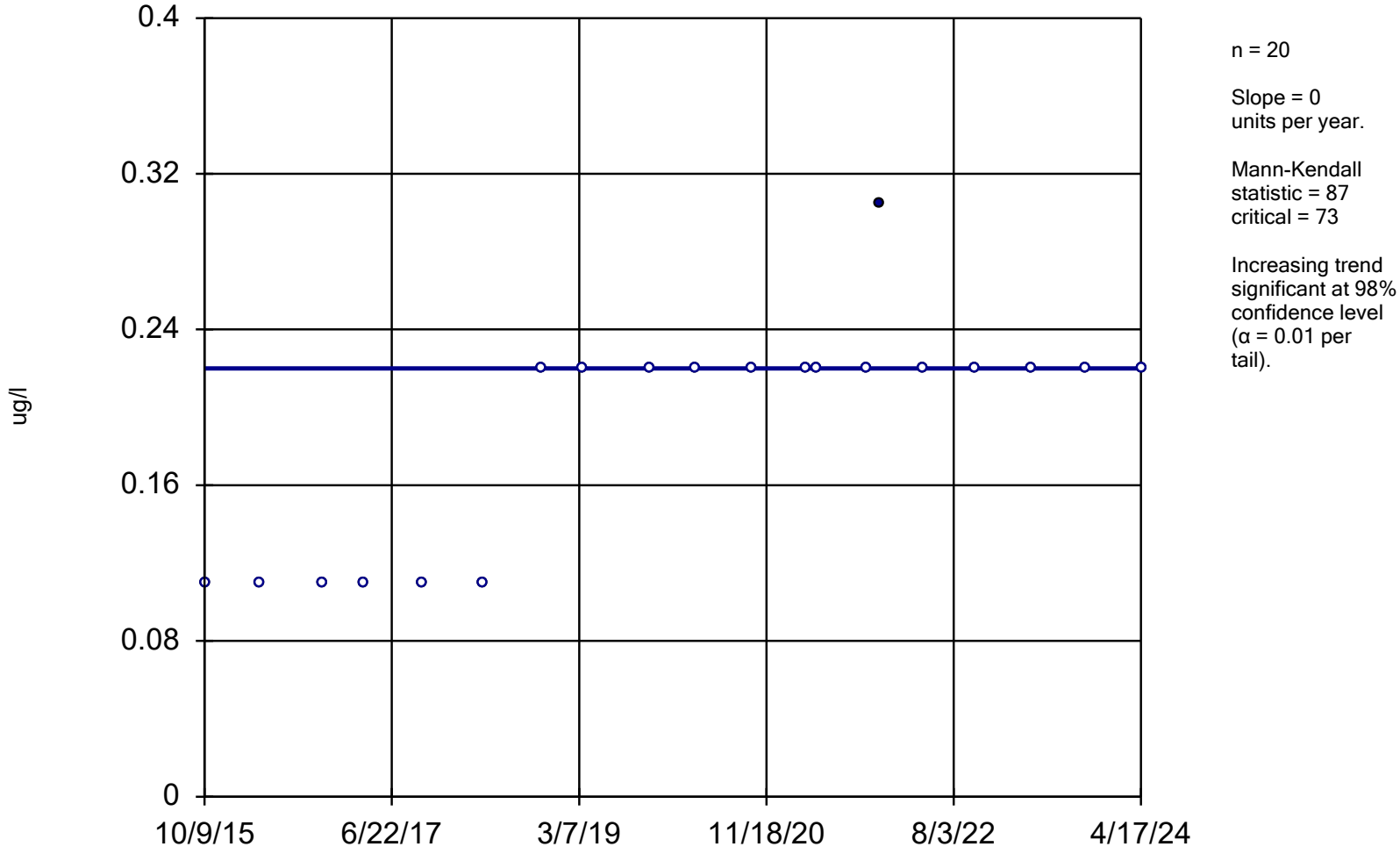
Constituent: Benzene Analysis Run 7/12/2024 3:05 PM View: App I VOCs_detected

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-303



n = 20

Slope = 0
units per year.

Mann-Kendall
statistic = 87
critical = 73

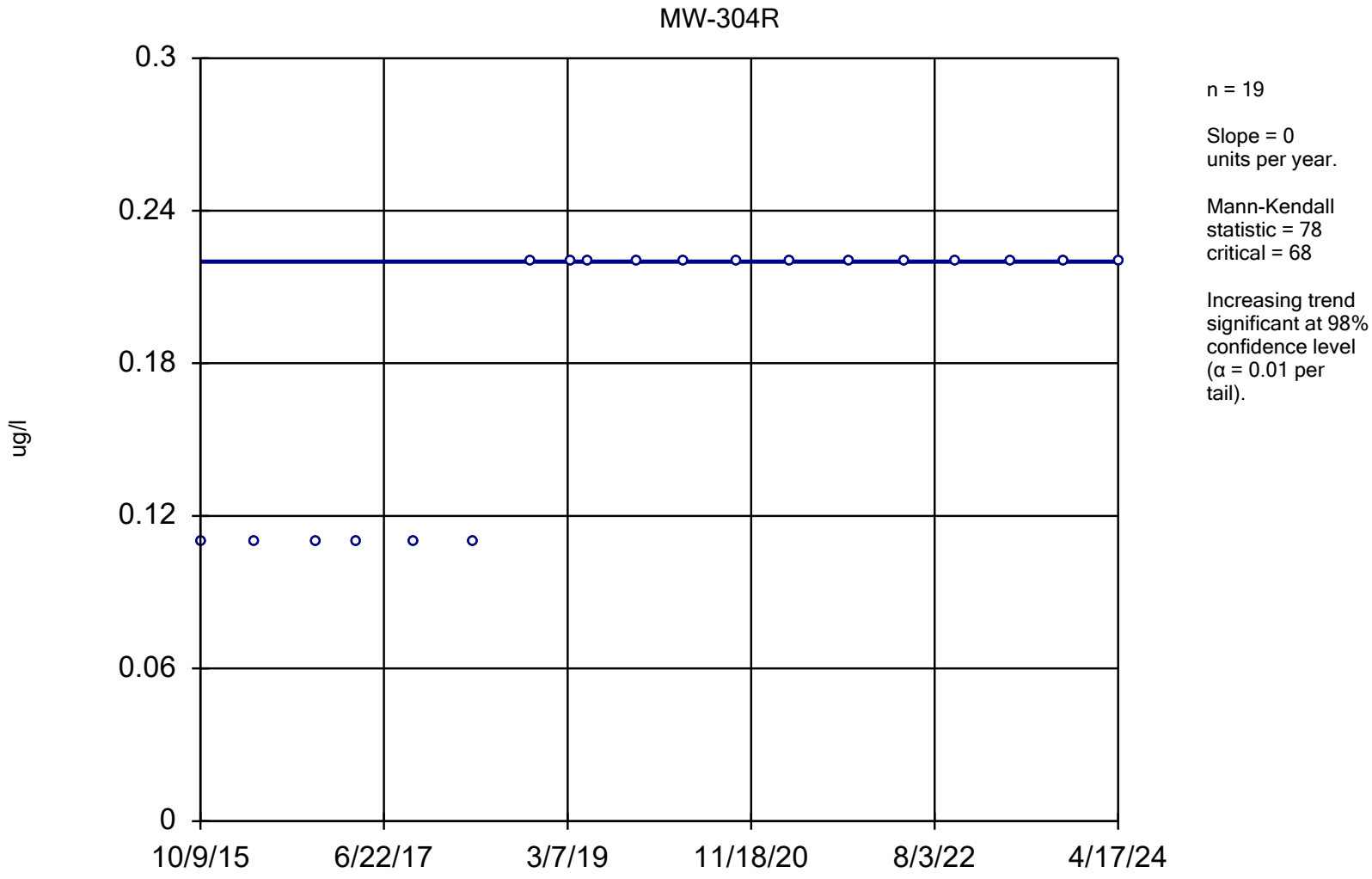
Increasing trend
significant at 98%
confidence level
(α = 0.01 per
tail).

Constituent: Benzene Analysis Run 7/12/2024 3:05 PM View: App I VOCs_detected

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



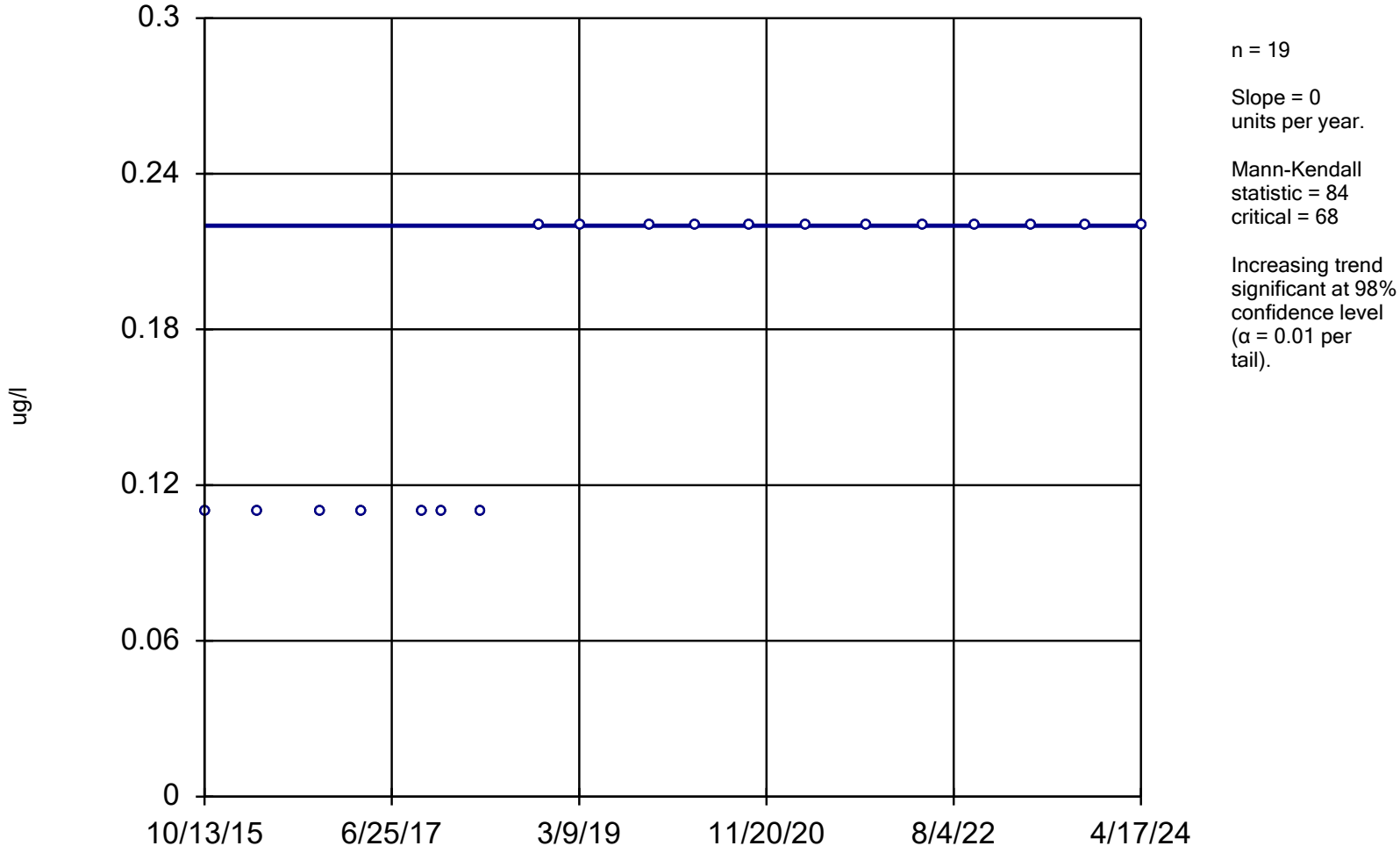
Constituent: Benzene Analysis Run 7/12/2024 3:05 PM View: App I VOCs_detected

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-305



n = 19

Slope = 0
units per year.

Mann-Kendall
statistic = 84
critical = 68

Increasing trend
significant at 98%
confidence level
(α = 0.01 per
tail).

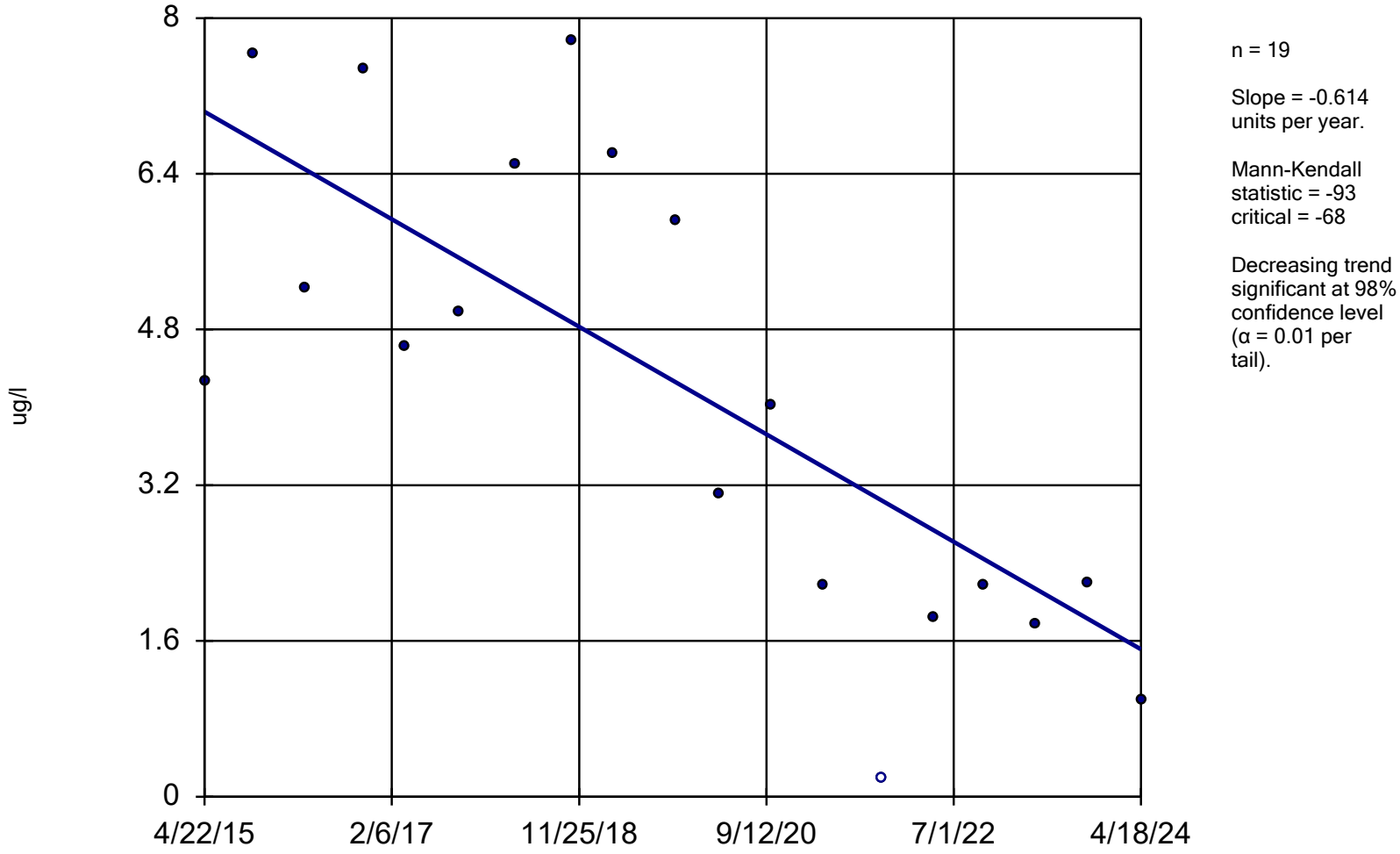
Constituent: Benzene Analysis Run 7/12/2024 3:05 PM View: App I VOCs_detected

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-19



n = 19

Slope = -0.614 units per year.

Mann-Kendall statistic = -93
critical = -68

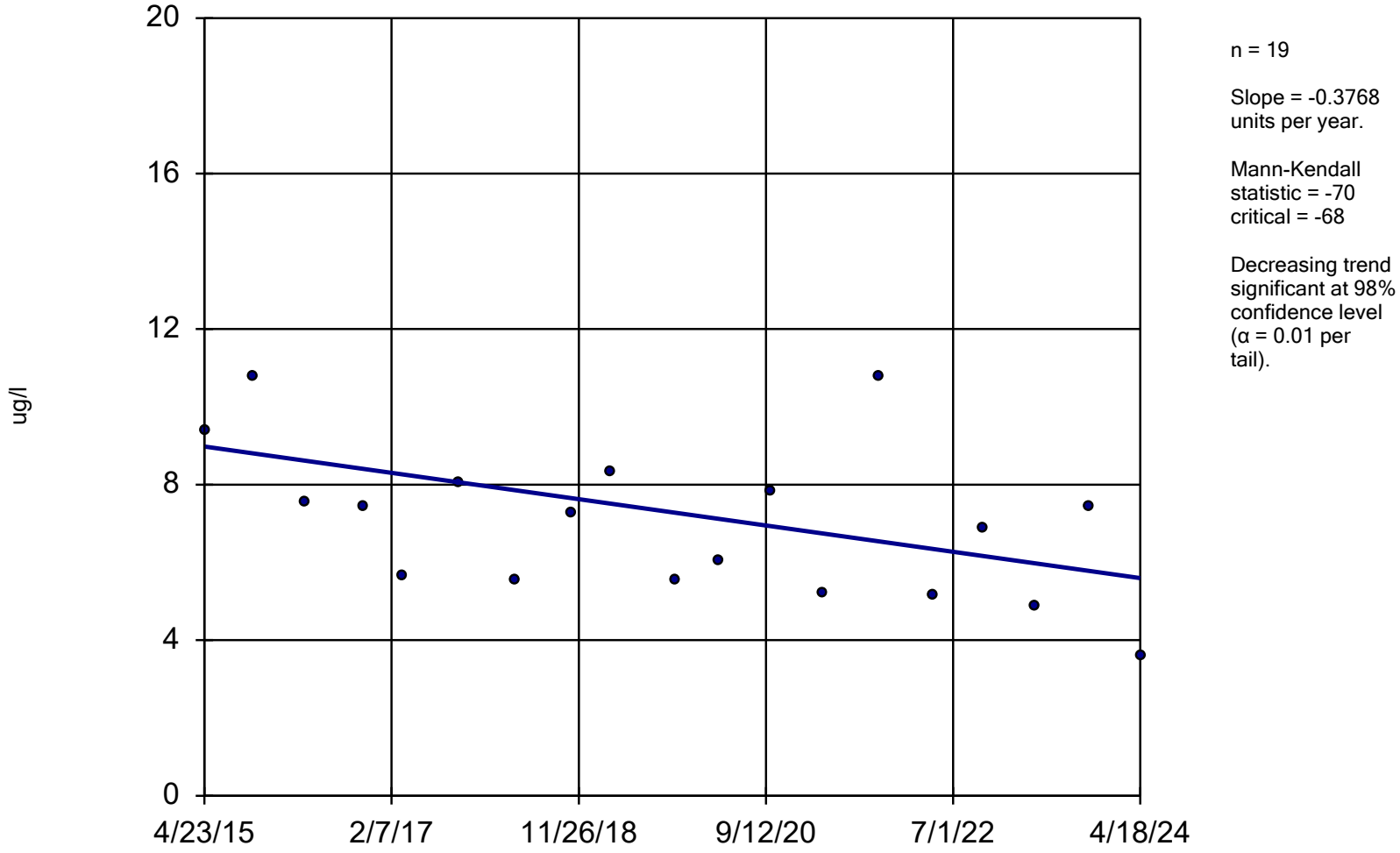
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chlorobenzene Analysis Run 7/12/2024 3:05 PM View: App I VOCs_detected

Linn County Data: CRLCSWA_Groundwater Database

Sen's Slope Estimator

MW-20



n = 19

Slope = -0.3768 units per year.

Mann-Kendall statistic = -70
critical = -68

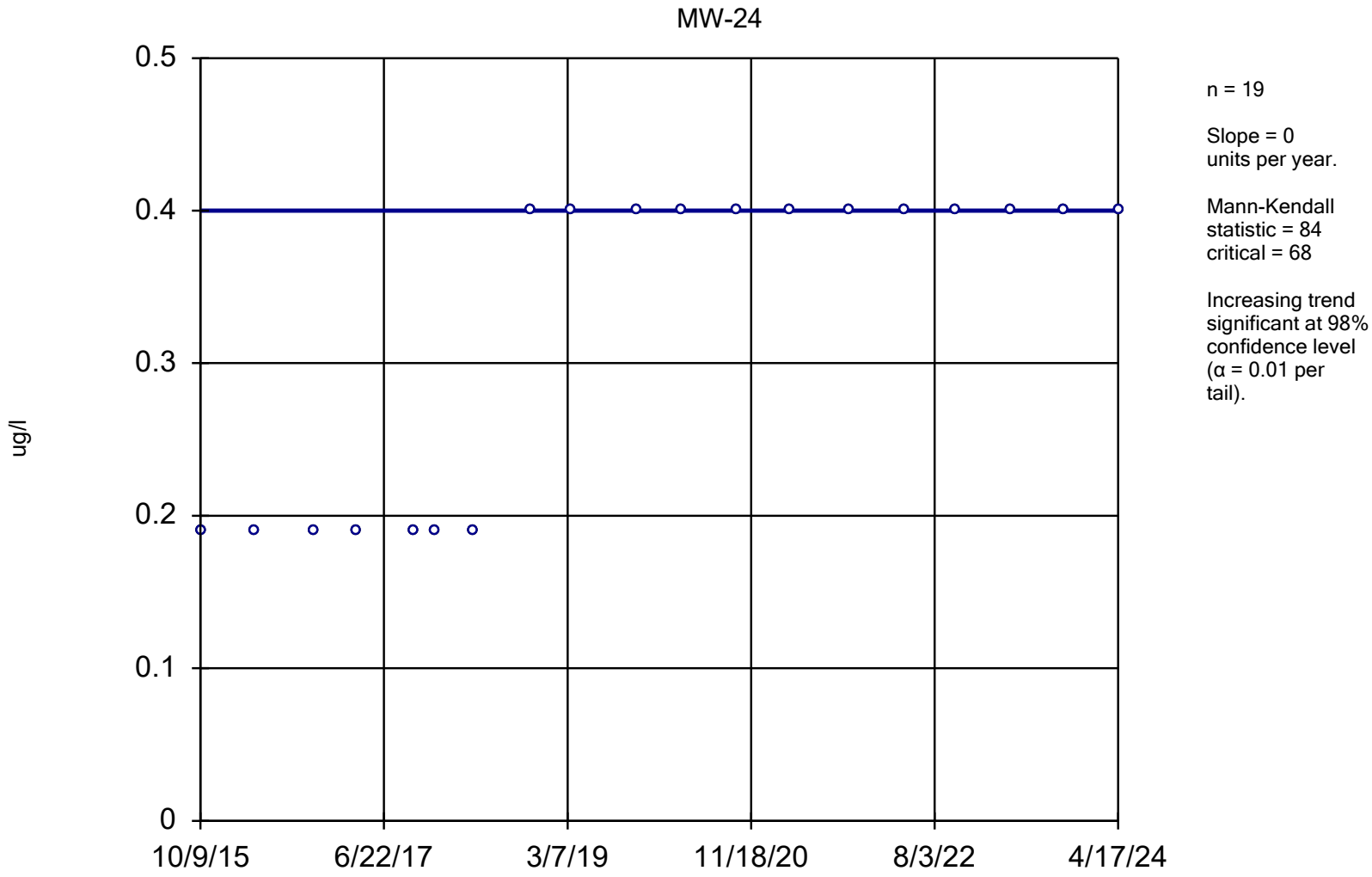
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chlorobenzene Analysis Run 7/12/2024 3:05 PM View: App I VOCs_detected

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

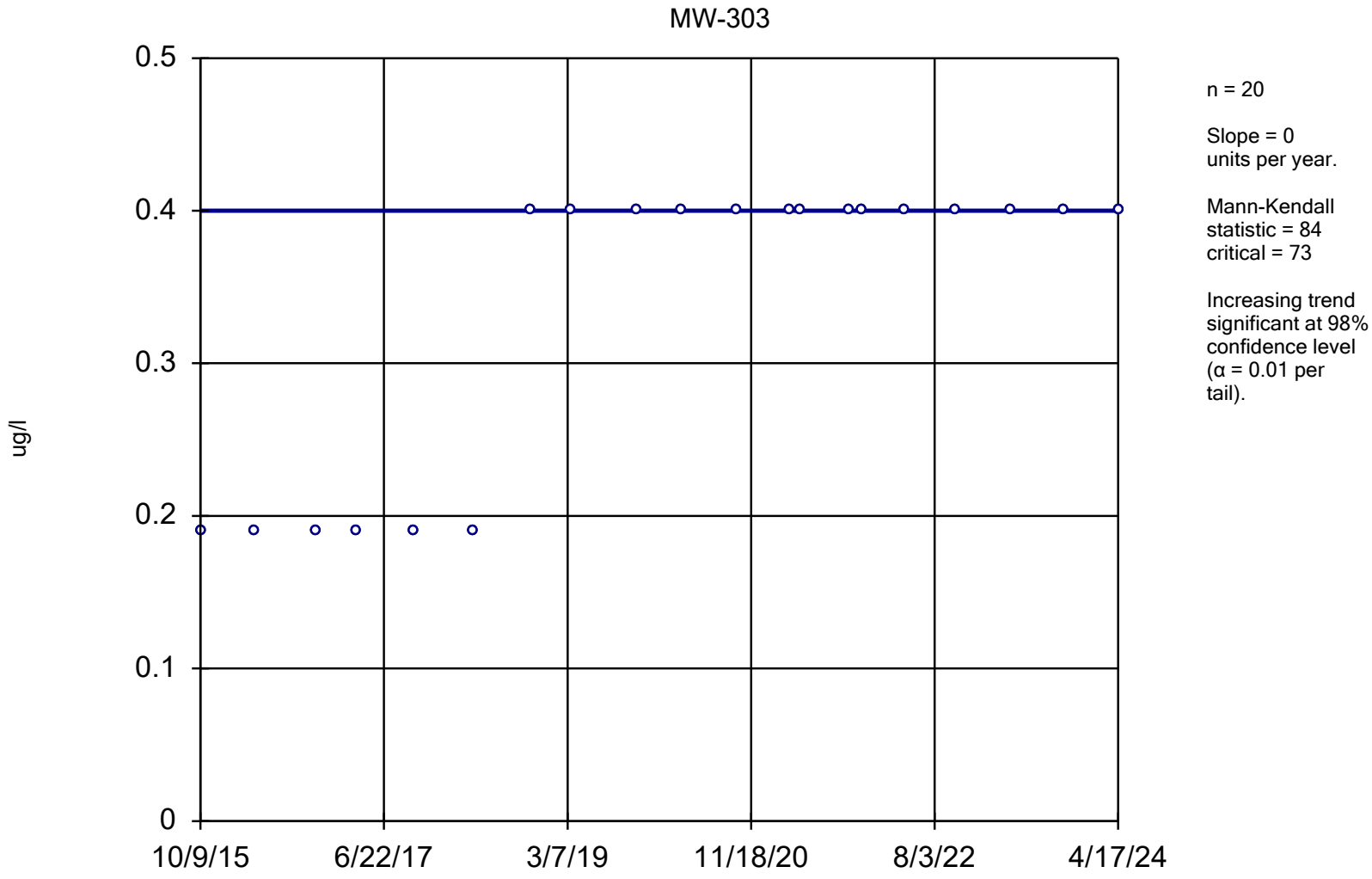


Constituent: Chlorobenzene Analysis Run 7/12/2024 3:05 PM View: App I VOCs_detected

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



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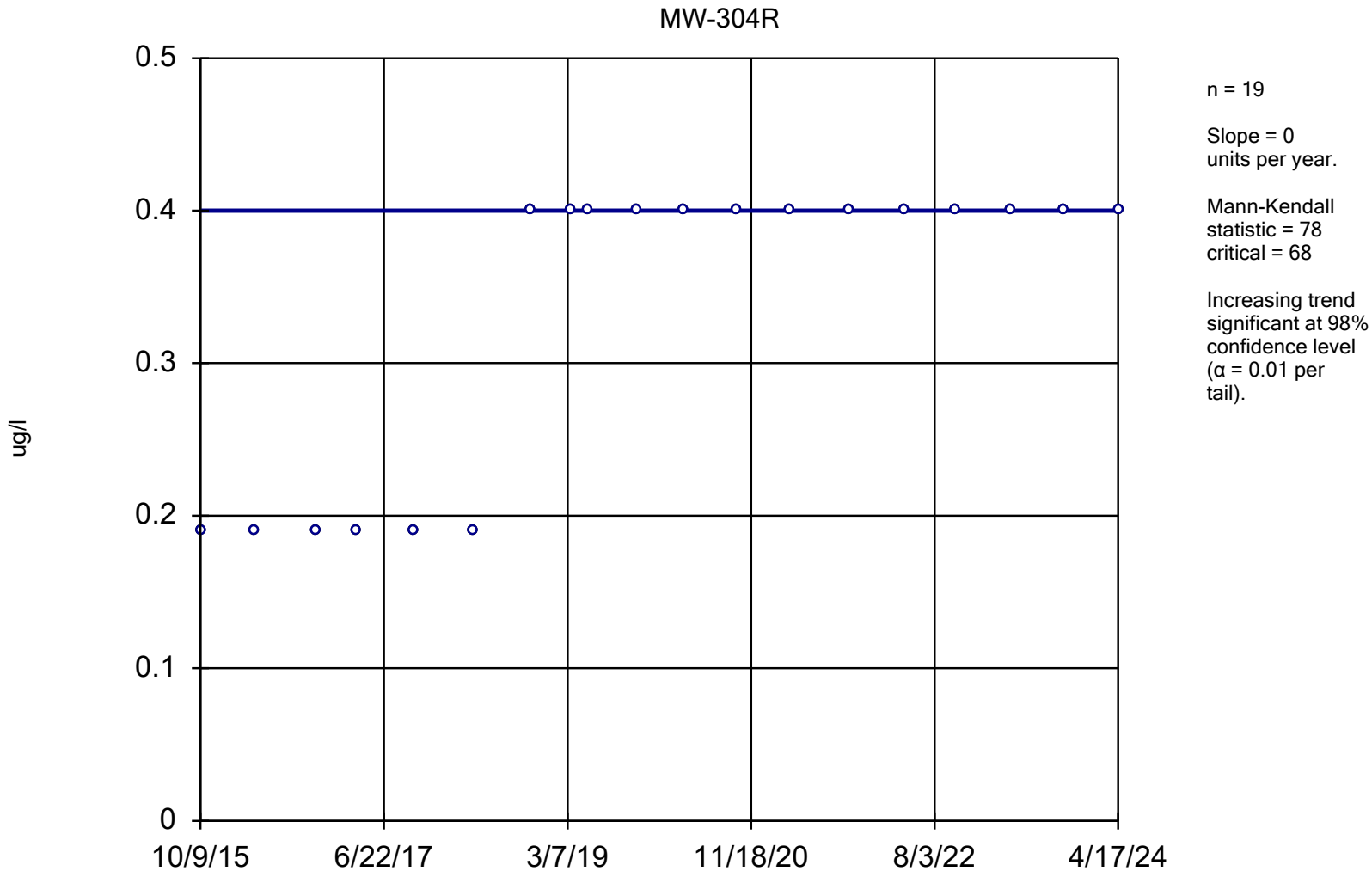
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



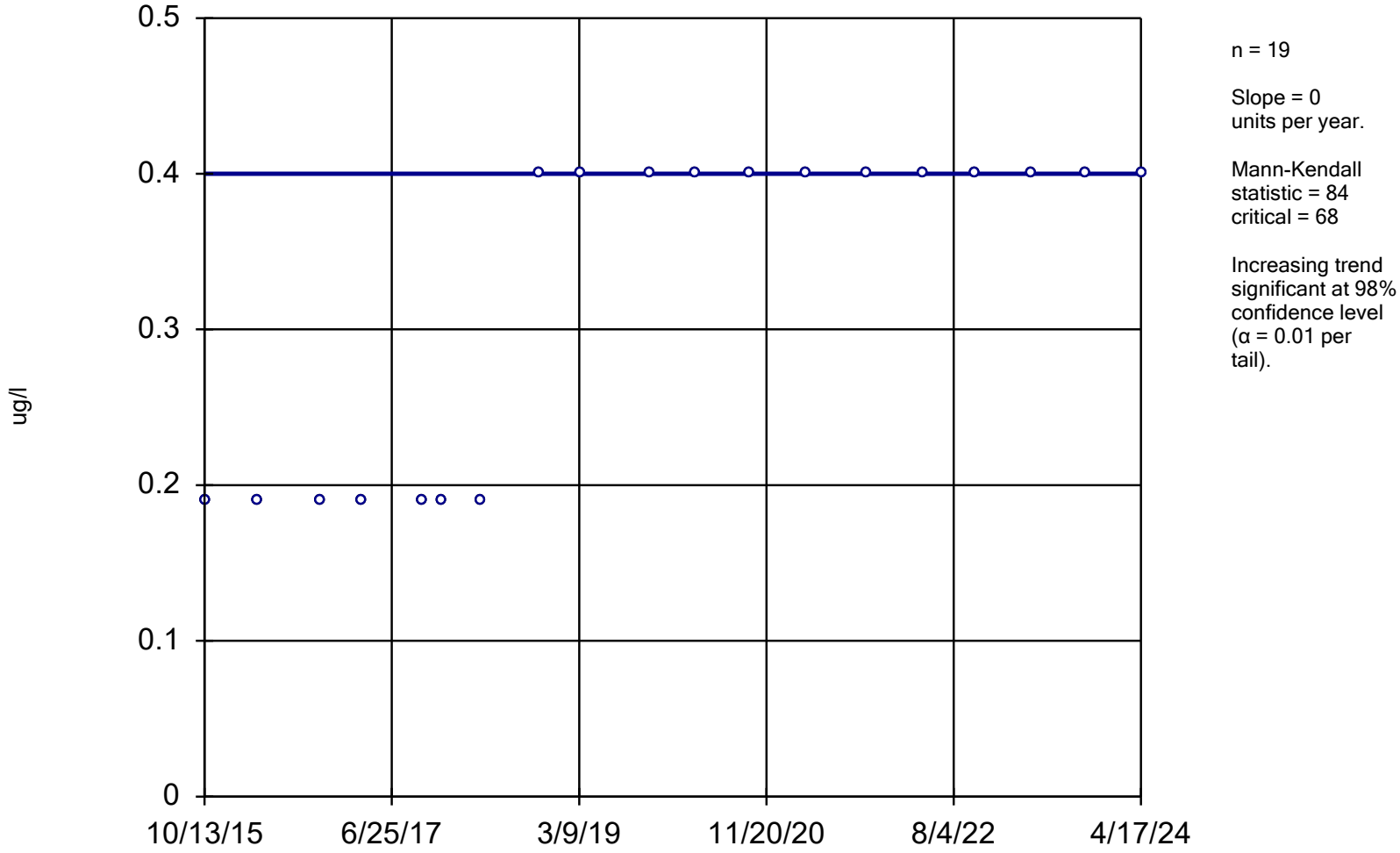
Constituent: Chlorobenzene Analysis Run 7/12/2024 3:05 PM View: App I VOCs_detected

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-305



n = 19

Slope = 0
units per year.

Mann-Kendall
statistic = 84
critical = 68

Increasing trend
significant at 98%
confidence level
(α = 0.01 per
tail).

Constituent: Chlorobenzene Analysis Run 7/12/2024 3:05 PM View: App I VOCs_detected

Linn County Data: CRLCSWA_Groundwater Database

Trend Test

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 3:06 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
1,4-Dichlorobenzene (ug/l)	MW-15	0	65	73	No	20	100	0.02	NP
1,4-Dichlorobenzene (ug/l)	MW-18	0	54	68	No	19	100	0.02	NP
1,4-Dichlorobenzene (ug/l)	MW-19	-0.24	-40	-68	No	19	15.79	0.02	NP
1,4-Dichlorobenzene (ug/l)	MW-20	0.007673	41	68	No	19	52.63	0.02	NP
1,4-Dichlorobenzene (ug/l)	MW-201B...	0	54	68	No	19	100	0.02	NP
1,4-Dichlorobenzene (ug/l)	MW-22	0	54	68	No	19	100	0.02	NP
1,4-Dichlorobenzene (ug/l)	**MW-24**	**0**	**84**	**68**	**Yes**	**19**	**100**	**0.02**	**NP**
1,4-Dichlorobenzene (ug/l)	MW-26A	0	44	48	No	15	100	0.02	NP
1,4-Dichlorobenzene (ug/l)	MW-300	0.006784	47	68	No	19	47.37	0.02	NP
1,4-Dichlorobenzene (ug/l)	MW-301	0	27	68	No	19	94.74	0.02	NP
1,4-Dichlorobenzene (ug/l)	MW-302R	0	65	73	No	20	100	0.02	NP
1,4-Dichlorobenzene (ug/l)	**MW-303**	**0**	**84**	**73**	**Yes**	**20**	**100**	**0.02**	**NP**
1,4-Dichlorobenzene (ug/l)	**MW-304R**	**0**	**78**	**68**	**Yes**	**19**	**100**	**0.02**	**NP**
1,4-Dichlorobenzene (ug/l)	**MW-305**	**0**	**84**	**68**	**Yes**	**19**	**100**	**0.02**	**NP**
1,4-Dichlorobenzene (ug/l)	MW-501	0	0	23	No	9	100	0.02	NP
1,4-Dichlorobenzene (ug/l)	MW-9AR ...	0	0	48	No	15	100	0.02	NP
Benzene (ug/l)	MW-15	0	23	73	No	20	80	0.02	NP
Benzene (ug/l)	MW-18	0	55	68	No	19	94.74	0.02	NP
Benzene (ug/l)	**MW-19**	**-0.1884**	**-136**	**-68**	**Yes**	**19**	**10.53**	**0.02**	**NP**
Benzene (ug/l)	MW-20	-0.2118	-46	-68	No	19	0	0.02	NP
Benzene (ug/l)	MW-201B...	0	54	68	No	19	100	0.02	NP
Benzene (ug/l)	**MW-22**	**0.03776**	**74**	**68**	**Yes**	**19**	**0**	**0.02**	**NP**
Benzene (ug/l)	MW-24	0	59	68	No	19	89.47	0.02	NP
Benzene (ug/l)	MW-26A	0	44	48	No	15	100	0.02	NP
Benzene (ug/l)	MW-300	-0.1039	-68	-68	No	19	21.05	0.02	NP
Benzene (ug/l)	MW-301	0	23	68	No	19	89.47	0.02	NP
Benzene (ug/l)	MW-302R	0	65	73	No	20	100	0.02	NP
Benzene (ug/l)	**MW-303**	**0**	**87**	**73**	**Yes**	**20**	**95**	**0.02**	**NP**
Benzene (ug/l)	**MW-304R**	**0**	**78**	**68**	**Yes**	**19**	**100**	**0.02**	**NP**
Benzene (ug/l)	**MW-305**	**0**	**84**	**68**	**Yes**	**19**	**100**	**0.02**	**NP**
Benzene (ug/l)	MW-501	0	0	23	No	9	100	0.02	NP
Benzene (ug/l)	MW-9AR ...	0	0	48	No	15	100	0.02	NP
Chlorobenzene (ug/l)	MW-15	0	65	73	No	20	100	0.02	NP
Chlorobenzene (ug/l)	MW-18	0	54	68	No	19	100	0.02	NP
Chlorobenzene (ug/l)	**MW-19**	**-0.614**	**-93**	**-68**	**Yes**	**19**	**5.263**	**0.02**	**NP**
Chlorobenzene (ug/l)	**MW-20**	**-0.3768**	**-70**	**-68**	**Yes**	**19**	**0**	**0.02**	**NP**
Chlorobenzene (ug/l)	MW-201B...	0	54	68	No	19	100	0.02	NP
Chlorobenzene (ug/l)	MW-22	-0.003698	-9	-68	No	19	26.32	0.02	NP
Chlorobenzene (ug/l)	**MW-24**	**0**	**84**	**68**	**Yes**	**19**	**100**	**0.02**	**NP**
Chlorobenzene (ug/l)	MW-26A	0	44	48	No	15	100	0.02	NP
Chlorobenzene (ug/l)	MW-300	0	15	68	No	19	47.37	0.02	NP
Chlorobenzene (ug/l)	MW-301	-0.03718	-38	-68	No	19	36.84	0.02	NP
Chlorobenzene (ug/l)	MW-302R	0	65	73	No	20	100	0.02	NP
Chlorobenzene (ug/l)	**MW-303**	**0**	**84**	**73**	**Yes**	**20**	**100**	**0.02**	**NP**
Chlorobenzene (ug/l)	**MW-304R**	**0**	**78**	**68**	**Yes**	**19**	**100**	**0.02**	**NP**
Chlorobenzene (ug/l)	**MW-305**	**0**	**84**	**68**	**Yes**	**19**	**100**	**0.02**	**NP**
Chlorobenzene (ug/l)	MW-501	0	0	23	No	9	100	0.02	NP
Chlorobenzene (ug/l)	MW-9AR ...	0	0	48	No	15	100	0.02	NP
Silvex [2,4,5-TP] (ug/l)	MW-15	-0.1297	NaN	NaN	No	3	100	NaN	NP
Silvex [2,4,5-TP] (ug/l)	MW-18	-0.0458	NaN	NaN	No	2	100	NaN	NP

Trend Test

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 3:06 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Silvex [2,4,5-TP] (ug/l)	MW-19	-0.03505	NaN	NaN	No	2	100	NaN	NP
Silvex [2,4,5-TP] (ug/l)	MW-20	-0.1146	-8	-23	No	9	100	0.02	NP
Silvex [2,4,5-TP] (ug/l)	MW-201B...	-0.213	-4	-8	No	4	100	0.02	NP
Silvex [2,4,5-TP] (ug/l)	MW-22	-0.03379	-44	-63	No	18	55.56	0.02	NP
Silvex [2,4,5-TP] (ug/l)	MW-24	-0.05064	NaN	NaN	No	2	100	NaN	NP
Silvex [2,4,5-TP] (ug/l)	MW-26A	-0.04599	NaN	NaN	No	3	100	NaN	NP
Silvex [2,4,5-TP] (ug/l)	MW-300	-0.03827	NaN	NaN	No	2	100	NaN	NP
Silvex [2,4,5-TP] (ug/l)	MW-301	-0.03489	NaN	NaN	No	2	100	NaN	NP
Silvex [2,4,5-TP] (ug/l)	MW-302R	-0.04836	NaN	NaN	No	2	100	NaN	NP
Silvex [2,4,5-TP] (ug/l)	MW-303	-0.08223	NaN	NaN	No	2	100	NaN	NP
Silvex [2,4,5-TP] (ug/l)	MW-304R	-0.05566	NaN	NaN	No	2	100	NaN	NP
Silvex [2,4,5-TP] (ug/l)	MW-305	-0.04712	NaN	NaN	No	2	100	NaN	NP
Silvex [2,4,5-TP] (ug/l)	MW-9AR ...	0.02729	NaN	NaN	No	2	100	NaN	NP

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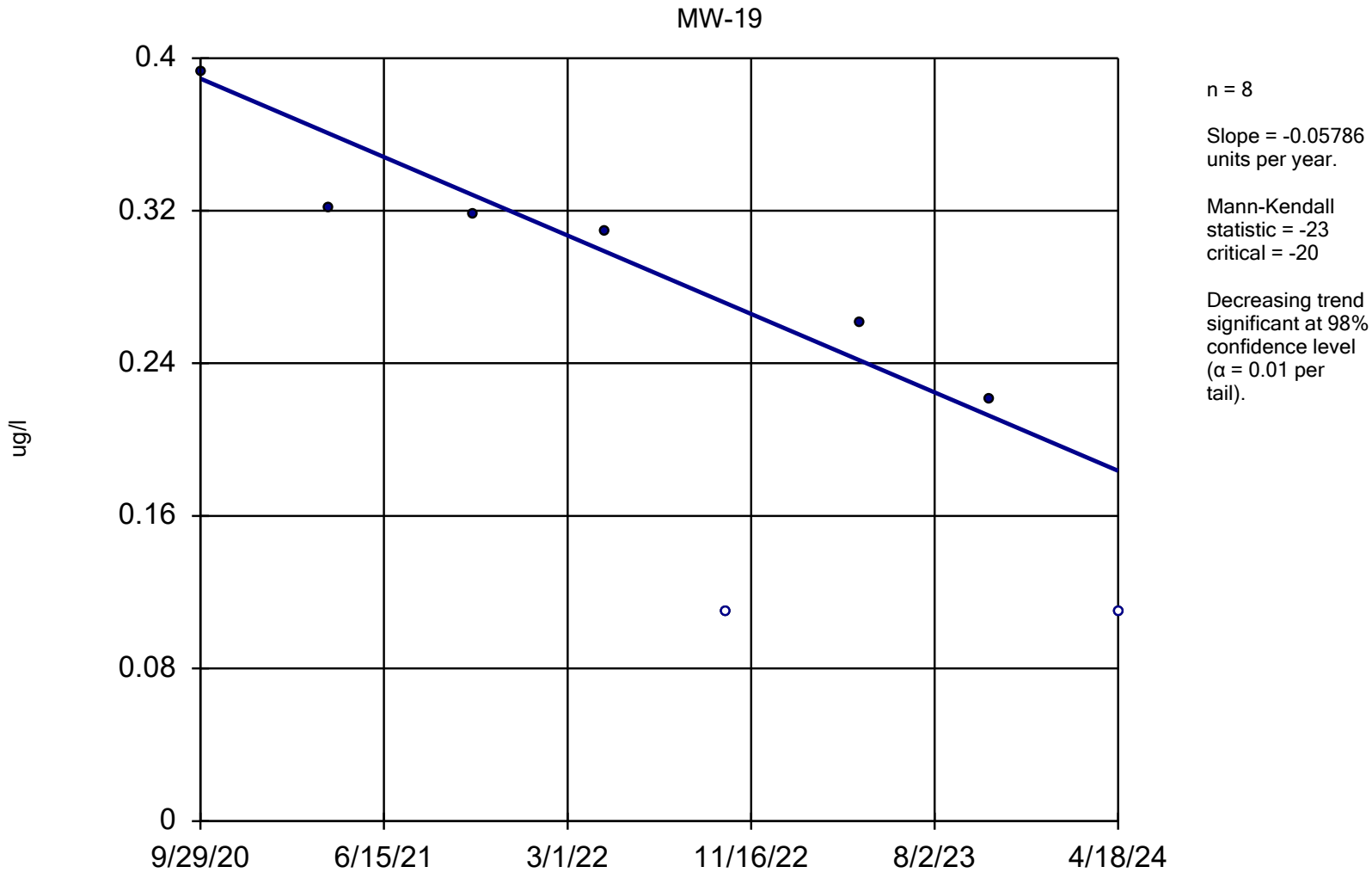
Monitoring Well VOC Trend Analysis – Recent Events Dataset – Spring 2024

Hollow symbols indicate censored values.

Sen's Slope Estimator



Constituent: Benzene Analysis Run 7/12/2024 3:02 PM View: App I VOCs_detected

Linn County Data: CRLCSWA_Groundwater Database

Trend Test

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 3:03 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
1,4-Dichlorobenzene (ug/l)	MW-15	0	0	20	No	8	100	0.02	NP
1,4-Dichlorobenzene (ug/l)	MW-18	0	0	20	No	8	100	0.02	NP
1,4-Dichlorobenzene (ug/l)	MW-19	-0.5539	-6	-20	No	8	12.5	0.02	NP
1,4-Dichlorobenzene (ug/l)	MW-20	0.1029	13	20	No	8	37.5	0.02	NP
1,4-Dichlorobenzene (ug/l)	MW-201B...	0	0	20	No	8	100	0.02	NP
1,4-Dichlorobenzene (ug/l)	MW-22	0	0	20	No	8	100	0.02	NP
1,4-Dichlorobenzene (ug/l)	MW-24	0	0	20	No	8	100	0.02	NP
1,4-Dichlorobenzene (ug/l)	MW-26A	0	0	20	No	8	100	0.02	NP
1,4-Dichlorobenzene (ug/l)	MW-300	0	4	20	No	8	50	0.02	NP
1,4-Dichlorobenzene (ug/l)	MW-301	0	0	20	No	8	100	0.02	NP
1,4-Dichlorobenzene (ug/l)	MW-302R	0	0	20	No	8	100	0.02	NP
1,4-Dichlorobenzene (ug/l)	MW-303	0	0	20	No	8	100	0.02	NP
1,4-Dichlorobenzene (ug/l)	MW-304R	0	0	20	No	8	100	0.02	NP
1,4-Dichlorobenzene (ug/l)	MW-305	0	0	20	No	8	100	0.02	NP
1,4-Dichlorobenzene (ug/l)	MW-501	0	0	20	No	8	100	0.02	NP
1,4-Dichlorobenzene (ug/l)	MW-9AR ...	0	0	20	No	8	100	0.02	NP
Benzene (ug/l)	MW-15	0	3	20	No	8	87.5	0.02	NP
Benzene (ug/l)	MW-18	0	0	20	No	8	100	0.02	NP
Benzene (ug/l)	**MW-19**	**-0.05786**	**-23**	**-20**	**Yes**	**8**	**25**	**0.02**	**NP**
Benzene (ug/l)	MW-20	-0.8136	-16	-20	No	8	0	0.02	NP
Benzene (ug/l)	MW-201B...	0	0	20	No	8	100	0.02	NP
Benzene (ug/l)	MW-22	0.1207	15	20	No	8	0	0.02	NP
Benzene (ug/l)	MW-24	0	-3	-20	No	8	87.5	0.02	NP
Benzene (ug/l)	MW-26A	0	0	20	No	8	100	0.02	NP
Benzene (ug/l)	MW-300	-0.01744	-12	-20	No	8	50	0.02	NP
Benzene (ug/l)	MW-301	0	0	20	No	8	100	0.02	NP
Benzene (ug/l)	MW-302R	0	0	20	No	8	100	0.02	NP
Benzene (ug/l)	MW-303	0	-3	-20	No	8	87.5	0.02	NP
Benzene (ug/l)	MW-304R	0	0	20	No	8	100	0.02	NP
Benzene (ug/l)	MW-305	0	0	20	No	8	100	0.02	NP
Benzene (ug/l)	MW-501	0	0	20	No	8	100	0.02	NP
Benzene (ug/l)	MW-9AR ...	0	0	20	No	8	100	0.02	NP
Chlorobenzene (ug/l)	MW-15	0	0	20	No	8	100	0.02	NP
Chlorobenzene (ug/l)	MW-18	0	0	20	No	8	100	0.02	NP
Chlorobenzene (ug/l)	MW-19	-0.3471	-6	-20	No	8	12.5	0.02	NP
Chlorobenzene (ug/l)	MW-20	-0.6624	-12	-20	No	8	0	0.02	NP
Chlorobenzene (ug/l)	MW-201B...	0	0	20	No	8	100	0.02	NP
Chlorobenzene (ug/l)	MW-22	0.01169	1	20	No	8	25	0.02	NP
Chlorobenzene (ug/l)	MW-24	0	0	20	No	8	100	0.02	NP
Chlorobenzene (ug/l)	MW-26A	0	0	20	No	8	100	0.02	NP
Chlorobenzene (ug/l)	MW-300	0	-4	-20	No	8	50	0.02	NP
Chlorobenzene (ug/l)	MW-301	-0.006588	-6	-20	No	8	50	0.02	NP
Chlorobenzene (ug/l)	MW-302R	0	0	20	No	8	100	0.02	NP
Chlorobenzene (ug/l)	MW-303	0	0	20	No	8	100	0.02	NP
Chlorobenzene (ug/l)	MW-304R	0	0	20	No	8	100	0.02	NP
Chlorobenzene (ug/l)	MW-305	0	0	20	No	8	100	0.02	NP
Chlorobenzene (ug/l)	MW-501	0	0	20	No	8	100	0.02	NP
Chlorobenzene (ug/l)	MW-9AR ...	0	0	20	No	8	100	0.02	NP
Silvex [2,4,5-TP] (ug/l)	MW-15	-0.1297	NaN	NaN	No	3	100	NaN	NP
Silvex [2,4,5-TP] (ug/l)	MW-18	-0.0458	NaN	NaN	No	2	100	NaN	NP

Trend Test

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 3:03 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Silvex [2,4,5-TP] (ug/l)	MW-19	-0.03505	NaN	NaN	No	2	100	NaN	NP
Silvex [2,4,5-TP] (ug/l)	MW-20	-0.1897	-8	-20	No	8	100	0.02	NP
Silvex [2,4,5-TP] (ug/l)	MW-201B...	-0.213	-4	-8	No	4	100	0.02	NP
Silvex [2,4,5-TP] (ug/l)	MW-22	-0.6629	-17	-20	No	8	12.5	0.02	NP
Silvex [2,4,5-TP] (ug/l)	MW-24	-0.05064	NaN	NaN	No	2	100	NaN	NP
Silvex [2,4,5-TP] (ug/l)	MW-26A	-0.04599	NaN	NaN	No	3	100	NaN	NP
Silvex [2,4,5-TP] (ug/l)	MW-300	-0.03827	NaN	NaN	No	2	100	NaN	NP
Silvex [2,4,5-TP] (ug/l)	MW-301	-0.03489	NaN	NaN	No	2	100	NaN	NP
Silvex [2,4,5-TP] (ug/l)	MW-302R	-0.04836	NaN	NaN	No	2	100	NaN	NP
Silvex [2,4,5-TP] (ug/l)	MW-303	-0.08223	NaN	NaN	No	2	100	NaN	NP
Silvex [2,4,5-TP] (ug/l)	MW-304R	-0.05566	NaN	NaN	No	2	100	NaN	NP
Silvex [2,4,5-TP] (ug/l)	MW-305	-0.04712	NaN	NaN	No	2	100	NaN	NP
Silvex [2,4,5-TP] (ug/l)	MW-9AR ...	0.02729	NaN	NaN	No	2	100	NaN	NP

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Monitoring Well VOC Screening - DQR – Spring 2024

VOC Screening

Analysis Run 7/12/2024 2:31 PM View: App II_VOCs
Linn County Data: CRLCSWA_Groundwater Database

UG 'Double Quantification Rule' results for 209 constituents in 16 wells on 6 dates:

1,4-Dichlorobenzene, MW-19, 10/18/2023: 3.13 ug/l, 4/18/2024: 1 ug/l
Benzene, MW-20, 10/19/2023: 3.66 ug/l, 4/18/2024: 3.47 ug/l
Benzene, MW-22, 10/19/2023: 1.29 ug/l, 4/18/2024: 1.9 ug/l
Chlorobenzene, MW-20, 10/19/2023: 7.42 ug/l, 4/18/2024: 3.59 ug/l

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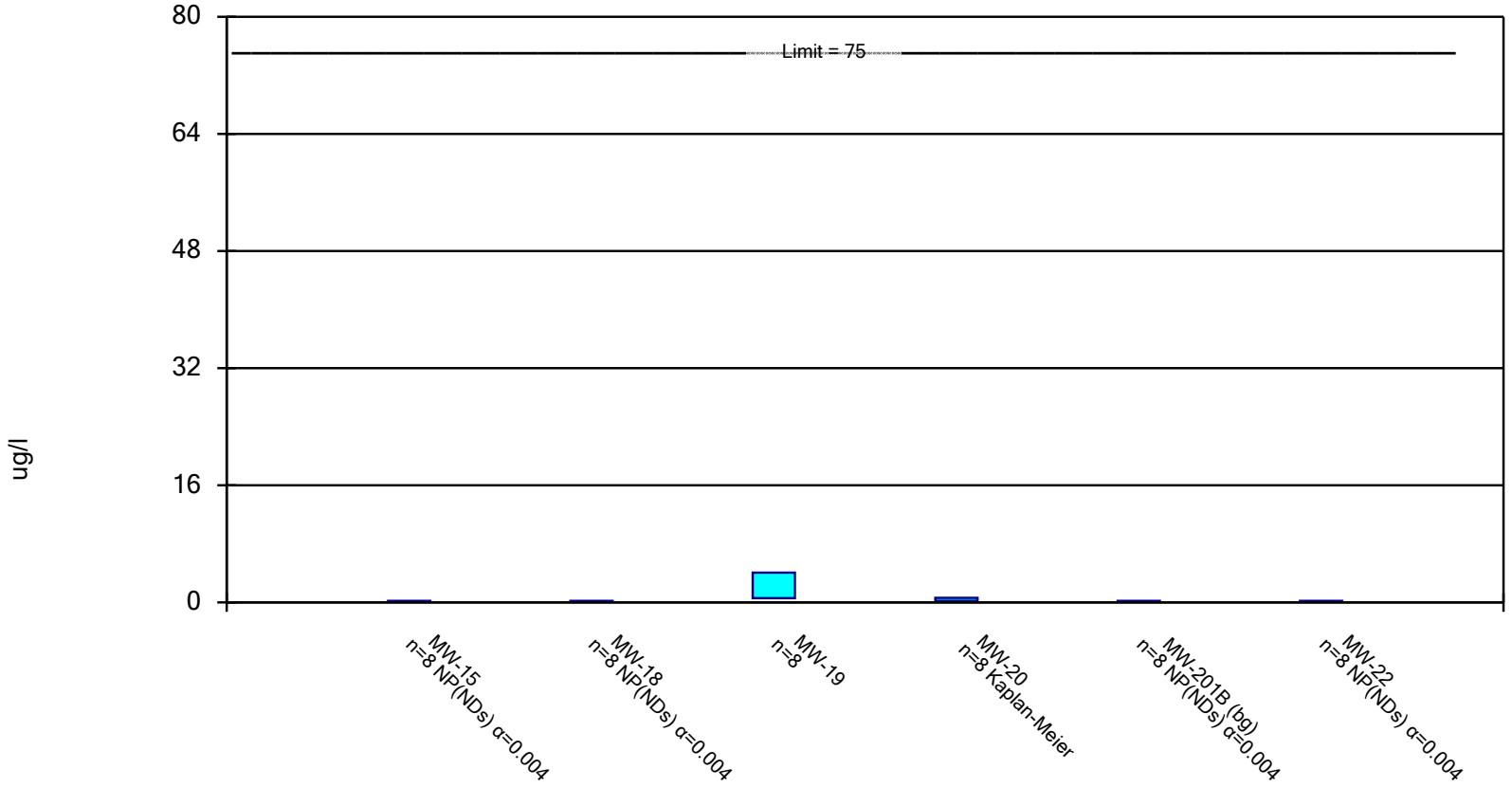
Monitoring Well VOC Confidence Interval Analysis – Spring 2024

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

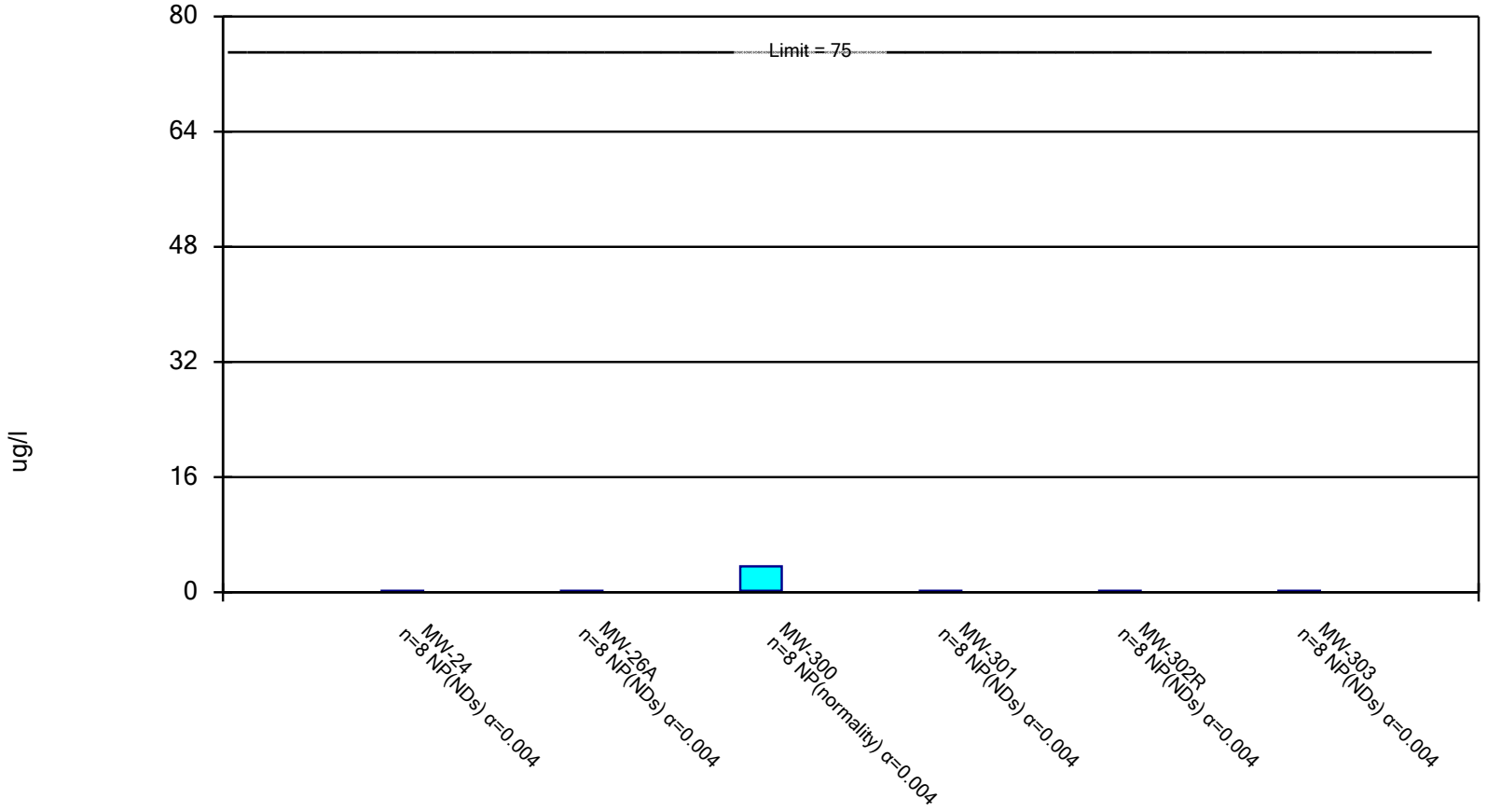


Constituent: 1,4-Dichlorobenzene Analysis Run 5/10/2024 3:05 PM View: App I VOCs_detected

Linn County Data: CRLCSWA_Groundwater Database

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

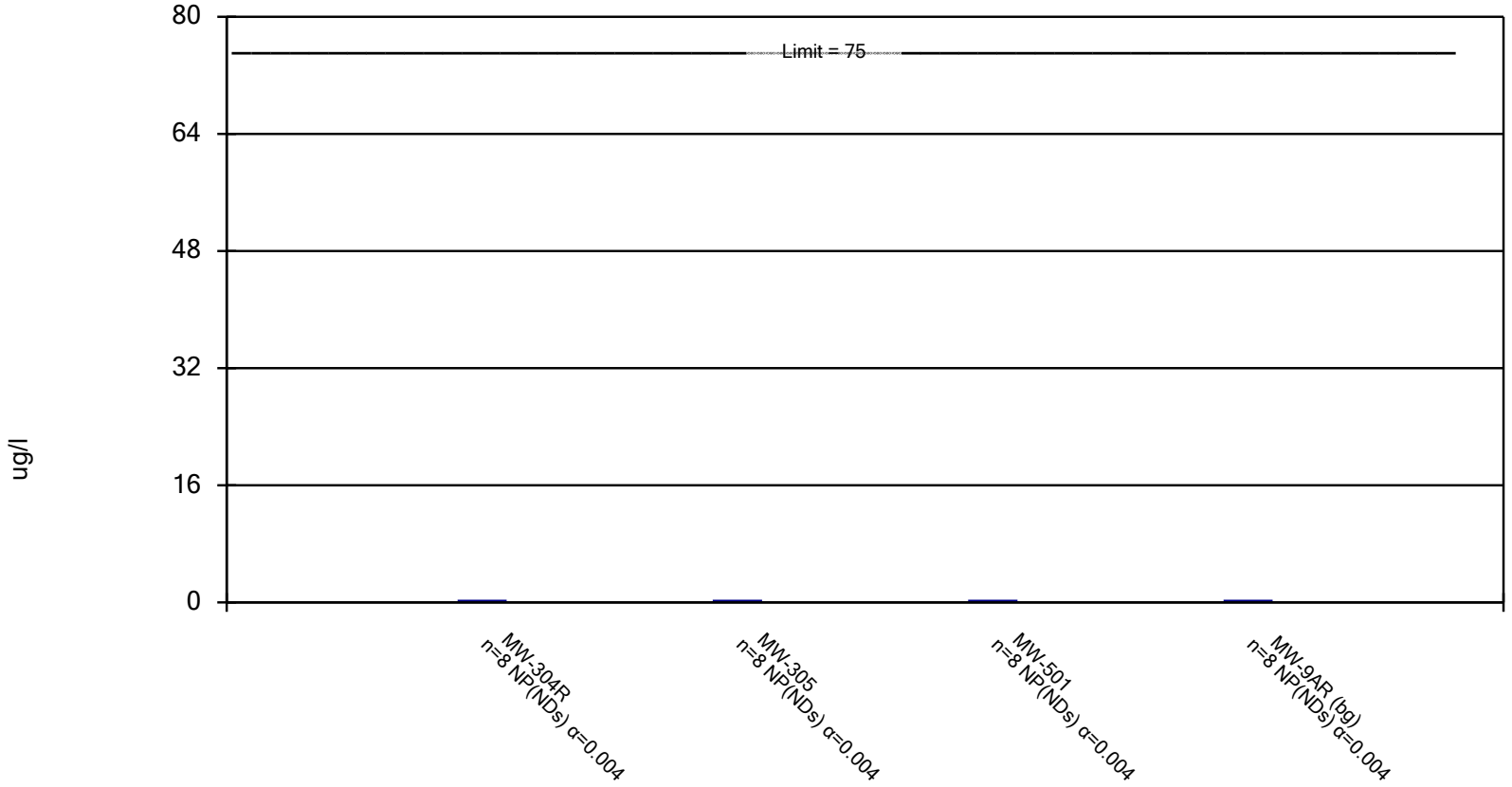


Constituent: 1,4-Dichlorobenzene Analysis Run 5/10/2024 3:05 PM View: App I VOCs_detected

Linn County Data: CRLCSWA_Groundwater Database

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

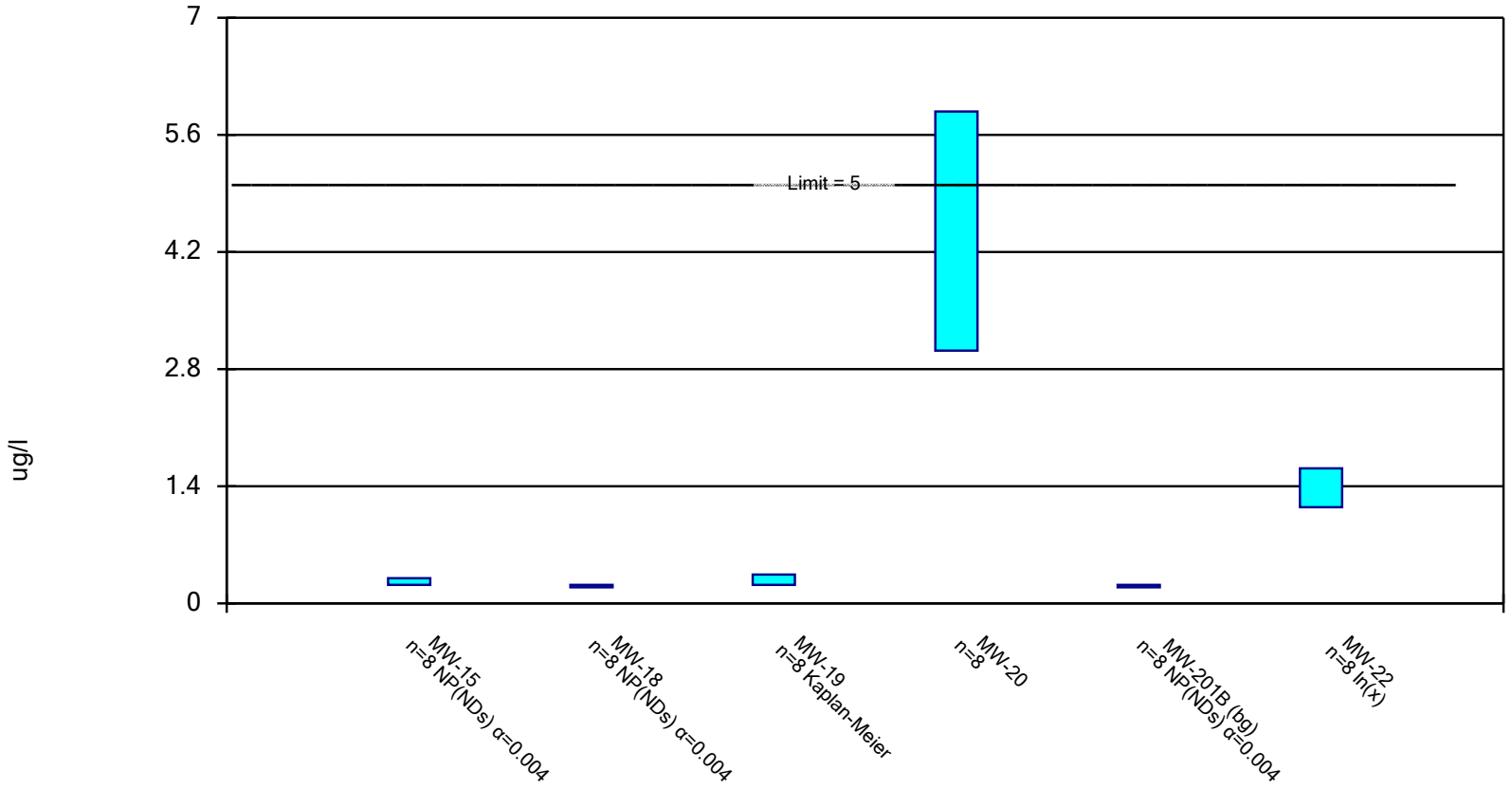


Constituent: 1,4-Dichlorobenzene Analysis Run 5/10/2024 3:05 PM View: App I VOCs_detected

Linn County Data: CRLCSWA_Groundwater Database

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

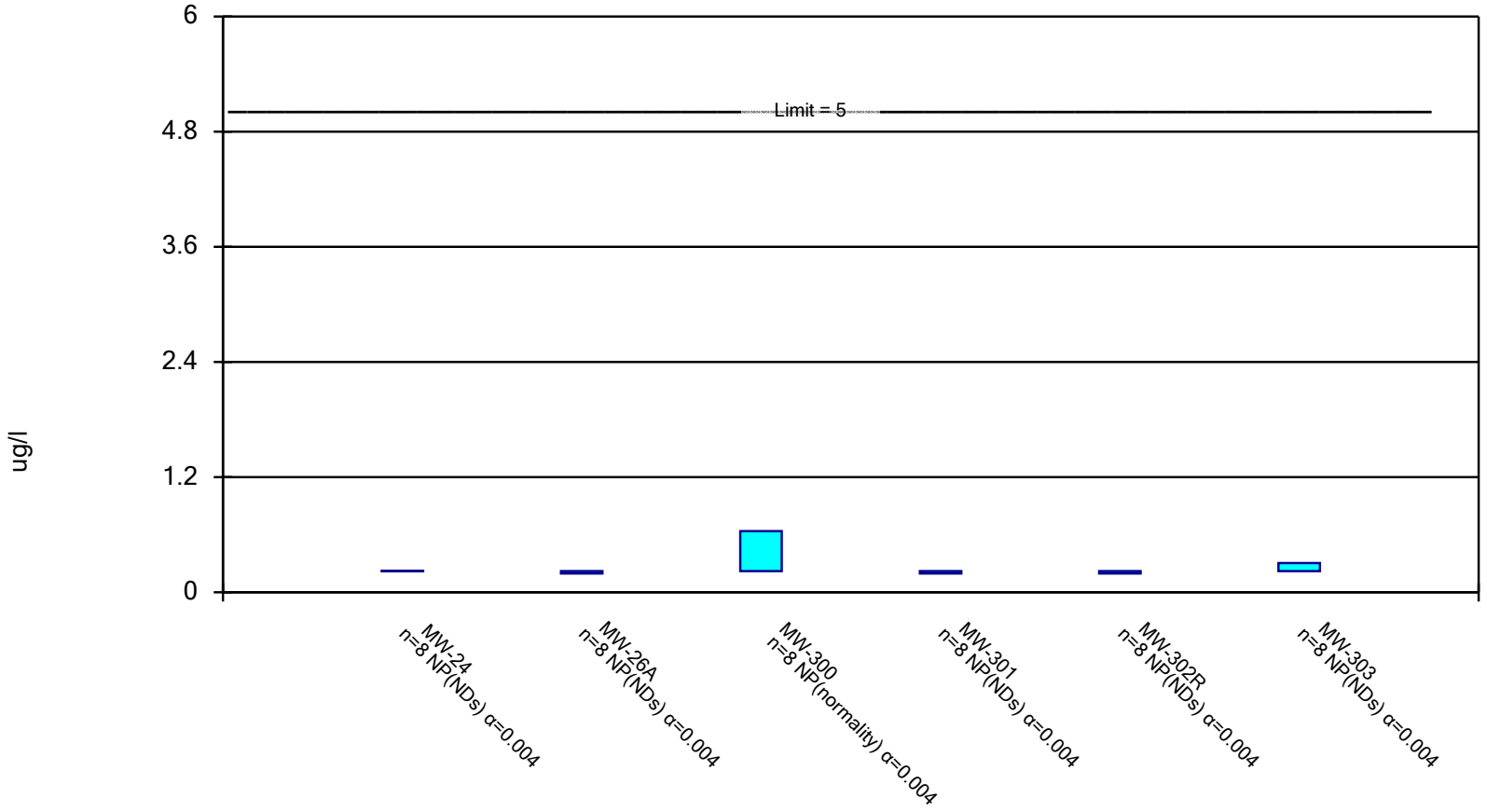


Constituent: Benzene Analysis Run 5/10/2024 3:05 PM View: App I VOCs_detected

Linn County Data: CRLCSWA_Groundwater Database

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

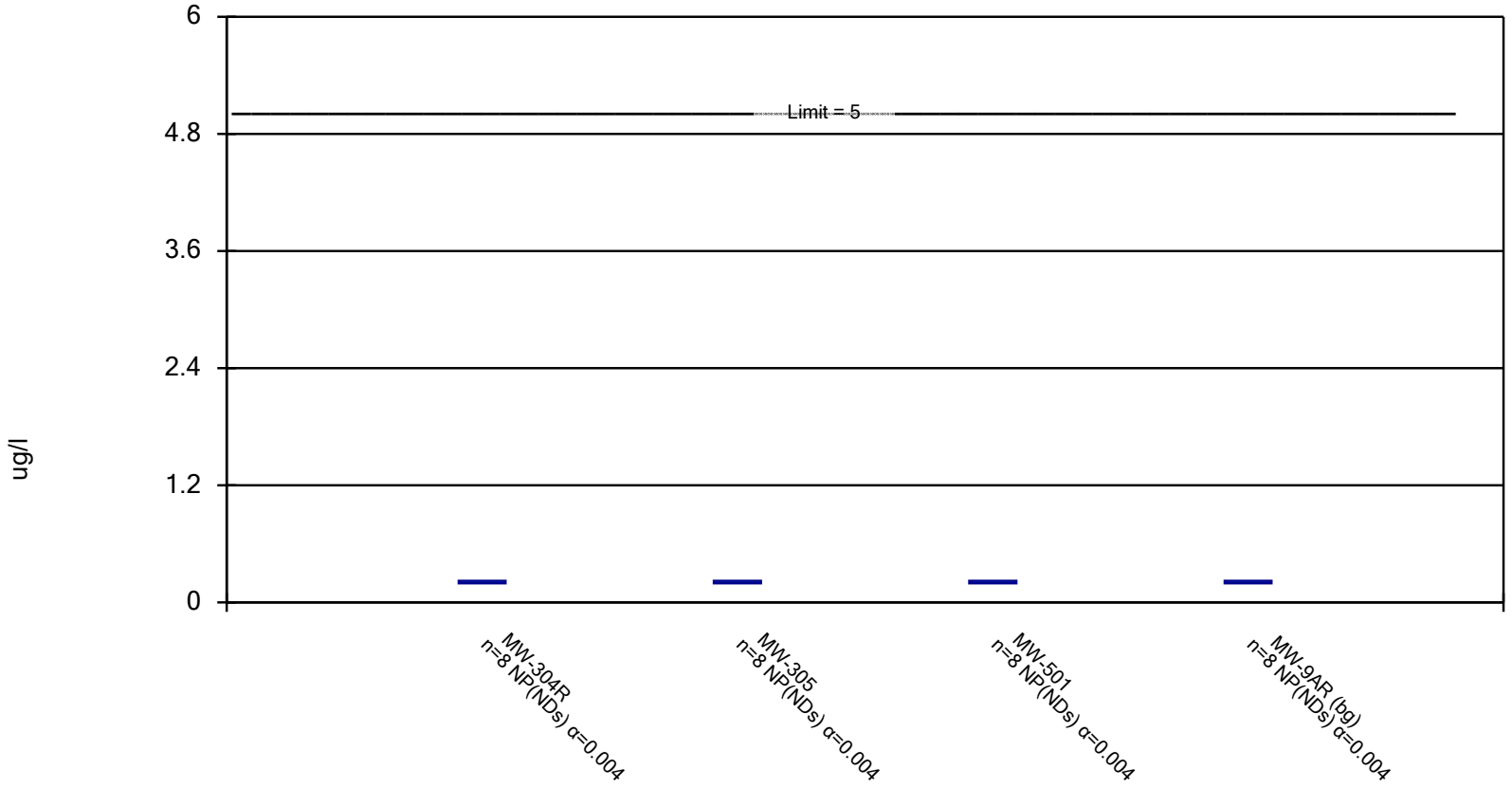


Constituent: Benzene Analysis Run 5/10/2024 3:05 PM View: App I VOCs_detected

Linn County Data: CRLCSWA_Groundwater Database

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

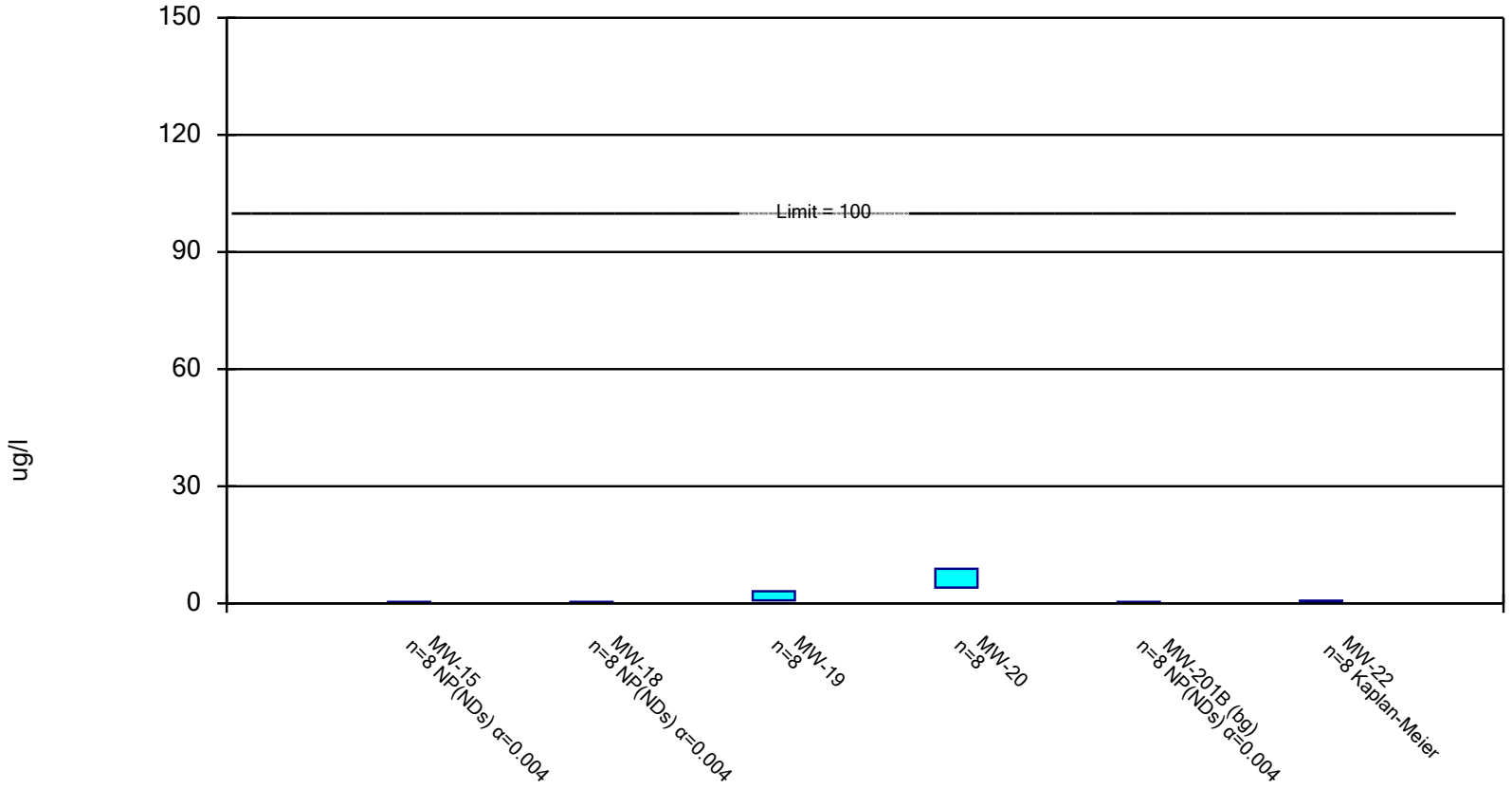


Constituent: Benzene Analysis Run 5/10/2024 3:05 PM View: App I VOCs_detected

Linn County Data: CRLCSWA_Groundwater Database

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

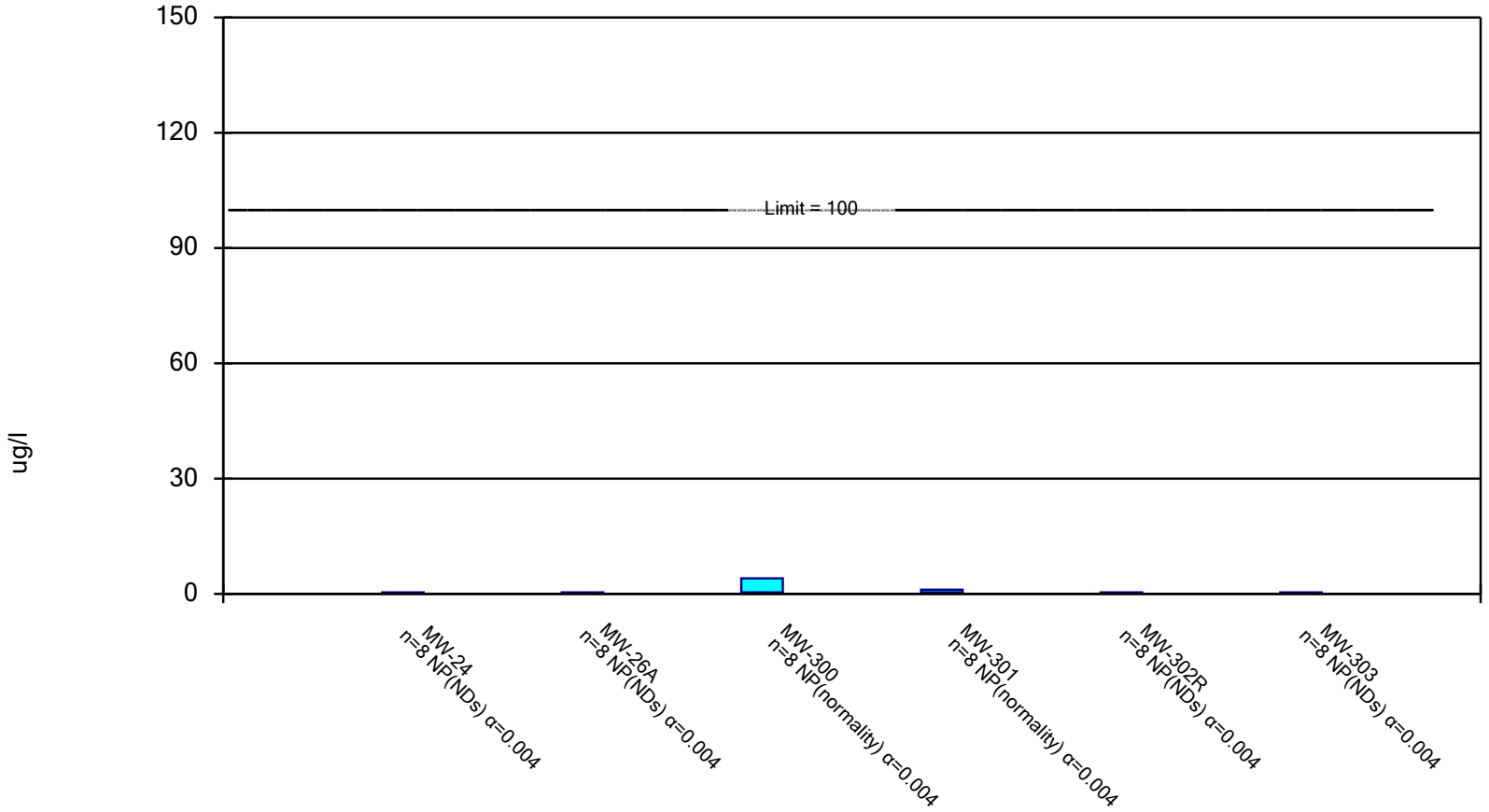


Constituent: Chlorobenzene Analysis Run 5/10/2024 3:05 PM View: App I VOCs_detected

Linn County Data: CRLCSWA_Groundwater Database

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

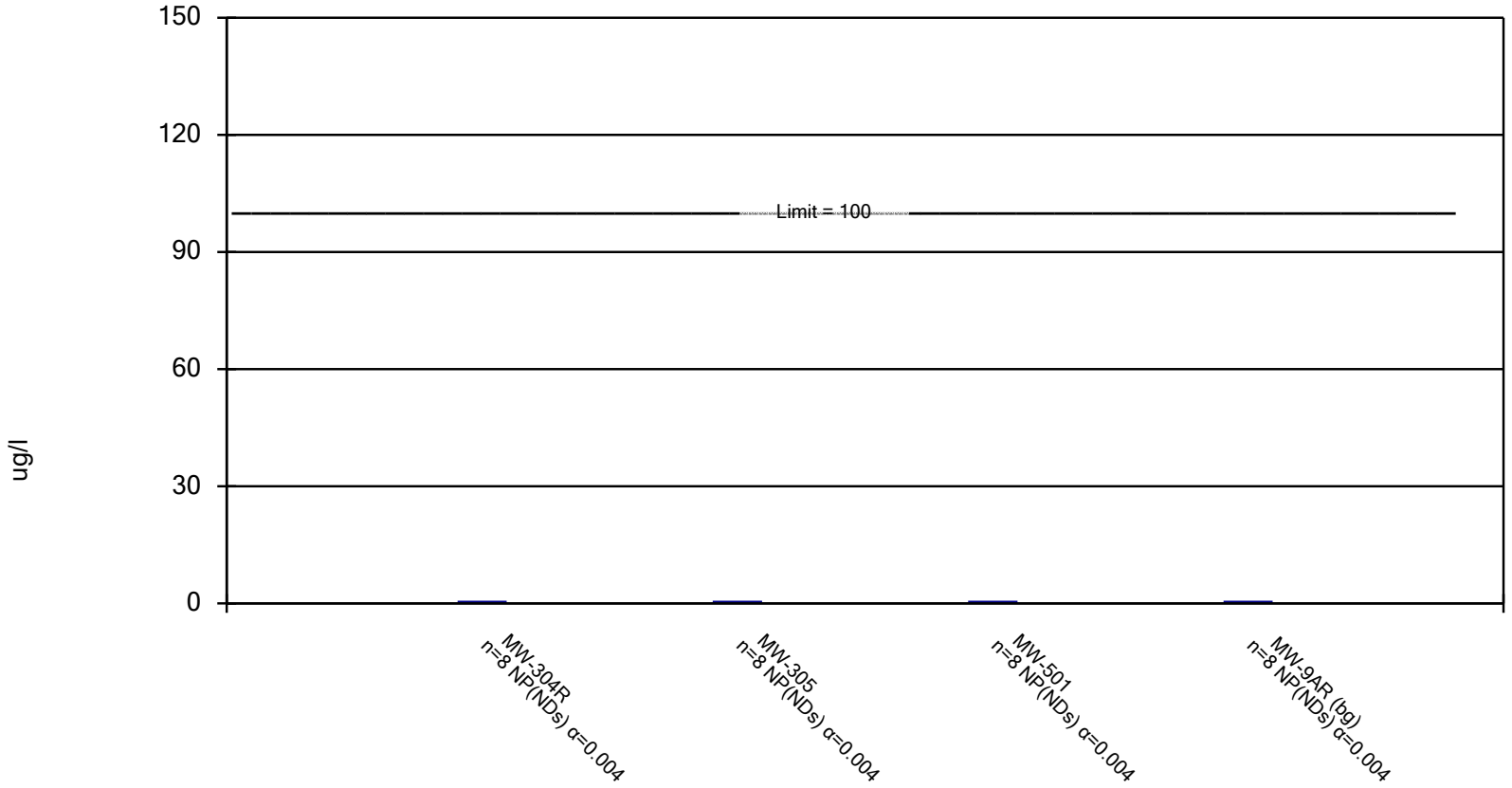


Constituent: Chlorobenzene Analysis Run 5/10/2024 3:05 PM View: App I VOCs_detected

Linn County Data: CRLCSWA_Groundwater Database

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

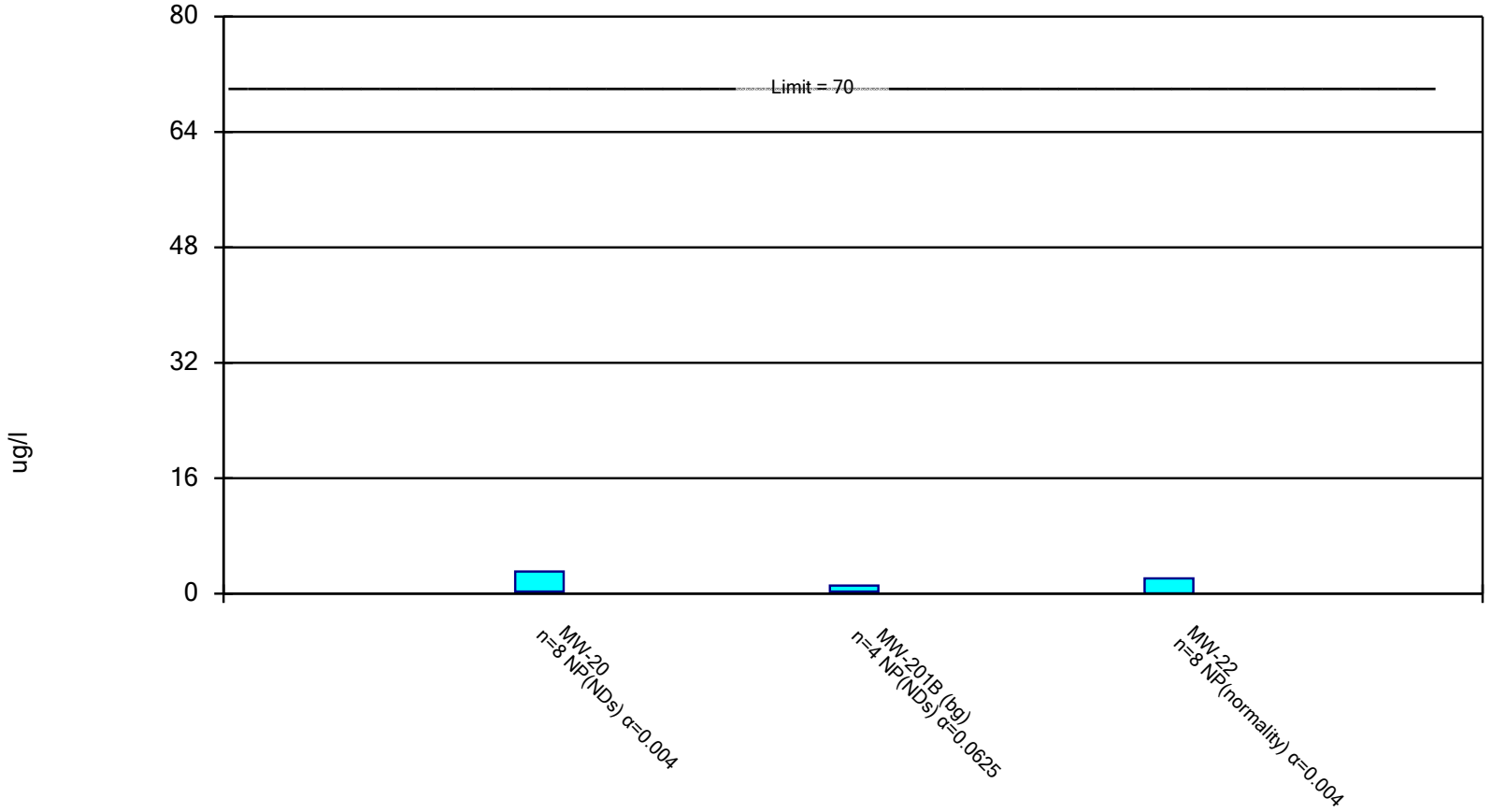


Constituent: Chlorobenzene Analysis Run 5/10/2024 3:05 PM View: App I VOCs_detected

Linn County Data: CRLCSWA_Groundwater Database

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Silvex [2,4,5-TP] Analysis Run 5/10/2024 3:05 PM View: App I VOCs_detected

Linn County Data: CRLCSWA_Groundwater Database

Confidence Interval

Linn County Data: CRLCSWA_Groundwater Database Printed 5/10/2024, 3:07 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
1,4-Dichlorobenzene (ug/l)	MW-15	0.23	0.23	75	No	8	0.23	0	100	None	No	0.004	NP (NDs)
1,4-Dichlorobenzene (ug/l)	MW-18	0.23	0.23	75	No	8	0.23	0	100	None	No	0.004	NP (NDs)
1,4-Dichlorobenzene (ug/l)	MW-19	4.08	0.5654	75	No	8	2.323	1.658	12.5	None	No	0.01	Param.
1,4-Dichlorobenzene (ug/l)	MW-20	0.6335	0.2168	75	No	8	0.4251	0.2101	37.5	Kaplan-Meier	No	0.01	Param.
1,4-Dichlorobenzene (ug/l)	MW-201B (bg)	0.23	0.23	75	No	8	0.23	0	100	Kaplan-Meier	No	0.004	NP (NDs)
1,4-Dichlorobenzene (ug/l)	MW-22	0.23	0.23	75	No	8	0.23	0	100	Kaplan-Meier	No	0.004	NP (NDs)
1,4-Dichlorobenzene (ug/l)	MW-24	0.23	0.23	75	No	8	0.23	0	100	None	No	0.004	NP (NDs)
1,4-Dichlorobenzene (ug/l)	MW-26A	0.23	0.23	75	No	8	0.23	0	100	None	No	0.004	NP (NDs)
1,4-Dichlorobenzene (ug/l)	MW-300	3.61	0.23	75	No	8	1.137	1.474	50	None	No	0.004	NP (normality)
1,4-Dichlorobenzene (ug/l)	MW-301	0.23	0.23	75	No	8	0.23	0	100	None	No	0.004	NP (NDs)
1,4-Dichlorobenzene (ug/l)	MW-302R	0.23	0.23	75	No	8	0.23	0	100	None	No	0.004	NP (NDs)
1,4-Dichlorobenzene (ug/l)	MW-303	0.23	0.23	75	No	8	0.23	0	100	None	No	0.004	NP (NDs)
1,4-Dichlorobenzene (ug/l)	MW-304R	0.23	0.23	75	No	8	0.23	0	100	None	No	0.004	NP (NDs)
1,4-Dichlorobenzene (ug/l)	MW-305	0.23	0.23	75	No	8	0.23	0	100	None	No	0.004	NP (NDs)
1,4-Dichlorobenzene (ug/l)	MW-501	0.23	0.23	75	No	8	0.23	0	100	None	No	0.004	NP (NDs)
1,4-Dichlorobenzene (ug/l)	MW-9AR (bg)	0.23	0.23	75	No	8	0.23	0	100	None	No	0.004	NP (NDs)
Benzene (ug/l)	MW-15	0.301	0.22	5	No	8	0.2301	0.02864	87.5	None	No	0.004	NP (NDs)
Benzene (ug/l)	MW-18	0.22	0.22	5	No	8	0.22	0	100	None	No	0.004	NP (NDs)
Benzene (ug/l)	MW-19	0.3453	0.2205	5	No	8	0.2554	0.1025	25	Kaplan-Meier	No	0.01	Param.
Benzene (ug/l)	MW-20	5.879	3.021	5	No	8	4.45	1.348	0	None	No	0.01	Param.
Benzene (ug/l)	MW-201B (bg)	0.22	0.22	5	No	8	0.22	0	100	None	No	0.004	NP (NDs)
Benzene (ug/l)	MW-22	1.612	1.15	5	No	8	1.378	0.2398	0	None	ln(x)	0.01	Param.
Benzene (ug/l)	MW-24	0.223	0.22	5	No	8	0.2204	0.001061	87.5	None	No	0.004	NP (NDs)
Benzene (ug/l)	MW-26A	0.22	0.22	5	No	8	0.22	0	100	None	No	0.004	NP (NDs)
Benzene (ug/l)	MW-300	0.639	0.22	5	No	8	0.3699	0.1985	50	None	No	0.004	NP (normality)
Benzene (ug/l)	MW-301	0.22	0.22	5	No	8	0.22	0	100	None	No	0.004	NP (NDs)
Benzene (ug/l)	MW-302R	0.22	0.22	5	No	8	0.22	0	100	None	No	0.004	NP (NDs)
Benzene (ug/l)	MW-303	0.305	0.22	5	No	8	0.2306	0.03005	87.5	None	No	0.004	NP (NDs)
Benzene (ug/l)	MW-304R	0.22	0.22	5	No	8	0.22	0	100	None	No	0.004	NP (NDs)
Benzene (ug/l)	MW-305	0.22	0.22	5	No	8	0.22	0	100	None	No	0.004	NP (NDs)
Benzene (ug/l)	MW-501	0.22	0.22	5	No	8	0.22	0	100	None	No	0.004	NP (NDs)
Benzene (ug/l)	MW-9AR (bg)	0.22	0.22	5	No	8	0.22	0	100	None	No	0.004	NP (NDs)
Chlorobenzene (ug/l)	MW-15	0.4	0.4	100	No	8	0.4	0	100	None	No	0.004	NP (NDs)
Chlorobenzene (ug/l)	MW-18	0.4	0.4	100	No	8	0.4	0	100	None	No	0.004	NP (NDs)
Chlorobenzene (ug/l)	MW-19	3.087	0.7569	100	No	8	1.922	1.099	12.5	None	No	0.01	Param.
Chlorobenzene (ug/l)	MW-20	8.866	4.079	100	No	8	6.473	2.258	0	None	No	0.01	Param.
Chlorobenzene (ug/l)	MW-201B (bg)	0.4	0.4	100	No	8	0.4	0	100	None	No	0.004	NP (NDs)
Chlorobenzene (ug/l)	MW-22	0.7442	0.4488	100	No	8	0.5965	0.149	25	Kaplan-Meier	No	0.01	Param.
Chlorobenzene (ug/l)	MW-24	0.4	0.4	100	No	8	0.4	0	100	None	No	0.004	NP (NDs)
Chlorobenzene (ug/l)	MW-26A	0.4	0.4	100	No	8	0.4	0	100	None	No	0.004	NP (NDs)
Chlorobenzene (ug/l)	MW-300	4.06	0.4	100	No	8	1.551	1.525	50	None	No	0.004	NP (normality)
Chlorobenzene (ug/l)	MW-301	1.09	0.4	100	No	8	0.5291	0.2385	50	None	No	0.004	NP (normality)
Chlorobenzene (ug/l)	MW-302R	0.4	0.4	100	No	8	0.4	0	100	None	No	0.004	NP (NDs)
Chlorobenzene (ug/l)	MW-303	0.4	0.4	100	No	8	0.4	0	100	None	No	0.004	NP (NDs)
Chlorobenzene (ug/l)	MW-304R	0.4	0.4	100	No	8	0.4	0	100	None	No	0.004	NP (NDs)
Chlorobenzene (ug/l)	MW-305	0.4	0.4	100	No	8	0.4	0	100	None	No	0.004	NP (NDs)
Chlorobenzene (ug/l)	MW-501	0.4	0.4	100	No	8	0.4	0	100	None	No	0.004	NP (NDs)
Chlorobenzene (ug/l)	MW-9AR (bg)	0.4	0.4	100	No	8	0.4	0	100	None	No	0.004	NP (NDs)
Silvex [2,4,5-TP] (ug/l)	MW-20	3.09	0.296	70	No	8	1.448	1.341	100	None	No	0.004	NP (NDs)
Silvex [2,4,5-TP] (ug/l)	MW-201B (bg)	1.11	0.297	70	No	4	0.5105	0.4	100	None	No	0.0625	NP (NDs)

Confidence Interval

Linn County Data: CRLCSWA_Groundwater Database Printed 5/10/2024, 3:07 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Silvex [2,4,5-TP] (ug/l)	MW-22	2.11	0.0511	70	No	8	0.7522	0.9101	12.5	None	No	0.004	NP (normality)

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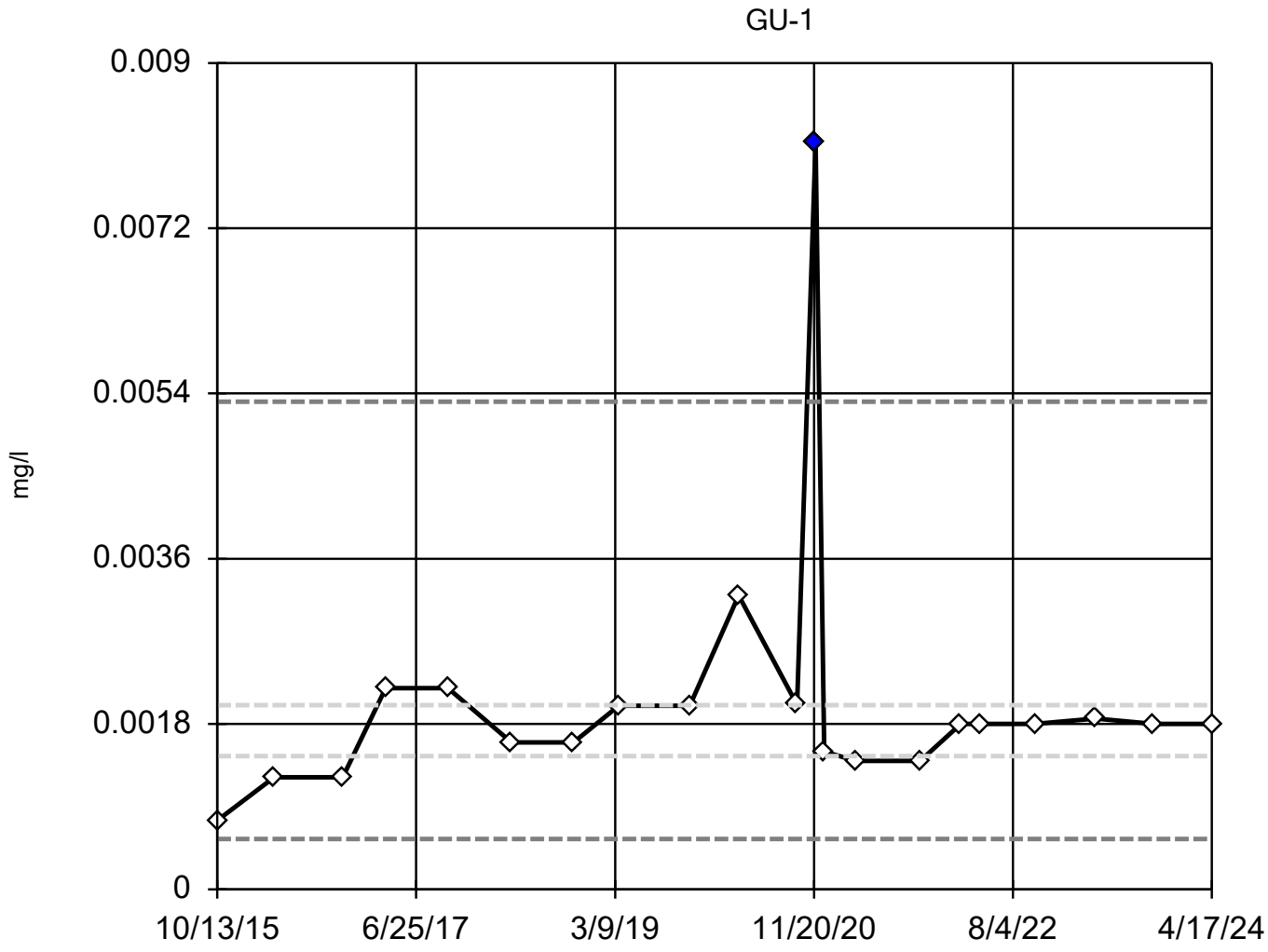
Underdrain Inorganic Outliers Analysis – Spring 2024

Tukey's Outlier Screening



n = 21

Outlier is drawn as solid. Tukey's method selected by user.

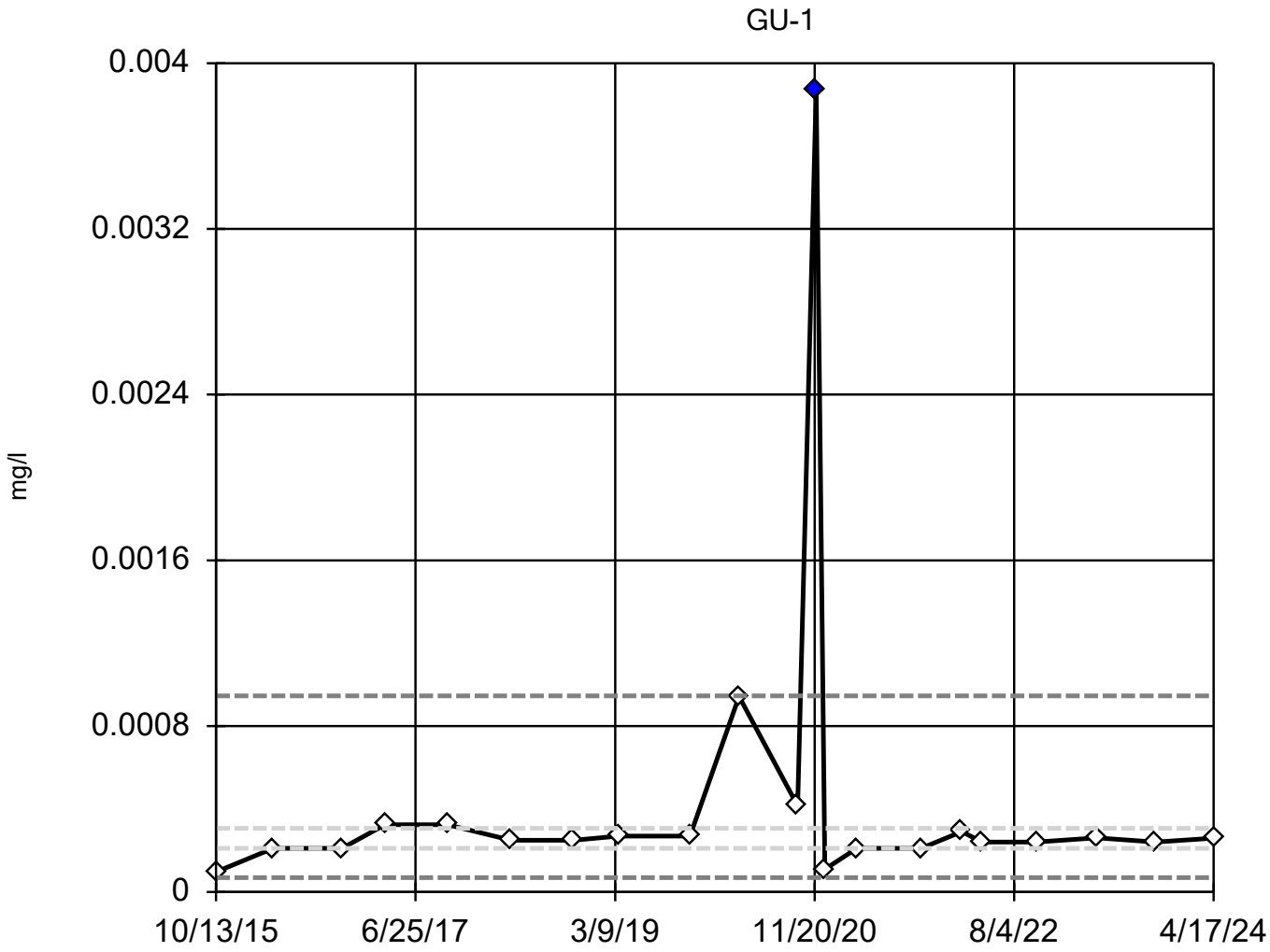
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.00531, low cutoff = 0.0005471, based on IQR multiplier of 3.

Constituent: Copper Analysis Run 5/10/2024 3:25 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 21

Outlier is drawn as solid. Tukey's method selected by user.

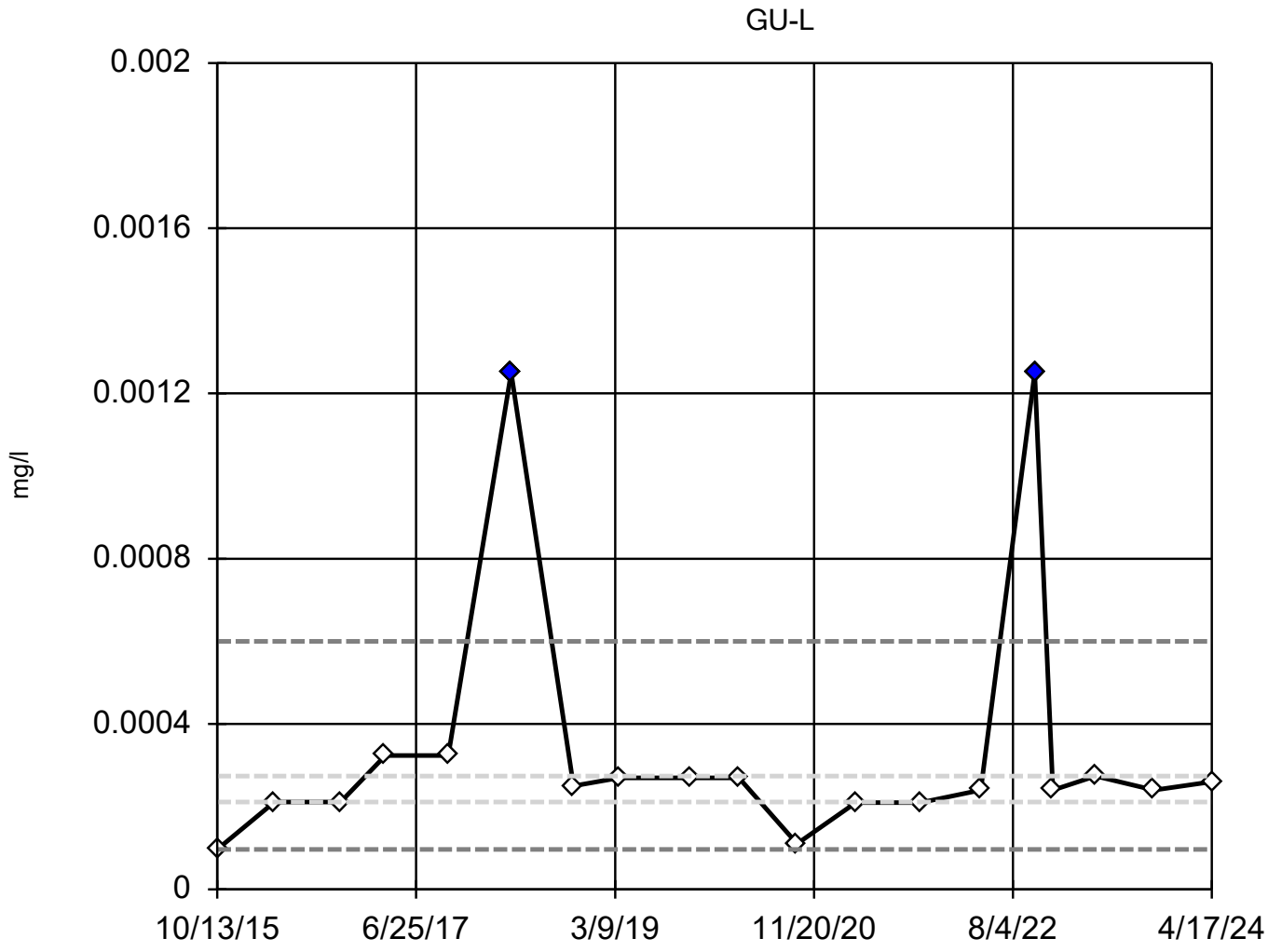
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.0009463, low cutoff = 0.00006847, based on IQR multiplier of 3.

Constituent: Lead Analysis Run 5/10/2024 3:25 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 19

Outliers are drawn as solid.
Tukey's method selected by user.

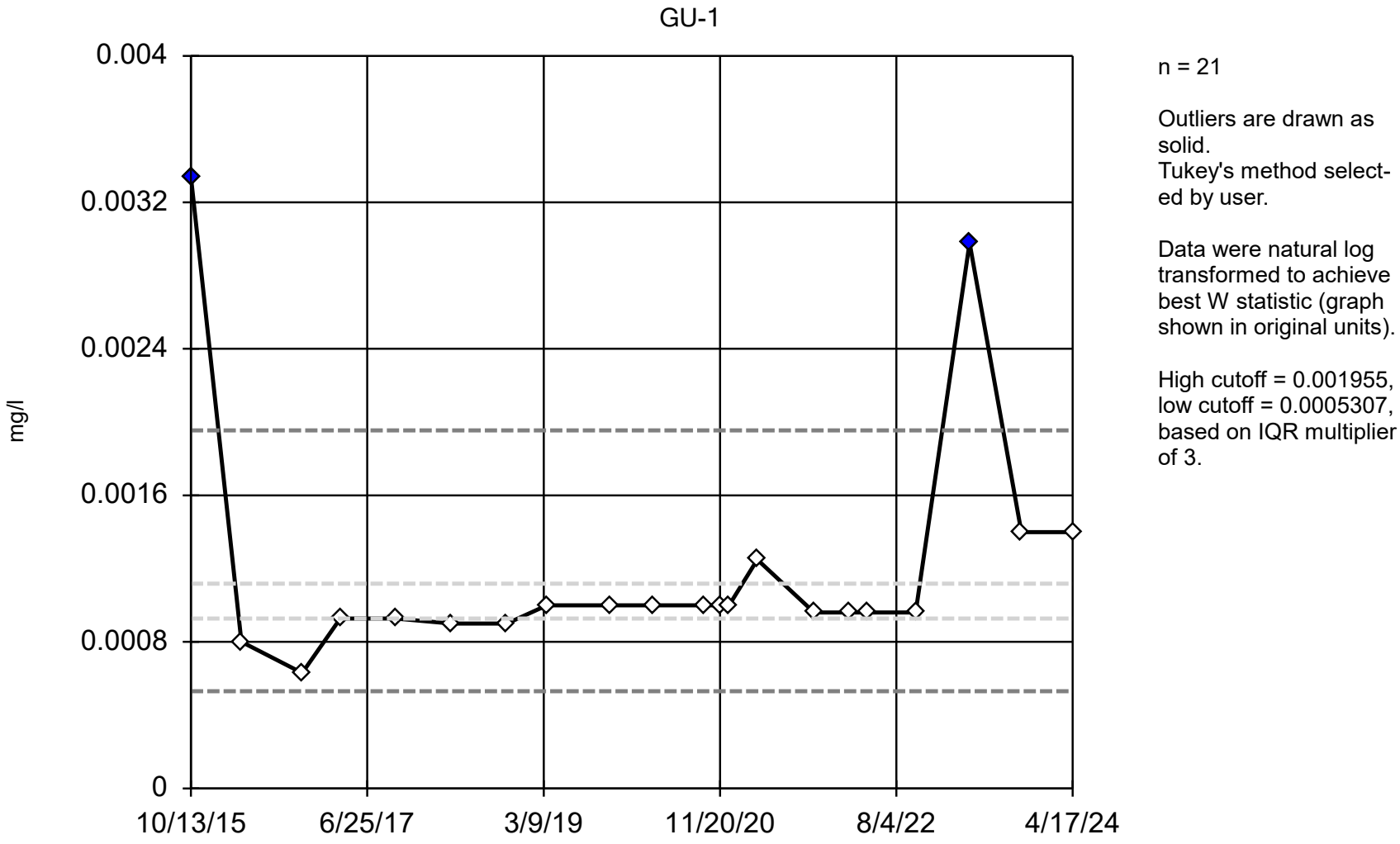
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.0006, low cutoff = 0.00009636, based on IQR multiplier of 3.

Constituent: Lead Analysis Run 5/10/2024 3:25 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 21

Outliers are drawn as solid.
Tukey's method selected by user.

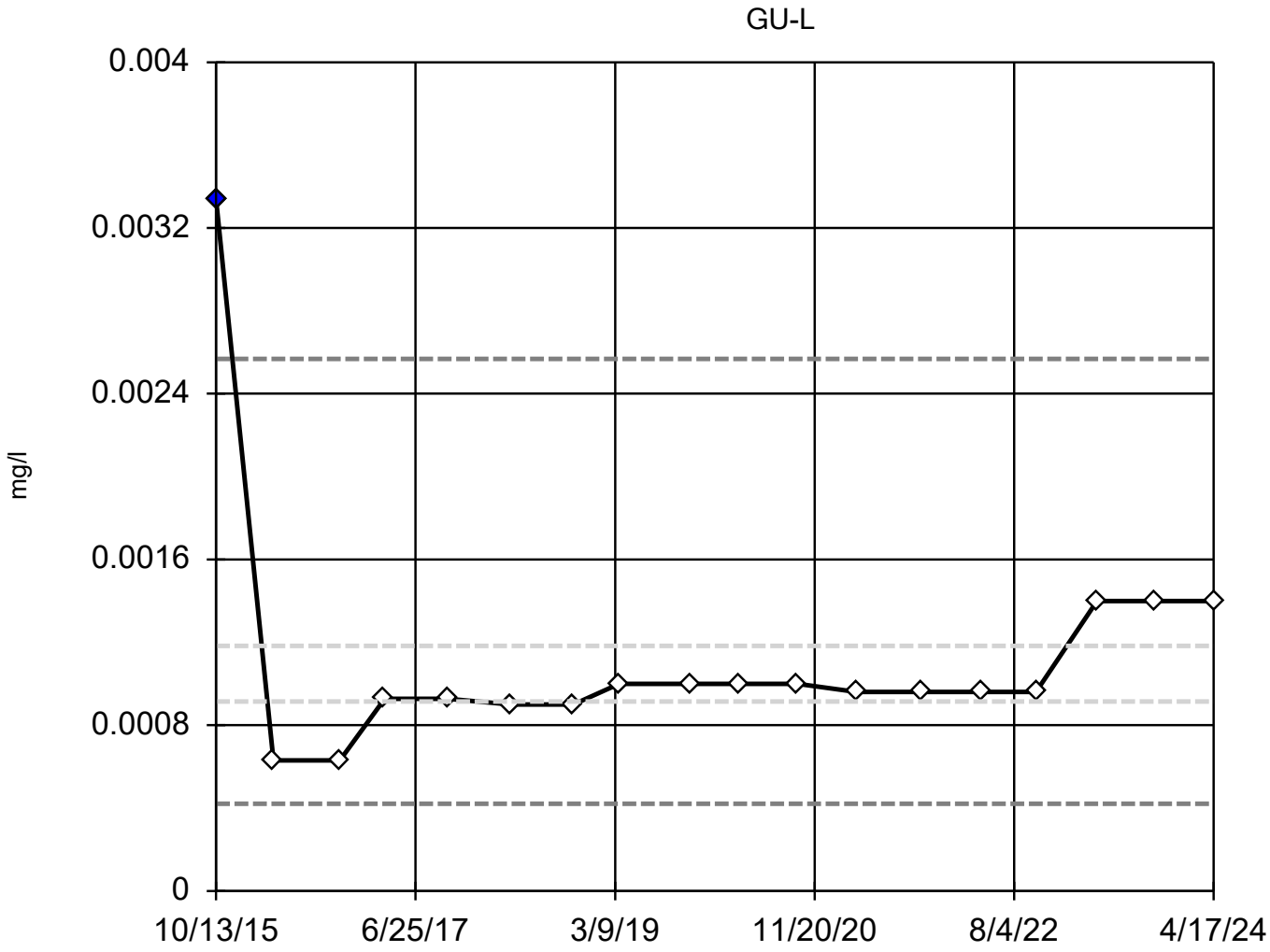
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.001955, low cutoff = 0.0005307, based on IQR multiplier of 3.

Constituent: Selenium Analysis Run 5/10/2024 3:25 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 18

Outlier is drawn as solid. Tukey's method selected by user.

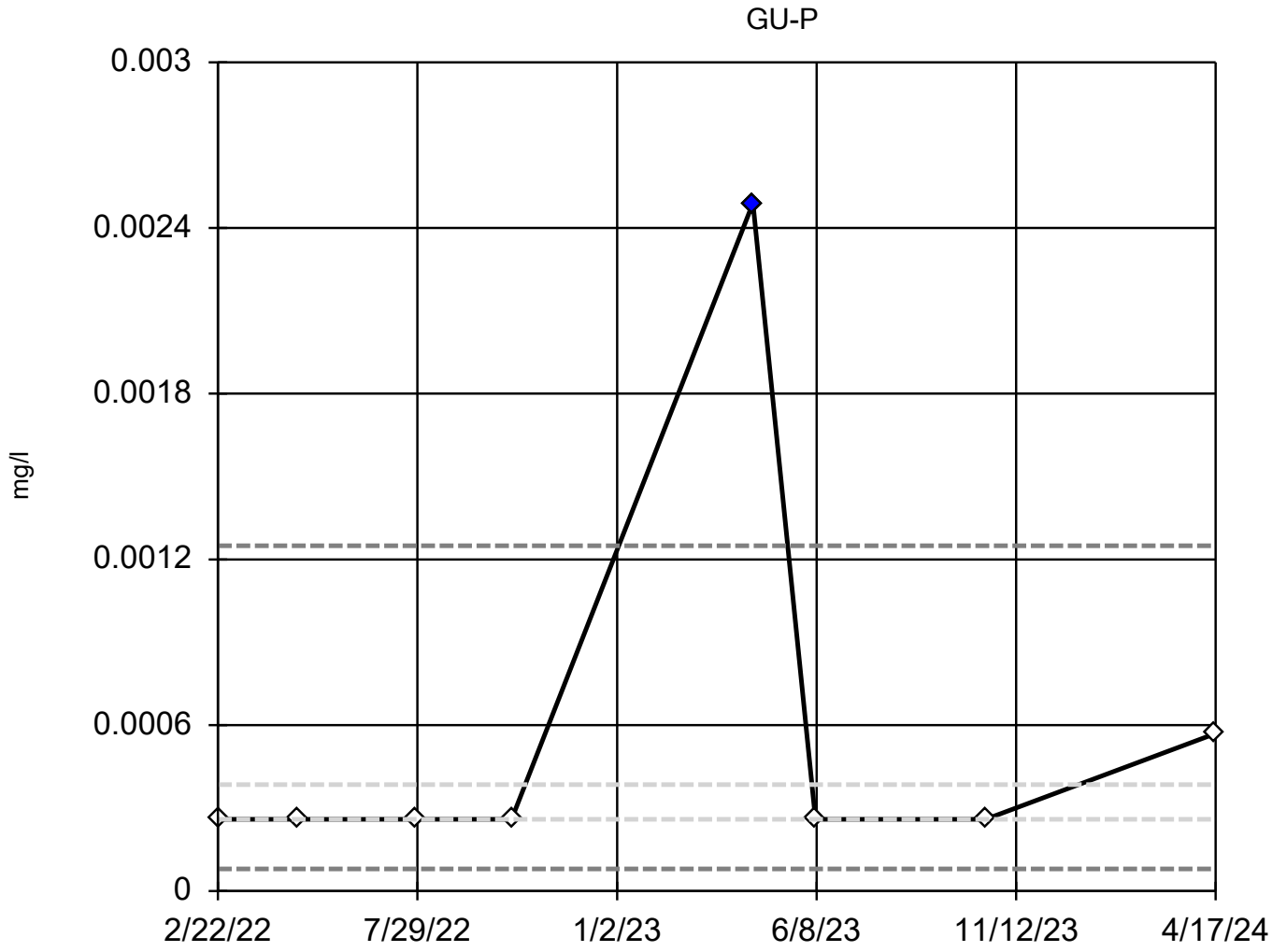
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.002568, low cutoff = 0.0004211, based on IQR multiplier of 3.

Constituent: Selenium Analysis Run 5/10/2024 3:25 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 8

Outlier is drawn as solid. Tukey's method selected by user.

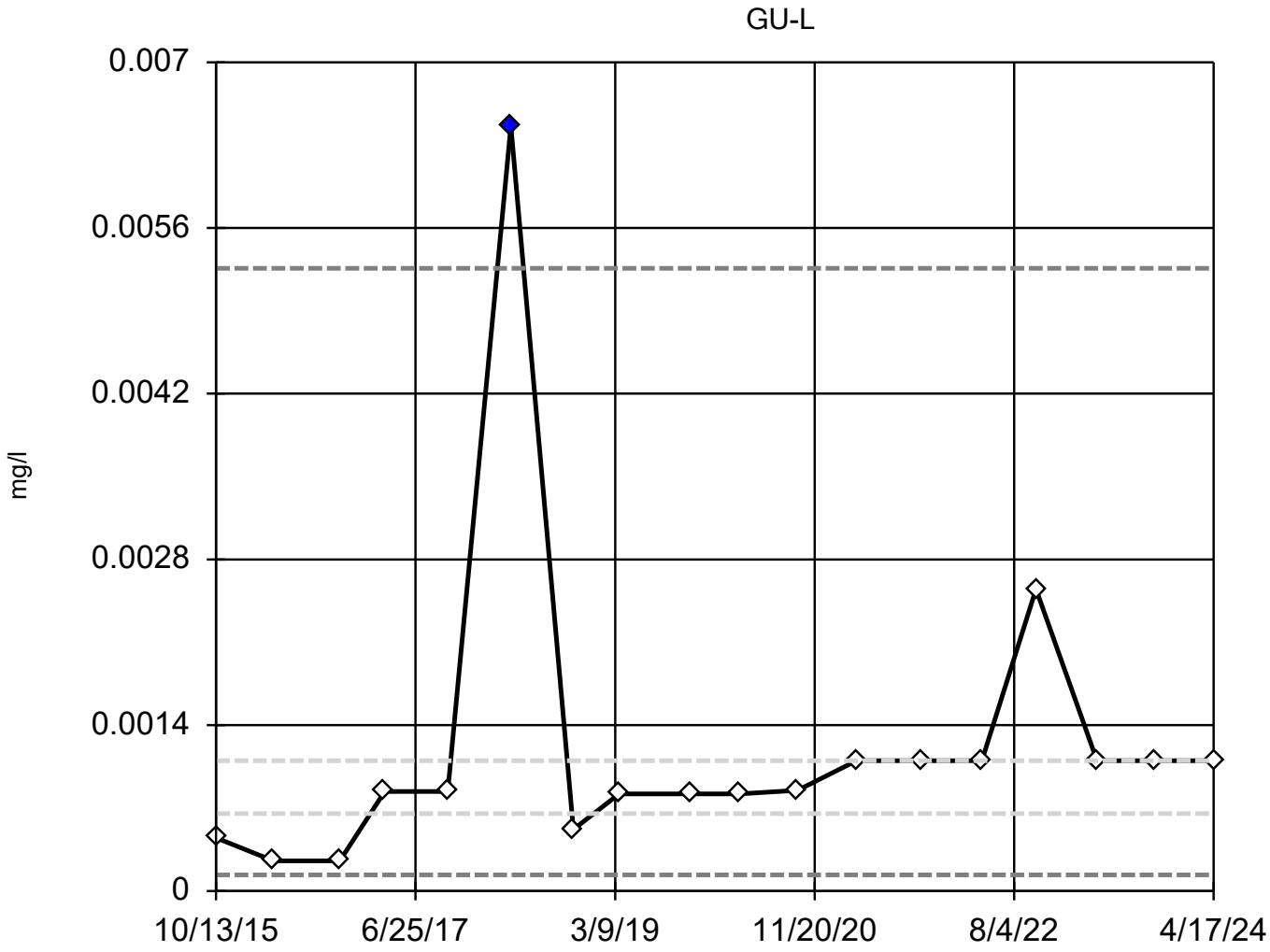
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.00125, low cutoff = 0.0000801, based on IQR multiplier of 3.

Constituent: Thallium Analysis Run 5/10/2024 3:25 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 18

Outlier is drawn as solid. Tukey's method selected by user.

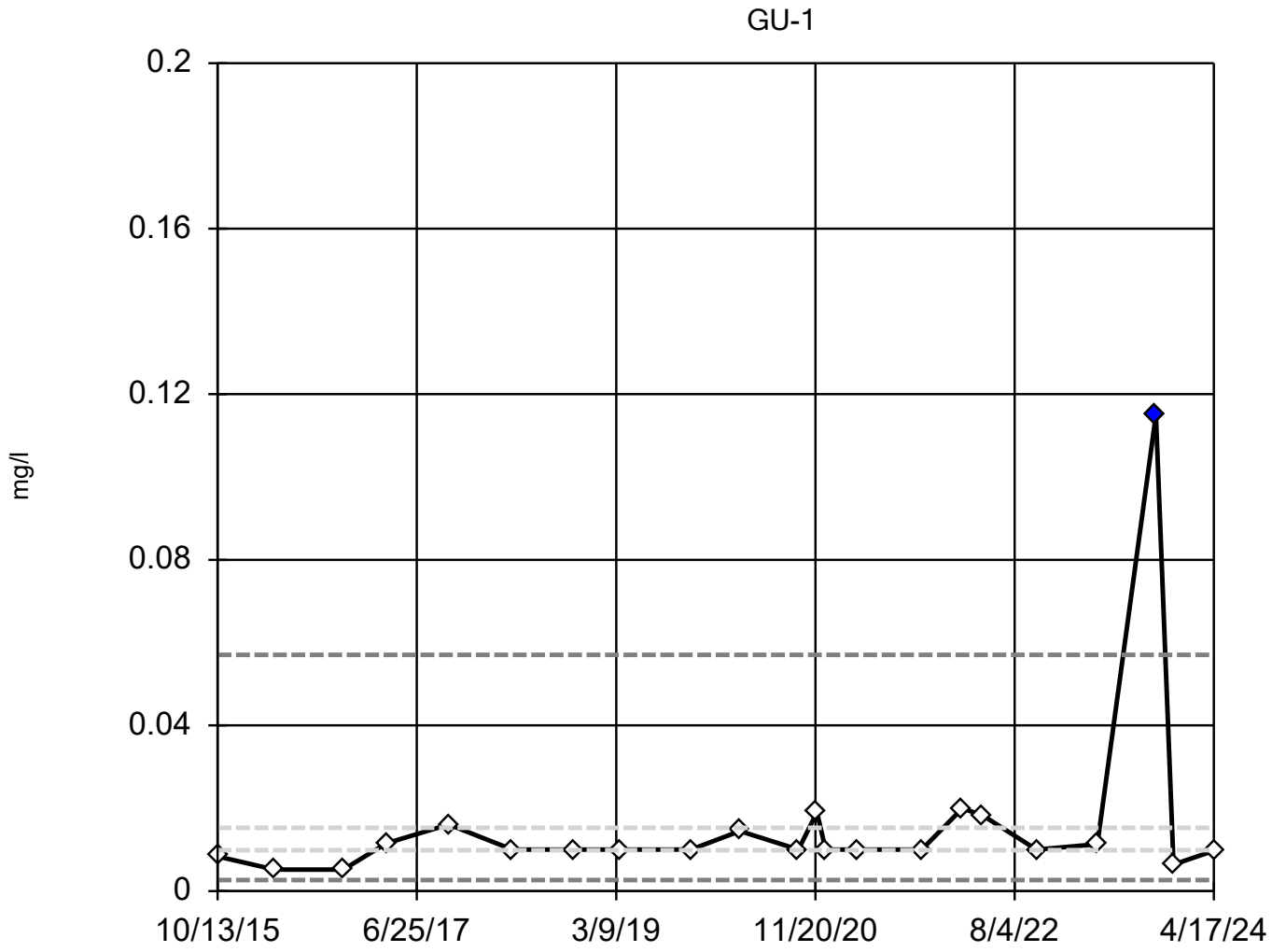
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.005258, low cutoff = 0.0001366, based on IQR multiplier of 3.

Constituent: Vanadium Analysis Run 5/10/2024 3:25 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening



n = 22

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

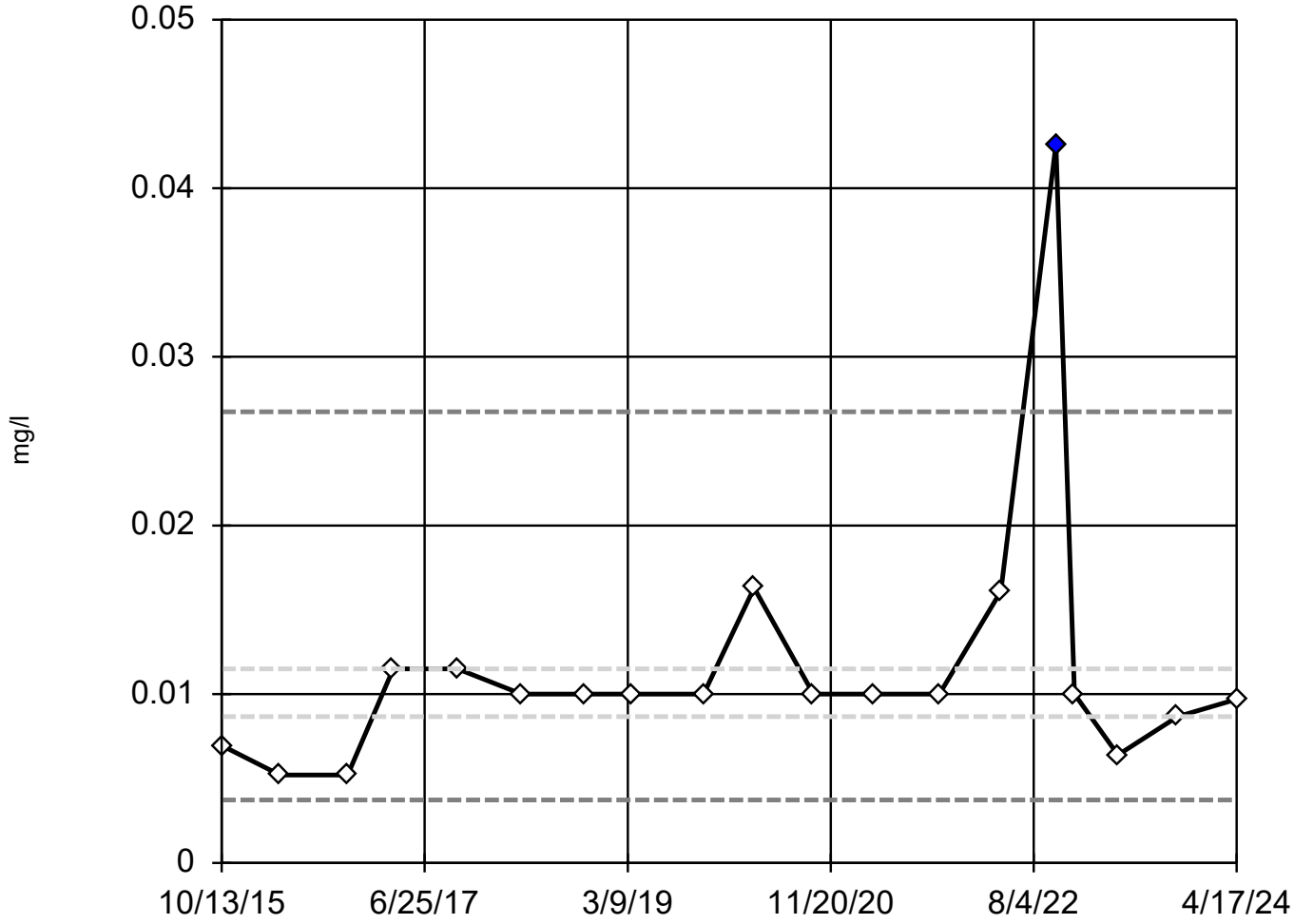
High cutoff = 0.05705, low cutoff = 0.002638, based on IQR multiplier of 3.

Constituent: Zinc Analysis Run 5/10/2024 3:25 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Tukey's Outlier Screening

GU-L



n = 19

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.02674, low cutoff = 0.003732, based on IQR multiplier of 3.

Constituent: Zinc Analysis Run 5/10/2024 3:26 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Outlier Analysis

Linn County Data: CRLCSWA_Groundwater Database Printed 5/10/2024, 3:26 PM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Antimony (mg/l)	GU-1	No	n/a	n/a	NP	NaN	21	0.000585	0.0003082	sqrt(x)	ShapiroWilk
Antimony (mg/l)	GU-L	n/a	n/a	n/a	NP	NaN	18	0.000...	0.0003284	unknown	ShapiroWilk
Antimony (mg/l)	GU-O	n/a	n/a	n/a	NP	NaN	9	0.000...	0.0002242	unknown	ShapiroWilk
Antimony (mg/l)	GU-P	n/a	n/a	n/a	NP	NaN	7	0.000...	0.0001657	unknown	ShapiroWilk
Arsenic (mg/l)	GU-1	No	n/a	n/a	NP	NaN	22	0.0136	0.01791	ln(x)	ShapiroWilk
Arsenic (mg/l)	GU-L	No	n/a	n/a	NP	NaN	20	0.003026	0.00572	ln(x)	ShapiroWilk
Arsenic (mg/l)	GU-O	No	n/a	n/a	NP	NaN	9	0.002753	0.0007838	ln(x)	ShapiroWilk
Arsenic (mg/l)	GU-P	No	n/a	n/a	NP	NaN	7	0.002389	0.0004991	ln(x)	ShapiroWilk
Barium (mg/l)	GU-1	No	n/a	n/a	NP	NaN	22	0.7001	0.3065	ln(x)	ShapiroWilk
Barium (mg/l)	GU-L	No	n/a	n/a	NP	NaN	18	0.04659	0.02254	ln(x)	ShapiroWilk
Barium (mg/l)	GU-O	No	n/a	n/a	NP	NaN	9	0.3127	0.05945	x^5	ShapiroWilk
Barium (mg/l)	GU-P	No	n/a	n/a	NP	NaN	8	0.2985	0.01723	x^4	ShapiroWilk
Beryllium (mg/l)	GU-1	No	n/a	n/a	NP	NaN	21	0.000...	0.0000...	x^2	ShapiroWilk
Beryllium (mg/l)	GU-L	No	n/a	n/a	NP	NaN	18	0.000...	0.0000...	x^2	ShapiroWilk
Beryllium (mg/l)	GU-O	n/a	n/a	n/a	NP	NaN	9	0.000...	0.0000...	unknown	ShapiroWilk
Beryllium (mg/l)	GU-P	n/a	n/a	n/a	NP	NaN	7	0.000...	0.0000...	unknown	ShapiroWilk
Cadmium (mg/l)	GU-1	No	n/a	n/a	NP	NaN	21	0.000...	0.0000...	ln(x)	ShapiroWilk
Cadmium (mg/l)	GU-L	No	n/a	n/a	NP	NaN	18	0.000...	0.0000...	ln(x)	ShapiroWilk
Cadmium (mg/l)	GU-O	n/a	n/a	n/a	NP	NaN	9	0.000...	0.0000...	unknown	ShapiroWilk
Cadmium (mg/l)	GU-P	n/a	n/a	n/a	NP	NaN	7	0.000...	0.0000...	unknown	ShapiroWilk
Chromium (mg/l)	GU-1	No	n/a	n/a	NP	NaN	21	0.001121	0.0003977	sqrt(x)	ShapiroWilk
Chromium (mg/l)	GU-L	No	n/a	n/a	NP	NaN	18	0.001056	0.0004871	x^(1/3)	ShapiroWilk
Chromium (mg/l)	GU-O	n/a	n/a	n/a	NP	NaN	9	0.001073	0.0001221	unknown	ShapiroWilk
Chromium (mg/l)	GU-P	n/a	n/a	n/a	NP	NaN	7	0.001124	0.0000...	unknown	ShapiroWilk
Cobalt (mg/l)	GU-1	No	n/a	n/a	NP	NaN	22	0.004465	0.004327	ln(x)	ShapiroWilk
Cobalt (mg/l)	GU-L	No	n/a	n/a	NP	NaN	19	0.003569	0.003928	x^(1/3)	ShapiroWilk
Cobalt (mg/l)	GU-O	No	n/a	n/a	NP	NaN	9	0.000...	0.0003156	ln(x)	ShapiroWilk
Cobalt (mg/l)	GU-P	No	n/a	n/a	NP	NaN	7	0.000...	0.0003226	ln(x)	ShapiroWilk
Copper (mg/l)	**GU-1**	**Yes**	**0.00813**	**11/25/2020**	**NP**	**NaN**	**21**	**0.00206**	**0.001472**	**ln(x)**	**ShapiroWilk**
Copper (mg/l)	GU-L	n/a	n/a	n/a	NP	NaN	18	0.001849	0.0006313	unknown	ShapiroWilk
Copper (mg/l)	GU-O	n/a	n/a	n/a	NP	NaN	9	0.001738	0.0001444	unknown	ShapiroWilk
Copper (mg/l)	GU-P	n/a	n/a	n/a	NP	NaN	7	0.0018	0	unknown	ShapiroWilk
Lead (mg/l)	**GU-1**	**Yes**	**0.00387**	**11/25/2020**	**NP**	**NaN**	**21**	**0.000...**	**0.0008005**	**ln(x)**	**ShapiroWilk**
Lead (mg/l)	**GU-L**	**Yes**	**0.00125...**	**4/19/2018,10/11/2022**	**NP**	**NaN**	**19**	**0.000...**	**0.0003248**	**ln(x)**	**ShapiroWilk**
Lead (mg/l)	GU-O	n/a	n/a	n/a	NP	NaN	9	0.00024	0.0000...	unknown	ShapiroWilk
Lead (mg/l)	GU-P	n/a	n/a	n/a	NP	NaN	7	0.000...	0.0001071	unknown	ShapiroWilk
Nickel (mg/l)	GU-1	No	n/a	n/a	NP	NaN	22	0.04825	0.008165	x^2	ShapiroWilk
Nickel (mg/l)	GU-L	No	n/a	n/a	NP	NaN	19	0.004318	0.002731	x^(1/3)	ShapiroWilk
Nickel (mg/l)	GU-O	n/a	n/a	n/a	NP	NaN	9	0.001822	0.0003153	unknown	ShapiroWilk
Nickel (mg/l)	GU-P	No	n/a	n/a	NP	NaN	7	0.001941	0.0000...	ln(x)	ShapiroWilk
Selenium (mg/l)	**GU-1**	**Yes**	**0.00334...**	**10/13/2015,4/19/2023**	**NP**	**NaN**	**21**	**0.001205**	**0.000675**	**ln(x)**	**ShapiroWilk**
Selenium (mg/l)	**GU-L**	**Yes**	**0.00334**	**10/13/2015**	**NP**	**NaN**	**18**	**0.001128**	**0.0005928**	**ln(x)**	**ShapiroWilk**
Selenium (mg/l)	GU-O	n/a	n/a	n/a	NP	NaN	9	0.0011	0.0002258	unknown	ShapiroWilk
Selenium (mg/l)	GU-P	n/a	n/a	n/a	NP	NaN	7	0.001251	0.0004356	unknown	ShapiroWilk
Silver (mg/l)	GU-1	No	n/a	n/a	NP	NaN	22	0.000...	0.0002572	ln(x)	ShapiroWilk
Silver (mg/l)	GU-L	n/a	n/a	n/a	NP	NaN	18	0.000...	0.0001504	unknown	ShapiroWilk
Silver (mg/l)	GU-O	n/a	n/a	n/a	NP	NaN	9	0.000...	0.0000...	unknown	ShapiroWilk
Silver (mg/l)	GU-P	n/a	n/a	n/a	NP	NaN	8	0.000...	0.0003167	unknown	ShapiroWilk
Thallium (mg/l)	GU-1	No	n/a	n/a	NP	NaN	22	0.000...	0.0004099	ln(x)	ShapiroWilk
Thallium (mg/l)	GU-L	n/a	n/a	n/a	NP	NaN	18	0.000...	0.0001333	unknown	ShapiroWilk

Outlier Analysis

Linn County Data: CRLCSWA_Groundwater Database Printed 5/10/2024, 3:26 PM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Thallium (mg/l)	GU-O	n/a	n/a	n/a	NP	NaN	9	0.000...	0.0001111	unknown	ShapiroWilk
Thallium (mg/l)	**GU-P**	**Yes**	**0.00249**	**4/19/2023**	**NP**	**NaN**	**8**	**0.000...**	**0.0007803**	**ln(x)**	**ShapiroWilk**
Vanadium (mg/l)	GU-1	No	n/a	n/a	NP	NaN	21	0.000...	0.0005316	ln(x)	ShapiroWilk
Vanadium (mg/l)	**GU-L**	**Yes**	**0.00646**	**4/19/2018**	**NP**	**NaN**	**18**	**0.001227**	**0.001397**	**ln(x)**	**ShapiroWilk**
Vanadium (mg/l)	GU-O	n/a	n/a	n/a	NP	NaN	9	0.001036	0.0001933	unknown	ShapiroWilk
Vanadium (mg/l)	GU-P	n/a	n/a	n/a	NP	NaN	7	0.00119	0.0002381	unknown	ShapiroWilk
Zinc (mg/l)	**GU-1**	**Yes**	**0.115**	**10/19/2023**	**NP**	**NaN**	**22**	**0.01594**	**0.02249**	**ln(x)**	**ShapiroWilk**
Zinc (mg/l)	**GU-L**	**Yes**	**0.0426**	**10/11/2022**	**NP**	**NaN**	**19**	**0.01159**	**0.008049**	**ln(x)**	**ShapiroWilk**
Zinc (mg/l)	GU-O	n/a	n/a	n/a	NP	NaN	9	0.009167	0.001572	unknown	ShapiroWilk
Zinc (mg/l)	GU-P	n/a	n/a	n/a	NP	NaN	7	0.008929	0.001731	unknown	ShapiroWilk

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Underdrain Inorganic Flagged Outliers – Spring 2024

Flagged Outliers

Linn County Data: CRLCSWA_Groundwater Database Printed 5/10/2024, 3:27 PM

	GU-L Arsenic (mg/l)	GU-L Cadmium (mg/l)	GU-1 Copper (mg/l)	GU-1 Lead (mg/l)	GU-L Lead (mg/l)	GU-1 Selenium (mg/l)	GU-L Selenium (mg/l)	GU-1 Silver (mg/l)	GU-P Silver (mg/l)	GU-1 Thallium (mg/l)
10/13/2015						<0.00334 (o)	<0.00334 (o)			
4/8/2016						0.0008 (Jo)				
4/19/2018		0.000398 (Jo)			0.00125 (o)					
11/25/2020			0.00813 (o)	0.00387 (o)						
10/11/2022	0.0264 (o)				0.00125 (o)					
4/19/2023						0.00298 (Jo)		0.00141 (o)	0.00139 (o)	0.00198 (o)
10/19/2023										

	GU-P Thallium (mg/l)	GU-L Vanadium (mg/l)	GU-1 Zinc (mg/l)	GU-L Zinc (mg/l)
10/13/2015				
4/8/2016				
4/19/2018		0.00646 (o)		
11/25/2020				
10/11/2022		0.00255 (Jo)		0.0426 (o)
4/19/2023	0.00249 (o)			
10/19/2023			0.115 (o)	

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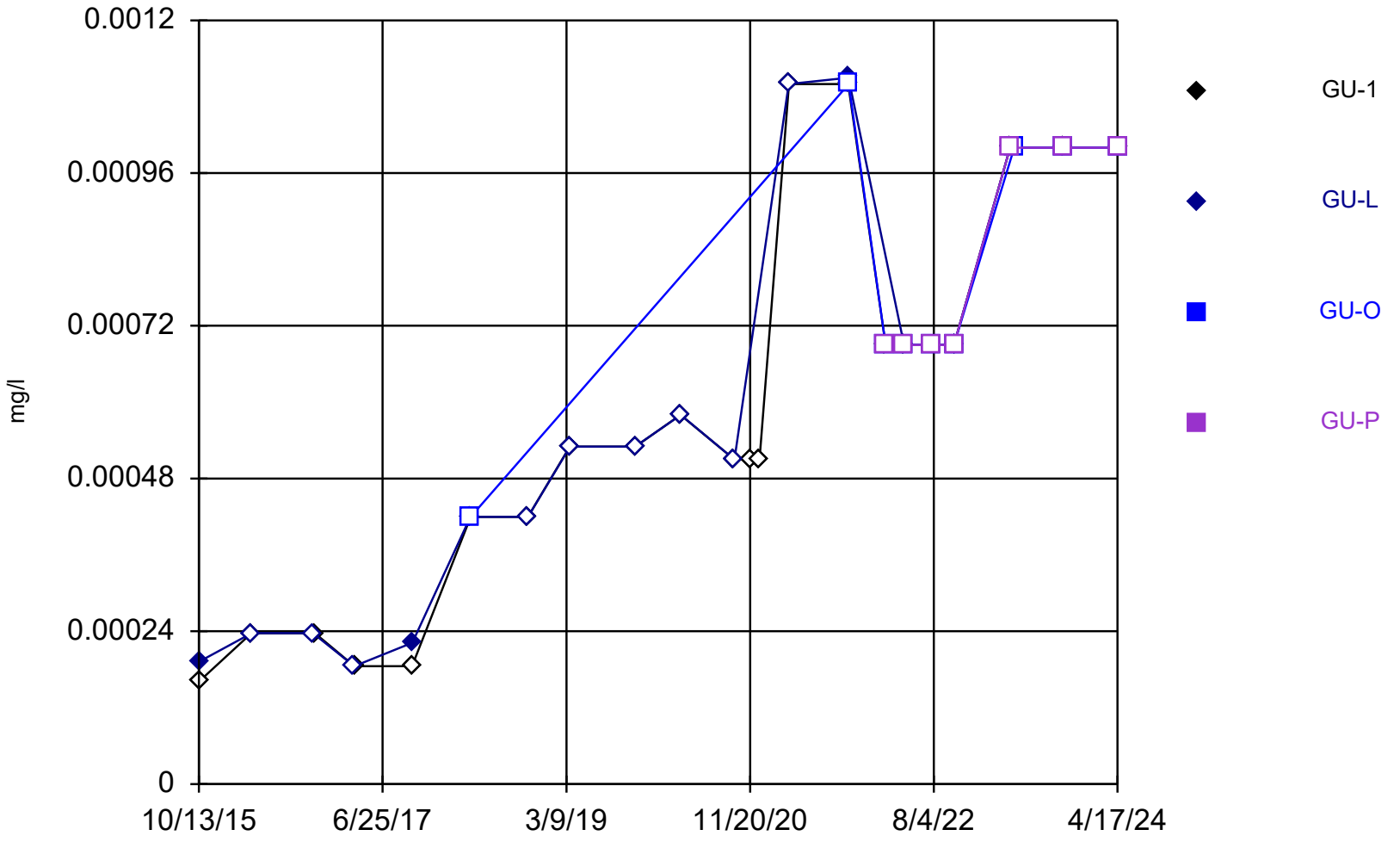
Underdrain Inorganic Time-Series – Spring 2024

Hollow symbols indicate censored values.

Time Series

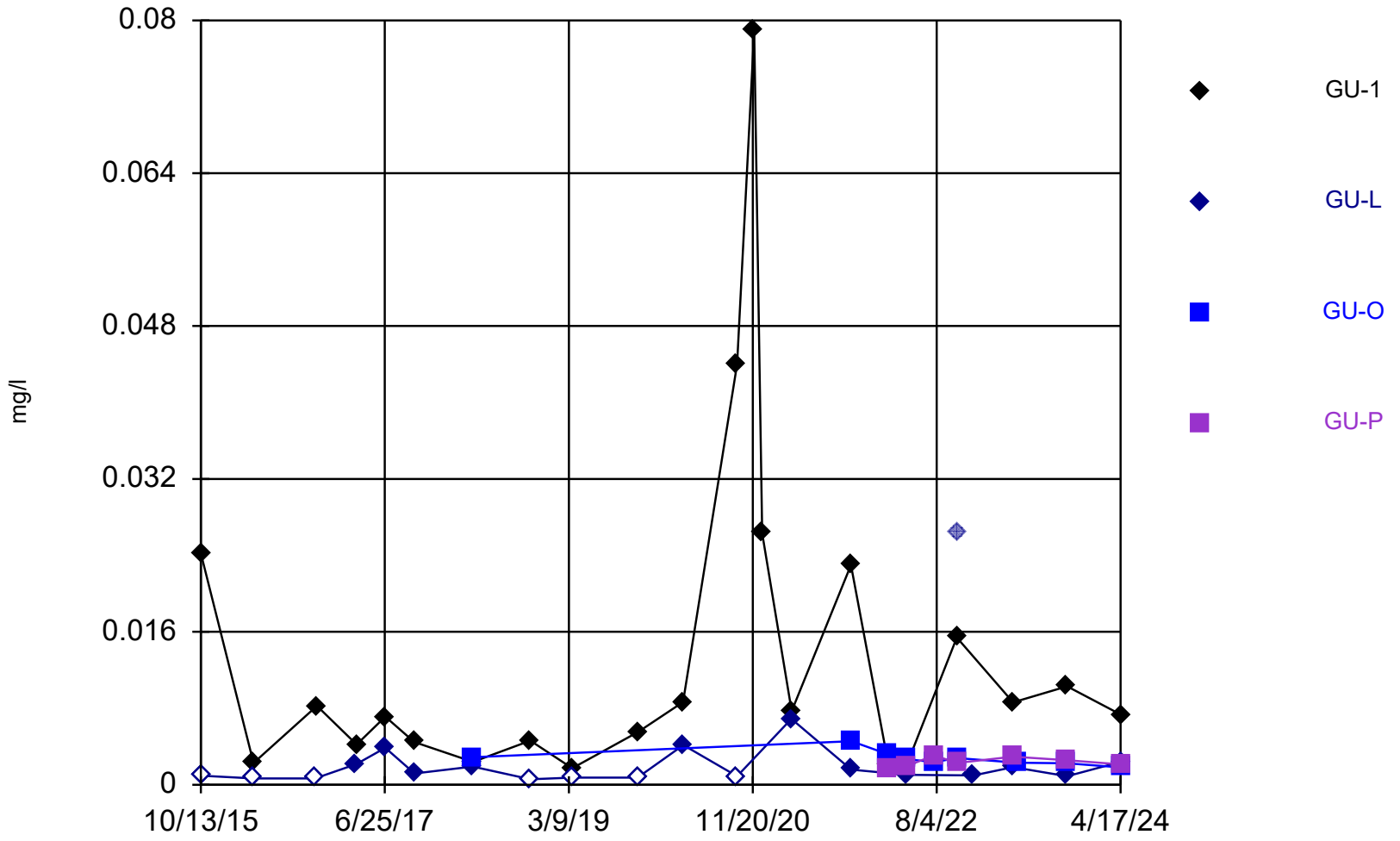


Constituent: Antimony Analysis Run 5/10/2024 3:29 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

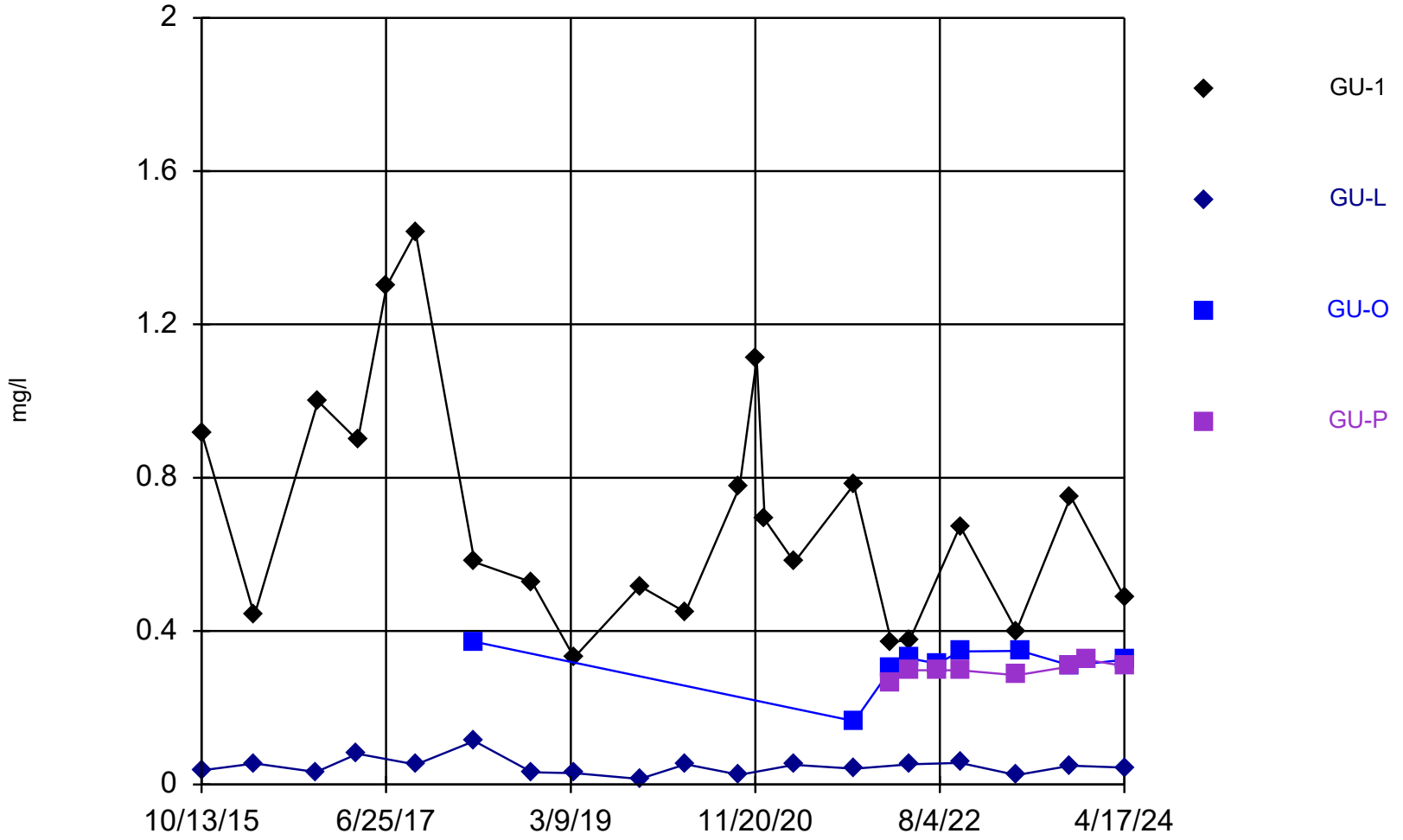
Time Series



Constituent: Arsenic Analysis Run 5/10/2024 3:29 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Time Series

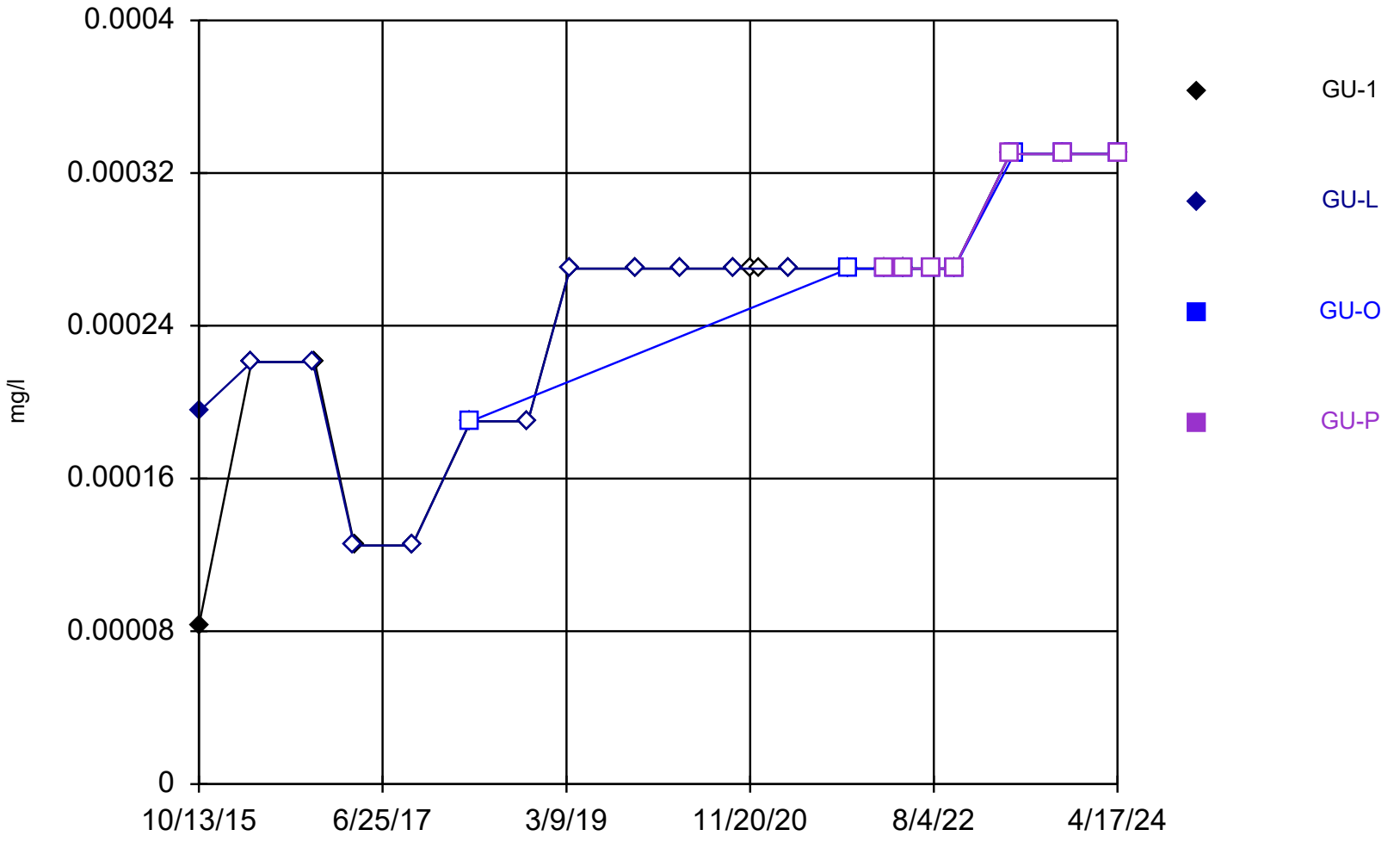


Constituent: Barium Analysis Run 5/10/2024 3:29 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

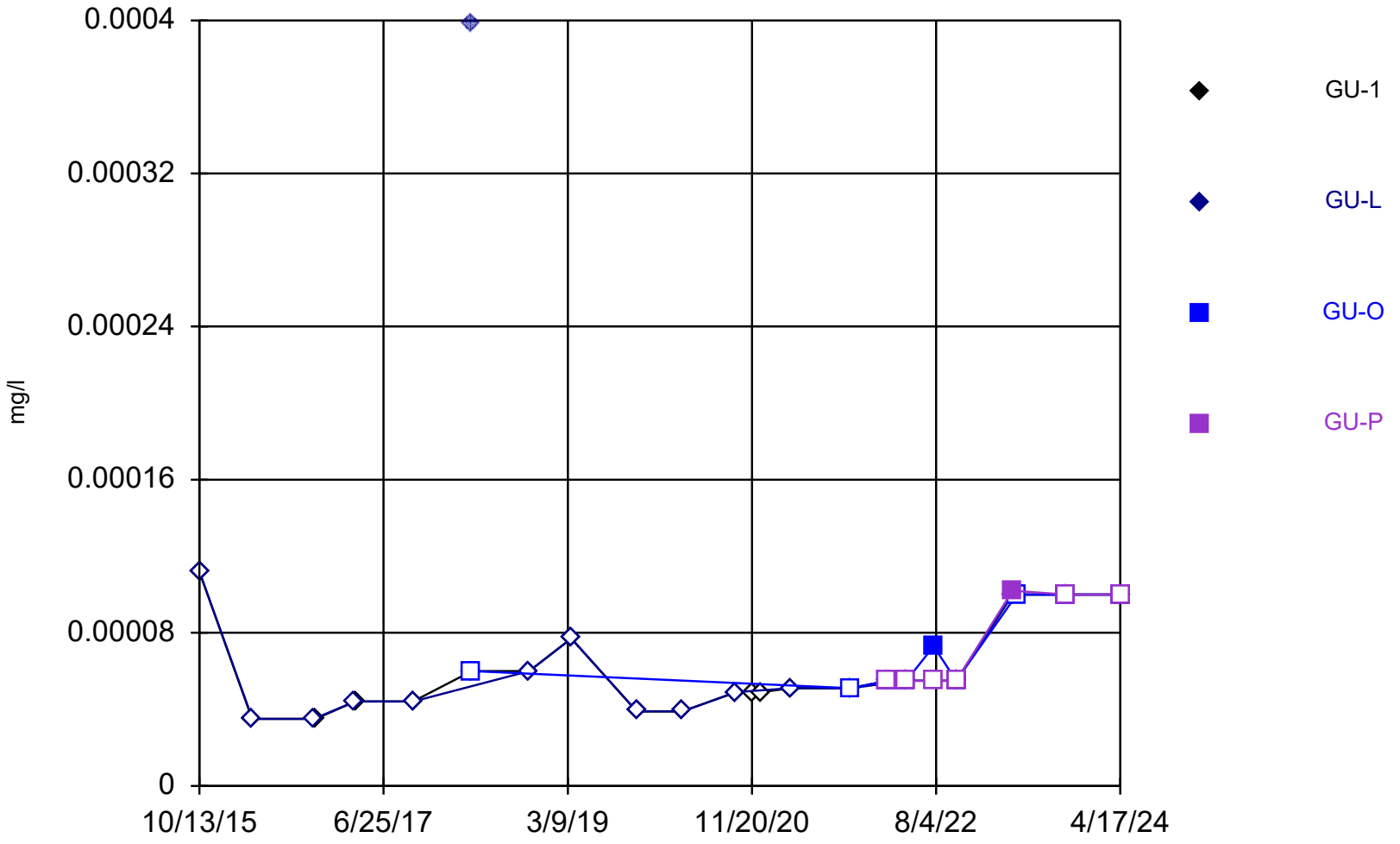


Constituent: Beryllium Analysis Run 5/10/2024 3:29 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

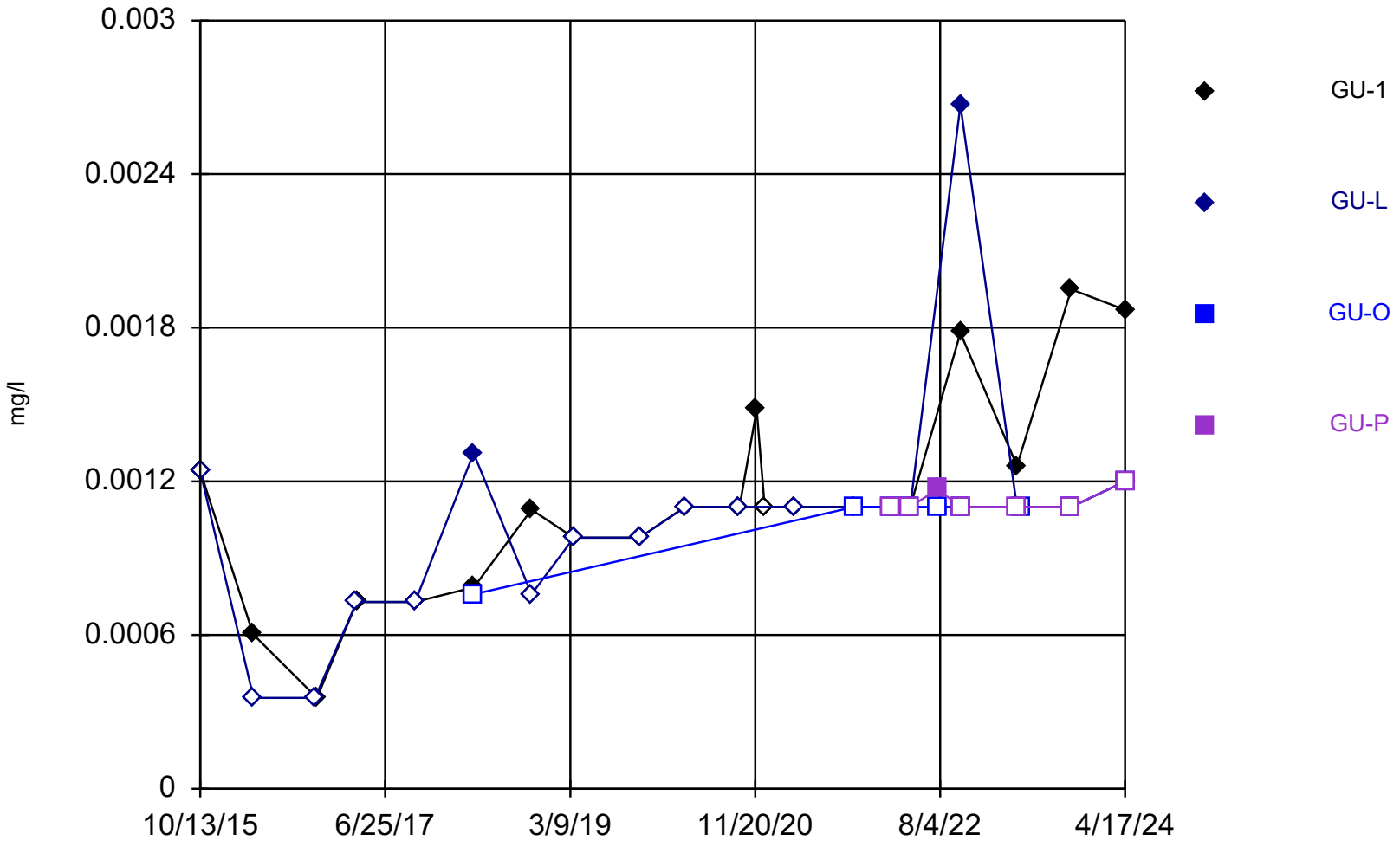


Constituent: Cadmium Analysis Run 5/10/2024 3:29 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

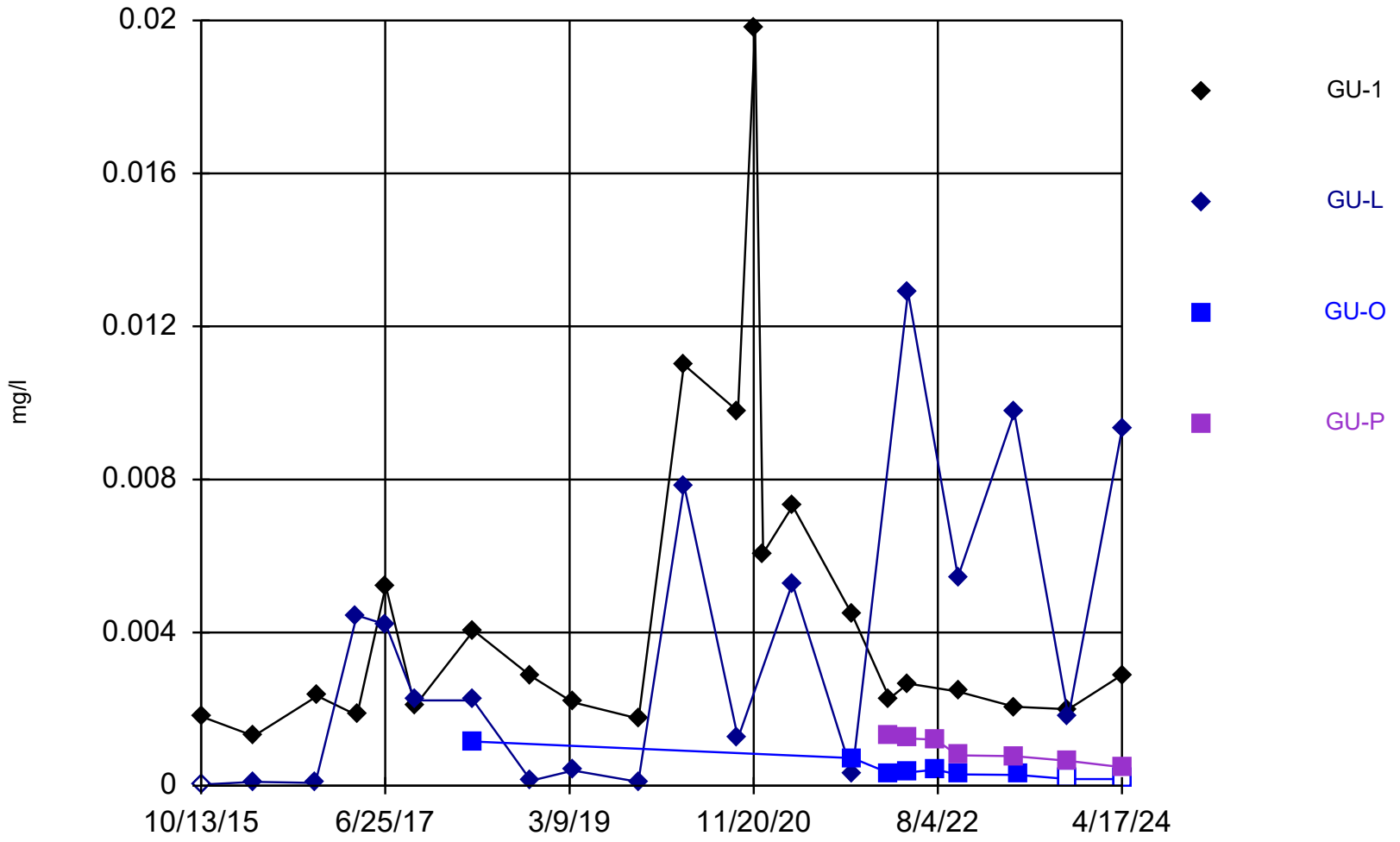


Constituent: Chromium Analysis Run 5/10/2024 3:29 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

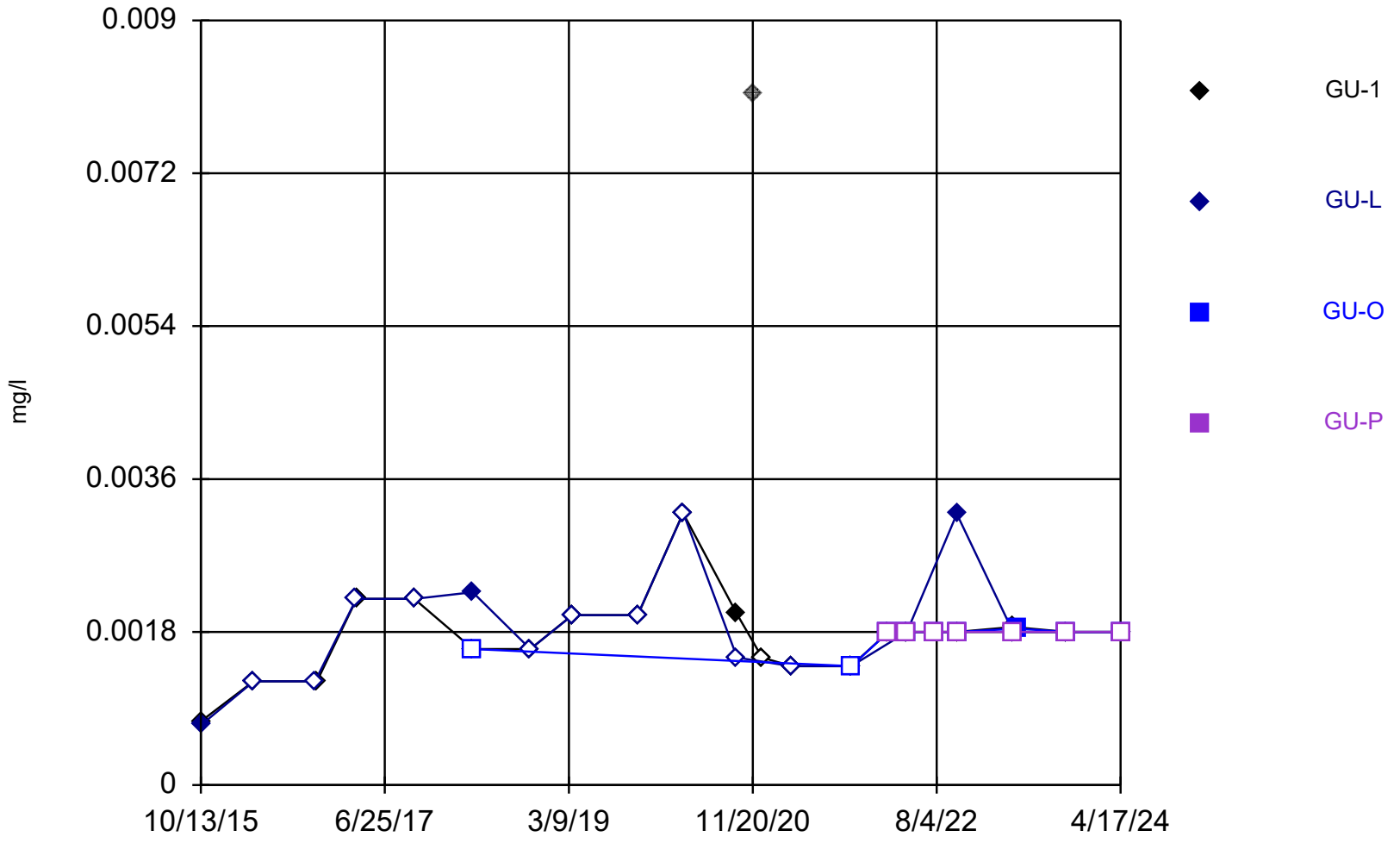


Constituent: Cobalt Analysis Run 5/10/2024 3:29 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

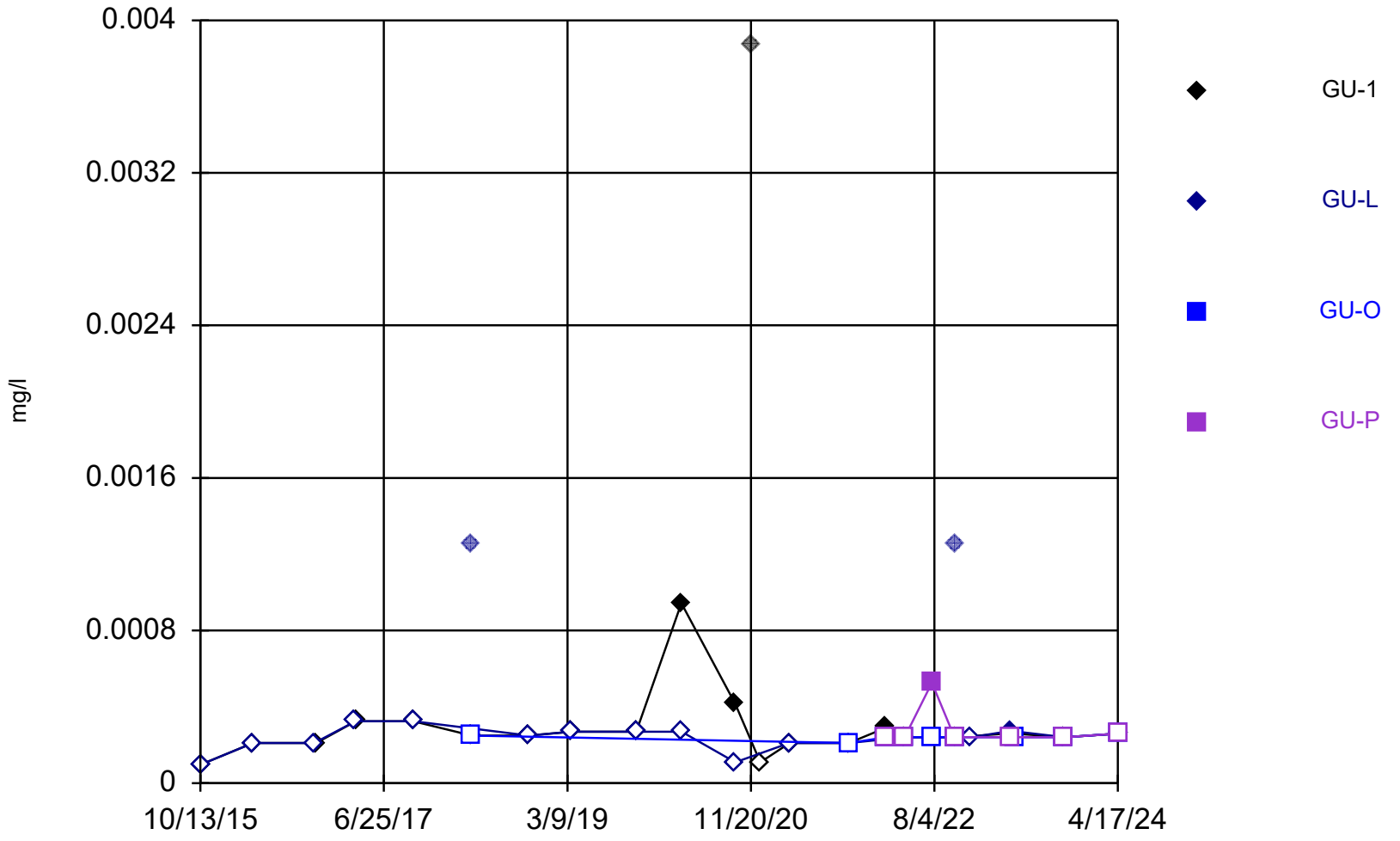


Constituent: Copper Analysis Run 5/10/2024 3:29 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

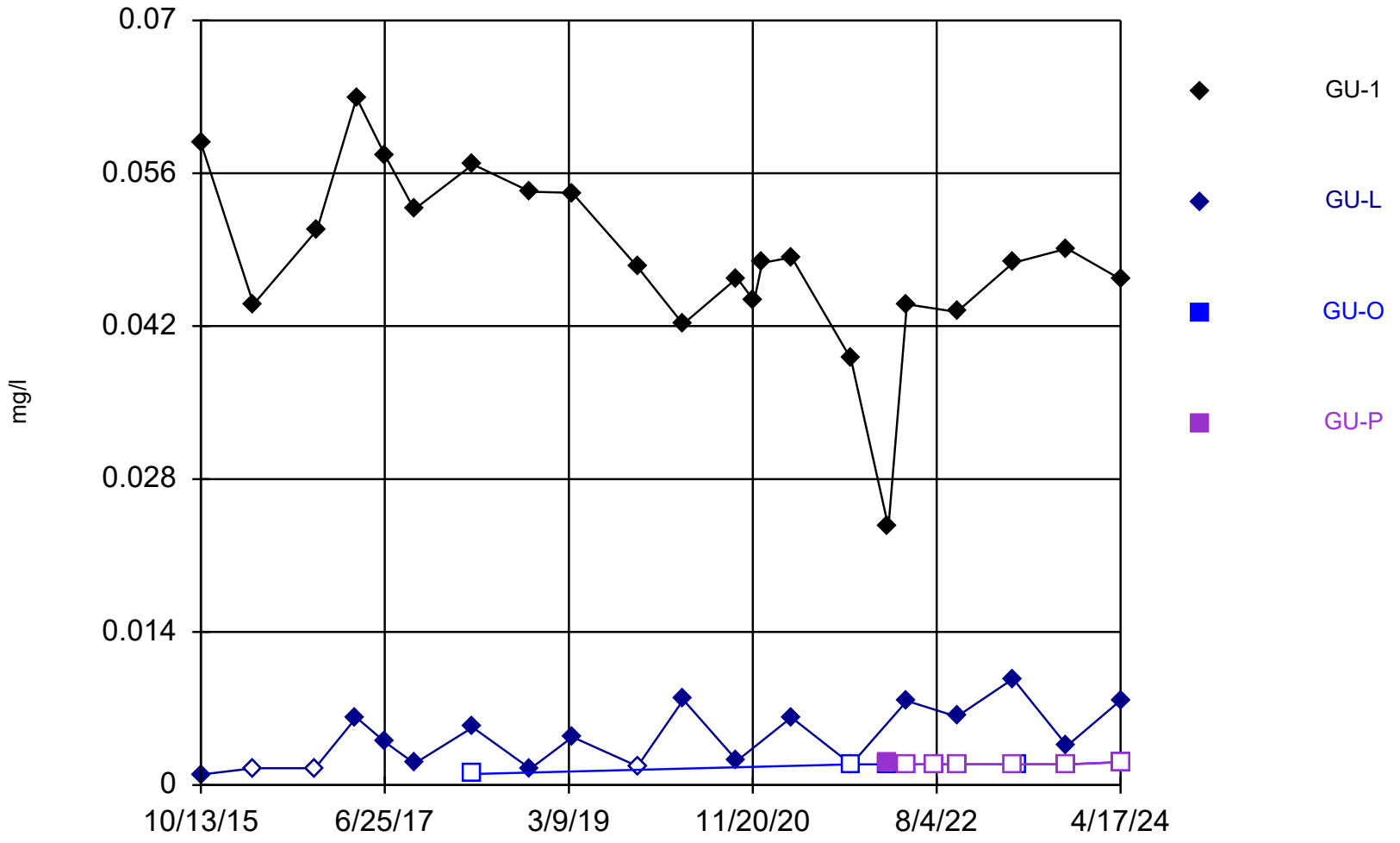


Constituent: Lead Analysis Run 5/10/2024 3:29 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

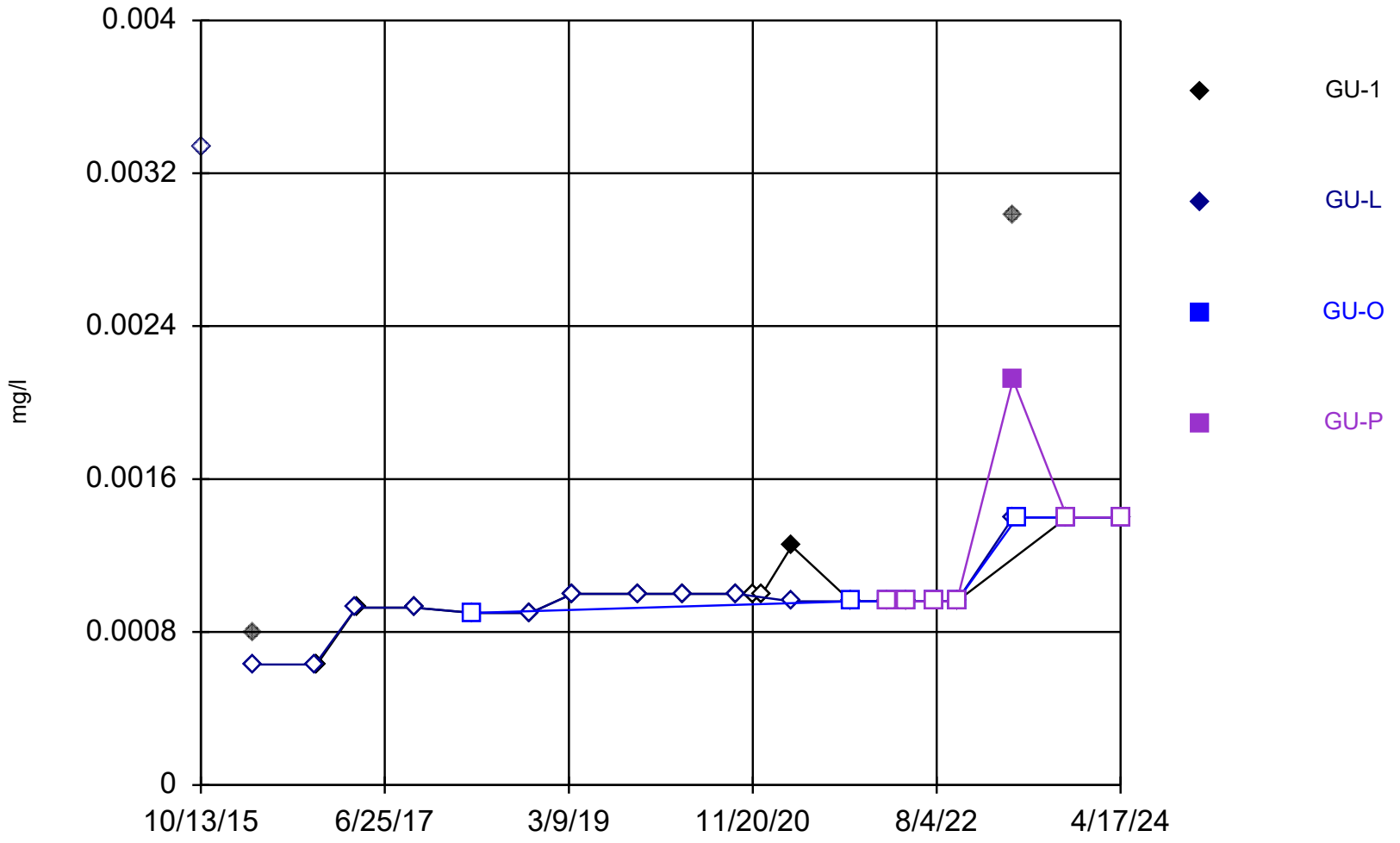


Constituent: Nickel Analysis Run 5/10/2024 3:29 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

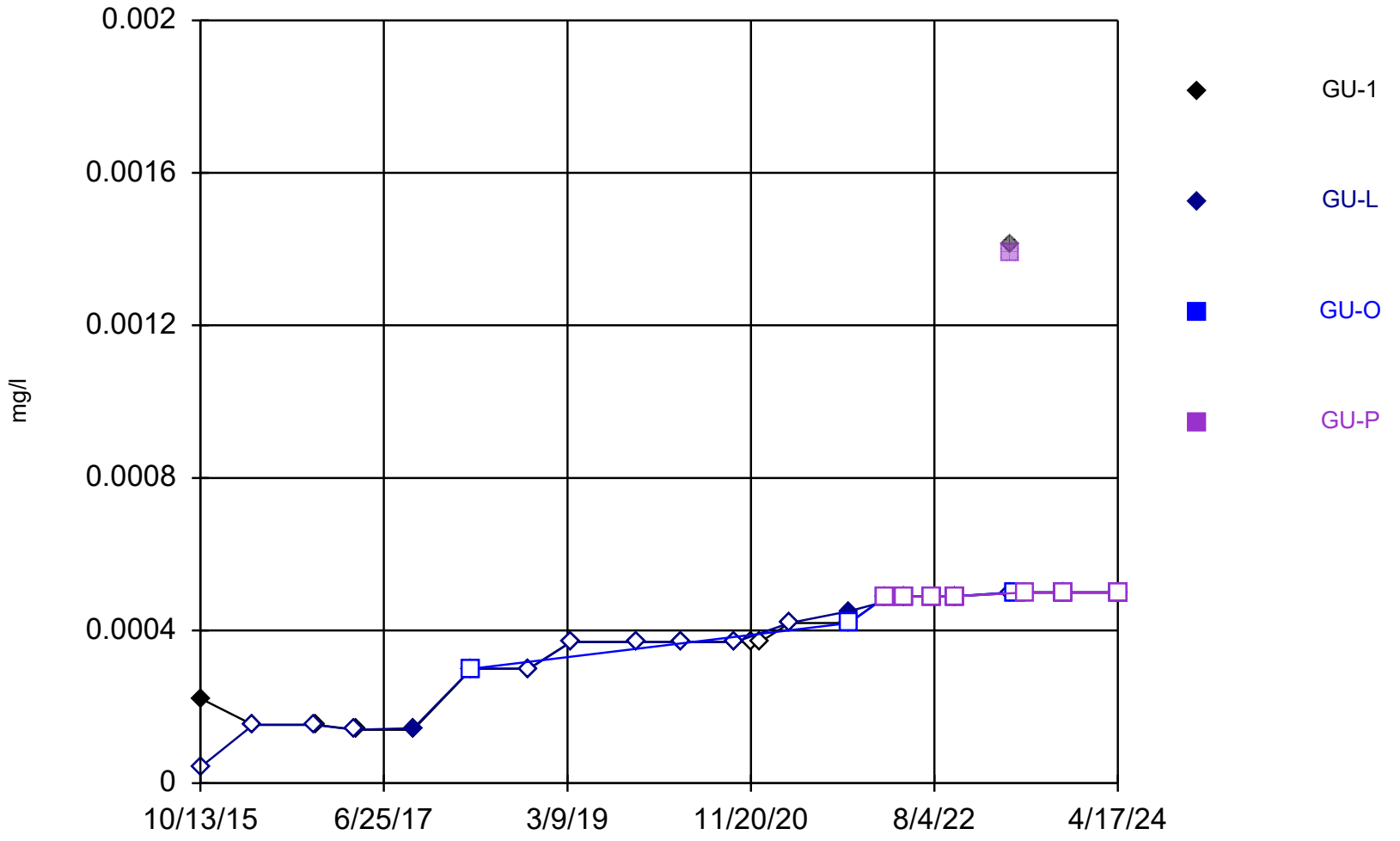


Constituent: Selenium Analysis Run 5/10/2024 3:29 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

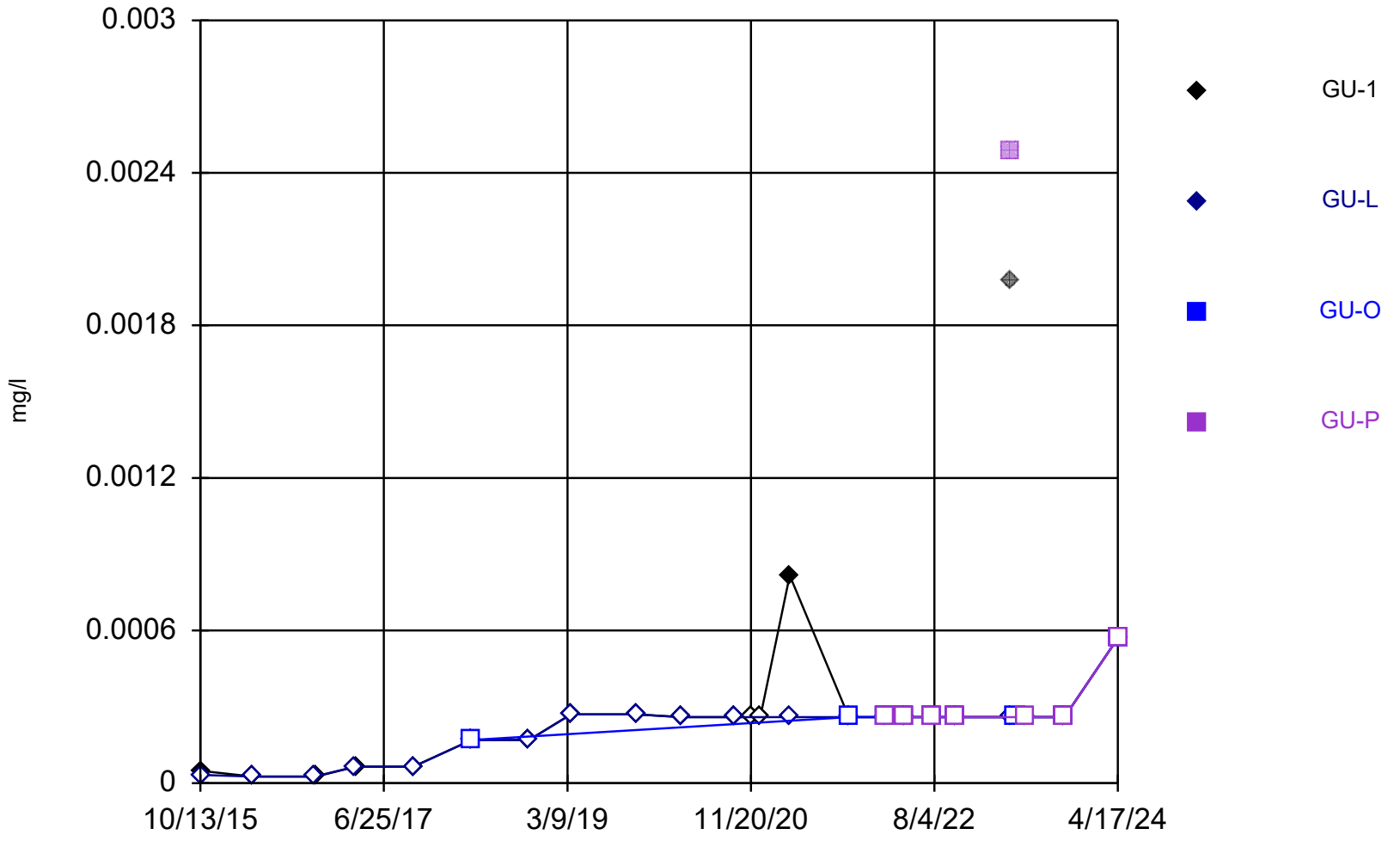


Constituent: Silver Analysis Run 5/10/2024 3:29 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

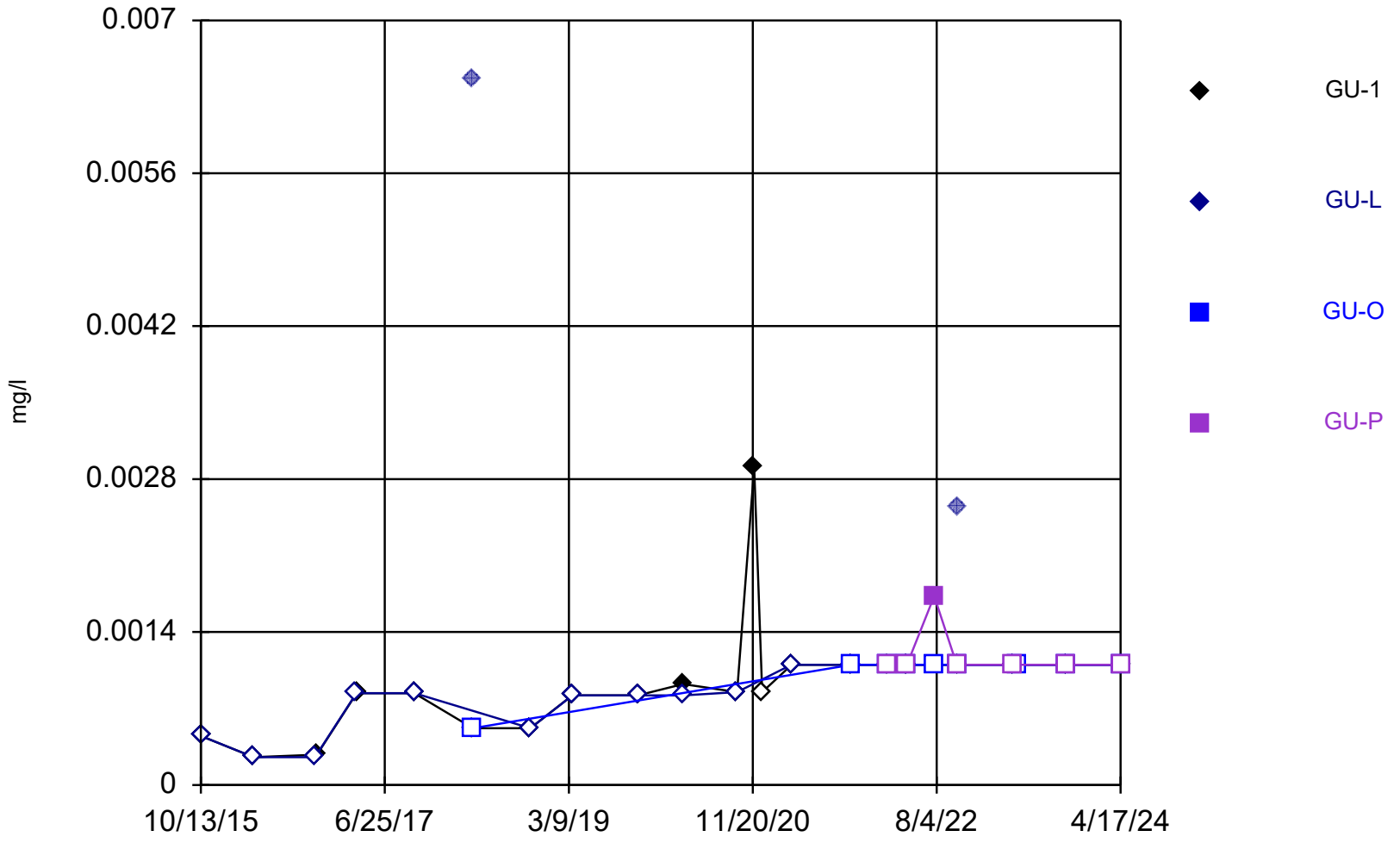


Constituent: Thallium Analysis Run 5/10/2024 3:29 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series

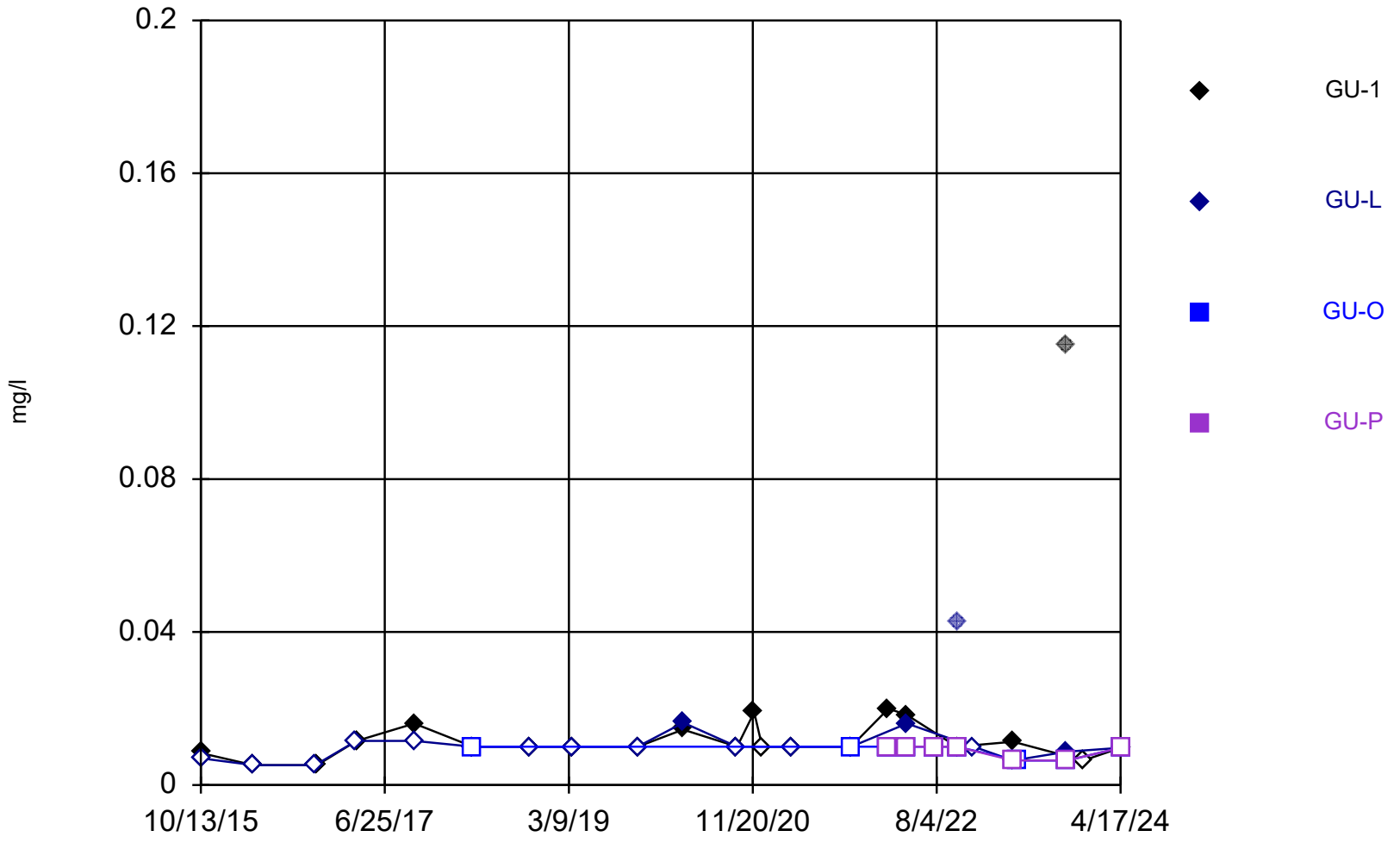


Constituent: Vanadium Analysis Run 5/10/2024 3:29 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Time Series



Constituent: Zinc Analysis Run 5/10/2024 3:29 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

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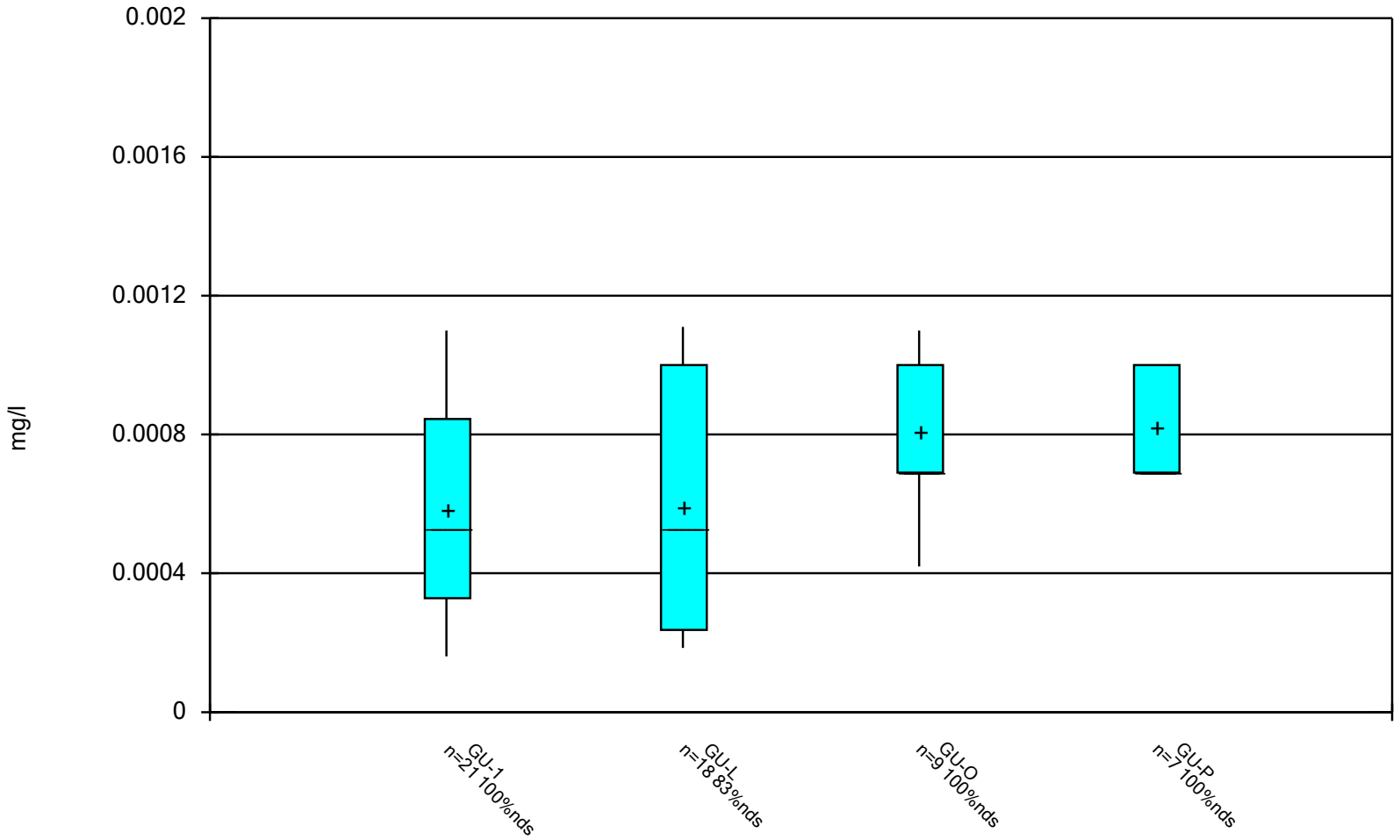
Underdrain Inorganic Box & Whiskers Plot – Spring 2024

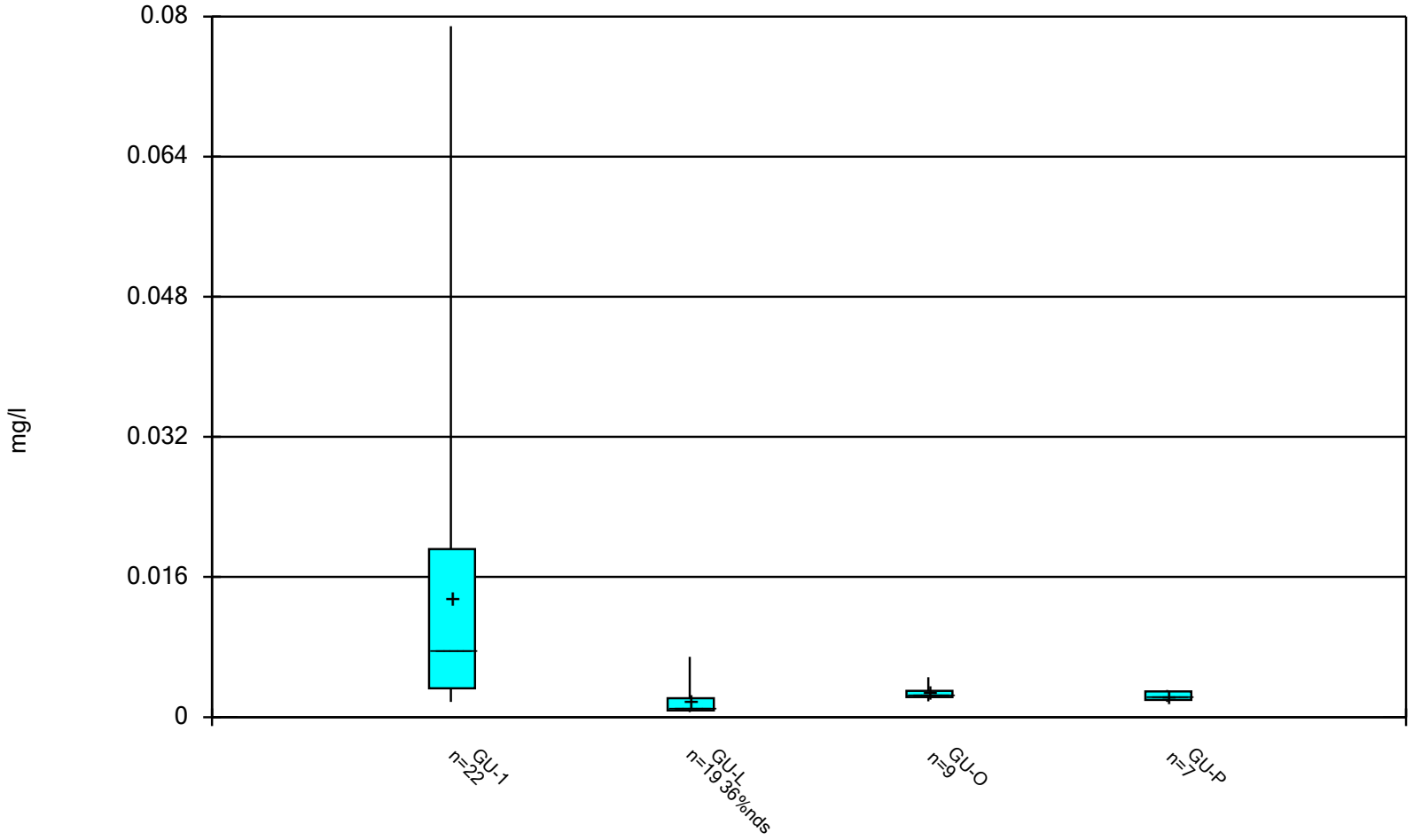
Box & Whiskers Plot



Constituent: Antimony Analysis Run 5/10/2024 3:30 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

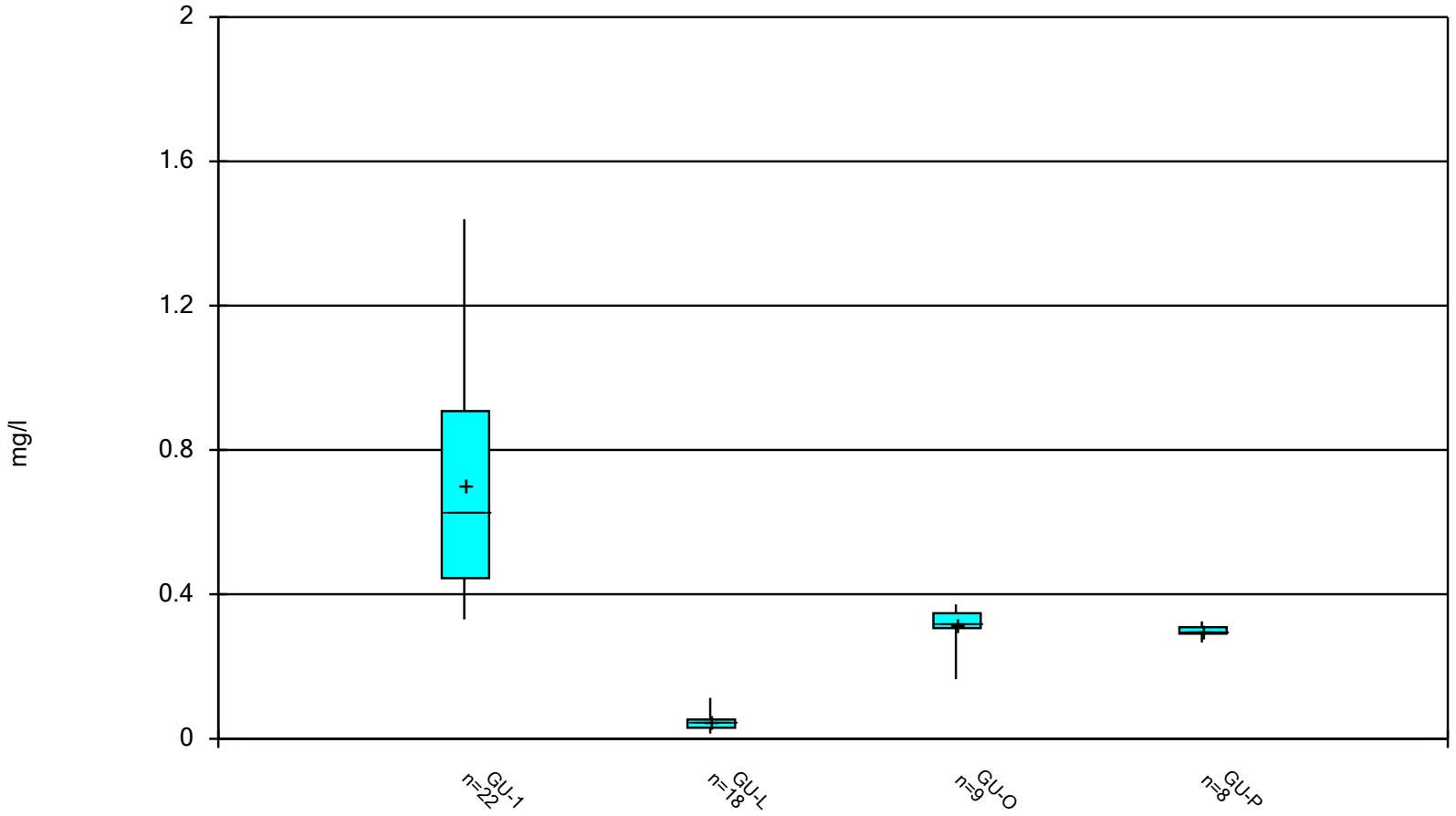
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 5/10/2024 3:30 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

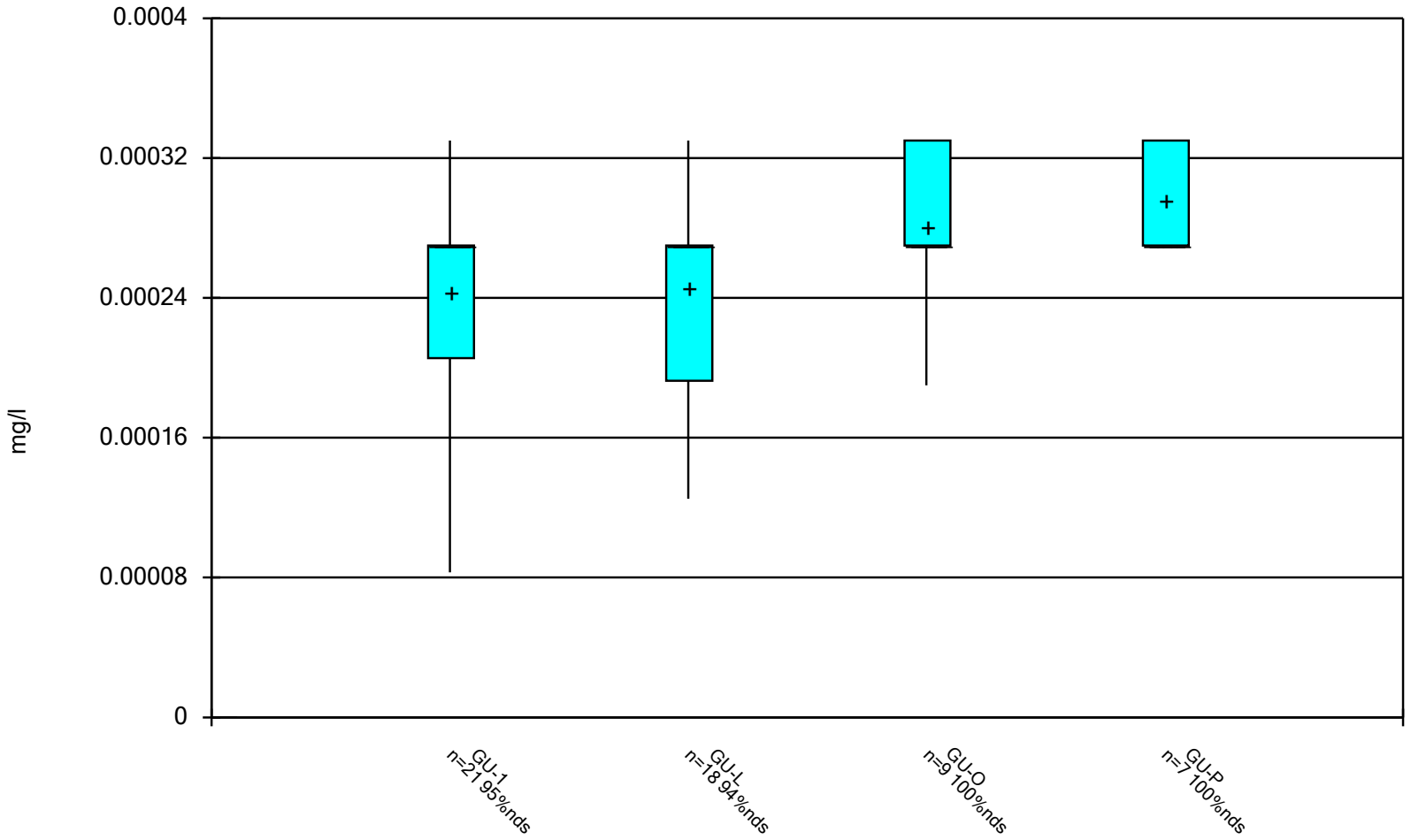
Box & Whiskers Plot



Constituent: Barium Analysis Run 5/10/2024 3:30 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

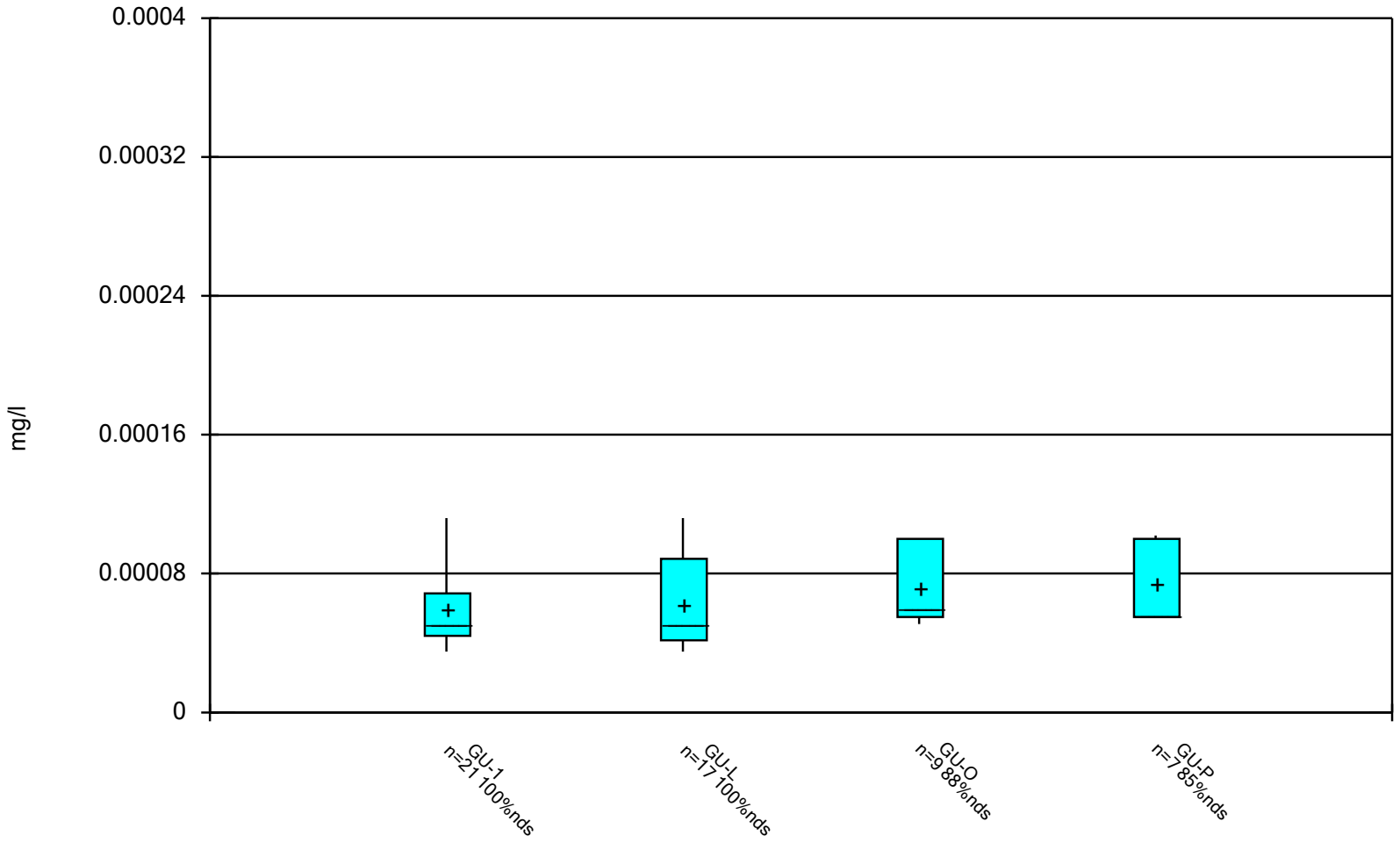
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 5/10/2024 3:30 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

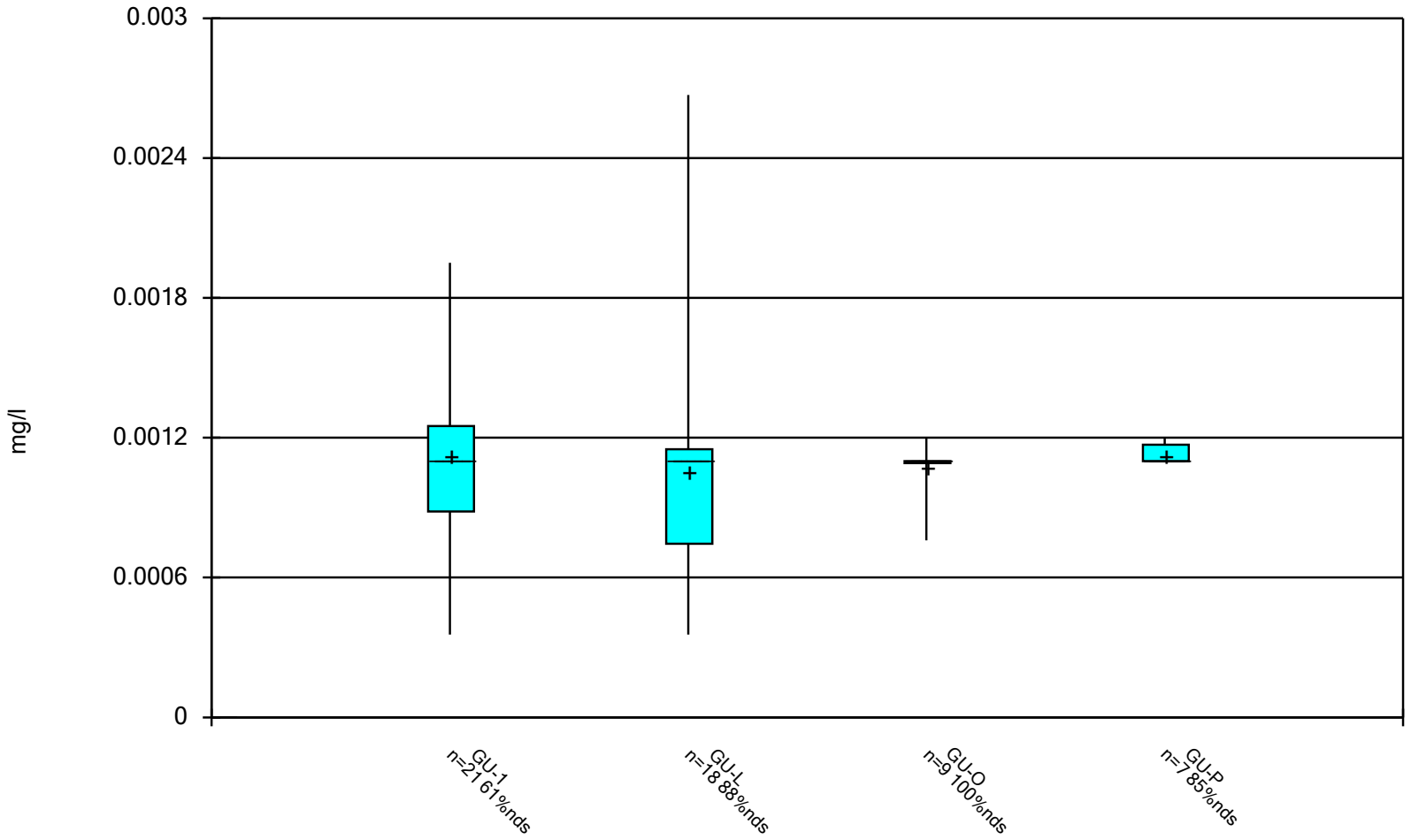
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 5/10/2024 3:30 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

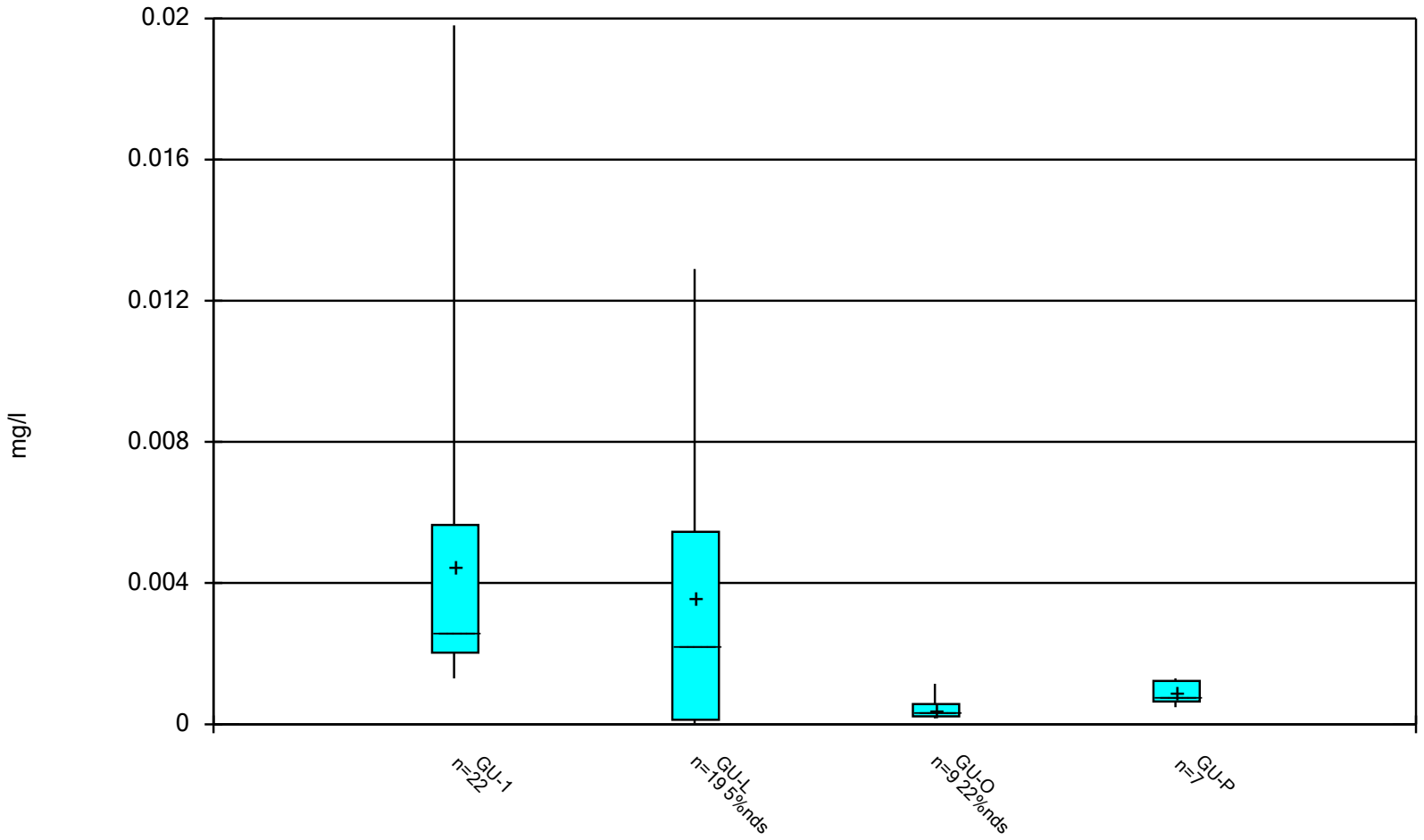
Box & Whiskers Plot



Constituent: Chromium Analysis Run 5/10/2024 3:31 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

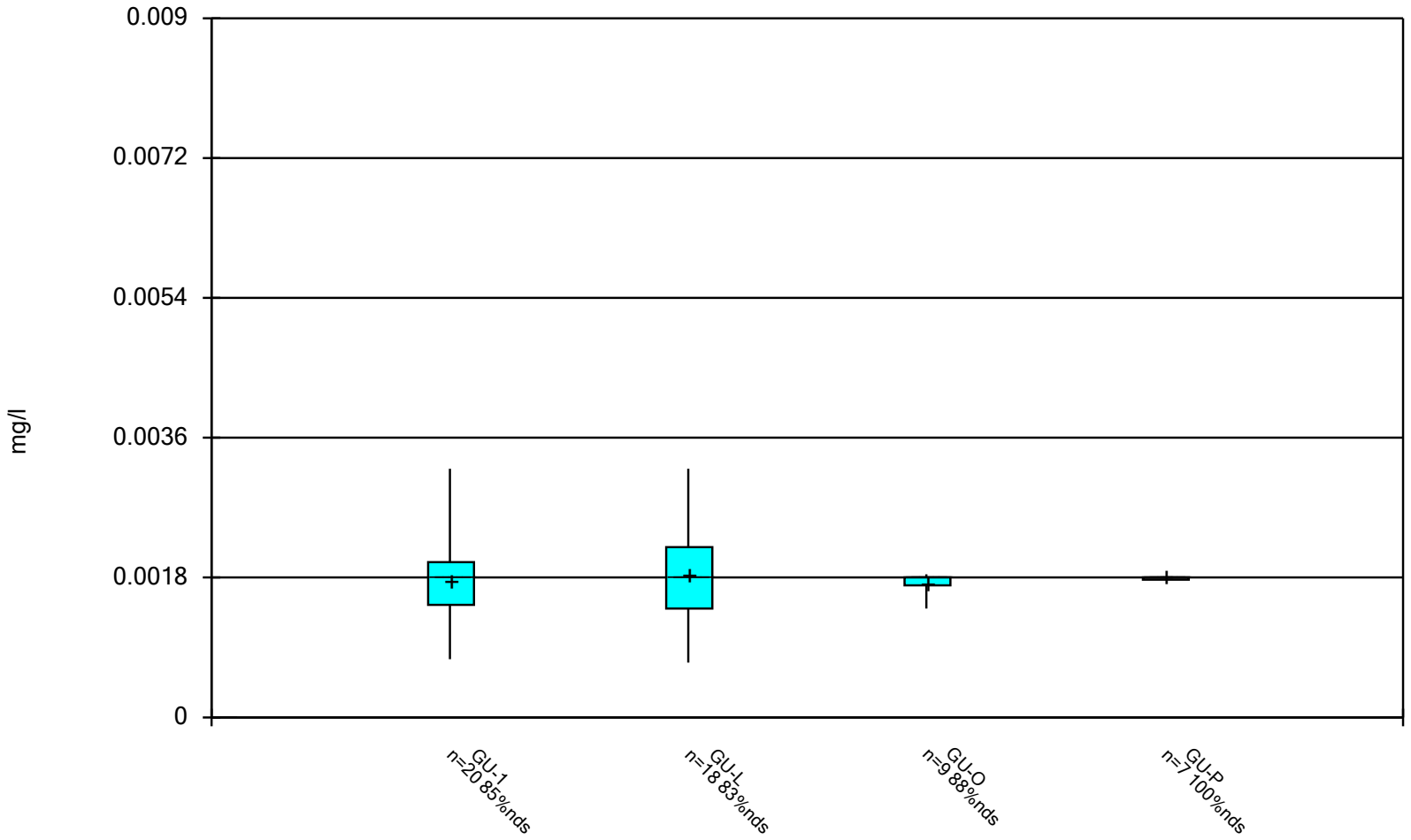
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 5/10/2024 3:31 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

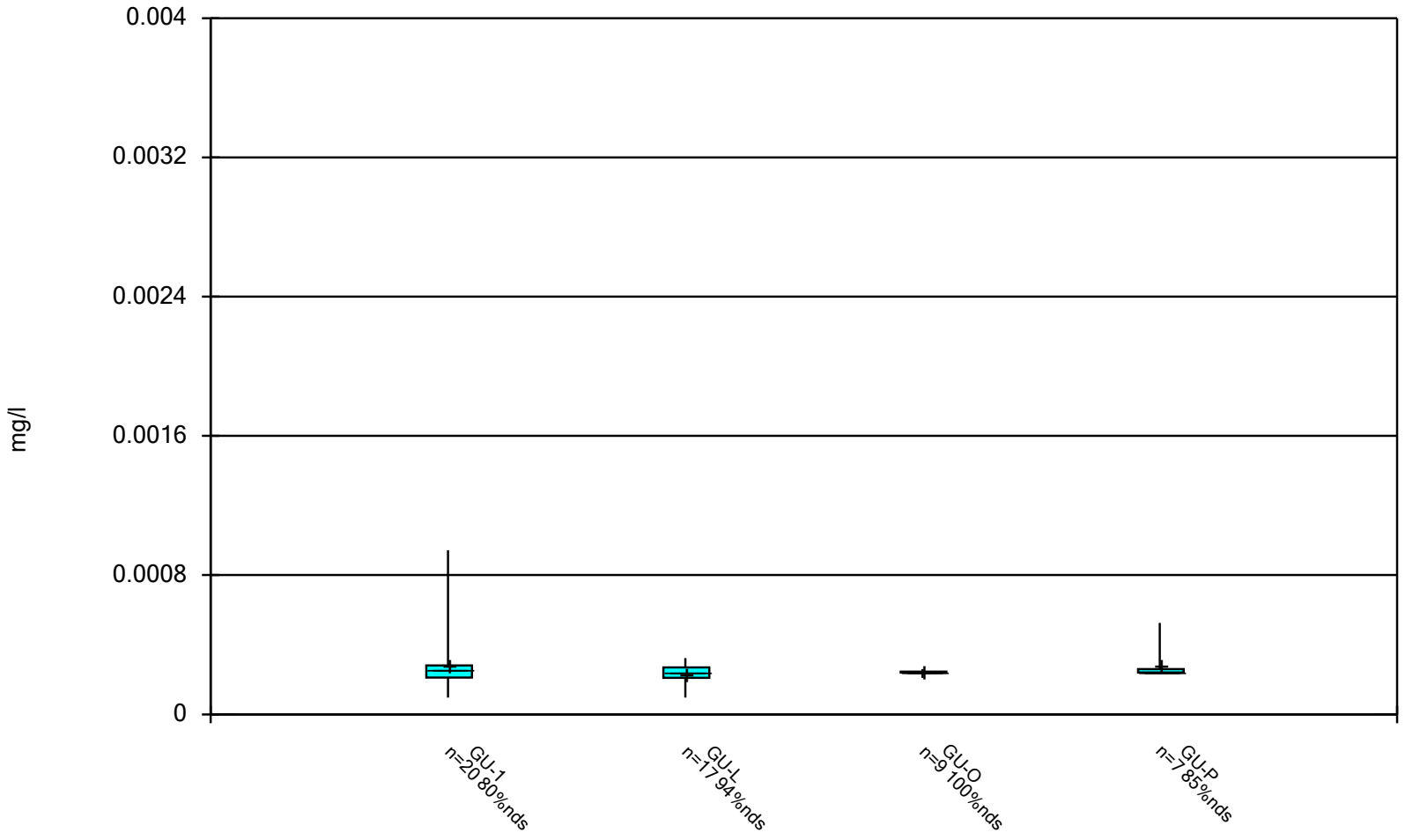
Box & Whiskers Plot



Constituent: Copper Analysis Run 5/10/2024 3:31 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

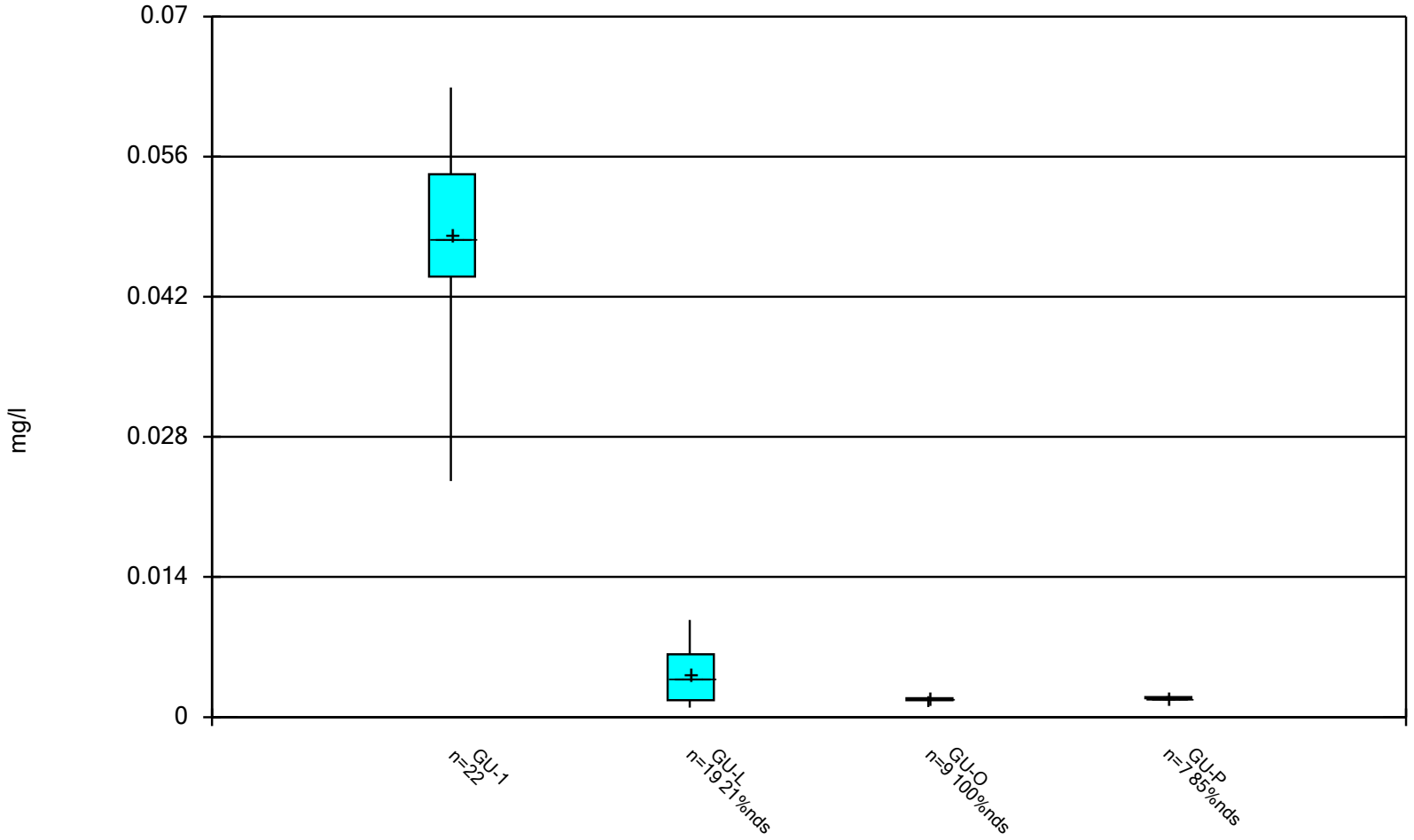
Box & Whiskers Plot



Constituent: Lead Analysis Run 5/10/2024 3:31 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

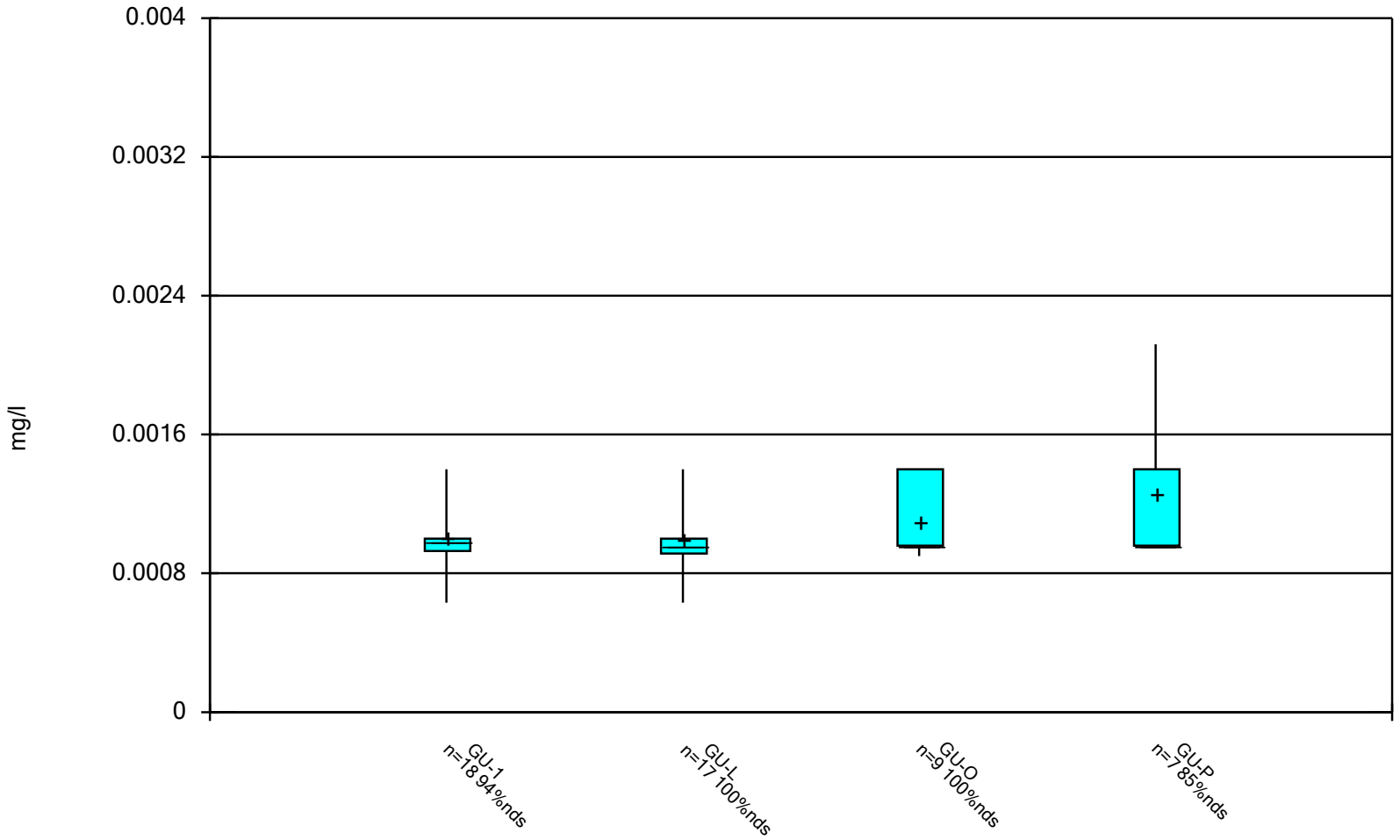
Box & Whiskers Plot



Constituent: Nickel Analysis Run 5/10/2024 3:31 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

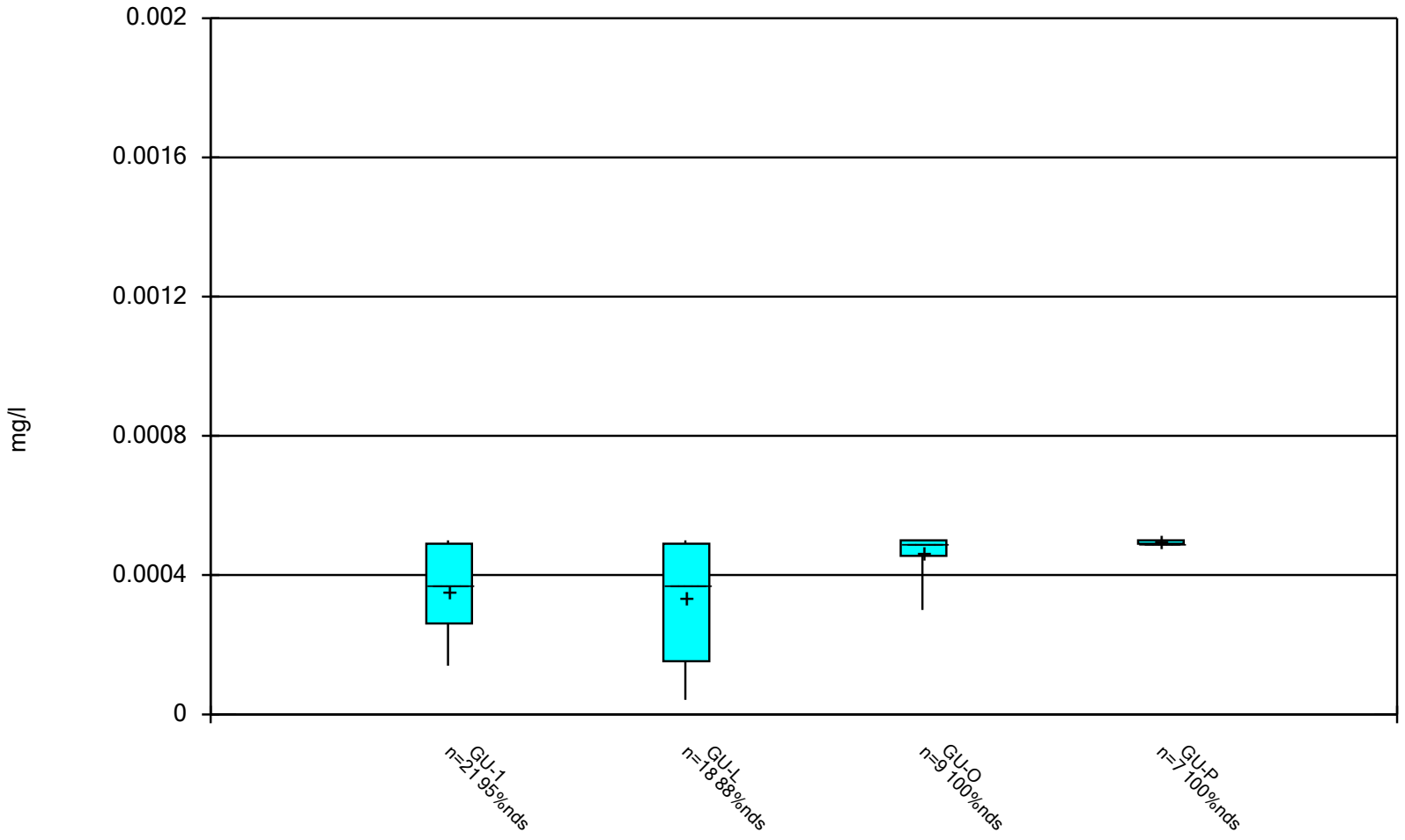
Box & Whiskers Plot



Constituent: Selenium Analysis Run 5/10/2024 3:31 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

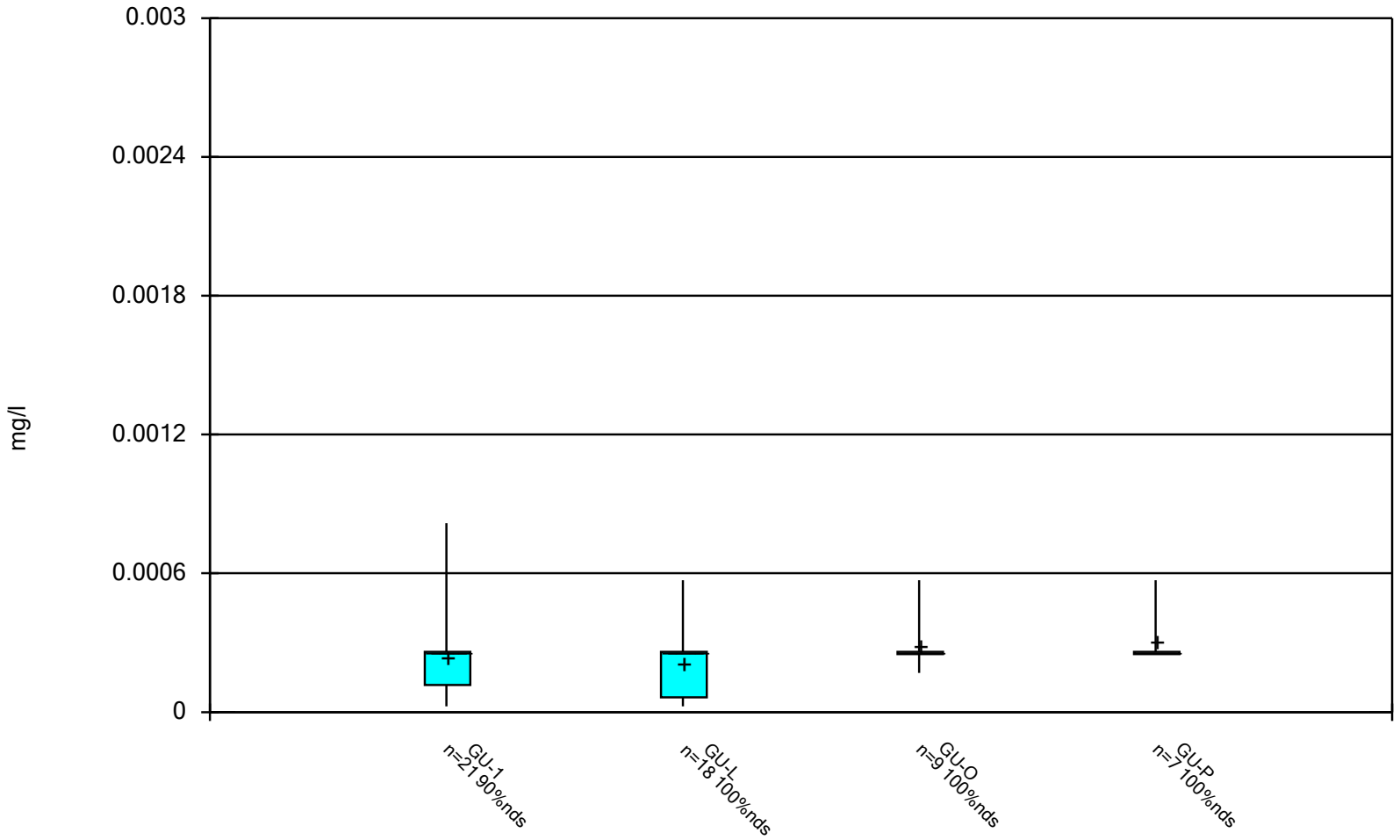
Box & Whiskers Plot



Constituent: Silver Analysis Run 5/10/2024 3:31 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

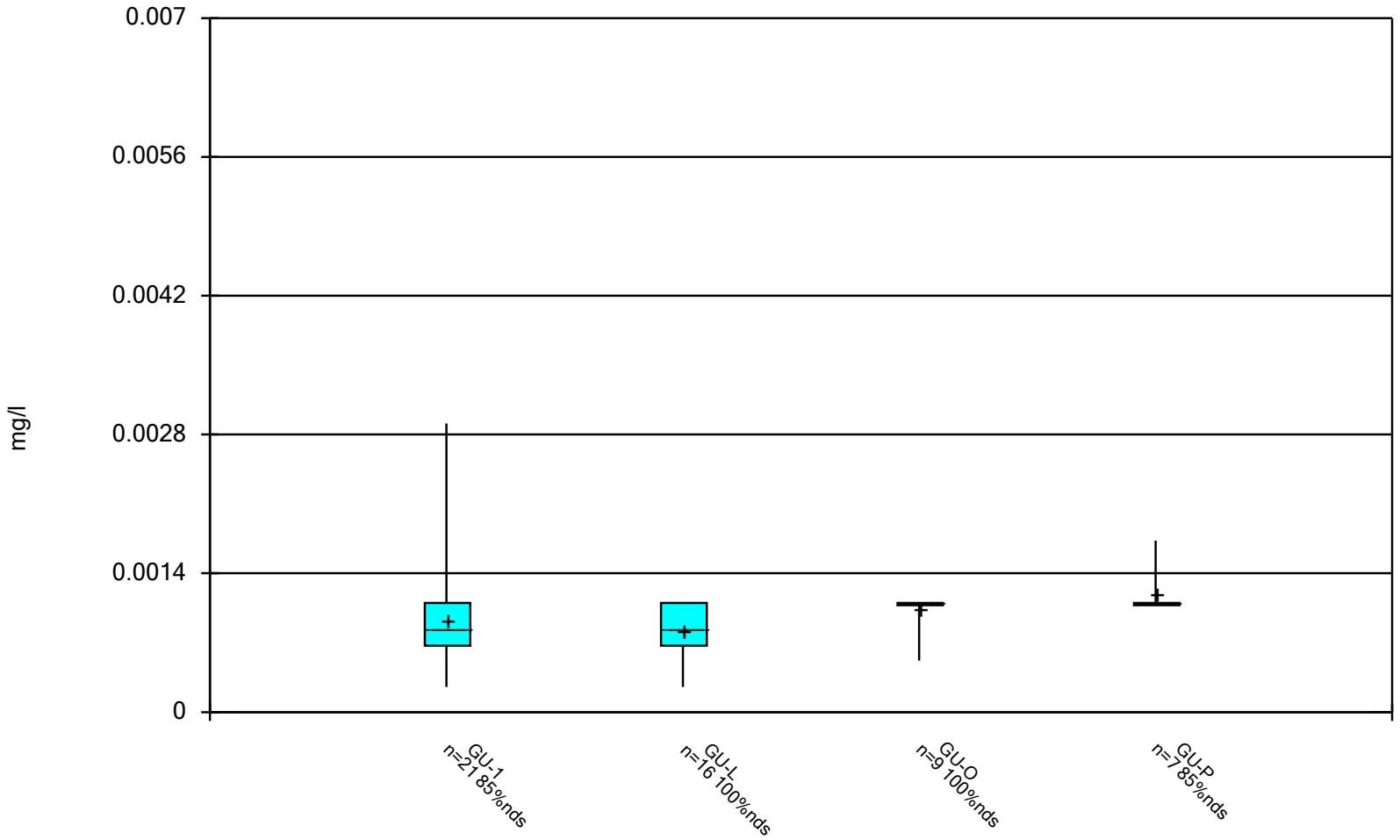
Box & Whiskers Plot



Constituent: Thallium Analysis Run 5/10/2024 3:31 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

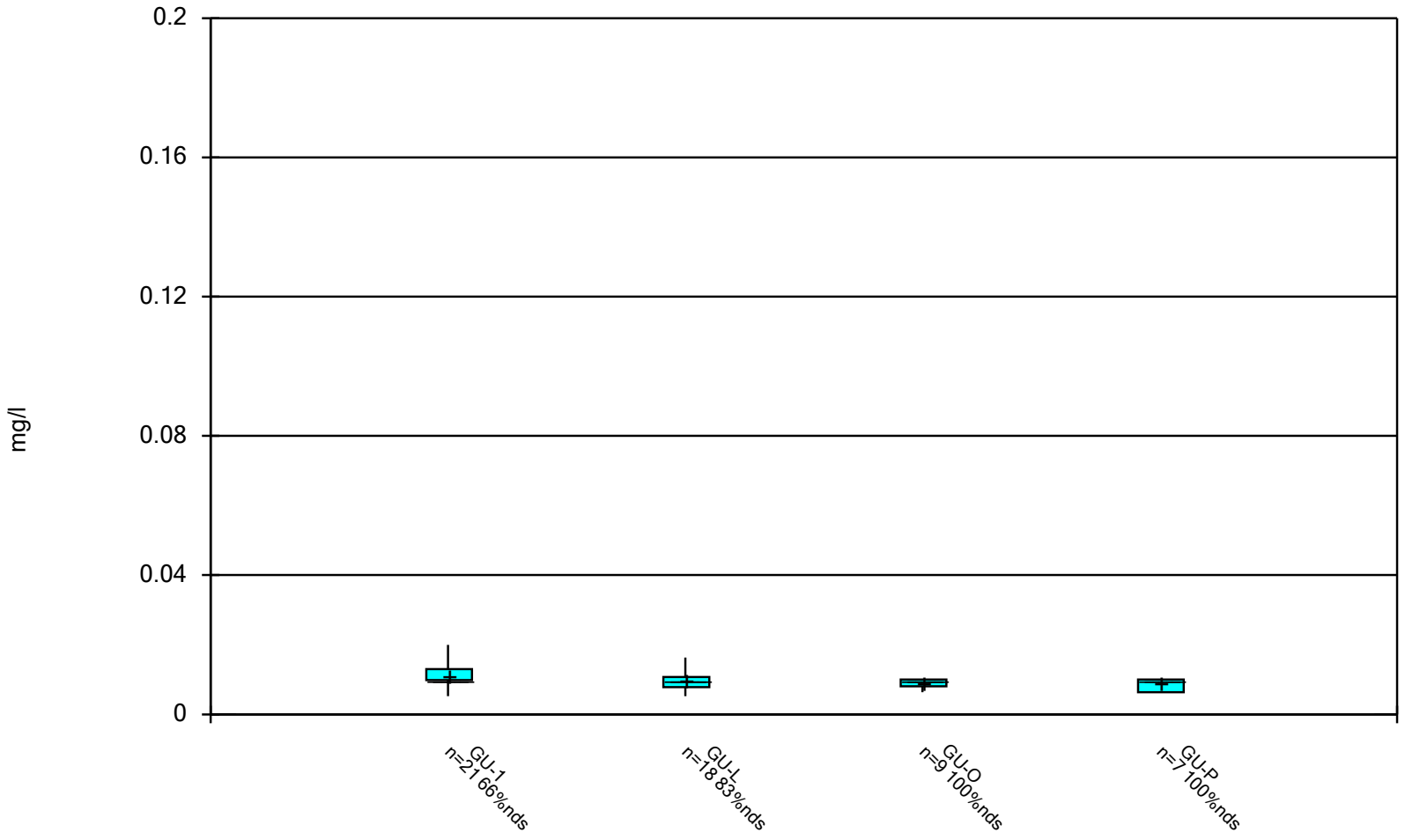
Box & Whiskers Plot



Constituent: Vanadium Analysis Run 5/10/2024 3:31 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot



Constituent: Zinc Analysis Run 5/10/2024 3:31 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Box & Whiskers Plot

Linn County Data: CRLCSWA_Groundwater Database Printed 5/10/2024, 3:31 PM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Lower Q.	Upper Q.	Min.	Max.	%NDs
Antimony (mg/l)	GU-1	21	0.000585	0.0003082	0.0000...	0.00053	0.0003285	0.000845	0.000161	0.0011	100
Antimony (mg/l)	GU-L	18	0.0005918	0.0003284	0.0000774	0.00053	0.000237	0.001	0.000185	0.00111	83.33
Antimony (mg/l)	GU-O	9	0.0008089	0.0002242	0.0000...	0.00069	0.00069	0.001	0.00042	0.0011	100
Antimony (mg/l)	GU-P	7	0.0008229	0.0001657	0.0000...	0.00069	0.00069	0.001	0.00069	0.001	100
Arsenic (mg/l)	GU-1	22	0.0136	0.01791	0.003818	0.007525	0.00329	0.0192	0.00173	0.0789	0
Arsenic (mg/l)	GU-L	19	0.001795	0.001608	0.0003689	0.00104	0.00075	0.00216	0.00057	0.0069	36.84
Arsenic (mg/l)	GU-O	9	0.002753	0.0007838	0.0002613	0.00269	0.00228	0.003015	0.00181	0.00455	0
Arsenic (mg/l)	GU-P	7	0.002389	0.0004991	0.0001887	0.00228	0.00197	0.00295	0.00175	0.00309	0
Barium (mg/l)	GU-1	22	0.7001	0.3065	0.06535	0.627	0.445	0.908	0.331	1.44	0
Barium (mg/l)	GU-L	18	0.04659	0.02254	0.005313	0.0465	0.03055	0.0534	0.0145	0.113	0
Barium (mg/l)	GU-O	9	0.3127	0.05945	0.01982	0.325	0.3065	0.3475	0.165	0.372	0
Barium (mg/l)	GU-P	8	0.2985	0.01723	0.006092	0.298	0.2915	0.3085	0.267	0.325	0
Beryllium (mg/l)	GU-1	21	0.0002436	0.0000...	0.0000147	0.00027	0.0002055	0.00027	0.000083	0.00033	95.24
Beryllium (mg/l)	GU-L	18	0.0002454	0.0000...	0.0000...	0.00027	0.0001925	0.00027	0.000125	0.00033	94.44
Beryllium (mg/l)	GU-O	9	0.0002811	0.0000...	0.0000...	0.00027	0.00027	0.00033	0.00019	0.00033	100
Beryllium (mg/l)	GU-P	7	0.0002957	0.0000...	0.0000...	0.00027	0.00027	0.00033	0.00027	0.00033	100
Cadmium (mg/l)	GU-1	21	0.00005997	0.0000...	0.0000...	0.000051	0.0000441	0.0000685	0.000...	0.000112	100
Cadmium (mg/l)	GU-L	17	0.00006155	0.0000...	0.0000...	0.000051	0.00004155	0.0000885	0.000...	0.000112	100
Cadmium (mg/l)	GU-O	9	0.00007211	0.0000...	0.0000...	0.00006	0.000055	0.0001	0.000051	0.0001	88.89
Cadmium (mg/l)	GU-P	7	0.00007457	0.0000...	0.0000...	0.000055	0.000055	0.0001	0.000055	0.000102	85.71
Chromium (mg/l)	GU-1	21	0.001121	0.0003977	0.0000...	0.0011	0.0008835	0.00125	0.000355	0.00195	61.9
Chromium (mg/l)	GU-L	18	0.001056	0.0004871	0.0001148	0.0011	0.0007445	0.00115	0.000355	0.00267	88.89
Chromium (mg/l)	GU-O	9	0.001073	0.0001221	0.0000...	0.0011	0.0011	0.0011	0.00076	0.0012	100
Chromium (mg/l)	GU-P	7	0.001124	0.0000...	0.0000...	0.0011	0.0011	0.00117	0.0011	0.0012	85.71
Cobalt (mg/l)	GU-1	22	0.004465	0.004327	0.0009226	0.002565	0.00203	0.005645	0.0013	0.0198	0
Cobalt (mg/l)	GU-L	19	0.003569	0.003928	0.0009012	0.00223	0.000125	0.00545	0.000...	0.0129	5.263
Cobalt (mg/l)	GU-O	9	0.0004298	0.0003156	0.0001052	0.00032	0.000226	0.000568	0.00017	0.00115	22.22
Cobalt (mg/l)	GU-P	7	0.0009169	0.0003226	0.0001219	0.00079	0.000645	0.00123	0.000484	0.0013	0
Copper (mg/l)	GU-1	20	0.001757	0.0004933	0.0001103	0.0018	0.00145	0.002	0.000748	0.0032	85
Copper (mg/l)	GU-L	18	0.001849	0.0006313	0.0001488	0.0018	0.0014	0.00219	0.000705	0.0032	83.33
Copper (mg/l)	GU-O	9	0.001738	0.0001444	0.0000...	0.0018	0.0017	0.0018	0.0014	0.00184	88.89
Copper (mg/l)	GU-P	7	0.0018	0	0	0.0018	0.0018	0.0018	0.0018	0.0018	100
Lead (mg/l)	GU-1	20	0.0002813	0.0001703	0.0000...	0.00025	0.000211	0.0002805	0.000...	0.000943	80
Lead (mg/l)	GU-L	17	0.0002359	0.0000...	0.0000...	0.00024	0.0002105	0.00027	0.000...	0.000324	94.12
Lead (mg/l)	GU-O	9	0.00024	0.0000...	0.0000...	0.00024	0.00024	0.000245	0.00021	0.00026	100
Lead (mg/l)	GU-P	7	0.0002837	0.0001071	0.0000...	0.00024	0.00024	0.00026	0.00024	0.000526	85.71
Nickel (mg/l)	GU-1	22	0.04825	0.008165	0.001741	0.0478	0.044	0.05425	0.0236	0.0629	0
Nickel (mg/l)	GU-L	19	0.004318	0.002731	0.0006265	0.00392	0.0017	0.00627	0.000967	0.00971	21.05
Nickel (mg/l)	GU-O	9	0.001822	0.0003153	0.0001051	0.0019	0.0019	0.0019	0.001	0.0021	100
Nickel (mg/l)	GU-P	7	0.001941	0.0000...	0.0000...	0.0019	0.0019	0.00199	0.0019	0.0021	85.71
Selenium (mg/l)	GU-1	18	0.00101	0.0001806	0.0000...	0.00098	0.000928	0.001	0.00063	0.0014	94.44
Selenium (mg/l)	GU-L	17	0.0009974	0.0002223	0.0000...	0.00096	0.000914	0.001	0.00063	0.0014	100
Selenium (mg/l)	GU-O	9	0.0011	0.0002258	0.0000...	0.00096	0.00096	0.0014	0.0009	0.0014	100
Selenium (mg/l)	GU-P	7	0.001251	0.0004356	0.0001646	0.00096	0.00096	0.0014	0.00096	0.00212	85.71
Silver (mg/l)	GU-1	21	0.0003542	0.0001275	0.0000...	0.00037	0.000261	0.00049	0.00014	0.0005	95.24
Silver (mg/l)	GU-L	18	0.0003368	0.0001504	0.0000...	0.00037	0.000153	0.00049	0.000042	0.0005	88.89
Silver (mg/l)	GU-O	9	0.0004644	0.0000...	0.0000...	0.00049	0.000455	0.0005	0.0003	0.0005	100
Silver (mg/l)	GU-P	7	0.0004943	0.0000...	0.0000...	0.00049	0.00049	0.0005	0.00049	0.0005	100
Thallium (mg/l)	GU-1	21	0.0002426	0.00018	0.0000...	0.00026	0.0001172	0.00026	0.000...	0.000817	90.48
Thallium (mg/l)	GU-L	18	0.0002079	0.0001333	0.0000...	0.00026	0.0000644	0.00026	0.000...	0.00057	100

Box & Whiskers Plot

Linn County Data: CRLCSWA_Groundwater Database Printed 5/10/2024, 3:31 PM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Lower Q.	Upper Q.	Min.	Max.	%NDs
Thallium (mg/l)	GU-O	9	0.0002844	0.0001111	0.0000...	0.00026	0.00026	0.00026	0.00017	0.00057	100
Thallium (mg/l)	GU-P	7	0.0003043	0.0001172	0.0000...	0.00026	0.00026	0.00026	0.00026	0.00057	100
Vanadium (mg/l)	GU-1	21	0.0009369	0.0005316	0.000116	0.00085	0.00067	0.0011	0.000255	0.00291	85.71
Vanadium (mg/l)	GU-L	16	0.0008168	0.0002987	0.0000...	0.00084	0.00067	0.0011	0.000255	0.0011	100
Vanadium (mg/l)	GU-O	9	0.001036	0.0001933	0.0000...	0.0011	0.0011	0.0011	0.00052	0.0011	100
Vanadium (mg/l)	GU-P	7	0.00119	0.0002381	0.00009	0.0011	0.0011	0.0011	0.0011	0.00173	85.71
Zinc (mg/l)	GU-1	21	0.01122	0.004133	0.000902	0.01	0.00985	0.013	0.00521	0.02	66.67
Zinc (mg/l)	GU-L	18	0.009864	0.002981	0.0007026	0.01	0.007815	0.01075	0.00521	0.0163	83.33
Zinc (mg/l)	GU-O	9	0.009167	0.001572	0.0005239	0.01	0.00805	0.01	0.0064	0.01	100
Zinc (mg/l)	GU-P	7	0.008929	0.001731	0.0006542	0.01	0.0064	0.01	0.0064	0.01	100

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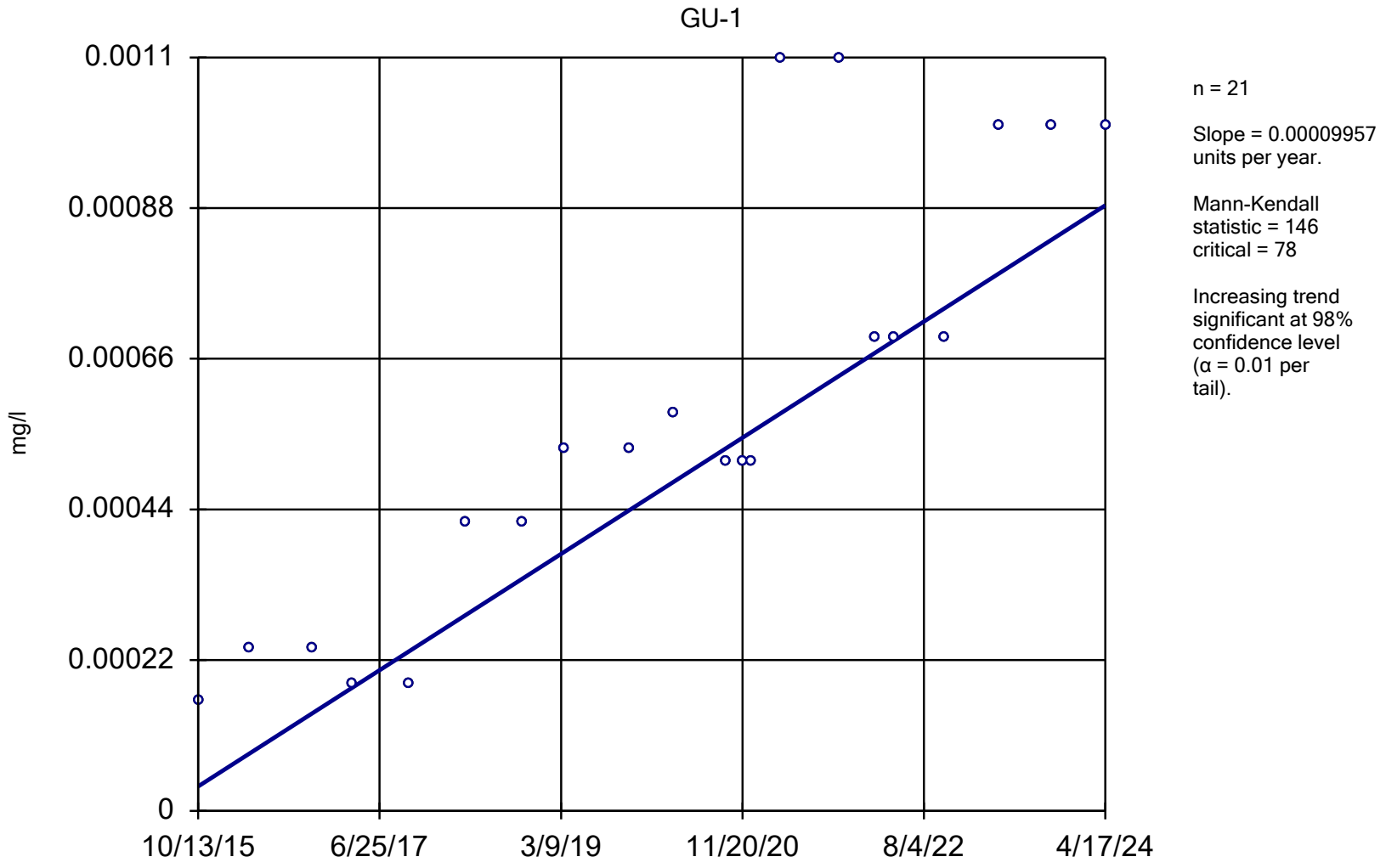
Underdrain Inorganic Trend Analysis – Full Dataset – Spring 2024

Hollow symbols indicate censored values.

Sen's Slope Estimator

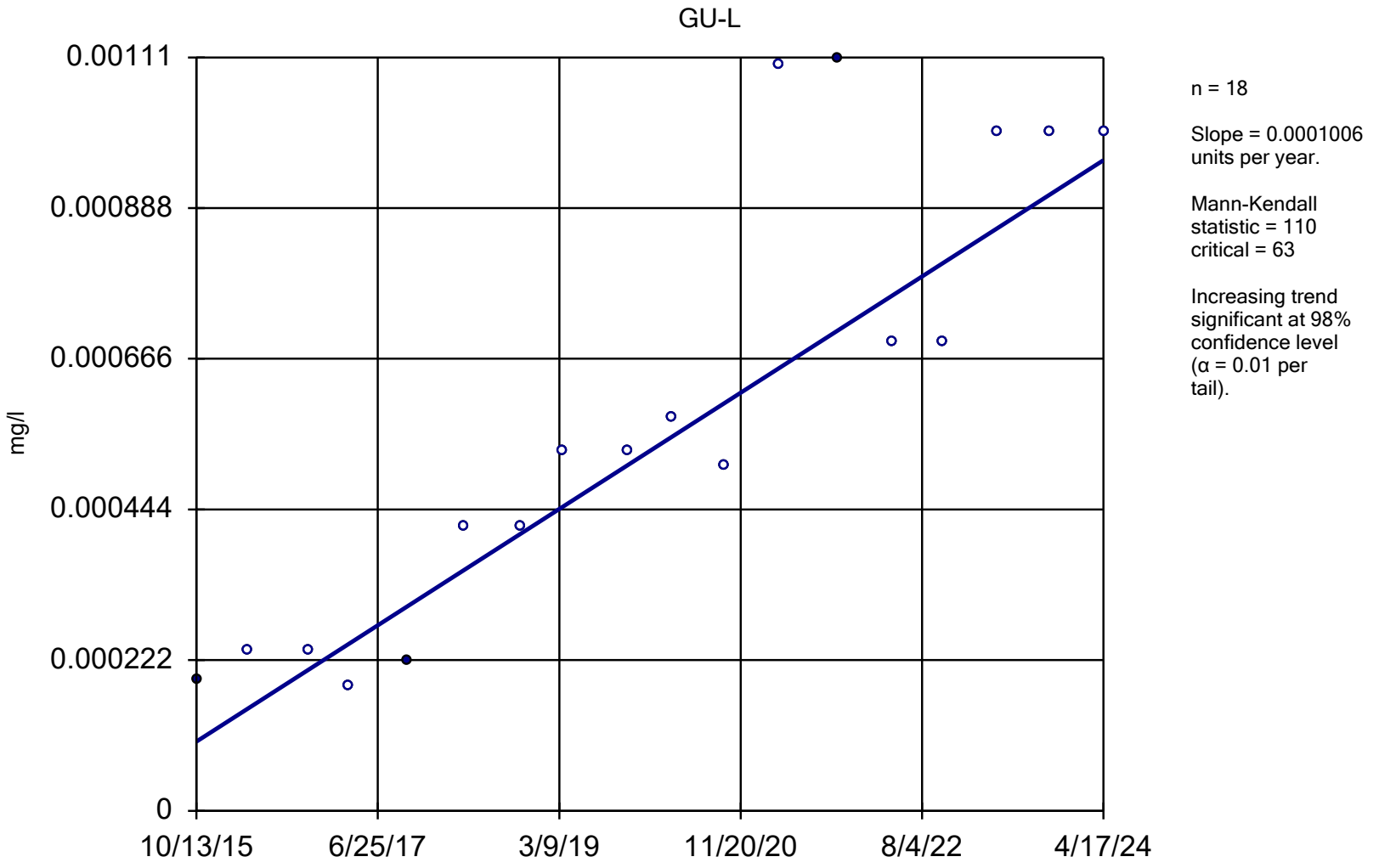


Constituent: Antimony Analysis Run 5/10/2024 3:32 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

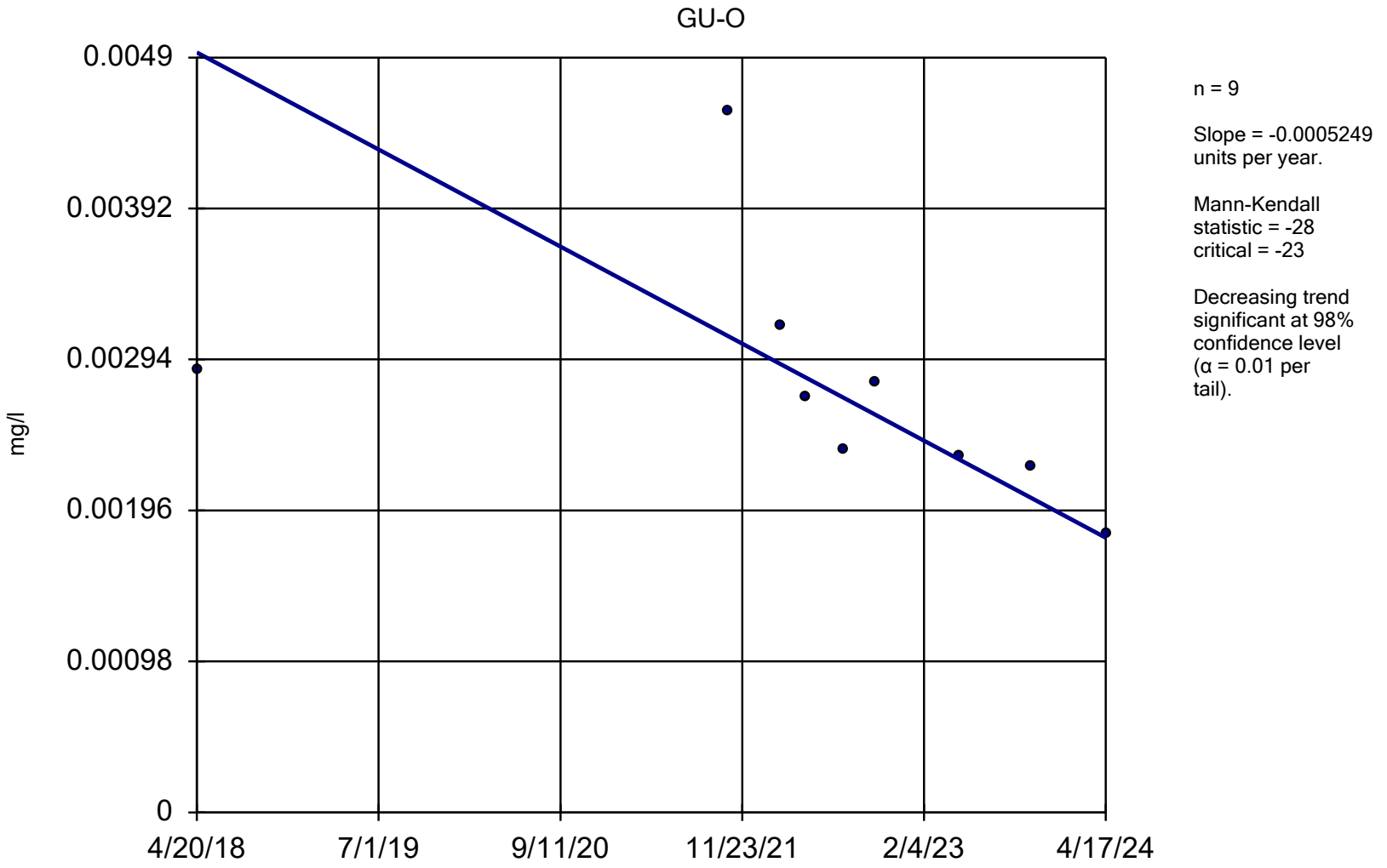
Sen's Slope Estimator



Constituent: Antimony Analysis Run 5/10/2024 3:32 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Sen's Slope Estimator

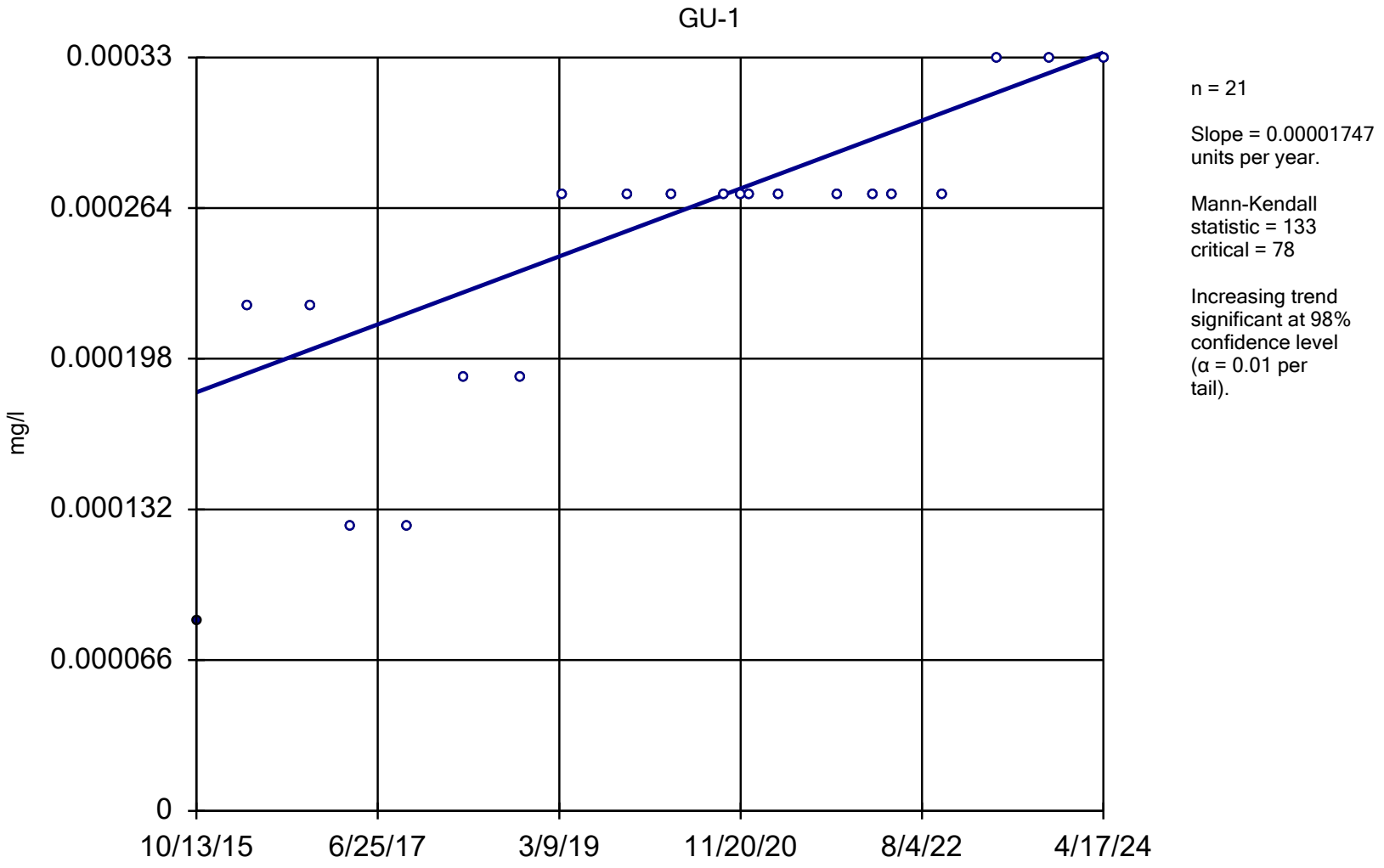


Constituent: Arsenic Analysis Run 5/10/2024 3:32 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

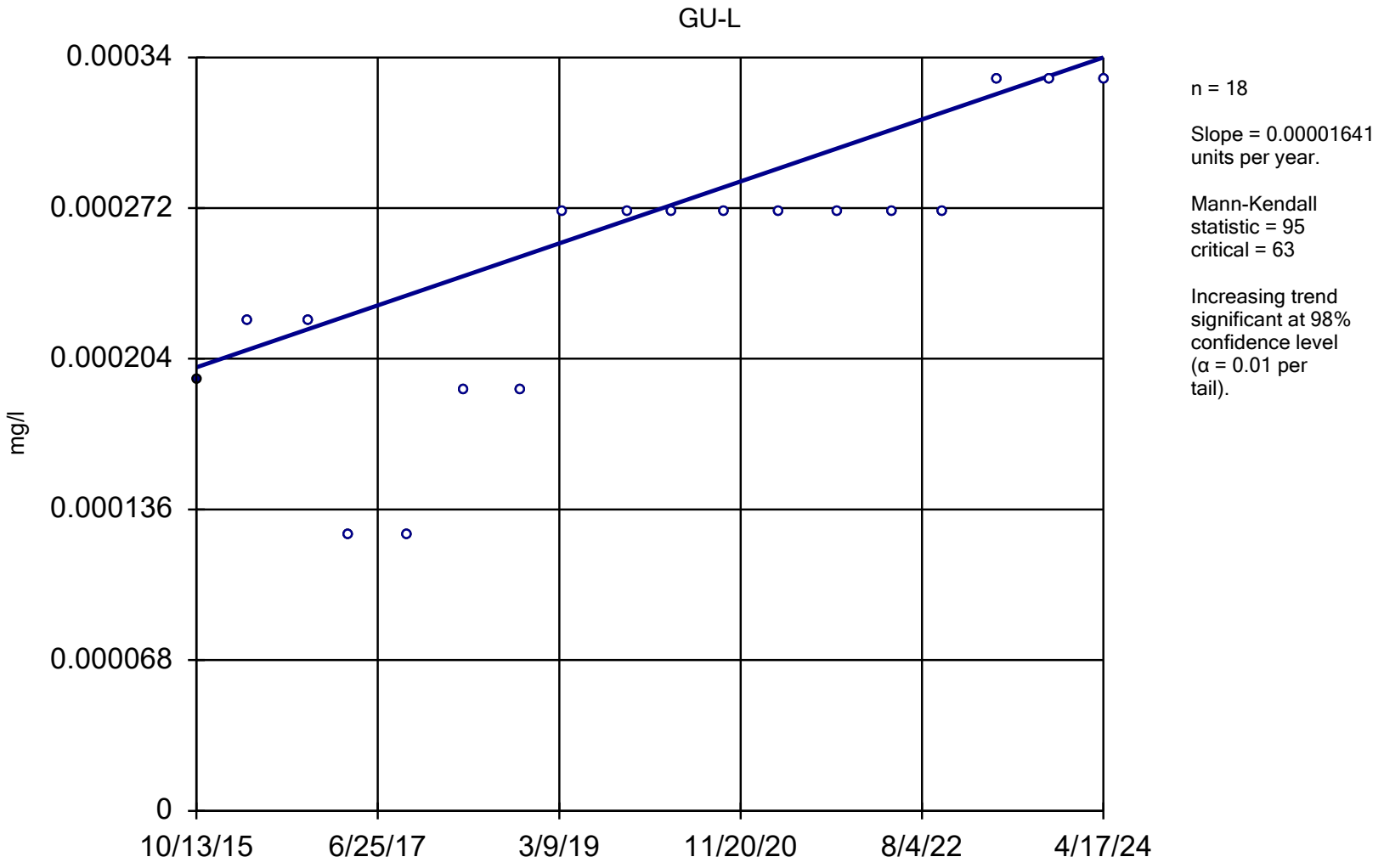


Constituent: Beryllium Analysis Run 5/10/2024 3:32 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



n = 18

Slope = 0.00001641 units per year.

Mann-Kendall statistic = 95
critical = 63

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

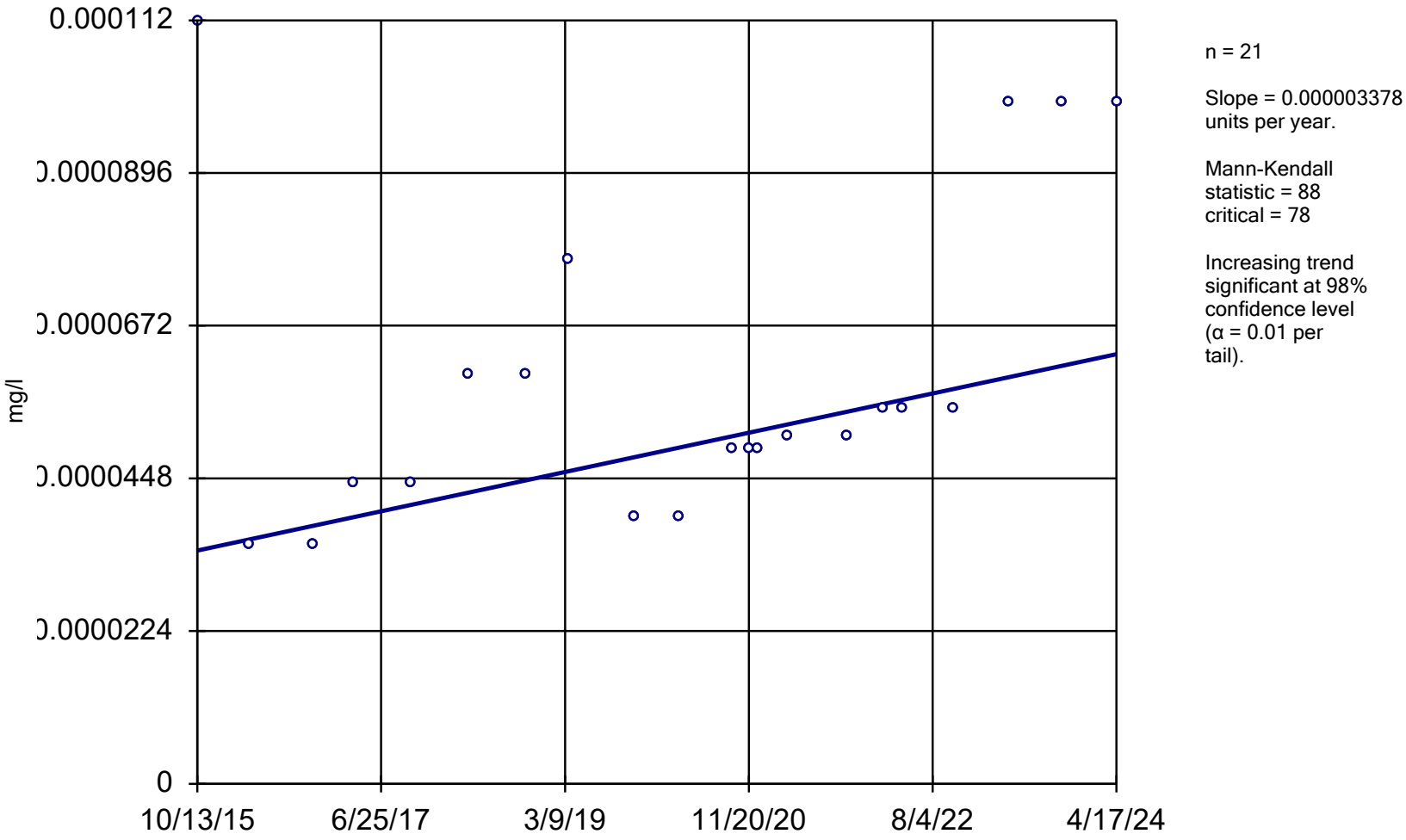
Constituent: Beryllium Analysis Run 5/10/2024 3:32 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

GU-1



n = 21

Slope = 0.000003378 units per year.

Mann-Kendall statistic = 88
critical = 78

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

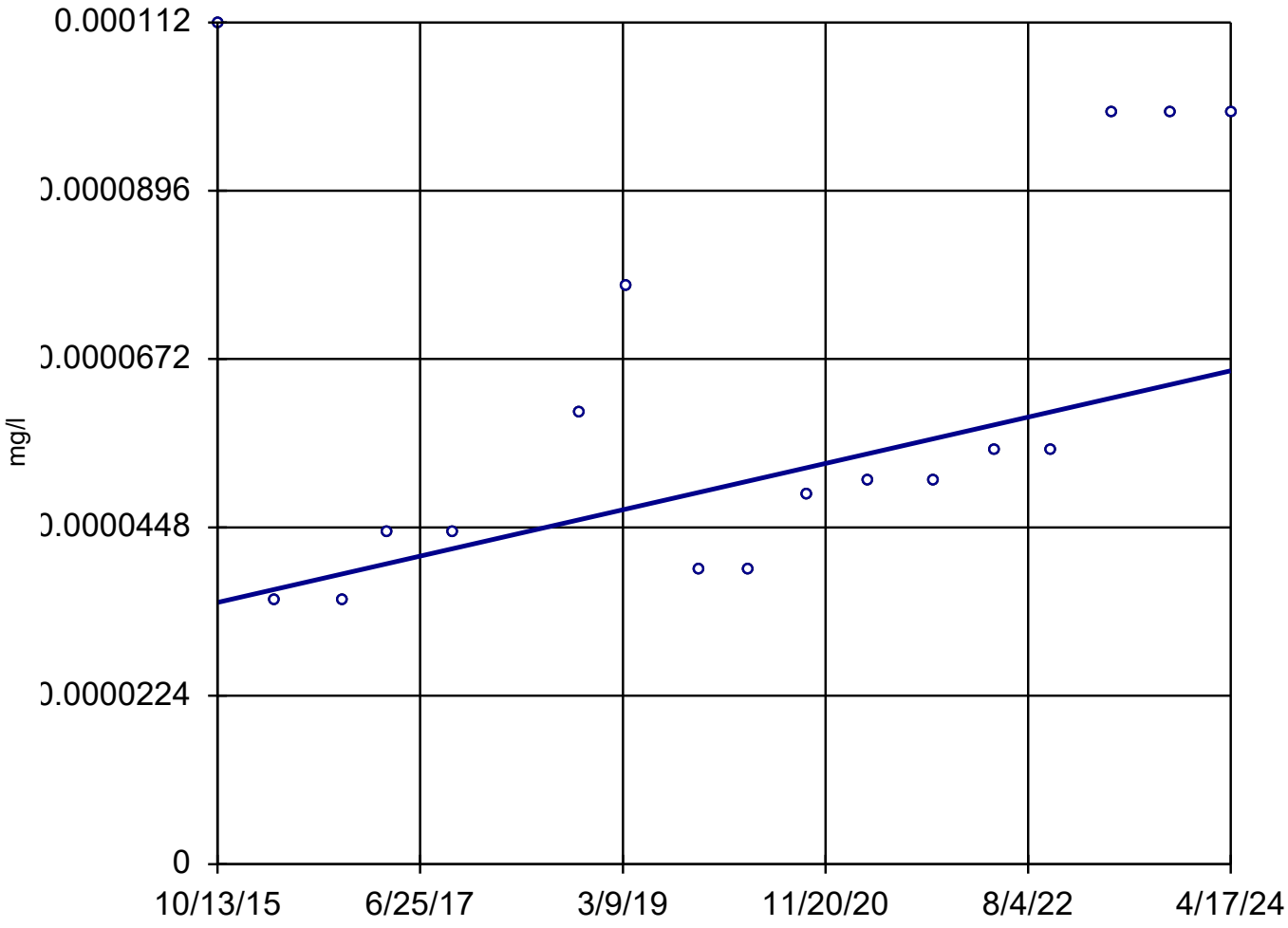
Constituent: Cadmium Analysis Run 5/10/2024 3:33 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

GU-L



n = 17

Slope = 0.000003617 units per year.

Mann-Kendall statistic = 60
critical = 58

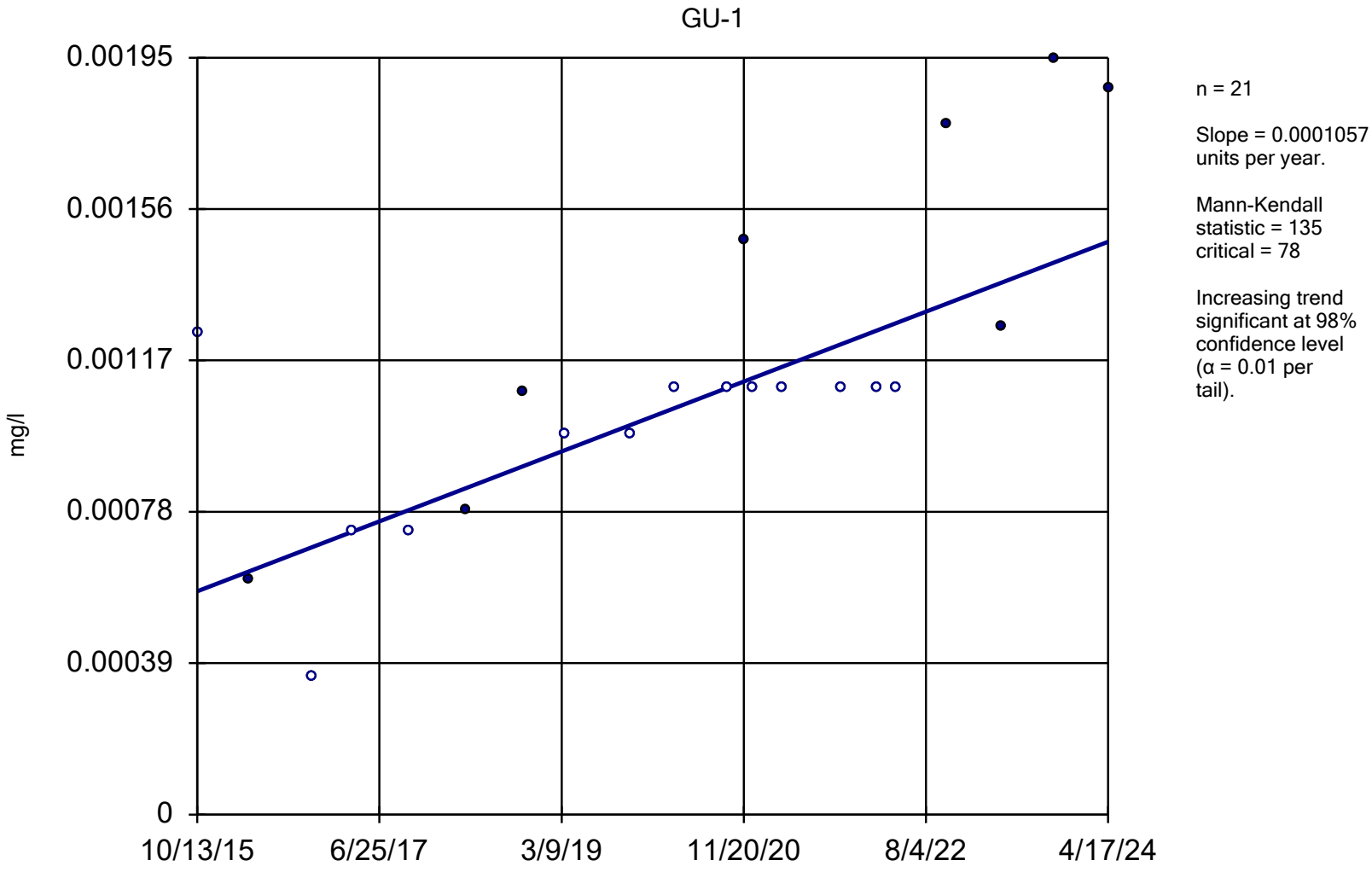
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Cadmium Analysis Run 5/10/2024 3:33 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

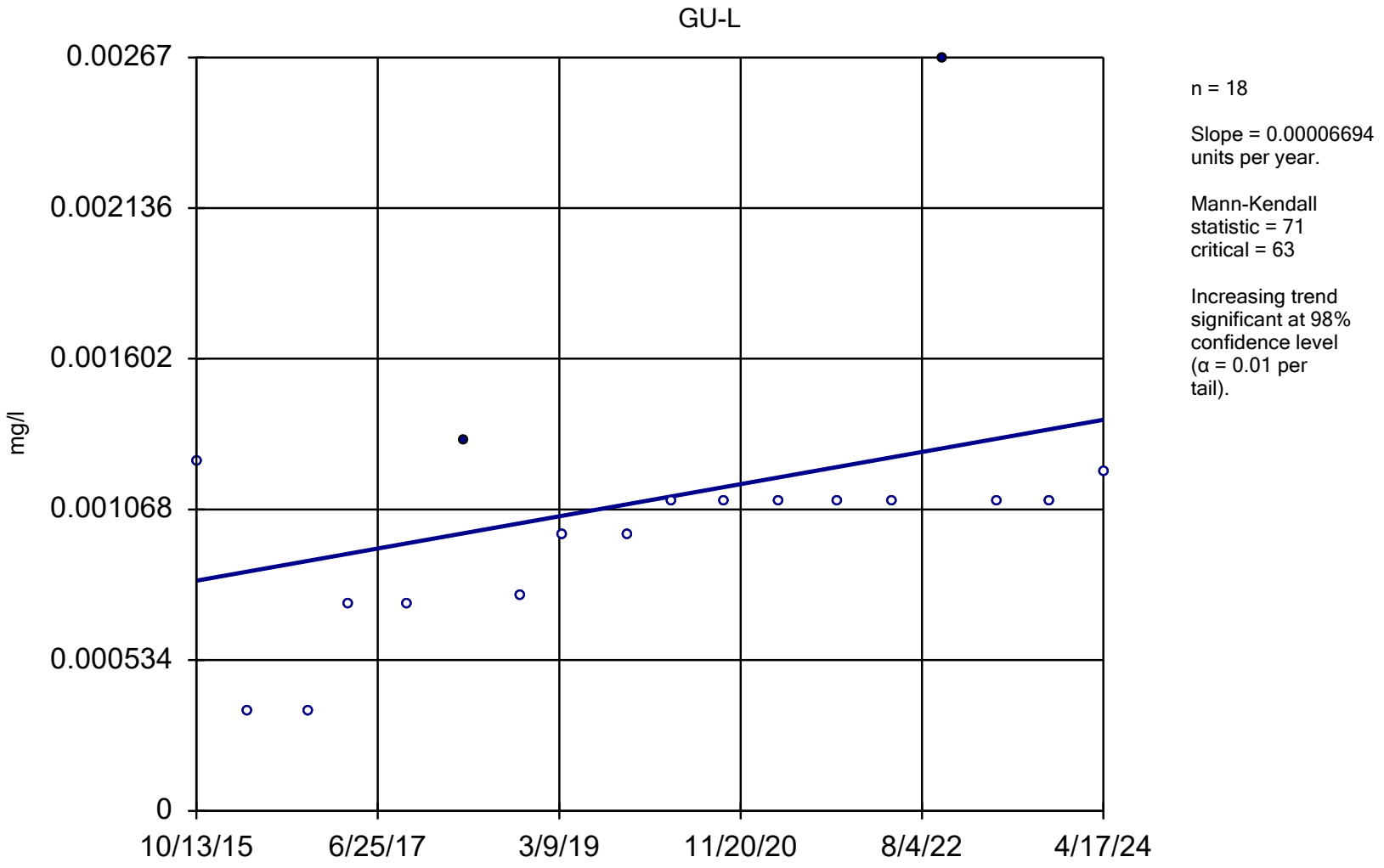


Constituent: Chromium Analysis Run 5/10/2024 3:33 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

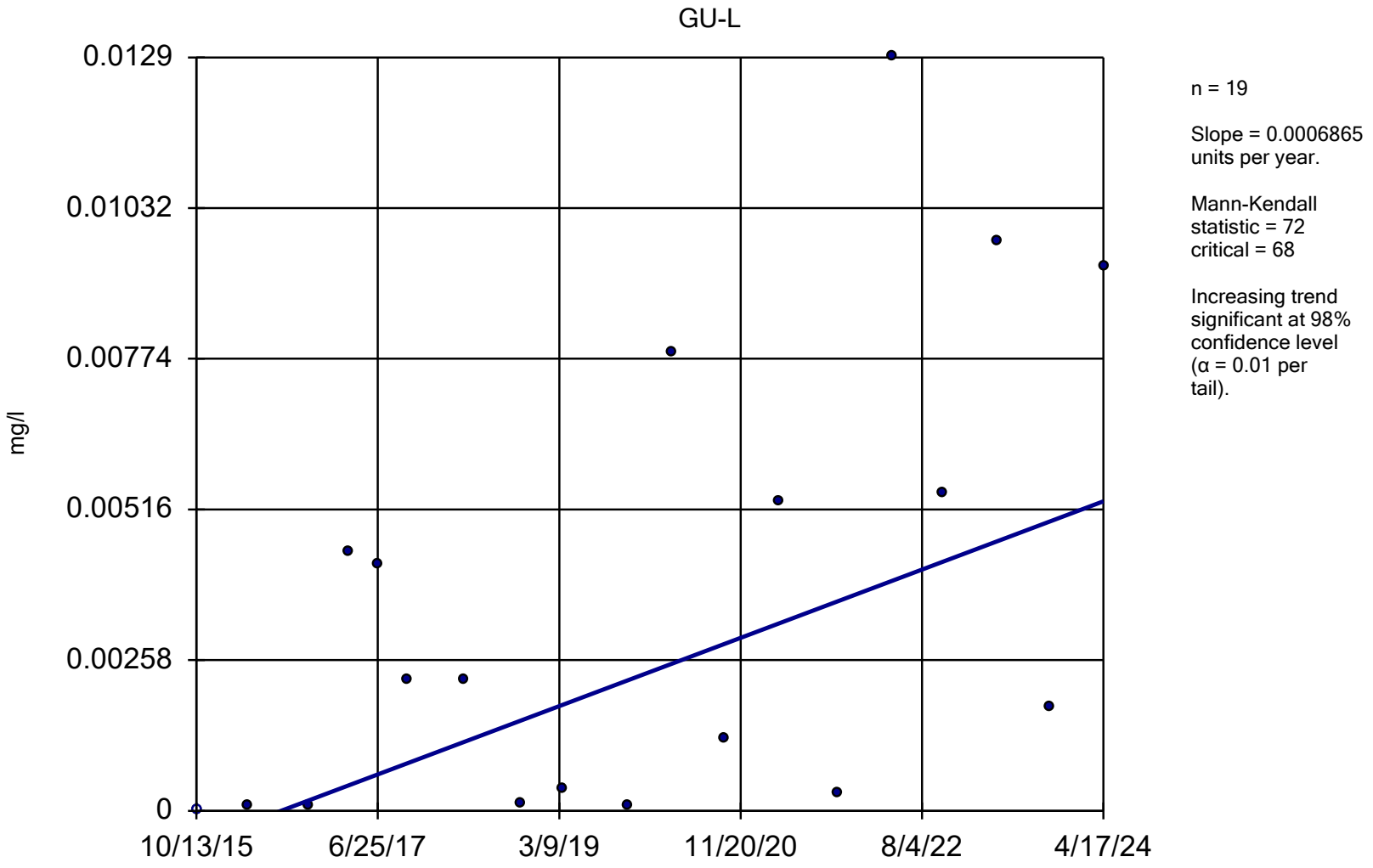


Constituent: Chromium Analysis Run 5/10/2024 3:33 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



n = 19

Slope = 0.0006865 units per year.

Mann-Kendall statistic = 72
critical = 68

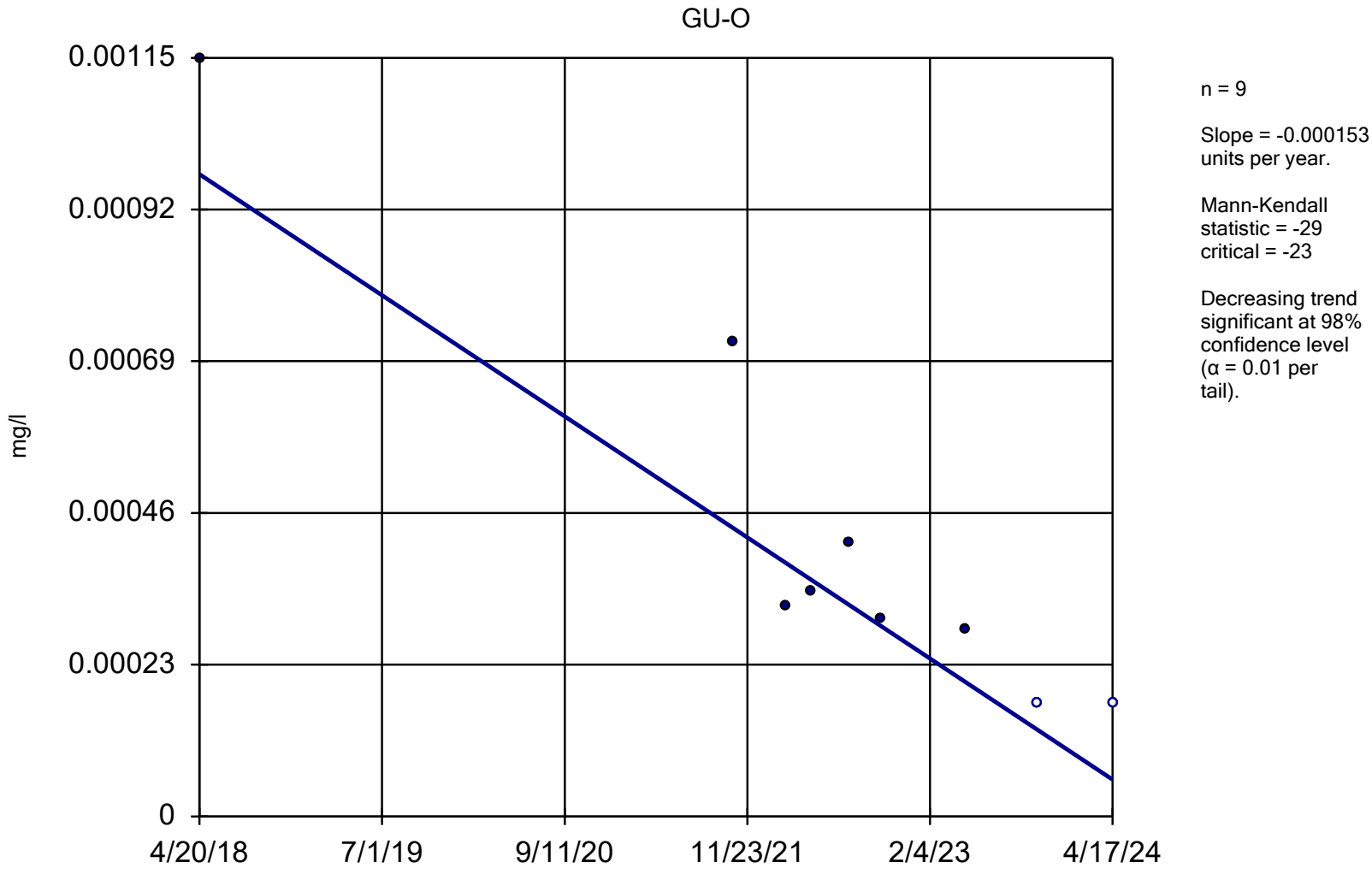
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Cobalt Analysis Run 5/10/2024 3:33 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

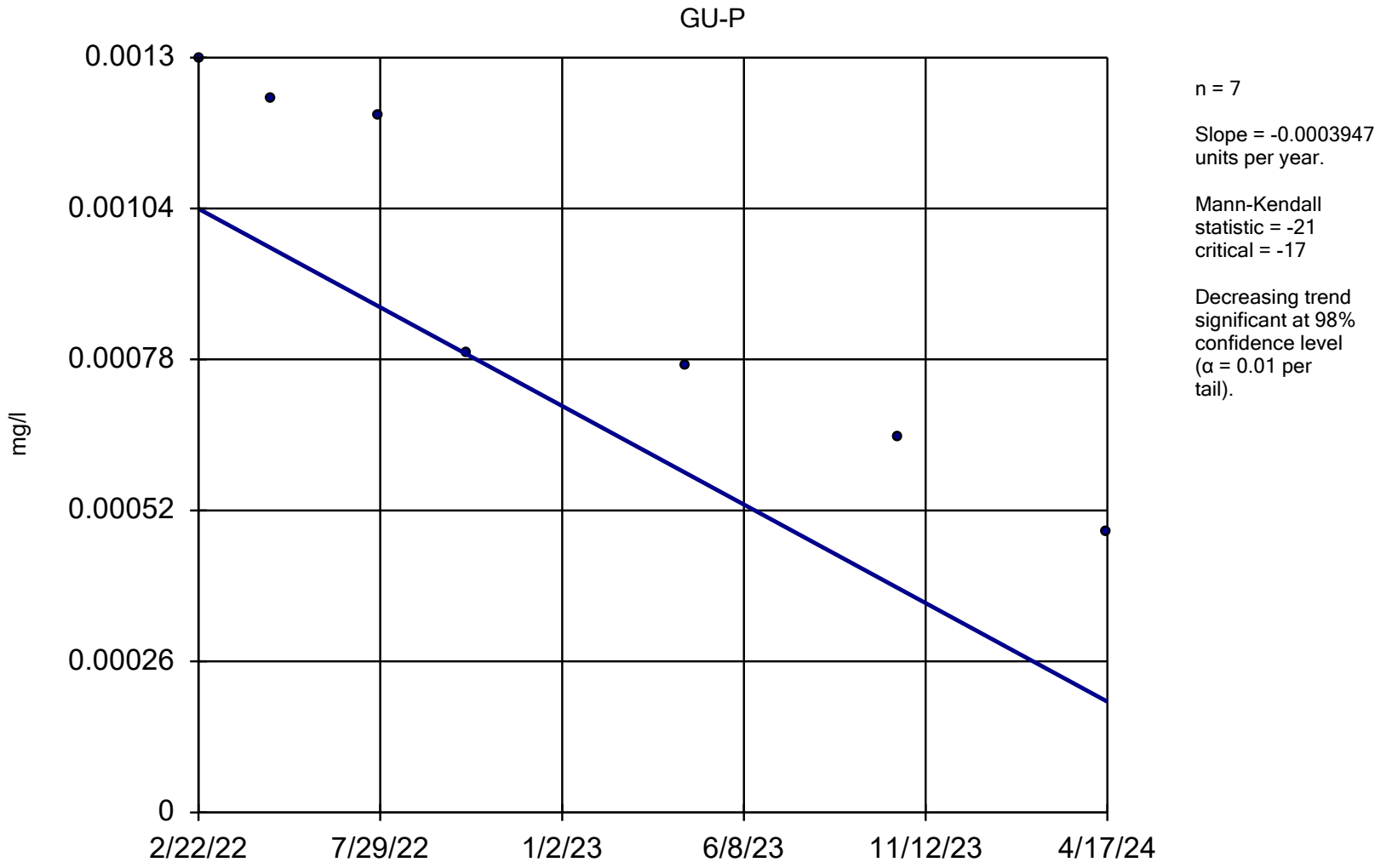
Sen's Slope Estimator



Constituent: Cobalt Analysis Run 5/10/2024 3:33 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Sen's Slope Estimator

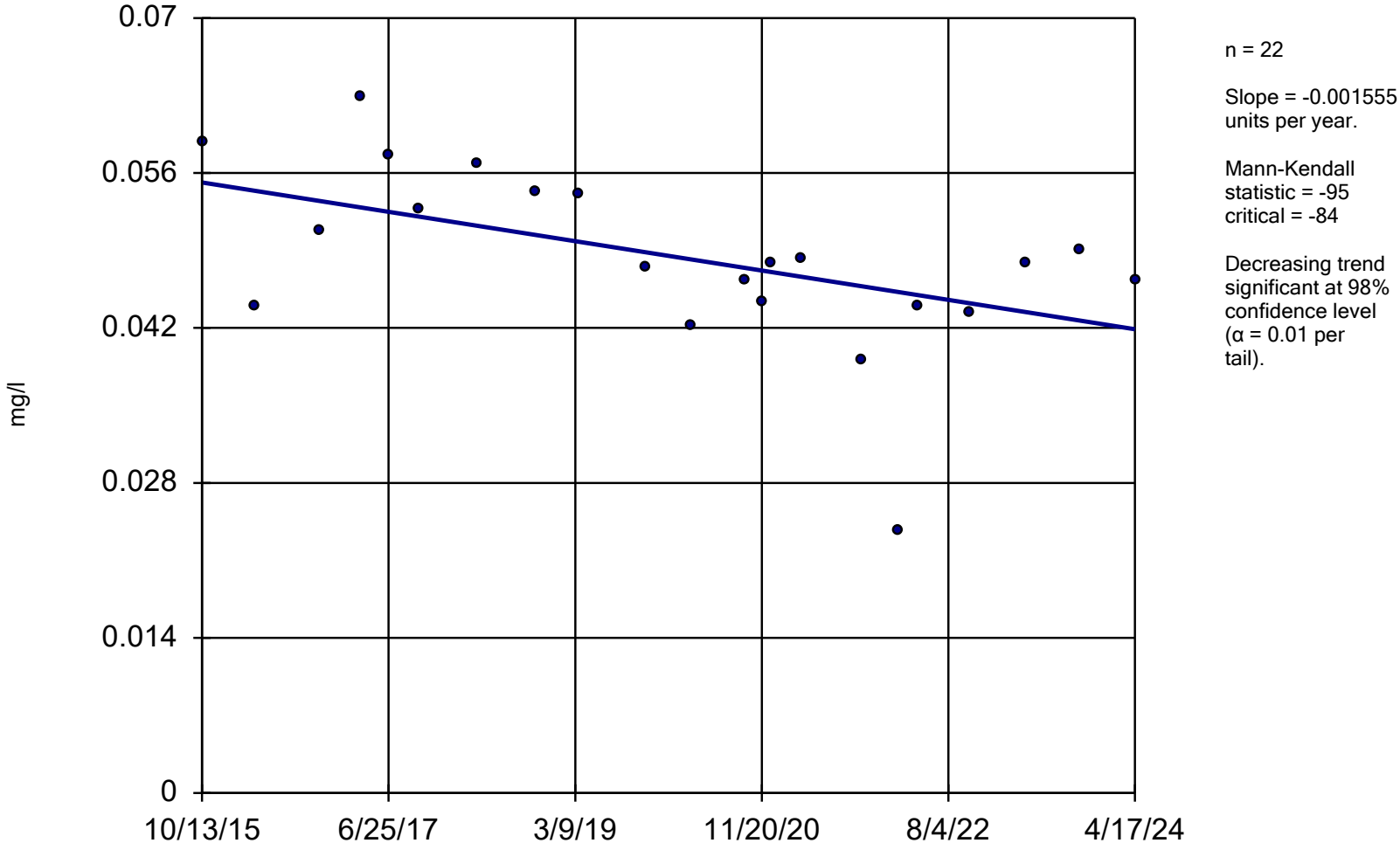


Constituent: Cobalt Analysis Run 5/10/2024 3:33 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Sen's Slope Estimator

GU-1



n = 22

Slope = -0.001555 units per year.

Mann-Kendall statistic = -95
critical = -84

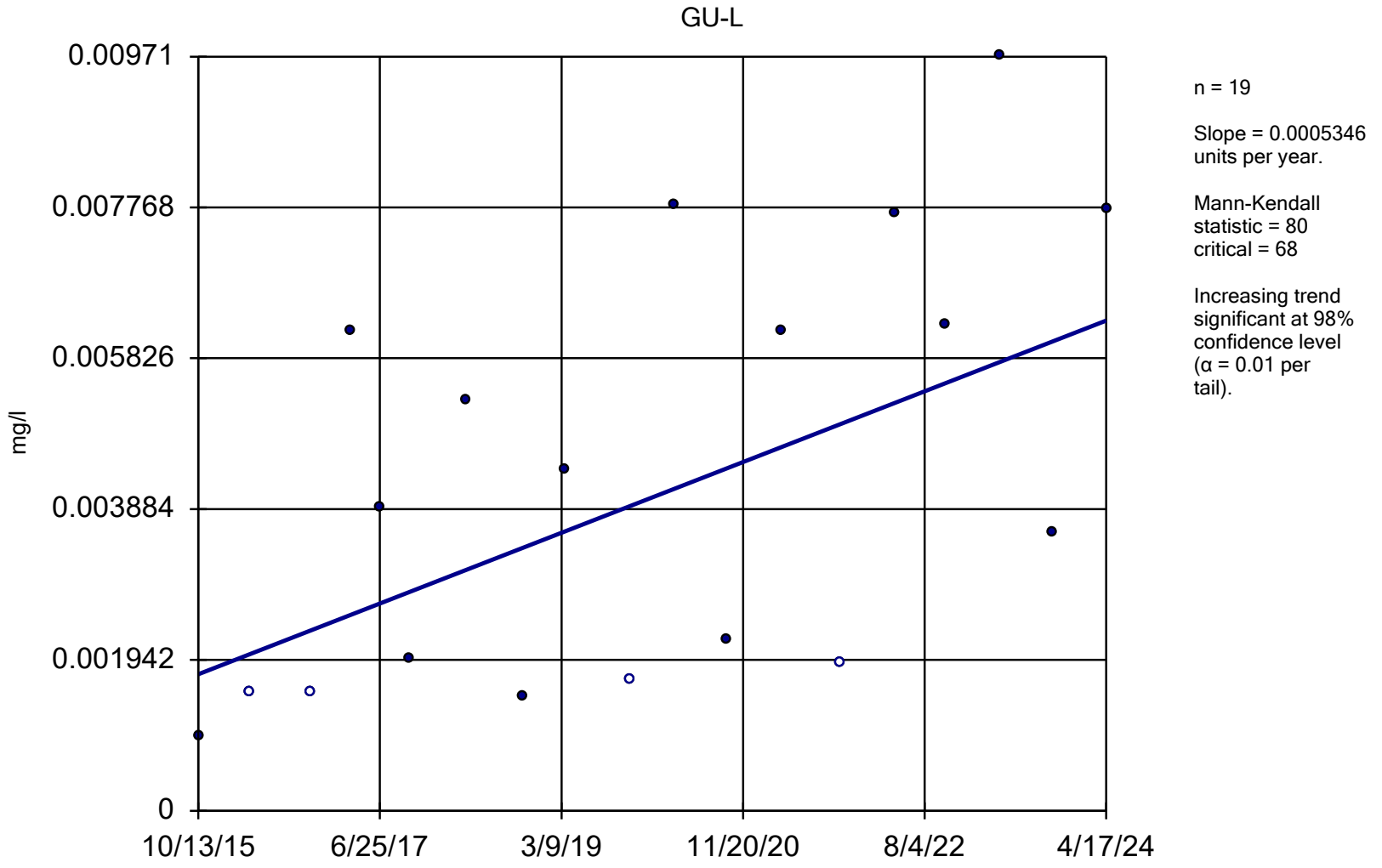
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Nickel Analysis Run 5/10/2024 3:33 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



n = 19

Slope = 0.0005346 units per year.

Mann-Kendall statistic = 80
critical = 68

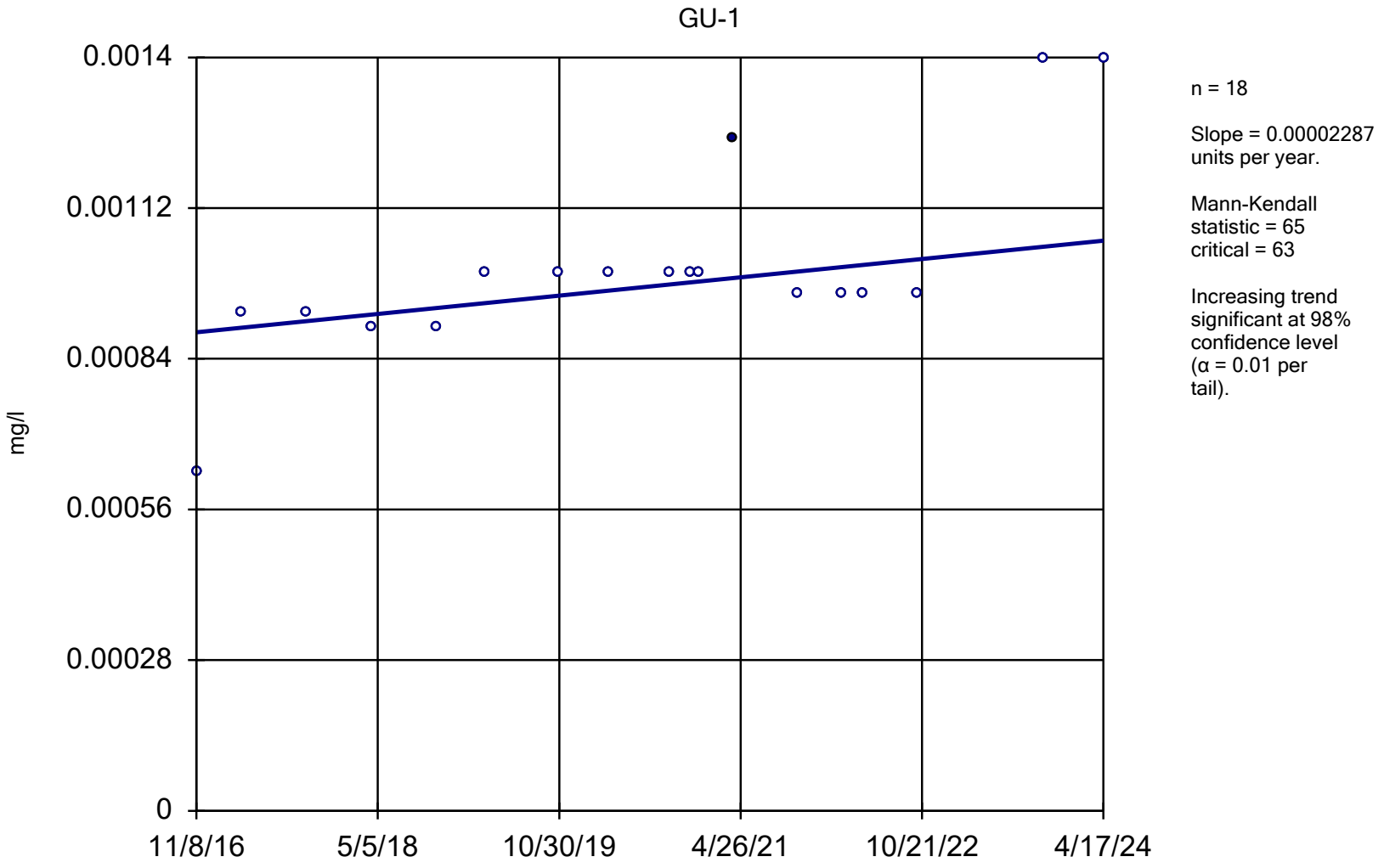
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Nickel Analysis Run 5/10/2024 3:33 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

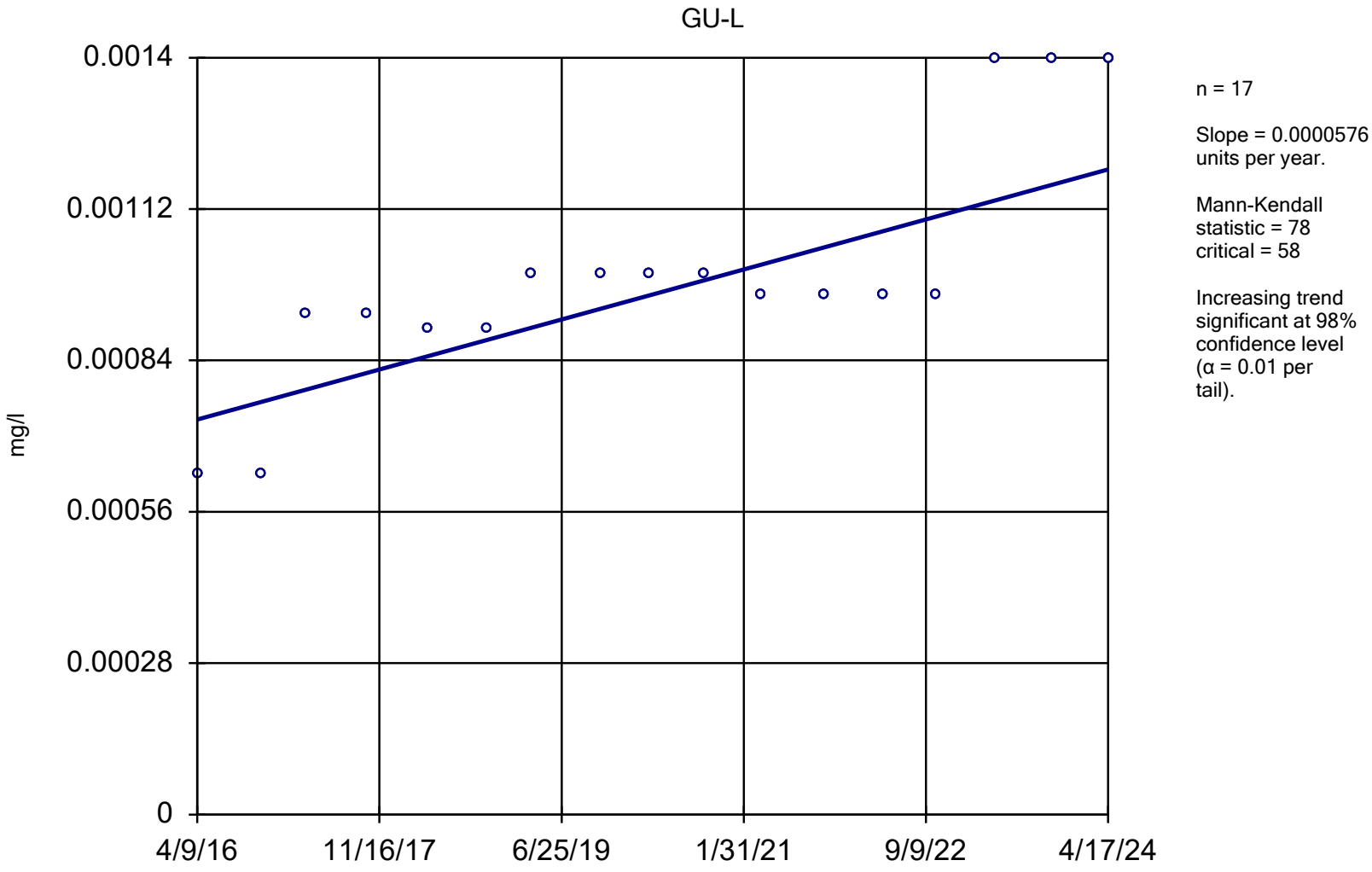


Constituent: Selenium Analysis Run 5/10/2024 3:33 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



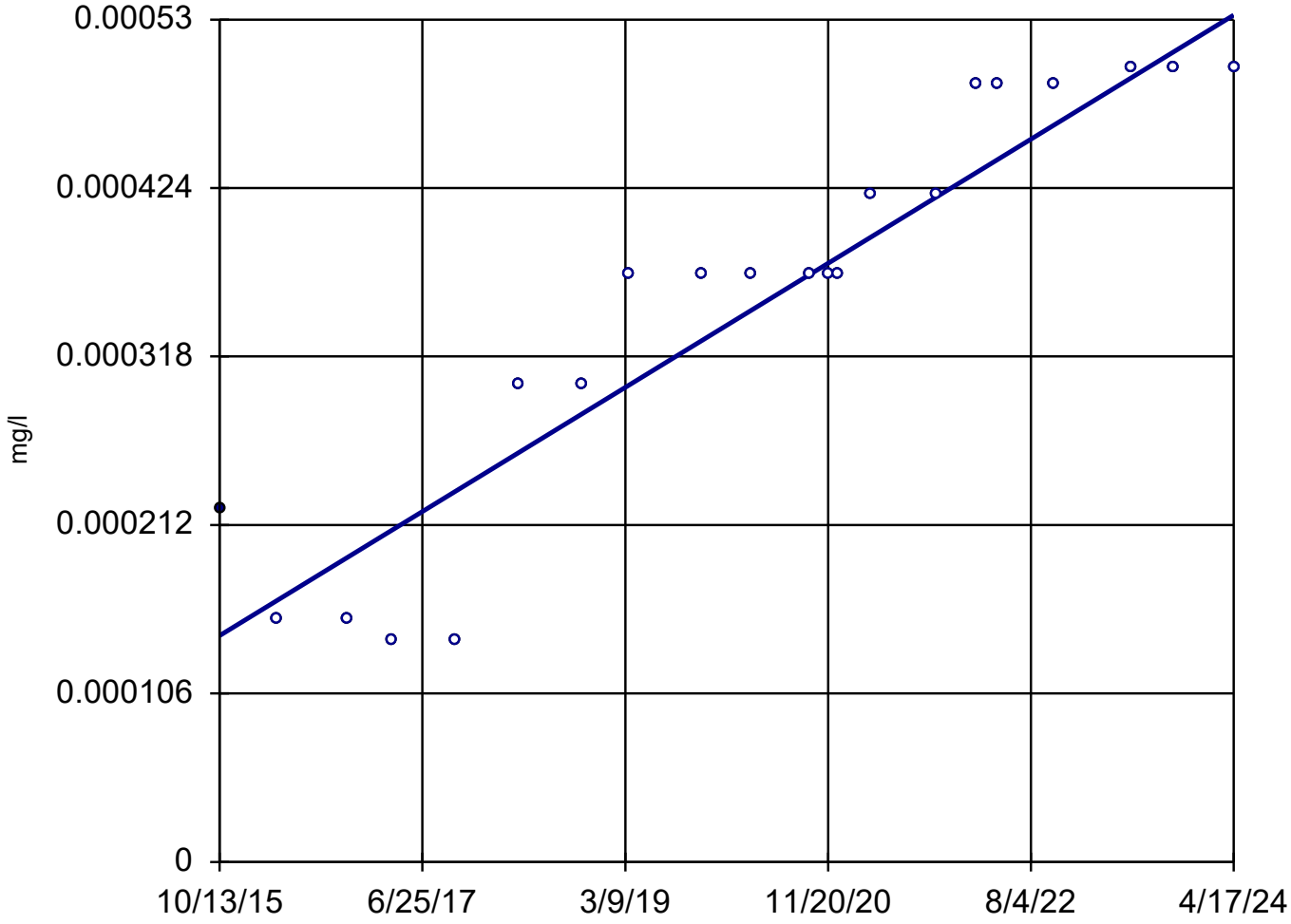
Constituent: Selenium Analysis Run 5/10/2024 3:33 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

GU-1



n = 21

Slope = 0.00004583 units per year.

Mann-Kendall statistic = 169
critical = 78

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

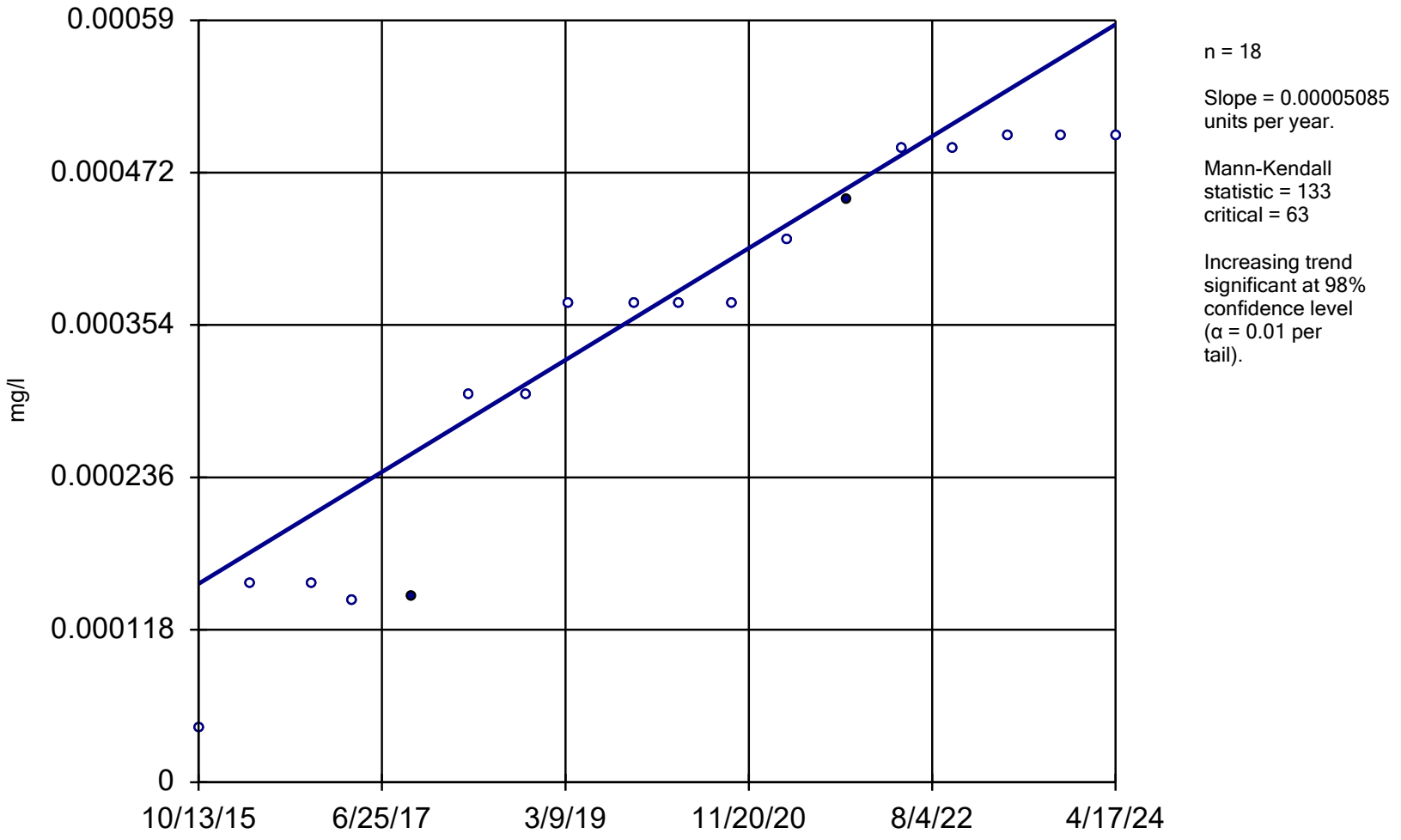
Constituent: Silver Analysis Run 5/10/2024 3:33 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

GU-L



n = 18

Slope = 0.00005085 units per year.

Mann-Kendall statistic = 133
critical = 63

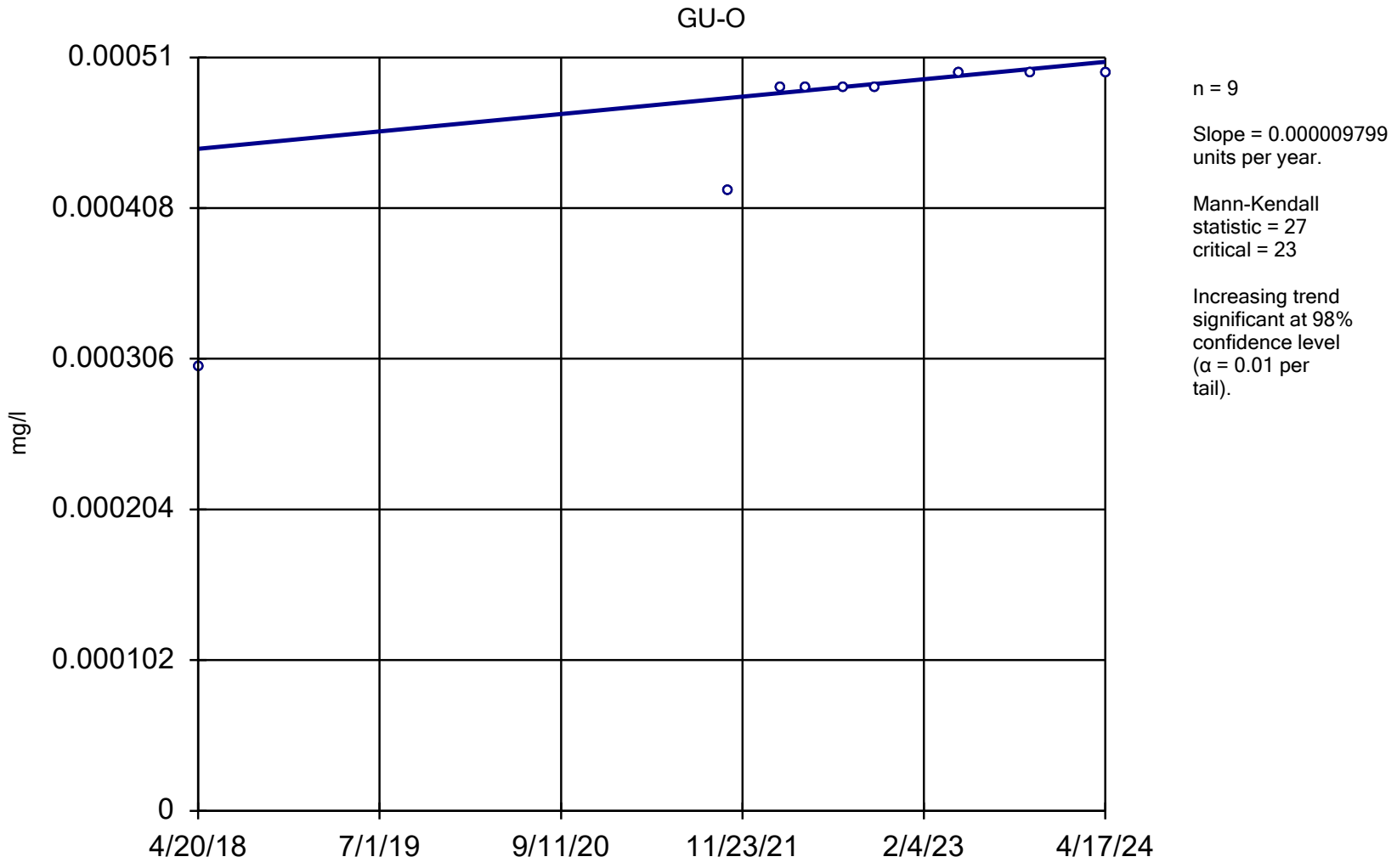
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Silver Analysis Run 5/10/2024 3:33 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

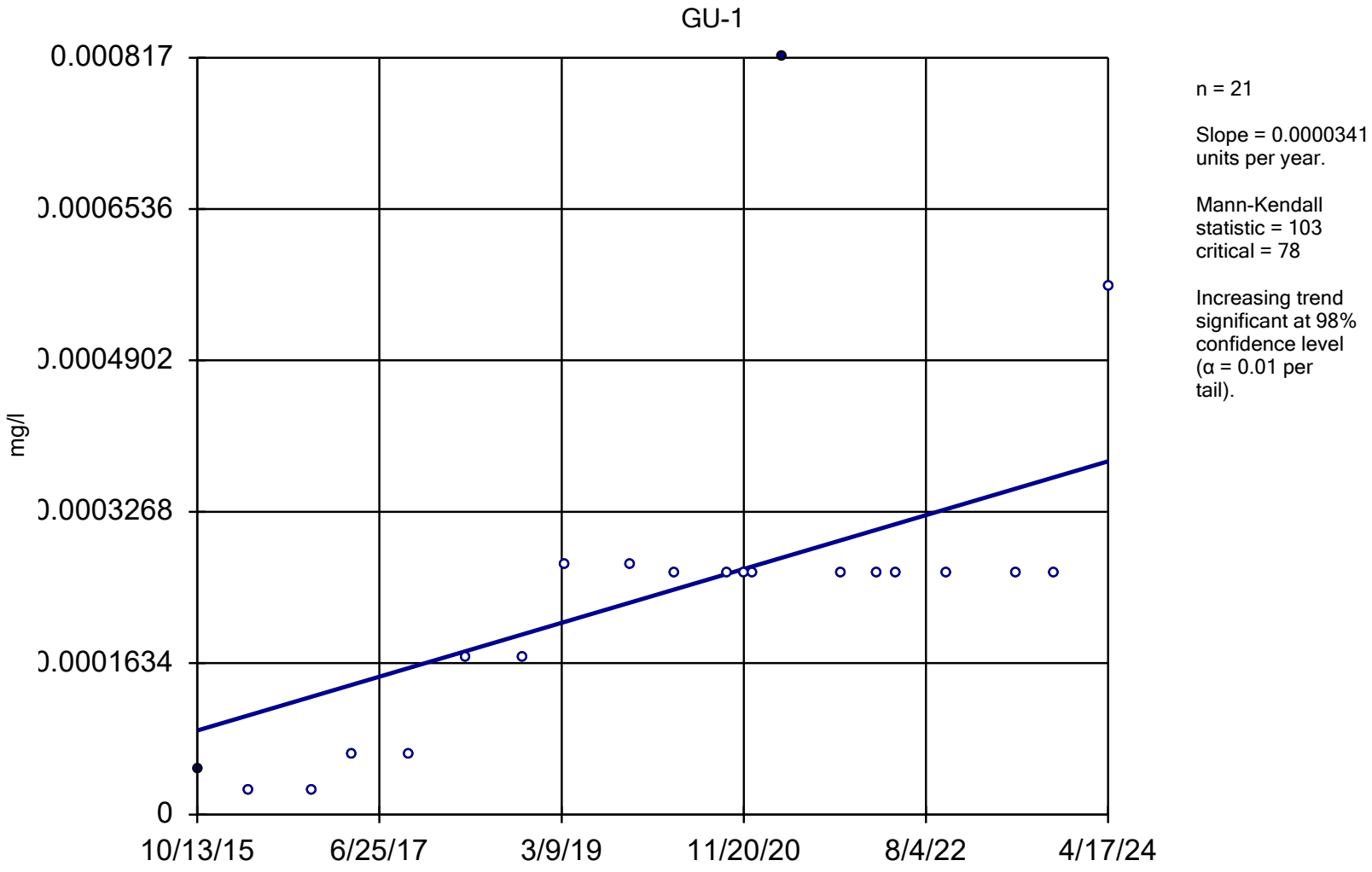


Constituent: Silver Analysis Run 5/10/2024 3:33 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

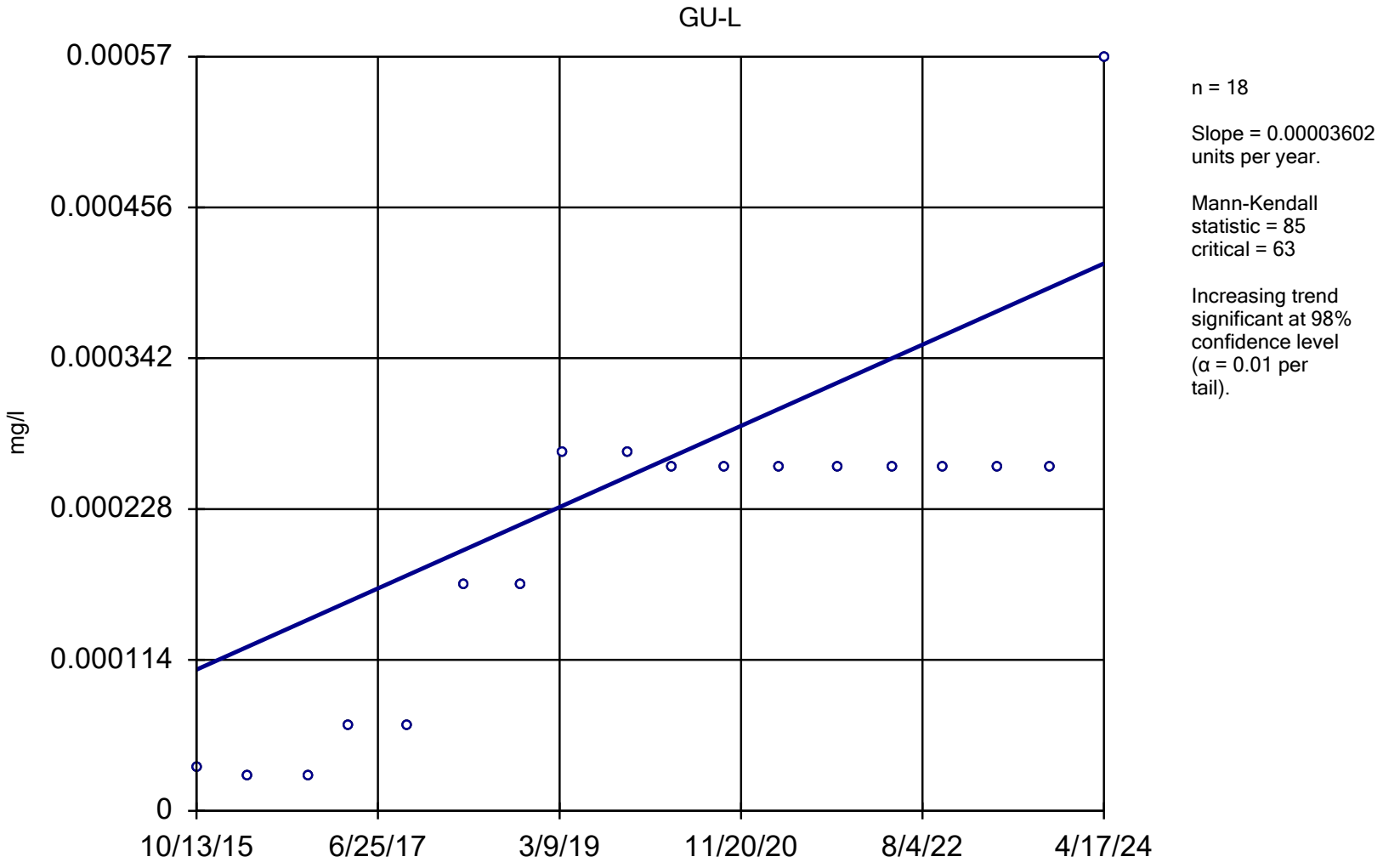


Constituent: Thallium Analysis Run 5/10/2024 3:33 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

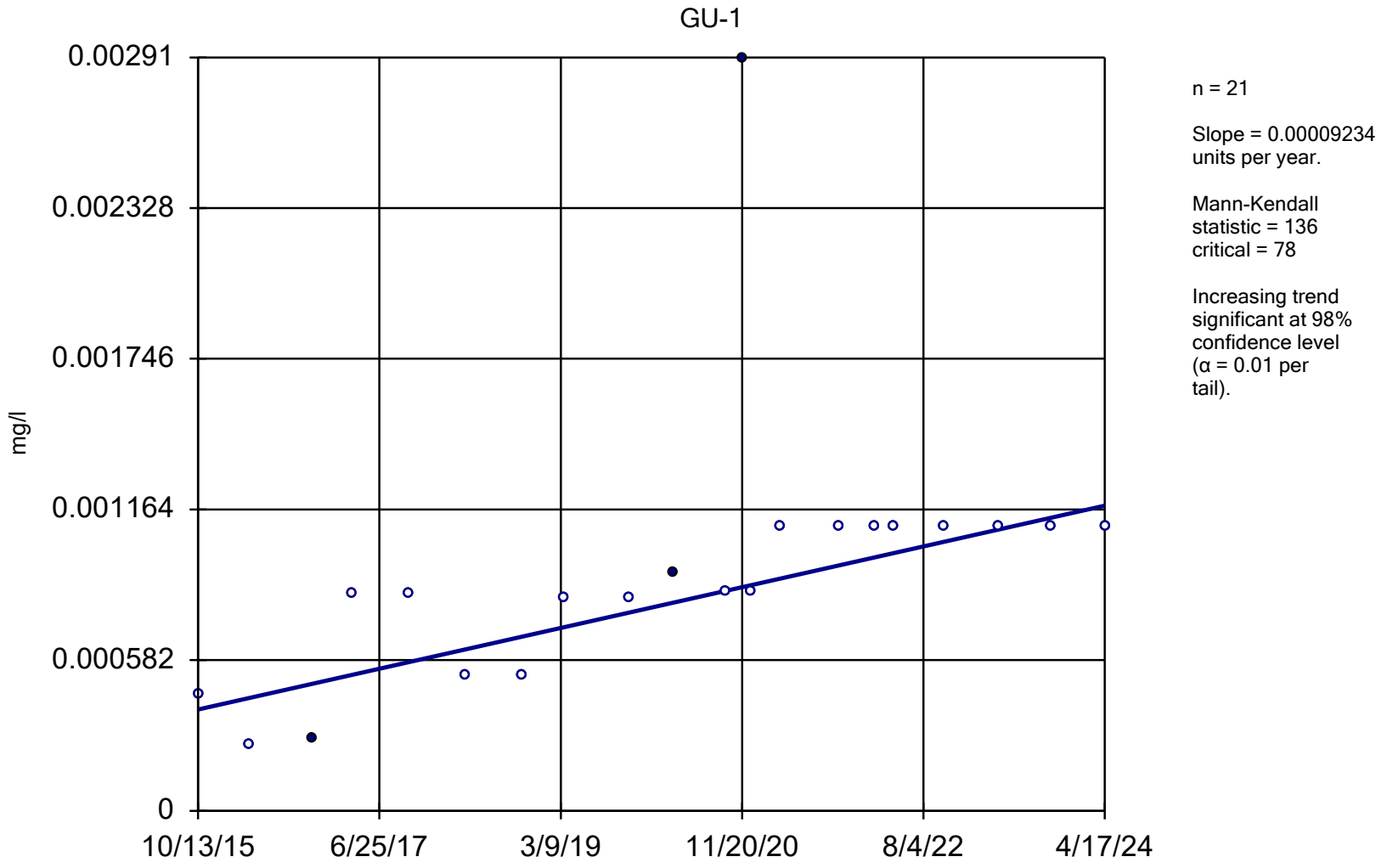


Constituent: Thallium Analysis Run 5/10/2024 3:33 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



n = 21

Slope = 0.00009234 units per year.

Mann-Kendall statistic = 136
critical = 78

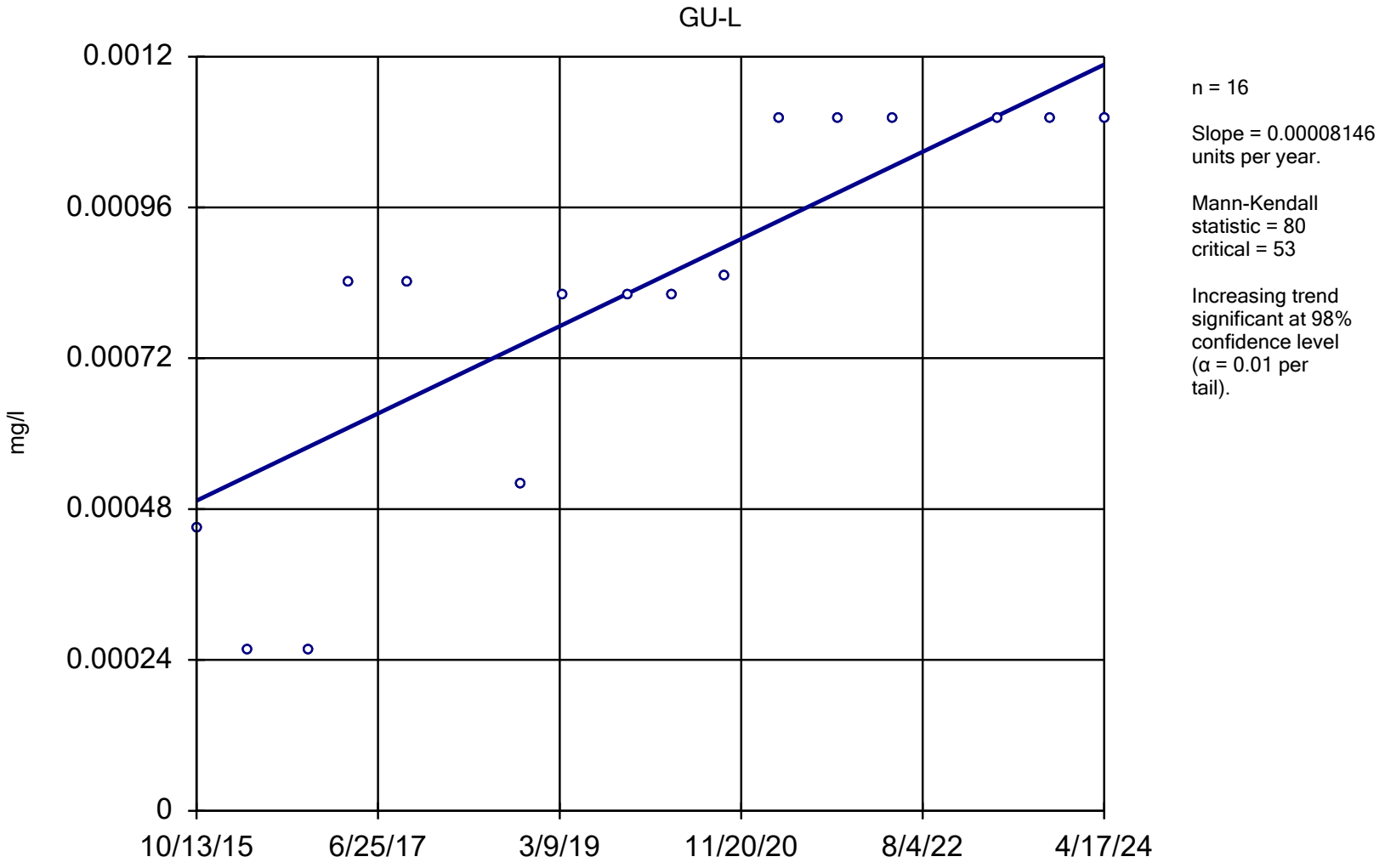
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Vanadium Analysis Run 5/10/2024 3:33 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



n = 16

Slope = 0.00008146 units per year.

Mann-Kendall statistic = 80
critical = 53

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Vanadium Analysis Run 5/10/2024 3:33 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Trend Test

Linn County Data: CRLCSWA_Groundwater Database Printed 5/10/2024, 3:34 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Antimony (mg/l)	**GU-1**	**0.00009957**	**146**	**78**	**Yes**	**21**	**100**	**0.02**	**NP**
Antimony (mg/l)	**GU-L**	**0.0001006**	**110**	**63**	**Yes**	**18**	**83.33**	**0.02**	**NP**
Antimony (mg/l)	GU-O	0.0000652	13	23	No	9	100	0.02	NP
Antimony (mg/l)	GU-P	0.0001567	12	17	No	7	100	0.02	NP
Arsenic (mg/l)	GU-1	0.0004451	31	84	No	22	0	0.02	NP
Arsenic (mg/l)	GU-L	0.000051	33	68	No	19	36.84	0.02	NP
Arsenic (mg/l)	**GU-O**	**-0.0005249**	**-28**	**-23**	**Yes**	**9**	**0**	**0.02**	**NP**
Arsenic (mg/l)	GU-P	0.0002642	5	17	No	7	0	0.02	NP
Barium (mg/l)	GU-1	-0.04102	-56	-84	No	22	0	0.02	NP
Barium (mg/l)	GU-L	-0.0007568	-17	-63	No	18	0	0.02	NP
Barium (mg/l)	GU-O	0.005012	4	23	No	9	0	0.02	NP
Barium (mg/l)	GU-P	0.0127	17	20	No	8	0	0.02	NP
Beryllium (m...	**GU-1**	**0.00001747**	**133**	**78**	**Yes**	**21**	**95.24**	**0.02**	**NP**
Beryllium (m...	**GU-L**	**0.00001641**	**95**	**63**	**Yes**	**18**	**94.44**	**0.02**	**NP**
Beryllium (m...	GU-O	0.00002309	23	23	No	9	100	0.02	NP
Beryllium (m...	GU-P	0.00003033	12	17	No	7	100	0.02	NP
Cadmium (mg/l)	**GU-1**	**0.000003378**	**88**	**78**	**Yes**	**21**	**100**	**0.02**	**NP**
Cadmium (mg/l)	**GU-L**	**0.000003617**	**60**	**58**	**Yes**	**17**	**100**	**0.02**	**NP**
Cadmium (mg/l)	GU-O	0.00001366	20	23	No	9	88.89	0.02	NP
Cadmium (mg/l)	GU-P	0.00002275	10	17	No	7	85.71	0.02	NP
Chromium (mg/l)	**GU-1**	**0.0001057**	**135**	**78**	**Yes**	**21**	**61.9**	**0.02**	**NP**
Chromium (mg/l)	**GU-L**	**0.00006694**	**71**	**63**	**Yes**	**18**	**88.89**	**0.02**	**NP**
Chromium (mg/l)	GU-O	0	15	23	No	9	100	0.02	NP
Chromium (mg/l)	GU-P	0	5	17	No	7	85.71	0.02	NP
Cobalt (mg/l)	GU-1	0.00007862	31	84	No	22	0	0.02	NP
Cobalt (mg/l)	**GU-L**	**0.0006865**	**72**	**68**	**Yes**	**19**	**5.263**	**0.02**	**NP**
Cobalt (mg/l)	**GU-O**	**-0.000153**	**-29**	**-23**	**Yes**	**9**	**22.22**	**0.02**	**NP**
Cobalt (mg/l)	**GU-P**	**-0.0003947**	**-21**	**-17**	**Yes**	**7**	**0**	**0.02**	**NP**
Copper (mg/l)	GU-1	0.00003624	25	73	No	20	85	0.02	NP
Copper (mg/l)	GU-L	0.00004473	23	63	No	18	83.33	0.02	NP
Copper (mg/l)	GU-O	0.00001667	15	23	No	9	88.89	0.02	NP
Copper (mg/l)	GU-P	0	0	17	No	7	100	0.02	NP
Lead (mg/l)	GU-1	0.000001748	10	73	No	20	80	0.02	NP
Lead (mg/l)	GU-L	4.9e-7	9	58	No	17	94.12	0.02	NP
Lead (mg/l)	GU-O	0	7	23	No	9	100	0.02	NP
Lead (mg/l)	GU-P	0	3	17	No	7	85.71	0.02	NP
Nickel (mg/l)	**GU-1**	**-0.001555**	**-95**	**-84**	**Yes**	**22**	**0**	**0.02**	**NP**
Nickel (mg/l)	**GU-L**	**0.0005346**	**80**	**68**	**Yes**	**19**	**21.05**	**0.02**	**NP**
Nickel (mg/l)	GU-O	0	15	23	No	9	100	0.02	NP
Nickel (mg/l)	GU-P	0	1	17	No	7	85.71	0.02	NP
Selenium (mg/l)	**GU-1**	**0.00002287**	**65**	**63**	**Yes**	**18**	**94.44**	**0.02**	**NP**
Selenium (mg/l)	**GU-L**	**0.0000576**	**78**	**58**	**Yes**	**17**	**100**	**0.02**	**NP**
Selenium (mg/l)	GU-O	0.00005025	23	23	No	9	100	0.02	NP
Selenium (mg/l)	GU-P	0.0002224	10	17	No	7	85.71	0.02	NP
Silver (mg/l)	**GU-1**	**0.00004583**	**169**	**78**	**Yes**	**21**	**95.24**	**0.02**	**NP**
Silver (mg/l)	**GU-L**	**0.00005085**	**133**	**63**	**Yes**	**18**	**88.89**	**0.02**	**NP**
Silver (mg/l)	**GU-O**	**0.000009799**	**27**	**23**	**Yes**	**9**	**100**	**0.02**	**NP**
Silver (mg/l)	GU-P	0.000005055	12	17	No	7	100	0.02	NP
Thallium (mg/l)	**GU-1**	**0.0000341**	**103**	**78**	**Yes**	**21**	**90.48**	**0.02**	**NP**
Thallium (mg/l)	**GU-L**	**0.00003602**	**85**	**63**	**Yes**	**18**	**100**	**0.02**	**NP**

Trend Test

Linn County Data: CRLCSWA_Groundwater Database Printed 5/10/2024, 3:34 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Thallium (mg/l)	GU-O	0	15	23	No	9	100	0.02	NP
Thallium (mg/l)	GU-P	0	6	17	No	7	100	0.02	NP
Vanadium (mg/l)	**GU-1**	**0.00009234**	**136**	**78**	**Yes**	**21**	**85.71**	**0.02**	**NP**
Vanadium (mg/l)	**GU-L**	**0.00008146**	**80**	**53**	**Yes**	**16**	**100**	**0.02**	**NP**
Vanadium (mg/l)	GU-O	0	8	23	No	9	100	0.02	NP
Vanadium (mg/l)	GU-P	0	-2	-17	No	7	85.71	0.02	NP
Zinc (mg/l)	GU-1	0	27	78	No	21	66.67	0.02	NP
Zinc (mg/l)	GU-L	0	1	63	No	18	83.33	0.02	NP
Zinc (mg/l)	GU-O	-0.00002501	-16	-23	No	9	100	0.02	NP
Zinc (mg/l)	GU-P	-0.0001517	-10	-17	No	7	100	0.02	NP

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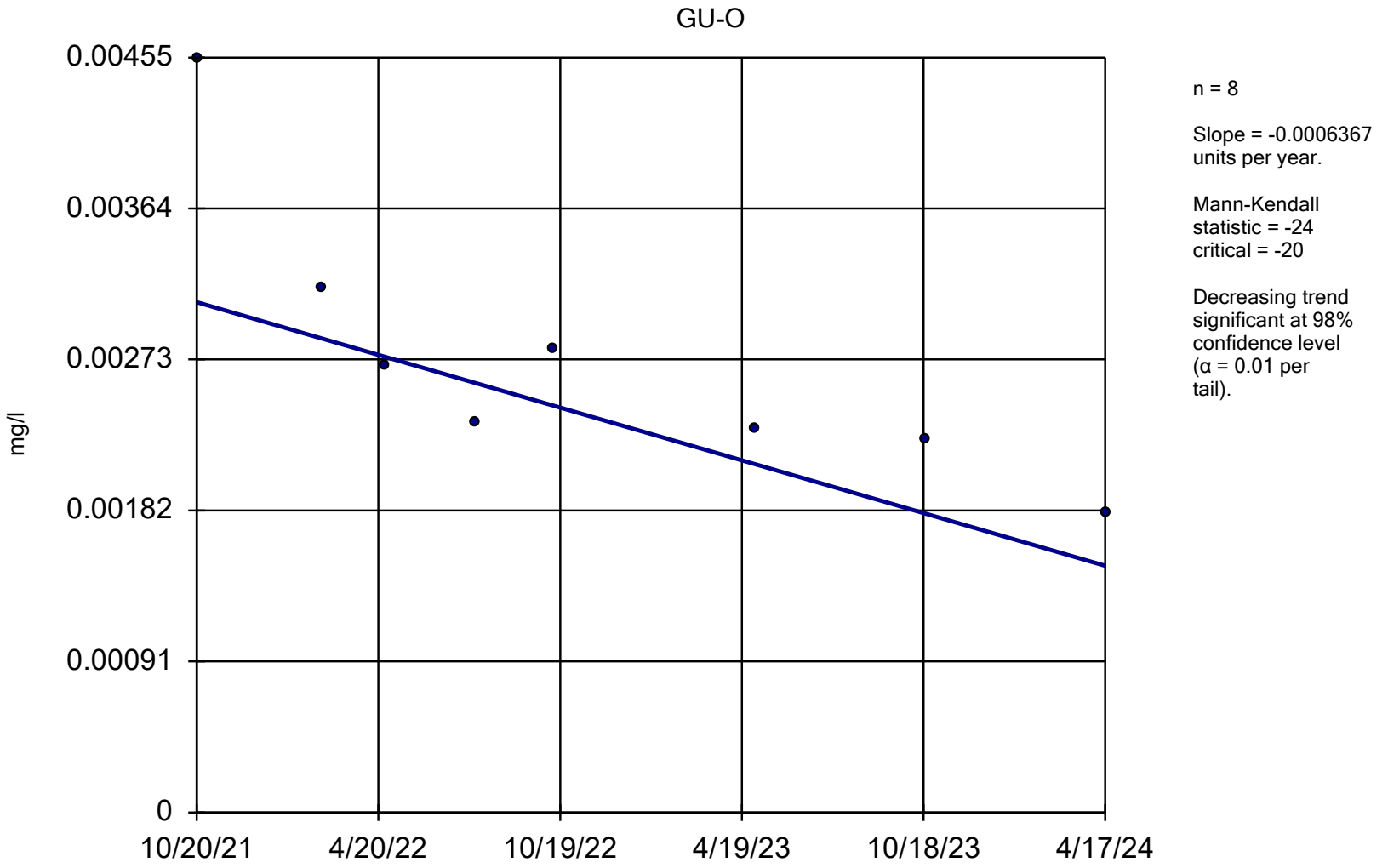
Underdrain Inorganic Trend Analysis – Recent Events Dataset – Spring 2024

Sen's Slope Estimator

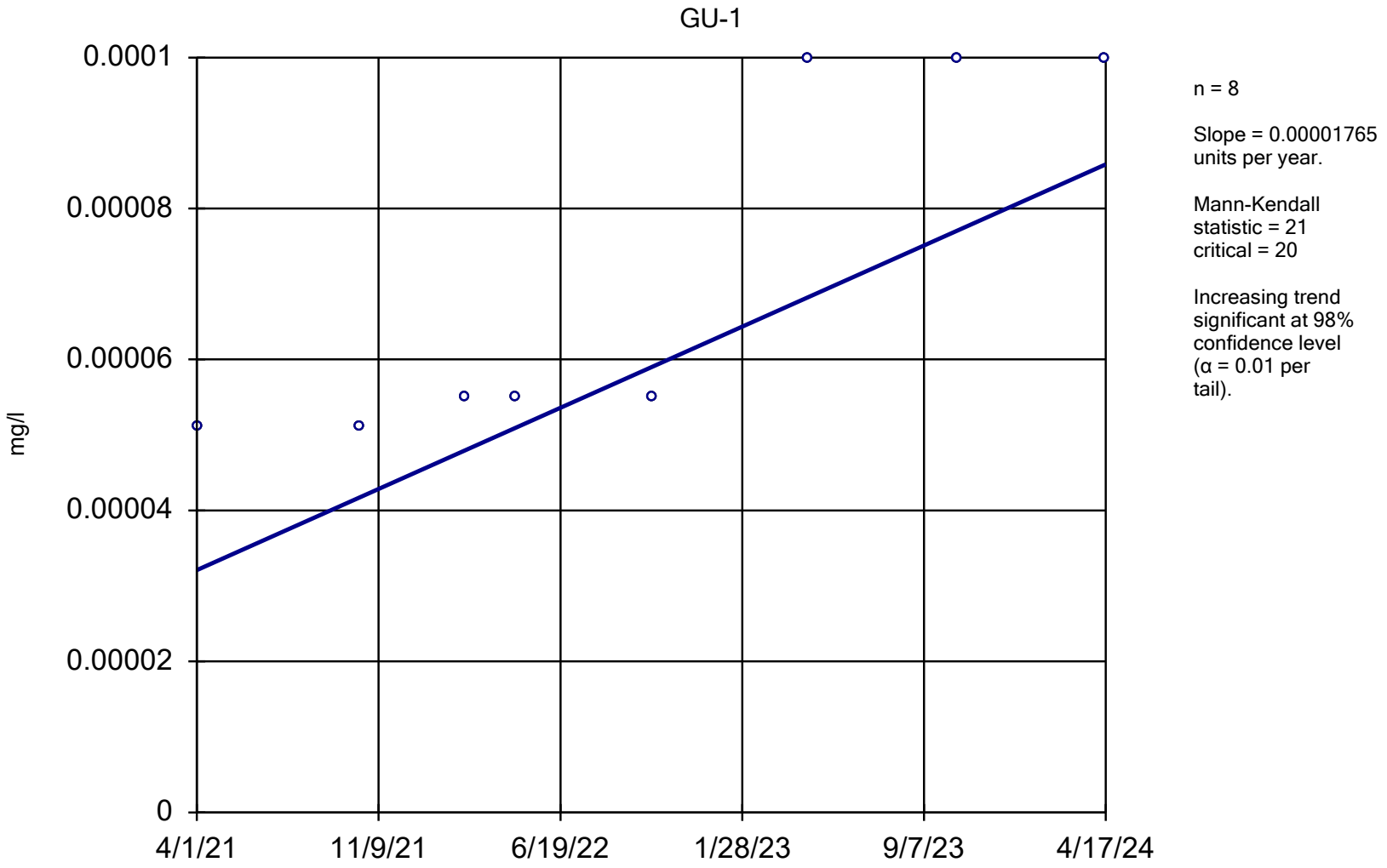


Constituent: Arsenic Analysis Run 5/10/2024 3:38 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

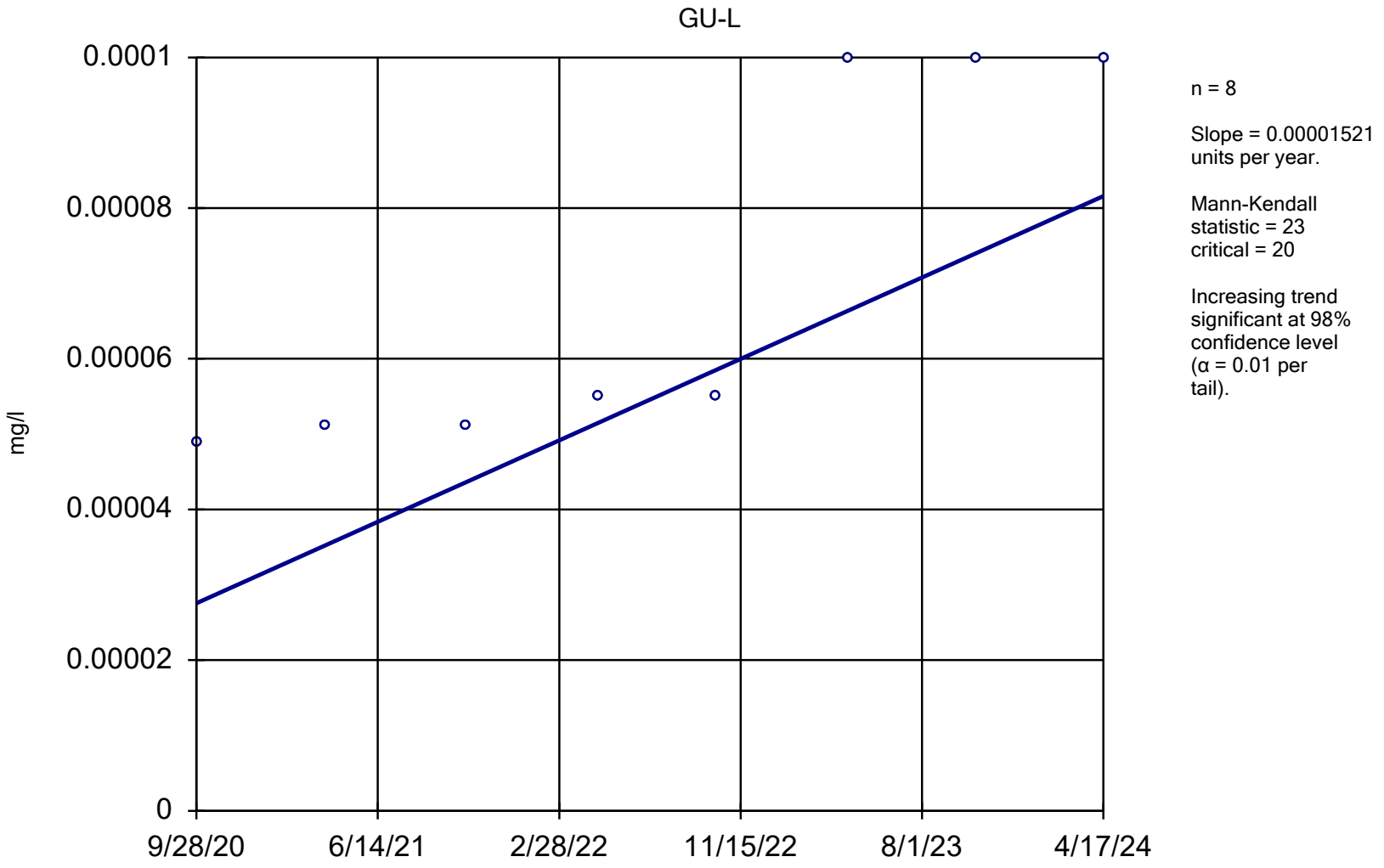


Constituent: Cadmium Analysis Run 5/10/2024 3:38 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

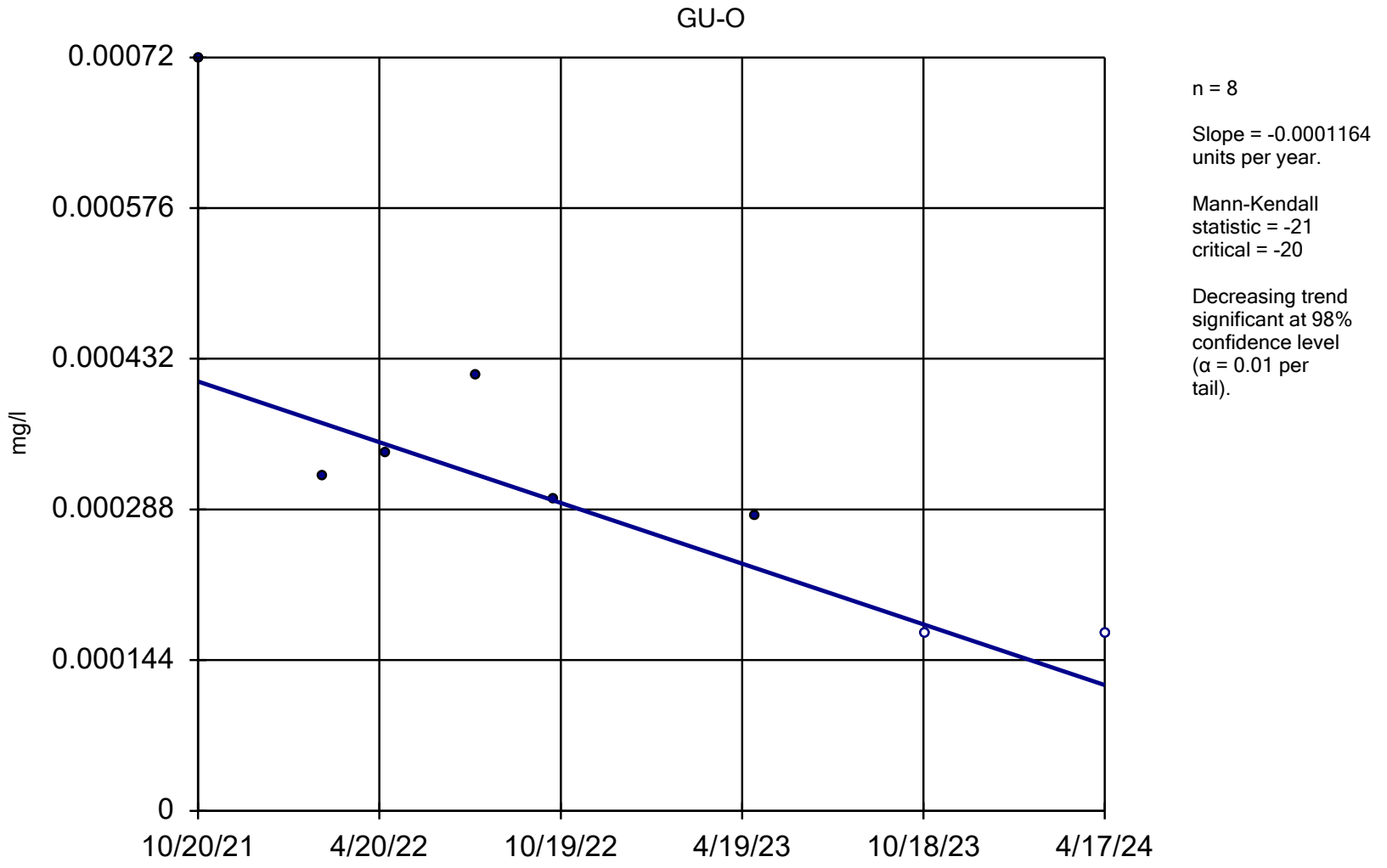


Constituent: Cadmium Analysis Run 5/10/2024 3:38 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

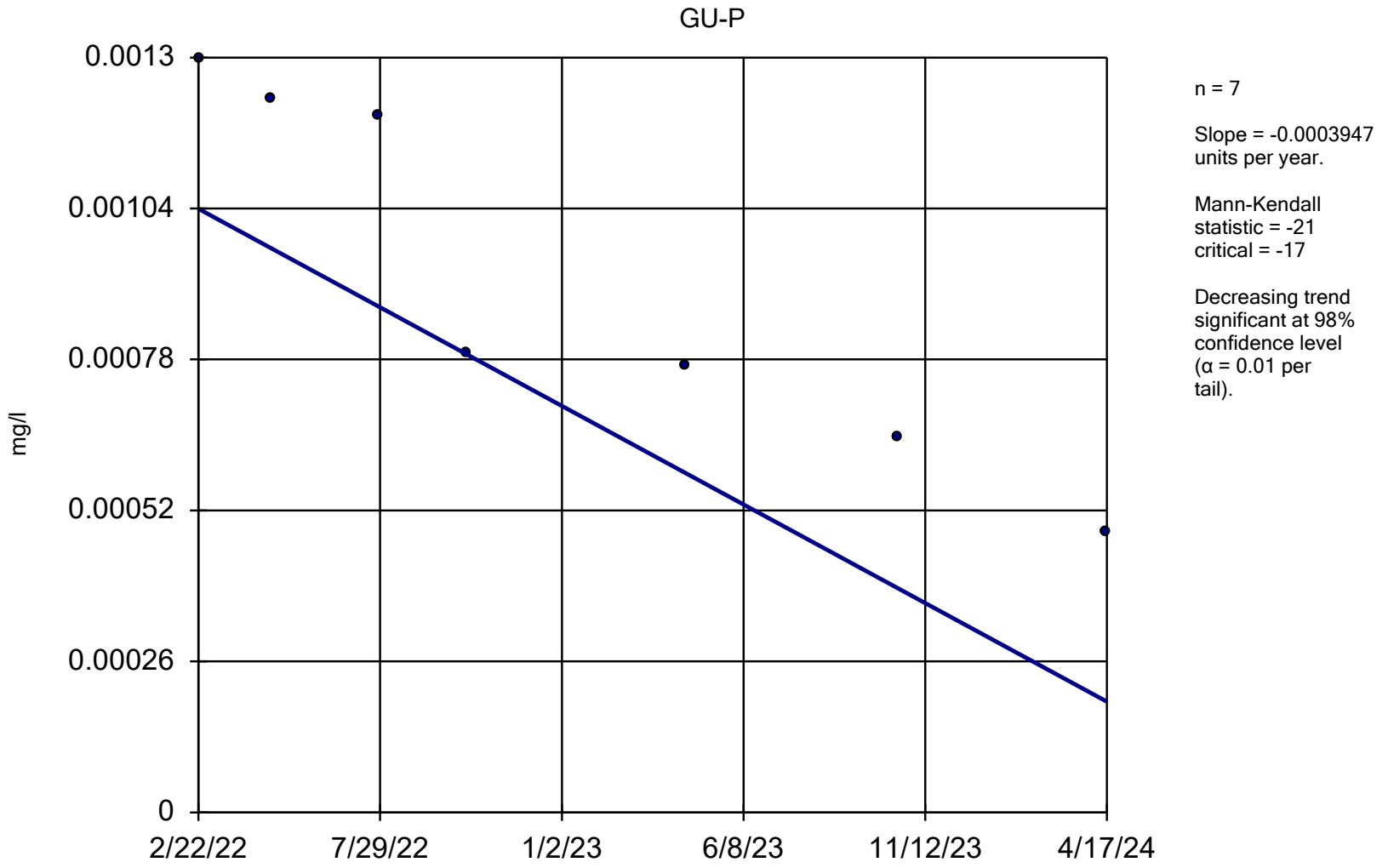
Sen's Slope Estimator



Constituent: Cobalt Analysis Run 5/10/2024 3:38 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Sen's Slope Estimator

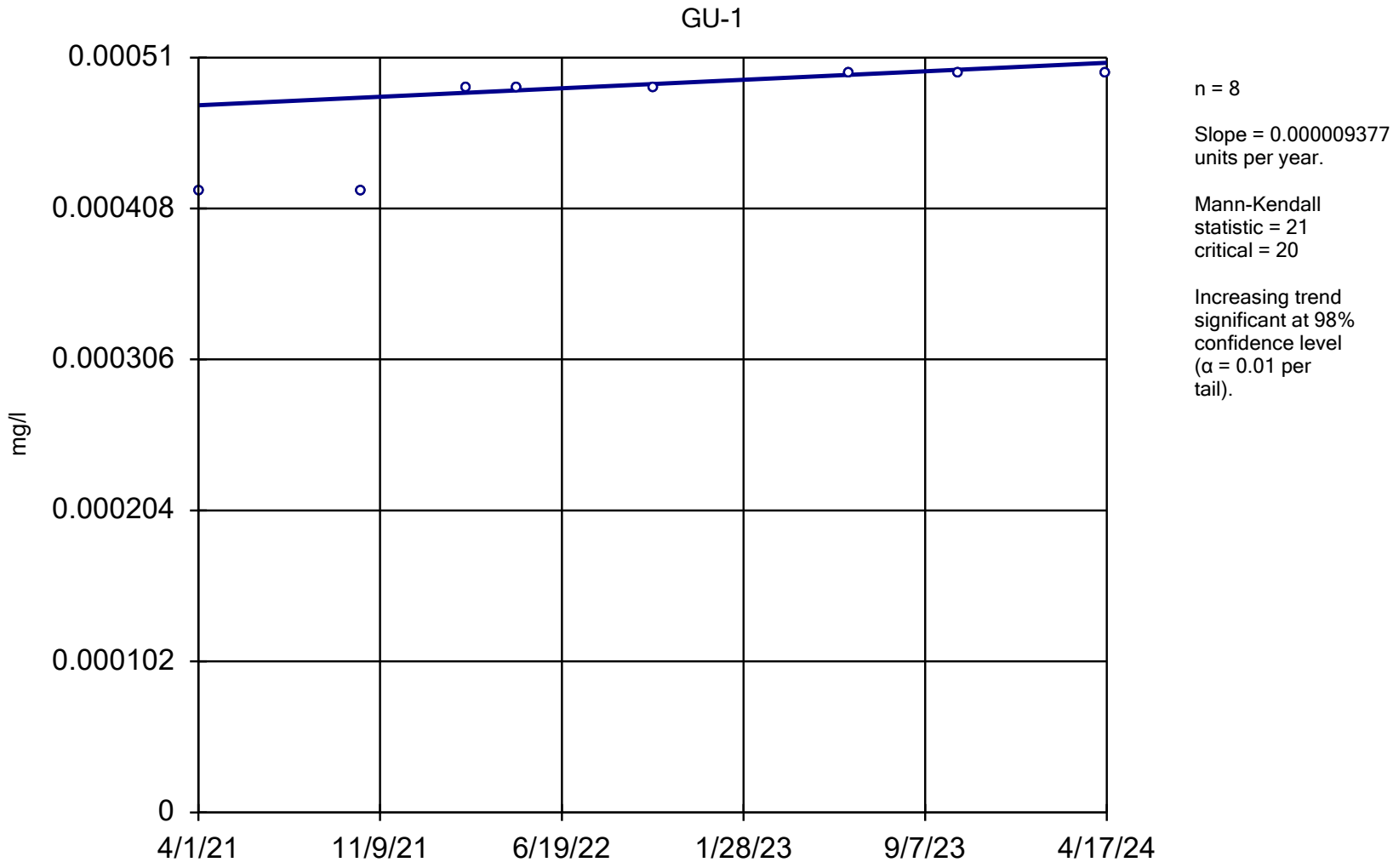


Constituent: Cobalt Analysis Run 5/10/2024 3:38 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

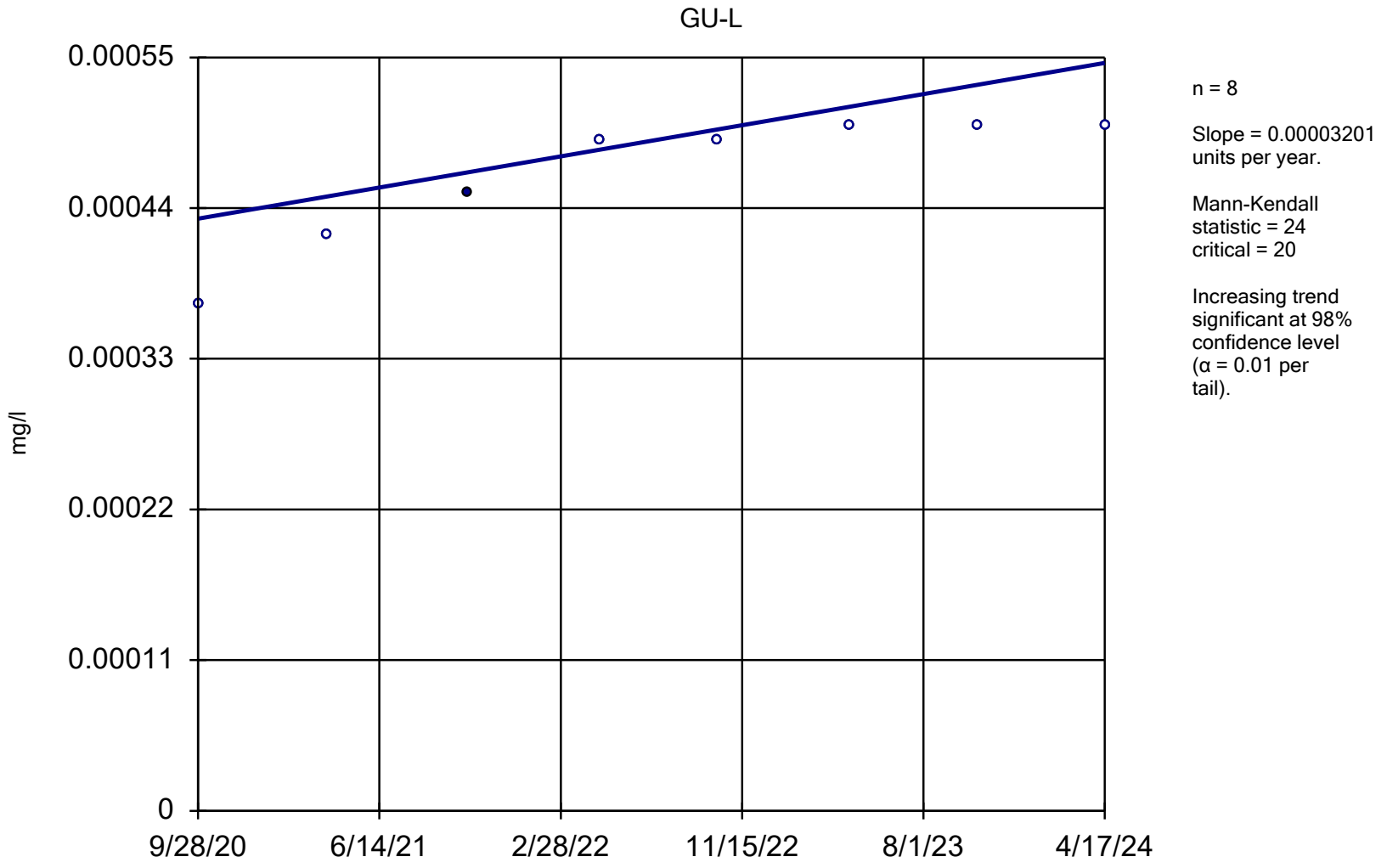


Constituent: Silver Analysis Run 5/10/2024 3:39 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



Constituent: Silver Analysis Run 5/10/2024 3:39 PM View: GU_App I Metals

Linn County Data: CRLCSWA_Groundwater Database

Trend Test

Linn County Data: CRLCSWA_Groundwater Database Printed 5/10/2024, 3:39 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Antimony (mg/l)	GU-1	0	-3	-20	No	8	100	0.02	NP
Antimony (mg/l)	GU-L	0.000009035	4	20	No	8	87.5	0.02	NP
Antimony (mg/l)	GU-O	0	5	20	No	8	100	0.02	NP
Antimony (mg/l)	GU-P	0.0001567	12	17	No	7	100	0.02	NP
Arsenic (mg/l)	GU-1	0.00005843	0	20	No	8	0	0.02	NP
Arsenic (mg/l)	GU-L	0.00002709	2	20	No	8	12.5	0.02	NP
Arsenic (mg/l)	**GU-O**	**-0.0006367**	**-24**	**-20**	**Yes**	**8**	**0**	**0.02**	**NP**
Arsenic (mg/l)	GU-P	0.0002642	5	17	No	7	0	0.02	NP
Barium (mg/l)	GU-1	0.02473	2	20	No	8	0	0.02	NP
Barium (mg/l)	GU-L	0.001168	2	20	No	8	0	0.02	NP
Barium (mg/l)	GU-O	0.02925	12	20	No	8	0	0.02	NP
Barium (mg/l)	GU-P	0.0127	17	20	No	8	0	0.02	NP
Beryllium (m...	GU-1	0.00002161	15	20	No	8	100	0.02	NP
Beryllium (m...	GU-L	0.00001825	15	20	No	8	100	0.02	NP
Beryllium (m...	GU-O	0.00002598	15	20	No	8	100	0.02	NP
Beryllium (m...	GU-P	0.00003033	12	17	No	7	100	0.02	NP
Cadmium (mg/l)	**GU-1**	**0.00001765**	**21**	**20**	**Yes**	**8**	**100**	**0.02**	**NP**
Cadmium (mg/l)	**GU-L**	**0.00001521**	**23**	**20**	**Yes**	**8**	**100**	**0.02**	**NP**
Cadmium (mg/l)	GU-O	0.00002235	20	20	No	8	87.5	0.02	NP
Cadmium (mg/l)	GU-P	0.00002275	10	17	No	7	85.71	0.02	NP
Chromium (mg/l)	GU-1	0.0002095	18	20	No	8	50	0.02	NP
Chromium (mg/l)	GU-L	0	7	20	No	8	87.5	0.02	NP
Chromium (mg/l)	GU-O	0	7	20	No	8	100	0.02	NP
Chromium (mg/l)	GU-P	0	5	17	No	7	85.71	0.02	NP
Cobalt (mg/l)	GU-1	-0.0006291	-14	-20	No	8	0	0.02	NP
Cobalt (mg/l)	GU-L	0.001693	8	20	No	8	0	0.02	NP
Cobalt (mg/l)	**GU-O**	**-0.0001164**	**-21**	**-20**	**Yes**	**8**	**25**	**0.02**	**NP**
Cobalt (mg/l)	**GU-P**	**-0.0003947**	**-21**	**-17**	**Yes**	**7**	**0**	**0.02**	**NP**
Copper (mg/l)	GU-1	0.0000566	13	20	No	8	87.5	0.02	NP
Copper (mg/l)	GU-L	0.0001077	11	20	No	8	87.5	0.02	NP
Copper (mg/l)	GU-O	0	9	20	No	8	87.5	0.02	NP
Copper (mg/l)	GU-P	0	0	17	No	7	100	0.02	NP
Lead (mg/l)	GU-1	0.00001408	10	20	No	8	75	0.02	NP
Lead (mg/l)	GU-L	0.00002723	20	20	No	8	87.5	0.02	NP
Lead (mg/l)	GU-O	0	13	20	No	8	100	0.02	NP
Lead (mg/l)	GU-P	0	3	17	No	7	85.71	0.02	NP
Nickel (mg/l)	GU-1	0.002757	8	20	No	8	0	0.02	NP
Nickel (mg/l)	GU-L	0.001189	12	20	No	8	12.5	0.02	NP
Nickel (mg/l)	GU-O	0	7	20	No	8	100	0.02	NP
Nickel (mg/l)	GU-P	0	1	17	No	7	85.71	0.02	NP
Selenium (mg/l)	GU-1	0	5	20	No	8	87.5	0.02	NP
Selenium (mg/l)	GU-L	0.0001217	11	20	No	8	100	0.02	NP
Selenium (mg/l)	GU-O	0.0001905	15	20	No	8	100	0.02	NP
Selenium (mg/l)	GU-P	0.0002224	10	17	No	7	85.71	0.02	NP
Silver (mg/l)	**GU-1**	**0.000009377**	**21**	**20**	**Yes**	**8**	**100**	**0.02**	**NP**
Silver (mg/l)	**GU-L**	**0.00003201**	**24**	**20**	**Yes**	**8**	**87.5**	**0.02**	**NP**
Silver (mg/l)	GU-O	0.000006668	19	20	No	8	100	0.02	NP
Silver (mg/l)	GU-P	0.000005055	12	17	No	7	100	0.02	NP
Thallium (mg/l)	GU-1	0	-1	-20	No	8	87.5	0.02	NP
Thallium (mg/l)	GU-L	0	7	20	No	8	100	0.02	NP

Trend Test

Linn County Data: CRLCSWA_Groundwater Database Printed 5/10/2024, 3:39 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Thallium (mg/l)	GU-O	0	7	20	No	8	100	0.02	NP
Thallium (mg/l)	GU-P	0	6	17	No	7	100	0.02	NP
Vanadium (mg/l)	GU-1	0	0	20	No	8	100	0.02	NP
Vanadium (mg/l)	GU-L	0	13	20	No	8	100	0.02	NP
Vanadium (mg/l)	GU-O	0	0	20	No	8	100	0.02	NP
Vanadium (mg/l)	GU-P	0	-2	-17	No	7	85.71	0.02	NP
Zinc (mg/l)	GU-1	-0.0007652	-9	-20	No	8	62.5	0.02	NP
Zinc (mg/l)	GU-L	-0.0001093	-10	-20	No	8	75	0.02	NP
Zinc (mg/l)	GU-O	-0.0001299	-13	-20	No	8	100	0.02	NP
Zinc (mg/l)	GU-P	-0.0001517	-10	-17	No	7	100	0.02	NP

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Underdrain Inorganic Intrawell Prediction Limit Analysis – Spring 2024

Prediction Limit

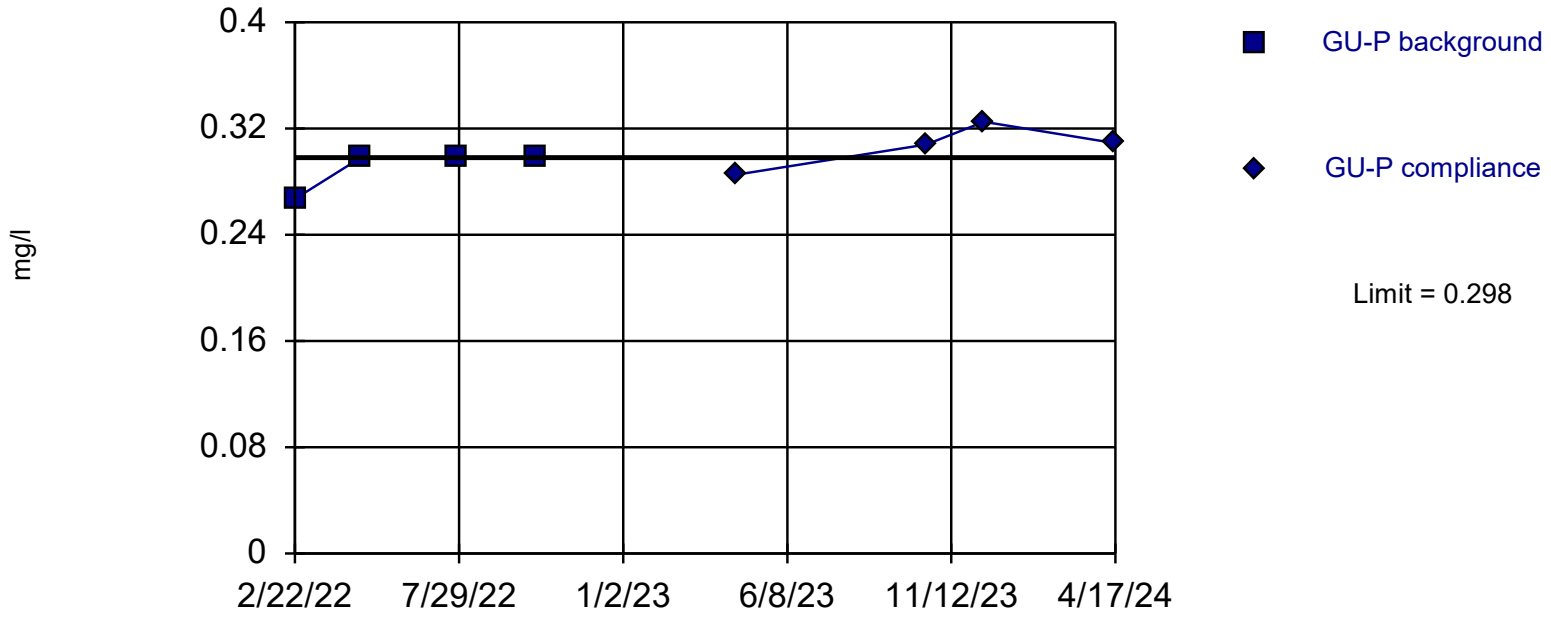
Linn County Data: CRLCSWA_Groundwater Database Printed 5/10/2024, 3:43 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Wells	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/l)	GU-1	0.000690	4/17/2024	0.001ND	No	17	n/a	n/a	n/a	100	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Antimony (mg/l)	GU-L	0.00111	4/17/2024	0.001ND	No	14	n/a	n/a	n/a	78.57	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Antimony (mg/l)	GU-O	0.000690	4/17/2024	0.001ND	No	5	n/a	n/a	n/a	100	n/a	n/a	0.04755	NP Intra (NDs) 1 of 2
Arsenic (mg/l)	GU-1	0.0876	4/17/2024	0.00735	No	18	n/a	0.2089	0.08721	0	None	x^(1/3)	0.000...	Param Intra 1 of 2
Arsenic (mg/l)	GU-L	0.0131	4/17/2024	0.00238	No	15	n/a	-6.719	0.8365	46.67	Kapla...	ln(x)	0.000...	Param Intra 1 of 2
Arsenic (mg/l)	GU-O	0.00942	4/17/2024	0.00181J	No	5	n/a	0.003124	0.0008495	0	None	No	0.000...	Param Intra 1 of 2
Barium (mg/l)	GU-1	1.61	4/17/2024	0.488	No	18	n/a	0.7272	0.3274	0	None	No	0.000...	Param Intra 1 of 2
Barium (mg/l)	GU-L	0.12	4/17/2024	0.0442	No	14	n/a	0.04751	0.02485	0	None	No	0.000...	Param Intra 1 of 2
Barium (mg/l)	GU-O	0.876	4/17/2024	0.325	No	5	n/a	0.2968	0.07815	0	None	No	0.000...	Param Intra 1 of 2
Beryllium (mg/l)	GU-1	0.000270	4/17/2024	0.00033ND	No	17	n/a	n/a	n/a	94.12	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Beryllium (mg/l)	GU-L	0.000270	4/17/2024	0.00033ND	No	14	n/a	n/a	n/a	92.86	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Beryllium (mg/l)	GU-O	0.000270	4/17/2024	0.00033ND	No	5	n/a	n/a	n/a	100	n/a	n/a	0.04755	NP Intra (NDs) 1 of 2
Cadmium (mg/l)	GU-1	0.0000550	4/17/2024	0.0001ND	No	17	n/a	n/a	n/a	100	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Cadmium (mg/l)	GU-L	0.0000550	4/17/2024	0.0001ND	No	13	n/a	n/a	n/a	100	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Cadmium (mg/l)	GU-O	0.0000730	4/17/2024	0.0001ND	No	5	n/a	n/a	n/a	80	n/a	n/a	0.04755	NP Intra (NDs) 1 of 2
Chromium (mg/l)	GU-1	0.00148	4/17/2024	0.00187J	No	17	n/a	n/a	n/a	76.47	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Chromium (mg/l)	GU-L	0.00131	4/17/2024	0.0012ND	No	14	n/a	n/a	n/a	92.86	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Chromium (mg/l)	GU-O	0.00110	4/17/2024	0.0012ND	No	5	n/a	n/a	n/a	100	n/a	n/a	0.04755	NP Intra (NDs) 1 of 2
Cobalt (mg/l)	GU-1	0.021	4/17/2024	0.00289	No	18	n/a	0.1587	0.04349	0	None	x^(1/3)	0.000...	Param Intra 1 of 2
Cobalt (mg/l)	GU-L	0.0189	4/17/2024	0.00931	No	15	n/a	0.04122	0.03384	6.667	None	sqrt(x)	0.000...	Param Intra 1 of 2
Cobalt (mg/l)	GU-O	0.00756	4/17/2024	0.00017ND	No	5	n/a	0.08148	0.01549	0	None	x^(1/3)	0.000...	Param Intra 1 of 2
Copper (mg/l)	GU-1	0.00320	4/17/2024	0.0018ND	No	16	n/a	n/a	n/a	87.5	n/a	n/a	0.006456	NP Intra (NDs) 1 of 2
Copper (mg/l)	GU-L	0.00320	4/17/2024	0.0018ND	No	14	n/a	n/a	n/a	85.71	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Copper (mg/l)	GU-O	0.00180	4/17/2024	0.0018ND	No	5	n/a	n/a	n/a	100	n/a	n/a	0.04755	NP Intra (NDs) 1 of 2
Lead (mg/l)	GU-1	0.000943	4/17/2024	0.00026ND	No	16	n/a	n/a	n/a	81.25	n/a	n/a	0.006456	NP Intra (NDs) 1 of 2
Lead (mg/l)	GU-L	0.000240	4/17/2024	0.00026ND	No	13	n/a	n/a	n/a	100	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Lead (mg/l)	GU-O	0.000240	4/17/2024	0.00026ND	No	5	n/a	n/a	n/a	100	n/a	n/a	0.04755	NP Intra (NDs) 1 of 2
Nickel (mg/l)	GU-1	0.0728	4/17/2024	0.0463	No	18	n/a	0.04862	0.008971	0	None	No	0.000...	Param Intra 1 of 2
Nickel (mg/l)	GU-L	0.0105	4/17/2024	0.00774	No	15	n/a	0.003532	0.002452	26.67	Kapla...	No	0.000...	Param Intra 1 of 2
Nickel (mg/l)	GU-O	0.00190	4/17/2024	0.0021ND	No	5	n/a	n/a	n/a	100	n/a	n/a	0.04755	NP Intra (NDs) 1 of 2
Selenium (mg/l)	GU-1	0.00125	4/17/2024	0.0014ND	No	15	n/a	n/a	n/a	93.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Selenium (mg/l)	GU-L	0.000960	4/17/2024	0.0014ND	No	13	n/a	n/a	n/a	100	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Selenium (mg/l)	GU-O	0.000960	4/17/2024	0.0014ND	No	5	n/a	n/a	n/a	100	n/a	n/a	0.04755	NP Intra (NDs) 1 of 2
Silver (mg/l)	GU-1	0.000490	4/17/2024	0.0005ND	No	17	n/a	n/a	n/a	94.12	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Silver (mg/l)	GU-L	0.000490	4/17/2024	0.0005ND	No	14	n/a	n/a	n/a	85.71	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Silver (mg/l)	GU-O	0.000490	4/17/2024	0.0005ND	No	5	n/a	n/a	n/a	100	n/a	n/a	0.04755	NP Intra (NDs) 1 of 2
Thallium (mg/l)	GU-1	0.000817	4/17/2024	0.00057ND	No	17	n/a	n/a	n/a	88.24	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Thallium (mg/l)	GU-L	0.000260	4/17/2024	0.00057ND	No	14	n/a	n/a	n/a	100	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Thallium (mg/l)	GU-O	0.000260	4/17/2024	0.00057ND	No	5	n/a	n/a	n/a	100	n/a	n/a	0.04755	NP Intra (NDs) 1 of 2
Vanadium (mg/l)	GU-1	0.00291	4/17/2024	0.0011ND	No	17	n/a	n/a	n/a	82.35	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Vanadium (mg/l)	GU-L	0.00110	4/17/2024	0.0011ND	No	13	n/a	n/a	n/a	100	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Vanadium (mg/l)	GU-O	0.00110	4/17/2024	0.0011ND	No	5	n/a	n/a	n/a	100	n/a	n/a	0.04755	NP Intra (NDs) 1 of 2
Zinc (mg/l)	GU-1	0.0200	4/17/2024	0.0097ND	No	17	n/a	n/a	n/a	64.71	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Zinc (mg/l)	GU-L	0.0163	4/17/2024	0.0097ND	No	14	n/a	n/a	n/a	85.71	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Zinc (mg/l)	GU-O	0.0100	4/17/2024	0.0097ND	No	5	n/a	n/a	n/a	100	n/a	n/a	0.04755	NP Intra (NDs) 1 of 2

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 4 background values. Well-constituent pair annual alpha = 0.119. Individual comparison alpha = 0.06138 (1 of 2).

Constituent: Barium Analysis Run 5/10/2024 3:45 PM View: GU_App I Metals_GU-P

Linn County Data: CRLCSWA_Groundwater Database

Prediction Limit

Linn County Data: CRLCSWA_Groundwater Database Printed 5/10/2024, 3:46 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Wells	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/l)	GU-P	0.000690	4/17/2024	0.001ND	No	4	n/a	n/a	n/a	100	n/a	n/a	0.06138	NP Intra (NDs) 1 of 2
Arsenic (mg/l)	GU-P	0.00804	4/17/2024	0.00213	No	4	n/a	0.002273	0.0005868	0	None	No	0.000...	Param Intra 1 of 2
Barium (mg/l)	**GU-P**	**0.298**	**4/17/2024**	**0.309**	**Yes**	**4**	**n/a**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.06138**	**NP Intra (normality) ...**
Beryllium (mg/l)	GU-P	0.000270	4/17/2024	0.00033ND	No	4	n/a	n/a	n/a	100	n/a	n/a	0.06138	NP Intra (NDs) 1 of 2
Cadmium (mg/l)	GU-P	0.0000550	4/17/2024	0.0001ND	No	4	n/a	n/a	n/a	100	n/a	n/a	0.06138	NP Intra (NDs) 1 of 2
Chromium (mg/l)	GU-P	0.00117	4/17/2024	0.0012ND	No	4	n/a	n/a	n/a	75	n/a	n/a	0.06138	NP Intra (NDs) 1 of 2
Cobalt (mg/l)	GU-P	0.00207	4/17/2024	0.000484J	No	4	n/a	1.6e-9	7.4e-10	0	None	x^3	0.000...	Param Intra 1 of 2
Copper (mg/l)	GU-P	0.00180	4/17/2024	0.0018ND	No	4	n/a	n/a	n/a	100	n/a	n/a	0.06138	NP Intra (NDs) 1 of 2
Lead (mg/l)	GU-P	0.000526	4/17/2024	0.00026ND	No	4	n/a	n/a	n/a	75	n/a	n/a	0.06138	NP Intra (NDs) 1 of 2
Nickel (mg/l)	GU-P	0.00199	4/17/2024	0.0021ND	No	4	n/a	n/a	n/a	75	n/a	n/a	0.06138	NP Intra (NDs) 1 of 2
Selenium (mg/l)	GU-P	0.000960	4/17/2024	0.0014ND	No	4	n/a	n/a	n/a	100	n/a	n/a	0.06138	NP Intra (NDs) 1 of 2
Silver (mg/l)	GU-P	0.000490	4/17/2024	0.0005ND	No	4	n/a	n/a	n/a	100	n/a	n/a	0.06138	NP Intra (NDs) 1 of 2
Thallium (mg/l)	GU-P	0.000260	4/17/2024	0.00057ND	No	4	n/a	n/a	n/a	100	n/a	n/a	0.06138	NP Intra (NDs) 1 of 2
Vanadium (mg/l)	GU-P	0.00173	4/17/2024	0.0011ND	No	4	n/a	n/a	n/a	75	n/a	n/a	0.06138	NP Intra (NDs) 1 of 2
Zinc (mg/l)	GU-P	0.0100	4/17/2024	0.0097ND	No	4	n/a	n/a	n/a	100	n/a	n/a	0.06138	NP Intra (NDs) 1 of 2

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Underdrain VOC Screening – DQR – Spring 2024

Data Screening

Analysis Run 5/10/2024 3:14 PM View: GU_DQR
Linn County Data: CRLCSWA_Groundwater Database

A listing of detects for 46 constituents in 4 wells on 46 dates:

Acetone, GU-1, 3/21/2019: 11.6 ug/l
Acetone, GU-1, 10/18/2021: 40.6 ug/l
Benzene, GU-1, 10/18/2021: 0.945 ug/l

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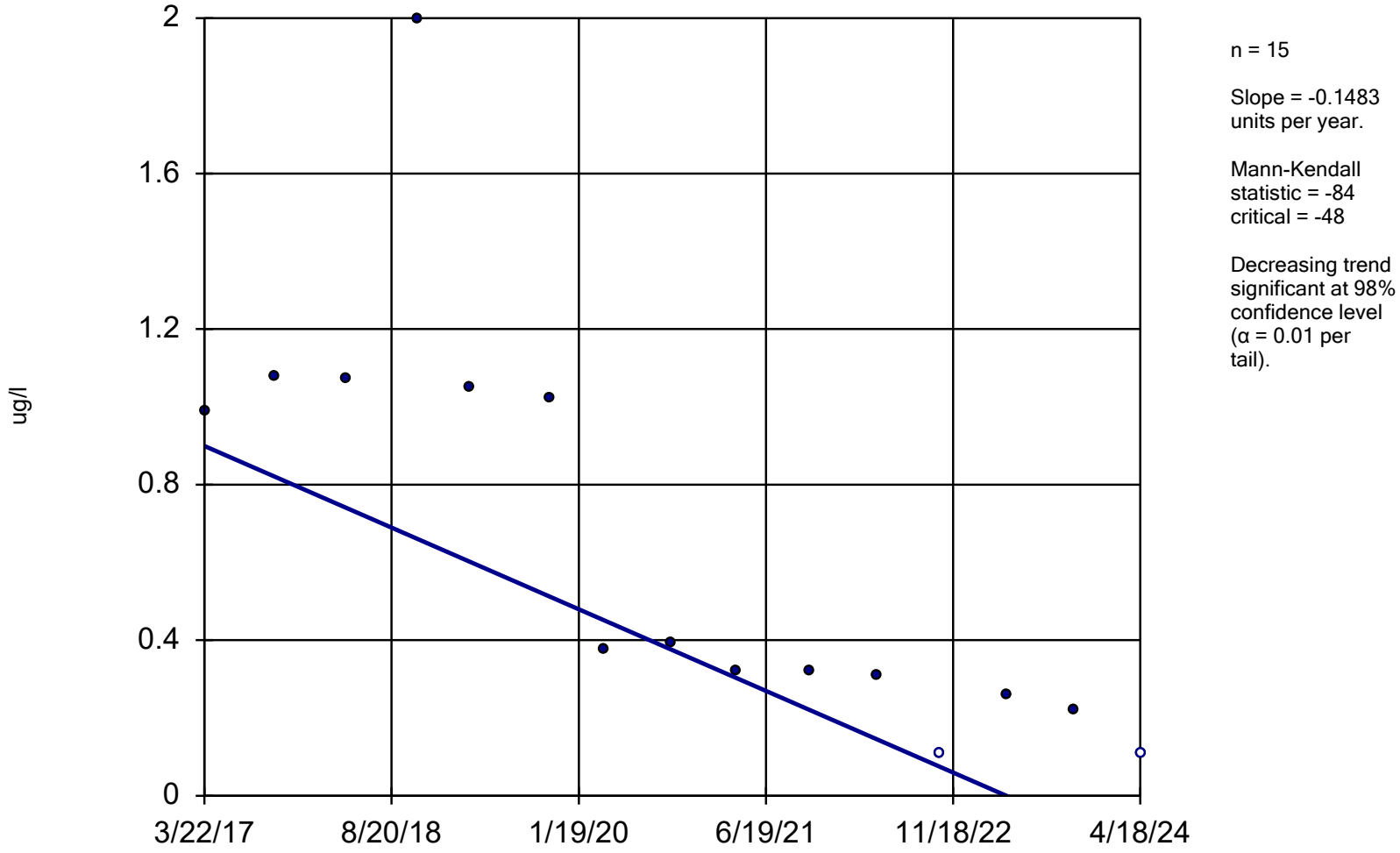
Underdrain VOC Trend Analysis – Full Dataset – Spring 2024

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-19



n = 15

Slope = -0.1483 units per year.

Mann-Kendall statistic = -84
critical = -48

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

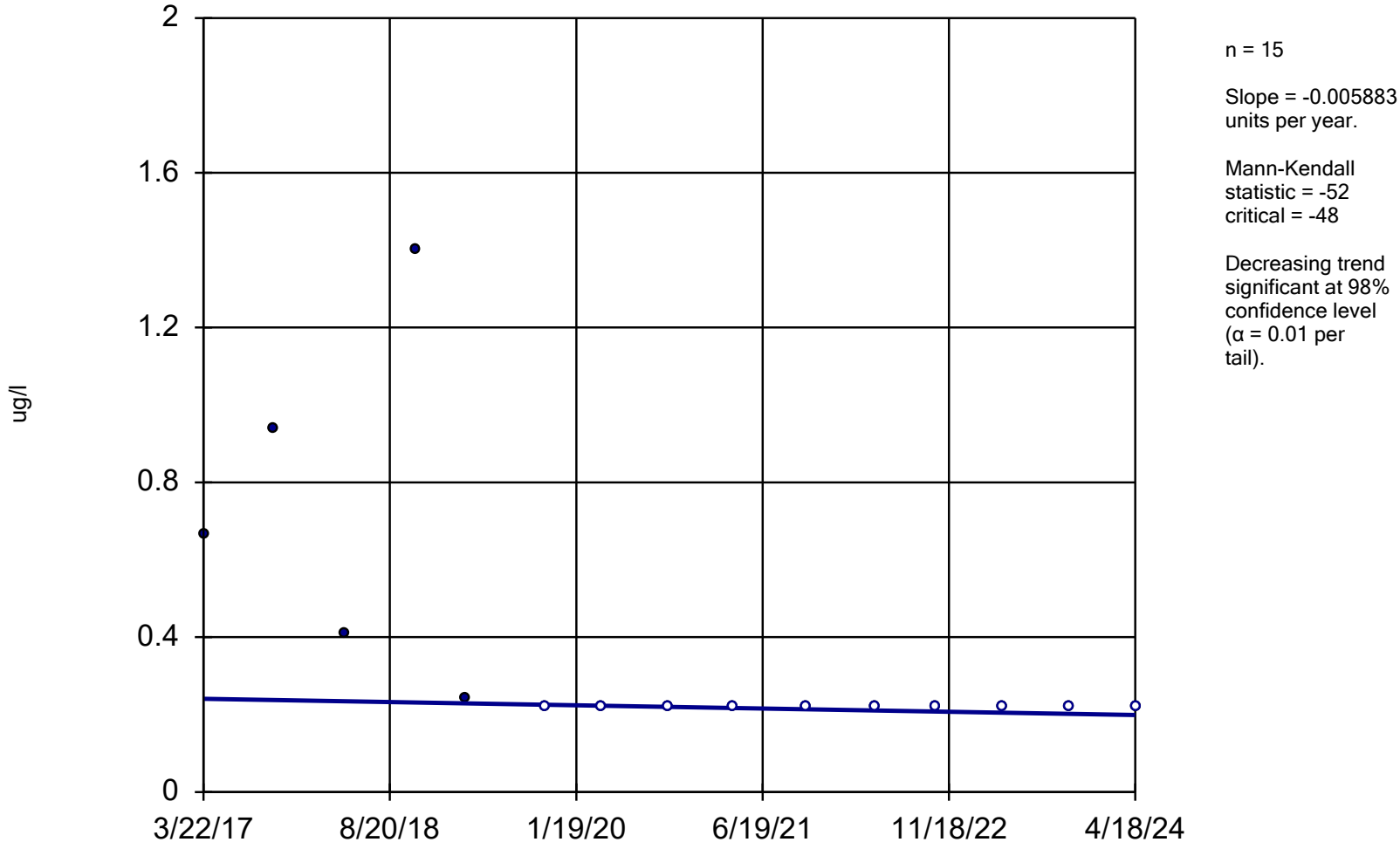
Constituent: Benzene Analysis Run 5/10/2024 3:50 PM View: Delineation wells

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-29



n = 15

Slope = -0.005883 units per year.

Mann-Kendall statistic = -52
critical = -48

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

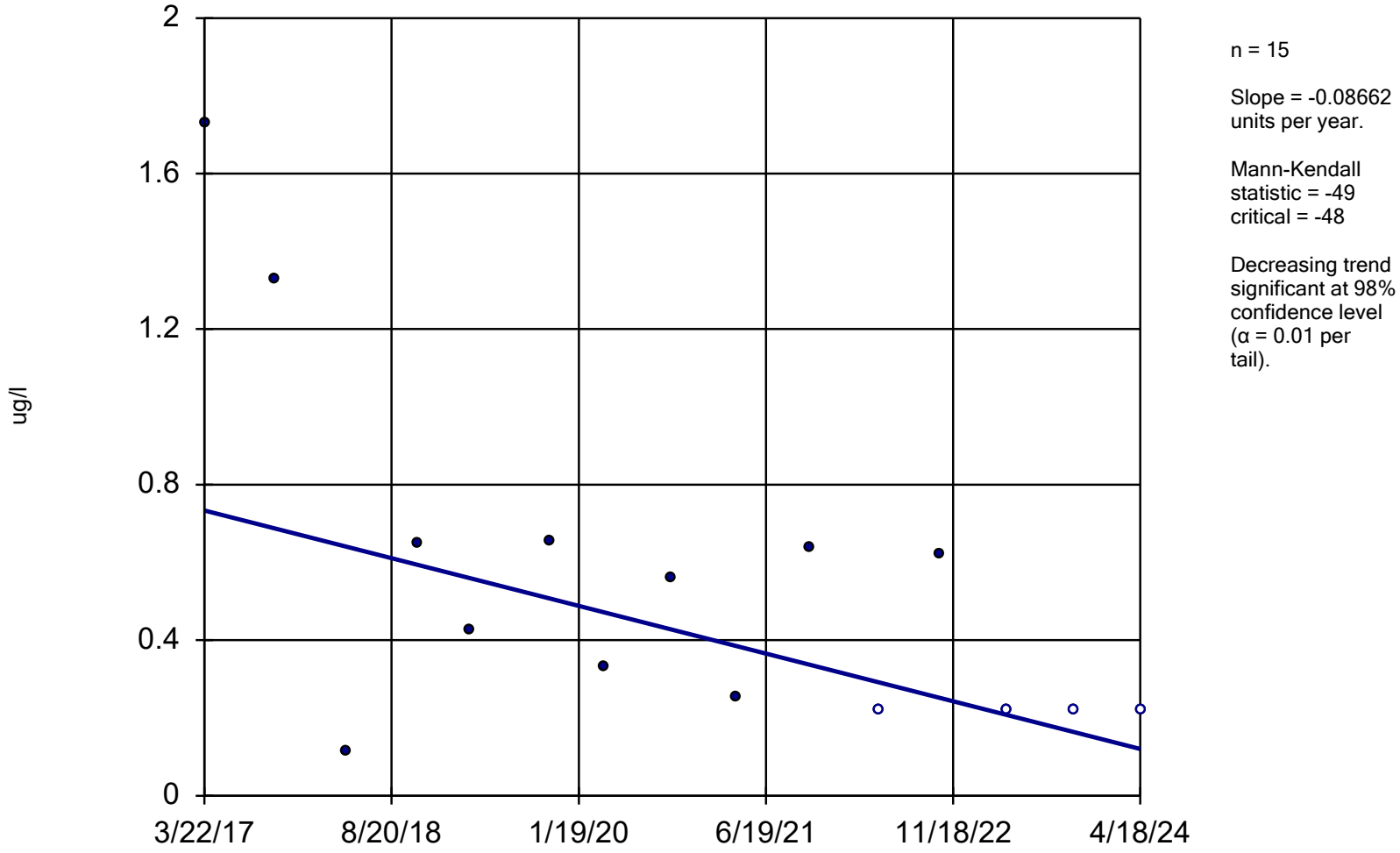
Constituent: Benzene Analysis Run 5/10/2024 3:50 PM View: Delineation wells

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-300



n = 15

Slope = -0.08662 units per year.

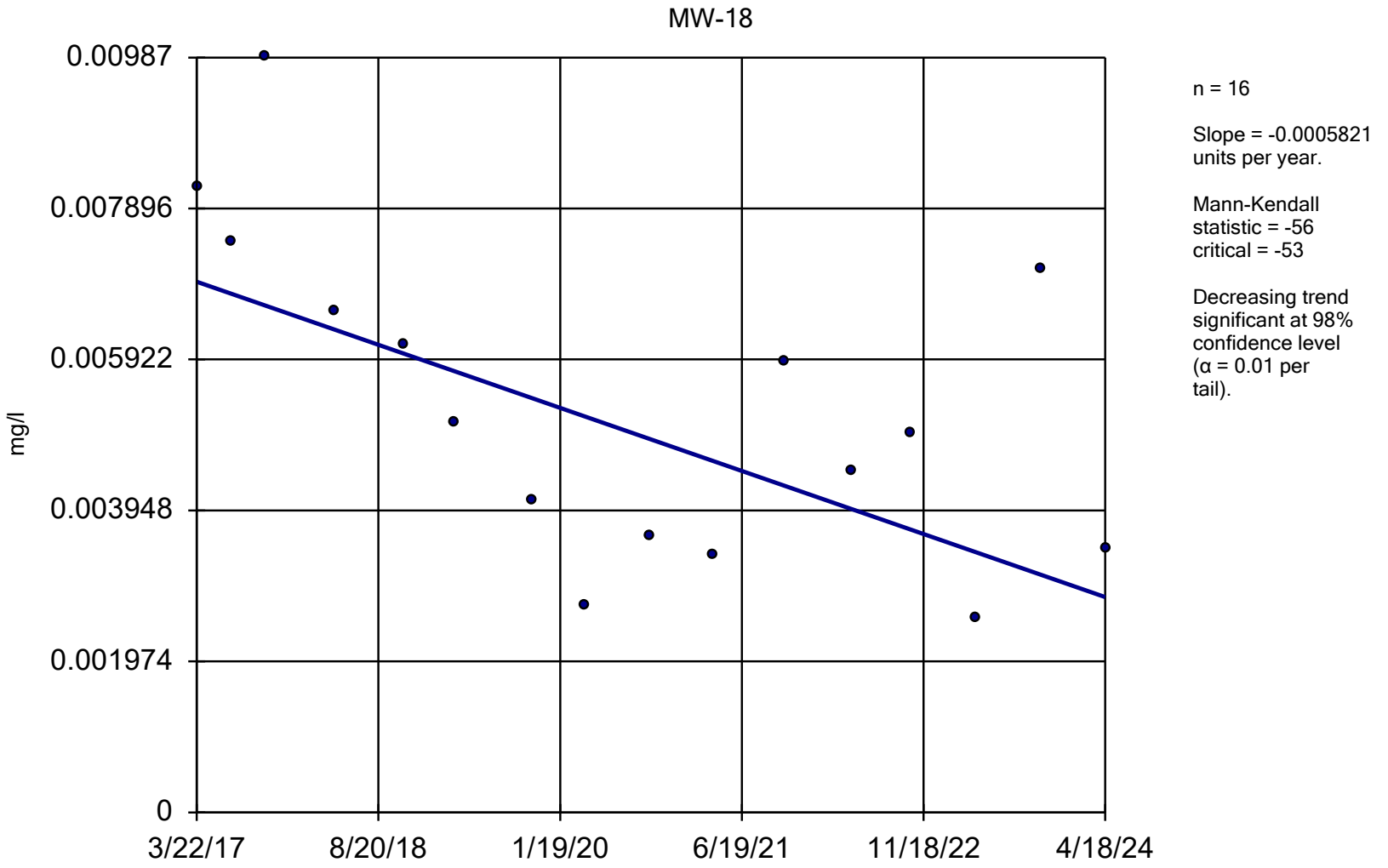
Mann-Kendall statistic = -49
critical = -48

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Benzene Analysis Run 5/10/2024 3:50 PM View: Delineation wells

Linn County Data: CRLCSWA_Groundwater Database

Sen's Slope Estimator



n = 16

Slope = -0.0005821 units per year.

Mann-Kendall statistic = -56
critical = -53

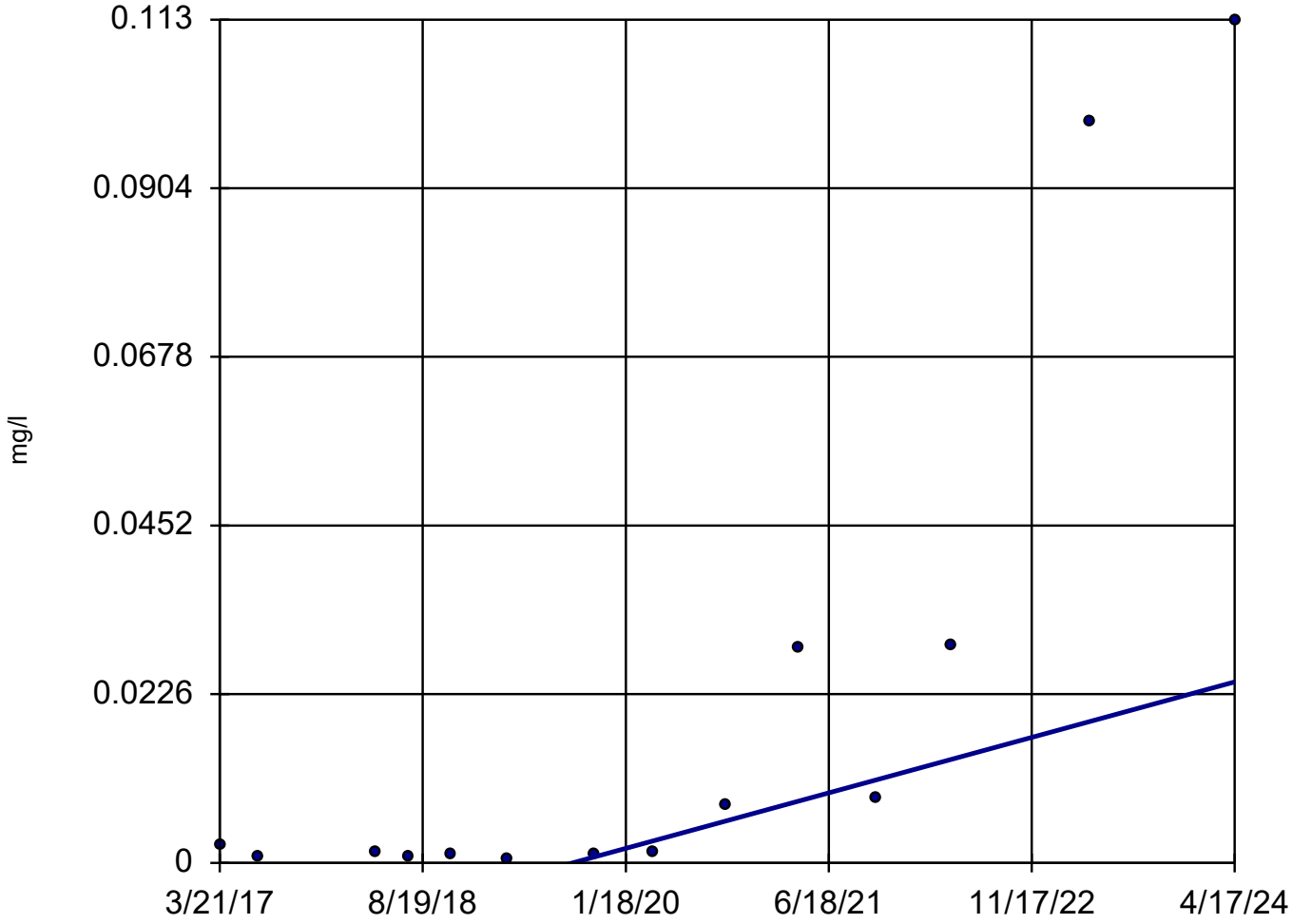
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Cobalt Analysis Run 5/10/2024 3:51 PM View: Delineation wells

Linn County Data: CRLCSWA_Groundwater Database

Sen's Slope Estimator

MW-26A



n = 14

Slope = 0.005254 units per year.

Mann-Kendall statistic = 57
critical = 44

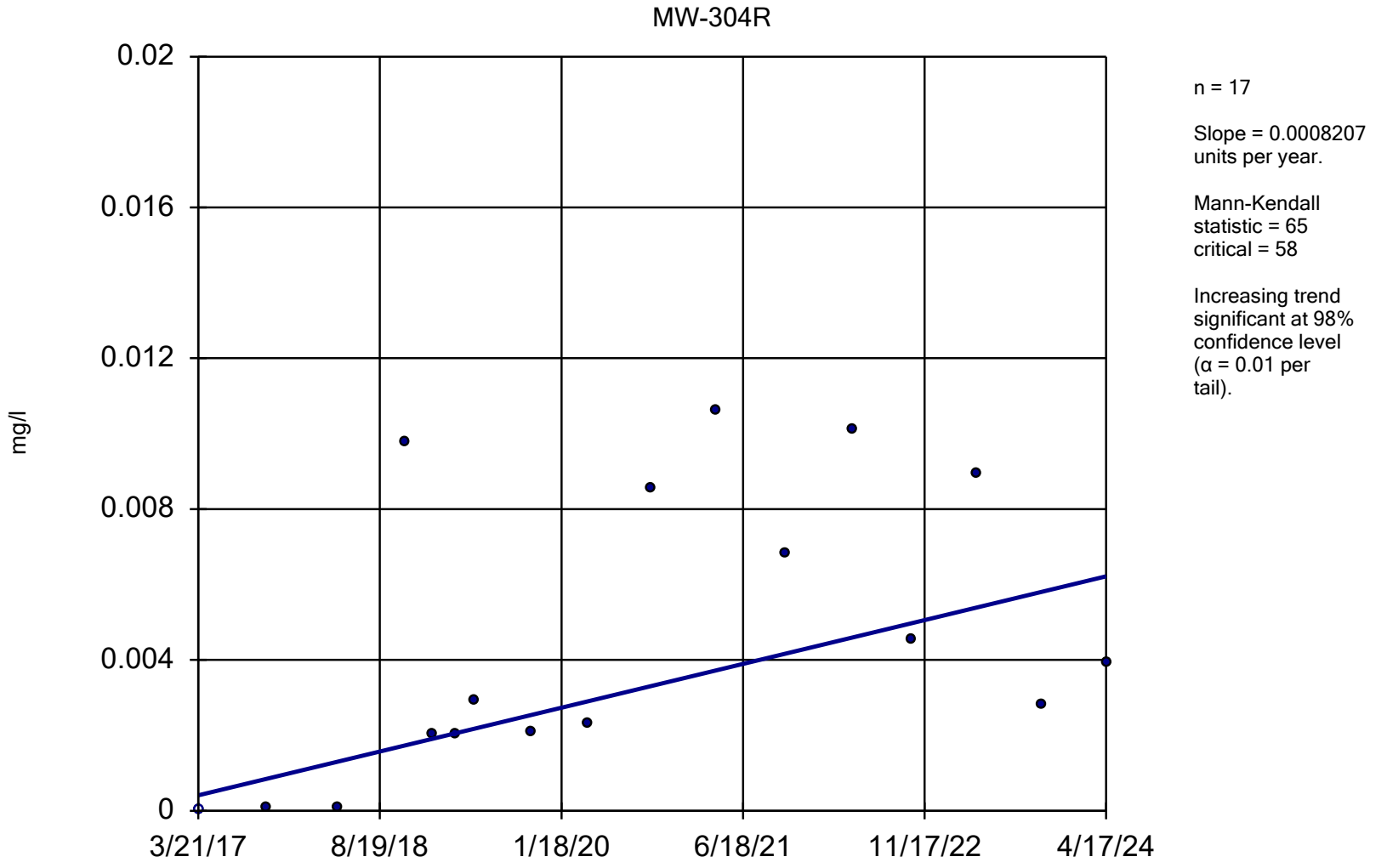
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Cobalt Analysis Run 5/10/2024 3:51 PM View: Delineation wells

Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Sen's Slope Estimator



Constituent: Cobalt Analysis Run 5/10/2024 3:51 PM View: Delineation wells

Linn County Data: CRLCSWA_Groundwater Database

Trend Test

Linn County Data: CRLCSWA_Groundwater Database Printed 5/10/2024, 3:51 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Benzene (ug/l)	MW-15	0	24	53	No	16	81.25	0.02	NP
Benzene (ug/l)	MW-18	0	34	48	No	15	93.33	0.02	NP
Benzene (ug/l)	**MW-19**	**-0.1483**	**-84**	**-48**	**Yes**	**15**	**13.33**	**0.02**	**NP**
Benzene (ug/l)	MW-20	-0.3263	-39	-48	No	15	0	0.02	NP
Benzene (ug/l)	MW-22	0.05222	38	48	No	15	0	0.02	NP
Benzene (ug/l)	MW-24	0	49	53	No	16	93.75	0.02	NP
Benzene (ug/l)	MW-26A	0	22	39	No	13	100	0.02	NP
Benzene (ug/l)	**MW-29**	**-0.005883**	**-52**	**-48**	**Yes**	**15**	**66.67**	**0.02**	**NP**
Benzene (ug/l)	MW-30	0	10	48	No	15	93.33	0.02	NP
Benzene (ug/l)	**MW-300**	**-0.08662**	**-49**	**-48**	**Yes**	**15**	**26.67**	**0.02**	**NP**
Benzene (ug/l)	MW-301	0	36	48	No	15	100	0.02	NP
Benzene (ug/l)	MW-302R	0	48	53	No	16	100	0.02	NP
Benzene (ug/l)	MW-303	0	45	58	No	17	94.12	0.02	NP
Benzene (ug/l)	MW-304R	0	39	53	No	16	100	0.02	NP
Benzene (ug/l)	MW-305	0	48	53	No	16	100	0.02	NP
Benzene (ug/l)	MW-306	-0.07222	-41	-48	No	15	26.67	0.02	NP
Benzene (ug/l)	MW-307A	0	-24	-35	No	12	66.67	0.02	NP
Benzene (ug/l)	MW-501	0	0	23	No	9	100	0.02	NP
Cobalt (mg/l)	MW-15	0.0002489	42	58	No	17	0	0.02	NP
Cobalt (mg/l)	**MW-18**	**-0.0005821**	**-56**	**-53**	**Yes**	**16**	**0**	**0.02**	**NP**
Cobalt (mg/l)	MW-19	-0.0002005	-16	-48	No	15	0	0.02	NP
Cobalt (mg/l)	MW-20	0.00009256	9	48	No	15	0	0.02	NP
Cobalt (mg/l)	MW-22	0.00002503	39	44	No	14	0	0.02	NP
Cobalt (mg/l)	MW-24	-0.00003452	-6	-58	No	17	0	0.02	NP
Cobalt (mg/l)	**MW-26A**	**0.005254**	**57**	**44**	**Yes**	**14**	**0**	**0.02**	**NP**
Cobalt (mg/l)	MW-29	-0.0000493	-10	-39	No	13	0	0.02	NP
Cobalt (mg/l)	MW-30	0.00007975	38	39	No	13	0	0.02	NP
Cobalt (mg/l)	MW-300	-0.0007962	-41	-48	No	15	13.33	0.02	NP
Cobalt (mg/l)	MW-301	-0.0005136	-37	-48	No	15	0	0.02	NP
Cobalt (mg/l)	MW-302R	-0.0001239	-51	-53	No	16	18.75	0.02	NP
Cobalt (mg/l)	MW-303	0.002008	57	68	No	19	0	0.02	NP
Cobalt (mg/l)	**MW-304R**	**0.0008207**	**65**	**58**	**Yes**	**17**	**5.882**	**0.02**	**NP**
Cobalt (mg/l)	MW-305	0.00003656	21	58	No	17	0	0.02	NP
Cobalt (mg/l)	MW-306	-0.00005165	-12	-39	No	13	0	0.02	NP
Cobalt (mg/l)	MW-307A	0.0001052	8	35	No	12	0	0.02	NP
Cobalt (mg/l)	MW-501	0.00176	18	23	No	9	0	0.02	NP

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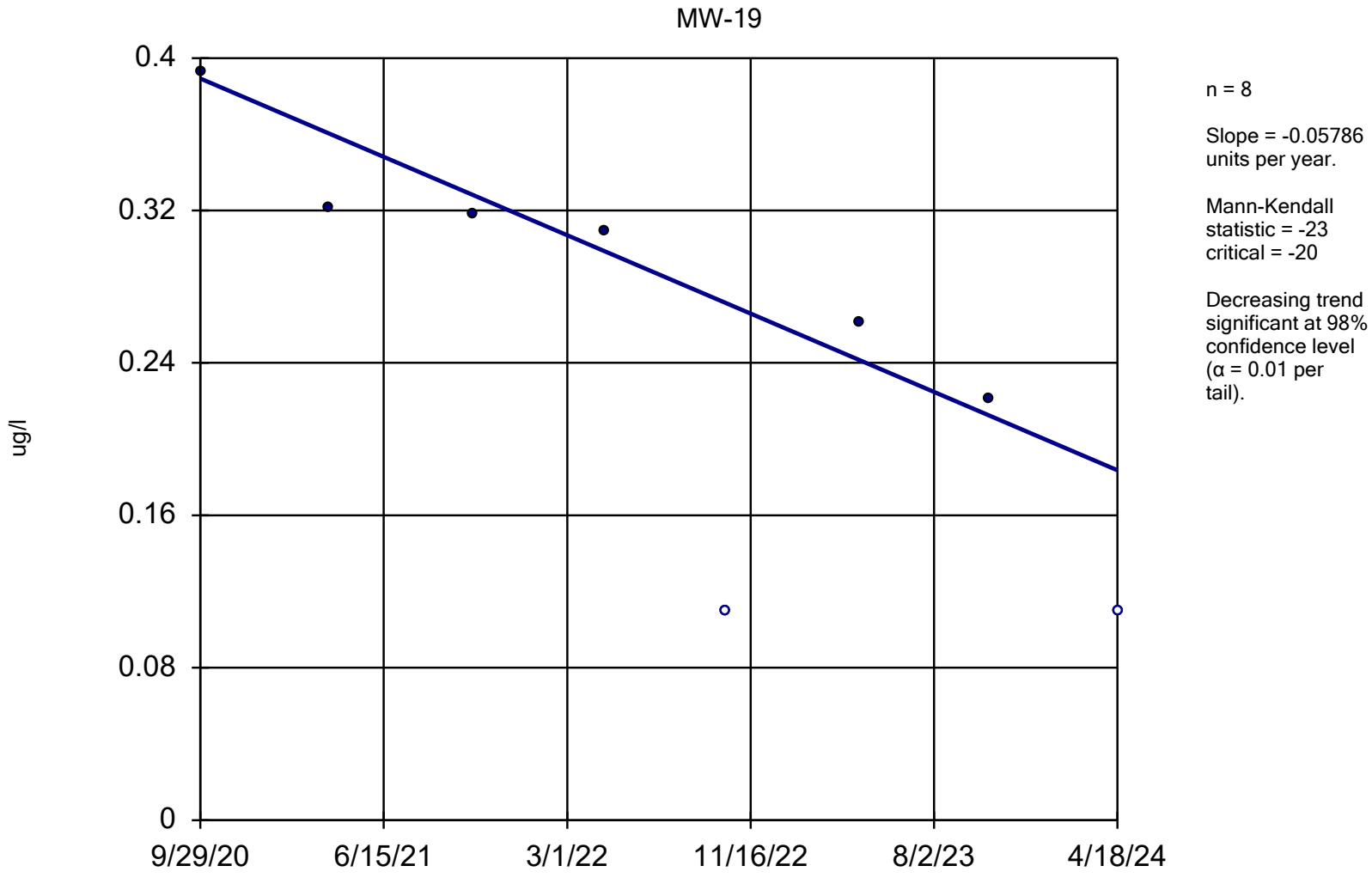
Underdrain VOC Trend Analysis – Recent Events Dataset – Spring 2024

Hollow symbols indicate censored values.

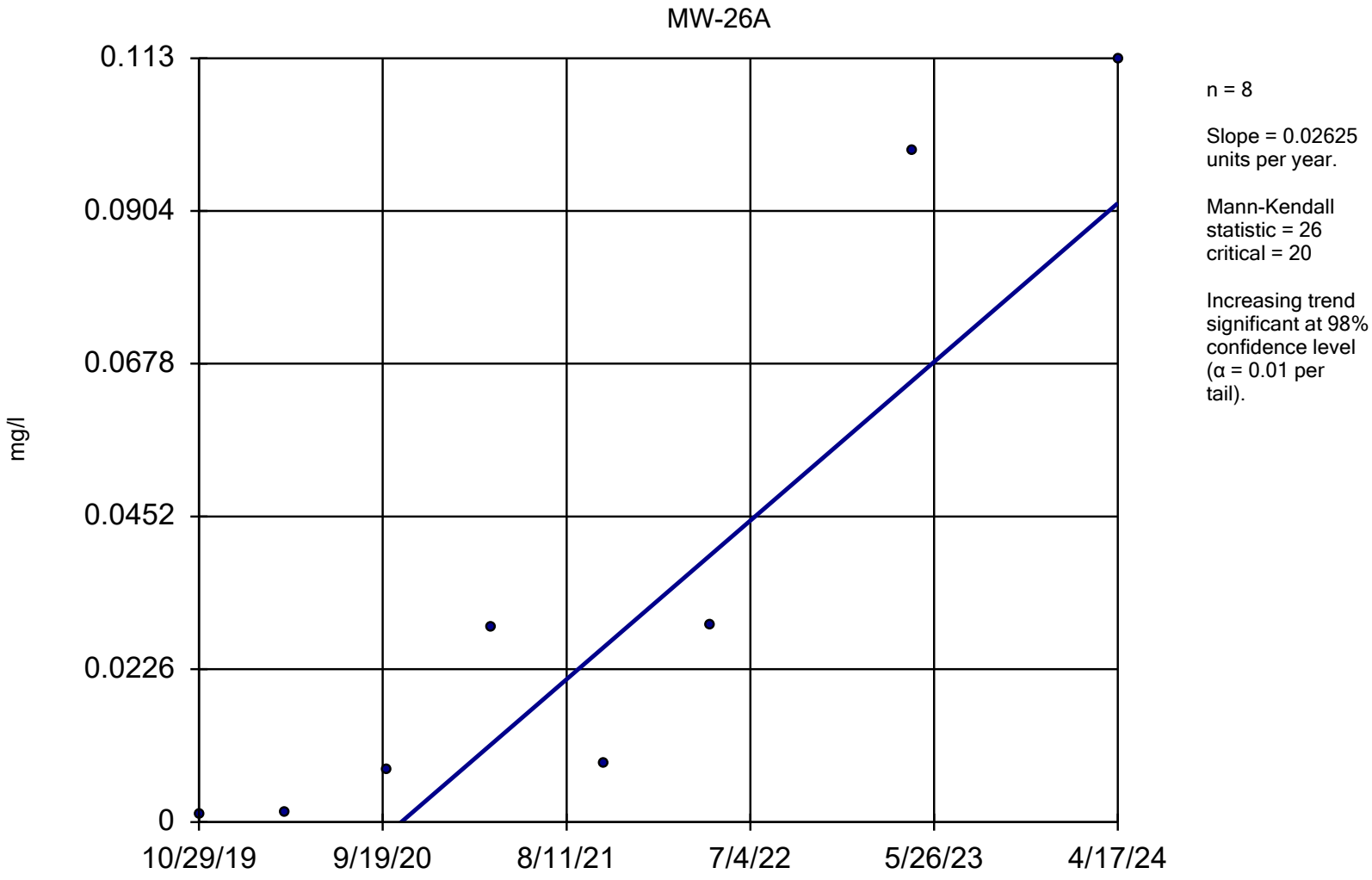
Sen's Slope Estimator



Constituent: Benzene Analysis Run 5/10/2024 3:48 PM View: Delineation wells

Linn County Data: CRLCSWA_Groundwater Database

Sen's Slope Estimator



Constituent: Cobalt Analysis Run 5/10/2024 3:48 PM View: Delineation wells

Linn County Data: CRLCSWA_Groundwater Database

Trend Test

Linn County Data: CRLCSWA_Groundwater Database Printed 5/10/2024, 3:49 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Benzene (ug/l)	MW-15	0	3	20	No	8	87.5	0.02	NP
Benzene (ug/l)	MW-18	0	0	20	No	8	100	0.02	NP
Benzene (ug/l)	**MW-19**	**-0.05786**	**-23**	**-20**	**Yes**	**8**	**25**	**0.02**	**NP**
Benzene (ug/l)	MW-20	-0.8136	-16	-20	No	8	0	0.02	NP
Benzene (ug/l)	MW-22	0.1207	15	20	No	8	0	0.02	NP
Benzene (ug/l)	MW-24	0	-3	-20	No	8	87.5	0.02	NP
Benzene (ug/l)	MW-26A	0	0	20	No	8	100	0.02	NP
Benzene (ug/l)	MW-29	0	0	20	No	8	100	0.02	NP
Benzene (ug/l)	MW-30	0	0	20	No	8	100	0.02	NP
Benzene (ug/l)	MW-300	-0.01744	-12	-20	No	8	50	0.02	NP
Benzene (ug/l)	MW-301	0	0	20	No	8	100	0.02	NP
Benzene (ug/l)	MW-302R	0	0	20	No	8	100	0.02	NP
Benzene (ug/l)	MW-303	0	-3	-20	No	8	87.5	0.02	NP
Benzene (ug/l)	MW-304R	0	0	20	No	8	100	0.02	NP
Benzene (ug/l)	MW-305	0	0	20	No	8	100	0.02	NP
Benzene (ug/l)	MW-306	0	1	20	No	8	37.5	0.02	NP
Benzene (ug/l)	MW-307A	0	-11	-20	No	8	75	0.02	NP
Benzene (ug/l)	MW-501	0	0	20	No	8	100	0.02	NP
Cobalt (mg/l)	MW-15	-0.0003074	-6	-20	No	8	0	0.02	NP
Cobalt (mg/l)	MW-18	0.0002806	2	20	No	8	0	0.02	NP
Cobalt (mg/l)	MW-19	0.00007175	2	20	No	8	0	0.02	NP
Cobalt (mg/l)	MW-20	-0.00004901	-6	-20	No	8	0	0.02	NP
Cobalt (mg/l)	MW-22	-0.00002928	-6	-20	No	8	0	0.02	NP
Cobalt (mg/l)	MW-24	-0.003513	-12	-20	No	8	0	0.02	NP
Cobalt (mg/l)	**MW-26A**	**0.02625**	**26**	**20**	**Yes**	**8**	**0**	**0.02**	**NP**
Cobalt (mg/l)	MW-29	0.0002891	12	20	No	8	0	0.02	NP
Cobalt (mg/l)	MW-30	0.000144	18	20	No	8	0	0.02	NP
Cobalt (mg/l)	MW-300	0.000006491	0	20	No	8	25	0.02	NP
Cobalt (mg/l)	MW-301	-0.0005479	-10	-20	No	8	0	0.02	NP
Cobalt (mg/l)	MW-302R	-0.00006462	-13	-20	No	8	37.5	0.02	NP
Cobalt (mg/l)	MW-303	-0.001694	-2	-20	No	8	0	0.02	NP
Cobalt (mg/l)	MW-304R	-0.001658	-14	-20	No	8	0	0.02	NP
Cobalt (mg/l)	MW-305	0.00001926	2	20	No	8	0	0.02	NP
Cobalt (mg/l)	MW-306	-0.00003923	-4	-20	No	8	0	0.02	NP
Cobalt (mg/l)	MW-307A	0.0003757	6	20	No	8	0	0.02	NP
Cobalt (mg/l)	MW-501	0.002898	16	20	No	8	0	0.02	NP

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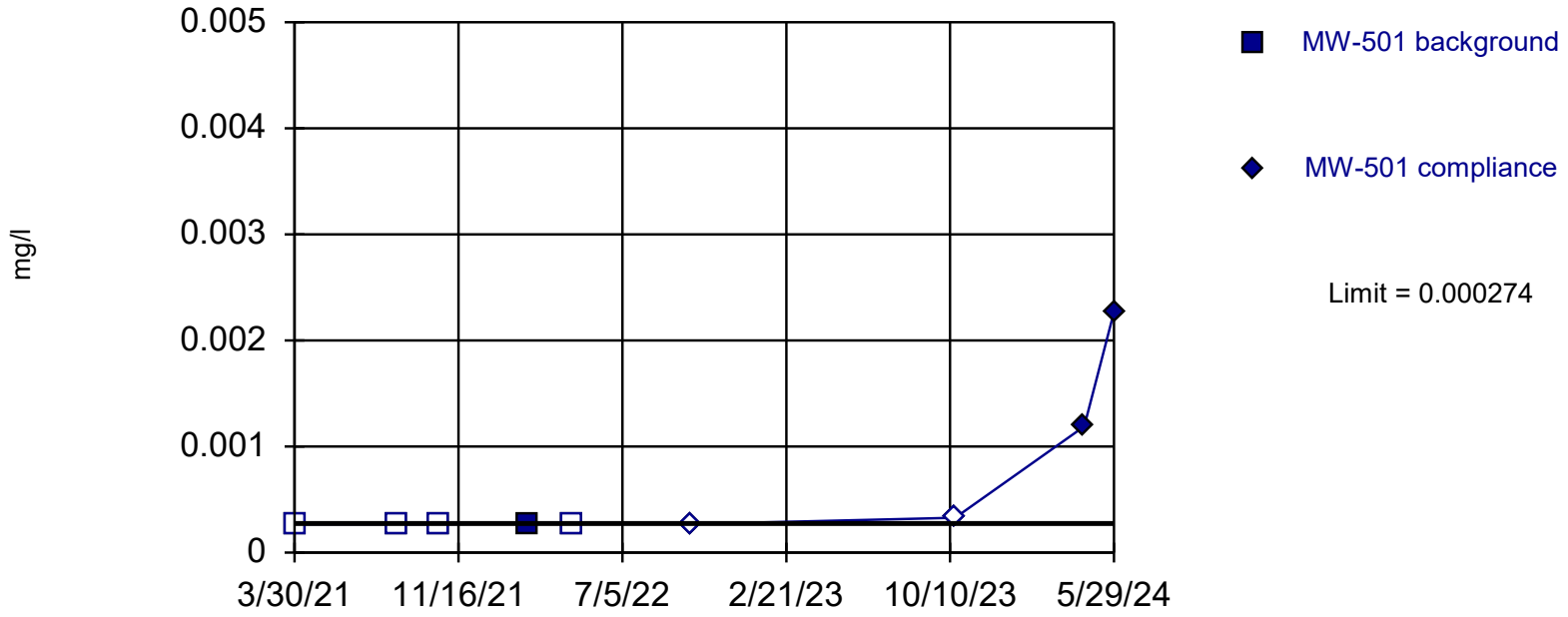
MW-501 Inorganic Intrawell Prediction Limit Analysis – Spring 2024

Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 5 background values. 80% NDs. Well-constituent pair annual alpha = 0.09284. Individual comparison alpha = 0.04755 (1 of 2).

Constituent: Beryllium Analysis Run 7/12/2024 1:40 PM View: Intrawell_App I Metals_Total and Dissolved

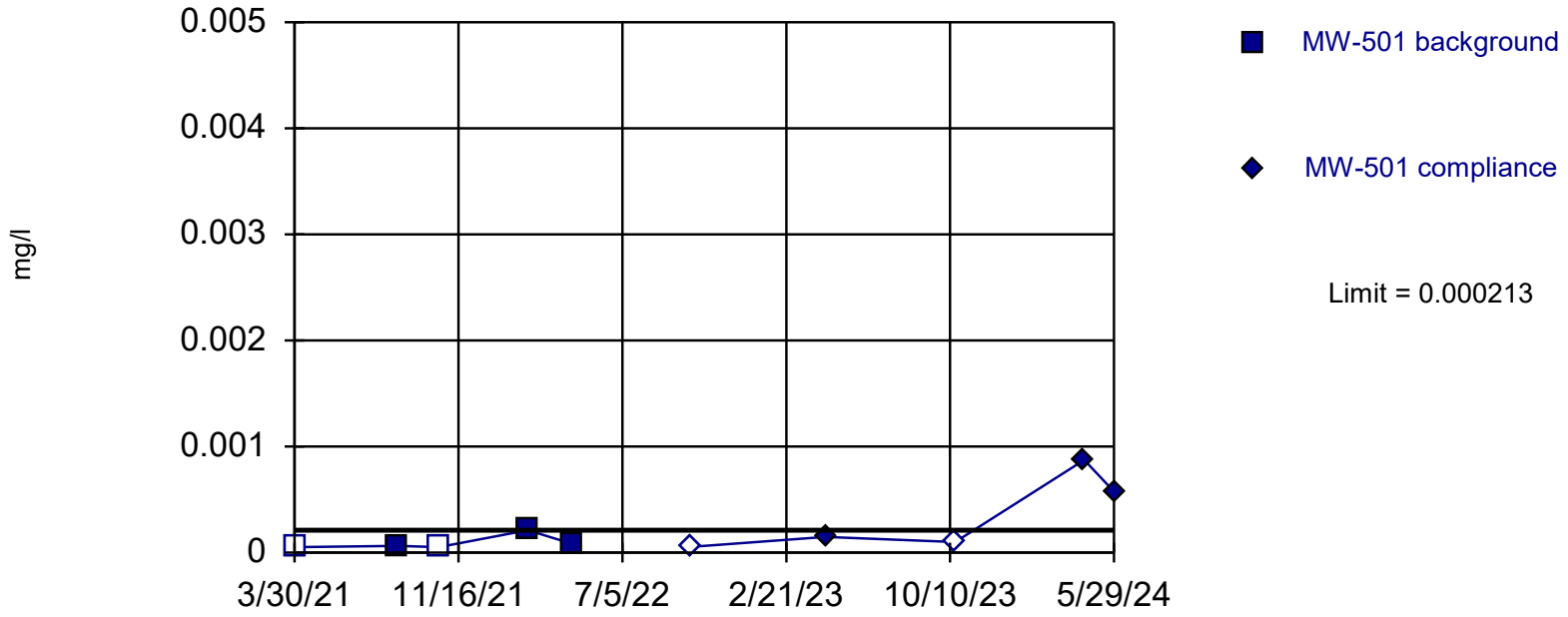
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 5 background values. 40% NDs. Well-constituent pair annual alpha = 0.09284. Individual comparison alpha = 0.04755 (1 of 2).

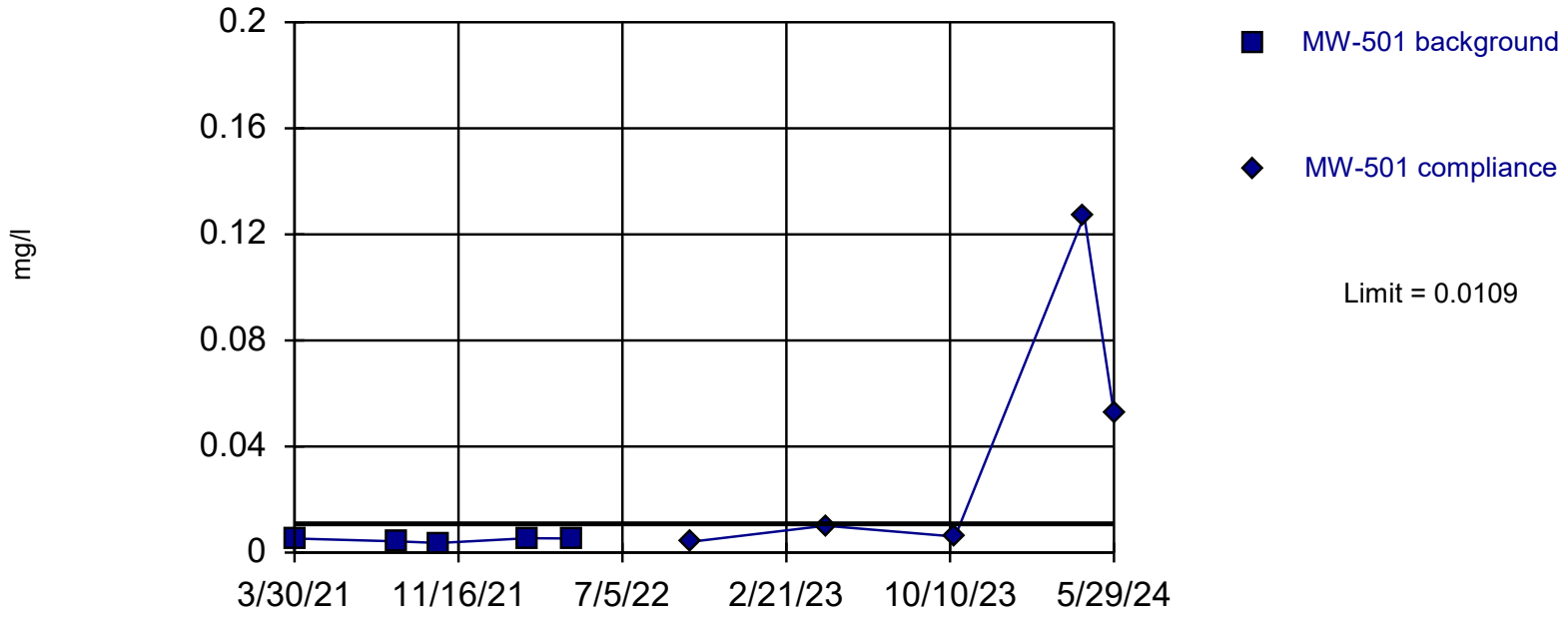
Constituent: Cadmium Analysis Run 7/12/2024 1:40 PM View: Intrawell_App I Metals_Total and Dissolved

Linn County Data: CRLCSWA_Groundwater Database

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.0048, Std. Dev.=0.0008221, n=5. Normality test: Chi Squared @alpha = 0.05, calculated = 2, critical = 5.991. Kappa = 7.411 (c=15, w=14, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002508.

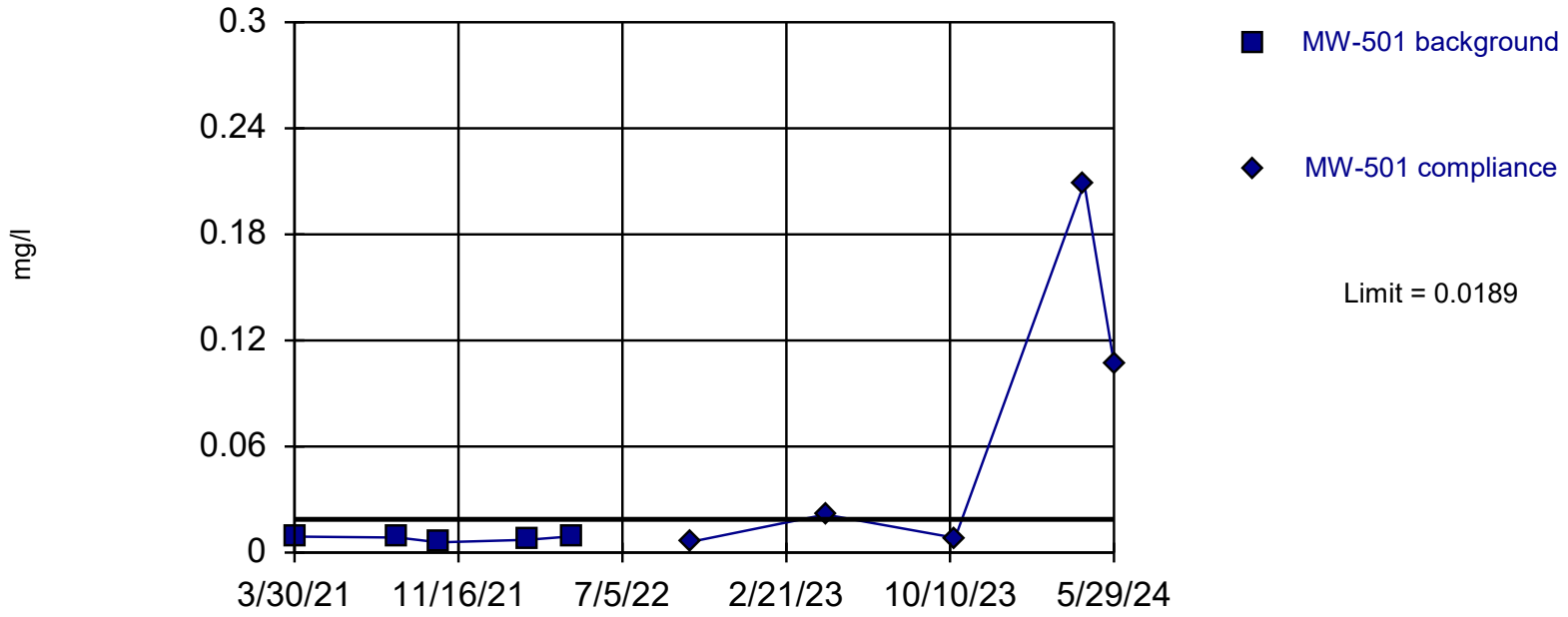
Constituent: Cobalt Analysis Run 7/12/2024 1:40 PM View: Intrawell_App I Metals_Total and Dissolved M

Linn County Data: CRLCSWA_Groundwater Database

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.008006, Std. Dev.=0.001471, n=5. Normality test: Chi Squared @alpha = 0.05, calculated = 2, critical = 5.991. Kappa = 7.411 (c=15, w=14, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002508.

Constituent: Nickel Analysis Run 7/12/2024 1:40 PM View: Intrawell_App I Metals_Total and Dissolved Me

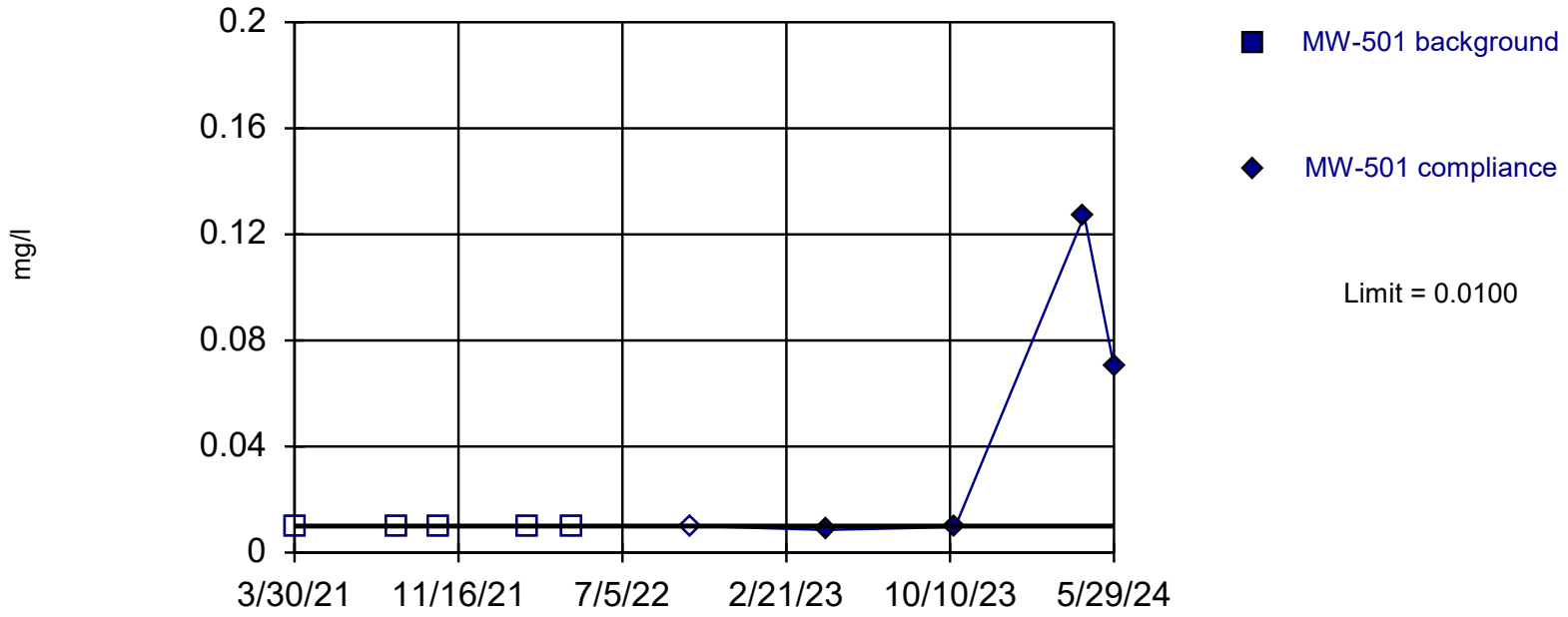
Linn County Data: CRLCSWA_Groundwater Database

Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 5) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.09284. Individual comparison alpha = 0.04755 (1 of 2).

Constituent: Zinc Analysis Run 7/12/2024 1:40 PM View: Intrawell_App I Metals_Total and Dissolved Meta

Linn County Data: CRLCSWA_Groundwater Database

Prediction Limit

Linn County Data: CRLCSWA_Groundwater Database Printed 7/12/2024, 1:41 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Wells	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/l)	MW-501	0.00191	n/a	5/29/2024	0.001ND	No	5	n/a	n/a	n/a	80	n/a	n/a	0.04755	NP Intra (NDs) 1 of 2
Arsenic (mg/l)	MW-501	0.0754	n/a	5/29/2024	0.00618	No	5	n/a	0.06027	0.02891	20	Kapla...	sqrt(x)	0.000...	Param Intra 1 of 2
Barium (mg/l)	MW-501	0.104	n/a	5/29/2024	0.0232	No	5	n/a	0.04696	0.007749	0	None	No	0.000...	Param Intra 1 of 2
Beryllium (mg/l)	**MW-501**	**0.000274**	**n/a**	**5/29/2024**	**0.00227**	**Yes**	**5**	**n/a**	**n/a**	**n/a**	**80**	**n/a**	**n/a**	**0.04755**	**NP Intra (NDs) 1 of 2**
Cadmium (mg/l)	**MW-501**	**0.000213**	**n/a**	**5/29/2024**	**0.000576**	**Yes**	**5**	**n/a**	**n/a**	**n/a**	**40**	**n/a**	**n/a**	**0.04755**	**NP Intra (normality) ...**
Chromium (mg/l)	MW-501	0.00110	n/a	5/29/2024	0.0012ND	No	5	n/a	n/a	n/a	100	n/a	n/a	0.04755	NP Intra (NDs) 1 of 2
Cobalt (mg/l)	**MW-501**	**0.0109**	**n/a**	**5/29/2024**	**0.0525**	**Yes**	**5**	**n/a**	**0.0048**	**0.0008221**	**0**	**None**	**No**	**0.000...**	**Param Intra 1 of 2**
Copper (mg/l)	MW-501	0.00186	n/a	5/29/2024	0.00289J	No	5	n/a	n/a	n/a	80	n/a	n/a	0.04755	NP Intra (NDs) 1 of 2
Lead (mg/l)	MW-501	0.00234	n/a	5/29/2024	0.000365J	No	5	n/a	n/a	n/a	60	n/a	n/a	0.04755	NP Intra (NDs) 1 of 2
Nickel (mg/l)	**MW-501**	**0.0189**	**n/a**	**5/29/2024**	**0.107**	**Yes**	**5**	**n/a**	**0.008006**	**0.001471**	**0**	**None**	**No**	**0.000...**	**Param Intra 1 of 2**
Selenium (mg/l)	MW-501	0.000960	n/a	5/29/2024	0.0014ND	No	5	n/a	n/a	n/a	100	n/a	n/a	0.04755	NP Intra (NDs) 1 of 2
Silver (mg/l)	MW-501	0.000490	n/a	5/29/2024	0.0005ND	No	5	n/a	n/a	n/a	100	n/a	n/a	0.04755	NP Intra (NDs) 1 of 2
Thallium (mg/l)	MW-501	0.000260	n/a	5/29/2024	0.00057ND	No	5	n/a	n/a	n/a	100	n/a	n/a	0.04755	NP Intra (NDs) 1 of 2
Vanadium (mg/l)	MW-501	0.00110	n/a	5/29/2024	0.0021J	No	4	n/a	n/a	n/a	75	n/a	n/a	0.06138	NP Intra (NDs) 1 of 2
Zinc (mg/l)	**MW-501**	**0.0100**	**n/a**	**5/29/2024**	**0.0702**	**Yes**	**5**	**n/a**	**n/a**	**n/a**	**100**	**n/a**	**n/a**	**0.04755**	**NP Intra (NDs) 1 of 2**

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